

**Essais en soufflerie à couche limite
en vue de mesurer
les coefficients de pression
pour les tableaux de la norme SIA 160
Révision 1988**

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1. INTRODUCTION

Les travaux de révision de la norme SIA 160 sur les charges ont conduit à un nouveau concept de sécurité, qui repose notamment sur l'analyse des dangers potentiels. Dans ce contexte, les bases du chapitre "vent" ont été reconstruites.

En effet, il fallait s'assurer que la vitesse du vent de référence soit définie de manière compatible avec le nouveau concept de sécurité.

En raison de l'existence en Suisse d'un réseau automatique de mesures météorologiques ANETZ qui assure la mesure des vitesses de pointe ainsi que des moyennes sur 10 minutes, c'est sur la vitesse de pointe que le choix s'est porté.

Ce choix fut guidé essentiellement par le fait que ce sont les charges statiques extrêmes qui sont déterminantes pour la norme et que pour définir de telles charges à partir d'une valeur moyenne il faut introduire un coefficient de rafale. Ceci entraînerait le produit de deux incertitudes, une sur la valeur moyenne et l'autre sur le coefficient de rafale. Notons que ce choix est très favorable dans le contexte suisse, puisque la complexité de la topographie implique une relativement grande variation spatiale dans les valeurs de référence. L'inconvénient de ce choix serait sa différence avec la pratique de certaines autres normes étrangères et avec les concepts se mettant en place pour les normes internationales (Euronorme par exemple) qui doivent tenir compte du fait que de nombreux pays ne mesurent, sur une base régulière, que les vitesses moyennes. Il peut s'agir de moyennes sur 10 minutes ou de moyennes horaires.

Le choix pour la norme SIA 160 s'est donc porté sur la valeur extrême et une période de retour de 50 ans a été retenue pour l'évaluation de la vitesse de pointe à partir des données.

Un coefficient de sécurité de 1.2 a ensuite été retenu sur l'incertitude des données, ce qui correspond approximativement à une période de retour de 120 ans. Un coefficient de 1.2 est également utilisé comme sécurité sur le modèle de calcul.

Comme la norme SIA prescrit un coefficient global de 1.5, la valeur extrême calculée est divisée dans le chapitre "vent" par ce coefficient de 1.5.

La deuxième différence avec l'ancienne norme est relative au profil de vitesse en fonction de la hauteur. Trois rugosités ont été définies. La rugosité de campagne (rurale) avec une loi de puissance de $\alpha = 0.23$ sur les vitesses moyennes, sert de référence. Les surfaces de lac ont un exposant de $\alpha = 0.18$ et les zones urbaines très rugueuses ont $\alpha = 0.36$.

Notons que dans la norme, le coefficient de hauteur CH représente des rapports de vitesse de pic et non celui des vitesses moyennes.

La troisième différence est une conséquence de ces choix. Les coefficients de pression étant rapportés à une pression dynamique de pointe et les charges souhaitées étant des valeurs extrêmes, nous avons défini un nouveau coefficient de pression C_q représentant le rapport entre une pression pic mesurée en soufflerie et la pression dynamique pic de l'écoulement non perturbé par le bâtiment.

Il peut apparaître d'emblée que dans une telle définition, si les objets sont de petite taille par rapport à celle de la turbulence d'approche, les répartitions de pressions extrêmes (C_q) doivent être voisines des répartitions moyennes (C_p). Les valeurs de C_q seront par contre plus faibles lorsqu'elles résultent d'une moyenne sur une

surface de construction. Notons que dans le cas de la prise en compte par erreur d'un coefficient C_p selon l'ancienne définition à la place de C_q , il en résulterait une charge trop forte, donc un sur-dimensionnement de la construction par rapport aux effets du vent.

Cette nouvelle définition, associée avec la nécessité de définir les coefficients correspondants nécessite des essais en soufflerie.

Le quatrième problème qui s'est posé est celui de la représentation des résultats. Suite à une enquête effectuée en 1981-1982, il est apparu que les bureaux d'ingénieurs manifestaient une préférence pour une réactualisation des tableaux de coefficients existants au lieu d'une nouvelle présentation sous forme de courbe ou sous forme paramétrique.

Les essais en soufflerie ont donc été organisés dans ce but. Des maquettes à l'échelle 1/200 sont placées dans une soufflerie à couche limite. La couche limite reproduite présente l'exposant de loi de puissance $\alpha = \sim 0.23$ qui correspond au terrain rural.

Les maquettes sont équipées de parois spécialement conçues pour permettre la mesure directe de la moyenne de surface.(1) En effet la technique usuelle consiste à pratiquer des trous dans la paroi et à l'aide de tuyaux reliés à un moyenneur pneumatique, on mesure la pression surfacique moyenne. Par une nouvelle conception des parois, dans laquelle le moyenneur est inclus dans la surface, il a été possible de réduire considérablement la complexité du cablage pneumatique ainsi que le travail correspondant. Ce type de paroi est décrit plus en détail au paragraphe 3.1.

Finalement, une conception modulaire des maquettes a été retenue de manière à permettre la réalisation de toutes les formes à l'aide de quelques éléments de base

2. DEFINITION DES COEFFICIENTS DE PRESSION

Le nouveau coefficient de pression noté par C_q (parfois aussi C_p) est défini comme le rapport de la pression extrême \hat{p} sur la pression dynamique extrême $(1/2 \hat{v}^2)$, les 2 valeurs extrêmes ayant la même probabilité d'apparaître ou la même période de retour.

La pression et la vitesse extrêmes ne sont ainsi pas simplement des valeurs aléatoires instantanées mesurées en soufflerie, mais des variables déduites statistiquement.

On suppose que les valeurs extrêmes suivent une distribution du type Fischer Tippet I. Un échantillon de 16 mesures est prélevé sur chaque prise de pression dans un intervalle de 7 secondes. La distribution de Fischer-Tippet permet d'effectuer une régression de Gumbel de ces valeurs extrêmes selon la relation suivante:

$$\hat{V}(P) = -\log(-\log(P))$$

où \hat{V} = vitesse extrême

P = probabilité d'apparition de la valeur.

On voit que cette relation est doublement logarithmique. Il a été montré qu'en turbulence, la population des extrêmes obéit à cette relation linéaire en diagramme doublement logarithmique (2).

La pression (\hat{p}) ainsi que la vitesse (\hat{V}) sont calculées par extrapolation de la distribution à la probabilité de non excédence de 0.98, ce qui correspond à une période de retour de 50 ans dans la nature.

Parallèlement à la mesure du coefficient (C_q) pour chaque point de la maquette, on calcule aussi un coefficient de pression moyenne (C_p) et un coefficient de pression pic (\hat{C}_p).

Le coefficient C_p correspond à la définition adoptée par la norme actuelle, il est toutefois recalculé ici pour un modèle placé en écoulement turbulent.

Les trois coefficients calculés sont définis ci-dessous:

$$C_p = \frac{\bar{p}}{1/2 \rho \bar{V}^2}$$

$$C_q = \frac{\hat{p}}{1/2 \rho \hat{V}^2}$$

$$\hat{C}_p = \frac{\hat{p}}{1/2 \rho \hat{V}^2}$$

Définition des variables:

\hat{p} = pression extrême

\bar{p} = pression moyenne

\hat{V} = vitesse extrême

\bar{V} = vitesse moyenne

ρ = densité de l'air

3. DESCRIPTION DES ESSAIS

Toutes les mesures ont été effectuées à la soufflerie à couche limite du LASEN de l'EPFL (fig. 1)

Les modèles étaient placés sur le plateau tournant permettant d'obtenir automatiquement les différentes orientations du vent choisies. Pour les essais décrits dans ce rapport, les orientations généralement choisies ont été de 0°, 15° et 45°, correspondant aux orientations définies dans la version 1970 de la norme SIA 160.

Toutes les mesures ont été réalisées dans un écoulement à couche limite turbulente (profil de vitesse $\alpha = 0.23$ - fig. 2).

Le dispositif utilisé pour la création de la couche limite comprend une rangée de perturbateurs triangulaires placées à l'entrée de la veine et suivie de cubes de 50 mm de côté disposés en quinconce sur une longueur de 2 m au sol de la soufflerie, puis des cubes de 25 mm de côté disposés en quinconce sur une longueur de 7 m. Le dispositif est dessiné schématiquement dans la figure 4. Les perturbateurs triangulaires sont conformes au concept de Irwin (3). La région située dans un rayon de 1 m de l'emplacement du modèle ne portait aucune rugosité afin de ne pas introduire de perturbations de sillage sur les faces des modèles (fig. 3)

Les profils de vitesses moyennes (\bar{V}) et intensités de turbulence (I) sont également donnés à la figure 2. L'écoulement reproduit dans la soufflerie correspond à un terrain rural dans la nature.

3.1 Appareillage de mesure

Un schéma des installations est présenté à la figure 4.

Les modèles sont en plexiglass à l'échelle 1:200. Ils ont été réalisés par l'Atelier des Maquettes du Département d'Architecture de l'EPFL. Les parois sont munies de cavités moyennantes afin de permettre la mesure de pressions moyennes sur les surfaces d'intérêt (ie. les surfaces pour lesquelles la norme requiert des coefficients de pression). En outre, quelques prises localisées sont disposées dans la région du coin du toit et sur la face au vent afin de permettre des mesures de pression ponctuelles (cf chap. 4, description détaillée).

Les prises de pression sont reliées par des tubes en plastique de diamètre intérieur 1mm et à un Scanivalve (commutateur pneumatique) à 48 entrées. Le cablage est présenté à la figure 4. La mesure de pression est effectuée avec deux capteurs de pression différentiels Brüel et Kjaer (B&K). Ces capteurs ayant une dérive du zéro en fonction du temps, la mesure de pressions sur chaque point de la maquette doit être corrigée de cette dérive. Pour ce faire et afin de permettre le prélèvement de plusieurs mesures sur chaque prise de pression, ces dernières sont alternées par des zéros. Ainsi un zéro est mesuré au début et à la fin de chaque série de 16 mesures sur une prise.

Le système de mesure de pression a une réponse plate à 10% près jusqu'à 80 Hz. La courbe de réponse spectrale est donnée dans la figure 5.

Le signal n'a pas été filtré car il a été admis que l'erreur sur les extrêmes, introduit par le filtrage, pourrait être plus importante que pour un signal non filtré.

La vitesse de référence est mesurée à la hauteur du sommet de chaque bâtiment à l'aide d'un fil chaud étalonné au préalable (fig. 6). Le système de mesure anémométrique est de ThermoSystem (TSI 1015).

3.2 Mesures de forces

Sur le tableau de chaque forme de bâtiment de la norme, sont aussi présentés des coefficients de forces globales. Il s'agit de la force totale agissant sur la structure dans ses trois composantes, divisée par la surface du maître couple correspondante.

Ces coefficients sont calculés par intégration des coefficients de pression correspondant à chaque composante.

Parallèlement, des mesures de ces forces sont effectuées directement dans la soufflerie à titre de comparaison. (cf. chapitre 5) L'écoulement a les mêmes propriétés que celui destiné aux mesures des coefficients de pression.

Les modèles utilisés sont en polyuréthane expansé avec les mêmes dimensions que les modèles en plexiglass.

Les mesures sont faites à l'aide d'une balance de base placée sous le modèle à l'extérieur de la soufflerie (cf schéma des installations, fig. 4). Il s'agit d'un capteur à six composantes conçu et fabriqué par le département de Microtechnique de l'EPFL (fig. 7 et 8).

La balance de base a une sensibilité de 0.2 N pour les forces et de 0.01 N/m pour les moments. Sa fréquence propre est de l'ordre de 30 Hz. Elle requiert le calcul des composantes à l'aide d'une matrice d'étalonnage à 36 composantes. Cette façon de procéder découle du fait que les capteurs sont disposés symétriquement et n'assurent pas l'indépendance des composantes qui seraient caractérisées par une matrice diagonale. De ce fait, les calculs sont importants et la balance ne peut pas mesurer des fréquences élevées.

La balance de base ne sert donc qu'à mesurer les réactions (forces quasi statiques exercées par le vent sur les bâtiments).

3.3 Mesure de forces sur tabliers de ponts

Un tableau supplémentaire relatif aux tabliers de ponts routiers a été établi à la demande de l'Office Fédéral des Routes. Le même dispositif que celui permettant la mesure de forces sur les bâtiments est utilisé pour des mesures des forces sur les tabliers de ponts.

La maquette à l'échelle 1:50 est une construction sandwich formée de bois et de sagex. Les différents murs ou parois sont réalisés en sagex. La maquette est posée sur le capteur à 6 composantes (balance) situé au milieu de la veine dans le sens de la largeur (fig. 9).

Tous les modèles des ponts ont été montés verticalement dans la soufflerie du LASEN à une distance de 2.5 m en aval de la sortie du convergeant. L'écoulement turbulent a été créé par une grille disposée à la sortie du convergeant et produisant une turbulence uniforme sur une hauteur de 50 cm de part et d'autre du centre de la section (fig. 10).

Les forces et moments sont mesurés par la même balance de base fixée au niveau du plancher de la soufflerie (fig. 11). Une extrémité du modèle est fixé sur la balance. L'autre extrémité du modèle est fixé au plafond au moyen d'un système à rotule et ressort. Ce montage permet d'équilibrer le poids du modèle de manière à éviter des surcharges en force vertical et d'éliminer un moment d'encastrement sur la balance. La rotule permet la mesure de forces latérales et moments de torsions. Ces deux dernières composantes sont les charges recherchées pour le dimensionnement des ponts en relation avec les effets du vent.

Les coefficients qui résultent de ces mesures sont présentés dans le tableau de la page suivante pour tous les types de pont demandés par l'Office Fédéral des Routes.

4. DESCRIPTION DES MODELES

4.1 Géométrie des modèles

Tous les modèles sont réalisés par l' atelier des maquettes du département d' architecture de l' EPFL.

Les modèles de bâtiments sont des éléments modulaires formés à partir d'un certain nombre d'éléments de base.

- Eléments de façade

Il s'agit de trois plaques d'une largeur de 120 mm nommées "murs", servant comme façade des modèles étudiés. Les trois "murs" ont une hauteur de 30, 60 et 120 mm (fig. 12 et 13).

- Eléments de toiture

Il s'agit de 4 types de toiture à 2 pans, de base carrée de 120 mm de côté. L'angle d'ouverture des toitures est de 0° (fig. 14 - toiture plate), 10° (fig. 15), 30° (fig. 16) et 50° (fig. 17).

Les figures 12 à 17 présentent ces éléments de base avec leurs dimensions, l'emplacement des prises localisées et les surfaces équipées afin d'obtenir des pressions moyennées.

Certaines formes de bâtiment de l'ancienne norme sont définies avec des avant-toits. Les résultats obtenus sur ces formes ne sont pas représentées ici.

Les différentes configurations de bâtiments faisant partie de la norme sont formées en combinant les éléments de base entre eux et en utilisant plusieurs fois le même type d'éléments pour le même modèle afin de créer le rapport des dimensions demandé.

Certains formes de bâtiment étant de grande taille, seule leur moitié était construites avec des parois équipées de prises de pression. Dans ces cas, un "masque" en plexiglass complète la maquette pour atteindre le rapport des dimensions donné (fig. 18). Les coefficients de pression pour les parois non équipées sont déduits par symétrie en effectuant des mesures à des orientations symétriques ou complémentaires à celles désirées.

La figure 19 présente un tableau récapitulant les différentes formes de modèles, leur numéro dans la nouvelle norme, leur dimensions exactes ainsi que le rapport des dimensions effectives demandé.

Les figures de l'Annexe A présentent pour chaque forme un dessin éclaté du modèle avec la numérotation des prises de pression.

4.2 Technique des mesures de pression

Comme les coefficients de pression demandés correspondent dans la plupart des cas à des moyennes sur de grandes surfaces, il a été possible de diminuer considérablement le nombre de tuyaux, et par conséquent celui des mesures de pression. Ceci est réalisé en développant des moyenneurs pneumatiques incorporés dans la paroi de chaque modèle.

Toutes les surfaces équipées des modèles sont construites avec 2 plaques en plexiglass de 1 mm d'épaisseur, séparées par une feuille de plastique adhésive double-face de 0,2 mm d'épaisseur. La surface extérieure comporte des séries de trous de 0,3 mm de diamètre, régulièrement espacés de 10 mm (fig. 20). Des découpes de la feuille de plastique permettent d'insérer plusieurs cavités correspondant à la définition des moyennes de surface différente sur chaque face. Elles correspondent aux valeurs E F G H, m n o etc. des tableaux. De petits canaux sont utilisés pour relier les prises de pression localisées situées trop au bord.

La surface intérieure est munie d'un seul tuyau pour chaque surface moyennée ou pour chaque prise localisée (fig. 21). Pour le cas des mesures simultanées des pressions intérieures et extérieures, un système symétrique à trois plaques a été conçu.

Ce système de moyenneurs pneumatiques a fait l'objet d'une analyse détaillée afin d'établir les limites et la précision du procédé. Les figures 22 et 23 montrent une partie de cette analyse concernant l'épaisseur du joint.

L'essai tel qu'il est conçu ici permet de contrôler l'efficacité de moyennage des cavités pratiquées dans la surface.

Cet effet est mesuré par la répartition des pressions à l'intérieur de la cavité (mesure selon les points 7 à 12).

De ce point de vue, le joint de 0,4 mm. présente une variation beaucoup plus faible que le joint de 0,2 mm. d'épaisseur.

La pression moyenne mesurée à l'aide d'un moyenieur pneumatique externe se rapproche beaucoup de la pression mesurée au centre de la surface, ceci aussi bien par les joints de 0,2 et de 0,4 mm.

Toutefois, la différence observée entre les points 7 et 8 pour le joint de 0,2 mm. est importante alors qu'elle est très faible pour le joint de 0,4 mm., ce qui montre la quasi insensibilité de la mesure de la moyenne à la position exacte des points de mesure à la zone centrale de la surface.

Si une épaisseur de joint supérieure à 0,2 mm. aurait amélioré de manière sensible l'efficacité du moyennage, elle n'a pas été retenue afin de ne pas affecter la réponse en fréquence.

Les figures 24 à 26 présentent la réponse en fréquence en fonction de différents volumes de moyenneurs pneumatiques.

La figure 27 présente les différents éléments d'une paroi de modèle (toiture ou mur).

Toutes les parois des modèles (murs ou toitures) ont une épaisseur de 8.2 mm.

La position des prises de pression (de la surface intérieure de la paroi) de chaque élément de base est donnée aux figures 12 - 17 du § 4.1.

Pour chaque forme de bâtiment, les documents suivants sont présentés en annexe:

- Un dessin édaté du modèle avec la numérotation des prises de pression pour des moyennes de surface ou pour les prises localisées.
- Les listings des résultats obtenus pour chaque orientation du vent et prise de pression (C_p , C_q , C_p).
- Les tableaux de la même forme que ceux de la norme, remplis uniquement avec des valeurs brutes, mesurées pour C_p , C_q et les forces mesurées pour C_p .
- Les tableaux finaux de la norme avec les coefficients correspondant uniquement aux valeurs déduites des C_q mesurés.

5. RESULTATS - CONCLUSIONS

Les résultats de l'étude se résument aux tableaux de coefficients de la pression due au vent, pour différents types de bâtiments et de ponts, et ceci dans le but de la réactualisation de la norme SIA 160 sur les charges.

En ce qui concerne les forces globales, les coefficients présentés dans les tableaux de la norme SIA 160 sont calculés par intégration des coefficients de pression C_q sur la surface correspondante à chaque des trois composantes.

Parallèlement, des mesures de ces forces sont effectuées directement dans la soufflerie à titre de comparaison, comme déjà mentionné au chapitre 3.2.

Les coefficients C_f issus des mesures de forces peuvent être comparés aux coefficients C_f déduits par intégration des C_p car il s'agit de pressions moyennes (figure 28).

La figure 29 présente une comparaison des coefficients C_f par des mesures en soufflerie avec les coefficients déduits par intégration des C_q . Tous les points sont pratiquement alignés sur une droite à 49° , ce qui est compatible au fait que les C_p sont en général supérieurs aux C_q de 10% - 15%.

Les quelques points en parenthèse sur les deux graphiques correspondent à la forme 4.6.8. Il s'agit d'un bâtiment très bas qui présente face au vent une très petite surface, donc de très faibles réactions difficilement mesurables avec précision.

Cette étude de comparaison montre que les coefficients résultant des deux méthodes sont en très bonne corrélation. Ceci autorise la détermination des coefficients des forces par sommation algébrique des coefficients de pression par face de bâtiment.

En ce qui concerne les coefficients de pression, la nouvelle technique est éprouvée et valable pour les déterminations des coefficients C_p et C_q définis au chapitre 2. Les valeurs de C_q présentées dans la norme sont celles qui intéressent l'ingénieur civil. Il s'agit de charges extrêmes correspondant à des éléments de façade, de toiture, d'élément de toit, voir à des structures entières.

Il est toutefois évident que les charges extrêmes ne sont pas exactement celles qu'espère l'ingénieur de structure pour calculer un élément de cadre ou de contreventement local (par exemple d'un étage).

En effet, les pressions dues au vent, étant non uniformes sur les surfaces, les charges extrêmes instantanées qui en résultent vont dépendre du système statique. Par exemple dans le cas d'un cadre, le moment maximum dû au vent peut être différent des moments dûs à la force résultant de la combinaison déterminante des coefficients de pression.

En toute rigueur, il faudrait mesurer en soufflerie les forces transmises par l'enveloppe dan le bâtiment à un instant donné sur les éléments porteurs. Cette remarque est particulièrement importante pour le dimensionnement de grands bâtiments contigus non jointifs (par exemple de grands bâtiments formés de 2

structures indépendantes) pour lesquels seuls des essais particuliers tenant compte de la structure prévue serait à même de fournir les charges.

Aujourd'hui, avec l'aide des microordinateurs, les essais effectués devraient être paramétrés et les résultats présentés sous forme de régression incluant les rapports de dimensions, des angles, des particularités géométriques des ouvertures et de la porosité du bâtiment. Ces formes paramétriques permettraient de déterminer les cas les plus défavorables relatifs à chaque ouvrage spécifique.

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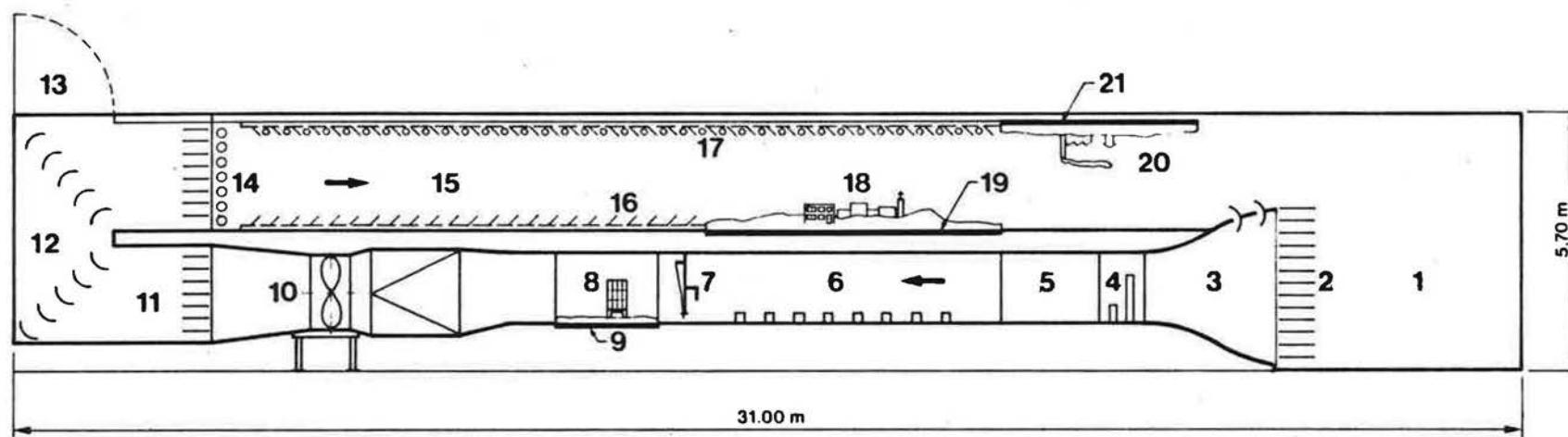


Fig. 1

SOUFFLERIE A COUCHE LIMITE DE L'IENER
Boundary Layer Wind Tunnel at IENER

COUPE VERTICALE
Vertical Cross-section

Echelle
Scale

0 1 2 3 m

17

1. Chambre de tranquillisation	Stabilization Chamber	$4 \times 5 \times 5 \text{ m}^3$	12. Diffuseur en double coude	Diffuser	$4 \pm 8 \text{ m}^2$
2. Grille en nid d'abeille	Honey Comb Grid		13. Panneau ouvrant pour fonctionnement en circuit ouvert	Opening Panel for Open Circuit Operation	
3. Concentration	Contraction	rapport 6:1	14. Echangeurs de chaleur	Heat Exchangers	
4. Générateurs de turbulence amovibles	Removable Vortex Generators		15. Veine de diffusion	Diffusion Test Section	$4 \times 2 \text{ m}^2$
5. Chambre d'expérimentation I	Test Section I	$2,00 \times 1,50 \text{ m}^2$	16. Plancher et rugosités refroidis	Floor and Roughness Element (Cooled)	
6. Rugosité de couche limite	Boundary Layer Roughness		17. Plafond et rugosités chauffés	Roof and Roughness Element (Heated)	
7. Porte-sonde	Probe Support		18. Chambre d'expérimentation III	Test Section III	$4 \times 2 \text{ m}^2$
8. Chambre d'expérimentation II (couche limite)	Test Section II (Boundary Layer)	$2,00 \times 1,50 \text{ m}^2$	19. Plateau tournant pour modèles topographiques	Turntable for Topographical Models	$\varnothing 6 \text{ m}$
9. Plateau tournant pour bâtiment	Turntable Platform for Building	$\varnothing ? \text{ m}$	20. Chambre d'expérimentation IV	Test Section IV	$4 \times 2 \text{ m}^2$
10. Ventilateur	Fan	435 kW	21. Plateau tournant pour modèle de diffusion	Turntable for Diffusion Models	$\varnothing 4 \text{ m}$
11. Grille de redressement	Flow Straightening Grid				

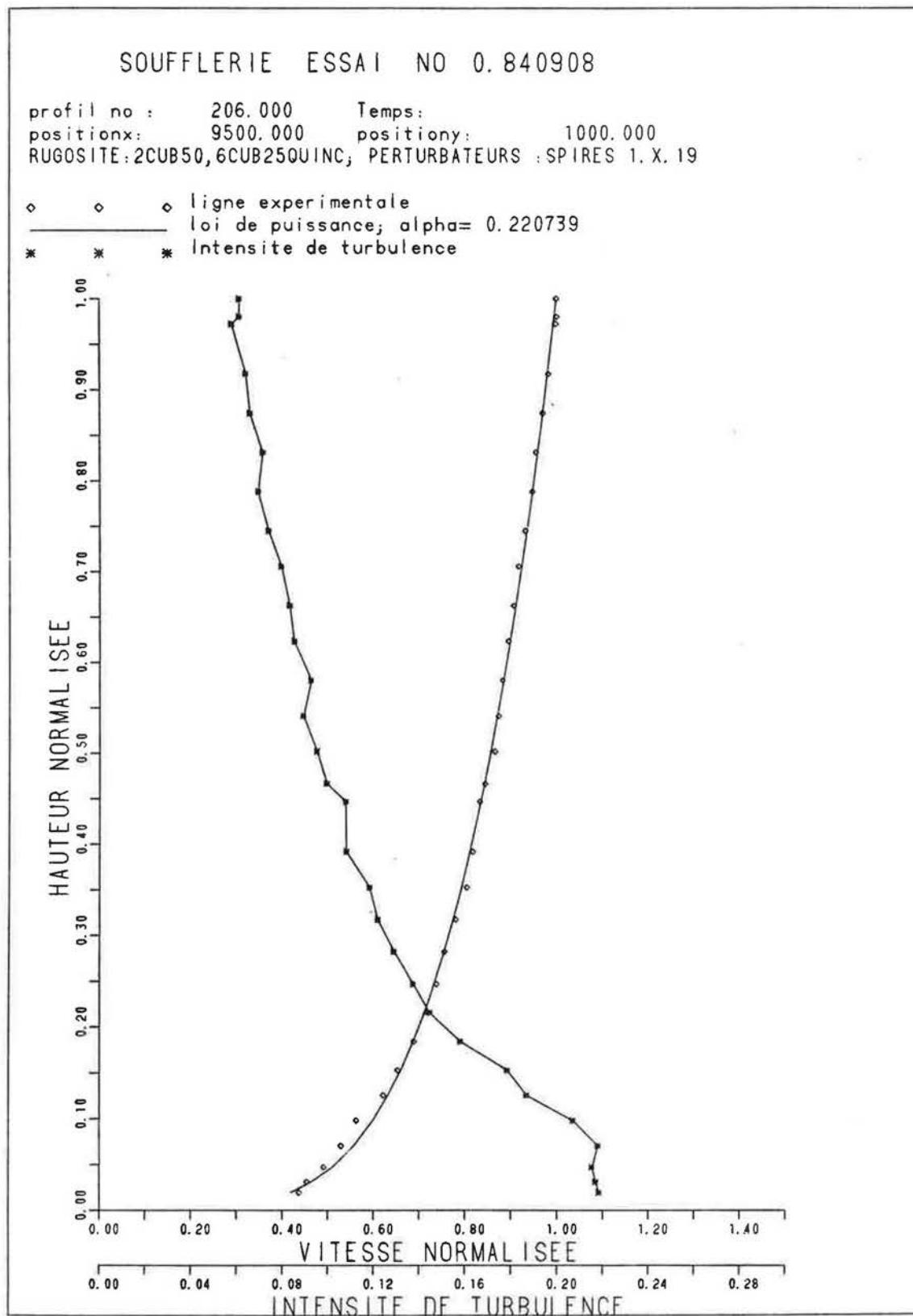


Fig. 2. Profils de vitesse et d'intensité de turbulence de l'écoulement destiné aux mesures des coefficients de pression sur les bâtiments (Norme SIA 160).

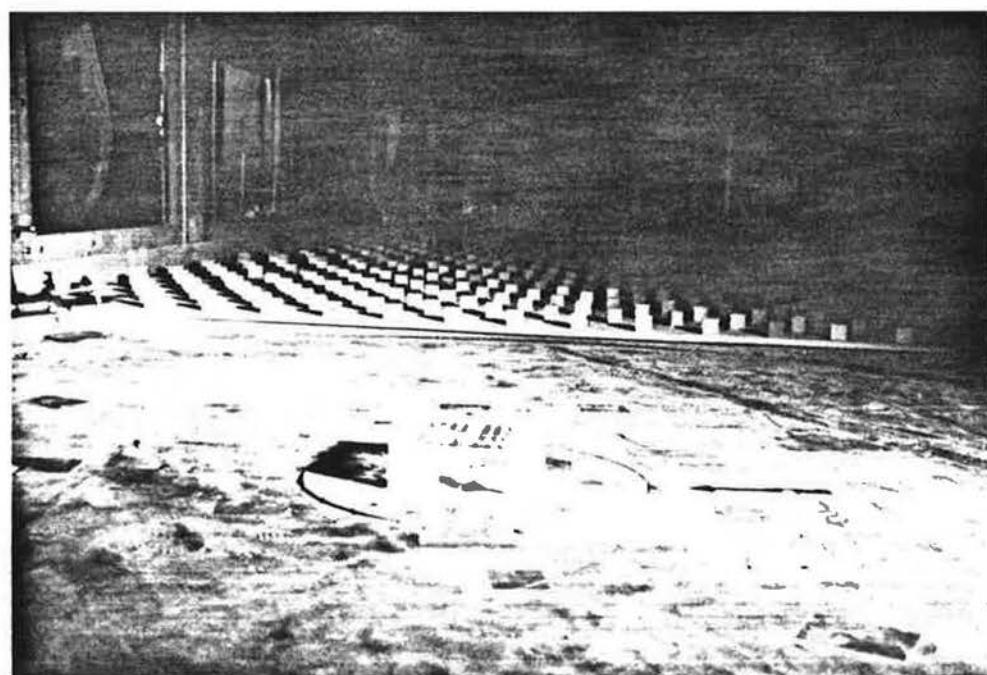


Fig. 3. Vue du modèle de "halle fermée" et du dispositif de création de l' écoulement turbulent dans la soufflerie à couche limite du LASEN.

Norme SIA 160
Groupe vent

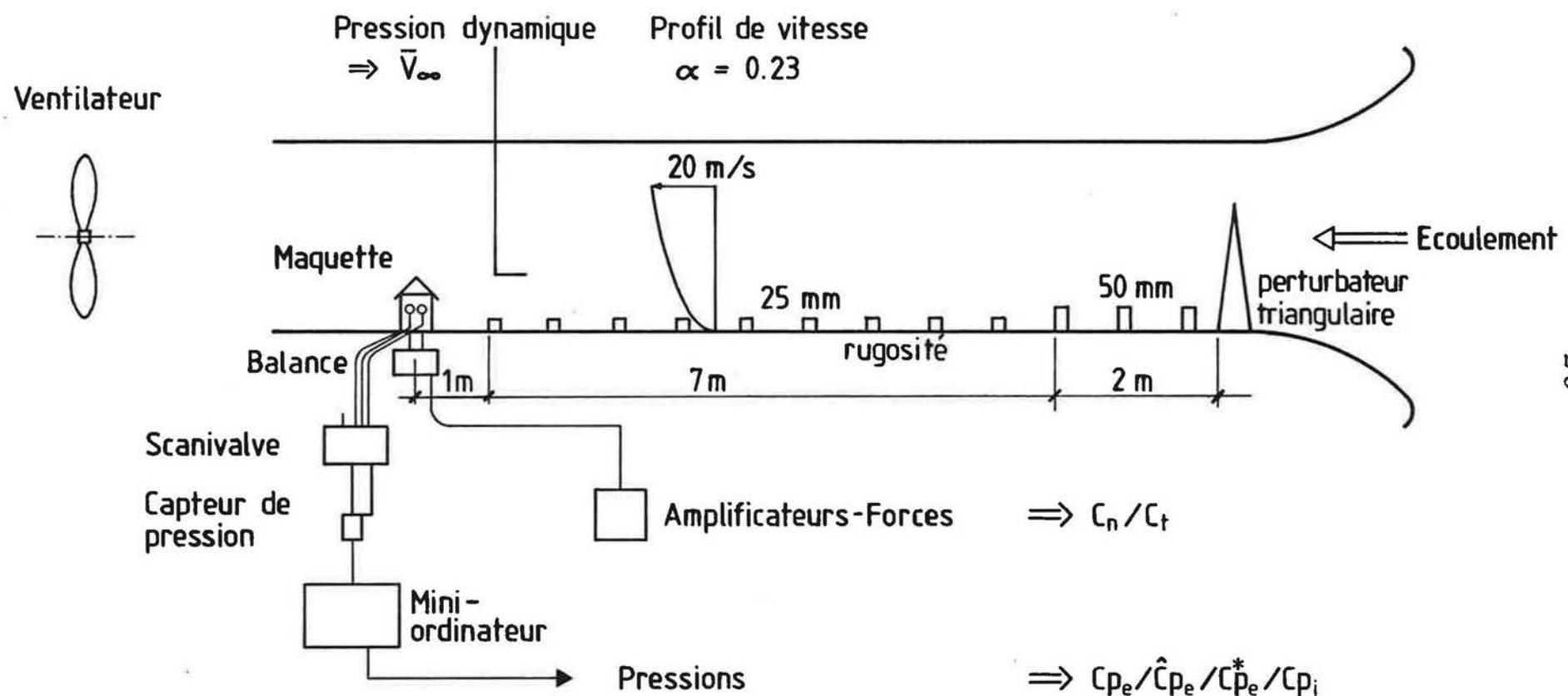


Fig. 4 Schéma d'installation des modèles dans la soufflerie pour la mesure des coefficients C_n / C_p

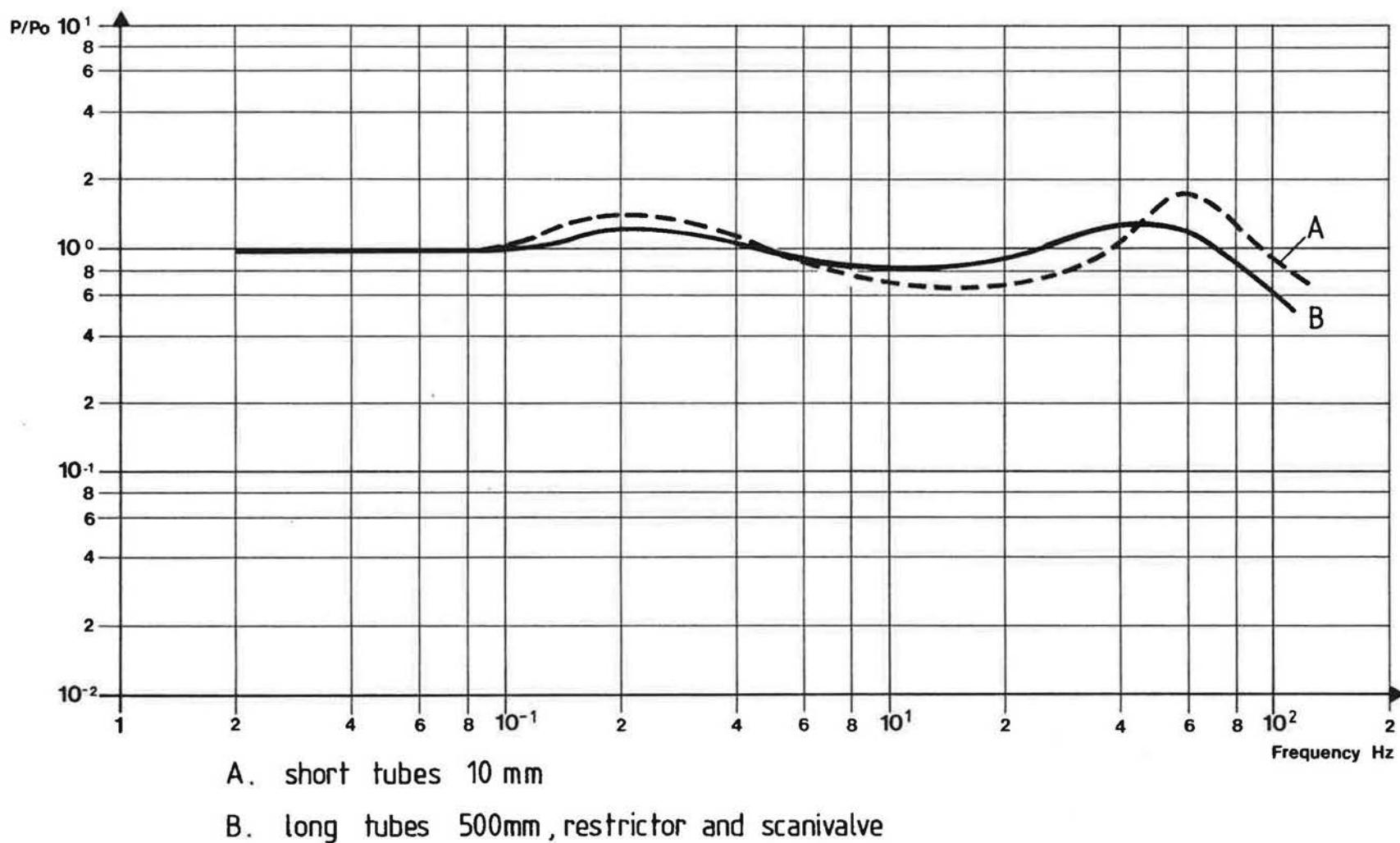


Fig. 5. Réponse en fréquence du système pneumatique de mesure de pressions.

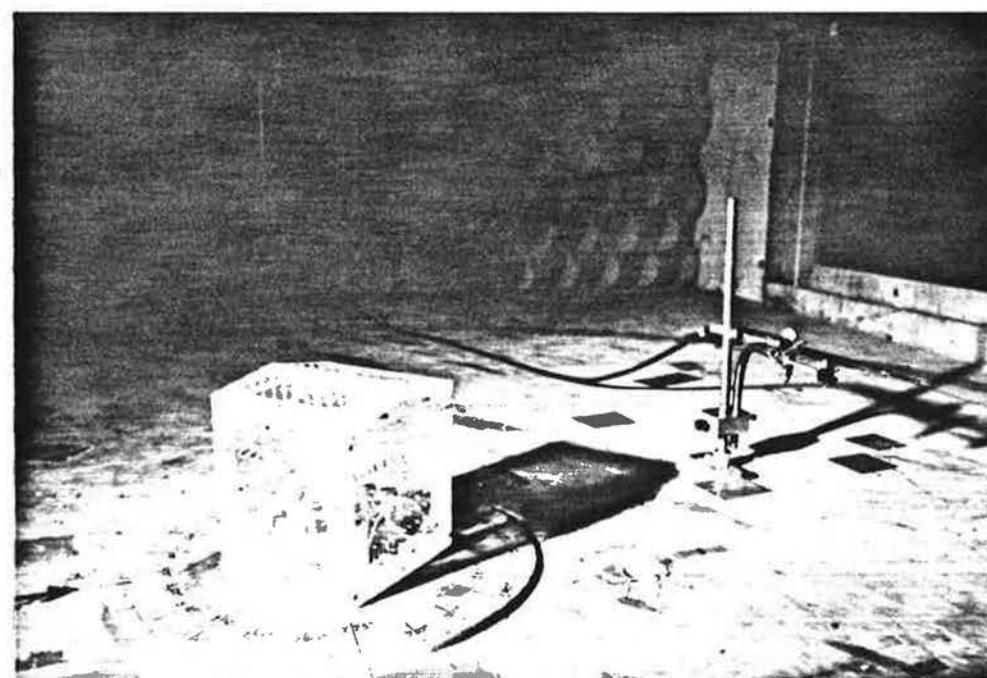
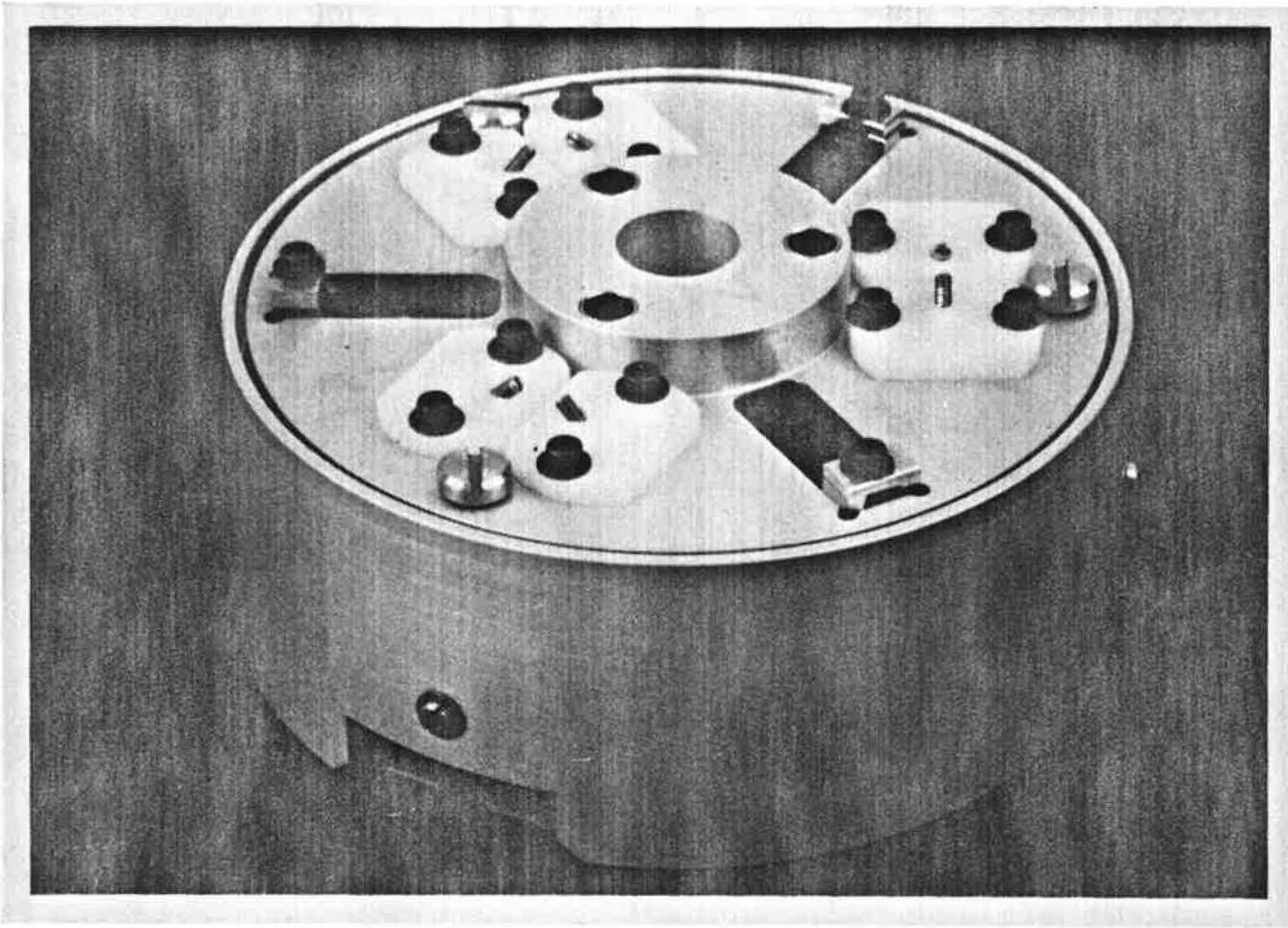
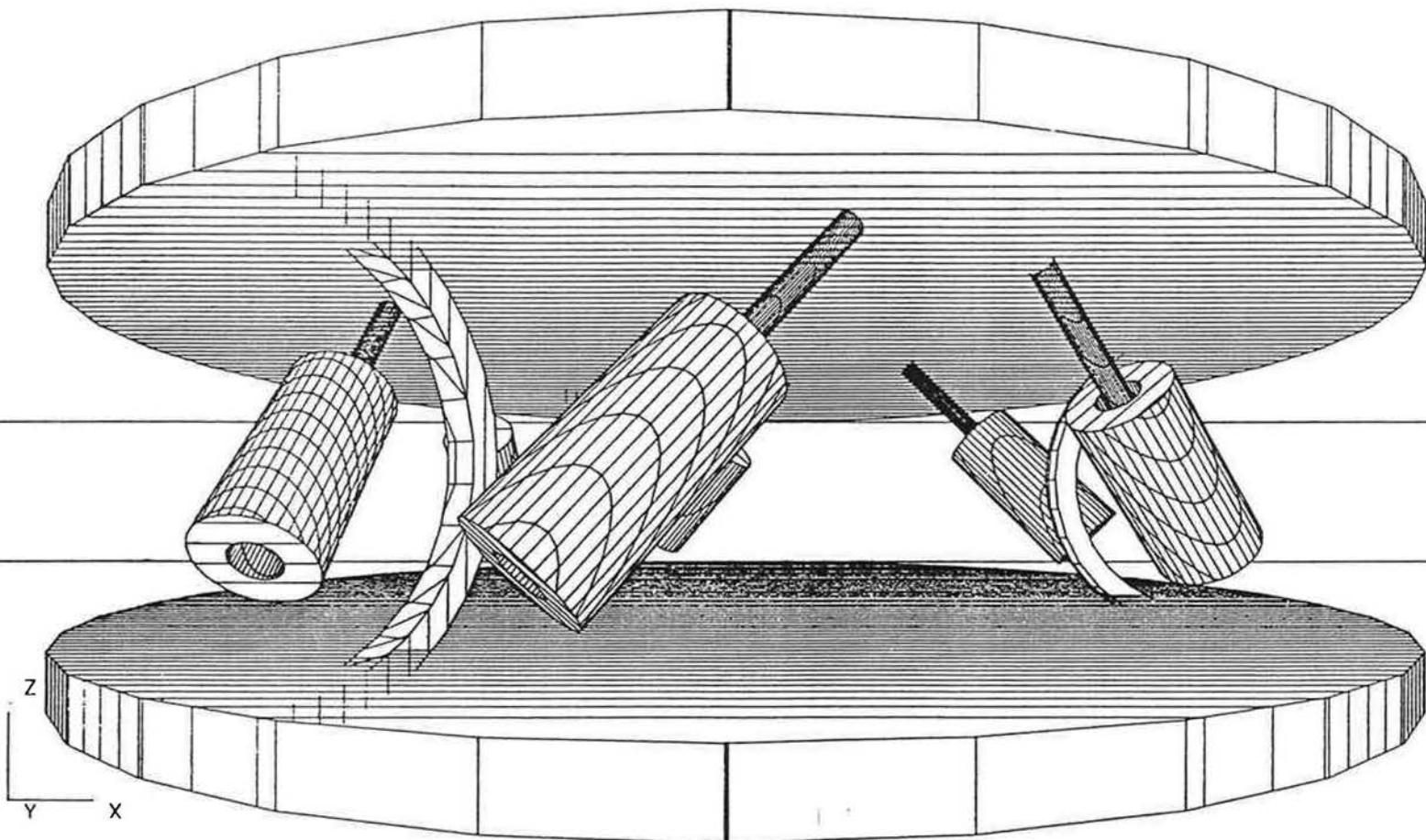


Fig. 6. Maquette de bâtiment et sonde de mesure de vitesse de référence dans la soufflerie.



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Fig. 7. Balance à six composantes pour la mesure des forces.



PERSPECTIVE OBSERV. / PT. VISE	CAPTEUR STERNHEIM	CADWORK
0 0		
-700 0		
-150 -150	LIMITES COORD. X - (-450 450 DU [MM] Y - (-450 450 MODELE Z - (-250 5.66 FACES NB - 1075	19-DEC-86 10:31:36

Fig. 8. Schéma de principe des capteurs de la balance à six composantes.

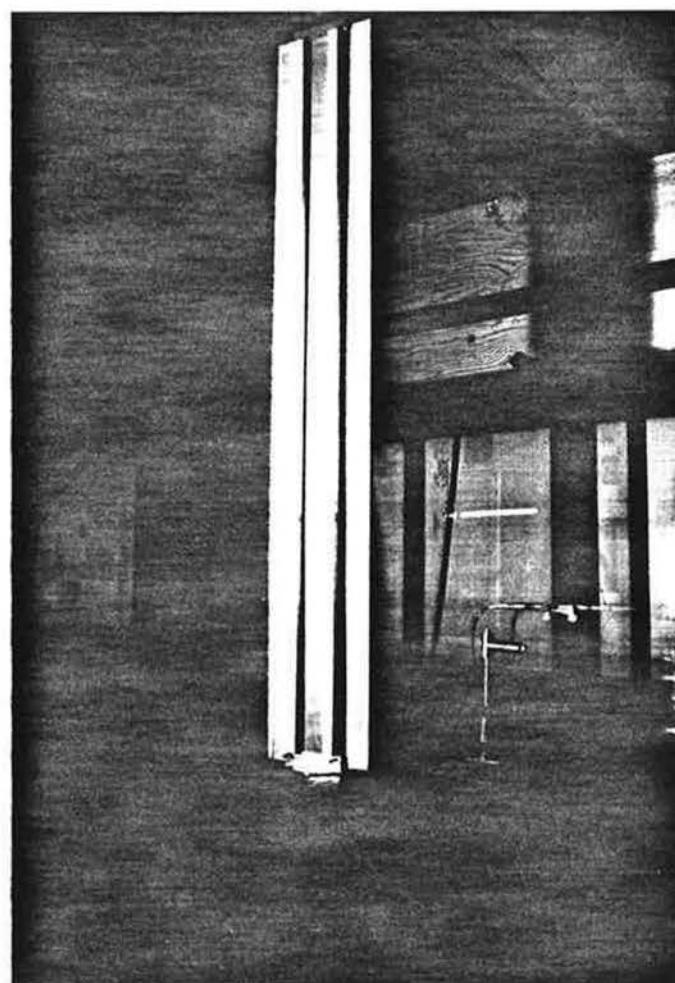


Fig. 9. Modèle de pont et sonde de mesures de vitesse dans la soufflerie.

Fig. 10a. Grille génératrice de turbulence.

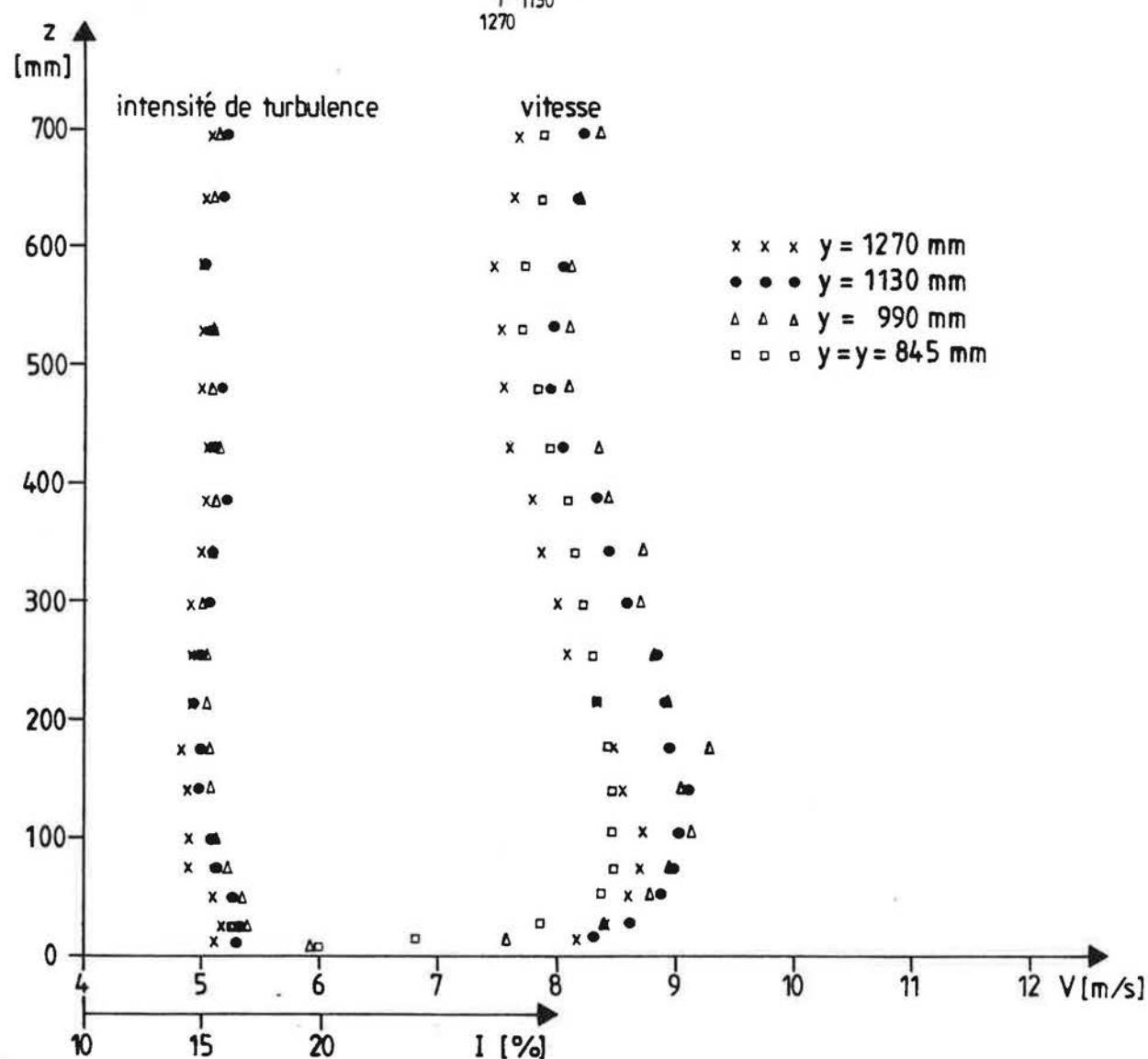
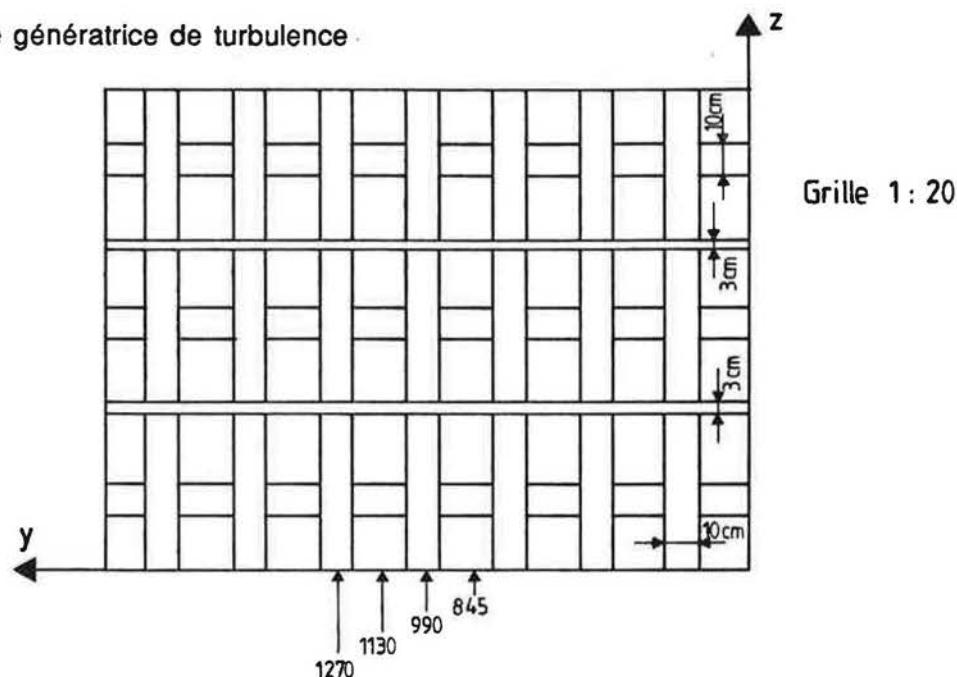


Fig. 10b. Profils de vitesse et intensité de turbulence pour les mesures de forces sur les tabliers de ponts.

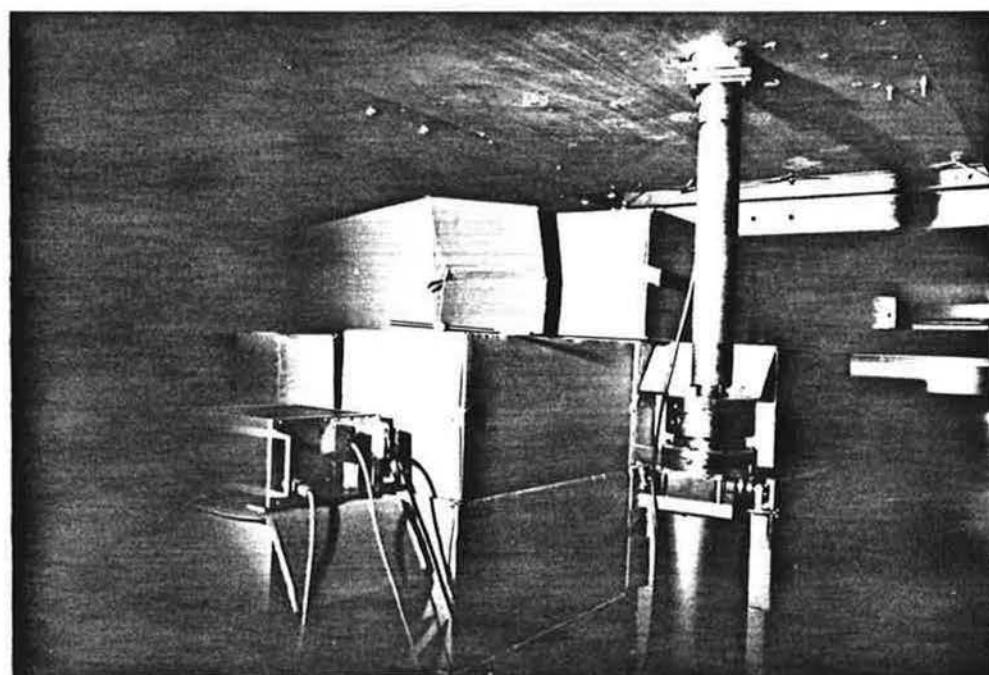
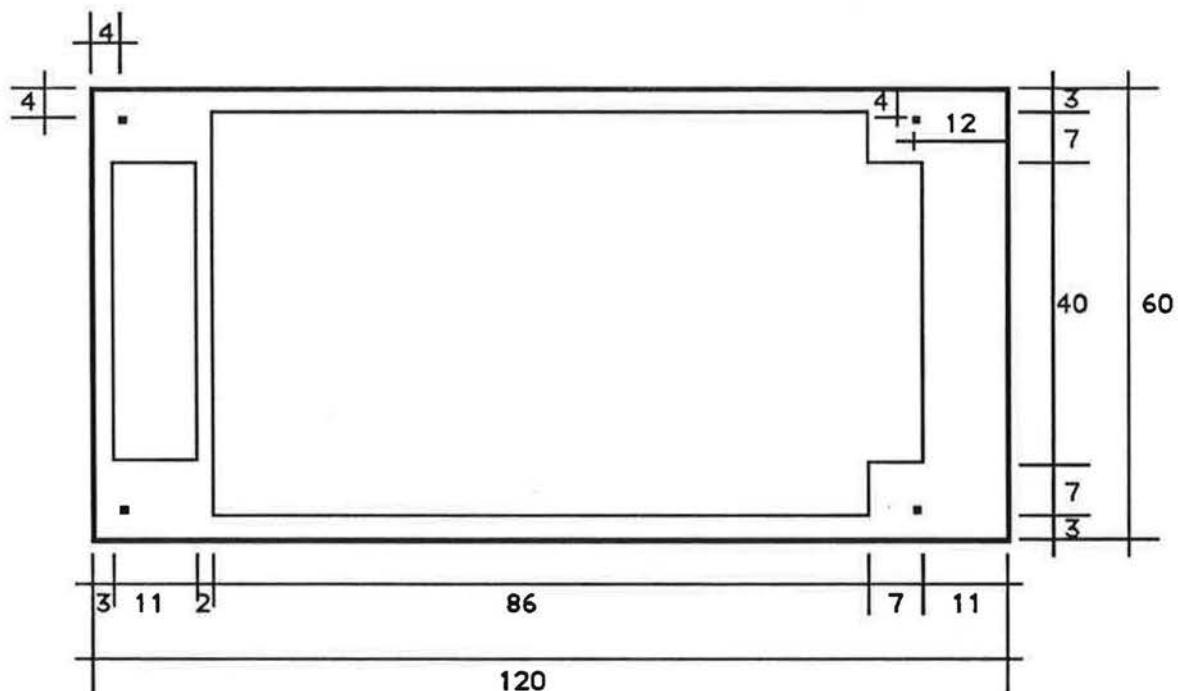
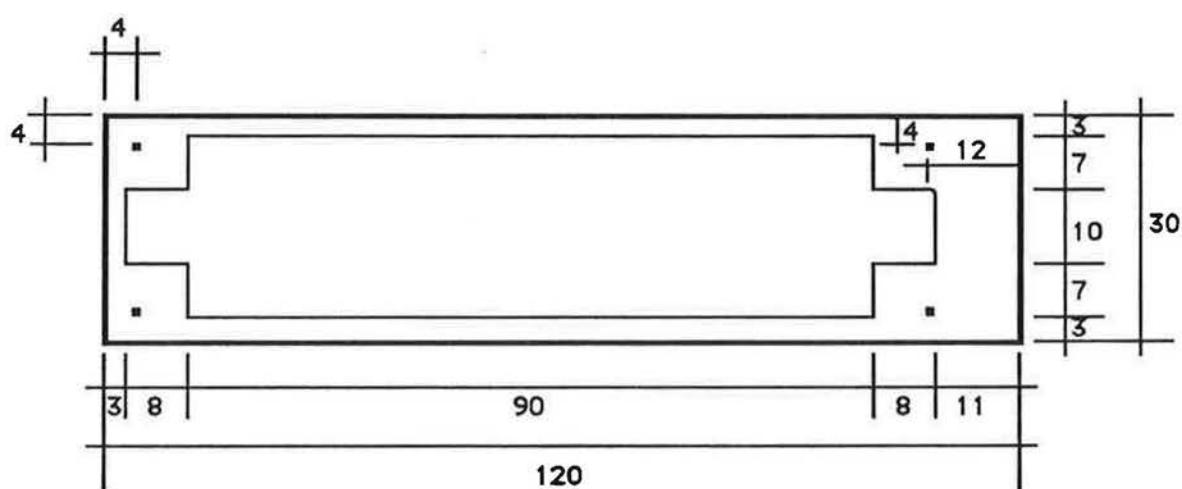


Fig. 11. Balance de base sur son support, placée à l' extérieur de la soufflerie du LASEN.

Fig.12 MUR , HAUTEUR 60 mm.

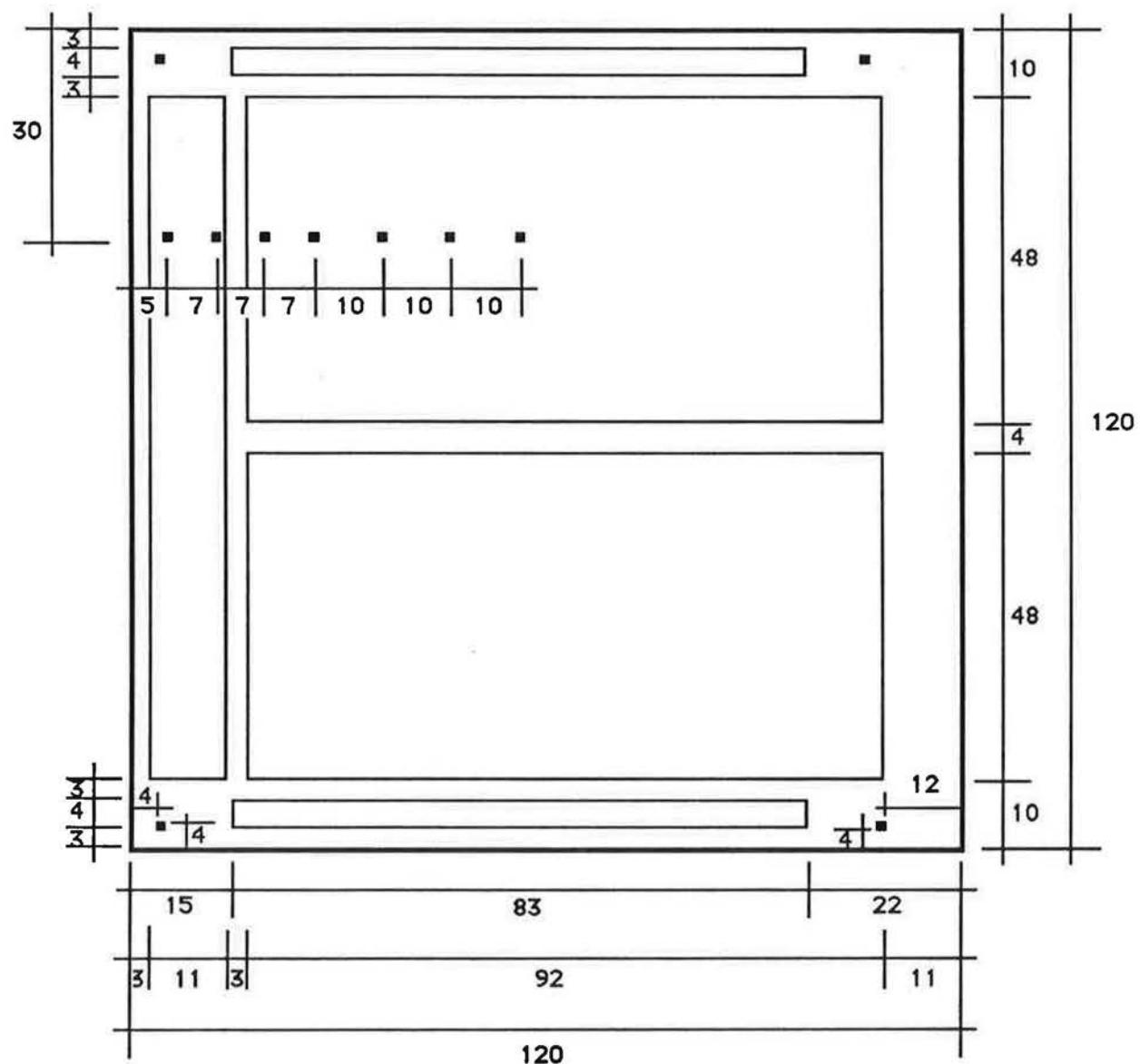


MUR , HAUTEUR 30 mm.



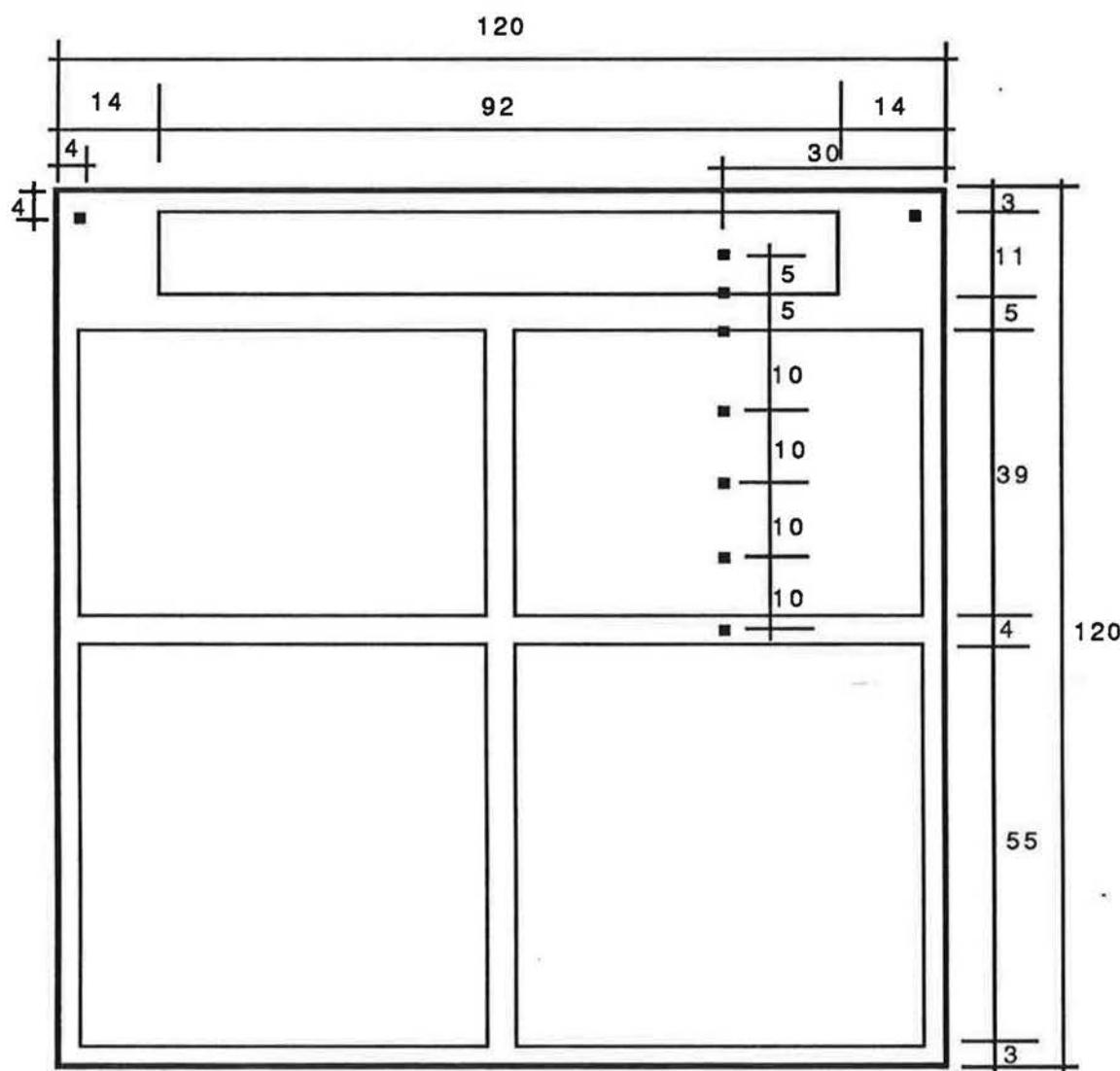
Dimensions en mm.

Fig. 13 MUR , HAUTEUR 120 mm.



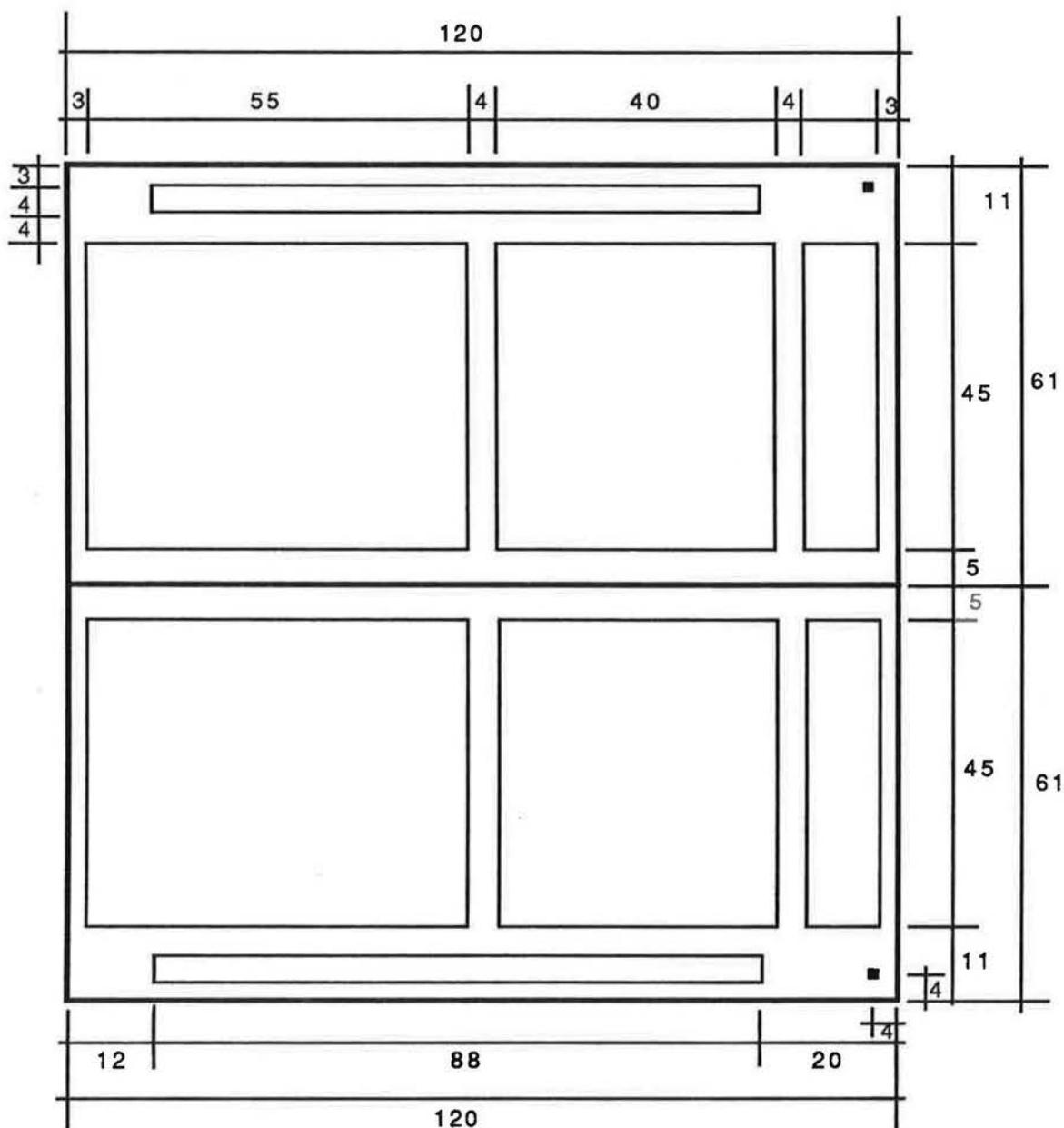
Dimensions en mm.

Fig. 14 TOITURE A 0 DEGRE



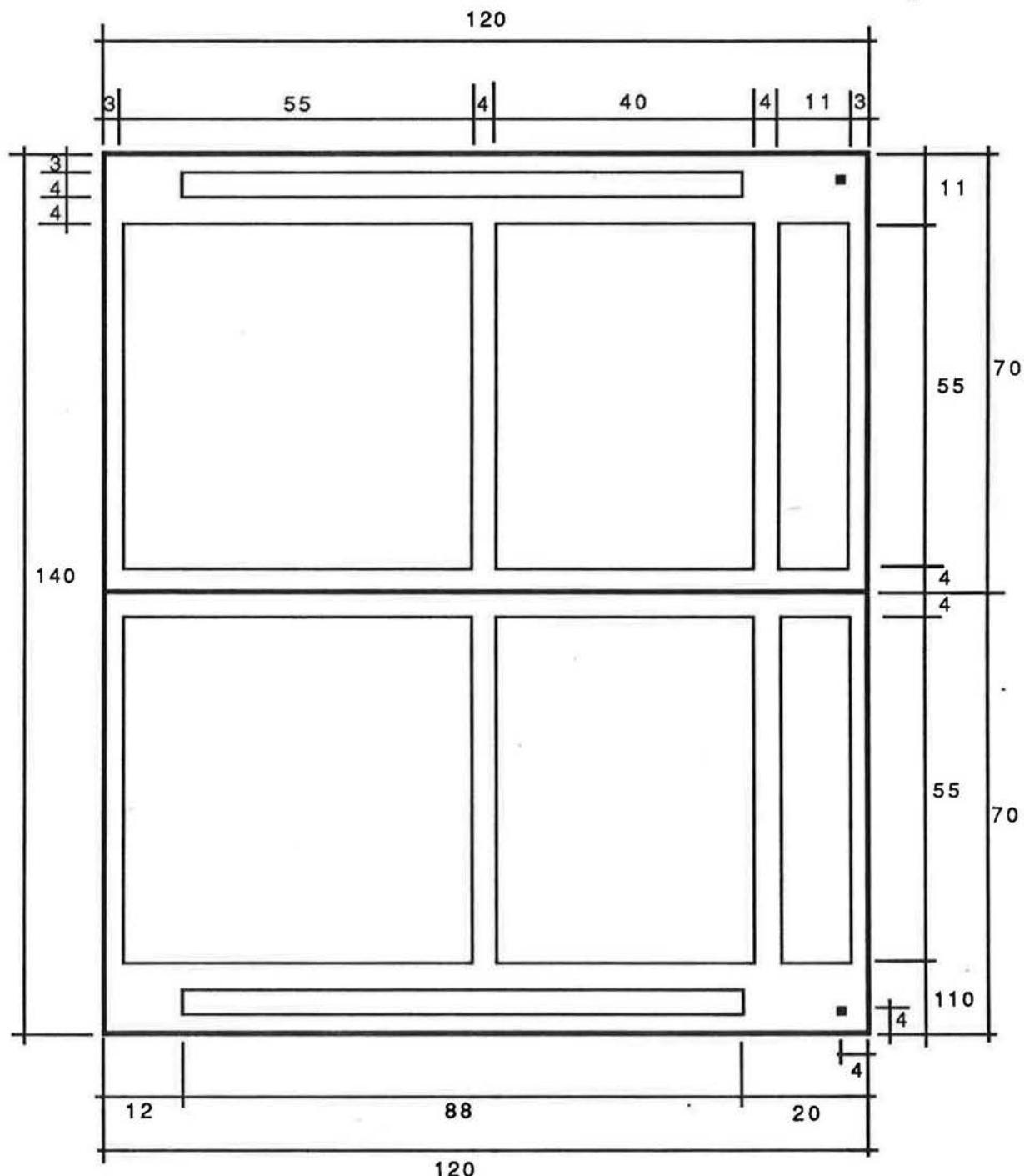
Dimensions en mm.

Fig.15 TOITURE A 10 DEGRES



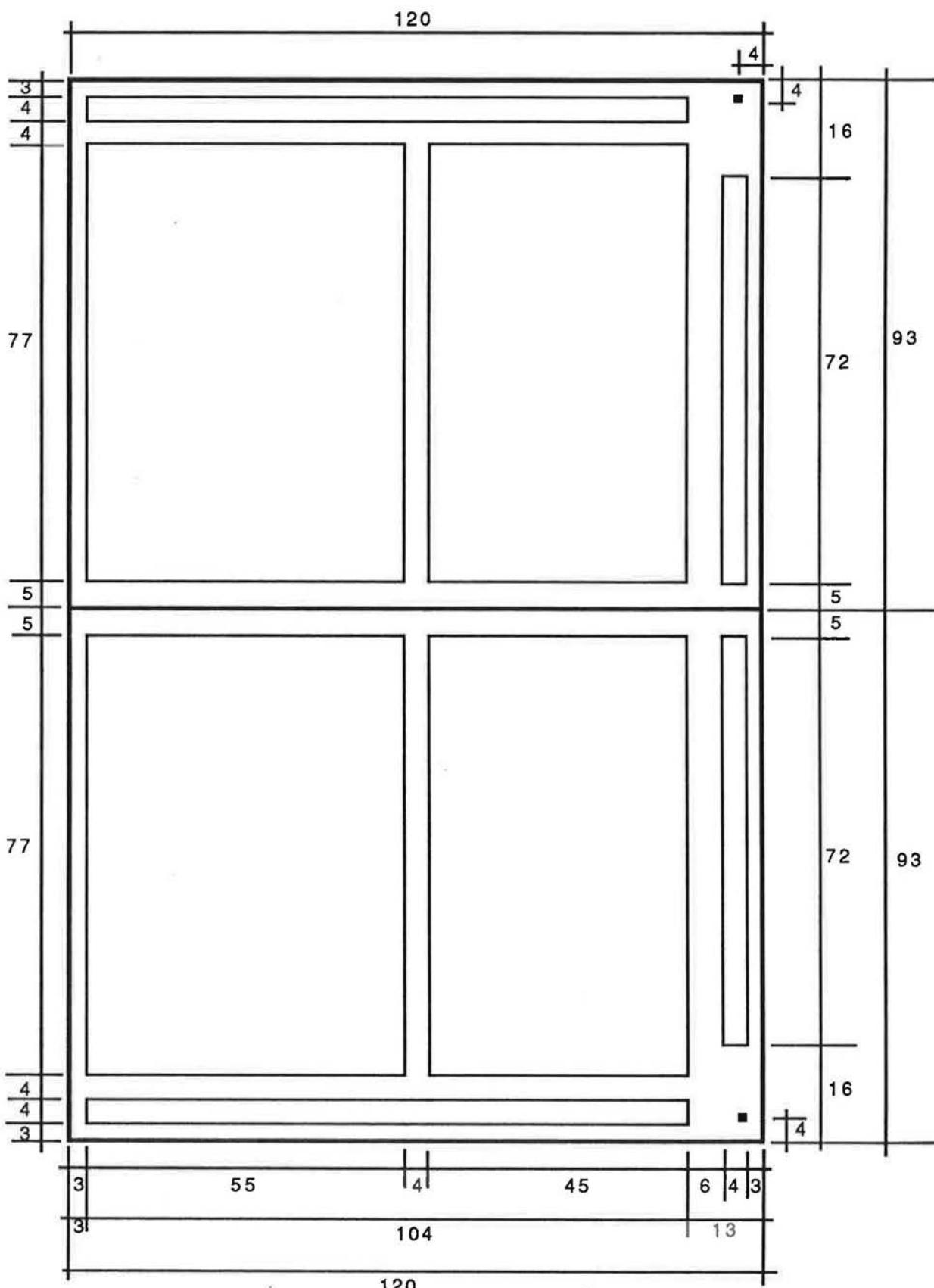
Dimensions en mm.

Fig. 16 TOITURE A 30 DEGRES



Dimensions en mm.

Fig.17 TOITURE A 50 DEGRES



Dimensions en mm.

LASEN N504. 125

29.11.1988 Ko/WI

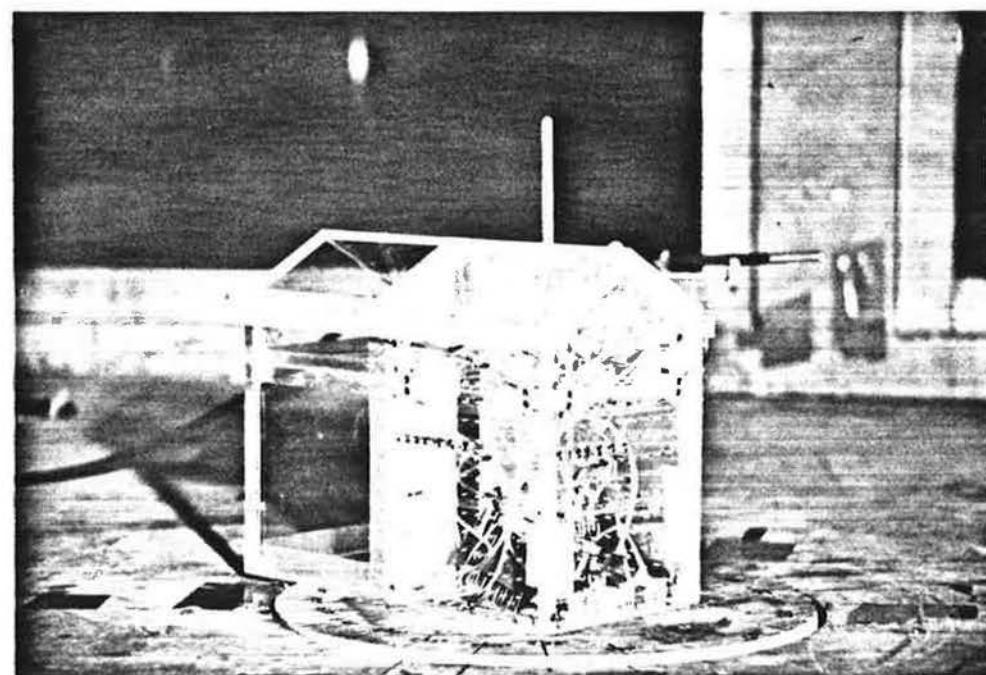


Fig. 18. Exemple d' une maquette de bâtiment de grande taille formée par des éléments équipés de prises de pression et complétée par un "masque" en plexiglass.

Forme Ancien. Norme	Nouv. Norme	Toit	Hauteur : h (mm)	Largeur : b (mm)	Longueur : l (mm)	Rapport : h:b:l Modèle	Norme	Remarques
0	4.6.4	Plat	128	120	120	1:0.94:0.94	1:1:1	
1	4.6.3	Plat	38	120	120	0.3:1:1	0.3:1:1	
2	4.6.5	10°	139	120	120	1:0.86:0.86	1:1:1	
300	(4.6.5 toit plat)	Plat	308	120	120	2.57:1:1	(2.5:1:1)	
310	4.6.6	10°	319	120	120	2.66:1:1	2.5:1:1	
4	4.6.8	30°	58	240	120	0.475:2:1	0.5:2:1	
5	4.6.7	10°	169	240	120	1.6:2:1	1.5:2:1	Avant-toits
6	4.6.10	30°	192	240	120	2.25:1.25	2:2.5:1	Avant-toits
7	4.6.11	50°	235	240	120	1.96:2:1	2:2:1	Avant-toits
8	4.6.9	30°	283	240	120	2.36:2:1	2.5:2:1	
151	4.6.19	30°	162	240	120	1.35:2:1	1:2.5:1.5	2 longs murs ouverts
152	4.6.21	30°	162	240	120	1.35:2:1	1:2.5:1.5	2 murs pignons ouverts
162	4.6.18	30°	162	240	120	1.35:2:1	1:2.5:1.5	1 long mur ouvert
161	4.6.20	30°	162	240	120	1.35:2:1	1:2.5:1.5	1 mur pignon ouvert
20	4.6.24	10°	90	600	120	0.75:5:1	0.6:5:1	Sans convoi
21	4.6.26	10°	90	600	120	0.75:5:1	0.6:5:1	Avec convoi
22	4.6.29	-10°	90	600	120	0.75:5:1	0.6:5:1	Avec convoi
23	4.6.27	-10°	90	600	120	0.75:5:1	0.6:5:1	Sans convoi

Fig. 19. Tableau recapitulatif des dimensions des modèles.

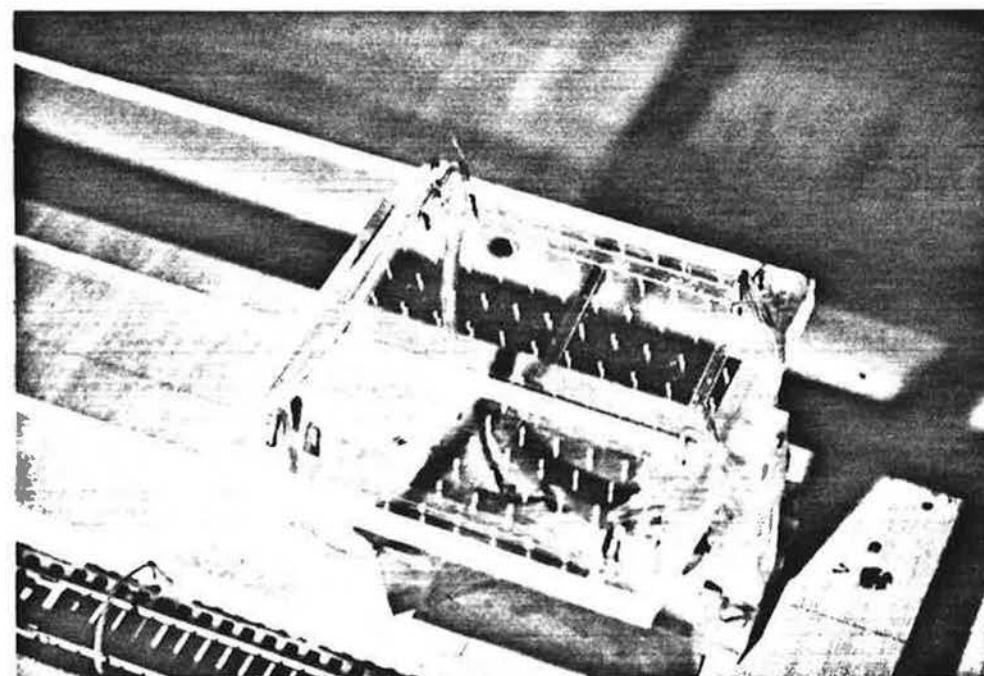


Fig. 20. Exemple de la surface extérieure d'une toiture avec des prises de pression espacées de 10mm.

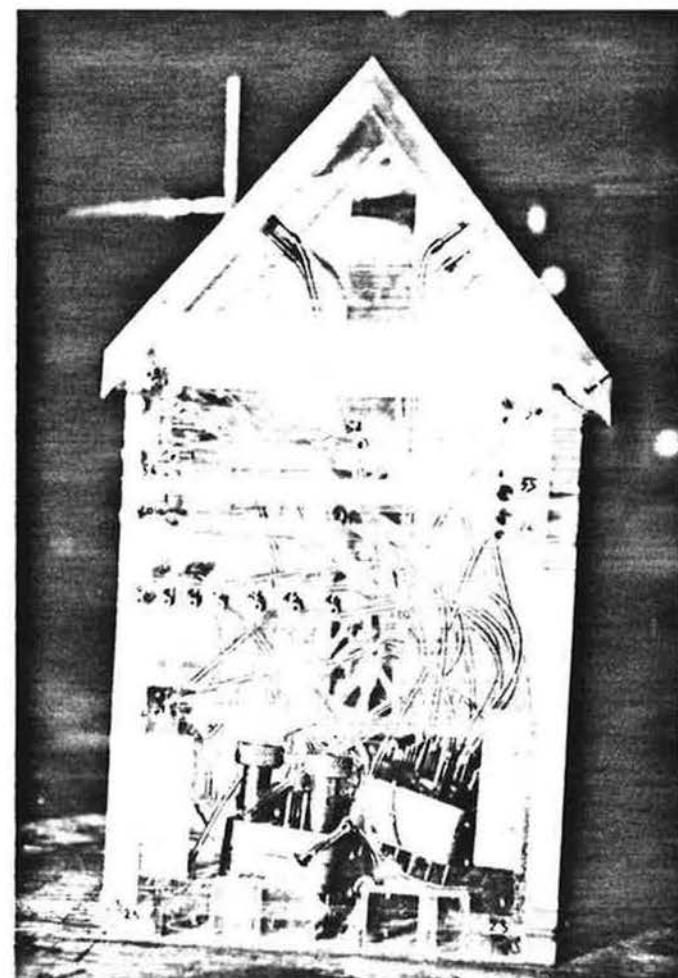


Fig. 21. Intérieur d' un bâtiment. La technique utilisée pour les mesures de pression sur le toit ne nécessite ici que quatre prises de pressions.

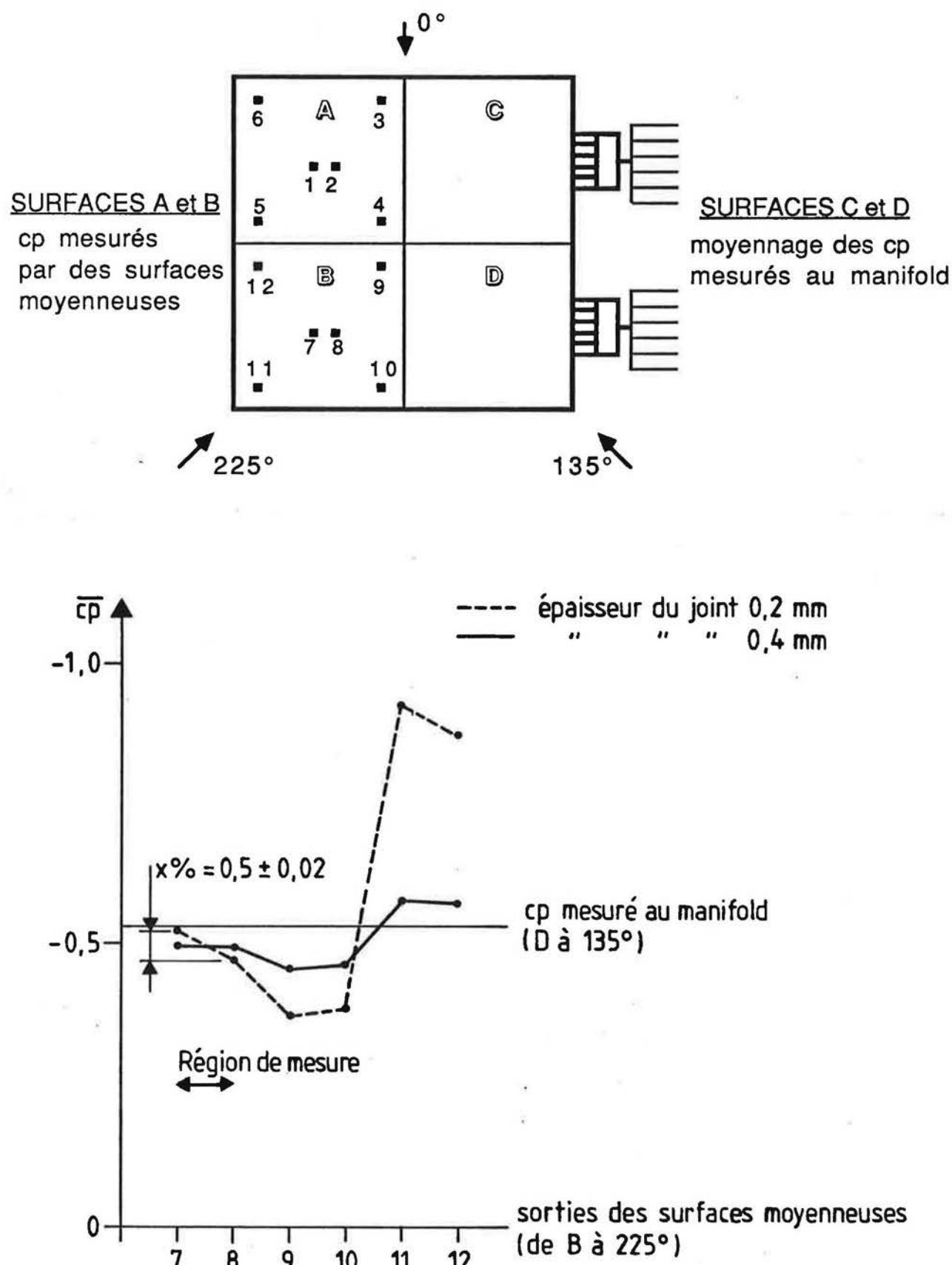


Fig. 22 Exemple de l'étude de précision du moyennage des CP, en fonction de l'épaisseur de la cavité

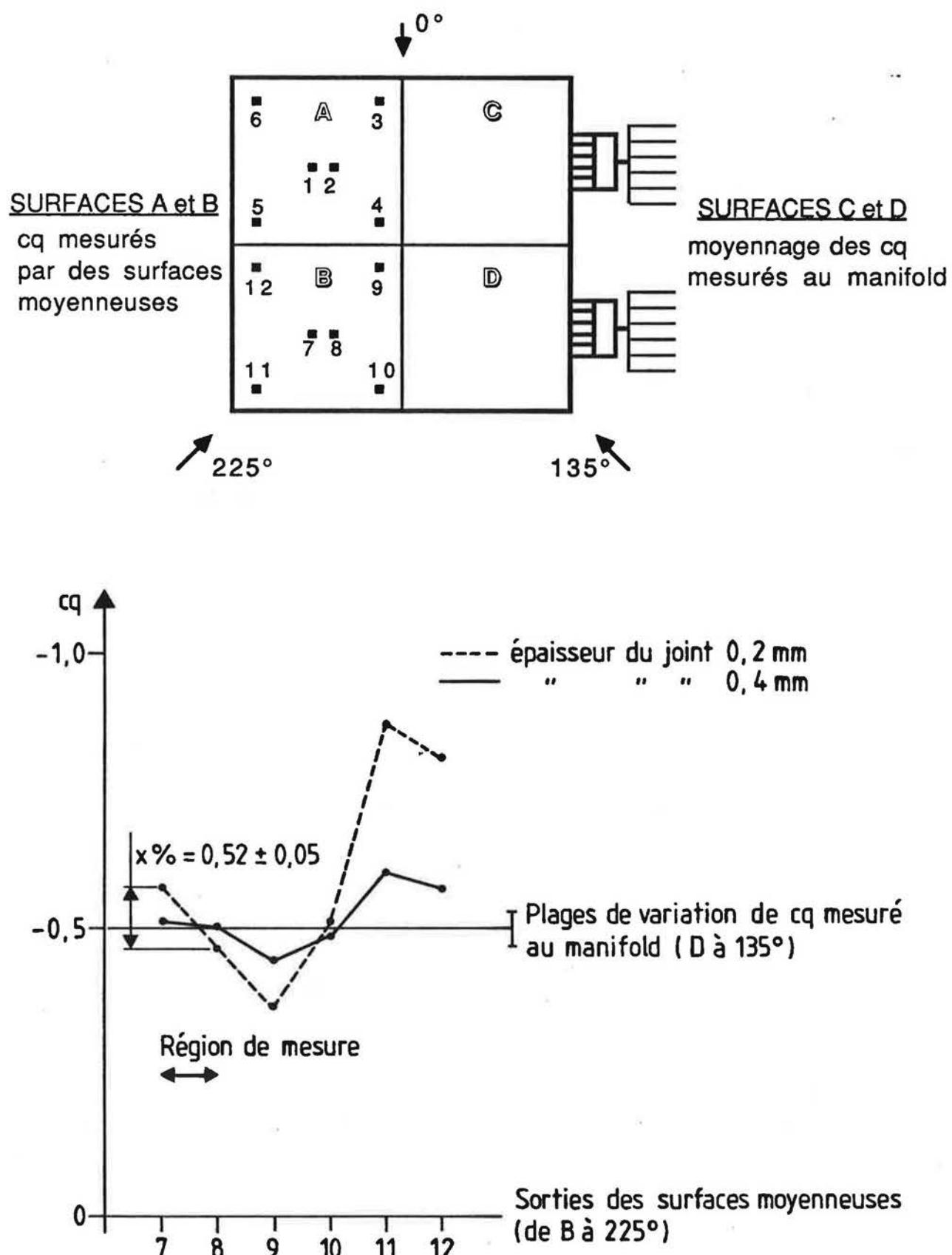


Fig. 23 Exemple de l'étude de précision du moyennage des cq, en fonction de l'épaisseur de la cavité

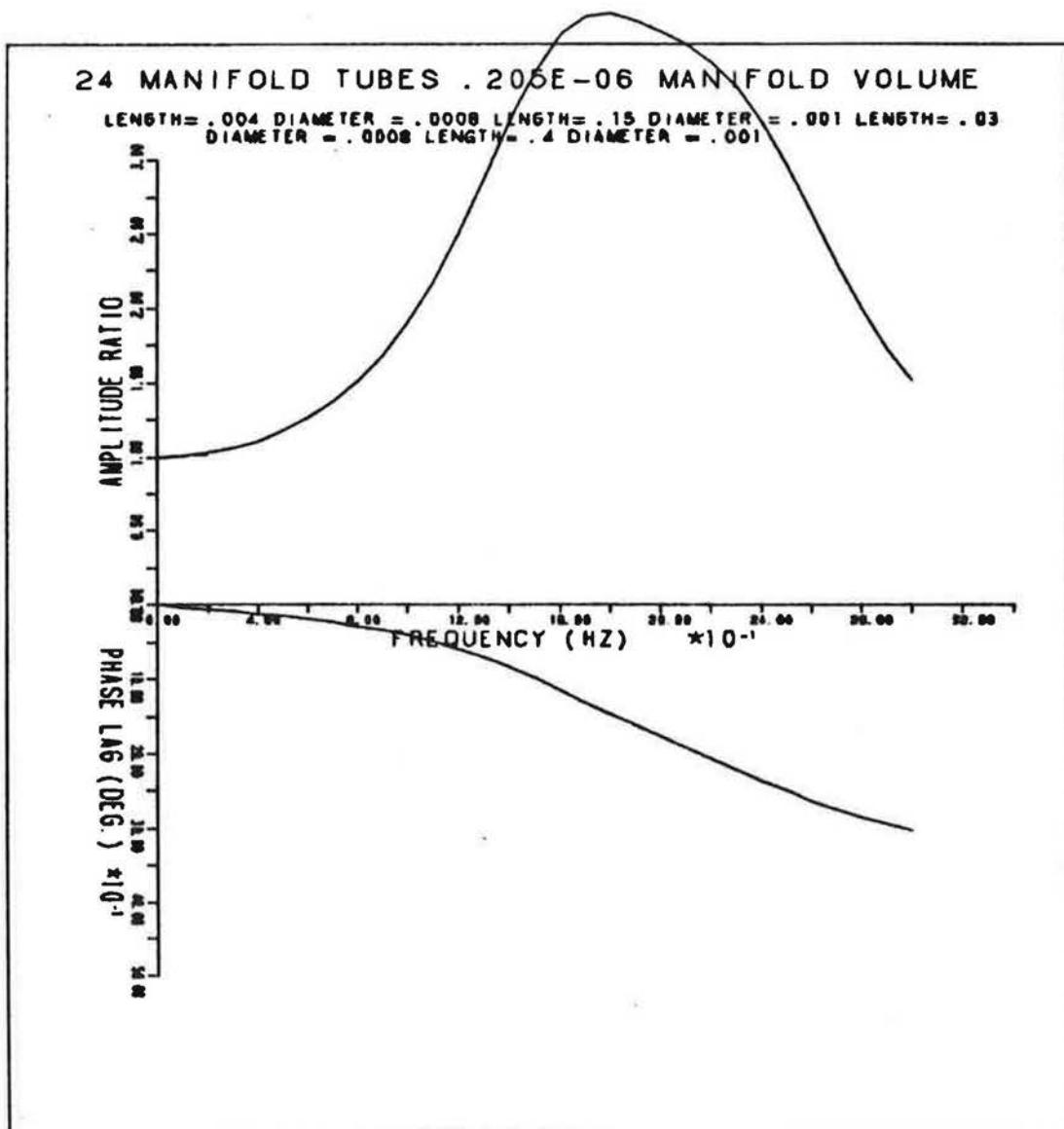
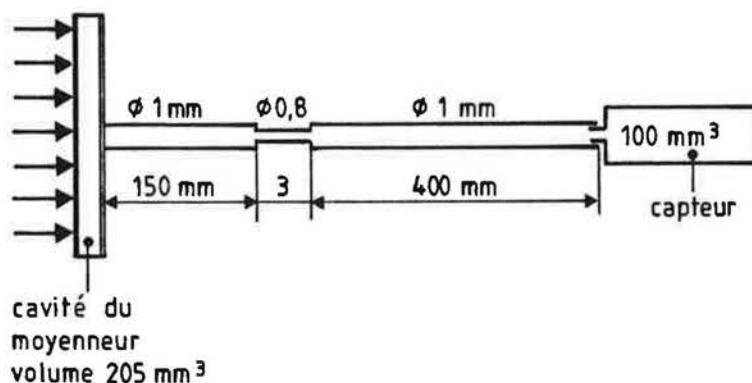


Fig.24 Réponse en fréquence du moyenneur pneumatique de 205mm³ de volume.

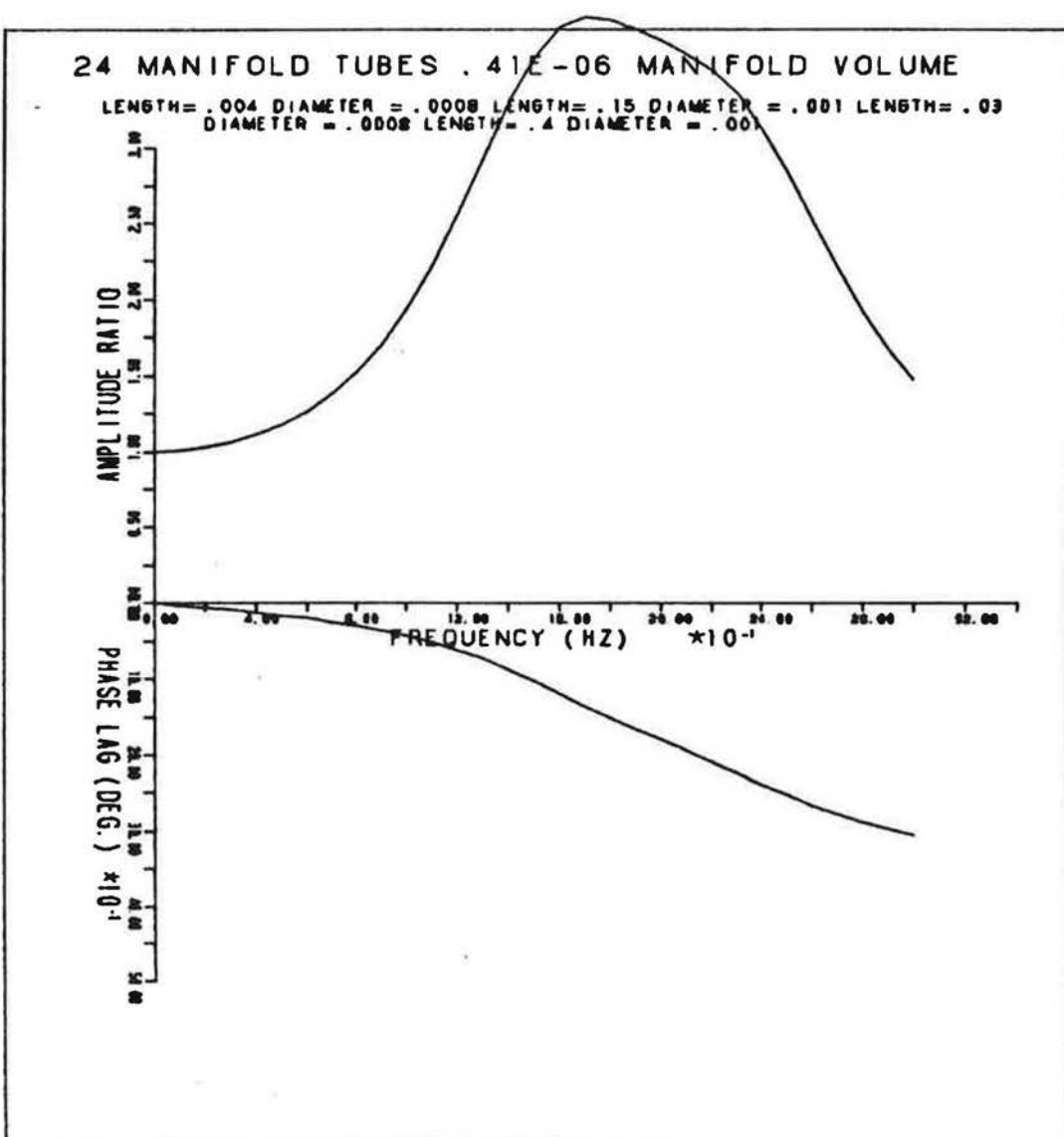
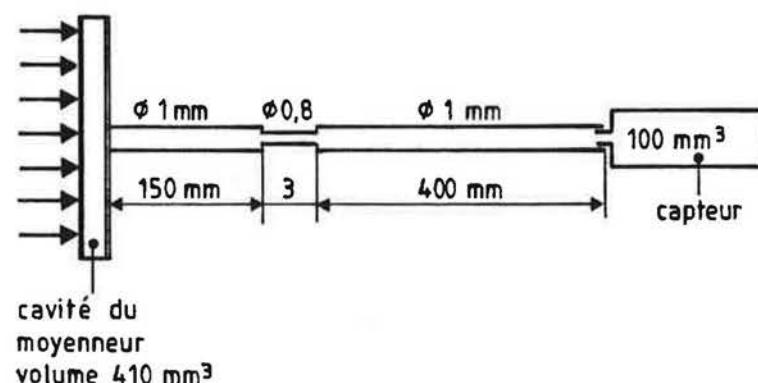


Fig.25 Réponse en fréquence du moyenneur pneumatique de 410 mm^3 de volume.

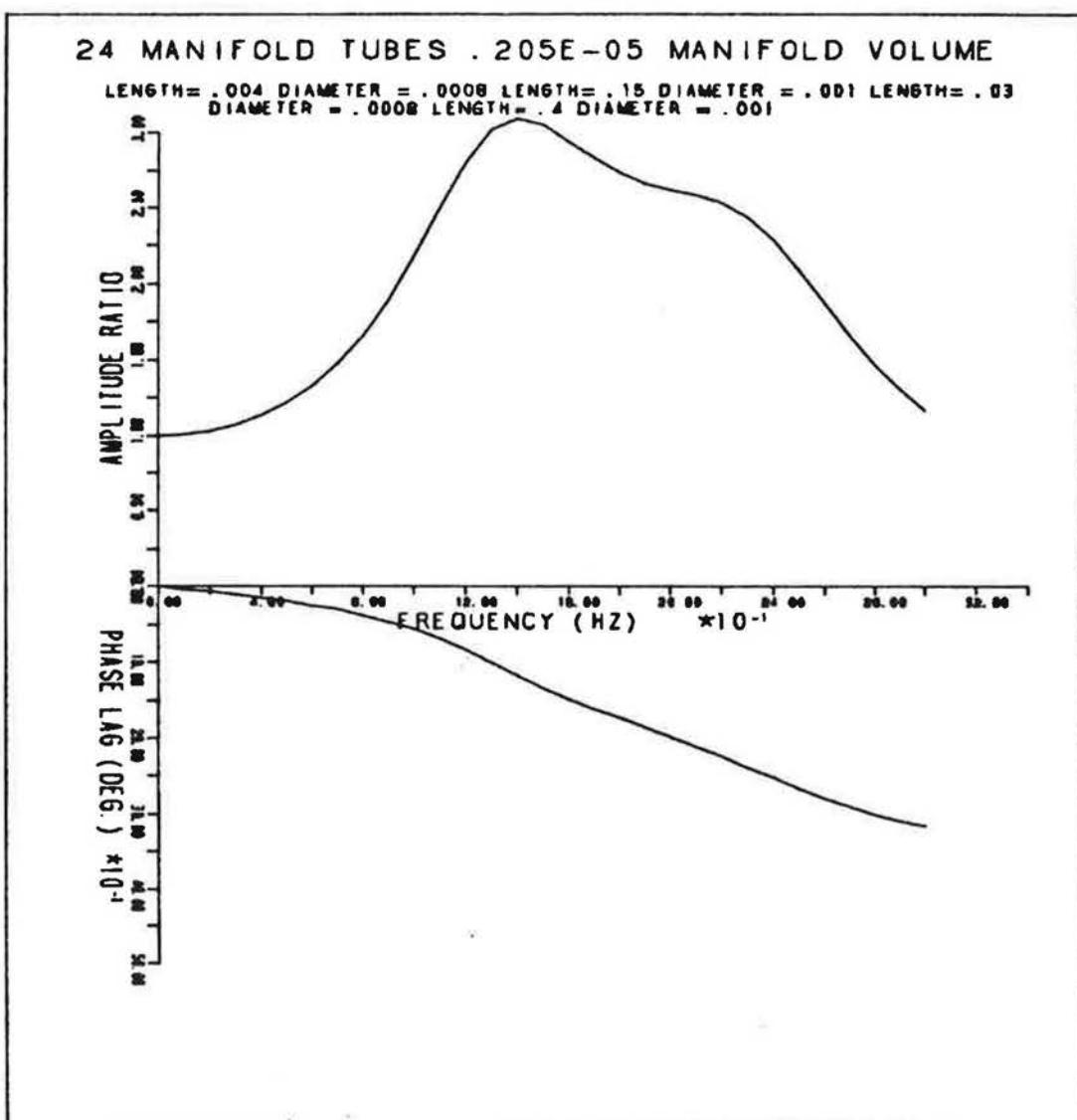
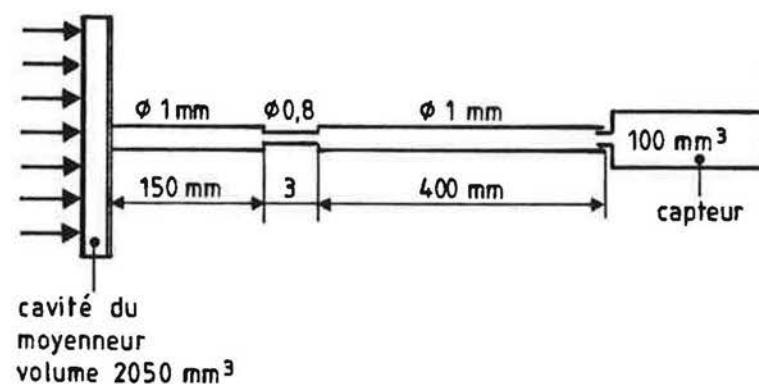
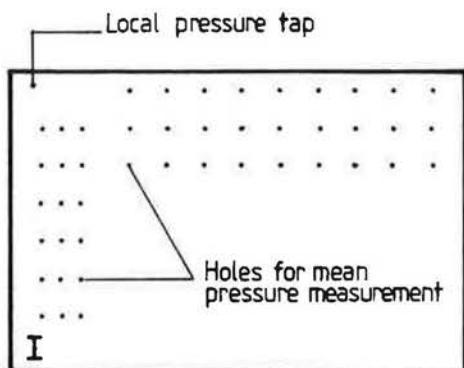
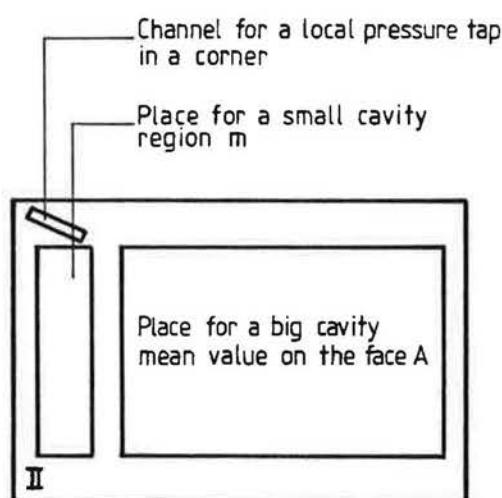


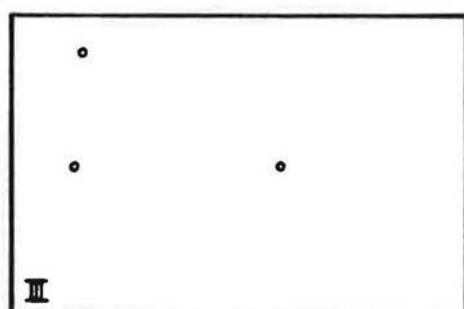
Fig.26 Reponse en fréquence du moyenneur pneumatique de 2050mm³ de volume.



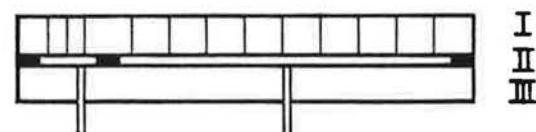
External plate



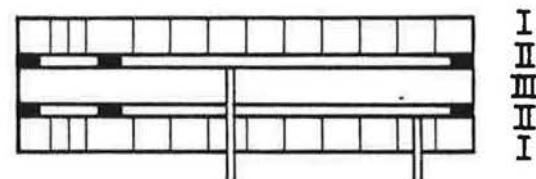
Double-faced adhesive sheet



Internal face



A. normal wall



B. special wall for internal
and external pressure
measurement

Fig. 27 Plan des parois des modèles (toiture ou mur).

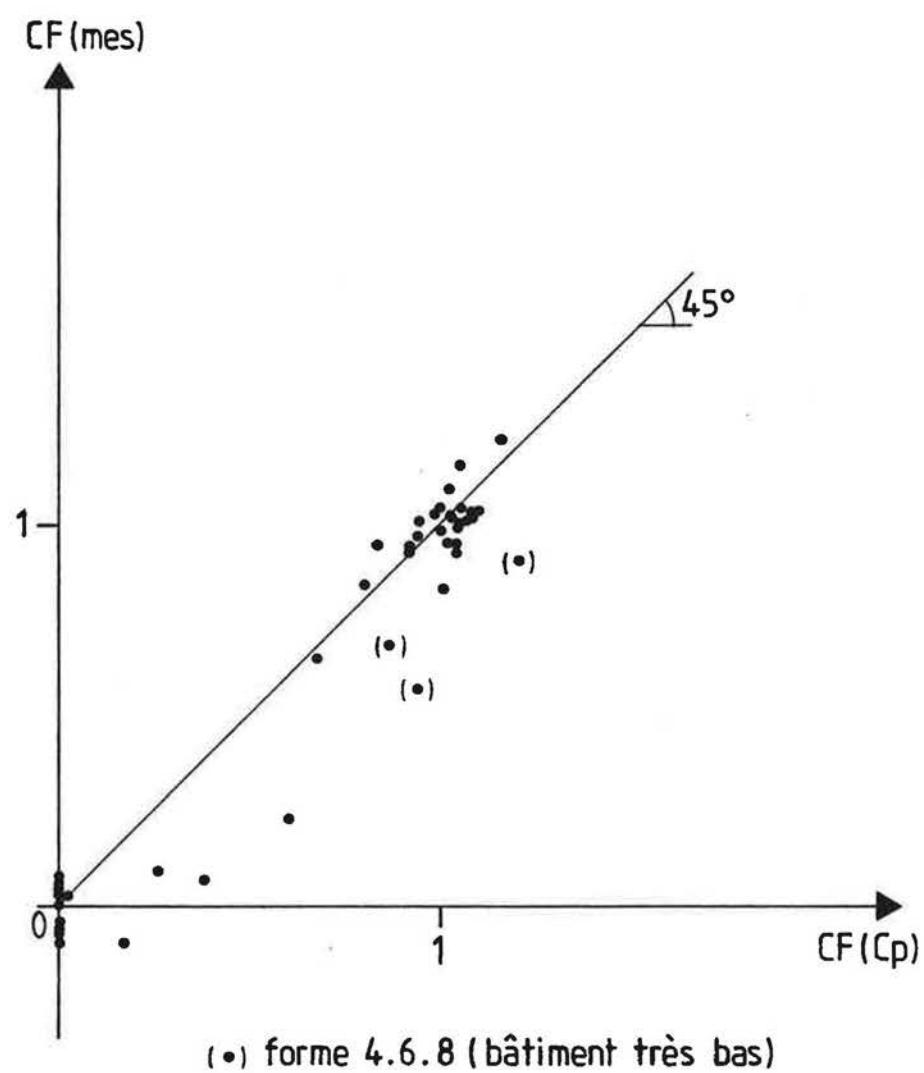


Fig. 28 Comparison entre les coefficients moyens de forces mesurés et ceux calculés par intégration des coefficients de pression C_p moyens sur les surfaces correspondantes.

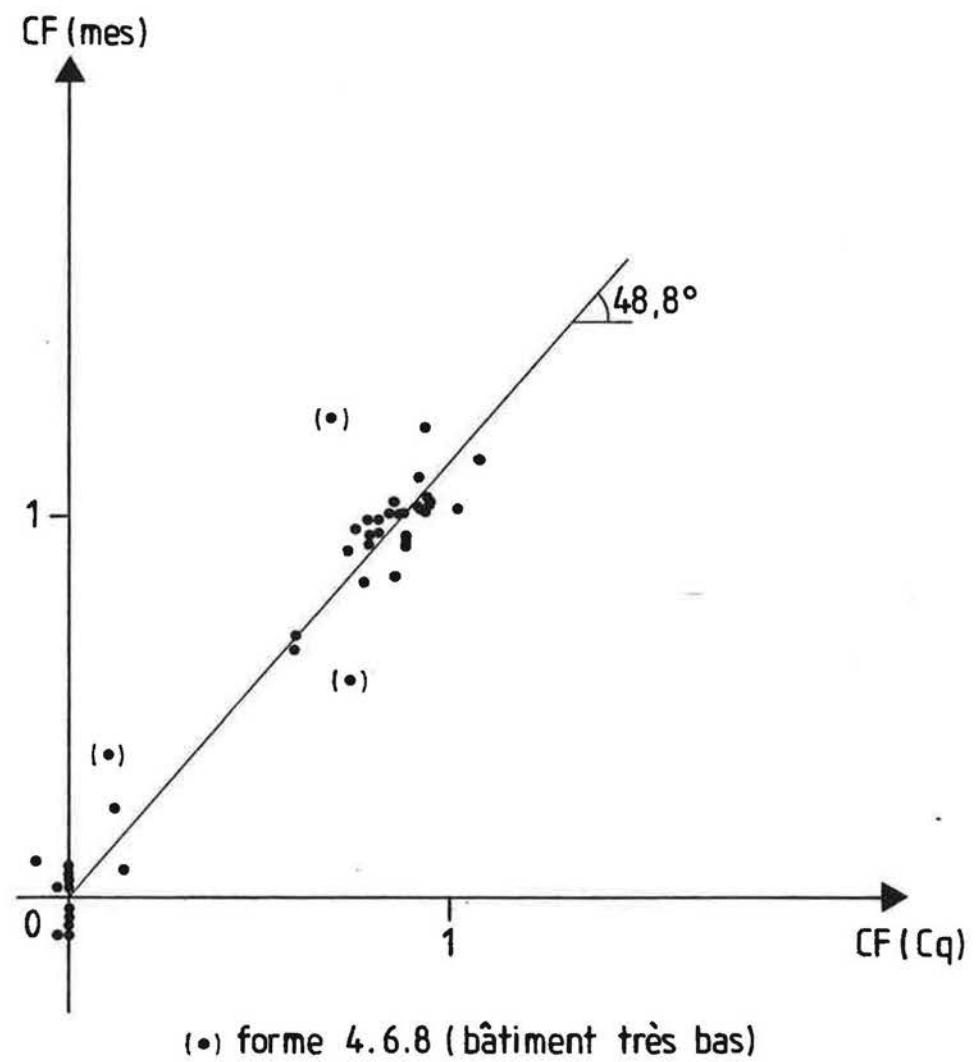


Fig. 29 Comparison entre les coefficients moyens de forces mesurés et ceux calculés par intégration des coefficients de pression C_q extrêmes sur les surfaces correspondantes.

Coefficients de pression C_q et C_p
mesurés sur la forme 0

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

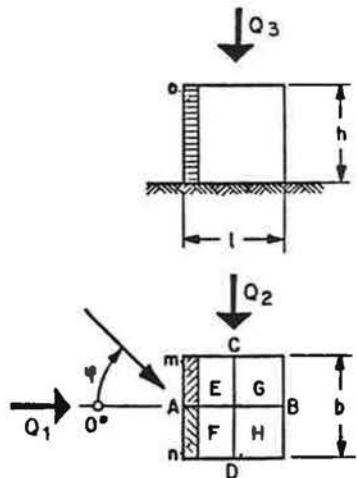


Tabelle 4.6.4.

$$h : b : l = 1 : 0.94 : 0.94$$

Toiture plate

phi	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE				
	c_{qe}								c^*_{qe}		c_1	c_2	c_3
	surface d'application								surface localisée		surface de référence = surface exposée au vent		
A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$l \times h$	$l \times b$
0°	0,59	-0,29	-0,75	-0,75	-0,87	-0,87	-0,46	-0,46		-0,80			
15°	0,57	-0,36	-0,55	-0,54	-0,72	-0,77	-0,28	-0,40					
45°	0,33	-0,45	0,33	-0,45	-0,50	-0,60	-0,57	-0,27		-0,48			
90°	-0,75	-0,75	0,59	-0,29	-0,87	-0,46	-0,87	-0,46					
180°													
											$\hat{c}_{qe} = -1,64$	Coefficient de frottement $c_t = 0$	

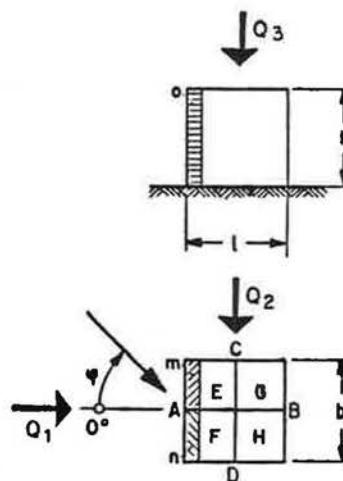
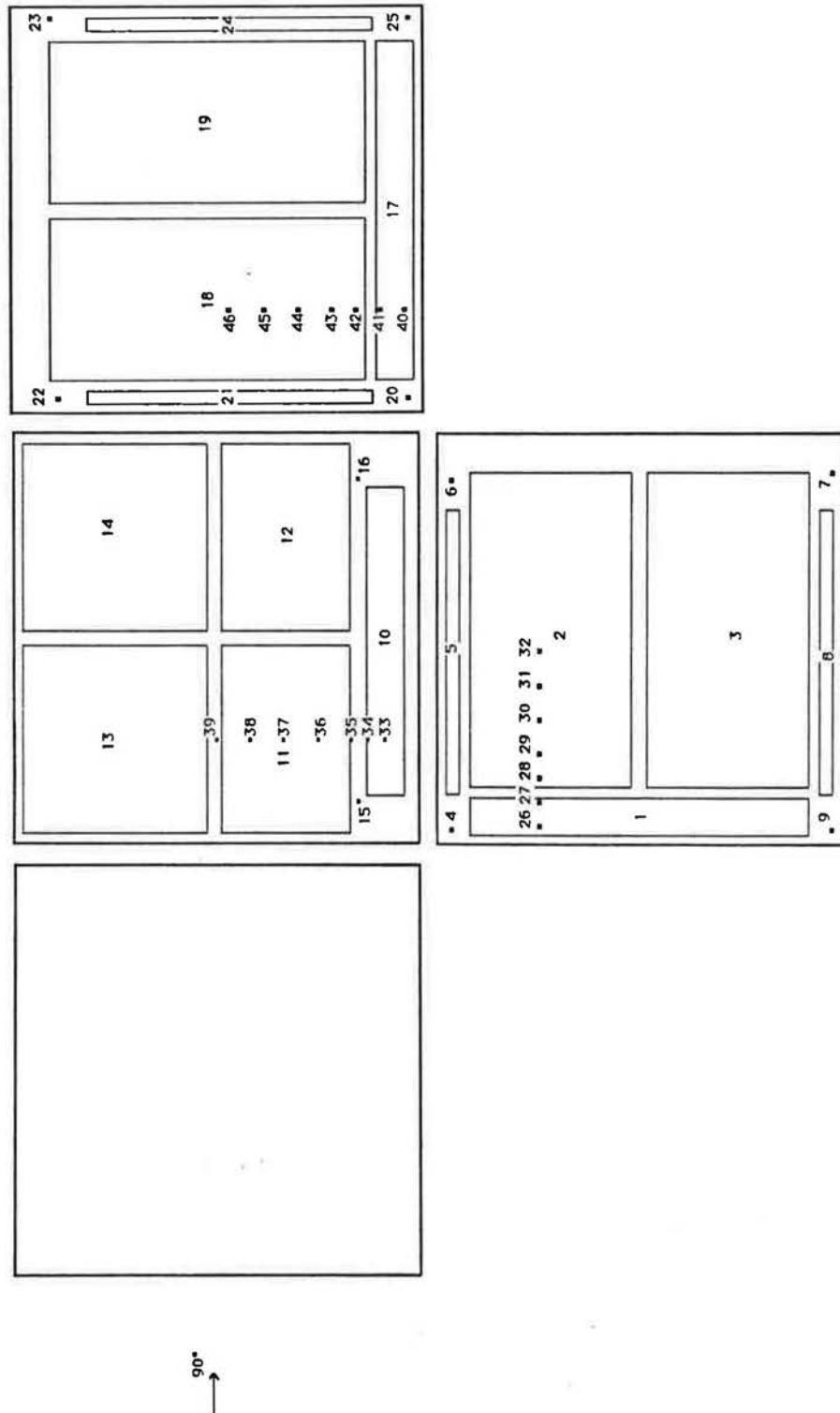


Tabelle 4.6.4.

$$h:b:l = 1:0.94:0.94$$

Toiture plate

MODELE N° 0
Numérotation des prises de pression



PROBA .98= -9.971
 VESSE MOYENNE = 8.731 M/S
 JEFF MOYEN= -1.060
 COEFF PIC .98= -0.800
 COEFF PIC= -2.394
 DONNEES PROBA PRESSION

DISP. 1/A= -0.484

MODE U= -9.363

VAL. PROBA .98= -11.254

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GF	DELTA	DP
1.000	0.484	0.403	1.408	2.908	3.0	0.025
10.000	-0.770	-1.193	-2.239	2.908	-4.0	0.031
2.000	0.658	0.706	1.816	2.759	-1.0	0.017
11.000	-0.866	-1.185	-2.390	2.759	-3.0	0.030
3.000	0.515	0.598	1.492	2.900	-2.0	0.035
12.000	-0.837	-1.260	-2.427	2.900	-4.0	0.040
4.000	0.345	0.207	0.946	2.742	7.0	0.017
13.000	-0.455	-0.483	-1.247	2.742	-1.0	0.021
5.000	0.607	0.644	1.680	2.767	-1.0	0.017
4.000	-0.463	-0.532	-1.282	2.767	-2.0	0.030
6.000	0.522	0.458	1.398	2.677	2.0	0.014
15.000	-0.958	-1.341	-2.565	2.677	-3.0	0.039
7.000	-0.888	0.680	-2.378	2.740	-0.230000E+02	0.086
16.000	-0.845	-1.296	-2.316	2.740	-4.0	0.024
9.000	-0.182	-0.138	-0.497	2.726	4.0	0.006
17.000	-0.796	-0.992	-2.171	2.726	-2.0	0.044
19.000	-0.696	-0.869	-1.947	2.796	-2.0	0.045
18.000	-0.796	-0.976	-2.225	2.796	-2.0	0.026
21.000	-0.774	-0.919	-2.185	2.822	-2.0	0.030
20.000	-0.733	-1.154	-2.069	2.822	-4.0	0.032
23.000	-0.422	-0.518	-1.270	3.010	-2.0	0.015
22.000	-0.477	-0.506	-1.435	3.010	-1.0	0.015
25.000	-0.745	-0.960	-2.196	2.947	-3.0	0.036
33.000	-0.992	-1.365	-2.923	2.947	-3.0	0.037
26.000	0.540	0.355	1.524	2.823	6.0	0.026
34.000	-0.960	-1.363	-2.711	2.823	-3.0	0.032
27.000	0.567	0.632	1.679	2.962	-2.0	0.027
35.000	-0.944	-1.387	-2.795	2.962	-4.0	0.030
3.000	0.634	0.714	1.924	3.036	-2.0	0.031
36.000	-0.817	-1.338	-2.481	3.036	-4.0	0.034
29.000	0.616	0.768	1.934	3.142	-2.0	0.023
37.000	-0.761	-1.223	-2.392	3.142	-4.0	0.020
30.000	0.650	0.774	1.933	2.976	-2.0	0.019
38.000	-0.759	-1.054	-2.257	2.976	-3.0	0.028
31.000	0.717	0.792	2.062	2.875	-1.0	0.032
39.000	-0.711	-0.899	-2.045	2.875	-3.0	0.031
32.000	0.688	0.788	1.943	2.826	-2.0	0.041
40.000	-0.769	-1.072	-2.173	2.826	-3.0	0.044
41.000	-0.710	-1.068	-2.161	3.045	-4.0	0.023
44.000	-0.798	-1.172	-2.431	3.045	-4.0	0.034
42.000	-0.765	-1.092	-2.342	3.060	-3.0	0.052
45.000	-0.780	-1.114	-2.388	3.060	-3.0	0.025
43.000	-0.709	-1.118	-2.121	2.992	-4.0	0.018
46.000	-0.800	-1.060	-2.394	2.992	-3.0	0.021

FENNE = 8.681 M/S
 FN= -0.900
 J .98= -0.602
 FC= -1.717
 PROBA PRESSION

/A= -0.341
 -6.652
 DBA .98= -7.981

===== ORIENTATION 15.0 =====

SI.	CF .98	CF MOY	CF PIC	GP	DELTA	DIF
000	0.619	0.605	1.807	2.920	1.0	0.028 -
000	-0.843	-1.257	-2.462	2.920	-4.0	0.030 -
000	0.573	0.660	1.674	2.919	-2.0	0.023
000	-0.716	-1.091	-2.090	2.919	-4.0	0.037
000	0.570	0.582	1.556	2.729	-1.0	0.022
000	-0.764	-1.124	-2.085	2.729	-4.0	0.029
000	0.456	0.504	1.352	2.967	-1.0	0.015
000	-0.273	-0.406	-0.811	2.967	-4.0	0.014
000	0.568	0.613	1.612	2.840	-1.0	0.026
000	-0.399	-0.609	-1.133	2.840	-4.0	0.007
000	0.392	0.289	1.053	2.689	4.0	0.015
000	-1.634	-2.127	-4.393	2.689	-3.0	0.047
000	0.855	2.269	2.649	3.099	-7.0	0.020
000	-0.762	-1.288	-2.362	3.099	-5.0	0.020
000	0.231	0.110	0.796	3.443	0.120000E+02	0.016
000	-0.464	-0.823	-1.597	3.443	-5.0	0.053
000	-0.554	-0.792	-1.610	2.905	-4.0	0.027
000	-0.532	-0.898	-1.547	2.905	-5.0	0.021
000	-0.626	-0.899	-1.856	2.965	-4.0	0.017
000	-0.474	-0.824	-1.406	2.965	-5.0	0.017
000	-0.500	-0.750	-1.510	3.017	-4.0	0.023
000	-0.624	-0.826	-1.883	3.017	-3.0	0.032
000	-0.516	-0.759	-1.501	2.909	-4.0	0.014
000	-1.233	-1.718	-3.587	2.909	-3.0	0.025
000	0.634	0.631	1.869	2.947	1.0	0.035
000	-1.175	-1.767	-3.462	2.947	-4.0	0.031
000	0.649	0.756	2.007	3.092	-2.0	0.037
000	-1.075	-1.731	-3.323	3.092	-4.0	0.062
000	0.629	0.789	1.983	3.152	-3.0	0.033
000	-0.770	-1.268	-2.429	3.152	-4.0	0.015
000	0.744	0.789	2.092	2.811	-1.0	0.024
000	-0.693	-0.785	-1.949	2.811	-2.0	0.013
000	0.657	0.791	1.931	2.937	-2.0	0.015
000	-0.518	-0.583	-1.523	2.937	-2.0	0.028
000	0.658	0.747	1.872	2.844	-2.0	0.028
000	-0.530	-0.504	-1.507	2.844	1.0	0.020
000	0.604	0.718	1.845	3.057	-2.0	0.017
000	-0.461	-0.754	-1.409	3.057	-4.0	0.015
000	-0.514	-0.773	-1.518	2.952	-4.0	0.031
000	-0.627	-0.878	-1.851	2.952	-3.0	0.046
000	-0.552	-0.779	-1.526	2.764	-3.0	0.027
000	-0.615	-0.873	-1.700	2.764	-3.0	0.030
000	-0.550	-0.804	-1.682	2.853	-4.0	0.013
000	-0.602	-0.900	-1.717	2.853	-4.0	0.027

SSE MOYENNE = 8.888 M/S
 FF MOYEN= -0.747
 ZFF PIC .98= -0.494
 ZEFF PIC= -1.345
 ANNEES PROBA PRESSION

TISF. 1/A= -0.315
 TODE U= -5.324
 TAL. PROBA .98= -6.552

=====

ORIENTATION 45.0

=====

POSI.	CF .98	CF MOY	CP FIC	GP	DELTA	DP
1.000	0.477	0.470	1.477	3.098	1.0	0.017
10.000	-0.956	-1.603	-2.963	3.098	-5.0	0.038
2.000	0.352	0.223	0.997	2.828	6.0	0.018
11.000	-0.499	-0.637	-1.411	2.828	-3.0	0.027
3.000	0.297	0.193	0.828	2.789	6.0	0.018
12.000	-0.597	-0.573	-1.665	2.789	1.0	0.023
4.000	0.472	0.439	1.325	2.809	1.0	0.023
13.000	-0.567	-0.857	-1.594	2.809	-4.0	0.018
5.000	0.302	0.187	0.883	2.929	7.0	0.021
14.000	-0.267	-0.487	-0.783	2.929	-5.0	0.012
6.000	-0.128	-0.048	-0.381	2.983	0.170000E+02	0.005
15.000	-0.996	-1.132	-2.970	2.983	-2.0	0.090
7.000	0.290	0.393	0.824	2.845	-3.0	0.076
16.000	-0.424	-0.713	-1.207	2.845	-5.0	0.009
9.000	0.400	0.384	1.145	2.863	1.0	0.033
17.000	-0.402	-0.710	-1.150	2.863	-5.0	0.010
19.000	-0.460	-0.804	-1.289	2.801	-5.0	0.010
18.000	-0.447	-0.763	-1.253	2.801	-5.0	0.010
21.000	-0.411	-0.684	-1.133	2.753	-4.0	0.009
20.000	-0.357	-0.562	-0.982	2.753	-4.0	0.022
23.000	-0.465	-0.745	-1.385	2.978	-4.0	0.019
22.000	-0.401	-0.614	-1.196	2.978	-4.0	0.013
25.000	-0.323	-0.655	-1.008	3.118	-6.0	0.008
33.000	-1.259	-1.374	-3.924	3.118	-1.0	0.039
26.000	0.568	0.490	1.651	2.910	2.0	0.024
34.000	-0.940	-0.550	-2.735	2.910	8.0	0.064
27.000	0.514	0.505	1.547	3.013	1.0	0.014
35.000	-0.635	-0.523	-1.913	3.013	3.0	0.056
28.000	0.520	0.455	1.441	2.769	2.0	0.026
5.000	-0.398	-0.471	-1.103	2.769	-2.0	0.026
29.000	0.482	0.389	1.387	2.877	3.0	0.032
37.000	-0.582	-0.424	-1.674	2.877	4.0	0.055
30.000	0.432	0.359	1.203	2.782	3.0	0.020
38.000	-0.665	-0.449	-1.849	2.782	5.0	0.029
31.000	0.364	0.313	1.035	2.844	2.0	0.013
39.000	-0.680	-0.512	-1.935	2.844	4.0	0.016
32.000	0.365	0.265	1.020	2.796	4.0	0.022
40.000	-0.409	-0.560	-1.144	2.796	-3.0	0.027
41.000	-0.411	-0.570	-1.130	2.748	-3.0	0.021
44.000	-0.471	-0.704	-1.296	2.748	-4.0	0.024
42.000	-0.364	-0.592	-1.023	2.811	-4.0	0.012
45.000	-0.438	-0.698	-1.232	2.811	-4.0	0.013
43.000	-0.432	-0.624	-1.176	2.721	-4.0	0.017
46.000	-0.494	-0.747	-1.345	2.721	-4.0	0.023

COEFF PIC .98= -0.507

COEFF PIC= -1.348

DONNEES PROBA PRESSION

TISF. 1/A= -0.589

10DE U= -4.269

JAL. PROBA .98= -6.566

=====

ORIENTATION 0.195000E+03

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.354	-0.592	-1.007	2.841	-5.0	0.011
10.000	-0.272	-0.436	-0.772	2.841	-4.0	0.005
2.000	-0.362	-0.530	-1.031	2.850	-4.0	0.013
11.000	-0.440	-0.635	-1.253	2.850	-4.0	0.025
3.000	-0.352	-0.553	-1.014	2.882	-4.0	0.011
12.000	-0.323	-0.477	-0.930	2.882	-4.0	0.017
4.000	-0.395	-0.639	-1.128	2.857	-4.0	0.011
13.000	-0.679	-1.117	-1.939	2.857	-4.0	0.015
5.000	-0.274	-0.497	-0.834	3.048	-5.0	0.008
14.000	-0.762	-1.200	-2.322	3.048	-4.0	0.027
6.000	-0.311	-0.496	-0.862	2.769	-4.0	0.008
15.000	-0.392	-0.643	-1.085	2.769	-4.0	0.016
7.000	-0.274	0.152	-0.750	2.734	-0.290000E+02	0.052
8.000	-0.316	-0.532	-0.863	2.734	-5.0	0.009
9.000	-0.402	-0.638	-1.088	2.705	-4.0	0.008
17.000	-0.269	-0.366	-0.727	2.705	-3.0	0.007
19.000	-0.512	-0.241	-1.367	2.669	0.120000E+02	0.039
18.000	-0.587	-0.263	-1.567	2.669	0.130000E+02	0.038
21.000	-0.369	-0.211	-1.127	3.056	8.0	0.038
20.000	-0.240	-0.455	-0.732	3.056	-5.0	0.006
23.000	-0.700	-0.632	-1.855	2.650	2.0	0.033
22.000	-0.925	-1.052	-2.451	2.650	-2.0	0.025
25.000	-0.301	-0.572	-0.836	2.776	-5.0	0.008
33.000	-0.381	-0.519	-1.056	2.776	-3.0	0.015
26.000	-0.374	-0.646	-1.131	3.028	-5.0	0.021
34.000	-0.360	-0.515	-1.090	3.028	-4.0	0.010
27.000	-0.331	-0.577	-1.035	3.122	-5.0	0.014
35.000	-0.341	-0.527	-1.065	3.122	-4.0	0.011
28.000	-0.340	-0.560	-1.011	2.972	-4.0	0.015
36.000	-0.449	-0.564	-1.335	2.972	-3.0	0.034
29.000	-0.333	-0.545	-0.932	2.801	-4.0	0.011
37.000	-0.463	-0.678	-1.297	2.801	-4.0	0.014
30.000	-0.320	-0.520	-0.930	2.906	-4.0	0.016
38.000	-0.527	-0.742	-1.532	2.906	-3.0	0.022
31.000	-0.320	-0.517	-0.931	2.906	-4.0	0.009
39.000	-0.584	-0.879	-1.698	2.906	-4.0	0.023
32.000	-0.309	-0.484	-0.912	2.954	-4.0	0.009
40.000	-0.228	-0.361	-0.673	2.954	-4.0	0.010
41.000	-0.237	-0.314	-0.649	2.739	-3.0	0.008
44.000	-0.349	-0.215	-0.957	2.739	7.0	0.020
42.000	-0.227	-0.266	-0.637	2.805	-2.0	0.012
45.000	-0.428	-0.194	-1.199	2.805	0.130000E+02	0.026
43.000	-0.217	-0.234	-0.578	2.658	-1.0	0.009
46.000	-0.507	-0.233	-1.348	2.658	0.120000E+02	0.027

IC .98= -0.718

TC= -1.982

PROBA PRESSION

/A= -0.380

-8.348

OBA .98= -9.829

===== ORIENTATION 0.180000E+03 =====

SI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
000	-0.301	-0.442	-0.871	2.888	-4.0	0.011
000	-0.313	-0.394	-0.904	2.888	-3.0	0.012
000	-0.277	-0.387	-0.762	2.751	-3.0	0.009
000	-0.490	-0.528	-1.348	2.751	-1.0	0.032
000	-0.304	-0.398	-0.798	2.624	-3.0	0.008
000	-0.501	-0.490	-1.314	2.624	1.0	0.012
000	-0.307	-0.413	-0.809	2.635	-3.0	0.011
000	-0.777	-1.143	-2.048	2.635	-4.0	0.010
000	0.255	0.387	0.723	2.835	-4.0	0.012
000	-0.811	-1.250	-2.300	2.835	-4.0	0.027
000	-0.242	-0.371	-0.649	2.684	-4.0	0.006
000	-0.341	-0.408	-0.915	2.684	-2.0	0.016
000	-0.373	-0.703	-1.078	2.887	-5.0	0.028
000	-0.203	-0.348	-0.585	2.887	-5.0	0.007
000	-0.308	-0.448	-0.935	3.030	-4.0	0.008
000	-0.356	-0.400	-1.080	3.030	-2.0	0.039
000	-0.578	-0.741	-1.711	2.961	-3.0	0.034
000	-0.648	-0.843	-1.919	2.961	-3.0	0.026
000	-0.658	-0.647	-1.799	2.734	1.0	0.035
000	-0.300	-0.377	-0.820	2.734	-3.0	0.010
000	-0.789	-1.023	-2.142	2.716	-3.0	0.019
000	-0.881	-1.265	-2.394	2.716	-4.0	0.034
000	-0.360	-0.483	-1.067	2.963	-3.0	0.022
000	-0.370	-0.431	-1.095	2.963	-2.0	0.019
000	-0.390	-0.452	-1.145	2.938	-2.0	0.028
000	-0.380	-0.423	-1.116	2.938	-2.0	0.016
000	-0.327	-0.420	-0.884	2.704	-3.0	0.017
000	-0.439	-0.446	-1.187	2.704	-1.0	0.032
000	-0.304	-0.415	-0.824	2.708	-3.0	0.018
000	-0.483	-0.501	-1.314	2.708	-1.0	0.020
000	-0.252	-0.407	-0.776	3.073	-4.0	0.008
000	-0.519	-0.571	-1.593	3.073	-1.0	0.038
000	-0.261	-0.378	-0.693	2.658	-4.0	0.009
000	-0.622	-0.675	-1.654	2.658	-1.0	0.031
000	-0.252	-0.393	-0.703	2.784	-4.0	0.011
000	-0.701	-0.855	-1.953	2.784	-2.0	0.024
000	-0.269	-0.380	-0.754	2.804	-3.0	0.011
000	-0.439	-0.386	-1.231	2.804	2.0	0.051
000	-0.365	-0.373	-1.039	2.849	-1.0	0.015
000	-0.565	-0.523	-1.610	2.849	1.0	0.018
000	-0.360	-0.383	-1.183	3.288	-1.0	0.010
000	-0.523	-0.611	-1.719	3.288	-2.0	0.040
000	-0.501	-0.420	-1.384	2.760	2.0	0.018
000	-0.718	-0.754	-1.982	2.760	-1.0	0.031

Coefficients de pression C_q et C_p
mesurés sur la forme 1

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

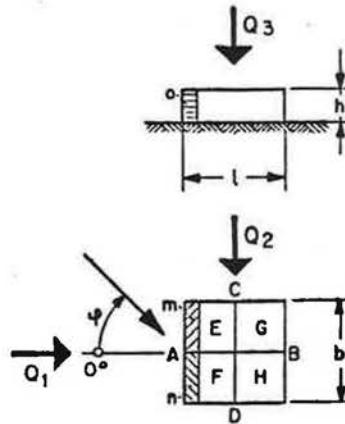


Tabelle 4.6.3

$h : b : l = 0.3 : 1 : 1$

Toiture plate

phi	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE			
	c_{qe}								c^*_{qe}	c_1	c_2	c_3
	surface d'application								surface localisée	surface de référence = surface exposée au vent		
0°	A	B	C	D	E	F	G	H	m	n	o	$b \times h$
0°	0,50	-0,23	-0,30	-0,30	-0,46	-0,46	-0,20	-0,20	-0,76			$1 \times h$
15°	0,47	-0,26	-0,14	-0,34	-0,41	-0,52	-0,22	-0,18	-0,75			$1 \times b$
45°	0,31	-0,29	0,31	-0,29	-0,34	-0,47	-0,47	-0,22	-0,68	-0,68		
90°	-0,30	-0,30	0,50	-0,23	-0,46	-0,20	-0,46	-0,20	-0,76			
180°												
										$\hat{c}_{qe} = -1,13$	Coefficient de frottement $c_t = 0$	

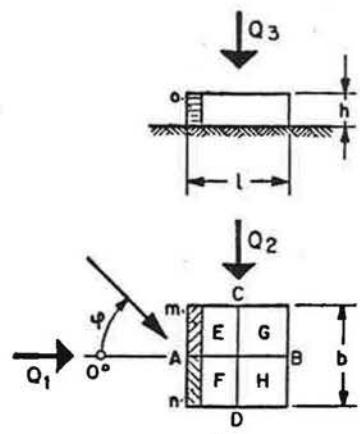


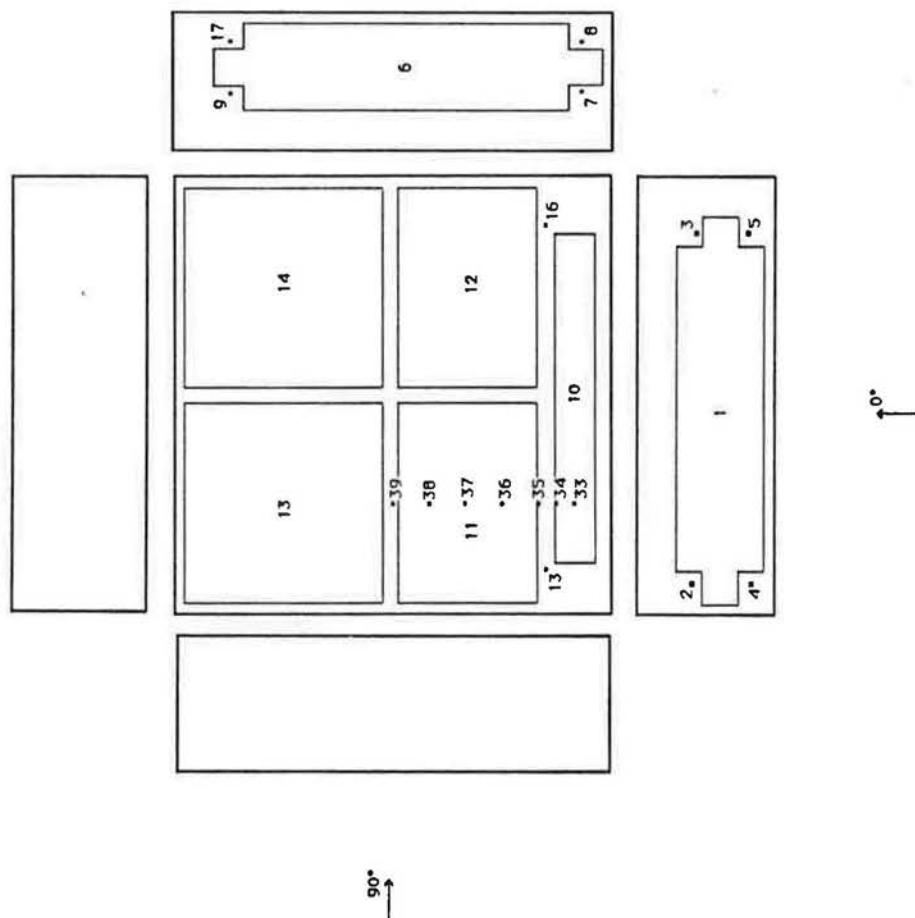
Tabelle 4.6.3

$h : b : l = 0.3 : 1 : 1$

Toiture plate

cp	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE		
	c_{pe}								c^*_{pe}		c_1	c_2	c_3
	surface d'application								surface localisée		surface de référence = surface exposée au vent		
A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,65	-0,44	-0,27	-0,27	-0,75	-0,75	-0,37	-0,37	-1,30				
15°	0,60	-0,55	-0,14	-0,54	-0,49	-0,68	-0,39	-0,37	-1,30				
45°	0,30	-0,60	0,30	-0,60	-0,50	-0,75	-0,75	-0,44	-1,30	-1,30			
90°	-0,27	-0,27	0,65	-0,44	-0,75	-0,37	-0,75	-0,37	-1,30				
180°													
											$\bar{c}_{pe} = -1,65$	Coefficient de frottement $c_t = 0$	

MODELE N° 1
Numérotation des prises de pression



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ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.501	0.649	1.892	3.779	-3.0	0.014
10.000	-0.756	-1.300	-2.857	3.779	-5.0	0.023
2.000	0.430	0.456	1.665	3.873	-1.0	0.018
11.000	-0.456	-0.748	-1.767	3.873	-4.0	0.012
3.000	0.503	0.421	1.691	3.364	2.0	0.015
12.000	-0.584	-0.660	-1.963	3.364	-2.0	0.013
4.000	0.260	0.145	0.907	3.483	8.0	0.016
13.000	-0.192	-0.340	-0.668	3.483	-5.0	0.006
5.000	0.394	0.332	1.405	3.567	2.0	0.016
14.000	-0.196	-0.374	-0.698	3.567	-5.0	0.005
6.000	-0.299	-0.269	-1.021	3.413	2.0	0.010
15.000	-1.094	-1.650	-3.735	3.413	-4.0	0.043
7.000	-0.759	-1.128	-2.444	3.221	-4.0	0.050
16.000	-0.938	-1.439	-3.023	3.221	-4.0	0.023
8.000	-0.582	-0.714	-2.009	3.451	-2.0	0.032
33.000	-0.878	-1.385	-3.029	3.451	-4.0	0.035
9.000	-0.178	-0.433	-0.722	4.045	-6.0	0.005
34.000	-0.698	-1.293	-2.822	4.045	-5.0	0.033
17.000	-0.101	-0.358	-0.632	6.283	-8.0	0.003
35.000	-0.445	-1.177	-2.795	6.283	-7.0	0.023
36.000	-0.523	-0.805	-1.892	3.620	-4.0	0.027
37.000	-0.478	-0.673	-1.730	3.620	-3.0	0.019
38.000	-0.285	-0.469	-1.133	3.976	-4.0	0.013
39.000	-0.280	-0.453	-1.114	3.976	-4.0	0.015

DONNEES PROBA PRESSION

DISP. 1/A = -0.102
 MODE U = -1.725
 VAL. PROBA .98 = -2.123

=====
 ORIENTATION 15.0
 =====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.472	0.601	1.746	3.702	-3.0	0.026
10.000	-0.736	-1.286	-2.725	3.702	-5.0	0.025
2.000	0.021	0.747	1.825	87.665	-10.0	0.011
11.000	-0.017	-0.485	-1.528	87.665	-10.0	0.048
3.000	0.014	0.314	1.582	114.584	-10.0	0.015
12.000	-0.017	-0.682	-1.970	114.584	-10.0	0.013
4.000	0.346	0.377	1.342	3.882	-1.0	0.019
13.000	-0.217	-0.384	-0.844	3.882	-5.0	0.007
5.000	0.369	0.319	1.377	3.735	2.0	0.019
14.000	-0.184	-0.366	-0.686	3.735	-5.0	0.005
6.000	-0.340	-0.539	-1.231	3.619	-4.0	0.008
15.000	-1.127	-1.566	-4.078	3.619	-3.0	0.058
7.000	-0.580	-1.075	-2.052	3.540	-5.0	0.011
16.000	-0.657	-1.196	-2.324	3.540	-5.0	0.009
8.000	-0.464	-0.766	-1.534	3.305	-4.0	0.013
33.000	-1.090	-1.347	-3.604	3.305	-2.0	0.048
9.000	-0.012	-0.492	-0.885	72.093	-10.0	0.014
34.000	-0.043	-1.261	-3.084	72.093	-10.0	0.011
17.000	-0.014	-0.429	-0.732	53.782	-10.0	0.004
35.000	-0.051	-0.965	-2.756	53.782	-10.0	0.024
36.000	-0.050	-0.443	-1.729	34.576	-9.0	0.017
37.000	-0.040	-0.408	-1.376	34.576	-10.0	0.045
38.000	-0.019	-0.351	-0.725	37.433	-10.0	0.011
39.000	-0.019	-0.374	-0.720	37.433	-10.0	0.005

DISP. 1/A= -0.356
MODE U= -2.665
VAL. PROBA .98= -4.054
VITESSE MOYENNE = 7.197 M/S
COEFF MOYEN= -0.483
COEFF PIC .98= -0.443
COEFF PIC= -1.578
DONNEES PROBA PRESSION

DISP. 1/A= -0.347
MODE U= -3.687
VAL. PROBA .98= -5.041

=====
ORIENTATION 45.0
=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.303	0.294	1.114	3.673	1.0	0.014
10.000	-0.673	-1.261	-2.478	3.673	-5.0	0.024
2.000	0.475	0.531	1.635	3.445	-2.0	0.016
11.000	-0.335	-0.497	-1.154	3.445	-4.0	0.014
3.000	0.219	0.082	0.764	3.489	17.0	0.026
12.000	-0.395	-0.465	-1.379	3.489	-2.0	0.021
4.000	0.434	0.623	1.445	3.333	-4.0	0.014
13.000	-0.470	-0.749	-1.568	3.333	-4.0	0.010
5.000	0.215	0.140	0.762	3.544	6.0	0.012
14.000	-0.214	-0.438	-0.757	3.544	-6.0	0.004
6.000	-0.283	-0.596	-1.041	3.673	-6.0	0.004
15.000	-0.643	-0.812	-2.363	3.673	-3.0	0.092
7.000	-0.308	-0.558	-1.132	3.671	-5.0	0.013
16.000	-0.360	-0.682	-1.320	3.671	-5.0	0.022
8.000	-0.309	-0.583	-1.089	3.525	-5.0	0.010
33.000	-1.129	-1.085	-3.981	3.525	1.0	0.035
9.000	-0.213	-0.480	-0.849	3.991	-6.0	0.006
34.000	-0.505	-0.444	-2.015	3.991	2.0	0.024
17.000	-0.246	-0.500	-0.889	3.612	-6.0	0.005
35.000	-0.307	-0.482	-1.110	3.612	-4.0	0.008
36.000	-0.228	-0.427	-0.754	3.312	-5.0	0.005
37.000	-0.349	-0.454	-1.156	3.312	-3.0	0.022
38.000	-0.356	-0.398	-1.269	3.561	-2.0	0.011
39.000	-0.443	-0.493	-1.578	3.561	-1.0	0.026

VAL. PROBA .98= -2.969
VITESSE MOYENNE = 7.149 M/S
COEFF MOYEN= -0.403
COEFF PIC .98= -0.244
COEFF PIC= -0.846
DONNEES PROBA PRESSION

DISP. 1/A= -0.110
MODE U= -2.238
VAL. PROBA .98= -2.668
VITESSE MOYENNE = 7.149 M/S
COEFF MOYEN= -0.471
COEFF PIC .98= -0.290
COEFF PIC= -1.006
DONNEES PROBA PRESSION

DISP. 1/A= -0.131
MODE U= -2.660
VAL. PROBA .98= -3.170

=====
ORIENTATION 0.180000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.232	-0.436	-0.855	3.690	-5.0	0.007
10.000	-0.207	-0.393	-0.763	3.690	-5.0	0.004
2.000	-0.246	-0.450	-0.794	3.222	-5.0	0.016
11.000	-0.228	-0.371	-0.735	3.222	-4.0	0.007
3.000	-0.185	-0.365	-0.670	3.621	-5.0	0.005
12.000	-0.184	-0.350	-0.666	3.621	-5.0	0.009
4.000	-0.203	-0.462	-0.744	3.675	-6.0	0.004
13.000	-0.527	-0.805	-1.937	3.675	-4.0	0.020
5.000	-0.137	-0.188	-0.500	3.656	-3.0	0.004
14.000	-0.506	-0.780	-1.848	3.656	-4.0	0.027
6.000	-0.267	-0.306	-0.911	3.406	-2.0	0.006
15.000	-0.189	-0.419	-0.645	3.406	-6.0	0.004
7.000	-0.188	-0.345	-0.612	3.263	-5.0	0.003
16.000	-0.184	-0.346	-0.599	3.263	-5.0	0.009
8.000	-0.145	-0.346	-0.585	4.037	-6.0	0.003
33.000	-0.179	-0.423	-0.722	4.037	-6.0	0.003
9.000	-0.556	-0.998	-2.155	3.874	-5.0	0.012
34.000	-0.202	-0.384	-0.784	3.874	-5.0	0.007
17.000	-0.508	-0.644	-1.854	3.652	-3.0	0.022
35.000	-0.213	-0.426	-0.779	3.652	-5.0	0.006
36.000	-0.230	-0.368	-0.789	3.430	-4.0	0.006
37.000	-0.274	-0.425	-0.939	3.430	-4.0	0.008
38.000	-0.244	-0.403	-0.846	3.463	-4.0	0.008
39.000	-0.290	-0.471	-1.006	3.463	-4.0	0.009

DISP. 1/H- 0.444
MODE U= 11.720
VAL. PROBA .98= 13.452
DONNEES PROBA PRESSION

DISP. 1/A= -0.171
MODE U= -2.417
VAL. PROBA .98= -3.082
VITESSE MOYENNE = 7.090 M/S
COEFF MOYEN= -0.494
COEFF PIC .98= -0.265
COEFF PIC= -0.954
DONNEES PROBA PRESSION

DISP. 1/A= -0.110
MODE U= -2.527
VAL. PROBA .98= -2.958
VITESSE MOYENNE = 7.090 M/S
COEFF MOYEN= -0.597
COEFF PIC .98= -0.327
COEFF PIC= -1.177
DONNEES PROBA PRESSION

DISP. 1/A= -0.133
MODE U= -3.130
VAL. PROBA .98= -3.648

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ORIENTATION 0.195000E+03
=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.255	-0.547	-0.912	3.575	-6.0	0.004
10.000	-0.214	-0.457	-0.764	3.575	-6.0	0.004
2.000	-0.266	-0.606	-0.951	3.572	-6.0	0.006
11.000	-0.211	-0.447	-0.753	3.572	-6.0	0.007
3.000	-0.240	-0.477	-0.806	3.355	-5.0	0.004
12.000	-0.241	-0.400	-0.807	3.355	-4.0	0.008
4.000	-0.243	-0.585	-0.929	3.825	-6.0	0.004
13.000	-0.469	-0.957	-1.795	3.825	-6.0	0.022
5.000	-0.163	-0.281	-0.633	3.887	-5.0	0.012
14.000	-0.452	-0.763	-1.757	3.887	-5.0	0.013
6.000	-0.139	-0.133	-0.480	3.448	1.0	0.004
15.000	-0.218	-0.482	-0.753	3.448	-6.0	0.005
7.000	-0.191	-0.379	-0.626	3.272	-5.0	0.004
16.000	-0.255	-0.500	-0.835	3.272	-5.0	0.005
8.000	-0.161	-0.387	-0.586	3.638	-6.0	0.002
33.000	-0.226	-0.489	-0.821	3.638	-6.0	0.005
9.000	-0.492	-0.372	-1.878	3.813	4.0	0.023
34.000	-0.203	-0.442	-0.776	3.813	-6.0	0.004
17.000	-0.420	-0.195	-1.461	3.482	12.0	0.021
35.000	-0.242	-0.468	-0.843	3.482	-5.0	0.005
36.000	-0.225	-0.407	-0.832	3.703	-5.0	0.004
37.000	-0.265	-0.469	-0.982	3.703	-5.0	0.006
38.000	-0.265	-0.494	-0.954	3.600	-5.0	0.003
39.000	-0.327	-0.597	-1.177	3.600	-5.0	0.013

Coefficients de pression C_q et C_p
mesurés sur la forme 2

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

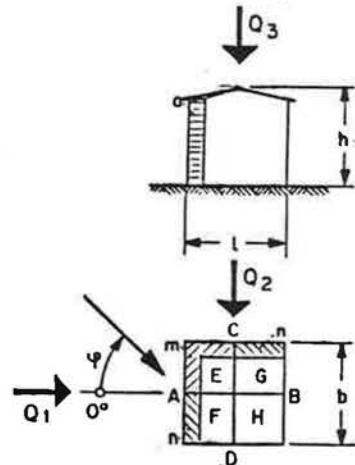
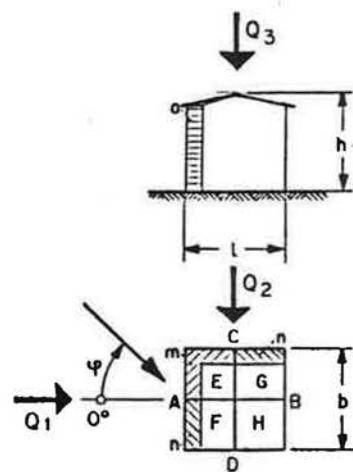


Tabelle 4.6.5

$h : b : l = 1 : 0.86 : 0.86$

Toiture à 10°

φ	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{qe}								c^*_{qe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
φ	A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,60	-0,31	-0,72	-0,72	-1,05	-1,05	-0,38	-0,38	-1,54	-0,88	-0,79			
15°	0,57	-0,39	-0,43	-0,55	-0,82	-0,86	-0,39	-0,36	-1,69	-0,88	-0,82			
45°	0,38	-0,43	0,38	-0,43	-0,42	-0,51	-0,60	-0,35	-1,52	-0,82	0,65			
90°	-0,72	-0,72	0,60	-0,31	-1,05	-0,38	-1,05	-0,38	-0,88	-1,54	0,52			
180°														
												$\hat{c}_{qe} = -1,9$	Coefficient de frottement $c_t = 0$	



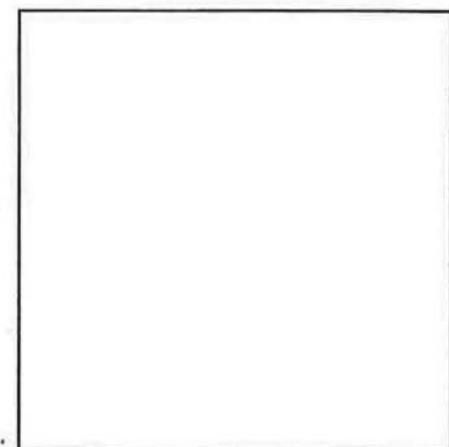
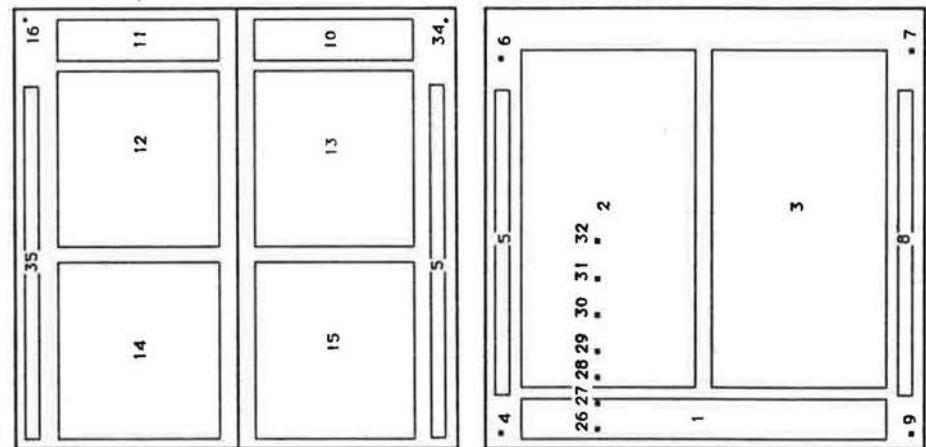
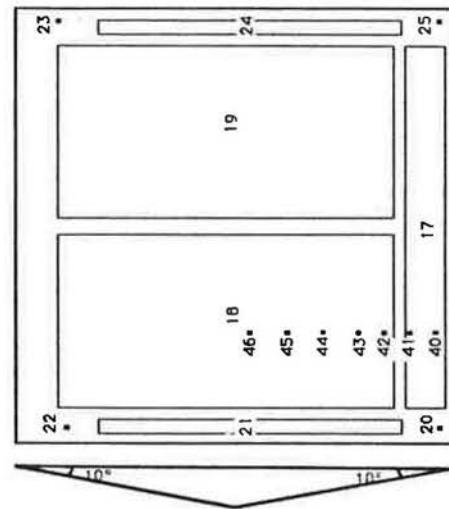
φ	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{pe}								c^*_{pe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
A	B	C	D	E	F	G	H	m	n	o	b <h></h>	1x <h></h>	1xb	
0°	0,66	-0,42	-0,87	-0,87	-1,55	-1,55	-0,48	-0,48	-1,85	-1,31	-0,95	0,93	-0,10	0,86
15°	0,59	-0,55	-0,22	-0,82	-1,26	-1,31	-0,59	-0,52	-2,19	-0,84	-0,90	1,04	0,23	1,49
45°	0,21	-0,81	0,21	-0,81	-0,56	-0,84	-0,96	-0,53	-1,89	-0,67	0,49	0,97	0,96	0,31
90°	-0,87	-0,87	0,66	-0,42	-1,55	-0,48	-1,55	-0,48	-1,31	-1,85	0,38	-0,50	1,03	0,65
180°														
											$\hat{c}_{pe} = -2,20$	Coefficient de frottement $c_t = 0$		

Tabelle 4.6.5

$$h : b : l = 1 : 0.86 : 0.86$$

Toiture à 10°

MODELE N° 2
Numérotation des prises de pression



90°

0°

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ORIENTATION 0.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.525	0.381	1.493	2.843	4.0	0.044
10.000	-0.877	-1.312	-2.492	2.843	-4.0	0.033
2.000	0.647	0.731	1.812	2.800	-2.0	0.022
11.000	-0.384	-0.491	-1.074	2.800	-3.0	0.016
3.000	0.557	0.583	1.491	2.678	-1.0	0.023
12.000	-0.313	-0.460	-0.838	2.678	-4.0	0.016
17.000	-0.784	-0.947	-2.001	2.551	-2.0	0.026
13.000	-1.097	-1.544	-2.800	2.551	-3.0	0.022
18.000	-0.739	-0.890	-1.970	2.666	-2.0	0.018
14.000	-0.318	-0.461	-0.847	2.666	-4.0	0.008
19.000	-0.703	-0.850	-1.912	2.720	-2.0	0.018
15.000	-1.049	-1.551	-2.854	2.720	-4.0	0.035
4.000	0.307	0.228	0.939	3.065	4.0	0.026
16.000	-0.259	-0.402	-0.795	3.065	-4.0	0.015
5.000	0.602	0.735	1.763	2.929	-2.0	0.038
20.000	-0.592	-1.136	-1.734	2.929	-5.0	0.012
6.000	0.473	0.465	1.316	2.779	1.0	0.014
21.000	-0.863	-1.026	-2.399	2.779	-2.0	0.020
34.000	-1.198	-1.685	-3.274	2.733	-3.0	0.058
22.000	-0.426	-0.444	-1.165	2.733	-1.0	0.028
35.000	-0.260	-0.406	-0.718	2.764	-4.0	0.014
36.000	-1.543	-1.854	-4.266	2.764	-2.0	0.051
26.000	0.475	0.317	1.407	2.961	5.0	0.021
40.000	-0.783	-1.083	-2.319	2.961	-3.0	0.033
27.000	0.615	0.604	1.763	2.865	1.0	0.034
41.000	-0.820	-1.077	-2.348	2.865	-3.0	0.038
28.000	0.725	0.673	1.882	2.597	1.0	0.020
42.000	-0.901	-1.057	-2.340	2.597	-2.0	0.020
29.000	0.740	0.765	1.966	2.656	-1.0	0.024
43.000	-0.924	-1.086	-2.455	2.656	-2.0	0.044
30.000	0.737	0.775	1.989	2.697	-1.0	0.024
44.000	-0.837	-1.106	-2.259	2.697	-3.0	0.017
31.000	0.758	0.785	1.940	2.586	-1.0	0.017
45.000	-0.894	-1.044	-2.313	2.586	-2.0	0.030
32.000	0.797	0.759	2.015	2.527	1.0	0.034
46.000	-0.886	-0.971	-2.240	2.527	-1.0	0.036

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ORIENTATION 15.0

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.616	0.569	1.674	2.719	1.0	0.021
10.000	-0.765	-1.142	-2.081	2.719	-4.0	0.022
2.000	0.562	0.639	1.585	2.822	-2.0	0.025
11.000	-0.443	-0.563	-1.251	2.822	-3.0	0.016
3.000	0.570	0.536	1.535	2.693	1.0	0.027
12.000	-0.360	-0.517	-0.970	2.693	-4.0	0.005
17.000	-0.502	-0.756	-1.347	2.682	-4.0	0.015
13.000	-0.861	-1.308	-2.309	2.682	-4.0	0.027
18.000	-0.561	-0.847	-1.603	2.857	-4.0	0.021
14.000	-0.388	-0.594	-1.109	2.857	-4.0	0.015
19.000	-0.542	-0.793	-1.557	2.873	-4.0	0.032
15.000	-0.816	-1.262	-2.343	2.873	-4.0	0.020
4.000	0.513	0.488	1.328	2.587	1.0	0.026
16.000	-0.387	-0.465	-1.000	2.587	-2.0	0.022
5.000	0.621	0.643	1.651	2.660	-1.0	0.016
20.000	-0.454	-0.788	-1.207	2.660	-5.0	0.019
6.000	0.421	0.290	1.100	2.613	5.0	0.017
21.000	-0.834	-0.921	-2.178	2.613	-1.0	0.029
34.000	-1.037	-1.395	-2.951	2.846	-3.0	0.089
22.000	-0.569	-0.710	-1.619	2.846	-2.0	0.067
35.000	-0.407	-0.560	-1.088	2.671	-3.0	0.008
36.000	-1.690	-2.193	-4.514	2.671	-3.0	0.065
26.000	0.643	0.579	1.780	2.768	2.0	0.013
40.000	-0.582	-0.787	-1.612	2.768	-3.0	0.038
27.000	0.700	0.719	1.918	2.738	-1.0	0.024
41.000	-0.565	-0.796	-1.548	2.738	-3.0	0.025
28.000	0.718	0.790	1.998	2.785	-1.0	0.016
42.000	-0.577	-0.772	-1.608	2.785	-3.0	0.019
29.000	0.765	0.798	2.042	2.668	-1.0	0.025
43.000	-0.681	-0.820	-1.816	2.668	-2.0	0.045
30.000	0.723	0.770	2.004	2.774	-1.0	0.037
44.000	-0.632	-0.838	-1.752	2.774	-3.0	0.023
31.000	0.650	0.746	1.836	2.823	-2.0	0.016
45.000	-0.589	-0.825	-1.664	2.823	-3.0	0.024
32.000	0.623	0.697	1.802	2.890	-2.0	0.024
46.000	-0.573	-0.842	-1.656	2.890	-4.0	0.015

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ORIENTATION 45.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.647	0.489	1.637	2.529	4.0	0.055
10.000	-0.497	-0.737	-1.258	2.529	-4.0	0.012
2.000	0.419	0.222	1.112	2.652	9.0	0.028
11.000	-0.358	-0.507	-0.951	2.652	-3.0	0.019
3.000	0.345	0.191	0.903	2.613	9.0	0.021
12.000	-0.334	-0.528	-0.873	2.613	-4.0	0.009
17.000	-0.431	-0.689	-1.153	2.675	-4.0	0.010
13.000	-0.505	-0.835	-1.349	2.675	-4.0	0.010
18.000	-0.418	-0.777	-1.211	2.894	-5.0	0.010
14.000	-0.598	-0.959	-1.731	2.894	-4.0	0.021
19.000	-0.438	-0.849	-1.292	2.951	-5.0	0.007
15.000	-0.421	-0.561	-1.241	2.951	-3.0	0.016
4.000	0.582	0.548	1.548	2.661	1.0	0.040
16.000	-0.393	-0.494	-1.045	2.661	-3.0	0.017
5.000	0.318	0.238	0.902	2.837	4.0	0.015
20.000	-0.274	-0.527	-0.778	2.837	-5.0	0.010
6.000	-0.120	-0.053	-0.351	2.916	13.0	0.005
21.000	-0.429	-0.714	-1.251	2.916	-4.0	0.029
34.000	-0.510	-0.832	-1.527	2.997	-4.0	0.029
22.000	-0.416	-0.590	-1.246	2.997	-3.0	0.056
35.000	-0.590	-0.886	-1.559	2.644	-4.0	0.015
36.000	-1.520	-1.895	-4.018	2.644	-2.0	0.060
26.000	0.597	0.527	1.592	2.668	2.0	0.028
40.000	-0.401	-0.611	-1.069	2.668	-4.0	0.012
27.000	0.572	0.543	1.548	2.705	1.0	0.040
41.000	-0.390	-0.616	-1.056	2.705	-4.0	0.009
28.000	0.547	0.496	1.483	2.713	2.0	0.019
42.000	-0.411	-0.617	-1.114	2.713	-4.0	0.018
29.000	0.481	0.442	1.258	2.615	1.0	0.017
43.000	-0.432	-0.674	-1.131	2.615	-4.0	0.017
30.000	0.458	0.383	1.294	2.825	2.0	0.032
44.000	-0.469	-0.721	-1.325	2.825	-4.0	0.029
31.000	0.412	0.334	1.106	2.684	3.0	0.017
45.000	-0.482	-0.759	-1.293	2.684	-4.0	0.011
32.000	0.381	0.276	1.035	2.713	4.0	0.014
46.000	-0.459	-0.774	-1.246	2.713	-5.0	0.013

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ORIENTATION 0.180000E+03
=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.368	-0.465	-0.988	2.685	-3.0	0.022
10.000	-0.371	-0.498	-0.997	2.685	-3.0	0.030
2.000	-0.336	-0.411	-0.846	2.518	-2.0	0.013
11.000	-0.984	-1.282	-2.479	2.518	-3.0	0.028
3.000	-0.278	-0.437	-0.818	2.943	-4.0	0.024
12.000	-0.898	-1.512	-2.642	2.943	-5.0	0.024
17.000	-0.401	-0.423	-1.132	2.821	-1.0	0.047
13.000	-0.306	-0.488	-0.862	2.821	-4.0	0.007
18.000	-0.722	-0.817	-1.891	2.618	-2.0	0.033
14.000	-0.999	-1.457	-2.616	2.618	-4.0	0.025
19.000	-0.696	-0.729	-1.834	2.634	-1.0	0.022
15.000	-0.379	-0.478	-0.998	2.634	-3.0	0.013
4.000	-0.316	-0.451	-0.867	2.742	-3.0	0.022
16.000	-0.410	-0.660	-1.124	2.742	-4.0	0.011
5.000	-0.255	-0.376	-0.686	2.685	-4.0	0.018
20.000	-0.201	-0.362	-0.540	2.685	-5.0	0.011
6.000	-0.270	-0.402	-0.737	2.730	-4.0	0.006
21.000	-0.817	-0.839	-2.232	2.730	-1.0	0.031
34.000	-0.302	-0.412	-0.786	2.601	-3.0	0.013
22.000	-0.970	-1.331	-2.522	2.601	-3.0	0.032
35.000	-1.283	-1.719	-3.313	2.581	-3.0	0.054
36.000	-0.302	-0.361	-0.779	2.581	-2.0	0.022
26.000	-0.399	-0.462	-1.067	2.676	-2.0	0.045
40.000	-0.339	-0.423	-0.906	2.676	-2.0	0.012
27.000	-0.350	-0.447	-0.882	2.520	-3.0	0.009
41.000	-0.468	-0.428	-1.180	2.520	1.0	0.017
28.000	-0.289	-0.427	-0.809	2.803	-4.0	0.011
42.000	-0.466	-0.419	-1.305	2.803	2.0	0.061
29.000	-0.265	-0.414	-0.738	2.780	-4.0	0.010
43.000	-0.488	-0.458	-1.358	2.780	1.0	0.020
30.000	-0.288	-0.405	-0.775	2.688	-3.0	0.012
44.000	-0.641	-0.526	-1.723	2.688	3.0	0.041
31.000	-0.312	-0.389	-0.824	2.643	-2.0	0.026
45.000	-0.645	-0.589	-1.705	2.643	1.0	0.017
32.000	-0.279	-0.385	-0.784	2.806	-3.0	0.014
46.000	-0.733	-0.722	-2.056	2.806	1.0	0.040

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ORIENTATION 0.195000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.402	-0.627	-1.106	2.752	-4.0	0.011
10.000	-0.652	-0.853	-1.793	2.752	-3.0	0.025
2.000	-0.371	-0.562	-1.032	2.781	-4.0	0.008
11.000	-0.746	-0.561	-2.074	2.781	-4.0	0.040
3.000	-0.400	-0.546	-1.049	2.625	-3.0	0.012
12.000	-0.887	-1.298	-2.329	2.625	-4.0	0.026
17.000	-0.238	-0.373	-0.639	2.689	-4.0	0.007
13.000	-0.340	-0.557	-0.916	2.689	-4.0	0.012
18.000	-0.450	-0.214	-1.211	2.690	12.0	0.030
14.000	-0.816	-1.203	-2.195	2.690	-4.0	0.029
19.000	-0.411	-0.230	-1.106	2.691	8.0	0.038
15.000	-0.419	-0.659	-1.129	2.691	-4.0	0.019
4.000	-0.427	-0.737	-1.177	2.760	-5.0	0.009
16.000	-0.391	-0.516	-1.078	2.760	-3.0	0.012
5.000	-0.305	-0.540	-0.856	2.804	-5.0	0.005
20.000	-0.209	-0.427	-0.585	2.804	-6.0	0.002
6.000	-0.325	-0.527	-0.876	2.697	-4.0	0.013
21.000	-0.472	-0.269	-1.273	2.697	8.0	0.029
34.000	-0.350	-0.552	-0.886	2.529	-4.0	0.005
22.000	-0.976	-0.847	-2.468	2.529	2.0	0.045
35.000	-0.982	-1.374	-2.615	2.662	-3.0	0.038
36.000	-0.398	-0.582	-1.059	2.662	-4.0	0.018
26.000	-0.476	-0.718	-1.246	2.619	-4.0	0.011
40.000	-0.279	-0.425	-0.730	2.619	-4.0	0.006
27.000	-0.431	-0.654	-1.181	2.742	-4.0	0.019
41.000	-0.261	-0.380	-0.715	2.742	-4.0	0.029
28.000	-0.351	-0.612	-1.050	2.988	-5.0	0.013
42.000	-0.224	-0.302	-0.669	2.988	-3.0	0.018
29.000	-0.404	-0.589	-1.051	2.604	-4.0	0.009
43.000	-0.237	-0.280	-0.618	2.604	-2.0	0.009
30.000	-0.388	-0.568	-0.972	2.504	-4.0	0.007
44.000	-0.318	-0.249	-0.795	2.504	3.0	0.020
31.000	-0.369	-0.553	-1.027	2.786	-4.0	0.020
45.000	-0.242	-0.185	-0.673	2.786	4.0	0.011
32.000	-0.372	-0.565	-0.978	2.627	-4.0	0.010
46.000	-0.436	-0.220	-1.145	2.627	10.0	0.026

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ORIENTATION 0.345000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.428	0.196	1.184	2.765	12.0	0.031
10.000	-0.876	-0.838	-2.421	2.765	1.0	0.045
2.000	0.646	0.674	1.866	2.890	-1.0	0.042
11.000	-0.525	-0.719	-1.516	2.890	-3.0	0.020
3.000	0.565	0.574	1.534	2.713	-1.0	0.029
12.000	-0.344	-0.562	-0.933	2.713	-4.0	0.008
17.000	-0.813	-0.900	-2.171	2.670	-1.0	0.070
13.000	-1.021	-1.541	-2.725	2.670	-4.0	0.032

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ORIENTATION 0.315000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.187	-0.185	-0.487	2.597	1.0	0.009
10.000	-0.819	-0.674	-2.127	2.597	3.0	0.034
2.000	0.398	0.337	1.182	2.967	2.0	0.026
11.000	-0.641	-1.030	-1.901	2.967	-4.0	0.042
3.000	0.368	0.291	1.031	2.800	3.0	0.011
12.000	-0.560	-0.959	-1.570	2.800	-5.0	0.014
17.000	0.512	0.414	1.451	2.836	3.0	0.026
13.000	-0.637	-0.642	-1.806	2.836	-1.0	0.045

Coefficients de pression C_q et C_p
mesurés sur la forme 300

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

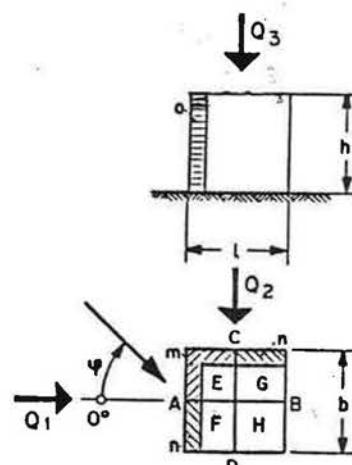
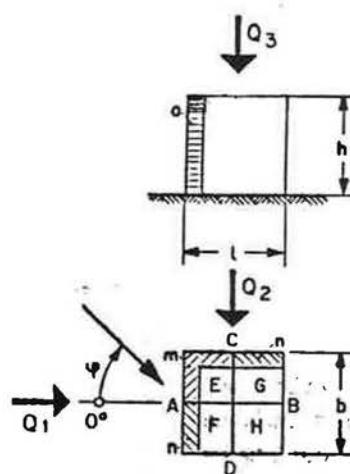


Tabelle 4.6.5

$$h : b : l = 2.57 : 1 : 1$$

Toiture plate

α_p	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE				
	c_{qe}								c^*_{qe}		c_1	c_2	c_3
	surface d'application								surface localisée		surface de référence = surface exposée au vent		
A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,64	-0,50	-0,98	-0,98	-0,96	-0,96	-0,70	-0,70	-0,94	-0,84	-0,99		
15°	0,59	-0,50	-0,69	-0,80	-0,91	-0,81	-0,46	-0,58	-0,80	-0,77			
45°	0,33	-0,60	0,33	-0,60	-0,65	-0,65	-0,78	-0,35	-1,23	-1,23	0,56		
90°	-0,98	-0,98	0,64	-0,50	-0,96	-0,70	-0,96	-0,70	-0,84	-0,94			
180°													
											$\hat{c}_{qe} = -1,1$	Coefficient de frottement $c_t = 0$	



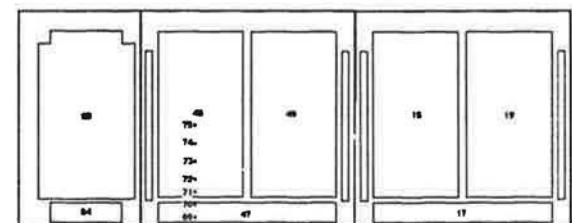
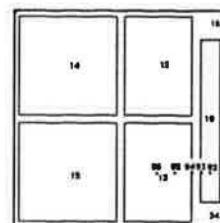
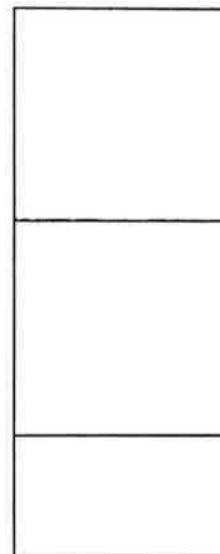
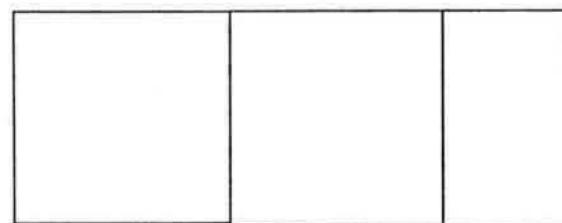
rp	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{pe}								c^*_{pe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
rp	A	B	C	D	E	F	G	H	m	n	o	b <h>bxh</h>	l <h>lxh</h>	l <h>lxh</h>
0°	0,65	-0,48	-0,98	-0,98	-1,20	-1,20	-0,76	-0,76	-1,09	-1,00	-0,83			
15°	0,59	-0,54	-0,42	-0,76	-1,18	-1,01	-0,53	-0,75	-1,08	-0,69				
45°	0,21	-0,68	0,21	-0,68	-0,74	-0,85	-0,96	-0,49	-1,53	-1,53	0,46			
90°	-0,98	-0,98	0,65	-0,48	-1,20	-0,76	-1,20	-0,76	-1,00	-1,09				
180°														

$\hat{c}_{pe} = -1,26$ Coefficient de frottement $c_t = 0$

Tabelle 4.6.5

 $h : b : l = 2,57 : 1 : 1$

Toiture plate



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ORIENTATION 0.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.413	0.194	0.844	2.045	12.0	0.026
17.000	-1.097	-0.870	-2.244	2.045	3.0	0.086
2.000	0.593	0.544	1.206	2.033	1.0	0.014
18.000	-1.028	-0.907	-2.090	2.033	2.0	0.046
3.000	0.541	0.475	1.124	2.075	2.0	0.025
19.000	-0.970	-0.827	-2.012	2.075	2.0	0.035
37.000	0.482	0.387	1.019	2.114	3.0	0.012
47.000	-0.907	-0.800	-1.916	2.114	2.0	0.041
38.000	0.704	0.755	1.471	2.091	-1.0	0.019
48.000	-0.871	-0.914	-1.822	2.091	-1.0	0.031
39.000	0.722	0.684	1.429	1.980	1.0	0.062
49.000	-0.958	-0.899	-1.897	1.980	1.0	0.031
76.000	0.545	0.401	0.863	1.583	4.0	0.015
84.000	-0.937	-0.805	-1.484	1.583	2.0	0.017
77.000	0.630	0.768	1.282	2.034	-2.0	0.013
85.000	-0.877	-0.956	-1.783	2.034	-1.0	0.036
10.000	-0.874	-0.998	-1.742	1.993	-2.0	0.033
12.000	-0.702	-0.755	-1.400	1.993	-1.0	0.015
13.000	-0.891	-1.174	-1.837	2.063	-3.0	0.024
14.000	-0.669	-0.758	-1.380	2.063	-2.0	0.021
15.000	-0.957	-1.182	-1.943	2.029	-2.0	0.028
16.000	-0.592	-0.610	-1.202	2.029	-1.0	0.040
34.000	-1.029	-1.172	-2.189	2.128	-2.0	0.037
69.000	-0.852	-0.922	-1.813	2.128	-1.0	0.039
62.000	0.499	0.306	0.998	2.002	7.0	0.022
70.000	-0.927	-0.900	-1.855	2.002	1.0	0.034
63.000	0.587	0.563	1.217	2.072	1.0	0.010
71.000	-0.950	-0.842	-1.968	2.072	2.0	0.054
64.000	0.644	0.651	1.340	2.080	-1.0	0.023
72.000	-0.891	-0.884	-1.854	2.080	1.0	0.034
65.000	0.719	0.719	1.470	2.046	-1.0	0.011
73.000	-0.962	-0.918	-1.968	2.046	1.0	0.066
66.000	0.713	0.773	1.499	2.103	-1.0	0.012
74.000	-0.981	-0.982	-2.064	2.103	-1.0	0.054
67.000	0.724	0.780	1.522	2.103	-1.0	0.038
75.000	-0.878	-0.947	-1.846	2.103	-1.0	0.032
68.000	0.752	0.805	1.541	2.050	-1.0	0.022
92.000	-0.990	-1.146	-2.030	2.050	-2.0	0.025
93.000	-0.915	-1.195	-1.982	2.166	-3.0	0.024
94.000	-0.961	-1.199	-2.082	2.166	-2.0	0.029
95.000	-0.980	-1.208	-2.058	2.101	-2.0	0.021
96.000	-1.038	-1.259	-2.181	2.101	-2.0	0.026
97.000	-0.870	-1.172	-1.912	2.198	-3.0	0.021
98.000	-0.892	-1.213	-1.961	2.198	-3.0	0.056
80.000	0.476	0.444	0.991	2.082	1.0	0.016
86.000	-0.848	-1.084	-1.766	2.082	-3.0	0.021

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ORIENTATION 15.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.491	0.349	1.046	2.131	5.0	0.025
17.000	-0.863	-0.669	-1.840	2.131	3.0	0.083
2.000	0.533	0.484	1.085	2.034	2.0	0.018
18.000	-0.877	-0.693	-1.784	2.034	3.0	0.063
3.000	0.525	0.426	1.083	2.063	3.0	0.014
19.000	-1.010	-0.805	-2.083	2.063	3.0	0.073
37.000	0.613	0.576	1.312	2.141	1.0	0.013
47.000	-0.621	-0.720	-1.329	2.141	-2.0	0.075
38.000	0.626	0.702	1.307	2.087	-2.0	0.028
48.000	-0.661	-0.797	-1.379	2.087	-2.0	0.029
39.000	0.631	0.633	1.278	2.025	-1.0	0.023
49.000	-0.832	-0.743	-1.685	2.025	2.0	0.039
76.000	0.669	0.695	1.381	2.064	-1.0	0.015
84.000	-0.537	-0.721	-1.109	2.064	-3.0	0.027
77.000	0.616	0.705	1.264	2.051	-2.0	0.025
85.000	-0.636	-0.769	-1.305	2.051	-2.0	0.027
10.000	-0.648	-0.879	-1.396	2.156	-3.0	0.038
12.000	-0.582	-0.753	-1.254	2.156	-3.0	0.023
13.000	-0.749	-1.013	-1.552	2.071	-3.0	0.017
14.000	-0.455	-0.533	-0.942	2.071	-2.0	0.010
15.000	-0.874	-1.178	-1.760	2.014	-3.0	0.019
16.000	-0.495	-0.697	-0.997	2.014	-3.0	0.010
34.000	-0.897	-1.087	-1.925	2.146	-2.0	0.027
69.000	0.555	-0.703	-1.190	2.146	-3.0	0.033
62.000	0.606	0.505	1.275	2.106	2.0	0.031
70.000	-0.607	-0.693	-1.278	2.106	-2.0	0.015
63.000	0.703	0.721	1.489	2.117	-1.0	0.015
71.000	-0.540	-0.676	-1.143	2.117	-3.0	0.013
64.000	0.699	0.750	1.434	2.052	-1.0	0.010
72.000	-0.599	-0.697	-1.230	2.052	-2.0	0.023
65.000	0.734	0.784	1.568	2.136	-1.0	0.038
73.000	-0.683	-0.705	-1.459	2.136	-1.0	0.044
66.000	0.741	0.792	1.532	2.066	-1.0	0.030
74.000	-0.709	-0.717	-1.466	2.066	-1.0	0.044
67.000	0.673	0.765	1.475	2.193	-2.0	0.019
75.000	-0.656	-0.694	-1.438	2.193	-1.0	0.040
68.000	0.679	0.725	1.410	2.077	-1.0	0.021
92.000	-0.792	-0.992	-1.644	2.077	-3.0	0.031
93.000	-0.804	-0.967	-1.622	2.017	-2.0	0.023
94.000	-0.827	-0.983	-1.669	2.017	-2.0	0.012
95.000	-0.833	-0.998	-1.762	2.116	-2.0	0.016
96.000	-0.798	-1.040	-1.690	2.116	-3.0	0.042
97.000	-0.846	-1.064	-1.733	2.048	-3.0	0.022
98.000	-0.955	-1.149	-1.956	2.048	-2.0	0.023
80.000	0.363	0.291	0.791	2.175	3.0	0.022
86.000	-0.551	-0.806	-1.198	2.175	-4.0	0.034

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ORIENTATION 45.0

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.467	0.322	0.949	2.033	5.0	0.021
17.000	-0.450	-0.519	-0.914	2.033	-2.0	0.025
2.000	0.288	0.152	0.589	2.041	9.0	0.017
18.000	-0.633	-0.609	-1.292	2.041	1.0	0.041
3.000	0.305	0.147	0.635	2.085	11.0	0.029
19.000	-0.646	-0.585	-1.347	2.085	2.0	0.043
37.000	0.618	0.531	1.213	1.963	2.0	0.029
47.000	-0.575	-0.682	-1.128	1.963	-2.0	0.048
38.000	0.352	0.251	0.696	1.976	5.0	0.015
48.000	-0.540	-0.757	-1.068	1.976	-3.0	0.014
39.000	0.358	0.222	0.727	2.030	7.0	0.013
49.000	-0.585	-0.714	-1.188	2.030	-2.0	0.022
76.000	0.647	0.592	1.296	2.005	1.0	0.008
84.000	-0.528	-0.691	-1.039	2.005	-3.0	0.016
77.000	0.331	0.263	0.680	2.051	3.0	0.027
85.000	-0.602	-0.713	-1.234	2.051	-2.0	0.027
10.000	-0.472	-0.508	-0.964	2.044	-1.0	0.012
12.000	-0.351	-0.489	-0.716	2.044	-3.0	0.023
13.000	-0.651	-0.848	-1.368	2.103	-3.0	0.019
14.000	-0.779	-0.958	-1.638	2.103	-2.0	0.027
15.000	-0.653	-0.737	-1.327	2.034	-2.0	0.014
16.000	0.472	-0.664	-0.959	2.034	-3.0	0.040
34.000	-0.498	-0.711	-1.043	2.097	-4.0	0.011
69.000	-0.489	-0.725	-1.026	2.097	-4.0	0.021
62.000	0.626	0.584	1.225	1.955	1.0	0.029
70.000	-0.585	-0.766	-1.144	1.955	-3.0	0.023
63.000	0.331	0.574	2.808	8.494	-5.0	1.084
71.000	-0.142	-0.765	-1.204	8.494	-9.0	0.031
64.000	0.562	0.515	1.148	2.044	1.0	0.019
72.000	-0.536	-0.733	-1.096	2.044	-3.0	0.017
65.000	0.519	0.475	1.126	2.168	1.0	0.018
73.000	-0.513	-0.741	-1.112	2.168	-4.0	0.013
66.000	0.498	0.412	1.007	2.020	3.0	0.011
74.000	-0.517	-0.700	-1.045	2.020	-3.0	0.016
67.000	0.443	0.362	0.907	2.038	3.0	0.021
75.000	-0.582	-0.734	-1.185	2.038	-3.0	0.031
68.000	0.382	0.299	0.782	2.045	3.0	0.012
92.000	-0.751	-0.923	-1.537	2.045	-2.0	0.020
93.000	-0.708	-0.930	-1.452	2.051	-3.0	0.016
94.000	-0.800	-1.001	-1.642	2.051	-3.0	0.014
95.000	-0.725	-0.864	-1.535	2.116	-2.0	0.017
96.000	-0.751	-0.751	-1.590	2.116	1.0	0.016
97.000	-0.819	-0.555	-1.610	1.966	5.0	0.033
98.000	-0.819	-0.402	-1.611	1.966	11.0	0.087
80.000	-0.155	-0.073	-0.323	2.082	12.0	0.010
86.000	-0.482	-0.691	-1.004	2.082	-4.0	0.009

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ORIENTATION 0.180000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.606	-0.492	-1.265	2.089	3.0	0.036
17.000	-0.811	-0.561	-1.693	2.089	5.0	0.040
2.000	-0.515	-0.445	-1.014	1.969	2.0	0.018
18.000	-1.088	-0.974	-2.142	1.969	2.0	0.026
3.000	-0.516	-0.435	-1.035	2.006	2.0	0.019
19.000	-0.933	-0.832	-1.875	2.006	2.0	0.027
37.000	-0.584	-0.549	-1.193	2.041	1.0	0.019
47.000	-0.991	-0.743	-2.023	2.041	4.0	0.052
38.000	-0.488	-0.506	-0.998	2.044	-1.0	0.025
48.000	-0.956	-1.034	-1.953	2.044	-1.0	0.021
39.000	-0.481	-0.463	-1.019	2.117	1.0	0.021
49.000	-0.917	-1.006	-1.941	2.117	-1.0	0.031
76.000	-0.610	-0.571	-1.235	2.025	1.0	0.033
84.000	-0.712	-0.616	-1.442	2.025	2.0	0.026
77.000	-0.477	-0.542	-0.952	1.994	-2.0	0.017
85.000	-0.924	-1.041	-1.843	1.994	-2.0	0.032
10.000	-0.843	-0.997	-1.765	2.093	-2.0	0.025
12.000	-0.977	-1.202	-2.045	2.093	-2.0	0.033
13.000	-0.604	-0.706	-1.239	2.053	-2.0	0.017
14.000	-0.884	-1.197	-1.815	2.053	-3.0	0.019
15.000	-0.621	-0.662	-1.237	1.992	-1.0	0.018
16.000	-0.897	-1.127	-1.787	1.992	-3.0	0.022
34.000	-0.481	-0.519	-0.969	2.013	-1.0	0.015
69.000	-0.964	-0.735	-1.940	2.013	4.0	0.028
62.000	-0.645	-0.582	-1.284	1.990	2.0	0.054
70.000	-0.925	-0.749	-1.840	1.990	3.0	0.030
63.000	-0.571	-0.547	-1.175	2.057	1.0	0.009
71.000	-0.809	-0.796	-1.664	2.057	1.0	0.033
64.000	-0.653	-0.527	-1.259	1.928	3.0	0.027
72.000	-0.853	-0.804	-1.646	1.928	1.0	0.048
65.000	-0.569	-0.527	-1.197	2.104	1.0	0.024
73.000	-0.924	-0.921	-1.945	2.104	1.0	0.039
66.000	-0.543	-0.508	-1.117	2.057	1.0	0.030
74.000	-0.936	-0.960	-1.925	2.057	-1.0	0.034
67.000	-0.557	-0.506	-1.119	2.009	1.0	0.028
75.000	-0.998	-1.010	-2.006	2.009	-1.0	0.033
68.000	-0.562	-0.497	-1.107	1.970	2.0	0.037
92.000	-0.746	-0.673	-1.469	1.970	2.0	0.035
93.000	-0.663	-0.654	-1.370	2.066	1.0	0.015
94.000	-0.680	-0.692	-1.406	2.066	-1.0	0.036
95.000	-0.629	-0.679	-1.266	2.013	-1.0	0.014
96.000	-0.706	-0.708	-1.422	2.013	-1.0	0.028
97.000	-0.665	-0.701	-1.338	2.013	-1.0	0.031
98.000	-0.648	-0.719	-1.304	2.013	-1.0	0.011
80.000	-0.479	-0.538	-0.993	2.074	-2.0	0.016
86.000	-0.559	-0.539	-1.159	2.074	1.0	0.021

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 ORIENTATION 0.195000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.514	-0.532	-1.060	2.061	-1.0	0.015
17.000	-0.393	-0.348	-0.810	2.061	2.0	0.032
2.000	-0.574	-0.502	-1.127	1.963	2.0	0.035
18.000	-0.731	-0.397	-1.435	1.963	9.0	0.054
3.000	-0.622	-0.477	-1.274	2.050	4.0	0.031
19.000	-0.631	-0.321	-1.295	2.050	10.0	0.068
37.000	-0.457	-0.609	-0.938	2.054	-3.0	0.011
47.000	-0.452	-0.412	-0.929	2.054	1.0	0.034
38.000	-0.461	-0.588	-0.953	2.067	-3.0	0.008
48.000	-0.721	-0.508	-1.491	2.067	5.0	0.056
39.000	-0.439	-0.545	-0.922	2.102	-2.0	0.009
49.000	-0.759	-0.499	-1.595	2.102	6.0	0.023
76.000	-0.512	-0.655	-1.042	2.036	-3.0	0.015
84.000	-0.351	-0.379	-0.715	2.036	-1.0	0.018
77.000	-0.397	-0.580	-0.826	2.083	-4.0	0.012
85.000	-0.619	-0.375	-1.289	2.083	7.0	0.046
10.000	-0.768	-0.687	-1.633	2.126	-2.0	0.034
12.000	-0.906	-1.181	-1.925	2.126	-3.0	0.025
13.000	-0.460	-0.482	-0.891	1.935	-1.0	0.013
14.000	-0.812	-1.003	-1.572	1.935	-2.0	0.023
15.000	-0.495	-0.687	-1.081	2.186	-3.0	0.012
16.000	-1.176	-1.367	-2.571	2.186	-2.0	0.039
34.000	0.406	-0.591	-0.866	2.134	-4.0	0.007
69.000	-0.413	-0.468	-0.882	2.134	-2.0	0.014
62.000	-0.541	-0.648	-1.073	1.984	-2.0	0.015
70.000	-0.464	-0.384	-0.920	1.984	3.0	0.017
63.000	-0.504	-0.608	-1.022	2.030	-2.0	0.015
71.000	-0.564	-0.321	-1.144	2.030	8.0	0.028
64.000	-0.515	-0.603	-1.031	2.041	-2.0	0.020
72.000	-0.492	-0.330	-1.005	2.041	5.0	0.025
65.000	-0.490	-0.599	-1.012	2.063	-2.0	0.013
73.000	-0.573	-0.318	-1.182	2.063	9.0	0.036
66.000	-0.493	-0.600	-1.003	2.034	-2.0	0.026
74.000	-0.697	-0.341	-1.418	2.034	11.0	0.024
67.000	-0.481	-0.593	-0.986	2.048	-2.0	0.012
75.000	-0.800	-0.438	-1.639	2.048	9.0	0.059
68.000	-0.512	-0.601	-1.066	2.082	-2.0	0.028
92.000	-0.773	-0.697	-1.610	2.082	2.0	0.025
93.000	-0.681	-0.517	-1.350	1.982	4.0	0.036
94.000	-0.588	-0.474	-1.166	1.982	3.0	0.024
95.000	-0.441	-0.443	-0.877	1.989	-1.0	0.019
96.000	-0.448	-0.447	-0.892	1.989	1.0	0.015
97.000	-0.510	-0.512	-1.020	2.000	-1.0	0.021
98.000	-0.545	-0.608	-1.090	2.000	-2.0	0.019
80.000	-0.366	-0.522	-0.797	2.176	-3.0	0.008
86.000	-0.300	-0.399	-0.652	2.176	-3.0	0.010

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ORIENTATION 0.225000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-1.229	-1.527	-2.485	2.023	-2.0	0.022
12.000	-0.424	-0.524	-0.857	2.023	-2.0	0.011

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ORIENTATION 0.255000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.804	-1.082	-1.650	2.051	-3.0	0.017
12.000	-0.909	-1.193	-1.865	2.051	-3.0	0.026

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ORIENTATION 0.270000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.935	-1.091	-1.921	2.053	-2.0	0.038
12.000	-0.927	-1.183	-1.903	2.053	-3.0	0.023

Coefficients de pression C_q et C_p
mesurés sur la forme 310

Définition des surfaces et des points de mesures.
Tableaux des résultats bruts

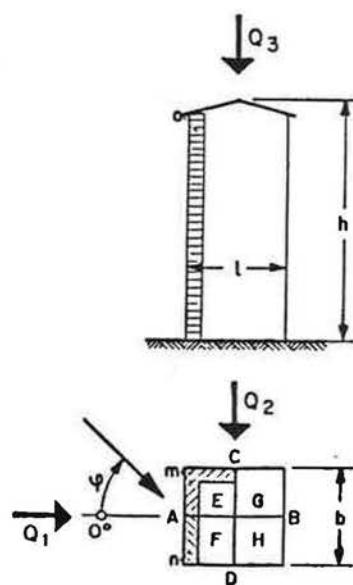


Tabelle 4.6.6

 $h : b : l = 2.66 : 1 : 1$

Toiture à 10°

φ	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE					
	c_{qe}								c_1	c_2	c_3			
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
φ	A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,59	-0,49	-0,92	-0,92	-1,29	-1,29	-0,47	-0,47	-1,55	-0,90	-0,91			
15°	0,59	-0,51	-0,61	-0,76	-1,05	-0,96	-0,45	-0,49	-1,49	-0,92				
45°	0,32	-0,57	0,32	-0,57	-0,56	-0,65	-0,74	-0,43	-1,80					
90°	-0,92	-0,92	0,59	-0,49	-0,96	-0,70	-0,96	-0,70	-0,90	-1,55				
180°														
												$\hat{c}_{qe} = -1,80$	Coefficient de frottement $c_t = 0$	

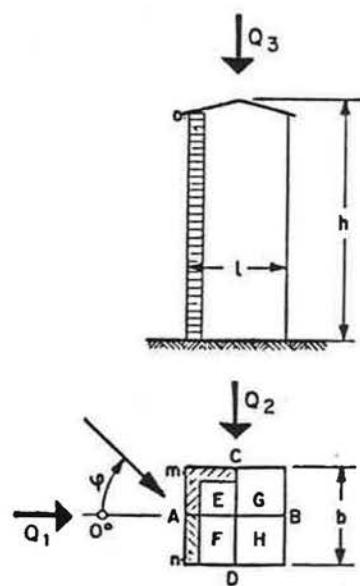
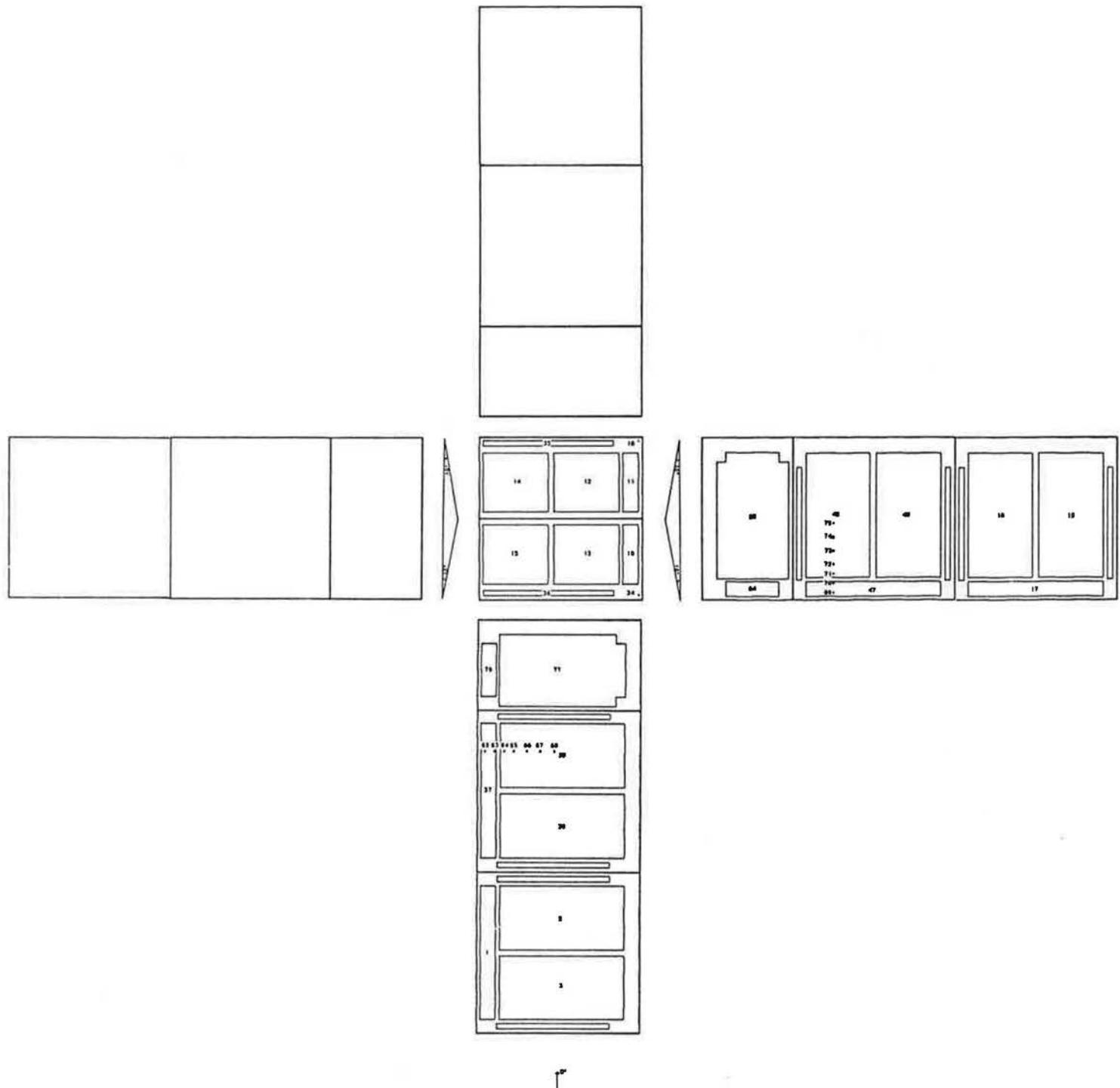


Tabelle 4.6.6

 $h : b : l = 2.66 : 1 : 1$ Toiture à 10°

φ	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE					
	c_{pe}								c^*_{pe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
φ	A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,59	-0,46	-0,84	-0,84	-1,50	-1,50	-0,50	-0,50	-1,70	-1,18	-0,81	1,03	0,05	1,94
15°	0,57	-0,52	-0,31	-0,69	-1,43	-1,23	-0,55	-0,61	-1,75	-0,82		1,02	0,07	1,78
45°	0,19	-0,64	0,19	-0,64	-0,58	-0,90	-0,27	-0,59	-1,95			0,84	0,95	1,41
90°	-0,84	-0,84	0,59	-0,46	-1,50	-0,50	-1,50	-0,50	-1,18	-1,70		-0,06	1,16	1,22
180°														
											$\hat{c}_{pe} = -1,95$	Coefficient de frottement $c_t = 0$		



MODELE N° 310
Numérotation des prises de pression

ORIENTATION 0.0			A			
POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.374	0.194	0.744	1.990	10.0	0.021
17.000	-0.016	0.000	0.031	0.000		
2.000	0.534	0.485	1.044	1.954	2.0	0.012
18.000	-0.062	-0.035	-0.120	0.000		
3.000	0.533	0.430	1.047	1.966	3.0	0.022
19.000	-0.049	-0.029	-0.099	0.000		
37.000	0.508	0.363	0.989	1.948	4.0	0.020
47.000	-0.060	-0.034	-0.119	0.000		
38.000	0.669	0.685	1.294	1.934	-1.0	0.034
48.000	-0.060	-0.027	-0.117	0.000		
39.000	0.617	0.620	1.265	2.053	-1.0	0.027
49.000	-0.059	-0.035	-0.123	0.000		
76.000	0.562	0.429	0.994	1.770	4.0	0.009
84.000	-0.064	-0.039	-0.122	0.000		
77.000	0.599	0.722	1.231	2.056	-2.0	0.017
85.000	-0.071	-0.056	-0.147	0.000		
10.000	-0.903	-1.181	-1.875	2.077	-3.0	0.015
11.000	-0.096	-0.068	-0.202	0.000		
12.000	-0.472	-0.501	-0.935	1.981	-1.0	0.013
13.000	-0.076	-0.050	-0.154	0.000		
14.000	-0.467	-0.491	-0.919	1.967	-1.0	0.024
15.000	-0.080	-0.050	-0.159	0.000		
16.000	-0.438	-0.482	-0.849	1.939	-1.0	0.014
69.000	-0.073	-0.049	-0.143	0.000		
62.000	0.457	0.290	0.890	1.949	6.0	0.013
70.000	0.074	0.053	0.146	0.000		
63.000	0.573	0.503	1.138	1.986	2.0	0.017
71.000	-0.073	0.044	0.146	0.000		
64.000	0.587	0.585	1.219	2.078	1.0	0.023
72.000	-0.045	-0.039	-0.095	0.000		
65.000	0.672	0.661	1.360	2.022	1.0	0.020
73.000	-0.066	-0.037	-0.136	0.000		
66.000	0.658	0.696	1.349	2.051	-1.0	0.022
74.000	-0.101	-0.078	-0.212	0.000		
67.000	0.695	0.726	1.371	1.972	-1.0	0.029
75.000	0.000	0.000	0.000	0.000		
68.000	0.725	0.712	1.404	1.936	1.0	0.016
35.000	0.000	0.000	0.000	0.000		
34.000	-1.349	-1.503	-2.672	1.981	-2.0	0.050
80.000	0.000	0.000	0.000	0.000		
36.000	-1.554	-1.532	-3.044	1.959	1.0	0.075
86.000	0.000	0.000	0.000	0.000		

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 ORIENTATION 15.0
 A
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.557	0.345	1.119	2.010	7.0	0.029
17.000	0.000	0.000	0.000	0.000		
2.000	0.562	0.458	1.049	1.866	3.0	0.027
18.000	0.000	0.000	0.000	0.000		
3.000	0.458	0.405	0.955	2.085	2.0	0.023
19.000	0.000	0.000	0.000	0.000		
37.000	0.603	0.581	1.262	2.092	1.0	0.023
47.000	0.000	0.000	0.000	0.000		
38.000	0.678	0.683	1.349	1.989	-1.0	0.024
48.000	0.000	0.000	0.000	0.000		
39.000	0.627	0.615	1.240	1.978	1.0	0.023
49.000	0.000	0.000	0.000	0.000		
76.000	0.659	0.678	1.335	2.025	-1.0	0.017
84.000	0.000	0.000	0.000	0.000		
77.000	0.617	0.698	1.188	1.926	-2.0	0.014
85.000	0.000	0.000	0.000	0.000		
10.000	-0.865	-1.149	-1.767	2.043	-3.0	0.017
11.000	0.000	0.000	0.000	0.000		
12.000	-0.490	-0.610	-0.971	1.983	-2.0	0.012
13.000	0.000	0.000	0.000	0.000		
14.000	-0.445	-0.549	-0.876	1.966	-2.0	0.014
15.000	0.000	0.000	0.000	0.000		
16.000	-0.495	-0.662	-0.956	1.932	-3.0	0.005
69.000	0.000	0.000	0.000	0.000		
62.000	0.583	0.502	1.201	2.062	2.0	0.012
70.000	0.000	0.000	0.000	0.000		
63.000	0.661	0.673	1.402	2.121	-1.0	0.026
71.000	0.000	0.000	0.000	0.000		
64.000	0.733	0.717	1.441	1.966	1.0	0.013
72.000	0.000	0.000	0.000	0.000		
65.000	0.718	0.746	1.448	2.016	-1.0	0.013
73.000	0.000	0.000	0.000	0.000		
66.000	0.732	0.748	1.466	2.002	-1.0	0.034
74.000	0.000	0.000	0.000	0.000		
67.000	0.698	0.737	1.445	2.070	-1.0	0.022
75.000	0.000	0.000	0.000	0.000		
68.000	0.677	0.690	1.325	1.955	-1.0	0.016
35.000	0.000	0.000	0.000	0.000		
34.000	-1.205	-1.299	-2.307	1.915	-1.0	0.059
80.000	0.000	0.000	0.000	0.000		
36.000	-1.488	-1.748	-3.030	2.036	-2.0	0.133
86.000	0.000	0.000	0.000	0.000		

ORIENTATION 45.0				A		
POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.426	0.307	0.883	2.073	4.0	0.009
17.000	0.000	0.000	0.000	0.000		
2.000	0.294	0.152	0.604	2.051	10.0	0.022
18.000	0.000	0.000	0.000	0.000		
3.000	0.260	0.121	0.538	2.069	12.0	0.021
19.000	0.000	0.000	0.000	0.000		
37.000	0.568	0.508	1.215	2.140	2.0	0.035
47.000	0.000	0.000	0.000	0.000		
38.000	0.367	0.222	0.734	2.001	7.0	0.019
48.000	0.000	0.000	0.000	0.000		
39.000	0.385	0.212	0.745	1.932	9.0	0.033
49.000	0.000	0.000	0.000	0.000		
76.000	0.646	0.546	1.285	1.990	2.0	0.048
84.000	0.000	0.000	0.000	0.000		
77.000	0.267	0.245	0.552	2.066	1.0	0.008
85.000	0.000	0.000	0.000	0.000		
10.000	-0.571	-0.759	-1.142	2.001	-3.0	0.008
11.000	0.000	0.000	0.000	0.000		
12.000	-0.430	-0.586	-0.840	1.953	-3.0	0.009
13.000	0.000	0.000	0.000	0.000		
14.000	-0.735	-0.870	-1.438	1.957	-2.0	0.029
15.000	0.000	0.000	0.000	0.000		
16.000	-0.473	-0.668	-0.944	1.998	-3.0	0.007
69.000	0.000	0.000	0.000	0.000		
62.000	0.620	0.525	1.259	2.030	2.0	0.040
70.000	0.000	0.000	0.000	0.000		
63.000	0.591	0.531	1.205	2.039	2.0	0.018
71.000	0.000	0.000	0.000	0.000		
64.000	0.492	0.474	0.994	2.022	1.0	0.018
72.000	0.000	0.000	0.000	0.000		
65.000	0.527	0.436	1.046	1.983	3.0	0.011
73.000	0.000	0.000	0.000	0.000		
66.000	0.499	0.390	0.998	2.000	3.0	0.023
74.000	0.000	0.000	0.000	0.000		
67.000	0.430	0.339	0.930	2.163	3.0	0.035
75.000	0.000	0.000	0.000	0.000		
68.000	0.410	0.276	0.824	2.011	5.0	0.018
35.000	0.000	0.000	0.000	0.000		
34.000	-0.564	-0.799	-1.172	2.080	-3.0	0.012
80.000	0.000	0.000	0.000	0.000		
36.000	-1.799	-1.948	-3.531	1.963	-1.0	0.034
86.000	0.000	0.000	0.000	0.000		

ORIENTATION 0.180000E+03				A		
POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.567	-0.472	-1.120	1.976	3.0	0.016
17.000	0.000	0.000	0.000	0.000		
2.000	-0.509	-0.421	-1.018	2.000	3.0	0.046
18.000	0.000	0.000	0.000	0.000		
3.000	-0.506	-0.413	-1.079	2.132	3.0	0.027
19.000	0.000	0.000	0.000	0.000		
37.000	-0.573	-0.527	-1.088	1.901	1.0	0.020
47.000	0.000	0.000	0.000	0.000		
38.000	-0.555	-0.492	-1.084	1.953	2.0	0.034
48.000	0.000	0.000	0.000	0.000		
39.000	-0.462	-0.448	-0.923	1.998	1.0	0.018
49.000	0.000	0.000	0.000	0.000		
76.000	-0.542	-0.531	-1.076	1.986	1.0	0.023
84.000	0.000	0.000	0.000	0.000		
77.000	-0.422	-0.509	-0.854	2.023	-2.0	0.014
85.000	0.000	0.000	0.000	0.000		
10.000	-0.489	-0.535	-1.023	2.091	-1.0	0.031
11.000	0.000	0.000	0.000	0.000		
12.000	-1.147	-1.468	-2.318	2.020	-3.0	0.035
13.000	0.000	0.000	0.000	0.000		
14.000	-1.059	-1.473	-2.239	2.114	-3.0	0.018
15.000	0.000	0.000	0.000	0.000		
16.000	-1.674	-1.602	-3.331	1.989	1.0	0.046
69.000	0.000	0.000	0.000	0.000		
62.000	-0.624	-0.555	-1.258	2.016	2.0	0.034
70.000	0.000	0.000	0.000	0.000		
63.000	-0.588	-0.526	-1.173	1.996	2.0	0.029
71.000	0.000	0.000	0.000	0.000		
64.000	-0.569	-0.506	-1.178	2.073	2.0	0.040
72.000	0.000	0.000	0.000	0.000		
65.000	-0.482	-0.492	-1.004	2.081	-1.0	0.008
73.000	0.000	0.000	0.000	0.000		
66.000	-0.526	-0.482	-1.046	1.987	1.0	0.014
74.000	0.000	0.000	0.000	0.000		
67.000	-0.485	-0.475	-1.038	2.139	1.0	0.047
75.000	0.000	0.000	0.000	0.000		
68.000	-0.480	-0.483	-0.975	2.029	-1.0	0.012
35.000	0.000	0.000	0.000	0.000		
34.000	-0.466	-0.485	-0.905	1.944	-1.0	0.017
80.000	0.000	0.000	0.000	0.000		
36.000	-0.444	-0.503	-0.885	1.993	-2.0	0.012
86.000	0.000	0.000	0.000	0.000		

=====				GP	DELTA	DP
POSI.	CP .98	CP MOY	CP PIC			
1.000	-0.535	-0.517	-1.085	2.028	1.0	0.030
17.000	0.000	0.000	0.000	0.000		
2.000	-0.571	-0.463	-1.126	1.973	3.0	0.057
18.000	0.000	0.000	0.000	0.000		
3.000	-0.591	-0.447	-1.220	2.064	4.0	0.025
19.000	0.000	0.000	0.000	0.000		
37.000	-0.506	-0.582	-0.974	1.923	-2.0	0.012
47.000	0.000	0.000	0.000	0.000		
38.000	-0.495	-0.561	-0.982	1.982	-2.0	0.024
48.000	0.000	0.000	0.000	0.000		
39.000	-0.473	-0.530	-0.925	1.957	-2.0	0.032
49.000	0.000	0.000	0.000	0.000		
76.000	-0.562	-0.646	-1.066	1.898	-2.0	0.012
84.000	0.000	0.000	0.000	0.000		
77.000	-0.407	-0.582	-0.833	2.048	-4.0	0.008
85.000	0.000	0.000	0.000	0.000		
10.000	-0.777	-0.768	-1.522	1.959	1.0	0.045
11.000	0.000	0.000	0.000	0.000		
12.000	-1.022	-1.427	-2.013	1.970	-3.0	0.019
13.000	0.000	0.000	0.000	0.000		
14.000	-0.920	-1.229	-1.839	1.998	-3.0	0.013
15.000	0.000	0.000	0.000	0.000		
16.000	-1.833	-2.038	-3.781	2.062	-2.0	0.081
69.000	0.000	0.000	0.000	0.000		
62.000	-0.473	-0.630	-0.961	2.033	-3.0	0.013
70.000	0.000	0.000	0.000	0.000		
63.000	-0.526	-0.607	-1.059	2.013	-2.0	0.021
71.000	0.000	0.000	0.000	0.000		
64.000	-0.493	-0.604	-1.002	2.035	-2.0	0.006
72.000	0.000	0.000	0.000	0.000		
65.000	-0.621	-0.602	-1.229	1.980	1.0	0.090
73.000	0.000	0.000	0.000	0.000		
66.000	-0.518	-0.581	-1.064	2.055	-2.0	0.036
74.000	0.000	0.000	0.000	0.000		
67.000	-0.479	-0.587	-0.957	1.998	-2.0	0.010
75.000	0.000	0.000	0.000	0.000		
68.000	-0.521	-0.585	-1.008	1.934	-2.0	0.014
35.000	0.000	0.000	0.000	0.000		
34.000	-0.420	-0.531	-0.851	2.027	-3.0	0.013
80.000	0.000	0.000	0.000	0.000		
36.000	-0.460	-0.606	-0.939	2.044	-3.0	0.008
86.000	0.000	0.000	0.000	0.000		

Coefficients de pression C_q et C_p
mesurés sur la forme 4

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

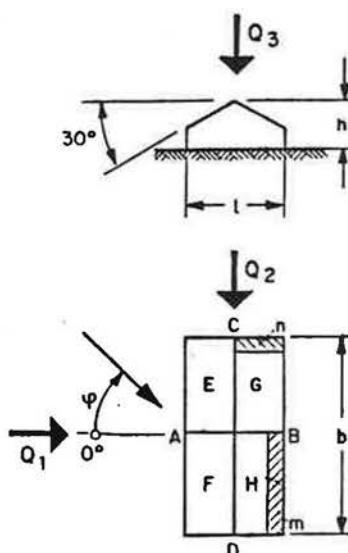


Tabelle 4.6.8

$$h:b:l = 0.47:2:1$$

Toiture à 30°

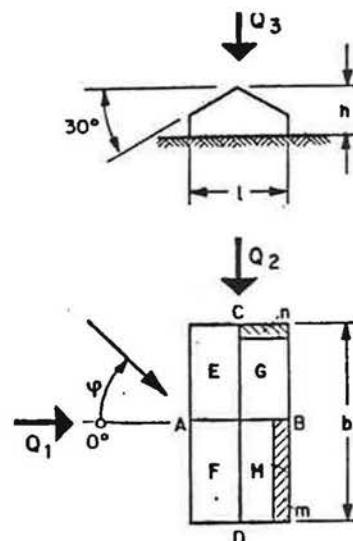


Tabelle 4.6.8

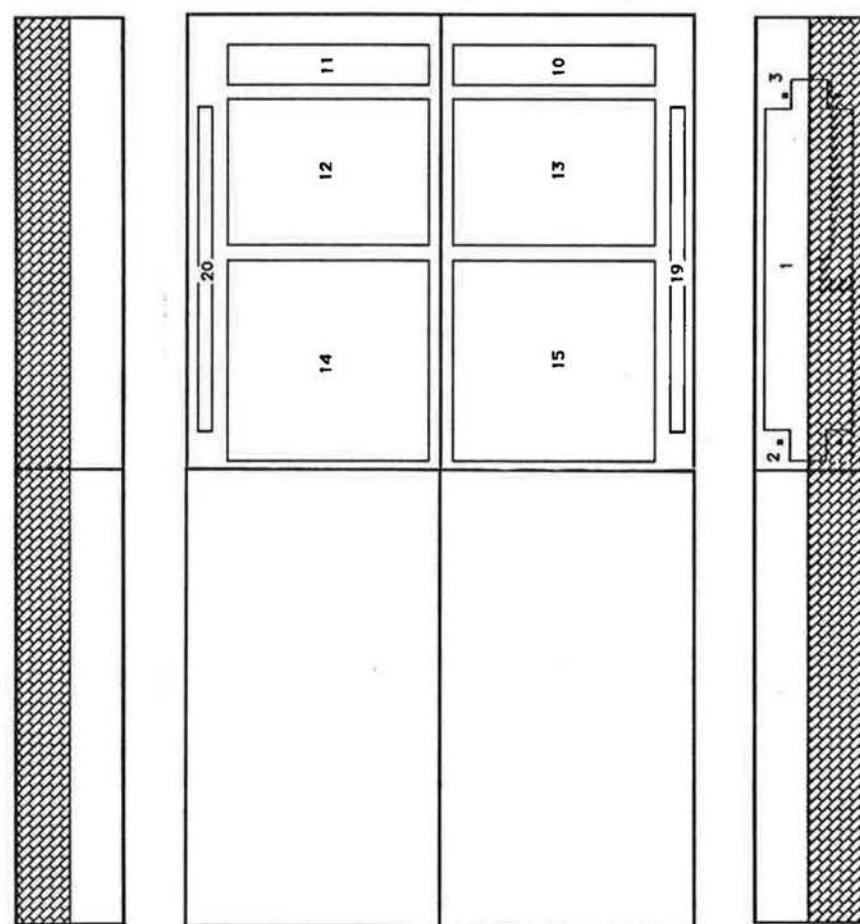
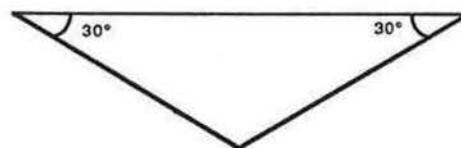
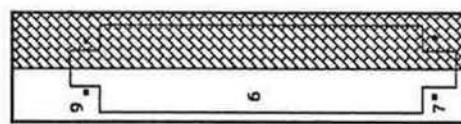
$h : b : l = 0.47 : 2 : 1$

Toiture à 30°

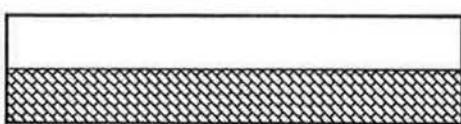
ϕ	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{pe}								c^*_{pe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
ϕ	A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,58	-0,88	-0,44	-0,44	0,11	0,11	-1,00	-1,10	-1,12	-1,12		0,91	-0,08	1,25
15°					0,10	$\pm 0,10$	-1,08	-1,00	-1,09	-1,08		1,26	0,37	0,35
45°	0,29	-0,53	0,10	-0,57	$\pm 0,10$	-0,20	-1,17	-0,96	-0,84	-1,38		0,69	0,65	1,01
90°	-0,22	-0,22	0,45	-0,47	-0,68	-0,31	-0,68	-0,31	-0,28	-1,42		0,08	0,57	1,24
180°														
											$\hat{c}_{pe} = -1,42$	Coefficient de frottement $c_t = 0$		



: Masque en bois



0°



MODELE N° 4

Numérotation des prises de pression

=====						
ORIENTATION 0.0						
POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
-1.000	1.204	3.304	3.524	2.924	-7.0	0.005
2.000	0.421	0.349	1.272	3.023	3.0	0.017
3.000	-0.387	-0.441	-1.091	2.821	-2.0	0.014
6.000	0.300	0.710	0.962	3.206	-6.0	0.005
7.000	-0.950	-1.472	-2.962	3.117	-4.0	0.036
9.000	-0.410	-0.876	-1.336	3.259	-6.0	0.009
10.000	-0.176	-0.156	-0.612	3.478	2.0	0.012
11.000	-0.471	-1.001	-1.610	3.417	-6.0	0.009
12.000	-0.552	-1.018	-1.673	3.029	-5.0	0.013
13.000	0.244	0.063	0.773	3.161	29.0	0.012
15.000	0.285	0.149	0.849	2.978	10.0	0.011
14.000	-0.511	-0.960	-1.773	3.472	-5.0	0.010
16.000	-0.553	-1.036	-1.638	2.960	-5.0	0.011
18.000	-0.236	-0.133	-0.750	3.182	8.0	0.010
19.000	0.303	0.056	0.961	3.171	44.0	0.015
20.000	-0.616	-1.122	-1.981	3.217	-5.0	0.000

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ORIENTATION 15.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.158	3.181	3.381	2.921	-7.0	0.004
2.000	0.395	0.334	1.166	2.955	2.0	0.013
3.000	-0.492	-0.769	-1.490	3.030	-4.0	0.013
4.000	0.277	0.586	0.841	3.039	-6.0	0.007
5.000	-0.867	-1.640	-2.850	3.288	-5.0	0.015
6.000	-0.415	-0.778	-1.281	3.085	-5.0	0.006
7.000	-0.242	-0.321	-0.733	3.025	-3.0	0.008
8.000	-0.540	-0.961	-1.641	3.040	-5.0	0.023
9.000	-0.578	-0.991	-1.713	2.962	-5.0	0.026
10.000	-0.151	-0.109	-0.470	3.121	4.0	0.005
11.000	0.234	0.081	0.715	3.056	19.0	0.009
12.000	-0.468	-0.960	-1.561	3.339	-6.0	0.008
13.000	-0.524	-1.006	-1.697	3.239	-5.0	0.021
14.000	-0.302	-0.303	-0.998	3.301	-1.0	0.009
15.000	-0.216	-0.010	-0.697	3.233	0.197000E+03	0.013
16.000	-0.833	-1.087	-2.327	2.793	-3.0	0.000

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ORIENTATION 45.0

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POSI.	CP .28	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.077	3.199	3.401	3.157	-7.0	0.003
2.000	0.221	0.105	0.630	2.942	11.0	0.010
3.000	-0.269	-0.481	-0.834	3.098	-5.0	0.005
4.000	0.284	0.621	0.811	2.854	-6.0	0.003
5.000	-0.331	-0.659	-0.992	2.998	-5.0	0.005
6.000	-0.314	-0.617	-1.132	3.609	-5.0	0.012
7.000	-0.185	-0.374	-0.619	3.350	-6.0	0.004
8.000	-0.424	-0.766	-1.273	3.001	-5.0	0.019
9.000	-0.485	-0.851	-1.419	2.923	-5.0	0.011
10.000	-0.161	-0.248	-0.504	3.132	-4.0	0.005
11.000	-0.135	-0.144	-0.449	3.325	-1.0	0.006
12.000	-0.544	-1.061	-1.734	3.185	-5.0	0.012
13.000	-0.443	-0.806	-1.353	3.056	-5.0	0.006
14.000	-0.201	-0.211	-0.646	3.211	-1.0	0.014
15.000	-0.240	-0.215	-0.794	3.304	2.0	0.019
16.000	-0.731	-0.937	-2.314	3.166	-3.0	0.000

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ORIENTATION 90.0

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POSI.	CP .93	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.050	3.062	3.174	3.024	7.0	0.002
2.000	-0.213	-0.287	-0.646	3.038	-3.0	0.004
3.000	-0.250	-0.471	-0.725	2.899	-5.0	0.007
4.000	0.294	0.766	0.938	3.190	7.0	0.005
5.000	-0.239	-0.517	-0.765	3.202	-6.0	0.003
6.000	-0.236	-0.441	-0.679	2.880	-5.0	0.005
7.000	-0.197	-0.395	-0.622	3.152	-6.0	0.004
8.000	-0.194	-0.382	-0.636	3.287	-5.0	0.005
9.000	-0.175	-0.337	-0.524	3.000	-5.0	0.005
10.000	-0.190	-0.347	-0.541	2.841	-5.0	0.002
11.000	-0.169	-0.267	-0.531	3.153	-4.0	0.006
12.000	-0.149	-0.274	-0.453	3.048	-5.0	0.003
13.000	-0.189	-0.394	-0.604	3.194	-6.0	0.002
14.000	-0.139	-0.184	-0.401	2.886	-3.0	0.002
15.000	-0.215	-0.281	-0.593	2.758	-3.0	0.005
16.000	-0.157	-0.278	-0.545	3.459	-5.0	0.000

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ORIENTATION 0.135000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.944	3.013	3.167	3.356	7.0	0.004
2.000	-0.283	-0.324	-0.828	2.931	-2.0	0.007
3.000	-0.336	-0.616	-0.980	2.914	-5.0	0.007
4.000	0.281	0.736	0.915	3.255	-7.0	0.002
5.000	-0.330	-0.633	-1.032	3.131	-5.0	0.007
6.000	-0.325	-0.631	-0.963	2.967	-5.0	0.011
7.000	-0.435	-0.730	-1.212	2.789	-5.0	0.011
8.000	-0.204	-0.332	-0.599	2.940	-4.0	0.005
9.000	-0.166	-0.221	-0.507	3.052	-3.0	0.005
10.000	-0.433	-0.813	-1.294	2.989	-5.0	0.010
11.000	-0.608	-1.044	-1.877	3.088	-5.0	0.014
12.000	-0.107	-0.091	-0.332	3.115	2.0	0.004
13.000	-0.309	-0.548	-0.922	2.986	-5.0	0.011
14.000	-0.289	-0.494	-0.915	3.172	-5.0	0.013
15.000	-0.855	-0.843	-2.486	2.907	1.0	0.024
16.000	-0.296	-0.226	-0.861	2.905	4.0	0.000

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ORIENTATION 0.165000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.006	3.011	3.145	3.125	-7.0	0.003
2.000	-0.489	-0.771	-1.483	3.034	-4.0	0.012
3.000	-0.565	-0.766	-1.632	2.889	-3.0	0.017
6.000	0.329	0.732	0.964	2.933	-6.0	0.004
7.000	-0.314	-0.686	-1.053	3.349	-6.0	0.006
9.000	-0.931	-1.447	-2.671	2.870	-4.0	0.040
10.000	-0.527	-0.881	-1.549	2.940	-5.0	0.008
11.000	-0.219	-0.233	-0.662	3.024	-1.0	0.007
12.000	-0.132	-0.040	-0.443	3.368	23.0	0.006
13.000	-0.479	-0.851	-1.497	3.124	-5.0	0.014
15.000	-0.451	-0.881	-1.420	3.149	-5.0	0.010
14.000	0.221	0.101	0.684	3.092	12.0	0.014
16.000	-0.467	-0.715	-1.515	3.246	-4.0	0.021
18.000	-0.498	-0.733	-1.577	3.165	-4.0	0.024
19.000	-0.594	-1.007	-1.882	3.168	-5.0	0.015
20.000	-0.185	-0.028	-0.567	3.070	58.0	0.000

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ORIENTATION 0.180000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.094	3.029	3.176	2.903	-7.0	0.003
2.000	-0.495	-0.744	-1.450	2.931	-4.0	0.008
3.000	-0.489	-0.884	-1.587	3.248	-5.0	0.015
4.000	0.362	0.859	1.002	2.993	-6.0	0.004
5.000	-0.327	-0.692	-1.048	3.206	-6.0	0.008
6.000	-0.840	-1.291	-2.383	2.837	-4.0	0.024
7.000	-0.462	-0.864	-1.453	3.146	-5.0	0.010
8.000	-0.166	-0.059	-0.546	3.285	19.0	0.008
9.000	0.301	0.081	0.872	2.897	27.0	0.012
10.000	-0.461	-0.889	-1.461	3.169	-5.0	0.013
11.000	-0.478	-0.894	-1.433	2.996	-5.0	0.013
12.000	0.263	0.134	0.820	3.113	10.0	0.014
13.000	-0.373	-0.508	-1.147	3.073	-3.0	0.008
14.000	-0.359	-0.657	-1.152	3.208	-5.0	0.007
15.000	-0.538	-0.989	-1.831	3.401	-5.0	0.014
16.000	0.461	0.020	1.449	3.141	0.224000E+03	0.000

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ORIENTATION 0.195000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.135	3.031	3.194	2.814	-7.0	0.003
2.000	-0.518	-0.830	-1.591	3.074	-4.0	0.028
3.000	-0.494	-1.066	-1.630	3.301	-6.0	0.012
4.000	-0.411	-0.995	-1.247	3.031	-6.0	0.010
5.000	-0.341	-0.716	-1.035	3.039	-6.0	0.007
6.000	-0.615	-0.693	-1.768	2.873	-2.0	0.023
7.000	-0.441	-0.953	-1.596	3.619	-6.0	0.012
8.000	0.274	0.168	0.964	3.521	7.0	0.019
9.000	0.310	0.170	0.895	2.884	9.0	0.015
10.000	-0.496	-0.970	-1.582	3.189	-5.0	0.007
11.000	-0.570	-0.972	-1.791	3.140	-5.0	0.018
12.000	0.225	0.087	0.675	3.002	16.0	0.012
13.000	-0.282	-0.179	-0.832	2.955	6.0	0.013
14.000	-0.446	-0.730	-1.330	2.982	-4.0	0.013
15.000	-0.623	-1.043	-1.962	3.146	-5.0	0.022
16.000	-0.245	-0.005	-0.727	2.968	0.446000E+03	0.000

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ORIENTATION 0.225000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.997	3.069	3.209	3.220	7.0	0.004
2.000	-0.402	-0.505	-1.234	3.070	-3.0	0.013
3.000	-0.435	-1.002	-1.585	3.643	-6.0	0.010
4.000	0.548	1.236	1.792	3.269	-6.0	0.014
5.000	-0.239	-0.507	-0.791	3.307	-6.0	0.002
6.000	0.407	0.481	1.289	3.168	-2.0	0.018
7.000	-0.898	-1.454	-2.841	3.165	-4.0	0.031
8.000	-0.330	0.002	-0.999	3.028	-0.135900E+04	0.018
9.000	-0.116	-0.052	-0.357	3.085	13.0	0.005
10.000	-0.749	-1.381	-2.366	3.157	-5.0	0.022
11.000	-0.663	-0.860	-1.875	2.828	-3.0	0.014
12.000	-0.130	-0.156	-0.412	3.168	-2.0	0.003
13.000	-0.354	-0.085	-1.167	3.302	32.0	0.037
14.000	-0.833	-1.069	-2.533	3.042	-3.0	0.032
15.000	-0.623	-0.732	-1.844	2.962	-2.0	0.021
16.000	-0.279	-0.240	-0.822	2.943	2.0	0.000

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ORIENTATION 0.270000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.045	3.056	3.175	3.038	-7.0	0.003
2.000	-0.235	-0.464	-0.789	3.351	-5.0	0.011
3.000	-0.666	-1.317	-2.130	3.199	-5.0	0.011
4.000	0.577	1.259	1.793	3.107	-6.0	0.015
5.000	0.273	0.045	0.904	3.307	51.0	0.012
6.000	-0.247	-0.365	-0.705	2.859	-4.0	0.005
7.000	-1.090	-1.418	-3.044	2.793	-3.0	0.020
8.000	-0.829	-1.241	-2.679	3.230	-4.0	0.020
9.000	-0.691	-1.015	-2.026	2.932	-4.0	0.013
10.000	-0.563	-0.973	-1.945	3.454	-5.0	0.021
11.000	-0.209	-0.313	-0.613	2.941	-4.0	0.007
12.000	-0.207	-0.336	-0.655	3.165	-4.0	0.007
13.000	-0.766	-1.277	-2.578	3.364	-5.0	0.027
14.000	-0.962	-1.281	-3.010	3.128	-3.0	0.034
15.000	-0.190	-0.345	-0.597	3.137	-5.0	0.005
16.000	-0.255	-0.341	-0.810	3.180	-3.0	0.000

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 ORIENTATION 0.315000E+03
 =====
 POSI. CP .98 CP MOY CP PIC GP DELTA DP
 =====
 1.000 1.063 3.177 3.415 3.211 -7.0 0.005
 2.000 -0.142 -0.066 -0.434 3.068 12.0 0.006
 3.000 0.440 0.354 1.270 2.883 3.0 0.021
 6.000 0.453 1.006 1.394 3.077 6.0 0.008
 7.000 0.373 0.364 1.139 3.056 1.0 0.022
 9.000 -0.342 -0.636 -1.025 2.995 -5.0 0.006
 10.000 0.270 0.098 0.804 2.975 18.0 0.017
 11.000 -0.928 -1.374 -2.882 3.105 -4.0 0.025
 12.000 -0.835 -1.308 -2.405 2.880 -4.0 0.019
 13.000 0.317 0.001 1.012 3.191 0.245700E+04 0.155
 15.000 -0.127 -0.089 -0.408 3.220 5.0 0.005
 14.000 -0.751 -1.014 -2.146 2.857 -3.0 0.017
 16.000 -0.989 -1.552 -3.125 3.159 -4.0 0.014
 18.000 0.319 0.309 0.993 3.114 1.0 0.012
 19.000 -0.270 -0.054 -0.847 3.142 40.0 0.029
 20.000 -0.673 -0.771 -2.262 3.363 -2.0 0.000

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ORIENTATION 0.345000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	1.144	3.220	3.440	3.006	-7.0	0.003
2.000	0.357	0.238	1.090	3.055	5.0	0.017
3.000	-0.219	-0.136	-0.678	3.095	7.0	0.005
4.000	0.356	0.757	0.990	2.778	-6.0	0.007
5.000	-0.677	-0.738	-2.124	3.138	-1.0	0.040
6.000	-0.450	-0.903	-1.341	2.982	-6.0	0.005
7.000	0.217	0.066	0.683	3.140	24.0	0.014
8.000	-0.603	-1.076	-1.863	3.092	-5.0	0.020
9.000	-0.599	-1.077	-1.835	3.065	-5.0	0.010
10.000	0.259	0.102	0.792	3.055	16.0	0.012
11.000	0.277	0.105	0.803	2.901	17.0	0.026
12.000	-0.498	-1.066	-1.715	3.448	-6.0	0.012
13.000	-0.608	-1.075	-1.729	2.842	-5.0	0.015
14.000	0.248	0.136	0.741	2.989	9.0	0.010
15.000	0.343	0.057	0.953	2.783	51.0	0.015
16.000	-0.635	-1.147	-1.916	3.015	-5.0	0.000

Coefficients de pression C_q et C_p
mesurés sur la forme 5

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

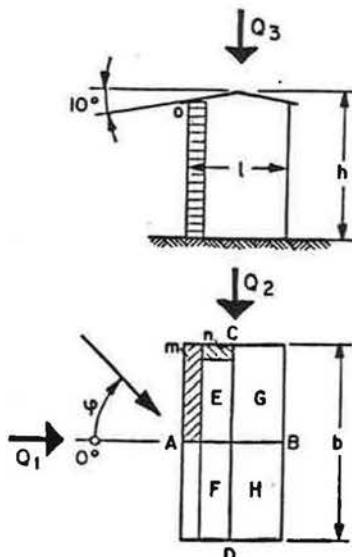


Tabelle 4.6.7

$$h:b:l = 1.6:2:1$$

Toiture à 10°

COEFFICIENTS DE PRESSION													COEFFICIENTS DE FORCE		
	C_{qe}								C^*_{qe}				C_1	C_2	C_3
	surface d'application								surface localisée			surface de référence = surface exposée au vent			
φ	A	B	C	D	E	F	G	H	m	n	o	b <h></h>	1x <h></h>	1xb	
0°	0,59	-0,40	-0,86	-0,86	-1,08	-1,08	-0,48	-0,48	-1,21	-0,83	-0,90				
15°	0,56	-0,39	-0,76	-0,73	-1,05	-0,96	-0,47	-0,55	-1,20	-0,71	-0,84				
45°	0,36	-0,51	0,33	-0,53	-0,44	-0,69	-0,68	-0,41	-1,23	-1,08	0,56				
90°	-0,53	-0,53	0,67	-0,23	-0,97	-0,19	-0,97	-0,19	-0,62	-1,17	0,49				
180°															
												$\hat{C}_{qe} = -1,80$	Coefficient de frottement $C_t = 0$		

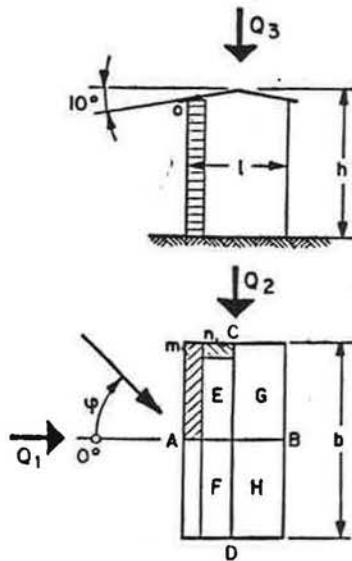
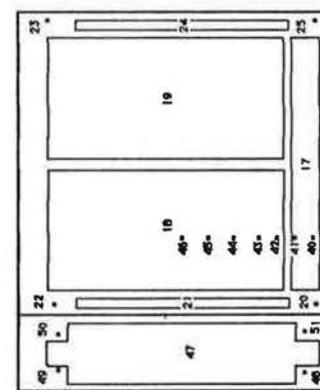


Tabelle 4.6.7

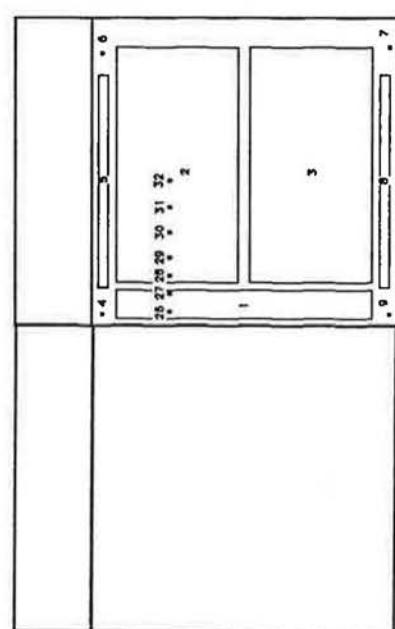
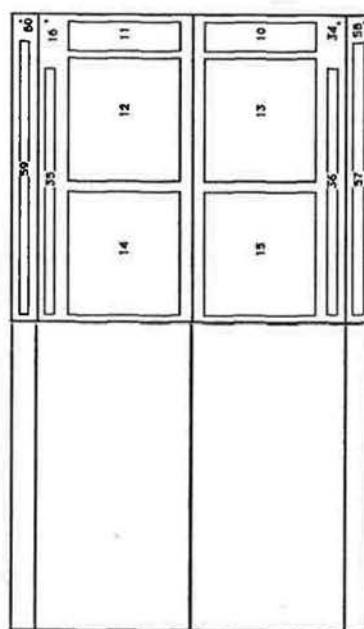
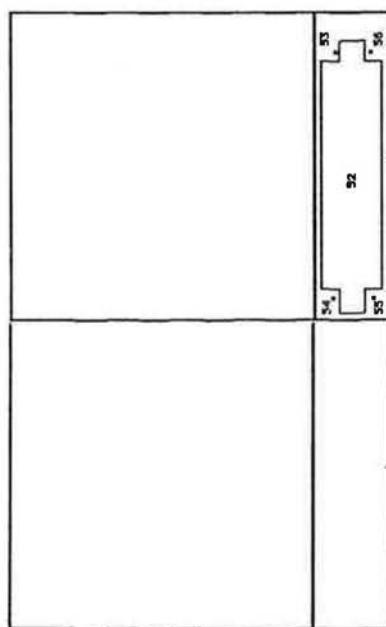
$$h:b:l = 1.6:2:1$$

Toiture à 10°

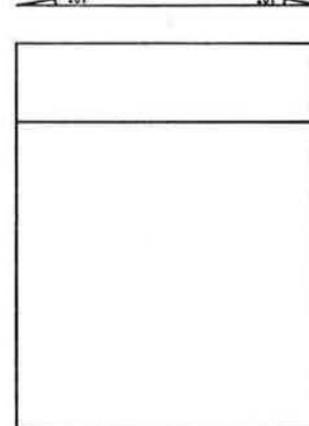
φ	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{pe}								c^*_{pe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
φ	A	B	C	D	E	F	G	H	m	n	o	b <h></h>	l <h></h>	l
0°	0,57	-0,47	-0,99	-0,99	-1,68	-1,68	-0,67	-0,67	-1,82	-0,95	-0,91	0,94	0,02	2,12
15°	0,49	-0,55	-0,74	-0,90	-1,11	-1,29	-0,73	-0,72	-1,85	-0,78	-1,11	1,01	-0,08	1,96
45°	0,28	-0,82	0,24	-0,81	-0,60	-0,85	-1,09	-0,64	-1,66	-1,62	0,19	0,99	0,77	1,98
90°	-0,59	-0,59	0,69	-0,36	-1,35	-0,24	-1,35	-0,25	-0,72	-1,36	0,35	0,00	0,80	1,17
180°														
	$\bar{c}_{pe} = -2.53$										Coefficient de frottement $c_t=0$			



10° 10°



6 ←



8↑

MODELE N°5
Numérotation des prises de pression

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ORIENTATION 0.0

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POSI.	CP +98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.553	0.578	1.491	2.698	-1.0	0.036
10.000	-0.833	-0.947	-2.247	2.698	-2.0	0.042
2.000	0.724	0.591	1.677	2.317	3.0	0.026
11.000	-0.681	-0.676	-1.577	2.317	1.0	0.026
3.000	0.491	0.427	1.306	2.662	2.0	0.023
12.000	-0.480	-0.674	-1.276	2.662	-3.0	0.029
17.000	-0.898	-0.911	-2.172	2.419	-1.0	0.046
13.000	-1.084	-1.427	-2.622	2.419	-3.0	0.029
18.000	-0.840	-0.989	-2.165	2.578	-2.0	0.058
14.000	-0.445	-0.622	-1.148	2.578	-3.0	0.014
19.000	-0.806	-0.923	-2.072	2.570	-2.0	0.025
15.000	-1.077	-1.683	-2.768	2.570	-4.0	0.011
47.000	-0.940	-1.074	-2.276	2.422	-2.0	0.036
16.000	-0.540	-0.633	-1.308	2.422	-2.0	0.017
48.000	-0.926	-1.182	-2.153	2.326	-3.0	0.036
52.000	-0.325	-0.432	-0.756	2.326	-3.0	0.014
49.000	1.362	3.210	3.281	2.409	-6.0	0.001
53.000	-0.400	-0.463	-0.963	2.409	-2.0	0.012
34.000	-1.074	-1.483	-2.712	2.526	-3.0	0.035
54.000	-0.292	-0.431	-0.738	2.526	-4.0	0.005
35.000	-0.436	-0.588	-1.159	2.661	-3.0	0.020
36.000	-1.189	-1.849	-3.162	2.661	-4.0	0.023
26.000	0.699	0.688	1.736	2.483	1.0	0.012
40.000	-0.767	-0.983	-1.905	2.483	-3.0	0.024
27.000	0.656	0.705	1.728	2.635	-1.0	0.018
41.000	-0.841	-0.983	-2.216	2.635	-2.0	0.045
28.000	0.661	0.726	1.798	2.721	-1.0	0.012
42.000	-0.782	-0.988	-2.127	2.721	-3.0	0.040
29.000	0.698	0.707	1.861	2.665	-1.0	0.051
43.000	-0.854	-1.015	-2.277	2.665	-2.0	0.032
30.000	0.705	0.688	1.700	2.412	1.0	0.024
44.000	-0.846	-1.010	-2.042	2.412	-2.0	0.031
31.000	0.707	0.678	1.771	2.506	1.0	0.036
45.000	-0.907	-1.029	-2.273	2.506	-2.0	0.048
32.000	0.721	0.661	1.791	2.483	1.0	0.042
46.000	-0.917	-1.012	-2.276	2.483	-1.0	0.066
57.000	-1.236	-1.821	-3.178	2.572	-4.0	0.050
59.000	-0.401	-0.583	-1.032	2.572	-4.0	0.015
58.000	-1.797	-2.534	-4.783	2.662	-3.0	0.082
60.000	-0.504	-0.605	-1.342	2.662	-2.0	0.017

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ORIENTATION 15.0

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POSI.	CP +98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.603	0.567	1.463	2.428	1.0	0.025
10.000	-0.738	-0.871	-1.839	2.428	-2.0	0.019
2.000	0.520	0.455	1.342	2.578	2.0	0.030
11.000	-0.693	-0.812	-1.787	2.578	-2.0	0.026
3.000	0.450	0.314	1.063	2.365	5.0	0.014
12.000	-0.548	-0.719	-1.297	2.365	-3.0	0.010
17.000	-0.538	-0.826	-1.377	2.557	-4.0	0.016
13.000	-0.958	-1.285	-2.451	2.557	-3.0	0.022
18.000	-0.629	-0.898	-1.573	2.499	-3.0	0.021
14.000	-0.450	-0.630	-1.125	2.499	-3.0	0.013
19.000	-0.583	-0.908	-1.589	2.728	-4.0	0.021
15.000	-0.943	-1.514	-2.573	2.728	-4.0	0.024
47.000	-0.725	-0.884	-1.813	2.501	-2.0	0.021
16.000	-0.696	-0.837	-1.742	2.501	-2.0	0.070
48.000	-0.568	-0.818	-1.508	2.655	-4.0	0.011
52.000	-0.284	-0.438	-0.753	2.655	-4.0	0.008
49.000	1.224	3.228	3.307	2.701	-7.0	0.004
53.000	-0.383	-0.518	-1.035	2.701	-3.0	0.012
34.000	-0.880	-1.227	-2.157	2.450	-3.0	0.064
54.000	-0.390	-0.498	-0.957	2.450	-3.0	0.016
35.000	-0.402	-0.615	-1.010	2.515	-4.0	0.013
36.000	-1.157	-1.664	-2.909	2.515	-4.0	0.025
26.000	0.650	0.649	1.617	2.489	1.0	0.016
40.000	-0.546	-0.767	-1.360	2.489	-3.0	0.026
27.000	0.736	0.641	1.710	2.324	2.0	0.040
41.000	-0.590	-0.789	-1.372	2.324	-3.0	0.014
28.000	0.606	0.646	1.570	2.593	-1.0	0.010
42.000	-0.565	-0.792	-1.464	2.593	-3.0	0.022
29.000	0.620	0.605	1.476	2.381	1.0	0.027
43.000	-0.657	-0.805	-1.564	2.381	-2.0	0.023
30.000	0.582	0.608	1.603	2.755	-1.0	0.026
44.000	-0.533	-0.829	-1.468	2.755	-4.0	0.010
31.000	0.647	0.543	1.600	2.473	2.0	0.028
45.000	-0.658	-0.874	-1.627	2.473	-3.0	0.046
32.000	0.578	0.535	1.480	2.539	1.0	0.014
46.000	-0.650	-0.895	-1.664	2.559	-3.0	0.036
57.000	-1.078	-1.626	-2.776	2.576	-4.0	0.024
59.000	-0.424	-0.620	-1.092	2.576	-4.0	0.020
58.000	-1.564	-2.052	-3.811	2.437	-3.0	0.043
60.000	-0.727	-0.764	-1.771	2.437	-1.0	0.022

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ORIENTATION 45.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.313	0.255	0.777	2.484	3.0	0.008
10.000	-0.521	-0.728	-1.293	2.484	-3.0	0.013
2.000	0.244	0.084	0.679	2.784	20.0	0.017
11.000	-0.405	-0.638	-1.127	2.784	-4.0	0.011
3.000	0.234	0.048	0.557	2.379	39.0	0.010
12.000	-0.406	-0.640	-0.965	2.379	-4.0	0.011
17.000	-0.465	-0.787	-1.188	2.554	-5.0	0.006
13.000	-0.587	-0.834	-1.499	2.554	-3.0	0.021
18.000	-0.552	-0.803	-1.272	2.304	-4.0	0.017
14.000	-0.352	-0.509	-0.812	2.304	-4.0	0.006
19.000	-0.556	-0.938	-1.379	2.479	-5.0	0.017
15.000	-0.778	-1.084	-1.928	2.479	-3.0	0.024
47.000	-0.481	-0.693	-1.155	2.402	-4.0	0.020
16.000	-0.424	-0.639	-1.018	2.402	-4.0	0.016
48.000	-0.397	-0.630	-0.948	2.386	-4.0	0.005
52.000	-0.379	-0.644	-0.905	2.386	-5.0	0.008
49.000	1.331	3.212	3.285	2.467	-6.0	0.002
53.000	-0.469	-0.627	-1.158	2.467	-3.0	0.016
34.000	-0.578	-0.773	-1.433	2.478	-3.0	0.035
54.000	-0.448	-0.699	-1.110	2.478	-4.0	0.032
35.000	-0.370	-0.624	-0.899	2.429	-5.0	0.013
36.000	-0.841	-1.163	-2.043	2.429	-3.0	0.023
26.000	0.371	0.263	0.924	2.491	5.0	0.015
40.000	-0.453	-0.701	-1.129	2.491	-4.0	0.013
27.000	0.385	0.250	0.933	2.424	6.0	0.019
41.000	-0.467	-0.695	-1.131	2.424	-4.0	0.012
28.000	0.394	0.260	1.022	2.596	6.0	0.015
42.000	-0.448	-0.713	-1.164	2.596	-4.0	0.016
29.000	0.435	0.230	1.115	2.563	9.0	0.060
43.000	-0.451	-0.744	-1.156	2.563	-4.0	0.009
30.000	0.293	0.192	0.812	2.773	6.0	0.026
44.000	-0.436	-0.780	-1.209	2.773	-5.0	0.016
31.000	0.301	0.164	0.791	2.624	9.0	0.020
45.000	-0.474	-0.751	-1.244	2.624	-4.0	0.010
32.000	0.290	0.136	0.757	2.608	12.0	0.022
46.000	-0.492	-0.824	-1.284	2.608	-5.0	0.012
57.000	-0.814	-1.140	-1.981	2.434	-3.0	0.020
59.000	-0.428	-0.717	-1.042	2.434	-5.0	0.008
58.000	-0.974	-0.807	-2.418	2.483	3.0	0.039
60.000	-0.490	-0.691	-1.216	2.483	-3.0	0.015

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ORIENTATION 90.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.455	-0.396	-1.139	2.502	2.0	0.013
10.000	-0.199	-0.259	-0.497	2.502	-3.0	0.004
2.000	-0.307	-0.252	-0.733	2.390	3.0	0.018
11.000	-0.218	-0.270	-0.520	2.390	-2.0	0.013
3.000	-0.281	-0.279	-0.693	2.468	1.0	0.018
12.000	-0.181	-0.242	-0.448	2.468	-3.0	0.004
17.000	-0.255	-0.362	-0.618	2.425	-3.0	0.005
13.000	-0.185	-0.228	-0.448	2.425	-2.0	0.012
18.000	-0.228	-0.362	-0.557	2.444	-4.0	0.008
14.000	-0.228	-0.093	-0.556	2.444	15.0	0.015
19.000	-0.247	-0.374	-0.615	2.487	-4.0	0.008
15.000	-0.231	-0.201	-0.575	2.487	2.0	0.008
47.000	-0.218	-0.359	-0.526	2.413	-4.0	0.003
16.000	-0.187	-0.312	-0.451	2.413	-5.0	0.006
48.000	-0.212	-0.330	-0.503	2.376	-4.0	0.005
52.000	-0.311	-0.320	-0.740	2.376	-1.0	0.020
49.000	1.252	3.123	3.187	2.545	-6.0	0.002
53.000	-0.326	-0.268	-0.830	2.545	3.0	0.019
34.000	-0.208	-0.280	-0.479	2.299	-3.0	0.008
54.000	-0.526	-0.394	-1.209	2.299	4.0	0.017
35.000	-0.244	-0.218	-0.619	2.538	2.0	0.010
36.000	-0.308	-0.253	-0.783	2.538	3.0	0.012
26.000	-0.526	-0.451	-1.364	2.592	2.0	0.025
40.000	-0.265	-0.385	-0.688	2.592	-4.0	0.016
27.000	-0.519	-0.384	-1.169	2.253	4.0	0.019
41.000	-0.292	-0.374	-0.657	2.253	-3.0	0.009
28.000	-0.431	-0.354	-1.083	2.511	3.0	0.021
42.000	-0.247	-0.369	-0.620	2.511	-4.0	0.010
29.000	-0.411	-0.331	-1.083	2.637	3.0	0.025
43.000	-0.248	-0.372	-0.655	2.637	-4.0	0.013
30.000	-0.377	-0.285	-1.015	2.691	4.0	0.027
44.000	-0.216	-0.359	-0.582	2.691	-4.0	0.009
31.000	-0.370	-0.268	-0.896	2.424	4.0	0.008
45.000	-0.243	-0.356	-0.588	2.424	-4.0	0.010
32.000	-0.319	-0.244	-0.809	2.539	4.0	0.016
46.000	-0.226	-0.351	-0.575	2.539	-4.0	0.005
57.000	-0.215	-0.230	-0.553	2.576	-1.0	0.006
59.000	-0.242	-0.241	-0.622	2.576	1.0	0.010
58.000	-0.235	-0.270	-0.580	2.465	-2.0	0.030
60.000	-0.265	-0.339	-0.654	2.465	-3.0	0.012

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ORIENTATION 0.135000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.499	-0.759	-1.198	2.400	-4.0	0.009
10.000	-0.483	-0.669	-1.159	2.400	-3.0	0.014
2.000	-0.448	-0.614	-1.056	2.356	-3.0	0.012
11.000	-0.595	-0.759	-1.403	2.356	-3.0	0.011
3.000	-0.486	-0.751	-1.158	2.381	-4.0	0.012
12.000	-0.689	-0.846	-1.641	2.381	-2.0	0.051
17.000	-0.509	-0.654	-1.314	2.583	-3.0	0.010
13.000	-0.423	-0.654	-1.091	2.583	-4.0	0.026
18.000	-0.443	-0.717	-1.078	2.432	-4.0	0.007
14.000	-0.766	-1.056	-1.864	2.432	-3.0	0.021
19.000	-0.495	-0.787	-1.297	2.619	-4.0	0.013
15.000	-0.353	-0.634	-0.924	2.619	-5.0	0.005
47.000	-0.450	-0.708	-1.097	2.439	-4.0	0.010
16.000	-0.577	-0.793	-1.408	2.439	-3.0	0.018
48.000	-0.407	-0.688	-0.984	2.421	-5.0	0.008
52.000	0.290	0.252	0.701	2.421	2.0	0.016
49.000	1.236	2.983	3.049	2.467	-6.0	0.003
53.000	-0.155	-0.114	-0.383	2.467	4.0	0.008
34.000	-0.430	-0.661	-1.053	2.449	-4.0	0.010
54.000	0.478	0.370	1.170	2.449	3.0	0.019
35.000	-0.786	-1.192	-1.904	2.423	-4.0	0.025
36.000	-0.416	-0.694	-1.008	2.423	-5.0	0.009
26.000	-0.445	-0.769	-1.187	2.666	-5.0	0.010
40.000	-0.498	-0.759	-1.329	2.666	-4.0	0.012
27.000	-0.511	-0.754	-1.221	2.389	-4.0	0.013
41.000	-0.550	-0.742	-1.314	2.389	-3.0	0.028
28.000	-0.494	-0.733	-1.215	2.458	-4.0	0.008
42.000	-0.477	-0.716	-1.173	2.458	-4.0	0.013
29.000	-0.502	-0.726	-1.177	2.342	-4.0	0.006
43.000	-0.493	-0.706	-1.156	2.342	-4.0	0.017
30.000	-0.456	-0.704	-1.146	2.514	-4.0	0.011
44.000	-0.455	-0.717	-1.144	2.514	-4.0	0.005
31.000	-0.504	-0.676	-1.192	2.365	-3.0	0.013
45.000	-0.480	-0.700	-1.135	2.365	-4.0	0.007
32.000	-0.461	-0.650	-1.153	2.502	-3.0	0.020
46.000	-0.451	-0.719	-1.129	2.502	-4.0	0.013
57.000	-0.358	-0.676	-0.999	2.789	-5.0	0.010
59.000	-0.683	-1.042	-1.904	2.789	-4.0	0.022
58.000	-0.444	-0.660	-1.048	2.364	-4.0	0.010
60.000	-0.794	-0.845	-1.877	2.364	-1.0	0.035

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 ORIENTATION 0.165000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.392	-0.542	-0.993	2.537	-3.0	0.016
10.000	-0.680	-0.792	-1.726	2.537	-2.0	0.024
2.000	-0.365	-0.465	-0.838	2.299	-3.0	0.011
11.000	-0.840	-0.983	-1.931	2.299	-2.0	0.021
3.000	-0.369	-0.531	-0.945	2.563	-4.0	0.010
12.000	-0.875	-1.222	-2.244	2.563	-3.0	0.029
17.000	-0.642	-0.838	-1.785	2.780	-3.0	0.031
13.000	-0.433	-0.698	-1.204	2.780	-4.0	0.013
18.000	-0.711	-0.862	-1.689	2.377	-2.0	0.025
14.000	-1.049	-1.381	-2.493	2.377	-3.0	0.024
19.000	-0.750	-0.884	-1.839	2.451	-2.0	0.025
15.000	-0.460	-0.661	-1.128	2.451	-4.0	0.013
47.000	-0.767	-0.899	-1.925	2.511	-2.0	0.034
16.000	-0.819	-1.180	-2.056	2.511	-4.0	0.010
48.000	-0.675	-0.842	-1.523	2.257	-2.0	0.021
52.000	0.613	0.607	1.383	2.257	1.0	0.027
49.000	1.180	3.010	3.094	2.622	-7.0	0.004
53.000	0.215	0.032	0.564	2.622	58.0	0.010
34.000	-0.551	-0.715	-1.307	2.371	-3.0	0.011
54.000	0.700	0.671	1.659	2.371	1.0	0.023
35.000	-1.046	-1.452	-2.567	2.455	-3.0	0.087
36.000	-0.431	-0.640	-1.059	2.455	-4.0	0.013
26.000	-0.396	-0.532	-1.017	2.571	-3.0	0.018
40.000	-0.793	-0.951	-2.039	2.571	-2.0	0.040
27.000	-0.383	-0.521	-0.962	2.511	-3.0	0.006
41.000	-0.741	-0.890	-1.862	2.511	-2.0	0.036
28.000	-0.376	-0.492	-0.905	2.410	-3.0	0.006
42.000	-0.680	-0.860	-1.638	2.410	-3.0	0.022
29.000	-0.401	-0.487	-1.033	2.576	-2.0	0.021
43.000	-0.576	-0.857	-1.485	2.576	-4.0	0.015
30.000	-0.431	-0.469	-1.004	2.331	-1.0	0.016
44.000	-0.674	-0.857	-1.571	2.331	-3.0	0.016
31.000	-0.342	-0.466	-0.873	2.550	-3.0	0.010
45.000	-0.658	-0.870	-1.678	2.550	-3.0	0.024
32.000	-0.365	-0.457	-0.878	2.407	-3.0	0.006
46.000	-0.744	-0.879	-1.792	2.407	-2.0	0.034
57.000	-0.419	-0.579	-0.990	2.360	-3.0	0.017
59.000	-1.201	-1.509	-2.833	2.360	-3.0	0.058
58.000	-0.619	-0.667	-1.494	2.414	-1.0	0.015
60.000	-1.180	-1.346	-2.849	2.414	-2.0	0.045

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ORIENTATION 0.180000E+03

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.316	-0.416	-0.765	2.422	-3.0	0.005
10.000	-0.561	-0.641	-1.359	2.422	-2.0	0.020
2.000	-0.414	-0.439	-0.971	2.346	-1.0	0.015
11.000	-0.878	-0.958	-2.059	2.346	-1.0	0.025
3.000	-0.392	-0.499	-0.973	2.482	-3.0	0.026
12.000	-1.037	-1.303	-2.574	2.482	-3.0	0.022
17.000	-0.654	-0.648	-1.659	2.536	1.0	0.031
13.000	-0.423	-0.621	-1.073	2.536	-4.0	0.012
18.000	-0.845	-0.988	-2.100	2.484	-2.0	0.077
14.000	-1.024	-1.453	-2.542	2.484	-3.0	0.022
19.000	-0.803	-0.911	-2.118	2.637	-2.0	0.034
15.000	-0.428	-0.614	-1.128	2.637	-4.0	0.018
47.000	-0.856	-1.023	-2.016	2.355	-2.0	0.030
16.000	-1.036	-1.424	-2.440	2.355	-3.0	0.012
48.000	-0.463	-0.488	-1.144	2.469	-1.0	0.026
52.000	0.556	0.691	1.373	2.469	-2.0	0.018
49.000	1.288	3.046	3.139	2.437	-6.0	0.004
53.000	0.506	-0.006	1.232	2.437	-0.798000E+03	0.305
34.000	-0.469	-0.572	-1.085	2.315	-2.0	0.011
54.000	0.721	0.640	1.668	2.315	2.0	0.019
35.000	-0.944	-1.534	-2.484	2.633	-4.0	0.008
36.000	-0.400	-0.580	-1.052	2.633	-4.0	0.026
26.000	-0.310	-0.438	-0.705	2.270	-3.0	0.008
40.000	-0.852	-0.674	-1.933	2.270	3.0	0.033
27.000	-0.288	-0.433	-0.676	2.350	-4.0	0.004
41.000	-0.714	-0.679	-1.678	2.350	1.0	0.042
28.000	-0.326	-0.414	-0.769	2.360	-3.0	0.008
42.000	-0.679	-0.694	-1.602	2.360	-1.0	0.033
29.000	-0.288	-0.417	-0.733	2.549	-4.0	0.015
43.000	-0.663	-0.748	-1.691	2.549	-2.0	0.023
30.000	-0.297	-0.410	-0.813	2.741	-3.0	0.020
44.000	-0.704	-0.826	-1.930	2.741	-2.0	0.032
31.000	-0.385	-0.423	-0.921	2.392	-1.0	0.020
45.000	-0.812	-0.910	-1.943	2.392	-2.0	0.027
32.000	-0.353	-0.434	-0.918	2.599	-2.0	0.008
46.000	-0.813	-1.007	-2.113	2.599	-2.0	0.046
57.000	-0.388	-0.547	-0.908	2.341	-3.0	0.009
59.000	-1.303	-1.684	-3.051	2.341	-3.0	0.061
58.000	-0.460	-0.543	-1.156	2.515	-2.0	0.025
60.000	-1.679	-1.987	-4.223	2.515	-2.0	0.081

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 ORIENTATION 0.195000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.451	-0.618	-1.149	2.549	-3.0	0.010
10.000	-0.948	-1.107	-2.418	2.549	-2.0	0.025
2.000	-0.392	-0.599	-1.073	2.740	-4.0	0.022
11.000	-0.555	-0.640	-1.520	2.740	-2.0	0.025
3.000	-0.439	-0.633	-1.116	2.545	-4.0	0.013
12.000	-0.911	-0.771	-2.318	2.545	2.0	0.048
17.000	-0.409	-0.470	-1.021	2.495	-2.0	0.019
13.000	-0.468	-0.733	-1.168	2.495	-4.0	0.021
18.000	-0.696	-0.531	-1.661	2.385	4.0	0.022
14.000	-1.075	-1.561	-2.563	2.385	-4.0	0.020
19.000	-0.612	-0.468	-1.590	2.597	4.0	0.039
15.000	-0.442	-0.739	-1.148	2.597	-5.0	0.011
47.000	-0.594	-0.429	-1.479	2.489	4.0	0.024
16.000	-0.954	-0.966	-2.375	2.489	-1.0	0.042
48.000	-0.297	-0.480	-0.760	2.559	-4.0	0.008
52.000	0.583	0.754	1.491	2.559	-3.0	0.016
49.000	1.335	3.331	3.419	2.561	-6.0	0.003
53.000	0.428	0.239	1.096	2.561	8.0	0.023
34.000	-0.509	-0.762	-1.329	2.613	-4.0	0.022
54.000	0.561	0.631	1.466	2.613	-2.0	0.025
35.000	-1.015	-1.681	-2.878	2.835	-4.0	0.026
36.000	-0.400	-0.731	-1.133	2.835	-5.0	0.012
26.000	-0.452	-0.607	-1.112	2.459	-3.0	0.021
40.000	-0.398	-0.493	-0.980	2.459	-2.0	0.014
27.000	-0.448	-0.620	-1.138	2.539	-3.0	0.015
41.000	-0.481	-0.473	-1.222	2.539	1.0	0.034
28.000	-0.402	-0.591	-1.064	2.647	-4.0	0.014
42.000	-0.507	-0.408	-1.341	2.647	3.0	0.020
29.000	-0.417	-0.607	-1.103	2.644	-4.0	0.012
43.000	-0.419	-0.411	-1.109	2.644	1.0	0.006
30.000	-0.443	-0.611	-1.137	2.566	-3.0	0.021
44.000	-0.659	-0.421	-1.692	2.566	6.0	0.039
31.000	-0.423	-0.591	-1.110	2.627	-3.0	0.013
45.000	-0.613	-0.420	-1.610	2.627	5.0	0.036
32.000	-0.461	-0.586	-1.147	2.490	-3.0	0.013
46.000	-0.688	-0.497	-1.713	2.490	4.0	0.034
57.000	-0.447	-0.706	-1.136	2.538	-4.0	0.015
59.000	-1.352	-1.957	-3.433	2.538	-4.0	0.051
58.000	-0.505	-0.728	-1.235	2.444	-4.0	0.015
60.000	-1.830	-1.799	-4.473	2.444	1.0	0.032

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ORIENTATION 0.225000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.561	-0.964	-1.427	2.542	-5.0	0.019
10.000	-1.082	-1.559	-2.751	2.542	-4.0	0.016
2.000	-0.536	-0.976	-1.414	2.638	-5.0	0.004
11.000	-1.259	-1.316	-3.322	2.638	-1.0	0.024
3.000	-0.583	-0.958	-1.438	2.468	-4.0	0.015
12.000	-0.349	-0.554	-0.861	2.468	-4.0	0.007
17.000	-0.245	-0.292	-0.632	2.580	-2.0	0.007
13.000	-0.823	-1.328	-2.122	2.580	-4.0	0.014
18.000	0.468	0.329	1.212	2.591	5.0	0.016
14.000	-0.849	-1.029	-2.201	2.591	-2.0	0.032
19.000	0.387	0.257	1.046	2.703	6.0	0.017
15.000	-0.377	-0.740	-1.020	2.703	-5.0	0.004
47.000	0.481	0.350	1.223	2.540	4.0	0.026
16.000	-2.742	-2.967	-6.965	2.540	-1.0	0.121
48.000	-0.259	-0.317	-0.672	2.591	-2.0	0.009
52.000	0.384	0.390	0.994	2.591	-1.0	0.026
49.000	1.347	3.388	3.458	2.566	-7.0	0.003
53.000	0.600	0.641	1.540	2.566	-1.0	0.025
34.000	-0.653	-1.157	-1.732	2.653	-5.0	0.013
54.000	0.354	0.224	0.939	2.653	6.0	0.023
35.000	-0.878	-1.288	-2.198	2.502	-4.0	0.019
36.000	-0.448	-0.799	-1.120	2.502	-5.0	0.009
26.000	-0.587	-0.996	-1.470	2.504	-5.0	0.014
40.000	-0.314	-0.389	-0.786	2.504	-2.0	0.008
27.000	-0.584	-0.996	-1.493	2.557	-5.0	0.019
41.000	-0.231	-0.200	-0.589	2.557	2.0	0.010
28.000	-0.603	-0.966	-1.475	2.446	-4.0	0.011
42.000	-0.173	-0.037	-0.423	2.446	37.0	0.007
29.000	-0.541	-0.966	-1.402	2.591	-5.0	0.010
43.000	0.290	0.042	0.752	2.591	60.0	0.009
30.000	-0.581	-0.952	-1.501	2.583	-4.0	0.021
44.000	0.352	0.146	0.910	2.583	15.0	0.019
31.000	-0.541	-0.959	-1.428	2.641	-5.0	0.011
45.000	0.400	0.265	1.056	2.641	6.0	0.027
32.000	-0.539	-0.938	-1.392	2.585	-5.0	0.017
46.000	0.446	0.264	1.154	2.585	7.0	0.013
57.000	-0.557	-0.972	-1.483	2.662	-5.0	0.014
59.000	-0.938	-1.479	-2.498	2.662	-4.0	0.032
58.000	-0.730	-1.074	-1.790	2.453	-4.0	0.017
60.000	-1.395	-1.030	-3.421	2.453	4.0	0.301

ORIENTATION 0.270000E+03

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.550	-0.506	-1.306	2.377	1.0	0.017
10.000	-1.165	-1.361	-2.769	2.377	-2.0	0.040
2.000	-0.735	-0.987	-1.824	2.481	-3.0	0.014
11.000	-1.031	-1.329	-2.558	2.481	-3.0	0.035
3.000	-0.815	-0.856	-1.943	2.383	-1.0	0.032
12.000	-0.956	-1.345	-2.279	2.383	-3.0	0.017
17.000	0.489	0.351	1.170	2.392	4.0	0.012
13.000	-0.974	-1.339	-2.330	2.392	-3.0	0.035
18.000	0.657	0.704	1.736	2.644	-1.0	0.021
14.000	-0.416	-0.378	-1.100	2.644	2.0	0.012
19.000	0.573	0.571	1.393	2.433	1.0	0.038
15.000	-0.446	-0.392	-1.086	2.433	2.0	0.022
47.000	0.784	0.795	1.792	2.287	-1.0	0.011
16.000	-1.235	-1.401	-2.823	2.287	-2.0	0.046
48.000	0.439	0.435	1.071	2.440	1.0	0.012
52.000	-0.574	-0.889	-1.401	2.440	-4.0	0.010
49.000	1.360	3.166	3.232	2.377	-6.0	0.001
53.000	-0.826	-0.981	-1.964	2.377	-2.0	0.027
34.000	-0.834	-1.080	-2.025	2.429	-3.0	0.018
54.000	-0.699	-0.696	-1.698	2.429	1.0	0.023
35.000	-0.476	-0.417	-1.180	2.480	2.0	0.021
36.000	-0.495	-0.399	-1.228	2.480	3.0	0.018
26.000	-0.582	-0.537	-1.506	2.587	1.0	0.018
40.000	0.517	0.307	1.337	2.587	7.0	0.020
27.000	-0.648	-0.557	-1.551	2.392	2.0	0.038
41.000	0.663	0.512	1.586	2.392	3.0	0.028
28.000	-0.676	-0.606	-1.570	2.321	2.0	0.021
42.000	0.764	0.657	1.774	2.321	2.0	0.021
29.000	-0.653	-0.649	-1.694	2.593	1.0	0.031
43.000	0.748	0.699	1.939	2.593	1.0	0.045
30.000	-0.685	-0.718	-1.700	2.481	-1.0	0.034
44.000	0.704	0.706	1.746	2.481	-1.0	0.019
31.000	-0.787	-0.807	-1.868	2.372	-1.0	0.048
45.000	0.831	0.750	1.970	2.372	2.0	0.021
32.000	-0.754	-0.905	-1.835	2.433	-2.0	0.014
46.000	0.806	0.734	1.962	2.433	1.0	0.038
57.000	-0.624	-0.723	-1.526	2.443	-2.0	0.027
59.000	-0.703	-0.780	-1.719	2.443	-1.0	0.015
58.000	-1.289	-1.566	-3.245	2.517	-2.0	0.044
60.000	-1.206	-1.500	-3.035	2.517	-2.0	0.039

===== ORIENTATION 0.165000E+03 315° =====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.408	0.343	1.088	2.668	2.0	0.031
10.000	-0.935	-0.934	-2.494	2.668	1.0	0.030
2.000	0.494	0.531	1.312	2.653	-1.0	0.017
11.000	-1.077	-1.618	-2.859	2.653	-4.0	0.028
3.000	0.478	0.475	1.275	2.670	1.0	0.024
12.000	-0.681	-1.090	-1.819	2.670	-4.0	0.015
17.000	0.556	0.191	1.314	2.362	20.0	0.023
13.000	-0.431	-0.601	-1.019	2.362	-3.0	0.013
18.000	0.330	0.116	0.836	2.536	19.0	0.020
14.000	-0.373	-0.653	-0.947	2.536	-5.0	0.010
19.000	0.300	0.084	0.712	2.374	26.0	0.022
15.000	-1.010	-1.245	-2.397	2.374	-2.0	0.023
47.000	0.376	0.155	0.901	2.395	15.0	0.026
16.000	-0.694	-1.178	-1.662	2.395	-5.0	0.010
48.000	0.499	0.135	1.268	2.542	27.0	0.046
52.000	-0.447	-0.851	-1.136	2.542	-5.0	0.008
49.000	1.346	3.108	3.180	2.363	-6.0	0.003
53.000	-0.502	-0.801	-1.187	2.363	-4.0	0.017
34.000	-1.055	-1.345	-2.673	2.534	-3.0	0.030
54.000	-0.449	-0.809	-1.138	2.534	-5.0	0.009
35.000	-0.390	-0.702	-1.014	2.598	-5.0	0.009
36.000	-0.869	-1.406	-2.258	2.598	-4.0	0.014
26.000	0.425	0.354	1.081	2.543	3.0	0.014
40.000	0.534	0.197	1.358	2.543	18.0	0.010
27.000	0.513	0.396	1.191	2.320	3.0	0.011
41.000	0.586	0.299	1.359	2.320	10.0	0.034
28.000	0.445	0.431	1.159	2.602	1.0	0.009
42.000	0.461	0.327	1.199	2.602	5.0	0.024
29.000	0.502	0.442	1.273	2.535	2.0	0.024
43.000	0.441	0.294	1.117	2.535	5.0	0.026
30.000	0.540	0.473	1.340	2.480	2.0	0.024
44.000	0.424	0.264	1.052	2.480	7.0	0.046
31.000	0.539	0.500	1.351	2.506	1.0	0.020
45.000	0.378	0.222	0.948	2.506	8.0	0.026
32.000	0.559	0.513	1.410	2.523	1.0	0.019
46.000	0.331	0.139	0.835	2.523	14.0	0.018
57.000	-1.227	-1.662	-2.989	2.436	-3.0	0.039
59.000	-0.506	-0.833	-1.233	2.436	-4.0	0.009
58.000	-1.250	-0.827	-2.911	2.330	6.0	0.101
60.000	-0.653	-1.041	-1.521	2.330	-4.0	0.016

***Coefficients de pression C_q et C_p
mesurés sur la forme 6***

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

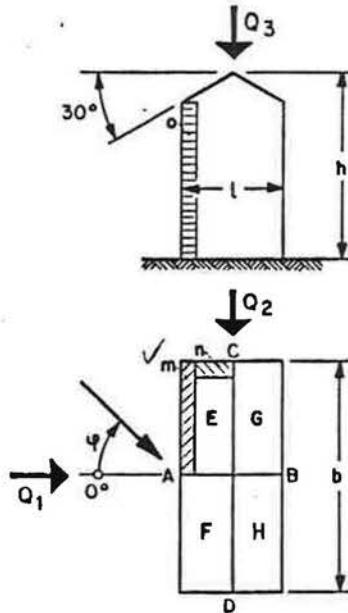


Tabelle 4.6.10

$h : b : l = 2 : 2.5 : 1.25$

Toiture à 30°

α_p	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{qe}								c^*_{qe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
α_p	A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$
0°	0,60	-0,61	-0,80	-0,88	-0,43	-0,43	-0,53	-0,53	-0,63	-0,38	-0,87			
15°	0,57	-0,52	-0,64	-0,73	-0,22	-0,43	-0,54	-0,64	-0,61	-0,33	-1,02			
45°	0,40	-0,54	0,32	-0,60	-0,31	-0,41	-0,80	-0,68	-0,57	-0,76	0,61			
90°	-0,60	-0,60	0,68	-0,25	-0,81	-0,28	-0,81	-0,28	-0,86	-1,10	0,52			
180°														
	$\hat{c}_{qe} = -1,15$										Coefficient de frottement $c_t = 0$			

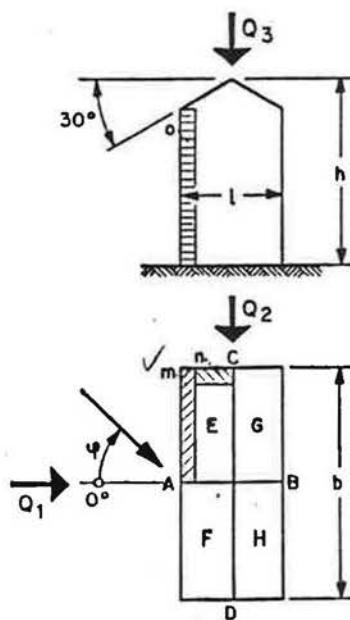
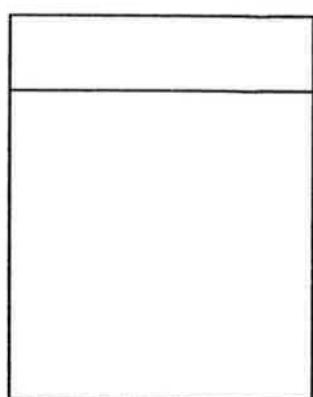
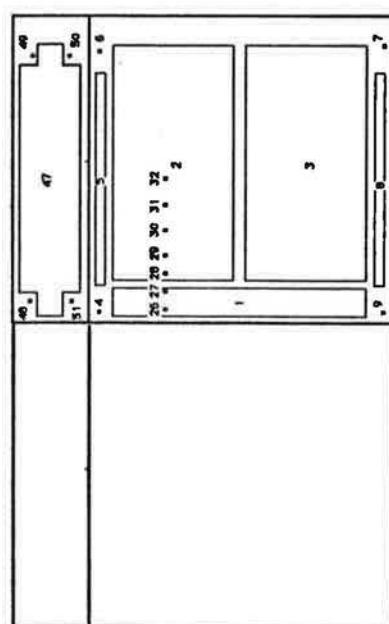
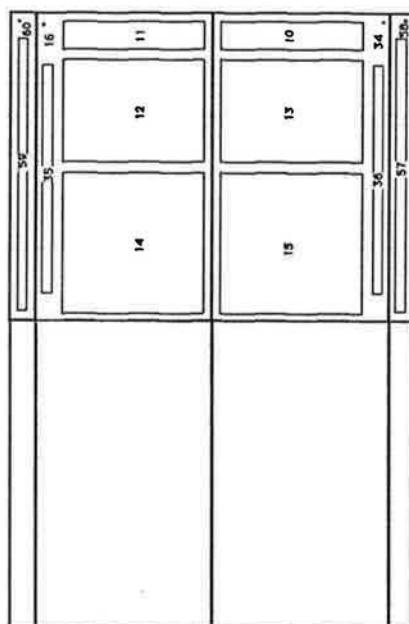
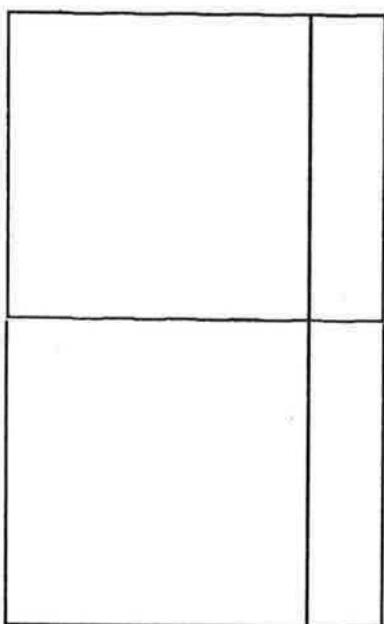
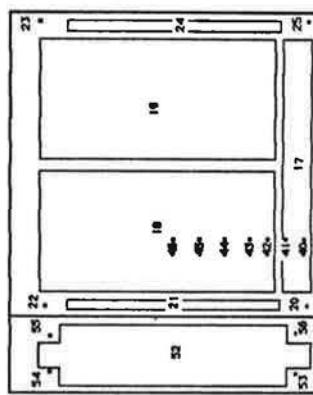


Tabelle 4.6.10

$h : b : l = 2 : 2.5 : 1.25$

Toiture à 30°

phi	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE		
	c_{pe}								c^*_{pe}		c_1
	surface d'application								surface localisée		c_2
phi	A	B	C	D	E	F	G	H	m	n	c_3
0°	0,53	0,65	-1,14	-1,14	-0,14	-0,14	-0,77	-0,77	-0,64	-0,22	-1,13
15°	0,55	-0,65	-0,70	-0,95	-0,07	-0,19	-0,82	-0,80	-0,60	-0,05	-1,10
45°	0,27	-0,86	0,14	-0,88	-0,15	-0,35	-1,18	-0,90	-0,55	-0,10	0,30
90°	-0,66	-0,66	0,67	-0,35	-0,89	-0,26	-0,89	-0,26	-0,91	-1,31	0,32
180°											
									$\hat{c}_{pe} = -1,43$	Coefficient de frottement $c_t = 0$	



2

MODELE N° 6
Numérotation des prises de pression

=====
 ORIENTATION 0.0
 =====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.685	0.562	1.622	2.368	3.0	0.034
10.000	-0.486	-0.288	-1.151	2.368	7.0	0.010
2.000	0.673	0.562	1.583	2.350	2.0	0.061
11.000	-0.566	-0.774	-1.331	2.350	-3.0	0.017
3.000	0.478	0.414	1.169	2.446	2.0	0.015
12.000	-0.523	-0.761	-1.278	2.446	-4.0	0.042
17.000	-0.866	-1.125	-2.032	2.347	-3.0	0.018
13.000	-0.435	-0.168	-1.021	2.347	16.0	0.036
18.000	-0.901	-1.188	-2.065	2.293	-3.0	0.026
14.000	-0.517	-0.786	-1.186	2.293	-4.0	0.009
19.000	-0.881	-1.082	-2.005	2.277	-2.0	0.032
15.000	-0.473	-0.163	-1.077	2.277	19.0	0.014
47.000	0.731	0.705	1.820	2.490	1.0	0.023
16.000	-0.564	-0.780	-1.405	2.490	-3.0	0.028
48.000	1.361	3.281	3.346	2.458	-6.0	0.003
52.000	-0.747	-1.173	-1.836	2.458	-4.0	0.018
49.000	0.346	0.243	0.805	2.324	5.0	0.014
53.000	-1.147	-1.425	-2.666	2.324	-2.0	0.033
34.000	-0.529	-0.405	-1.286	2.430	4.0	0.009
54.000	-0.606	-0.731	-1.472	2.430	-2.0	0.032
35.000	-0.491	-0.754	-1.178	2.396	-4.0	0.009
36.000	-0.648	-0.358	-1.553	2.396	9.0	0.021
26.000	0.649	0.681	1.663	2.564	-1.0	0.014
40.000	-0.905	-1.249	-2.320	2.564	-3.0	0.033
27.000	0.698	0.699	1.671	2.392	-1.0	0.013
41.000	-0.946	-1.275	-2.263	2.392	-3.0	0.028
28.000	0.804	0.696	1.837	2.284	2.0	0.034
42.000	-0.966	-1.224	-2.206	2.284	-3.0	0.017
29.000	0.710	0.695	1.693	2.387	1.0	0.021
43.000	-1.024	-1.275	-2.445	2.387	-2.0	0.035
30.000	0.654	0.680	1.666	2.547	-1.0	0.026
44.000	-0.917	-1.281	-2.337	2.547	-3.0	0.025
31.000	0.750	0.666	1.675	2.234	2.0	0.019
45.000	-1.038	-1.230	-2.318	2.234	-2.0	0.024
32.000	0.686	0.625	1.696	2.472	1.0	0.029
46.000	-0.965	-1.245	-2.386	2.472	-3.0	0.043
57.000	-0.620	-0.641	-1.415	2.284	-1.0	0.013
59.000	-0.603	-0.730	-1.376	2.284	-2.0	0.026
58.000	-0.849	-1.036	-1.995	2.348	-2.0	0.022
60.000	-0.676	-0.805	-1.587	2.348	-2.0	0.013

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ORIENTATION 0.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.685	0.562	1.622	2.368	3.0	0.034
10.000	-0.486	-0.288	-1.151	2.368	7.0	0.010
2.000	0.673	0.562	1.583	2.350	2.0	0.061
11.000	-0.566	-0.774	-1.331	2.350	-3.0	0.017
3.000	0.478	0.414	1.169	2.446	2.0	0.015
12.000	-0.523	-0.761	-1.278	2.446	-4.0	0.042
17.000	-0.866	-1.125	-2.032	2.347	-3.0	0.018
13.000	-0.435	-0.163	-1.021	2.347	16.0	0.036
18.000	-0.901	-1.188	-2.065	2.293	-3.0	0.026
14.000	-0.517	-0.786	-1.186	2.293	-4.0	0.009
19.000	-0.881	-1.082	-2.005	2.277	-2.0	0.032
15.000	-0.473	-0.163	-1.077	2.277	19.0	0.014
47.000	0.731	0.705	1.820	2.490	1.0	0.023
16.000	-0.564	-0.780	-1.405	2.490	-3.0	0.028
48.000	1.361	3.281	3.346	2.458	-6.0	0.003
52.000	-0.747	-1.173	-1.836	2.458	-4.0	0.018
49.000	0.346	0.243	0.805	2.324	5.0	0.014
53.000	-1.147	-1.425	-2.666	2.324	-2.0	0.033
34.000	-0.529	-0.405	-1.286	2.430	4.0	0.009
54.000	-0.606	-0.731	-1.472	2.430	-2.0	0.032
35.000	-0.491	-0.754	-1.178	2.396	-4.0	0.009
36.000	-0.648	-0.358	-1.553	2.396	9.0	0.021
26.000	0.649	0.681	1.663	2.564	-1.0	0.014
40.000	-0.905	-1.249	-2.320	2.564	-3.0	0.033
27.000	0.698	0.699	1.671	2.392	-1.0	0.013
41.000	-0.946	-1.275	-2.263	2.392	-3.0	0.028
28.000	0.804	0.696	1.837	2.284	2.0	0.034
42.000	-0.966	-1.224	-2.206	2.284	-3.0	0.017
29.000	0.710	0.695	1.693	2.387	1.0	0.021
43.000	-1.024	-1.275	-2.445	2.387	-2.0	0.035
30.000	0.654	0.680	1.666	2.347	-1.0	0.026
44.000	-0.917	-1.281	-2.337	2.547	-3.0	0.025
31.000	0.750	0.666	1.675	2.234	2.0	0.019
45.000	-1.038	-1.230	-2.318	2.234	-2.0	0.024
32.000	0.686	0.623	1.696	2.472	1.0	0.029
46.000	-0.965	-1.245	-2.386	2.472	-3.0	0.043
57.000	-0.620	-0.641	-1.415	2.284	-1.0	0.013
59.000	-0.603	-0.730	-1.376	2.284	-2.0	0.026
58.000	-0.849	-1.036	-1.995	2.348	-2.0	0.022
60.000	-0.676	-0.805	-1.587	2.348	-2.0	0.013

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ORIENTATION 45.0
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.299	0.194	0.723	2.417	6.0	0.013
10.000	-0.351	-0.448	-0.848	2.417	-3.0	0.009
2.000	0.254	0.063	0.612	2.414	31.0	0.019
11.000	-0.713	-0.840	-1.722	2.414	-2.0	0.038
3.000	0.249	0.010	0.603	2.426	0.238000E+03	0.163
12.000	-0.649	-0.833	-1.575	2.426	-3.0	0.016
17.000	-0.555	-0.803	-1.355	2.442	-4.0	0.017
13.000	-0.372	-0.372	-0.909	2.442	1.0	0.025
18.000	-0.597	-0.844	-1.391	2.331	-3.0	0.011
14.000	-0.655	-0.913	-1.528	2.331	-3.0	0.012
19.000	-0.671	-1.005	-1.600	2.383	-4.0	0.016
15.000	-0.450	-0.274	-1.071	2.383	7.0	0.041
47.000	0.357	0.123	0.808	2.265	19.0	0.026
16.000	-0.714	-0.867	-1.618	2.265	-2.0	0.019
48.000	1.439	3.372	3.444	2.393	-6.0	0.003
52.000	-0.442	-0.711	-1.057	2.393	-4.0	0.011
49.000	-0.138	-0.141	-0.342	2.478	-1.0	0.004
53.000	-0.410	-0.609	-1.015	2.478	-4.0	0.012
34.000	-0.258	-0.360	-0.684	2.647	-3.0	0.005
54.000	-0.445	-0.743	-1.179	2.647	-5.0	0.023
35.000	-0.590	-0.892	-1.452	2.461	-4.0	0.015
36.000	-0.528	-0.421	-1.300	2.461	3.0	0.022
26.000	0.397	0.202	0.880	2.218	10.0	0.016
40.000	-0.591	-0.702	-1.310	2.218	-2.0	0.014
27.000	0.392	0.235	0.893	2.277	7.0	0.022
41.000	-0.574	-0.678	-1.307	2.277	-2.0	0.039
28.000	0.310	0.221	0.734	2.367	5.0	0.012
42.000	-0.576	-0.705	-1.363	2.367	-2.0	0.022
29.000	0.317	0.188	0.800	2.523	7.0	0.014
43.000	-0.532	-0.782	-1.341	2.523	-4.0	0.013
30.000	0.316	0.173	0.805	2.551	9.0	0.021
44.000	-0.556	-0.801	-1.418	2.551	-4.0	0.015
31.000	0.313	0.142	0.760	2.429	12.0	0.012
45.000	-0.635	-0.810	-1.542	2.429	-3.0	0.032
32.000	0.256	0.104	0.720	2.814	15.0	0.012
46.000	-0.572	-0.870	-1.608	2.814	-4.0	0.024
57.000	-0.533	-0.606	-1.228	2.302	-2.0	0.018
59.000	-0.719	-0.871	-1.655	2.302	-2.0	0.021
58.000	-0.522	-0.619	-1.234	2.362	-2.0	0.022
60.000	-0.828	-0.917	-1.956	2.362	-1.0	0.028

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ORIENTATION 90.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.502	-0.503	-1.209	2.410	-1.0	0.019
10.000	-0.217	-0.300	-0.523	2.410	-3.0	0.010
2.000	-0.353	-0.321	-0.877	2.486	2.0	0.010
11.000	-0.211	-0.298	-0.525	2.486	-3.0	0.008
3.000	-0.356	-0.317	-0.815	2.293	2.0	0.019
12.000	-0.195	-0.260	-0.447	2.293	-3.0	0.004
17.000	-0.458	-0.371	-1.039	2.265	3.0	0.067
13.000	-0.225	-0.266	-0.509	2.265	-2.0	0.007
18.000	-0.222	-0.360	-0.546	2.457	-4.0	0.004
14.000	-0.221	-0.233	-0.543	2.457	-1.0	0.007
19.000	-0.288	-0.342	-0.634	2.204	-2.0	0.028
15.000	-0.333	-0.258	-0.733	2.204	3.0	0.008
47.000	-0.547	-0.342	-1.226	2.241	7.0	0.021
16.000	-0.228	-0.316	-0.510	2.241	-3.0	0.006
48.000	-0.486	-0.578	-1.210	2.489	-2.0	0.032
52.000	-0.204	-0.364	-0.507	2.489	-5.0	0.006
49.000	-0.249	-0.361	-0.635	2.552	-4.0	0.007
53.000	-0.244	-0.373	-0.622	2.552	-4.0	0.022
34.000	-0.155	-0.162	-0.336	2.161	-1.0	0.004
54.000	-0.282	-0.388	-0.610	2.161	-3.0	0.009
35.000	-0.272	-0.250	-0.620	2.277	1.0	0.018
36.000	-0.379	-0.311	-0.862	2.277	3.0	0.010
26.000	-0.548	-0.549	-1.349	2.462	-1.0	0.027
40.000	-0.356	-0.401	-0.877	2.462	-2.0	0.018
27.000	-0.534	-0.477	-1.275	2.389	2.0	0.018
41.000	-0.304	-0.378	-0.727	2.389	-2.0	0.014
28.000	-0.558	-0.448	-1.355	2.430	3.0	0.044
42.000	-0.317	-0.356	-0.769	2.430	-2.0	0.021
29.000	-0.487	-0.403	-1.217	2.498	3.0	0.017
43.000	-0.279	-0.378	-0.698	2.498	-3.0	0.008
30.000	-0.495	-0.366	-1.130	2.284	4.0	0.019
44.000	-0.292	-0.375	-0.668	2.284	-3.0	0.008
31.000	-0.513	-0.333	-1.110	2.165	6.0	0.021
45.000	-0.293	-0.349	-0.634	2.165	-2.0	0.006
32.000	-0.354	-0.300	-0.905	2.555	2.0	0.015
46.000	-0.249	-0.369	-0.636	2.555	-4.0	0.005
57.000	-0.310	-0.261	-0.712	2.296	2.0	0.015
59.000	-0.270	-0.259	-0.621	2.296	1.0	0.014
58.000	-0.274	-0.325	-0.606	2.213	-2.0	0.007
60.000	-0.285	-0.343	-0.630	2.213	-2.0	0.010

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 ORIENTATION 0.135000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.548	-0.831	-1.300	2.372	-4.0	0.022
10.000	-0.720	-0.903	-1.709	2.372	-3.0	0.026
2.000	-0.497	-0.829	-1.232	2.478	-5.0	0.012
11.000	-0.340	-0.452	-0.844	2.478	-3.0	0.011
3.000	-0.474	-0.707	-1.117	2.358	-4.0	0.011
12.000	-0.371	-0.421	-0.873	2.358	-2.0	0.012
17.000	-0.610	-0.757	-1.447	2.372	-2.0	0.013
13.000	-0.695	-0.892	-1.649	2.372	-3.0	0.019
18.000	-0.455	-0.665	-1.085	2.385	-4.0	0.015
14.000	-0.382	-0.299	-0.912	2.385	3.0	0.015
19.000	-0.553	-0.657	-1.260	2.278	-2.0	0.047
15.000	-0.673	-0.930	-1.534	2.278	-3.0	0.017
47.000	-0.535	-0.791	-1.207	2.255	-4.0	0.017
16.000	-0.388	-0.569	-0.876	2.255	-4.0	0.009
48.000	-0.512	-0.797	-1.150	2.247	-4.0	0.007
52.000	-0.434	-0.693	-0.975	2.247	-4.0	0.025
49.000	-0.468	-0.744	-1.074	2.296	-4.0	0.009
53.000	-0.605	-0.771	-1.390	2.296	-3.0	0.029
34.000	-0.681	-0.752	-1.527	2.241	-1.0	0.018
54.000	-0.431	-0.622	-0.966	2.241	-4.0	0.015
35.000	-0.544	-0.400	-1.271	2.335	4.0	0.030
36.000	-0.635	-0.921	-1.483	2.335	-4.0	0.024
26.000	-0.613	-0.862	-1.349	2.201	-3.0	0.015
40.000	-0.569	-0.752	-1.253	2.201	-3.0	0.022
27.000	-0.524	-0.860	-1.268	2.419	-4.0	0.014
41.000	-0.526	-0.753	-1.273	2.419	-4.0	0.028
28.000	-0.549	-0.850	-1.302	2.370	-4.0	0.007
42.000	-0.523	-0.727	-1.240	2.370	-3.0	0.020
29.000	-0.604	-0.876	-1.396	2.310	-4.0	0.014
43.000	-0.511	-0.753	-1.180	2.310	-4.0	0.011
30.000	-0.579	-0.854	-1.321	2.283	-4.0	0.013
44.000	-0.564	-0.728	-1.287	2.283	-3.0	0.038
31.000	-0.590	-0.837	-1.321	2.240	-3.0	0.012
45.000	-0.515	-0.687	-1.154	2.240	-3.0	0.023
32.000	-0.537	-0.836	-1.252	2.333	-4.0	0.009
46.000	-0.479	-0.668	-1.116	2.333	-3.0	0.015
57.000	-0.653	-0.836	-1.425	2.180	-3.0	0.012
59.000	-0.623	-0.664	-1.359	2.180	-1.0	0.009
58.000	-0.829	-0.925	-1.805	2.177	-2.0	0.022
60.000	-0.609	-0.666	-1.325	2.177	-1.0	0.014

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ORIENTATION 0.165000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.524	-0.664	-1.246	2.377	-3.0	0.022
10.000	-0.757	-0.813	-1.799	2.377	-1.0	0.045
2.000	-0.534	-0.658	-1.171	2.195	-2.0	0.023
11.000	-0.480	-0.343	-1.054	2.195	5.0	0.016
3.000	-0.466	-0.599	-1.082	2.325	-3.0	0.018
12.000	-0.398	-0.227	-0.925	2.325	8.0	0.015
17.000	-0.998	-0.904	-2.379	2.384	2.0	0.028
13.000	-0.705	-0.775	-1.682	2.384	-1.0	0.030
18.000	-0.755	-0.823	-1.811	2.400	-1.0	0.056
14.000	-0.424	-0.153	-1.017	2.400	18.0	0.025
19.000	-0.799	-0.849	-1.901	2.380	-1.0	0.036
15.000	-0.565	-0.763	-1.344	2.380	-3.0	0.045
47.000	-0.411	-0.640	-0.998	2.427	-4.0	0.020
16.000	-0.470	-0.520	-1.141	2.427	-1.0	0.017
48.000	-0.423	-0.659	-1.011	2.390	-4.0	0.010
52.000	-0.640	-0.843	-1.530	2.390	-3.0	0.028
49.000	-0.493	-0.673	-1.210	2.453	-3.0	0.036
53.000	-0.774	-0.918	-1.899	2.453	-2.0	0.046
34.000	-0.602	-0.656	-1.431	2.376	-1.0	0.022
54.000	-0.841	-0.813	-1.998	2.376	1.0	0.039
35.000	-0.544	-0.341	-1.377	2.534	6.0	0.018
36.000	-0.576	-0.811	-1.459	2.534	-3.0	0.016
26.000	-0.589	-0.704	-1.416	2.405	-2.0	0.050
40.000	-1.087	-0.931	-2.613	2.405	2.0	0.055
27.000	-0.128	-0.682	-1.331	10.393	-9.0	0.021
41.000	-0.243	-0.879	-2.529	10.393	-8.0	0.053
28.000	-0.586	-0.661	-1.414	2.412	-2.0	0.031
42.000	-0.844	-0.855	-2.036	2.412	-1.0	0.049
29.000	-0.593	-0.666	-1.416	2.386	-2.0	0.027
43.000	-0.819	-0.859	-1.955	2.386	-1.0	0.032
30.000	-0.482	-0.666	-1.154	2.397	-3.0	0.011
44.000	-0.842	-0.861	-2.019	2.397	-1.0	0.028
31.000	-0.484	-0.634	-1.147	2.372	-3.0	0.011
45.000	-0.702	-0.825	-1.664	2.372	-2.0	0.044
32.000	-0.479	-0.642	-1.067	2.228	-3.0	0.006
46.000	-0.863	-0.841	-1.922	2.228	1.0	0.037
57.000	-0.650	-0.812	-1.646	2.532	-2.0	0.050
59.000	-0.608	-0.671	-1.539	2.532	-1.0	0.022
58.000	-0.822	-0.847	-1.949	2.371	-1.0	0.028
60.000	-0.763	-0.789	-1.810	2.371	-1.0	0.024

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 ORIENTATION 0.180000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.428	-0.629	-1.048	2.449	-4.0	0.009
10.000	-0.537	-0.752	-1.315	2.449	-3.0	0.015
2.000	-0.656	-0.661	-1.570	2.393	-1.0	0.050
11.000	-0.377	-0.215	-0.902	2.393	8.0	0.027
3.000	-0.611	-0.656	-1.425	2.331	-1.0	0.015
12.000	-0.379	-0.107	-0.884	2.331	26.0	0.026
17.000	-0.760	-0.819	-1.761	2.317	-1.0	0.016
13.000	-0.541	-0.741	-1.253	2.317	-3.0	0.011
18.000	-1.019	-1.207	-2.388	2.344	-2.0	0.038
14.000	-0.449	-0.128	-1.052	2.344	26.0	0.022
19.000	-0.845	-1.099	-2.135	2.527	-3.0	0.027
15.000	-0.481	-0.735	-1.217	2.527	-4.0	0.013
47.000	-0.519	-0.635	-1.248	2.404	-2.0	0.029
16.000	-0.502	-0.476	-1.207	2.404	1.0	0.028
48.000	-0.423	-0.619	-0.975	2.306	-4.0	0.014
52.000	-0.810	-1.180	-1.868	2.306	-4.0	0.027
49.000	-0.430	-0.633	-1.016	2.361	-4.0	0.019
53.000	-0.616	-0.678	-1.454	2.361	-1.0	0.037
34.000	-0.518	-0.604	-1.250	2.414	-2.0	0.031
54.000	-1.174	-1.422	-2.833	2.414	-2.0	0.046
35.000	-0.521	-0.344	-1.311	2.514	6.0	0.019
36.000	-0.514	-0.775	-1.292	2.514	-4.0	0.018
26.000	-0.469	-0.660	-1.061	2.263	-3.0	0.006
40.000	-0.869	-0.769	-1.967	2.263	2.0	0.039
27.000	-0.433	-0.635	-1.000	2.308	-4.0	0.007
41.000	-0.783	-0.835	-1.807	2.308	-1.0	0.025
28.000	-0.474	-0.611	-1.097	2.316	-3.0	0.026
42.000	-0.789	-0.840	-1.827	2.316	-1.0	0.043
29.000	-0.440	-0.630	-1.048	2.380	-4.0	0.010
43.000	-0.742	-0.907	-1.766	2.380	-2.0	0.017
30.000	-0.456	-0.635	-1.078	2.363	-3.0	0.018
44.000	-0.861	-1.003	-2.035	2.363	-2.0	0.045
31.000	-0.493	-0.649	-1.148	2.326	-3.0	0.021
45.000	-0.929	-1.073	-2.160	2.326	-2.0	0.028
32.000	-0.527	-0.652	-1.221	2.317	-2.0	0.012
46.000	-1.030	-1.174	-2.385	2.317	-2.0	0.032
57.000	-0.533	-0.780	-1.380	2.587	-4.0	0.024
59.000	-0.627	-0.639	-1.622	2.587	-1.0	0.027
58.000	-0.716	-0.770	-1.570	2.194	-1.0	0.017
60.000	-0.946	-0.863	-2.076	2.194	1.0	0.053

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ORIENTATION 0.195000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.577	-0.666	-1.413	2.450	-2.0	0.059
10.000	-0.521	-0.780	-1.277	2.450	-4.0	0.012
2.000	-0.578	-0.666	-1.323	2.290	-2.0	0.038
11.000	-0.330	-0.048	-0.756	2.290	59.0	0.021
3.000	-0.592	-0.657	-1.429	2.416	-1.0	0.024
12.000	0.490	-0.017	1.184	2.416	-0.303000E+03	0.296
17.000	-0.495	-0.537	-1.258	2.540	-1.0	0.018
13.000	-0.508	-0.798	-1.290	2.540	-4.0	0.019
18.000	-0.818	-0.801	-1.983	2.424	1.0	0.029
14.000	-0.431	-0.140	-1.045	2.424	21.0	0.021
19.000	-0.712	-0.696	-1.785	2.509	1.0	0.036
15.000	-0.511	-0.753	-1.281	2.509	-4.0	0.015
47.000	-0.493	-0.653	-1.232	2.500	-3.0	0.013
16.000	-0.412	-0.178	-1.031	2.500	14.0	0.016
48.000	-0.482	-0.654	-1.193	2.478	-3.0	0.033
52.000	-0.692	-0.509	-1.714	2.478	4.0	0.061
49.000	-0.365	-0.599	-0.931	2.552	-4.0	0.007
53.000	-0.359	-0.544	-0.917	2.552	-4.0	0.010
34.000	-0.491	0.601	-1.171	2.385	-2.0	0.016
54.000	-1.376	-1.484	-3.280	2.385	-1.0	0.037
35.000	-0.515	-0.370	-1.221	2.370	4.0	0.035
36.000	-0.525	-0.797	-1.243	2.370	-4.0	0.016
26.000	-0.552	-0.702	-1.368	2.478	-3.0	0.030
40.000	-0.499	-0.600	-1.236	2.478	-2.0	0.063
27.000	-0.582	-0.701	-1.385	2.380	-2.0	0.025
41.000	-0.528	-0.573	-1.257	2.380	-1.0	0.030
28.000	-0.536	-0.679	-1.335	2.489	-3.0	0.024
42.000	-0.589	-0.484	-1.465	2.489	3.0	0.041
29.000	-0.589	-0.663	-1.436	2.438	-2.0	0.031
43.000	-0.612	-0.517	-1.493	2.438	2.0	0.029
30.000	-0.683	-0.672	-1.569	2.296	1.0	0.038
44.000	-0.718	-0.538	-1.649	2.296	4.0	0.027
31.000	-0.583	-0.680	-1.452	2.488	-2.0	0.025
45.000	-0.791	-0.611	-1.968	2.488	3.0	0.042
32.000	-0.596	-0.662	-1.416	2.377	-2.0	0.014
46.000	-0.936	-0.704	-2.226	2.377	4.0	0.043
57.000	-0.481	-0.746	-1.243	2.584	-4.0	0.017
59.000	-0.576	-0.552	-1.488	2.584	1.0	0.047
58.000	-0.734	-0.787	-1.784	2.430	-1.0	0.022
60.000	-0.811	-0.652	-1.970	2.430	3.0	0.045

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 ORIENTATION 0.225000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.634	-0.944	-1.539	2.429	-4.0	0.017
10.000	-0.851	-1.213	-2.066	2.429	-3.0	0.023
2.000	-0.588	-0.954	-1.414	2.404	-4.0	0.022
11.000	-0.757	-0.090	-1.820	2.404	74.0	0.106
3.000	-0.593	-0.925	-1.404	2.366	-4.0	0.021
12.000	-0.193	-0.050	-0.457	2.366	29.0	0.007
17.000	-0.248	-0.347	-0.651	2.620	-3.0	0.005
13.000	-0.765	-1.197	-2.005	2.620	-4.0	0.020
18.000	0.450	0.274	1.039	2.310	7.0	0.015
14.000	-0.498	-0.269	-1.150	2.310	9.0	0.034
19.000	0.407	0.182	0.981	2.411	13.0	0.027
15.000	-0.766	-1.084	-1.847	2.411	-3.0	0.024
47.000	-0.590	-0.946	-1.401	2.376	-4.0	0.011
16.000	-1.209	-0.275	-2.872	2.376	35.0	0.047
48.000	-0.548	-0.911	-1.330	2.426	-4.0	0.011
52.000	0.368	0.299	0.892	2.426	3.0	0.025
49.000	-0.446	-0.867	-1.169	2.618	-5.0	0.007
53.000	-0.323	-0.516	-0.847	2.618	-4.0	0.011
34.000	-0.772	-1.019	-1.936	2.508	-3.0	0.070
54.000	0.641	0.587	1.607	2.508	1.0	0.035
35.000	-0.513	-0.440	-1.251	2.440	2.0	0.020
36.000	-0.751	-1.104	-1.833	2.440	-4.0	0.025
26.000	-0.669	-1.004	-1.561	2.334	-4.0	0.010
40.000	-0.344	-0.470	-0.802	2.334	-3.0	0.012
27.000	-0.643	-0.985	-1.488	2.315	-4.0	0.019
41.000	-0.269	-0.269	-0.623	2.315	-1.0	0.008
28.000	-0.677	-0.965	-1.545	2.282	-3.0	0.008
42.000	-0.238	-0.116	-0.543	2.282	11.0	0.013
29.000	-0.537	-0.978	-1.474	2.743	-5.0	0.016
43.000	-0.173	-0.041	-0.475	2.743	33.0	0.009
30.000	-0.612	-0.967	-1.577	2.575	-4.0	0.029
44.000	0.529	0.023	1.362	2.575	0.217000E+03	0.343
31.000	-0.586	-0.956	-1.480	2.524	-4.0	0.016
45.000	0.401	0.127	1.012	2.524	22.0	0.046
32.000	-0.548	-0.940	-1.381	2.521	-5.0	0.014
46.000	0.411	0.227	1.037	2.521	9.0	0.020
57.000	-0.801	-1.135	-1.926	2.404	-3.0	0.025
59.000	-0.568	-0.555	-1.366	2.404	1.0	0.015
58.000	-1.055	-1.240	-2.688	2.549	-2.0	0.030
60.000	-0.647	-0.074	-1.650	2.549	78.0	0.078

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 ORIENTATION 0.270000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.614	-0.613	-1.527	2.485	1.0	0.025
10.000	-1.062	-1.274	-2.640	2.485	-2.0	0.028
2.000	-0.732	-1.022	-1.862	2.543	-3.0	0.017
11.000	-1.099	-1.305	-2.794	2.543	-2.0	0.040
3.000	-0.875	-0.953	-2.007	2.293	-1.0	0.041
12.000	-0.986	-1.305	-2.262	2.293	-3.0	0.021
17.000	0.515	0.321	1.228	2.384	7.0	0.021
13.000	-1.014	-1.297	-2.417	2.384	-3.0	0.025
18.000	0.667	0.705	1.581	2.371	-1.0	0.017
14.000	-0.599	-0.462	-1.420	2.371	3.0	0.034
19.000	0.668	0.572	1.491	2.233	2.0	0.026
15.000	-0.556	-0.480	-1.241	2.233	2.0	0.017
47.000	-0.782	-1.002	-1.890	2.416	-3.0	0.019
16.000	-1.270	-1.373	-3.069	2.416	-1.0	0.047
48.000	-0.613	-0.642	-1.403	2.289	-1.0	0.032
52.000	0.750	0.809	1.718	2.289	-1.0	0.034
49.000	-0.625	-1.053	-1.600	2.560	-5.0	0.029
53.000	0.367	0.239	0.940	2.560	6.0	0.009
34.000	-1.060	-1.125	-2.662	2.511	-1.0	0.035
54.000	0.633	0.538	1.590	2.511	2.0	0.033
35.000	-0.526	-0.454	-1.257	2.391	2.0	0.033
36.000	-0.550	-0.488	-1.315	2.391	2.0	0.025
26.000	-0.691	-0.641	-1.588	2.298	1.0	0.030
40.000	0.551	0.242	1.267	2.298	13.0	0.022
27.000	-0.681	-0.670	-1.592	2.337	1.0	0.023
41.000	0.687	0.446	1.606	2.337	6.0	0.019
28.000	-0.680	-0.717	-1.607	2.363	-1.0	0.025
42.000	0.719	0.639	1.699	2.363	2.0	0.018
29.000	-0.657	-0.762	-1.680	2.559	-2.0	0.019
43.000	0.664	0.686	1.700	2.559	-1.0	0.023
30.000	-0.749	-0.848	-1.796	2.397	-2.0	0.012
44.000	0.797	0.708	1.911	2.397	2.0	0.043
31.000	-0.763	-0.902	-1.855	2.431	-2.0	0.052
45.000	0.772	0.767	1.877	2.431	1.0	0.025
32.000	-0.882	-0.977	-2.087	2.366	-1.0	0.036
46.000	0.781	0.758	1.848	2.366	1.0	0.021
57.000	-0.779	-0.910	-1.830	2.349	-2.0	0.023
59.000	-0.855	-0.911	-2.009	2.349	-1.0	0.024
58.000	-1.460	-1.433	-3.353	2.297	1.0	0.077
60.000	-1.462	-1.419	-3.358	2.297	1.0	0.071

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ORIENTATION 0.315000E+03

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.439	0.329	1.064	2.421	4.0	0.016
10.000	-0.717	-0.102	-1.737	2.421	51.0	0.050
2.000	0.543	0.509	1.274	2.348	1.0	0.016
11.000	-0.890	-1.269	-2.090	2.348	-3.0	0.017
3.000	0.493	0.460	1.157	2.347	1.0	0.018
12.000	-0.967	-1.241	-2.036	2.347	-4.0	0.014
17.000	0.610	0.297	1.426	2.337	11.0	0.028
13.000	-0.180	-0.024	-0.421	2.337	67.0	0.013
18.000	0.360	0.133	0.860	2.392	17.0	0.034
14.000	-0.729	-1.112	-1.744	2.392	-4.0	0.025
19.000	0.274	0.095	0.709	2.586	20.0	0.020
15.000	-0.415	-0.250	-1.072	2.586	7.0	0.021
47.000	0.543	0.530	1.305	2.403	1.0	0.013
16.000	-0.751	-1.230	-1.805	2.403	-4.0	0.019
48.000	0.411	0.347	0.924	2.245	2.0	0.014
52.000	0.347	0.240	0.779	2.245	5.0	0.014
49.000	0.577	0.763	1.439	2.494	-3.0	0.012
53.000	0.619	0.477	1.544	2.494	3.0	0.022
34.000	-1.068	-0.124	-2.580	2.416	76.0	0.051
54.000	-0.282	-0.286	-0.681	2.416	-1.0	0.008
35.000	-0.623	-1.048	-1.599	2.566	-5.0	0.012
36.000	-0.488	-0.500	-1.252	2.566	-1.0	0.037
26.000	0.438	0.377	1.117	2.549	2.0	0.021
40.000	0.595	0.338	1.518	2.549	8.0	0.018
27.000	0.473	0.386	1.106	2.341	3.0	0.018
41.000	0.597	0.386	1.399	2.341	6.0	0.019
28.000	0.538	0.395	1.235	2.294	4.0	0.020
42.000	0.557	0.395	1.277	2.294	5.0	0.043
29.000	0.497	0.409	1.128	2.269	3.0	0.012
43.000	0.551	0.374	1.251	2.269	5.0	0.025
30.000	0.533	0.441	1.288	2.418	3.0	0.027
44.000	0.503	0.338	1.216	2.418	5.0	0.024
31.000	0.513	0.483	1.240	2.417	1.0	0.019
45.000	0.420	0.278	1.016	2.417	6.0	0.025
32.000	0.561	0.507	1.324	2.359	2.0	0.022
46.000	0.433	0.195	1.022	2.359	13.0	0.027
57.000	-0.567	-0.547	-1.318	2.323	1.0	0.022
59.000	-0.783	-1.130	-1.819	2.323	-4.0	0.012
58.000	0.321	0.045	0.787	2.452	62.0	0.014
60.000	-0.962	-1.280	-2.359	2.452	-3.0	0.033

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ORIENTATION 0.345000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.664	0.633	1.581	2.381	1.0	0.027
10.000	0.660	0.011	1.570	2.381	0.583000E+03	
2.000	0.657	0.691	1.723	2.620	-1.0	0.029
11.000	-0.544	-0.797	-1.425	2.620	-4.0	0.025
3.000	0.635	0.598	1.567	2.465	1.0	0.050
12.000	-0.543	-0.770	-1.338	2.465	-3.0	0.033
17.000	-1.019	-1.097	-2.303	2.261	-1.0	0.029
13.000	0.281	0.046	0.636	2.261	52.0	0.015
18.000	-0.834	-0.790	-2.040	2.447	1.0	0.021
14.000	-0.544	-0.838	-1.332	2.447	-4.0	0.012
19.000	-0.656	-0.741	-1.703	2.596	-2.0	0.019
15.000	-0.416	-0.140	-1.081	2.596	20.0	0.036
47.000	0.777	0.817	1.797	2.312	-1.0	0.014
16.000	-0.611	-0.819	-1.414	2.312	-3.0	0.023
48.000	0.685	0.790	1.665	2.433	-2.0	0.019
52.000	-0.432	-0.423	-1.052	2.433	1.0	0.013
49.000	0.523	0.468	1.266	2.419	2.0	0.019
53.000	-1.752	-2.043	-4.238	2.419	-2.0	0.049
34.000	-0.427	-0.032	-1.056	2.474	0.125000E+03	
54.000	-0.351	-0.483	-0.868	2.474	-3.0	0.015
35.000	-0.566	-0.837	-1.296	2.289	-4.0	0.011
36.000	-0.642	-0.381	-1.470	2.289	7.0	0.030
26.000	0.667	0.715	1.718	2.576	-1.0	0.016
40.000	-0.891	-1.286	-2.295	2.576	-4.0	0.007
27.000	0.739	0.723	1.719	2.326	1.0	0.016
41.000	-1.063	-1.286	-2.472	2.326	-2.0	0.026
28.000	0.717	0.723	1.655	2.308	-1.0	0.031
42.000	-1.078	-1.221	-2.487	2.308	-2.0	0.060
29.000	0.785	0.756	1.769	2.255	1.0	0.038
43.000	-1.142	-1.230	-2.574	2.255	-1.0	0.038
30.000	0.760	0.743	1.847	2.428	1.0	0.025
44.000	-1.051	-1.103	-2.553	2.428	-1.0	0.022
31.000	0.788	0.731	1.879	2.383	1.0	0.023
45.000	-1.009	-1.001	-2.404	2.383	1.0	0.036
32.000	0.746	0.774	1.795	2.406	-1.0	0.024
46.000	-0.937	-0.881	-2.255	2.406	1.0	0.037
57.000	-0.610	-0.597	-1.396	2.290	1.0	0.018
59.000	-0.677	-0.824	-1.550	2.290	-2.0	0.029
58.000	-0.768	-0.642	-1.858	2.418	2.0	0.026
60.000	-0.693	-0.857	-1.677	2.418	-2.0	0.020

Coefficients de pression C_q et C_p
mesurés sur la forme 7

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

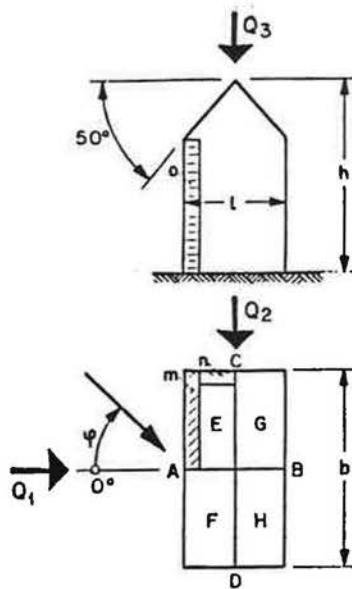


Tabelle 4.6.11

 $h : b : l = 1.96 : 2 : 1$

Toiture à 50°

φ	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE					
	c_{qe}								c_1	c_2	c_3			
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
φ	A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$l \times h$	$l \times b$
0°	0,56	-0,84	-0,94	-0,94	0,49	0,49	-0,68	-0,58	0,59	-0,26	-0,87			
15°	0,57	-0,70	-0,77	-0,80	0,55	0,38	-0,63	-0,59	0,61	0,17	-0,87			
45°	0,36	-0,66	0,28	-0,59	0,31	±0,10	-0,59	-0,59	0,43	0,52	-0,87			
90°	-0,56	-0,56	0,57	-0,21	-0,71	-0,27	-0,71	-0,27	-0,76	-0,77	0,49			
180°														
									$\hat{c}_{qe} = -1,56$			Coefficient de frottement $c_t = 0$		

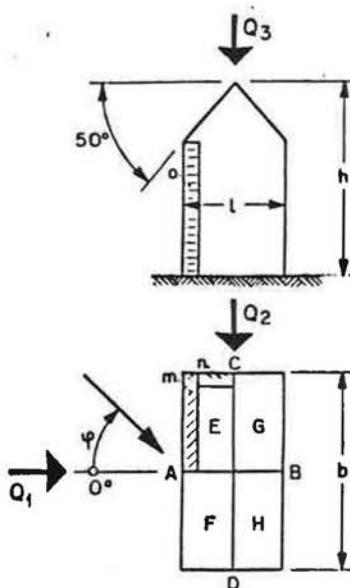
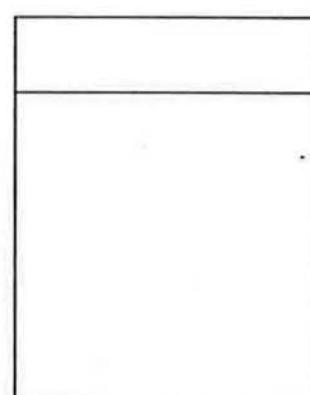
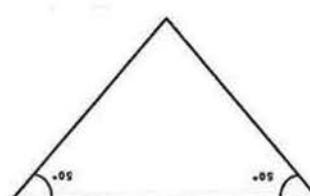
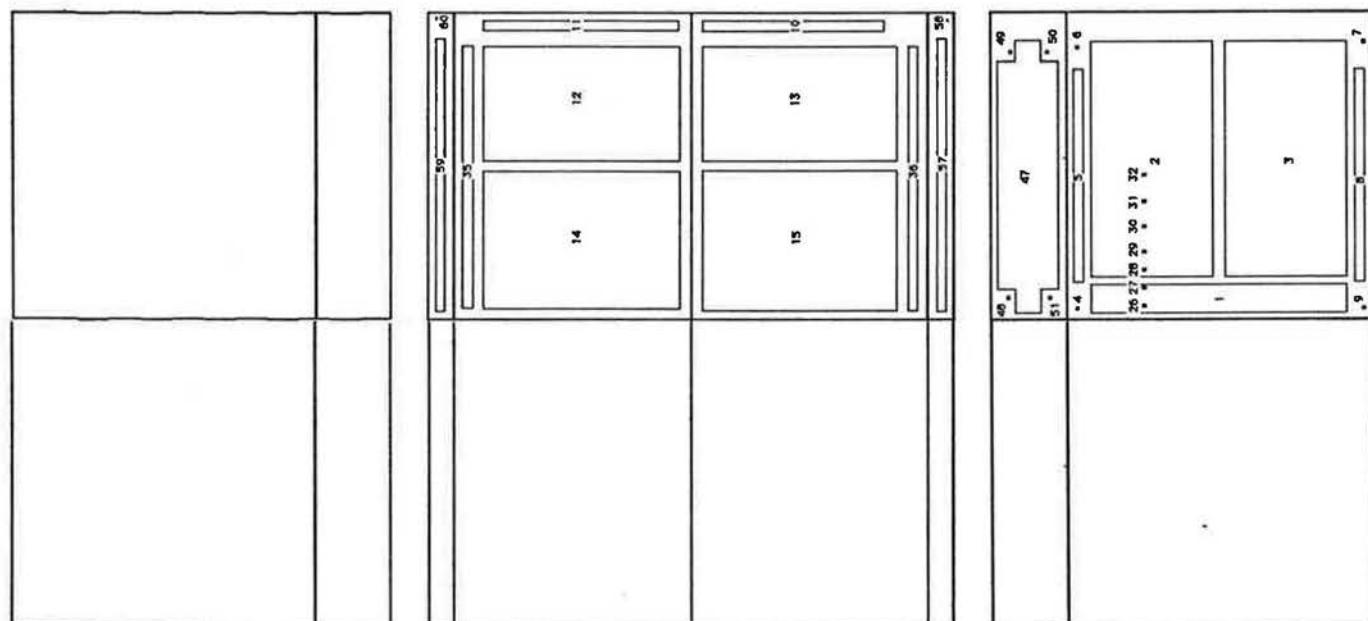
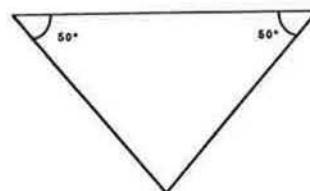
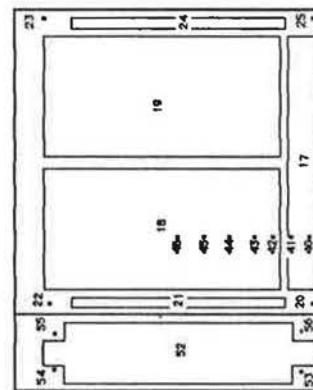


Tabelle 4.6.11

$h : b : l = 1.96 : 2 : 1$

Toiture à 50°

rp	COEFFICIENTS DE PRESSION										COEFFICIENTS DE FORCE			
	c_{pe}								c^*_{pe}		c_1	c_2	c_3	
	surface d'application								surface localisée		surface de référence = surface exposée au vent			
A	B	C	D	E	F	G	H	m	n	o	$b \times h$	$1 \times h$	$1 \times b$	
0°	0,50	-0,69	-1,00	-1,00	0,36	0,36	-0,76	-0,76	0,45	-0,05	-0,96	1,26	-0,06	0,33
15°	0,48	-0,67	-0,72	-0,84	0,41	0,27	-0,74	-0,69	0,51	0,27	1,04	1,19	0,30	0,59
45°	0,26	-0,65	0,11	-0,63	0,21	±0,03	-0,87	-0,81	0,42	0,42	-1,04	1,04	0,87	0,92
90°	-0,57	-0,57	0,60	-0,31	-0,78	-0,25	-0,78	-0,25	-0,89	-1,11	0,28	-0,05	0,82	0,74
180°														
											$\bar{c}_{pe} = -1,47$	Coefficient de frottement $c_t = 0$		



MODELE N° 7
Numérotation des prises de pression

=====						
ORIENTATION 0.0						
POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.573	0.545	1.331	2.322	1.0	0.023
10.000	-0.256	-0.045	-0.594	2.322	48.0	0.024
2.000	0.559	0.506	1.273	2.283	-2.0	0.030
11.000	-0.684	-0.798	-1.562	2.283	-2.0	0.015
3.000	0.491	0.436	1.110	2.258	2.0	0.020
12.000	-0.718	-0.753	-1.621	2.258	-1.0	0.044
17.000	-0.868	-0.959	-1.929	2.221	-1.0	0.039
13.000	0.507	0.325	1.125	2.221	6.0	0.067
18.000	-0.988	-0.996	-2.106	2.132	-1.0	0.047
14.000	-0.604	-0.719	-1.288	2.132	-2.0	0.034
19.000	-0.993	-0.961	-2.166	2.181	1.0	0.025
15.000	0.463	0.394	1.010	2.181	2.0	0.019
47.000	0.711	0.637	1.524	2.144	2.0	0.029
16.000	1.388	2.748	2.974	2.144	-5.0	0.036
48.000	0.606	0.721	1.343	2.217	-2.0	0.009
52.000	-0.739	-1.065	-1.638	2.217	-4.0	0.013
49.000	-0.298	-0.180	-0.648	2.175	7.0	0.009
53.000	-0.982	-1.098	-2.136	2.175	-2.0	0.031
34.000	1.328	2.767	2.820	2.123	-6.0	0.002
54.000	-0.796	-0.816	-1.690	2.123	-1.0	0.030
35.000	-0.750	-0.810	-1.692	2.257	-1.0	0.035
36.000	0.559	0.489	1.261	2.257	2.0	0.033
26.000	0.622	0.625	1.414	2.274	-1.0	0.008
40.000	-1.009	-0.992	-2.294	2.274	1.0	0.063
27.000	0.723	0.615	1.551	2.145	2.0	0.024
41.000	-1.040	-0.966	-2.231	2.145	1.0	0.044
28.000	0.669	0.613	1.545	2.309	1.0	0.023
42.000	-0.947	-0.990	-2.187	2.309	-1.0	0.021
29.000	0.651	0.613	1.454	2.235	1.0	0.042
43.000	-1.023	-0.998	-2.286	2.235	1.0	0.032
30.000	0.643	0.595	1.452	2.258	1.0	0.020
44.000	-0.900	-0.981	-2.032	2.258	-1.0	0.029
31.000	0.660	0.572	1.433	2.171	2.0	0.023
45.000	-1.103	-1.028	-2.394	2.171	1.0	0.046
32.000	0.609	0.552	1.404	2.307	2.0	0.024
46.000	-1.019	-1.020	-2.352	2.307	-1.0	0.067
57.000	0.591	0.444	1.266	2.141	4.0	0.022
59.000	-1.084	-0.833	-2.322	2.141	4.0	0.100
58.000	-0.493	-0.210	-1.139	2.308	14.0	0.024
60.000	-1.196	-0.861	-2.760	2.308	4.0	0.056

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ORIENTATION 15.0
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.500	0.491	1.217	2.434	1.0	0.009
10.000	-0.260	-0.169	-0.632	2.434	6.0	0.016
2.000	0.456	0.374	1.005	2.206	3.0	0.009
11.000	-0.721	-0.763	-1.591	2.206	-1.0	0.064
3.000	0.410	0.331	0.952	2.324	3.0	0.026
12.000	-0.596	-0.776	-1.384	2.324	-3.0	0.083
17.000	-0.683	-0.811	-1.578	2.310	-2.0	0.035
13.000	0.327	0.229	0.756	2.310	5.0	0.014
18.000	-0.759	-0.840	-1.722	2.268	-1.0	0.043
14.000	-0.539	-0.757	-1.223	2.268	-3.0	0.026
19.000	-0.918	-0.831	-2.098	2.286	2.0	0.042
15.000	0.409	0.289	0.934	2.286	5.0	0.016
47.000	0.563	0.496	1.309	2.324	2.0	0.025
16.000	1.410	2.830	3.277	2.324	-6.0	0.116
48.000	0.538	0.666	1.231	2.290	-2.0	0.020
52.000	-0.605	-0.837	-1.386	2.290	-3.0	0.018
49.000	-0.345	-0.333	-0.756	2.190	1.0	0.013
53.000	-0.727	-0.794	-1.592	2.190	-1.0	0.020
34.000	1.188	2.840	2.904	2.445	-6.0	0.003
54.000	-0.724	-0.911	-1.769	2.445	-3.0	0.037
35.000	-0.744	-0.795	-1.642	2.205	-1.0	0.041
36.000	0.550	0.414	1.213	2.205	4.0	0.025
26.000	0.579	0.538	1.328	2.292	1.0	0.021
40.000	-0.792	-0.819	-1.816	2.292	-1.0	0.067
27.000	0.584	0.547	1.372	2.347	1.0	0.023
41.000	-0.671	-0.806	-1.576	2.347	-2.0	0.034
28.000	0.616	0.547	1.411	2.292	2.0	0.048
42.000	-0.753	-0.767	-1.725	2.292	-1.0	0.048
29.000	0.549	0.517	1.278	2.330	1.0	0.027
43.000	-0.727	-0.826	-1.695	2.330	-2.0	0.035
30.000	0.608	0.506	1.300	2.138	3.0	0.027
44.000	-0.815	-0.813	-1.742	2.138	1.0	0.042
31.000	0.547	0.470	1.210	2.213	2.0	0.021
45.000	-0.789	-0.819	-1.747	2.213	-1.0	0.031
32.000	0.493	0.428	1.129	2.292	2.0	0.028
46.000	-0.797	-0.839	-1.827	2.292	-1.0	0.037
57.000	0.515	0.353	1.156	2.245	5.0	0.026
59.000	-0.771	-0.851	-1.731	2.245	-1.0	0.042
58.000	-0.415	-0.311	-0.966	2.326	4.0	0.017
60.000	-0.968	-0.913	-2.252	2.326	1.0	0.078

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ORIENTATION 45.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.258	0.198	0.624	2.420	4.0	0.021
10.000	-0.307	-0.353	-0.743	2.420	-2.0	0.016
2.000	0.197	0.058	0.487	2.475	24.0	0.017
11.000	-0.622	-0.841	-1.540	2.475	-3.0	0.029
3.000	0.224	0.056	0.505	2.249	30.0	0.012
12.000	-0.591	-0.762	-1.329	2.249	-3.0	0.017
17.000	-0.514	-0.560	-1.096	2.134	-1.0	0.014
13.000	-0.215	-0.077	-0.458	2.134	19.0	0.021
18.000	-0.585	-0.660	-1.395	2.384	-2.0	0.019
14.000	-0.598	-0.795	-1.425	2.384	-3.0	0.034
19.000	-0.642	-0.622	-1.421	2.213	1.0	0.047
15.000	0.199	0.038	0.441	2.213	43.0	0.013
47.000	0.284	0.132	0.615	2.167	12.0	0.019
16.000	1.444	2.922	3.129	2.167	-6.0	0.060
48.000	0.317	0.289	0.668	2.106	1.0	0.013
52.000	-0.492	-0.565	-1.036	2.106	-2.0	0.031
49.000	-0.344	-0.537	-0.818	2.376	-4.0	0.008
53.000	-0.486	-0.619	-1.155	2.376	-3.0	0.016
34.000	1.298	2.876	2.926	2.255	-6.0	0.002
54.000	-0.795	-0.737	-1.793	2.255	1.0	0.073
35.000	-0.609	-0.828	-1.415	2.324	-3.0	0.022
36.000	0.330	0.079	0.767	2.324	32.0	0.036
26.000	0.331	0.210	0.758	2.292	6.0	0.022
40.000	-0.580	-0.585	-1.330	2.292	-1.0	0.042
27.000	0.317	0.212	0.755	2.380	5.0	0.022
41.000	-0.338	-0.527	-1.281	2.380	1.0	0.020
28.000	0.333	0.206	0.778	2.339	7.0	0.012
42.000	-0.482	-0.602	-1.127	2.339	-2.0	0.017
29.000	0.309	0.186	0.703	2.277	7.0	0.019
43.000	-0.533	-0.585	-1.214	2.277	-1.0	0.036
30.000	0.347	0.169	0.786	2.264	11.0	0.023
44.000	-0.558	-0.616	-1.263	2.264	-1.0	0.015
31.000	0.271	0.130	0.637	2.349	11.0	0.022
45.000	-0.613	-0.615	-1.440	2.349	-1.0	0.057
32.000	0.293	0.103	0.715	2.442	19.0	0.023
46.000	-0.700	-0.637	-1.709	2.442	1.0	0.050
57.000	-0.252	0.010	-0.566	2.249	-0.262000E+03	0.014
59.000	-0.697	-0.836	-1.567	2.249	-2.0	0.038
58.000	-0.403	-0.453	-0.951	2.359	-2.0	0.016
60.000	-1.015	-1.005	-2.396	2.359	1.0	0.058

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ORIENTATION 90.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.542	-0.429	-1.238	2.285	3.0	0.035
10.000	-0.214	-0.244	-0.488	2.285	-2.0	0.020
2.000	-0.313	-0.258	-0.726	2.320	3.0	0.010
11.000	-0.208	-0.175	-0.481	2.320	2.0	0.015
3.000	-0.335	-0.252	-0.739	2.204	4.0	0.021
12.000	-0.250	-0.271	-0.551	2.204	-1.0	0.015
17.000	-0.288	-0.309	-0.672	2.333	-1.0	0.008
13.000	-0.245	-0.260	-0.572	2.333	-1.0	0.013
18.000	-0.200	-0.308	-0.470	2.347	-4.0	0.009
14.000	-0.255	-0.192	-0.598	2.347	4.0	0.011
19.000	-0.223	-0.290	-0.524	2.346	-3.0	0.019
15.000	-0.292	-0.225	-0.685	2.346	3.0	0.020
47.000	-0.476	-0.268	-1.003	2.107	8.0	0.016
16.000	1.586	2.827	3.342	2.107	-5.0	0.080
48.000	-0.441	-0.432	-0.954	2.164	1.0	0.024
52.000	-0.217	-0.343	-0.469	2.164	-4.0	0.007
49.000	-0.242	-0.386	-0.574	2.369	-4.0	0.009
53.000	-0.217	-0.337	-0.514	2.369	-4.0	0.013
34.000	1.306	2.777	2.828	2.166	-6.0	0.003
54.000	-0.246	-0.293	-0.533	2.166	-2.0	0.015
35.000	-0.281	-0.242	-0.606	2.154	2.0	0.008
36.000	-0.356	-0.257	-0.767	2.154	4.0	0.015
26.000	-0.553	-0.466	-1.251	2.262	2.0	0.016
40.000	-0.352	-0.334	-0.796	2.262	1.0	0.026
27.000	-0.528	-0.419	-1.161	2.196	3.0	0.037
41.000	-0.363	-0.278	-0.797	2.196	4.0	0.033
28.000	-0.509	-0.387	-1.216	2.387	4.0	0.024
42.000	-0.309	-0.313	-0.738	2.387	-1.0	0.053
29.000	-0.487	-0.355	-1.065	2.187	4.0	0.024
43.000	-0.338	-0.339	-0.738	2.187	-1.0	0.032
30.000	-0.420	-0.303	-0.953	2.266	4.0	0.017
44.000	-0.336	-0.266	-0.762	2.266	3.0	0.075
31.000	-0.440	-0.284	-0.988	2.244	6.0	0.019
45.000	-0.241	-0.315	-0.540	2.244	-3.0	0.009
32.000	-0.376	-0.257	-0.843	2.243	5.0	0.019
46.000	-0.249	-0.287	-0.558	2.243	-2.0	0.038
57.000	-0.387	-0.248	-0.874	2.256	6.0	0.023
59.000	-0.312	-0.256	-0.703	2.256	3.0	0.017
58.000	-0.332	-0.292	-0.689	2.074	2.0	0.016
60.000	-0.334	-0.325	-0.692	2.074	1.0	0.019

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ORIENTATION 0.135000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.556	-0.761	-1.224	2.201	-3.0	0.023
<u>10.000</u>	<u>-0.612</u>	<u>-0.793</u>	<u>-1.348</u>	<u>2.201</u>	<u>-3.0</u>	<u>0.023</u>
2.000	-0.541	-0.758	-1.203	2.223	-3.0	0.012
11.000	-0.336	-0.216	-0.747	2.223	6.0	0.045
3.000	-0.551	-0.699	-1.213	2.200	-3.0	0.015
12.000	-0.181	-0.070	-0.399	2.200	16.0	0.021
17.000	-0.915	-0.672	-1.865	2.038	4.0	0.049
13.000	-0.649	-0.857	-1.323	2.038	-3.0	0.020
18.000	-0.712	-0.605	-1.508	2.117	2.0	0.037
14.000	-0.236	-0.008	-0.500	2.117	0.272000E+03	0.014
19.000	-0.691	-0.587	-1.546	2.236	2.0	0.064
15.000	-0.538	-0.773	-1.203	2.236	-4.0	0.021
47.000	-0.536	-0.728	-1.130	2.107	-3.0	0.009
16.000	1.344	2.703	2.832	2.107	-6.0	0.010
48.000	-0.464	-0.690	-0.997	2.150	-4.0	0.006
52.000	-0.438	-0.606	-0.942	2.150	-3.0	0.010
49.000	-0.541	-0.833	-1.197	2.212	-4.0	0.011
53.000	-0.862	-0.686	-1.907	2.212	3.0	0.044
34.000	1.263	2.691	2.747	2.175	-6.0	0.002
54.000	-0.503	-0.540	-1.094	2.175	-1.0	0.054
35.000	0.282	0.080	0.616	2.183	26.0	0.025
36.000	-0.679	-0.791	-1.483	2.183	-2.0	0.105
26.000	-0.593	-0.779	-1.292	2.178	-3.0	0.018
40.000	-1.032	-0.705	-2.249	2.178	5.0	0.080
27.000	-0.564	-0.776	-1.251	2.218	-3.0	0.021
41.000	-0.964	-0.697	-2.139	2.218	4.0	0.154
28.000	-0.582	-0.765	-1.265	2.174	-3.0	0.012
42.000	-0.889	-0.711	-1.934	2.174	3.0	0.078
29.000	-0.585	-0.751	-1.236	2.114	-3.0	0.025
43.000	-0.770	-0.641	-1.627	2.114	3.0	0.070
30.000	-0.556	-0.768	-1.197	2.154	-3.0	0.009
44.000	-0.876	-0.727	-1.887	2.154	3.0	0.075
31.000	-0.595	-0.752	-1.245	2.094	-3.0	0.023
45.000	-0.857	-0.699	-1.795	2.094	3.0	0.054
32.000	-0.557	-0.764	-1.290	2.316	-3.0	0.022
46.000	-0.677	-0.614	-1.567	2.316	2.0	0.042
57.000	-0.579	-0.798	-1.322	2.281	-3.0	0.030
59.000	0.322	-0.065	0.735	2.281	-60.0	0.313
58.000	-0.973	-0.920	-2.002	2.058	1.0	0.052
60.000	-0.465	-0.470	-0.956	2.058	-1.0	0.073

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ORIENTATION 0.165000E+03

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POSI.	CP .98	CP MOY	CP FIC	GP	DELTA	DP
1.000	-0.617	-0.650	-1.416	2.295	-1.0	0.024
10.000	-0.769	-0.751	-1.765	2.295	1.0	0.032
2.000	-0.672	-0.655	-1.547	2.303	1.0	0.066
11.000	-0.325	-0.162	-0.749	2.303	11.0	0.027
3.000	-0.615	-0.598	-1.351	2.197	1.0	0.031
12.000	0.393	0.192	0.862	2.197	11.0	0.022
17.000	-1.171	-0.885	-2.526	2.158	4.0	0.048
13.000	-0.606	-0.686	-1.307	2.158	-2.0	0.025
18.000	-0.940	-0.821	-2.107	2.242	2.0	0.082
14.000	0.443	0.301	0.992	2.242	5.0	0.016
19.000	-1.063	-0.841	-2.365	2.225	3.0	0.149
15.000	-0.570	-0.695	-1.269	2.225	-2.0	0.054
47.000	-0.545	-0.650	-1.232	2.262	-2.0	0.022
16.000	1.280	2.822	2.896	2.262	-6.0	0.003
48.000	-0.508	-0.621	-1.083	2.132	-2.0	0.013
52.000	-0.656	-0.770	-1.399	2.132	-2.0	0.048
49.000	-0.630	-0.851	-1.421	2.255	-3.0	0.016
53.000	-0.975	-0.881	-2.198	2.255	2.0	0.059
34.000	1.231	2.788	2.839	2.307	-6.0	0.002
54.000	-0.747	-0.807	-1.723	2.307	-1.0	0.058
35.000	0.542	0.412	1.198	2.210	4.0	0.032
36.000	-0.799	-0.796	-1.766	2.210	1.0	0.043
26.000	-0.655	-0.699	-1.464	2.234	-1.0	0.076
40.000	-1.326	-0.925	-2.962	2.234	5.0	0.061
27.000	-0.600	-0.679	-1.394	2.325	-2.0	0.034
41.000	-1.060	-0.903	-2.465	2.325	2.0	0.059
28.000	-0.730	-0.663	-1.505	2.062	2.0	0.027
42.000	-1.190	-0.871	-2.454	2.062	4.0	0.083
29.000	-0.568	-0.655	-1.291	2.275	-2.0	0.031
43.000	-0.925	-0.882	-2.105	2.275	1.0	0.046
30.000	-0.558	-0.646	-1.192	2.136	-2.0	0.019
44.000	-1.013	-0.864	-2.164	2.136	2.0	0.019
31.000	-0.549	-0.649	-1.269	2.313	-2.0	0.037
45.000	-0.880	-0.816	-2.035	2.313	1.0	0.026
32.000	-0.556	-0.640	-1.238	2.226	-2.0	0.027
46.000	-0.994	-0.831	-2.212	2.226	2.0	0.142
57.000	-0.977	-0.827	-2.190	2.241	2.0	0.058
59.000	0.581	0.418	1.302	2.241	4.0	0.065
58.000	-1.091	-0.778	-2.063	1.892	5.0	0.072
60.000	-0.470	-0.240	-0.889	1.892	10.0	0.019

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ORIENTATION 0.180000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.552	-0.657	-1.385	2.508	-2.0	0.016
10.000	-0.655	-0.795	-1.641	2.508	-2.0	0.021
2.000	-0.792	-0.694	-1.818	2.295	2.0	0.042
11.000	-0.286	-0.013	-0.657	2.295	0.205000E+03	0.030
3.000	-0.969	-0.695	-2.195	2.265	4.0	0.067
12.000	0.445	0.288	1.008	2.265	6.0	0.019
17.000	-0.793	-0.806	-1.897	2.391	-1.0	0.034
13.000	-0.628	-0.764	-1.501	2.391	-2.0	0.030
18.000	-1.034	-1.129	-2.283	2.207	-1.0	0.036
14.000	0.576	0.424	1.272	2.207	4.0	0.062
19.000	-0.916	-1.048	-2.173	2.373	-2.0	0.021
15.000	-0.529	-0.721	-1.255	2.373	-3.0	0.030
47.000	-0.672	-0.675	-1.501	2.235	-1.0	0.037
16.000	1.414	2.848	3.161	2.235	-6.0	0.031
48.000	-0.450	-0.632	-0.997	2.216	-3.0	0.011
52.000	-0.765	-1.060	-1.694	2.216	-3.0	0.025
49.000	-0.555	-0.815	-1.321	2.378	-4.0	0.013
53.000	-0.656	-0.782	-1.560	2.378	-2.0	0.024
34.000	1.330	2.874	2.935	2.206	-6.0	0.001
54.000	-1.048	-1.191	-2.313	2.206	-2.0	0.055
35.000	0.565	0.492	1.319	2.337	2.0	0.015
36.000	-0.898	-0.767	-2.098	2.337	2.0	0.049
26.000	-0.639	-0.691	-1.443	2.257	-1.0	0.029
40.000	-0.912	-0.725	-2.057	2.257	3.0	0.035
27.000	-0.703	-0.673	-1.507	2.142	1.0	0.025
41.000	-0.991	-0.832	-2.122	2.142	2.0	0.043
28.000	-0.620	-0.664	-1.463	2.363	-1.0	0.035
42.000	-0.747	-0.870	-1.766	2.363	-2.0	0.027
29.000	-0.662	-0.659	-1.532	2.313	1.0	0.076
43.000	-0.784	-0.856	-1.812	2.313	-1.0	0.014
30.000	-0.764	-0.673	-1.703	2.228	2.0	0.018
44.000	-0.897	-0.972	-1.998	2.228	-1.0	0.036
31.000	-0.803	-0.684	-1.793	2.234	2.0	0.040
45.000	-0.912	-0.987	-2.038	2.234	-1.0	0.039
32.000	-0.767	-0.685	-1.743	2.272	2.0	0.025
46.000	-1.138	-1.201	-2.586	2.272	-1.0	0.053
57.000	-0.812	-0.811	-2.124	2.616	1.0	0.034
59.000	0.487	0.341	1.274	2.616	5.0	0.024
58.000	-1.338	-0.828	-2.716	2.031	7.0	0.075
60.000	-0.601	-0.184	-1.221	2.031	23.0	0.040

===== ORIENTATION 0.195000E+03 =====

POSI.	CP .98	CP MOY	CP FIC	GP	DELTA	DP
1.000	-0.754	-0.691	-1.628	2.159	1.0	0.029
10.000	-0.632	-0.799	-1.366	2.159	-3.0	0.018
2.000	-0.773	-0.683	-1.773	2.293	2.0	0.028
11.000	0.473	0.271	1.084	2.293	8.0	0.024
3.000	-0.683	-0.650	-1.626	2.380	1.0	0.037
12.000	0.535	0.479	1.273	2.380	2.0	0.015
17.000	-0.564	-0.510	-1.256	2.227	2.0	0.029
13.000	-0.643	-0.699	-1.431	2.227	-1.0	0.021
18.000	-0.814	-0.661	-1.809	2.223	3.0	0.047
14.000	0.572	0.339	1.272	2.223	7.0	0.032
19.000	-0.733	-0.613	-1.729	2.359	2.0	0.041
15.000	-0.561	-0.734	-1.322	2.359	-3.0	0.033
47.000	-0.602	-0.684	-1.387	2.305	-2.0	0.085
16.000	1.434	3.066	3.306	2.305	-6.0	0.081
48.000	-0.494	-0.661	-1.080	2.187	-3.0	0.022
52.000	-0.557	-0.411	-1.218	2.187	4.0	0.041
49.000	-0.483	-0.760	-1.099	2.274	-4.0	0.012
53.000	-0.424	-0.554	-0.965	2.274	-3.0	0.012
34.000	1.341	2.954	3.015	2.247	-6.0	0.004
54.000	-0.995	-0.967	-2.237	2.247	1.0	0.036
35.000	0.533	0.517	1.219	2.289	1.0	0.014
36.000	-0.636	-0.820	-1.455	2.289	-3.0	0.023
26.000	-0.673	-0.718	-1.613	2.397	-1.0	0.035
40.000	-0.477	-0.535	-1.142	2.397	-2.0	0.034
27.000	-0.720	-0.707	-1.551	2.155	1.0	0.053
41.000	-0.569	-0.490	-1.225	2.155	2.0	0.032
28.000	-0.632	-0.701	-1.454	2.300	-1.0	0.026
42.000	-0.544	-0.444	-1.251	2.300	3.0	0.026
29.000	-0.738	-0.693	-1.686	2.283	1.0	0.023
43.000	-0.658	-0.501	-1.503	2.283	4.0	0.066
30.000	-0.747	-0.686	-1.730	2.314	1.0	0.036
44.000	-0.704	-0.502	-1.629	2.314	5.0	0.040
31.000	-0.631	-0.680	-1.541	2.441	-1.0	0.042
45.000	-0.650	-0.447	-1.587	2.441	5.0	0.044
32.000	-0.704	-0.687	-1.681	2.387	1.0	0.033
46.000	-0.906	-0.603	-2.163	2.387	6.0	0.049
57.000	-0.679	-0.775	-1.543	2.273	-2.0	0.074
59.000	0.640	0.508	1.455	2.273	3.0	0.051
58.000	-0.618	-0.792	-1.460	2.363	-3.0	0.016
60.000	0.476	0.080	1.126	2.363	50.0	0.028

ORIENTATION 0.225000E+03

POSI.	CF .98	CF MOY	CF FIC	GP	DELTA	DP
1.000	-0.575	-0.838	-1.446	2.513	-4.0	0.020
10.000	-0.504	-0.856	-1.266	2.513	-5.0	0.019
2.000	-0.475	-0.784	-1.148	2.416	-4.0	0.009
11.000	0.475	0.134	1.147	2.416	26.0	0.033
3.000	-0.467	-0.776	-1.165	2.493	-4.0	0.014
12.000	-0.300	0.043	-0.747	2.493	-80.0	0.026
17.000	-0.255	-0.256	-0.592	2.321	-1.0	0.007
13.000	-0.543	-0.814	-1.259	2.321	-4.0	0.016
18.000	0.390	0.271	0.901	2.309	5.0	0.016
14.000	0.356	0.084	0.823	2.309	33.0	0.110
19.000	0.364	0.207	0.823	2.260	8.0	0.015
15.000	-0.557	-0.830	-1.258	2.260	-4.0	0.014
47.000	-0.504	-0.777	-1.120	2.221	-4.0	0.007
16.000	1.413	3.011	3.139	2.221	-6.0	0.011
48.000	-0.446	-0.790	-1.063	2.387	-5.0	0.006
52.000	0.331	0.291	0.790	2.387	2.0	0.020
49.000	-0.484	-0.841	-1.126	2.326	-5.0	0.011
53.000	-0.321	-0.417	-0.746	2.326	-3.0	0.011
34.000	1.337	2.991	3.053	2.283	-6.0	0.002
54.000	0.634	0.607	1.448	2.283	1.0	0.020
35.000	0.376	0.247	0.887	2.356	6.0	0.021
36.000	-0.566	-0.894	-1.333	2.356	-4.0	0.008
26.000	-0.648	-0.864	-1.443	2.228	-3.0	0.028
40.000	-0.330	-0.348	-0.736	2.228	-1.0	0.033
27.000	-0.578	-0.855	-1.336	2.311	-4.0	0.012
41.000	-0.236	-0.202	-0.546	2.311	2.0	0.013
28.000	-0.588	-0.824	-1.281	2.179	-3.0	0.015
42.000	-0.251	-0.061	-0.548	2.179	32.0	0.044
29.000	-0.567	-0.833	-1.315	2.319	-4.0	0.016
43.000	-0.331	0.014	-0.768	2.319	-0.245000E+03	0.039
30.000	-0.542	-0.807	-1.313	2.421	-4.0	0.020
44.000	0.356	0.125	0.861	2.421	19.0	0.047
31.000	-0.500	-0.783	-1.205	2.410	-4.0	0.012
45.000	0.361	0.195	0.870	2.410	9.0	0.014
32.000	-0.508	-0.774	-1.184	2.333	-4.0	0.009
46.000	0.429	0.249	1.000	2.333	8.0	0.017
57.000	-0.542	-0.839	-1.277	2.355	-4.0	0.026
59.000	0.450	0.260	1.059	2.355	8.0	0.095
58.000	-0.707	-0.853	-1.605	2.269	-2.0	0.034
60.000	0.606	0.414	1.376	2.269	5.0	0.015

ORIENTATION 0.270000E+03

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.548	-0.564	-1.314	2.397	-1.0	0.024
10.000	-0.769	-1.108	-1.844	2.397	-4.0	0.016
2.000	-0.732	-0.905	-1.694	2.314	-2.0	0.015
11.000	-0.797	-1.039	-1.843	2.314	-3.0	0.024
3.000	-0.822	-0.846	-1.816	2.209	-1.0	0.029
12.000	-0.837	-1.019	-1.849	2.209	-2.0	0.035
17.000	0.490	0.277	1.117	2.280	8.0	0.038
13.000	-0.878	-1.057	-2.003	2.280	-2.0	0.034
18.000	0.596	0.621	1.389	2.331	-1.0	0.025
14.000	-0.541	-0.506	-1.262	2.331	1.0	0.026
19.000	0.541	0.520	1.318	2.437	1.0	0.020
15.000	-0.468	-0.418	-1.140	2.437	2.0	0.031
47.000	-0.752	-0.926	-1.705	2.266	-2.0	0.016
16.000	1.349	2.857	3.057	2.266	-6.0	0.013
48.000	-0.497	-0.543	-1.178	2.372	-1.0	0.020
52.000	0.578	0.697	1.371	2.372	-2.0	0.033
49.000	-0.701	-0.983	-1.470	2.098	-3.0	0.022
53.000	0.412	0.258	0.864	2.098	6.0	0.014
34.000	1.289	2.874	2.926	2.270	-6.0	0.001
54.000	0.539	0.444	1.224	2.270	3.0	0.015
35.000	-0.739	-0.810	-1.750	2.306	-1.0	0.013
36.000	-0.766	-0.885	-1.767	2.306	-2.0	0.023
26.000	-0.561	-0.592	-1.368	2.436	-1.0	0.027
40.000	0.432	0.213	1.052	2.436	11.0	0.038
27.000	-0.605	-0.614	-1.408	2.328	-1.0	0.027
41.000	0.553	0.416	1.288	2.328	4.0	0.029
28.000	-0.665	-0.634	-1.523	2.286	1.0	0.019
42.000	0.635	0.545	1.451	2.286	2.0	0.020
29.000	-0.701	-0.702	-1.540	2.197	-1.0	0.027
43.000	0.691	0.593	1.518	2.197	2.0	0.023
30.000	-0.685	-0.781	-1.614	2.355	-2.0	0.020
44.000	0.691	0.629	1.628	2.355	1.0	0.051
31.000	-0.764	-0.851	-1.773	2.320	-2.0	0.090
45.000	0.661	0.621	1.533	2.320	1.0	0.044
32.000	-0.794	-0.893	-1.794	2.259	-2.0	0.026
46.000	0.688	0.588	1.554	2.259	2.0	0.024
57.000	-0.761	-0.888	-1.693	2.223	-2.0	0.018
59.000	-0.742	-0.860	-1.650	2.223	-2.0	0.010
58.000	-1.368	-1.257	-3.061	2.238	1.0	0.063
60.000	-1.327	-1.191	-2.970	2.238	2.0	0.070

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ORIENTATION 0.315000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.409	0.321	0.952	2.326	3.0	0.023
10.000	0.514	0.417	1.195	2.326	3.0	0.043
2.000	0.514	0.462	1.127	2.193	2.0	0.011
11.000	-0.558	-0.847	-1.223	2.193	-4.0	0.012
3.000	0.471	0.422	1.076	2.282	2.0	0.016
12.000	-0.566	-0.847	-1.292	2.282	-4.0	0.013
17.000	0.555	0.183	1.188	2.142	21.0	0.032
13.000	0.385	0.254	0.825	2.142	6.0	0.010
18.000	0.302	0.108	0.665	2.202	19.0	0.021
14.000	-0.613	-0.886	-1.349	2.202	-4.0	0.009
19.000	0.228	0.062	0.575	2.525	27.0	0.014
15.000	0.227	0.149	0.574	2.525	6.0	0.009
47.000	0.503	0.495	1.092	2.170	1.0	0.020
16.000	1.342	2.787	2.912	2.170	-6.0	0.014
48.000	0.345	0.337	0.747	2.165	1.0	0.007
52.000	0.317	0.198	0.687	2.165	7.0	0.072
49.000	0.561	0.601	1.304	2.324	-1.0	0.015
53.000	0.549	0.367	1.275	2.324	5.0	0.047
34.000	1.315	2.786	2.863	2.178	-6.0	0.007
54.000	-0.206	-0.138	-0.449	2.178	5.0	0.015
35.000	-0.625	-0.870	-1.357	2.170	-3.0	0.016
36.000	0.385	0.280	0.836	2.170	4.0	0.013
26.000	0.364	0.305	0.918	2.523	2.0	0.015
40.000	0.493	0.198	1.245	2.523	15.0	0.014
27.000	0.433	0.328	0.927	2.140	4.0	0.015
41.000	0.554	0.288	1.185	2.140	10.0	0.022
28.000	0.442	0.380	0.964	2.179	2.0	0.014
42.000	0.543	0.349	1.184	2.179	6.0	0.092
29.000	0.461	0.385	0.996	2.160	2.0	0.016
43.000	0.443	0.272	0.958	2.160	7.0	0.024
30.000	0.477	0.424	1.037	2.173	2.0	0.024
44.000	0.419	0.238	0.909	2.173	8.0	0.017
31.000	0.478	0.442	1.124	2.353	1.0	0.020
45.000	0.369	0.215	0.868	2.353	8.0	0.018
32.000	0.526	0.461	1.180	2.243	2.0	0.031
46.000	0.342	0.111	0.768	2.243	21.0	0.016
57.000	0.431	0.281	0.964	2.234	6.0	0.034
59.000	-0.608	-0.917	-1.358	2.234	-4.0	0.016
58.000	0.601	0.487	1.321	2.199	3.0	0.023
60.000	-0.619	-0.884	-1.361	2.199	-3.0	0.013

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ORIENTATION 0.345000E+03
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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.565	0.543	1.275	2.257	1.0	0.036
10.000	0.414	0.195	0.935	2.257	12.0	0.041
2.000	0.603	0.587	1.340	2.222	1.0	0.012
11.000	-0.602	-0.748	-1.338	2.222	-2.0	0.025
3.000	0.620	0.499	1.412	2.277	3.0	0.062
12.000	-0.553	-0.780	-1.259	2.277	-3.0	0.024
17.000	-0.868	-1.036	-2.004	2.309	-2.0	0.019
13.000	0.459	0.406	1.060	2.309	2.0	0.027
18.000	-0.849	-0.790	-1.821	2.146	1.0	0.028
14.000	-0.625	-0.777	-1.342	2.146	-2.0	0.032
19.000	-0.840	-0.754	-1.831	2.181	2.0	0.022
15.000	0.427	0.339	0.932	2.181	3.0	0.010
47.000	0.724	0.715	1.594	2.202	1.0	0.026
16.000	1.387	2.775	3.054	2.202	-6.0	0.059
48.000	0.576	0.702	1.374	2.386	-2.0	0.013
52.000	-0.450	-0.496	-1.073	2.386	-1.0	0.018
49.000	0.356	0.068	0.764	2.148	43.0	0.028
53.000	-1.470	-1.562	-3.157	2.148	-1.0	0.061
34.000	1.281	2.767	2.822	2.203	-6.0	0.002
54.000	-0.437	-0.438	-0.963	2.203	-1.0	0.012
35.000	-0.610	-0.798	-1.409	2.311	-3.0	0.012
36.000	0.610	0.542	1.409	2.311	2.0	0.023
26.000	0.723	0.600	1.535	2.122	3.0	0.029
40.000	-1.073	-1.142	-2.276	2.122	-1.0	0.024
27.000	0.639	0.609	1.514	2.368	1.0	0.019
41.000	-0.960	-1.151	-2.272	2.368	-2.0	0.037
28.000	0.701	0.645	1.498	2.135	1.0	0.030
42.000	-1.109	-1.153	-2.368	2.135	-1.0	0.036
29.000	0.725	0.633	1.547	2.133	2.0	0.030
43.000	-1.033	-1.139	-2.204	2.133	-1.0	0.026
30.000	0.688	0.637	1.540	2.238	1.0	0.030
44.000	-1.017	-1.120	-2.277	2.238	-1.0	0.023
31.000	0.688	0.639	1.458	2.120	1.0	0.026
45.000	-1.037	-0.972	-2.199	2.120	1.0	0.029
32.000	0.712	0.628	1.481	2.080	2.0	0.032
46.000	-1.063	-0.849	-2.211	2.080	3.0	0.043
57.000	0.614	0.501	1.395	2.274	3.0	0.022
59.000	-0.632	-0.793	-1.438	2.274	-3.0	0.053
58.000	0.641	-0.018	1.433	2.236	-0.371000E+03	0.513
60.000	-0.916	-0.783	-2.050	2.236	2.0	0.058

Coefficients de pression C_q et C_p
mesurés sur la forme 8

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

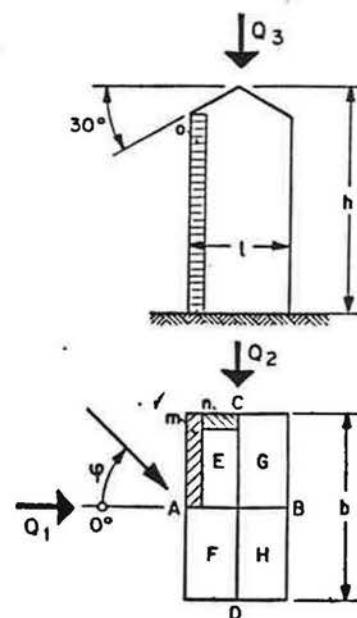


Tabelle 4.6.9

$$h : b : l = 2.36 : 2 : 1$$

Toiture à 30°

α_p	COEFFICIENTS DE PRESSION								COEFFICIENTS DE FORCE				
	c_{qe}								c^*_{qe}		c_1	c_2	c_3
	surface d'application								surface localisée		surface de référence = surface exposée au vent		
α_p	A	B	C	D	E	F	G	H	m	n	$b \times h$	$1 \times h$	$1 \times b$
0°	0,57	-0,71	-1,10	-1,10	-0,78	-0,78	-0,55	-0,55	-0,99	-0,78	-0,92		
15°	0,62	-0,53	-0,90	-0,99	-0,73	-0,81	-0,47	-0,65	-0,82	-0,71	-1,04		
45°	0,46	-0,55	0,46	-0,79	-0,44	-0,65	-0,65	-0,75	-0,68	-0,51	0,49		
90°	-0,69	-0,69	0,69	-0,29	-0,71	-0,32	-0,71	-0,32	-0,65	-0,87	0,49		
180°													
									$\hat{c}_{qe} = -1,31$		Coefficient de frottement $c_t = 0$		

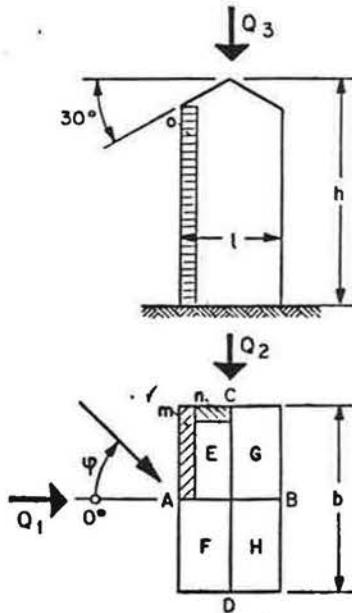
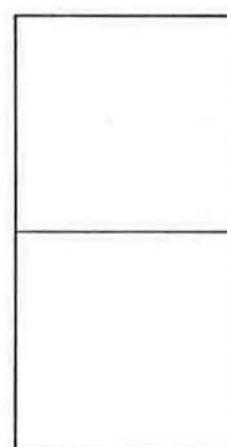
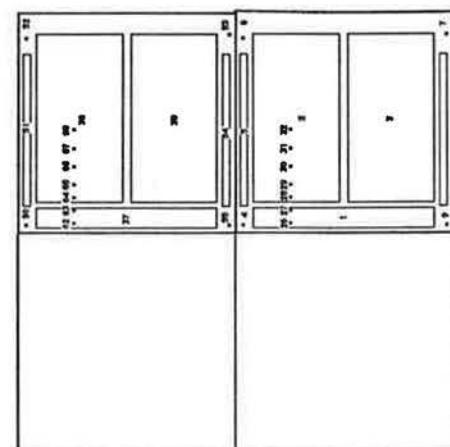
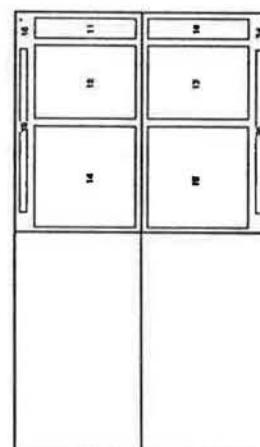
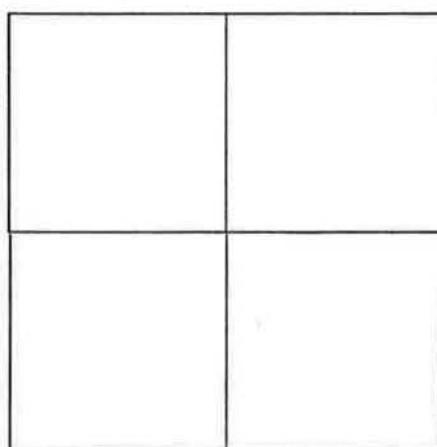
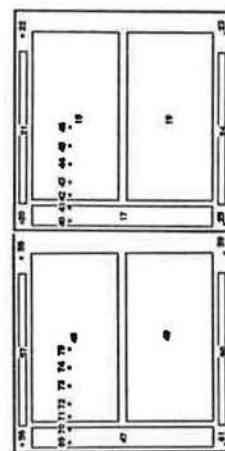


Tabelle 4.6.9

$$h:b:l = 2.36:2:1$$

Toiture à 30°



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MODELE N° 8
Numérotation des prises de pression

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ORIENTATION 0.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.578	0.561	1.238	2.143	1.0	0.027
10.000	-0.779	-0.592	-1.670	2.143	4.0	0.044
2.000	0.559	0.512	1.217	2.177	1.0	0.021
11.000	-0.603	-0.697	-1.313	2.177	-2.0	0.029
3.000	0.458	0.435	1.019	2.224	1.0	0.026
12.000	-0.539	-0.652	-1.200	2.224	-2.0	0.028
17.000	-0.899	-0.896	-2.008	2.234	1.0	0.063
13.000	-0.637	-0.589	-1.423	2.234	1.0	0.053
18.000	-0.967	-0.922	-2.052	2.121	1.0	0.031
14.000	-0.518	-0.650	-1.100	2.121	-3.0	0.019
19.000	-1.011	-0.904	-2.154	2.129	2.0	0.074
15.000	-0.717	-0.649	-1.527	2.129	2.0	0.032
37.000	0.705	0.796	1.562	2.216	-2.0	0.024
16.000	-0.570	-0.702	-1.263	2.216	-2.0	0.017
38.000	0.626	0.715	1.318	2.107	-2.0	0.024
34.000	-0.714	-0.880	-1.503	2.107	-2.0	0.020
39.000	0.629	0.658	1.364	2.171	-1.0	0.022
36.000	-0.993	-0.881	-2.156	2.171	2.0	0.061
50.000	0.556	0.650	1.205	2.169	-2.0	0.015
35.000	-0.462	-0.659	-1.002	2.169	-3.0	0.013
51.000	0.554	0.653	1.350	2.438	-2.0	0.022
47.000	-0.930	-0.929	-2.267	2.438	1.0	0.028
52.000	0.435	0.366	0.937	2.154	2.0	0.011
48.000	-1.099	-1.029	-2.367	2.154	1.0	0.050
54.000	0.654	0.646	1.378	2.107	1.0	0.027
49.000	-1.026	-0.962	-2.162	2.107	1.0	0.050
56.000	-1.084	-1.000	-2.398	2.213	1.0	0.035
57.000	-0.957	-0.988	-2.119	2.213	-1.0	0.048
58.000	-0.559	-0.646	-1.199	2.145	-2.0	0.015
60.000	-0.961	-0.926	-2.060	2.145	1.0	0.085
62.000	0.731	0.812	1.582	2.165	-2.0	0.039
69.000	-1.050	-0.967	-2.274	2.165	1.0	0.020
63.000	0.792	0.810	1.637	2.067	-1.0	0.034
70.000	-1.272	-0.981	-2.630	2.067	3.0	0.107
64.000	0.687	0.821	1.534	2.232	-2.0	0.019
71.000	-1.255	-1.006	-2.801	2.232	3.0	0.043
65.000	0.691	0.758	1.450	2.099	-1.0	0.030
72.000	-1.174	-0.978	-2.464	2.099	3.0	0.027
66.000	0.630	0.793	1.508	2.392	-3.0	0.021
73.000	-1.091	-1.036	-2.610	2.392	1.0	0.057

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ORIENTATION 15.0

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.677	0.725	1.507	2.225	-1.0	0.029
10.000	-0.729	-0.729	-1.623	2.225	1.0	0.024
2.000	0.511	0.549	1.258	2.461	-1.0	0.016
11.000	-0.670	-0.856	-1.647	2.461	-3.0	0.034
3.000	0.594	0.530	1.301	2.190	2.0	0.025
12.000	-0.724	-0.848	-1.586	2.190	-2.0	0.035
17.000	-1.048	-1.100	-2.307	2.201	-1.0	0.053
13.000	-0.760	-0.757	-1.672	2.201	1.0	0.031
18.000	-1.009	-1.115	-2.269	2.249	-1.0	0.064
14.000	-0.569	-0.817	-1.279	2.249	-4.0	0.014
19.000	-1.088	-1.125	-2.378	2.187	-1.0	0.023
15.000	-0.864	-0.722	-1.889	2.187	2.0	0.033
37.000	0.816	0.993	1.917	2.350	-2.0	0.021
16.000	-0.716	-0.907	-1.682	2.350	-3.0	0.019
38.000	0.637	0.821	1.545	2.425	-3.0	0.010
34.000	-0.649	-0.880	-1.575	2.425	-3.0	0.020
39.000	0.698	0.762	1.620	2.322	-1.0	0.023
36.000	-1.324	-1.417	-3.075	2.322	-1.0	0.069
50.000	0.660	0.853	1.586	2.403	-3.0	0.013
35.000	-0.521	-0.834	-1.253	2.403	-4.0	0.013
51.000	0.685	0.737	1.558	2.275	-1.0	0.016
47.000	-0.865	-0.914	-1.969	2.275	-1.0	0.066
52.000	0.419	0.305	0.984	2.346	4.0	0.019
48.000	-0.897	-0.995	-2.104	2.346	-1.0	0.035
54.000	0.698	0.735	1.567	2.244	-1.0	0.015
49.000	-0.958	-1.074	-2.150	2.244	-2.0	0.070
56.000	-0.797	-0.843	-1.788	2.242	-1.0	0.029
57.000	-1.096	-0.940	-2.458	2.242	2.0	0.050
58.000	-0.811	-1.019	-2.072	2.556	-3.0	0.043
60.000	-0.839	-1.097	-2.144	2.556	-3.0	0.031
62.000	0.895	1.060	2.009	2.245	-2.0	0.012
69.000	-0.878	-0.874	-1.972	2.245	1.0	0.040
63.000	0.880	1.051	2.013	2.288	-2.0	0.013
70.000	-0.932	-0.869	-2.132	2.288	1.0	0.073
64.000	0.872	0.997	2.022	2.318	-2.0	0.016
71.000	-1.067	-0.878	-2.473	2.318	3.0	0.060
65.000	0.812	1.011	1.940	2.389	-2.0	0.014
72.000	-1.004	-0.916	-2.399	2.389	1.0	0.057
66.000	0.806	0.965	1.886	2.340	-2.0	0.013
73.000	-1.036	-0.923	-2.424	2.340	2.0	0.074

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ORIENTATION 45.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.389	0.348	0.946	2.431	2.0	0.015
10.000	-0.518	-0.711	-1.259	2.431	-3.0	0.009
2.000	0.256	0.145	0.615	2.397	8.0	0.010
11.000	-0.713	-0.957	-1.710	2.397	-3.0	0.029
3.000	0.263	0.154	0.576	2.192	8.0	0.009
12.000	-0.748	-0.964	-1.639	2.192	-3.0	0.026
17.000	-0.809	-0.933	-1.856	2.296	-2.0	0.030
13.000	-0.622	-0.732	-1.427	2.296	-2.0	0.021
18.000	-0.901	-1.054	-2.127	2.361	-2.0	0.026
14.000	-0.708	-0.938	-1.672	2.361	-3.0	0.030
19.000	-0.873	-1.089	-1.974	2.261	-2.0	0.012
15.000	-0.585	-0.432	-1.322	2.261	4.0	0.021
37.000	0.465	0.454	1.107	2.378	1.0	0.014
16.000	-0.658	-0.944	-1.564	2.378	-4.0	0.016
38.000	0.343	0.246	0.803	2.339	4.0	0.011
34.000	-0.397	-0.559	-0.928	2.339	-3.0	0.013
39.000	0.355	0.234	0.791	2.229	6.0	0.020
36.000	-0.973	-1.219	-2.168	2.229	-3.0	0.015
50.000	0.419	0.443	0.978	2.335	-1.0	0.009
35.000	-0.782	-0.914	-1.825	2.335	-2.0	0.030
51.000	0.391	0.228	0.905	2.317	8.0	0.020
47.000	-0.575	-0.732	-1.332	2.317	-3.0	0.022
52.000	-0.363	-0.313	-0.811	2.235	2.0	0.008
48.000	-0.645	-0.832	-1.441	2.235	-3.0	0.011
54.000	0.362	0.236	0.847	2.341	6.0	0.018
49.000	-0.738	-0.821	-1.729	2.341	-2.0	0.031
56.000	-0.460	-0.661	-1.003	2.180	-4.0	0.007
57.000	-0.551	-0.718	-1.201	2.180	-3.0	0.015
58.000	-0.553	-0.813	-1.266	2.288	-4.0	0.022
60.000	-0.798	-0.846	-1.827	2.288	-1.0	0.029
62.000	0.526	0.461	1.165	2.214	2.0	0.011
69.000	-0.517	-0.707	-1.144	2.214	-3.0	0.011
63.000	0.559	0.453	1.200	2.145	3.0	0.023
70.000	-0.589	-0.702	-1.263	2.145	-2.0	0.047
64.000	0.476	0.429	1.095	2.300	2.0	0.016
71.000	-0.562	-0.713	-1.293	2.300	-3.0	0.023
65.000	0.490	0.420	1.143	2.334	2.0	0.018
72.000	-0.537	-0.727	-1.254	2.334	-3.0	0.020
66.000	0.421	0.381	0.930	2.211	2.0	0.010
73.000	-0.595	-0.763	-1.316	2.211	-3.0	0.048

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ORIENTATION 90,0						
POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.626	-0.345	-1.329	2.122	9.0	0.029
10.000	-0.246	-0.209	-0.522	2.122	2.0	0.014
2.000	-0.428	-0.211	-0.935	2.187	11.0	0.017
11.000	-0.260	-0.225	-0.568	2.187	2.0	0.024
3.000	-0.436	-0.192	-0.987	2.262	13.0	0.026
12.000	-0.220	-0.212	-0.498	2.262	1.0	0.010
17.000	-0.276	-0.326	-0.621	2.253	-2.0	0.015
13.000	-0.263	-0.181	-0.593	2.253	5.0	0.016
18.000	-0.263	-0.326	-0.575	2.188	-2.0	0.010
14.000	-0.427	-0.350	-0.933	2.188	3.0	0.020
19.000	-0.318	-0.349	-0.771	2.425	-1.0	0.035
15.000	-0.379	-0.168	-0.919	2.425	13.0	0.019
37.000	-0.595	-0.380	-1.309	2.198	6.0	0.007
16.000	-0.313	-0.297	-0.689	2.198	1.0	0.014
38.000	-0.274	-0.175	-0.642	2.348	6.0	0.018
34.000	-0.106	-0.090	-0.250	2.348	2.0	0.007
39.000	-0.426	-0.216	-0.931	2.186	10.0	0.021
36.000	-0.466	-0.239	-1.018	2.186	10.0	0.050
50.000	-0.671	-0.310	-1.477	2.201	12.0	0.032
35.000	-0.614	-0.542	-1.351	2.201	2.0	0.015
51.000	-0.480	-0.235	-1.059	2.206	11.0	0.019
47.000	-0.338	-0.337	-0.715	2.206	1.0	0.015
52.000	-0.386	-0.416	-0.855	2.215	-1.0	0.029
48.000	-0.274	-0.350	-0.606	2.215	-3.0	0.007
54.000	-0.436	-0.230	-0.981	2.249	9.0	0.023
49.000	-0.291	-0.323	-0.655	2.249	-1.0	0.013
56.000	-0.183	-0.273	-0.410	2.240	-4.0	0.003
57.000	-0.219	-0.299	-0.491	2.240	-3.0	0.005
58.000	-0.205	-0.301	-0.481	2.349	-4.0	0.002
60.000	-0.251	-0.314	-0.589	2.349	-3.0	0.015
62.000	-0.646	-0.334	-1.449	2.243	10.0	0.028
69.000	-0.292	-0.308	-0.656	2.243	-1.0	0.010
63.000	-0.647	-0.293	-1.393	2.152	13.0	0.026
70.000	-0.312	-0.299	-0.671	2.152	1.0	0.015
64.000	-0.704	-0.261	-1.473	2.094	18.0	0.032
71.000	-0.295	-0.312	-0.618	2.094	-1.0	0.023
65.000	-0.633	-0.230	-1.346	2.126	18.0	0.057
72.000	-0.299	-0.319	-0.637	2.126	-1.0	0.006
66.000	-0.526	-0.207	-1.148	2.184	16.0	0.021
73.000	-0.270	-0.333	-0.590	2.184	-2.0	0.009

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ORIENTATION 0.135000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.587	-0.869	-1.258	2.145	-4.0	0.015
10.000	-0.748	-0.895	-1.605	2.145	-2.0	0.027
2.000	-0.526	-0.736	-1.192	2.268	-3.0	0.021
11.000	-0.574	-0.658	-1.302	2.268	-2.0	0.040
3.000	-0.597	-0.859	-1.264	2.115	-4.0	0.009
12.000	-0.617	-0.706	-1.305	2.115	-2.0	0.012
17.000	-0.645	-0.613	-1.441	2.233	1.0	0.030
13.000	-0.677	-0.870	-1.512	2.233	-3.0	0.020
18.000	-0.778	-0.768	-1.731	2.224	1.0	0.028
14.000	-0.667	-0.557	-1.482	2.224	2.0	0.020
19.000	-0.810	-0.788	-1.761	2.175	1.0	0.040
15.000	-0.756	-0.920	-1.645	2.175	-2.0	0.072
37.000	-0.556	-0.851	-1.239	2.230	-4.0	0.017
16.000	-0.580	-0.731	-1.293	2.230	-3.0	0.017
38.000	-0.621	-0.833	-1.293	2.081	-3.0	0.025
34.000	-0.557	-0.757	-1.159	2.081	-3.0	0.014
39.000	-0.589	-0.827	-1.281	2.176	-3.0	0.010
36.000	-0.858	-0.933	-1.867	2.176	-1.0	0.060
50.000	-0.710	-0.848	-1.538	2.166	-2.0	0.025
35.000	-0.972	-1.037	-2.104	2.166	-1.0	0.023
51.000	-0.800	-0.824	-1.769	2.211	-1.0	0.047
47.000	-0.636	-0.833	-1.407	2.211	-3.0	0.023
52.000	-0.714	-0.876	-1.555	2.178	-2.0	0.032
48.000	-0.521	-0.779	-1.134	2.178	-4.0	0.006
54.000	-0.579	-0.812	-1.238	2.138	-3.0	0.011
49.000	-0.588	-0.754	-1.257	2.138	-3.0	0.020
56.000	-0.459	-0.790	-1.081	2.356	-5.0	0.010
57.000	-0.459	-0.733	-1.082	2.356	-4.0	0.012
58.000	-0.426	-0.641	-0.971	2.279	-4.0	0.014
60.000	-0.624	-0.755	-1.422	2.279	-2.0	0.027
62.000	-0.667	-0.823	-1.433	2.148	-2.0	0.051
69.000	-0.609	-0.798	-1.309	2.148	-3.0	0.019
63.000	-0.686	-0.820	-1.463	2.132	-2.0	0.029
70.000	-0.540	-0.775	-1.151	2.132	-4.0	0.008
64.000	-0.735	-0.831	-1.551	2.109	-2.0	0.037
71.000	-0.577	-0.800	-1.217	2.109	-3.0	0.011
65.000	-0.597	-0.819	-1.432	2.398	-3.0	0.018
72.000	-0.519	-0.779	-1.246	2.398	-4.0	0.067
66.000	-0.667	-0.817	-1.461	2.190	-2.0	0.024
73.000	-0.557	-0.773	-1.221	2.190	-3.0	0.012

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ORIENTATION 0.165000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.543	-0.534	-1.155	2.126	1.0	0.026
10.000	-0.642	-0.678	-1.365	2.126	-1.0	0.021
2.000	-0.506	-0.507	-1.132	2.238	-1.0	0.021
11.000	-0.657	-0.587	-1.470	2.238	2.0	0.032
3.000	-0.719	-0.542	-1.482	2.060	4.0	0.083
12.000	-0.716	-0.615	-1.475	2.060	2.0	0.016
17.000	-0.991	-0.886	-2.077	2.097	2.0	0.040
13.000	-0.611	-0.667	-1.280	2.097	-1.0	0.047
18.000	-0.859	-0.859	-1.934	2.252	-1.0	0.066
14.000	-0.720	-0.654	-1.622	2.252	2.0	0.043
19.000	-0.923	-0.883	-2.040	2.211	1.0	0.037
15.000	-0.467	-0.662	-1.032	2.211	-3.0	0.009
37.000	-0.466	-0.612	-1.083	2.322	-3.0	0.022
16.000	-0.946	-0.939	-2.196	2.322	1.0	0.059
38.000	-0.450	-0.625	-1.047	2.329	-3.0	0.023
34.000	-0.463	-0.611	-1.079	2.329	-3.0	0.022
39.000	-0.454	-0.592	-1.032	2.271	-3.0	0.016
36.000	-0.466	-0.693	-1.058	2.271	-4.0	0.007
50.000	-0.449	-0.652	-0.974	2.169	-4.0	0.007
35.000	-1.228	-1.115	-2.664	2.169	2.0	0.047
51.000	-0.463	-0.589	-1.019	2.200	-3.0	0.012
47.000	-0.942	-0.924	-2.073	2.200	1.0	0.035
52.000	-0.584	-0.645	-1.272	2.179	-1.0	0.042
48.000	-0.919	-0.791	-2.003	2.179	2.0	0.048
54.000	-0.420	-0.571	-0.946	2.253	-3.0	0.012
49.000	-0.727	-0.817	-1.637	2.253	-2.0	0.013
56.000	-0.808	-0.843	-1.772	2.194	-1.0	0.053
57.000	-0.903	-0.763	-1.980	2.194	2.0	0.045
58.000	-0.800	-0.688	-1.771	2.214	2.0	0.113
60.000	-0.873	-0.834	-1.933	2.214	1.0	0.054
62.000	-0.431	-0.583	-0.937	2.174	-3.0	0.012
69.000	-0.951	-0.845	-2.067	2.174	2.0	0.028
63.000	-0.438	-0.579	-0.995	2.270	-3.0	0.015
70.000	-0.840	-0.806	-1.906	2.270	1.0	0.033
64.000	-0.469	-0.584	-1.001	2.136	-2.0	0.031
71.000	-0.777	-0.798	-1.659	2.136	-1.0	0.023
65.000	-0.463	-0.578	-0.968	2.092	-2.0	0.019
72.000	-0.796	-0.777	-1.665	2.092	1.0	0.034
66.000	-0.458	-0.610	-1.008	2.198	-3.0	0.010
73.000	-0.804	-0.792	-1.767	2.198	1.0	0.069

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ORIENTATION 0.180000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.456	-0.517	-1.071	2.350	-2.0	0.022
10.000	-0.570	-0.725	-1.338	2.350	-3.0	0.023
2.000	-0.776	-0.622	-1.710	2.204	3.0	0.039
11.000	-0.741	-0.565	-1.633	2.204	4.0	0.028
3.000	-0.673	-0.629	-1.578	2.346	1.0	0.034
12.000	-0.786	-0.639	-1.843	2.346	3.0	0.021
17.000	-0.949	-0.841	-2.156	2.271	2.0	0.031
13.000	-0.577	-0.724	-1.311	2.271	-3.0	0.025
18.000	-1.033	-1.120	-2.192	2.123	-1.0	0.023
14.000	-0.770	-0.743	-1.635	2.123	1.0	0.013
19.000	-1.041	-1.075	-2.356	2.264	-1.0	0.030
15.000	-0.524	-0.725	-1.186	2.264	-3.0	0.014
37.000	-0.514	-0.652	-1.187	2.308	-3.0	0.025
16.000	-1.150	-1.289	-2.653	2.308	-2.0	0.040
38.000	-0.593	-0.654	-1.333	2.249	-1.0	0.015
34.000	-0.420	-0.616	-0.944	2.249	-4.0	0.012
39.000	-0.799	-0.664	-1.780	2.229	3.0	0.033
36.000	-0.520	-0.746	-1.159	2.229	-4.0	0.023
50.000	-0.423	-0.667	-1.001	2.366	-4.0	0.011
35.000	-0.984	-0.998	-2.329	2.366	-1.0	0.036
51.000	-0.533	-0.630	-1.185	2.224	-2.0	0.017
47.000	-0.859	-0.843	-1.910	2.224	1.0	0.029
52.000	-0.540	-0.636	-1.191	2.206	-2.0	0.022
48.000	-1.204	-1.258	-2.656	2.206	-1.0	0.026
54.000	-0.712	-0.649	-1.635	2.295	1.0	0.067
49.000	-1.128	-1.172	-2.589	2.295	-1.0	0.051
56.000	-0.554	-0.633	-1.216	2.194	-2.0	0.022
57.000	-0.954	-1.055	-2.093	2.194	-1.0	0.017
58.000	-1.384	-1.316	-3.235	2.337	1.0	0.051
60.000	-0.978	-1.151	-2.286	2.337	-2.0	0.022
62.000	-0.480	-0.640	-1.119	2.333	-3.0	0.017
69.000	-0.804	-0.687	-1.876	2.333	2.0	0.033
63.000	-0.520	-0.628	-1.143	2.197	-2.0	0.024
70.000	-0.699	-0.719	-1.537	2.197	-1.0	0.018
64.000	-0.494	-0.623	-1.137	2.299	-3.0	0.017
71.000	-0.725	-0.784	-1.666	2.299	-1.0	0.026
65.000	-0.524	-0.625	-1.194	2.281	-2.0	0.025
72.000	-0.795	-0.860	-1.814	2.281	-1.0	0.030
66.000	-0.620	-0.644	-1.378	2.223	-1.0	0.058
73.000	-0.968	-0.994	-2.152	2.223	-1.0	0.067

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ORIENTATION 0.195000E+03

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.604	-0.594	-1.412	2.338	1.0	0.023
10.000	-0.493	-0.720	-1.152	2.338	-4.0	0.020
2.000	-0.552	-0.596	-1.259	2.280	-1.0	0.015
11.000	-0.530	-0.069	-1.208	2.280	67.0	0.068
3.000	-0.604	-0.583	-1.417	2.345	1.0	0.061
12.000	-0.532	-0.333	-1.247	2.345	6.0	0.026
17.000	-0.504	-0.432	-1.124	2.229	2.0	0.023
13.000	-0.485	-0.695	-1.080	2.229	-4.0	0.011
18.000	-0.773	-0.605	-1.755	2.271	3.0	0.072
14.000	-0.610	-0.662	-1.385	2.271	-1.0	0.015
19.000	-0.695	-0.467	-1.609	2.316	5.0	0.036
15.000	-0.462	-0.693	-1.070	2.316	-4.0	0.015
37.000	-0.560	-0.653	-1.223	2.183	-2.0	0.044
16.000	-1.328	-1.115	-2.900	2.183	2.0	0.094
38.000	-0.444	-0.617	-0.993	2.235	-3.0	0.008
34.000	-0.385	-0.567	-0.860	2.235	-4.0	0.013
39.000	-0.479	-0.600	-1.052	2.196	-3.0	0.020
36.000	-0.466	-0.678	-1.024	2.196	-4.0	0.010
50.000	-0.427	-0.652	-0.994	2.328	-4.0	0.009
35.000	-0.729	-0.769	-1.698	2.328	-1.0	0.023
51.000	-0.427	-0.595	-0.930	2.178	-3.0	0.012
47.000	-0.469	-0.453	-1.022	2.178	1.0	0.027
52.000	-0.402	-0.600	-0.922	2.292	-4.0	0.013
48.000	-0.720	-0.465	-1.649	2.292	6.0	0.018
54.000	-0.588	-0.599	-1.374	2.334	-1.0	0.061
49.000	-0.726	-0.616	-1.695	2.334	2.0	0.025
56.000	-0.337	-0.504	-0.713	2.118	-4.0	0.005
57.000	-0.515	-0.258	-1.091	2.118	10.0	0.030
58.000	-1.293	-1.412	-3.031	2.344	-1.0	0.066
60.000	-0.759	-0.571	-1.780	2.344	4.0	0.058
62.000	-0.469	-0.626	-1.015	2.166	-3.0	0.016
69.000	-0.359	-0.454	-0.778	2.166	-3.0	0.012
63.000	-0.488	-0.623	-1.156	2.368	-3.0	0.048
70.000	-0.332	-0.371	-0.786	2.368	-2.0	0.011
64.000	-0.468	-0.616	-1.079	2.308	-3.0	0.014
71.000	-0.385	-0.344	-0.889	2.308	2.0	0.037
65.000	-0.444	-0.607	-1.071	2.410	-3.0	0.031
72.000	-0.370	-0.313	-0.893	2.410	2.0	0.019
66.000	-0.430	-0.594	-1.011	2.350	-3.0	0.024
73.000	-0.421	-0.273	-0.989	2.350	6.0	0.022

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ORIENTATION 0.225000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.541	-0.756	-1.199	2.217	-3.0	0.015
10.000	-0.698	-0.870	-1.547	2.217	-2.0	0.036
2.000	-0.449	-0.686	-1.049	2.337	-4.0	0.020
11.000	-0.505	-0.096	-1.181	2.337	43.0	0.052
3.000	-0.518	-0.674	-1.135	2.190	-3.0	0.018
12.000	-0.275	-0.036	-0.603	2.190	67.0	0.032
17.000	-0.184	-0.162	-0.431	2.341	2.0	0.008
13.000	-0.635	-0.856	-1.487	2.341	-3.0	0.030
18.000	0.444	0.343	0.966	2.176	3.0	0.020
14.000	-0.535	-0.525	-1.165	2.176	1.0	0.020
19.000	0.397	0.276	0.873	2.198	5.0	0.017
15.000	-0.654	-0.879	-1.437	2.198	-3.0	0.016
37.000	-0.508	-0.776	-1.171	2.304	-4.0	0.021
16.000	-0.888	-0.839	-2.046	2.304	1.0	0.044
38.000	-0.412	-0.719	-0.995	2.417	-5.0	0.013
34.000	-0.500	-0.746	-1.208	2.417	-4.0	0.029
39.000	-0.416	-0.710	-1.010	2.265	-4.0	0.012
36.000	-0.744	-0.888	-1.685	2.265	-2.0	0.026
50.000	-0.652	-0.803	-1.413	2.166	-2.0	0.030
35.000	-0.559	-0.641	-1.212	2.166	-2.0	0.027
51.000	-0.548	-0.726	-1.195	2.181	-3.0	0.025
47.000	-0.233	-0.144	-0.507	2.181	7.0	0.011
52.000	-0.499	-0.735	-1.060	2.122	-4.0	0.011
48.000	0.505	0.462	1.071	2.122	1.0	0.017
54.000	-0.431	-0.716	-1.059	2.457	-4.0	0.030
49.000	0.472	0.443	1.160	2.457	1.0	0.017
56.000	-0.250	-0.364	-0.594	2.380	-4.0	0.008
57.000	0.427	0.433	1.016	2.380	-1.0	0.013
58.000	0.659	0.771	1.497	2.273	-2.0	0.055
60.000	0.431	0.363	0.980	2.273	2.0	0.030
62.000	-0.599	-0.759	-1.322	2.209	-3.0	0.056
69.000	-0.243	-0.212	-0.537	2.209	2.0	0.020
63.000	-0.583	-0.760	-1.287	2.208	-3.0	0.032
70.000	-0.198	-0.008	-0.438	2.208	0.229000E+03	0.025
64.000	-0.569	-0.754	-1.294	2.274	-3.0	0.028
71.000	0.255	0.104	0.580	2.274	15.0	0.009
65.000	-0.535	-0.737	-1.287	2.406	-3.0	0.021
72.000	0.306	0.193	0.736	2.406	6.0	0.019
66.000	-0.609	-0.743	-1.360	2.234	-2.0	0.066
73.000	0.391	0.296	0.874	2.234	4.0	0.012

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ORIENTATION 0.270000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.562	-0.388	-1.220	2.170	5.0	0.027
10.000	-0.868	-1.056	-1.883	2.170	-2.0	0.037
2.000	-0.882	-0.887	-1.844	2.090	-1.0	0.028
11.000	-0.840	-0.988	-1.755	2.090	-2.0	0.034
3.000	-0.778	-0.717	-1.739	2.235	1.0	0.035
12.000	-0.763	-1.015	-1.705	2.235	-3.0	0.026
17.000	0.430	0.288	0.981	2.280	5.0	0.021
13.000	-0.834	-1.106	-1.901	2.280	-3.0	0.026
18.000	0.613	0.609	1.309	2.134	1.0	0.035
14.000	-0.583	-0.613	-1.244	2.134	-1.0	0.018
19.000	0.605	0.515	1.287	2.127	2.0	0.034
15.000	-0.534	-0.438	-1.136	2.127	3.0	0.017
37.000	-0.593	-0.501	-1.306	2.201	2.0	0.027
16.000	-0.778	-0.984	-1.713	2.201	-3.0	0.026
38.000	-0.734	-0.944	-1.559	2.124	-3.0	0.015
34.000	-0.649	-0.899	-1.379	2.124	-3.0	0.012
39.000	-0.776	-0.913	-1.730	2.230	-2.0	0.024
36.000	-0.549	-0.429	-1.225	2.230	3.0	0.039
50.000	-0.519	-0.362	-1.108	2.133	5.0	0.027
35.000	-0.714	-0.642	-1.524	2.133	2.0	0.041
51.000	-0.778	-0.905	-1.777	2.285	-2.0	0.053
47.000	0.558	0.516	1.275	2.285	1.0	0.033
52.000	-0.765	-1.019	-1.628	2.128	-3.0	0.022
48.000	0.787	0.853	1.675	2.128	-1.0	0.021
54.000	-0.801	-0.873	-1.715	2.140	-1.0	0.026
49.000	0.744	0.800	1.591	2.140	-1.0	0.048
56.000	0.285	0.214	0.617	2.163	4.0	0.008
57.000	0.749	0.866	1.620	2.163	-2.0	0.030
58.000	0.455	0.515	1.024	2.248	-2.0	0.015
60.000	0.647	0.733	1.455	2.248	-2.0	0.018
62.000	-0.545	-0.426	-1.249	2.293	3.0	0.029
69.000	0.533	0.458	1.222	2.293	2.0	0.034
63.000	-0.591	-0.478	-1.250	2.115	3.0	0.023
70.000	0.680	0.689	1.439	2.115	-1.0	0.024
64.000	-0.602	-0.543	-1.342	2.229	2.0	0.010
71.000	0.709	0.796	1.581	2.229	-2.0	0.018
65.000	-0.730	-0.613	-1.620	2.221	2.0	0.035
72.000	0.714	0.837	1.585	2.221	-2.0	0.028
66.000	-0.701	-0.697	-1.566	2.233	1.0	0.018
73.000	0.762	0.860	1.702	2.233	-2.0	0.037

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ORIENTATION 0.315000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.389	0.342	0.869	2.236	2.0	0.022
10.000	0.210	0.032	0.470	2.236	56.0	0.016
2.000	0.500	0.507	1.114	2.227	-1.0	0.023
11.000	-0.614	-0.816	-1.368	2.227	-3.0	0.020
3.000	0.438	0.468	0.961	2.194	-1.0	0.017
12.000	-0.608	-0.825	-1.334	2.194	-3.0	0.008
17.000	0.412	0.157	0.963	2.339	17.0	0.017
13.000	0.338	-0.007	0.790	2.339	-0.507000E+03	0.313
18.000	0.312	0.121	0.661	2.116	16.0	0.024
14.000	-0.588	-0.814	-1.245	2.116	-3.0	0.014
19.000	0.243	0.106	0.515	2.117	13.0	0.009
15.000	-0.611	-0.564	-1.293	2.117	1.0	0.045
37.000	0.426	0.452	0.953	2.236	-1.0	0.016
16.000	-0.609	-0.854	-1.362	2.236	-3.0	0.021
38.000	0.514	0.604	1.096	2.135	-2.0	0.022
34.000	-0.709	-0.312	-1.514	2.135	13.0	0.077
39.000	0.583	0.604	1.221	2.095	-1.0	0.012
36.000	-0.579	-0.667	-1.214	2.095	-2.0	0.014
50.000	0.331	0.318	0.739	2.230	1.0	0.014
35.000	-0.586	-0.825	-1.308	2.230	-3.0	0.019
51.000	0.430	0.473	0.940	2.189	-1.0	0.012
47.000	0.561	0.406	1.227	2.189	4.0	0.024
52.000	0.638	0.673	1.348	2.113	-1.0	0.030
48.000	0.368	0.211	0.779	2.113	8.0	0.034
54.000	0.529	0.555	1.179	2.227	-1.0	0.024
49.000	0.348	0.203	0.775	2.227	8.0	0.025
56.000	0.645	0.517	1.354	2.099	3.0	0.034
57.000	0.446	0.311	0.937	2.099	5.0	0.017
58.000	-0.170	-0.139	-0.367	2.157	3.0	0.006
60.000	0.343	0.210	0.739	2.157	7.0	0.022
62.000	0.455	0.439	0.968	2.127	1.0	0.014
69.000	0.641	0.480	1.363	2.127	4.0	0.025
63.000	0.486	0.469	1.030	2.122	1.0	0.014
70.000	0.614	0.557	1.303	2.122	2.0	0.033
64.000	0.473	0.479	1.018	2.153	-1.0	0.018
71.000	0.581	0.509	1.250	2.153	2.0	0.044
65.000	0.439	0.525	1.037	2.360	-2.0	0.010
72.000	0.538	0.482	1.269	2.360	2.0	0.025
66.000	0.569	0.520	1.216	2.138	1.0	0.016
73.000	0.452	0.387	0.968	2.138	2.0	0.029

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ORIENTATION 0.345000E+03

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	0.541	0.543	1.195	2.209	-1.0	0.024
10.000	-0.713	-0.274	-1.575	2.209	17.0	0.055
2.000	0.560	0.590	1.228	2.194	-1.0	0.014
11.000	-0.491	-0.665	-1.076	2.194	-3.0	0.011
3.000	0.493	0.505	1.076	2.183	-1.0	0.024
12.000	-0.474	-0.658	-1.034	2.183	-3.0	0.018
17.000	-1.089	-1.030	-2.324	2.135	1.0	0.107
13.000	-0.703	-0.453	-1.501	2.135	6.0	0.035
18.000	-0.832	-0.876	-1.828	2.198	-1.0	0.032
14.000	-0.460	-0.670	-1.012	2.198	-4.0	0.010
19.000	-0.897	-0.754	-1.872	2.088	2.0	0.046
15.000	-0.747	-0.683	-1.560	2.088	1.0	0.029
37.000	0.694	0.810	1.523	2.193	-2.0	0.031
16.000	-0.520	-0.701	-1.141	2.193	-3.0	0.015
38.000	0.682	0.809	1.496	2.193	-2.0	0.032
34.000	-0.753	-0.994	-1.651	2.193	-3.0	0.031
39.000	0.762	0.774	1.572	2.062	-1.0	0.038
36.000	-0.793	-0.817	-1.635	2.062	-1.0	0.039
50.000	0.556	0.643	1.206	2.171	-2.0	0.029
35.000	-0.504	-0.710	-1.094	2.171	-3.0	0.012
51.000	0.646	0.718	1.450	2.246	-2.0	0.013
47.000	-0.987	-1.238	-2.217	2.246	-3.0	0.028
52.000	0.574	0.552	1.230	2.142	1.0	0.024
48.000	-0.918	-0.725	-1.966	2.142	3.0	0.046
54.000	0.625	0.724	1.447	2.316	-2.0	0.013
49.000	-0.932	-1.003	-2.159	2.316	-1.0	0.055
56.000	-1.313	-1.724	-3.041	2.316	-3.0	0.048
57.000	-0.641	-0.408	-1.484	2.316	6.0	0.047
58.000	-0.284	-0.397	-0.611	2.260	-3.0	0.008
60.000	-0.879	-1.029	-1.985	2.260	-2.0	0.025
62.000	0.732	0.838	1.617	2.209	-2.0	0.020
69.000	-1.167	-1.405	-2.577	2.209	-2.0	0.042
63.000	0.770	0.842	1.677	2.177	-1.0	0.017
70.000	-1.373	-1.431	-2.989	2.177	-1.0	0.043
64.000	0.717	0.834	1.514	2.112	-2.0	0.011
71.000	-1.517	-1.488	-3.203	2.112	1.0	0.065
65.000	0.738	0.845	1.603	2.172	-2.0	0.017
72.000	-1.375	-1.486	-2.987	2.172	-1.0	0.095
66.000	0.741	0.856	1.648	2.223	-2.0	0.020
73.000	-1.259	-1.314	-2.798	2.223	-1.0	0.052

Coefficients de pression C_q et C_p
mesurés sur la forme 151

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

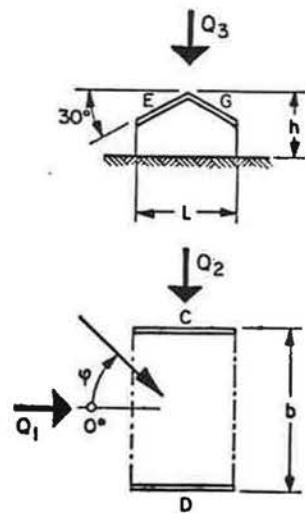


Tabelle 4.6.19

$h : b : l = 1.35 : 2 : 1$

Toiture à 30°

COEFFICIENTS DE PRESSION

φ	c_{qe}						c_{qi}					
	surface d'application						surface d'application					
	A	B	C	D	E	G	A	B	C	D	E	G
0°	-	-	-0,53	-0,45	0,33	-0,38	-	-	-0,33	-0,36	-0,45	-0,39
45°	-	-	0,44	-0,35	-0,02	-0,60	-	-	-0,39	0,43	-0,26	-0,05
60°	-	-	0,53	-0,37	-0,22	-0,52	-	-	-0,41	0,45	-0,32	-0,06
	$\hat{c}_{qe} =$						Coefficient de frottement $c_t = 0$					

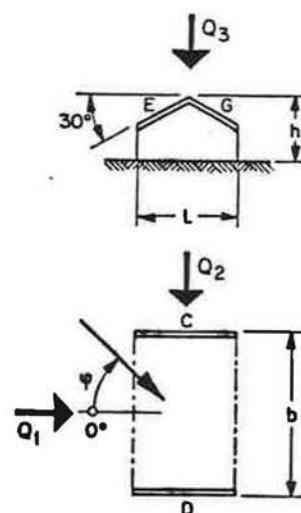
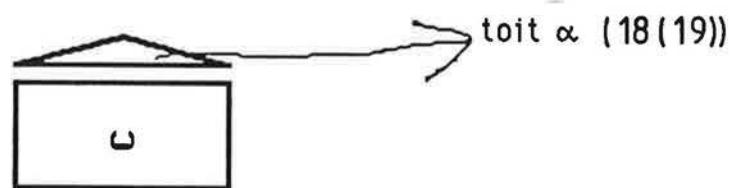
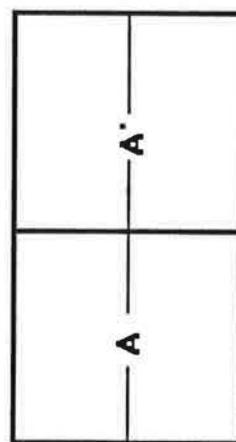
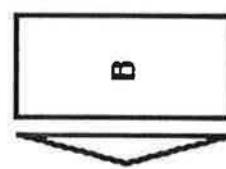


Tabelle 4.6.19

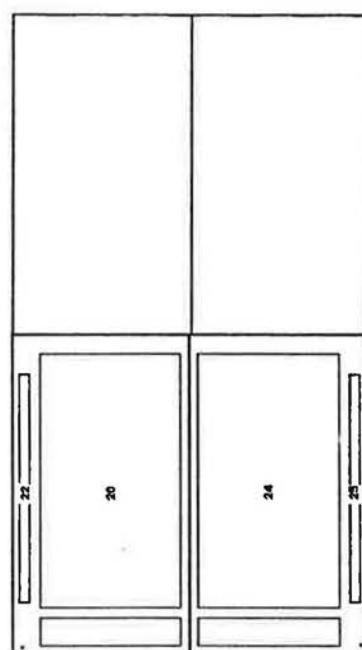
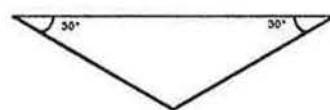
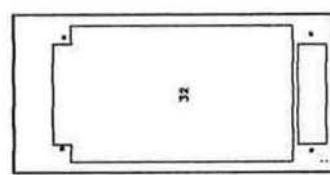
$h : b : l = 1.35 : 2 : 1$

Toiture à 30°

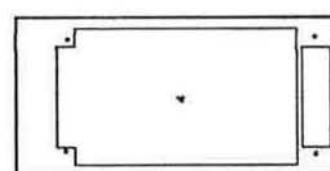
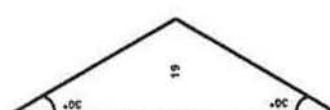
COEFFICIENTS DE PRESSION												
	c_{pe}						c_{pi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°	-	-	-0,40	-0,33	0,20	-0,47	-	-	-0,28	-0,31	-0,41	-0,39
45°	-	-	0,31	-0,37	-0,06	-0,65	-	-	-0,38	0,28	-0,17	-0,05
60°	-	-	0,45	-0,41	-0,13	-0,51	-	-	-0,42	0,28	-0,27	-0,06
	$\hat{c}_{pe} =$						Coefficient de frottement $c_t = 0$					



K151

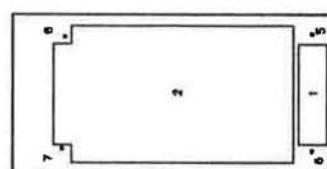
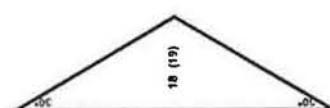
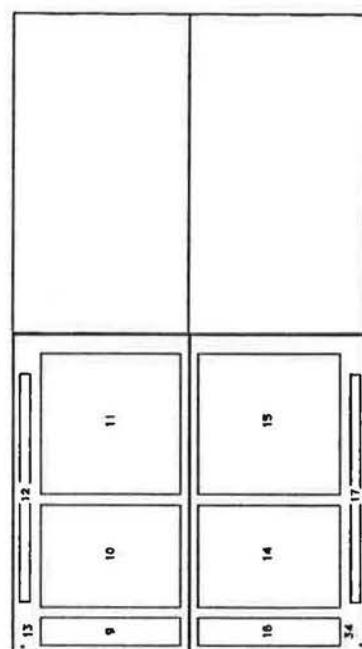
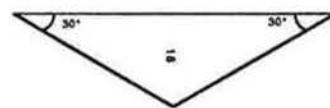
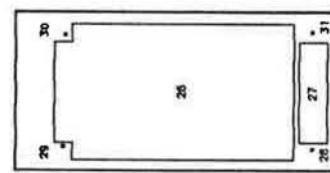


65



15

MODELE N° 15 Variante 151
Numérotation des prises de pression
Surfaces intérieures



6

MODELE N° 15 Variante 151
Numérotation des prises de pression
Surfaces extérieures

ORIENTATION 0.0				
PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.701	0.993	1.522	0.123
PRANDT B	0.708	1.001	1.537	0.125
8	-0.389	-0.424	-0.855	0.073
1	-1.035	-0.812	-2.276	0.210
13	-0.587	-0.507	-1.347	0.097
2	-0.350	-0.271	-0.804	0.075
10	-0.390	-0.473	-0.913	0.084
4	-0.331	-0.276	-0.776	0.096
9	-0.400	-0.474	-0.961	0.089
5	-0.938	-0.947	-2.250	0.212
7	-0.294	-0.353	-0.651	0.060
6	-1.309	-0.786	-2.903	0.279
19	-0.427	-0.322	-0.970	0.118
18	-0.547	-0.332	-1.242	0.144
22	-0.271	-0.235	-0.643	0.071
16	0.241	0.066	0.571	0.101
12	-0.464	-0.420	-1.038	0.071
34	-0.405	-0.141	-0.905	0.151
11	-0.345	-0.413	-0.754	0.060
14	0.315	0.180	0.686	0.111
20	-0.390	-0.299	-0.866	0.110
24	-0.447	-0.410	-0.992	0.106
32	-0.279	-0.202	-0.638	0.083
17	0.592	0.354	1.354	0.195
31	-1.589	-0.745	-3.558	0.258
15	0.343	0.208	0.769	0.105
27	-1.001	-0.751	-2.327	0.196
25	-0.466	-0.441	-1.084	0.105
29	-0.237	-0.384	-0.506	0.026
28	-0.798	-0.795	-1.706	0.160
30	-0.305	-0.287	-0.676	0.054
26	-0.445	-0.329	-0.985	0.101

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ORIENTATION 45.0

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FRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.619	0.987	1.415	0.126
PRANDT B	0.621	0.990	1.420	0.127
8	-0.262	-0.193	-0.584	0.081
1	0.677	0.543	1.510	0.168
13	-1.149	-0.683	-2.621	0.197
2	0.436	0.313	0.994	0.119
10	-0.594	-0.647	-1.443	0.124
4	-0.354	-0.441	-0.861	0.088
9	-0.661	-0.604	-1.452	0.116
5	0.801	0.624	1.759	0.209
7	-0.216	-0.209	-0.477	0.056
6	0.518	0.360	1.144	0.139
19	-0.332	-0.378	-0.752	0.076
18	0.512	0.415	1.159	0.153
0	1.331	2.760	2.831	0.013
0	1.388	2.756	2.953	0.012
22	-0.356	-0.338	-0.840	0.092
16	-0.664	-0.149	-1.565	0.233
12	-0.768	-0.543	-1.750	0.154
34	-0.986	-0.030	-2.246	0.246
11	-0.648	-0.677	-1.421	0.129
14	0.388	0.005	0.851	0.073
20	-0.280	-0.237	-0.687	0.092
24	-0.344	-0.363	-0.844	0.094
32	0.426	0.284	0.969	0.106
17	0.331	0.091	0.753	0.118
31	-0.403	-0.353	-0.875	0.066
15	-0.138	-0.030	-0.299	0.067
27	-0.317	-0.347	-0.710	0.059
25	-0.548	-0.513	-1.226	0.130
29	-0.198	-0.308	-0.444	0.025
28	-0.289	-0.353	-0.649	0.049
30	-0.373	-0.347	-0.788	0.066
26	-0.345	-0.376	-0.728	0.056

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 60.0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.592	0.983	1.437	0.126
PRANDT B	0.594	0.985	1.443	0.127
8	-0.218	-0.007	-0.484	0.102
1	0.613	0.492	1.363	0.161
13	-0.917	-0.616	-2.095	0.184
2	0.525	0.447	1.200	0.142
10	-0.541	-0.529	-1.204	0.107
4	-0.409	-0.415	-0.910	0.086
9	-0.640	-0.532	-1.505	0.111
5	0.665	0.483	1.563	0.191
7	-0.155	-0.080	-0.363	0.063
6	0.417	0.193	0.976	0.121
19	-0.355	-0.386	-0.804	0.073
18	0.639	0.541	1.446	0.180
0	1.152	2.743	2.797	0.013
0	1.218	2.740	2.956	0.013
22	-0.371	-0.407	-0.812	0.075
16	-0.832	-0.698	-1.822	0.221
12	-0.617	-0.472	-1.436	0.106
34	-1.270	-0.838	-2.955	0.374
11	-0.514	-0.498	-1.157	0.108
14	-0.394	-0.155	-0.886	0.100
20	-0.339	-0.372	-0.789	0.085
24	-0.398	-0.390	-0.927	0.096
32	0.454	0.283	1.060	0.110
17	-0.221	-0.039	-0.516	0.075
31	-0.438	-0.356	-0.999	0.086
15	-0.166	-0.106	-0.378	0.049
27	-0.358	-0.352	-0.845	0.070
25	-0.614	-0.437	-1.450	0.117
29	-0.183	-0.322	-0.436	0.024
28	-0.308	-0.357	-0.736	0.055
30	-0.377	-0.348	-0.872	0.074
26	-0.308	-0.374	-0.711	0.059

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 90.0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.615	0.981	1.463	0.124
PRANDT B	0.618	0.981	1.471	0.124
8	0.455	0.220	1.091	0.150
1	0.433	0.232	1.039	0.116
13	-1.143	-0.869	-2.659	0.251
2	0.545	0.492	1.268	0.150
10	-0.550	-0.587	-1.221	0.120
4	-0.299	-0.318	-0.663	0.062
9	-0.738	-0.740	-1.710	0.168
5	0.422	0.202	0.979	0.133
7	0.327	0.074	0.763	0.098
6	0.263	0.009	0.613	0.080
19	-0.282	-0.309	-0.641	0.059
18	0.730	0.530	1.660	0.181
0	1.347	2.754	2.831	0.016
0	1.413	2.736	2.970	0.013
22	-0.448	-0.400	-1.034	0.085
16	-0.738	-0.664	-1.705	0.140
12	-0.492	-0.385	-1.073	0.101
34	-0.993	-0.703	-2.167	0.182
11	-0.433	-0.304	-0.908	0.078
14	-0.660	-0.597	-1.382	0.128
20	-0.354	-0.360	-0.746	0.066
24	-0.344	-0.363	-0.725	0.067
32	-0.266	-0.196	-0.574	0.071
17	-0.520	-0.439	-1.123	0.115
31	-0.692	-0.240	-1.585	0.091
15	-0.413	-0.349	-0.946	0.099
27	-0.418	-0.236	-0.970	0.070
25	-0.419	-0.407	-0.973	0.083
29	0.059	0.027	0.133	0.027
28	-0.284	-0.218	-0.638	0.050
30	-0.832	-0.219	-1.810	0.092
26	-0.218	-0.216	-0.474	0.047

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0,120000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.662	0.987	1.433	0.132
PRANDT B	0.657	0.979	1.424	0.133
8	0.618	0.412	1.469	0.186
1	0.229	0.019	0.545	0.075
13	-1.389	-0.555	-2.924	0.441
2	0.498	0.375	1.049	0.111
10	-0.279	-0.082	-0.675	0.072
4	-0.324	-0.343	-0.783	0.070
9	-0.642	-0.497	-1.443	0.188
5	-0.225	-0.051	-0.505	0.096
7	0.462	0.218	1.013	0.126
6	-0.171	-0.125	-0.374	0.060
19	-0.364	-0.362	-0.830	0.075
18	0.525	0.356	1.198	0.129
0	1.274	2.770	2.829	0.013
0	1.339	2.745	2.974	0.011
22	-0.501	-0.405	-1.096	0.107
16	-0.565	-0.505	-1.236	0.100
12	-0.292	-0.018	-0.688	0.102
34	-0.701	-0.525	-1.650	0.131
11	-0.132	-0.087	-0.317	0.054
14	-0.500	-0.503	-1.200	0.102
20	-0.315	-0.342	-0.787	0.089
24	-0.288	-0.297	-0.720	0.085
32	0.280	0.120	0.627	0.085
17	-0.738	-0.461	-1.650	0.112
31	-0.435	-0.361	-0.963	0.076
15	-0.560	-0.502	-1.239	0.122
27	-0.431	-0.430	-0.918	0.074
25	-0.353	-0.351	-0.752	0.071
29	0.127	0.127	0.300	0.037
28	-0.456	-0.442	-1.083	0.068
30	-0.480	-0.383	-1.014	0.077
26	-0.374	-0.409	-0.791	0.063

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.180000E+03				
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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.659	0.998	1.504	0.127
PRANDT B	0.671	1.007	1.533	0.129
8	-0.762	-0.768	-1.667	0.166
1	-0.320	-0.301	-0.700	0.056
13	-0.530	-0.268	-1.172	0.173
2	-0.532	-0.394	-1.177	0.121
10	0.282	0.085	0.586	0.089
4	-0.295	-0.163	-0.615	0.065
9	-0.165	-0.030	-0.380	0.085
5	-0.446	-0.410	-1.031	0.076
7	-1.113	-0.671	-2.550	0.213
6	-0.338	-0.311	-0.773	0.059
19	-0.371	-0.192	-0.864	0.122
18	-0.576	-0.364	-1.342	0.136
0	1.173	2.814	2.874	0.011
0	1.235	2.803	3.025	0.015
22	-0.402	-0.367	-0.893	0.093
16	-0.472	-0.517	-1.048	0.090
12	0.560	0.283	1.317	0.183
34	-0.531	-0.529	-1.249	0.092
11	0.267	0.170	0.640	0.098
14	-0.405	-0.514	-0.971	0.082
20	-0.352	-0.297	-0.812	0.088
24	-0.300	-0.149	-0.693	0.107
32	-0.355	-0.304	-0.835	0.085
17	-0.439	-0.451	-1.032	0.072
31	-0.279	-0.333	-0.637	0.057
15	-0.356	-0.425	-0.814	0.064
27	-0.252	-0.311	-0.626	0.053
25	-0.248	-0.233	-0.617	0.064
29	0.417	0.682	0.967	0.058
28	-0.313	-0.413	-0.726	0.059
30	-1.720	-0.802	-4.133	0.290
26	-0.389	-0.312	-0.935	0.085

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ORIENTATION 0.135000E+03
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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.631	0.988	1.435	0.129
PRANDT B	0.635	0.985	1.444	0.130
8	0.624	0.495	1.437	0.169
1	-0.167	-0.103	-0.384	0.065
13	-0.875	0.033	-2.048	0.228
2	0.348	0.249	0.815	0.087
10	0.290	0.010	0.628	0.077
4	-0.388	-0.378	-0.841	0.081
9	-0.576	-0.033	-1.245	0.192
5	-0.276	-0.177	-0.597	0.087
7	0.491	0.324	1.038	0.124
6	-0.244	-0.202	-0.516	0.058
19	-0.352	-0.348	-0.790	0.075
18	0.416	0.189	0.934	0.098
0	1.267	2.783	2.851	0.012
0	1.309	2.754	2.947	0.011
22	-0.527	-0.441	-1.176	0.125
16	-0.792	-0.593	-1.766	0.119
12	0.351	0.090	0.826	0.147
34	-0.980	-0.645	-2.304	0.174
11	-0.123	-0.012	-0.281	0.076
14	-0.649	-0.624	-1.489	0.128
20	-0.379	-0.332	-0.851	0.091
24	-0.300	-0.160	-0.672	0.084
32	0.224	0.105	0.497	0.075
17	-0.649	-0.485	-1.440	0.133
31	-0.469	-0.373	-1.090	0.075
15	-0.604	-0.674	-1.405	0.133
27	-0.284	-0.402	-0.766	0.066
25	-0.274	-0.276	-0.739	0.079
29	0.230	0.378	0.557	0.045
28	-0.436	-0.443	-1.059	0.074
30	-0.357	-0.372	-0.864	0.070
26	-0.312	-0.397	-0.755	0.064

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.225000E+03
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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.665	1.002	1.499	0.127
PRANDT B	0.671	1.005	1.512	0.128
8	-0.302	-0.332	-0.704	0.060
1	-0.329	-0.391	-0.767	0.067
13	-0.355	-0.354	-0.800	0.071
2	-0.315	-0.371	-0.711	0.056
10	-0.178	-0.133	-0.399	0.057
4	0.232	0.099	0.520	0.071
9	-0.198	-0.215	-0.453	0.049
5	-0.502	-0.421	-1.152	0.081
7	-0.347	-0.357	-0.819	0.068
6	-0.355	-0.353	-0.837	0.073
19	0.507	0.349	1.128	0.115
18	-0.316	-0.404	-0.704	0.057
0	1.215	2.845	2.925	0.014
0	1.245	2.816	2.999	0.016
22	-0.263	-0.162	-0.598	0.072
16	-0.404	-0.470	-0.920	0.075
12	-0.288	-0.009	-0.651	0.126
34	-0.451	-0.473	-1.020	0.083
11	-0.167	-0.076	-0.374	0.065
14	-0.492	-0.570	-1.098	0.090
20	-0.144	-0.017	-0.343	0.052
24	0.209	0.099	0.497	0.063
32	-0.414	-0.451	-0.904	0.088
17	-0.626	-0.478	-1.367	0.127
31	-0.266	-0.218	-0.628	0.062
15	-0.617	-0.716	-1.459	0.116
27	-0.149	-0.066	-0.338	0.073
25	-0.224	-0.162	-0.510	0.058
29	-0.124	-0.001	-0.270	0.063
28	-0.251	-0.257	-0.547	0.065
30	0.545	0.371	1.255	0.137
26	0.441	0.348	-1.016	0.127

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.240000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.650	1.005	1.496	0.132
PRANDT B	0.646	1.000	1.487	0.133
8	-0.344	-0.347	-0.776	0.063
1	-0.440	-0.413	-0.993	0.070
13	-0.345	-0.352	-0.732	0.069
2	-0.359	-0.400	-0.761	0.059
10	-0.163	-0.175	-0.374	0.044
4	0.223	0.051	0.513	0.075
9	-0.240	-0.252	-0.507	0.043
5	-0.539	-0.421	-1.139	0.078
7	-0.403	-0.361	-0.929	0.081
6	-0.513	-0.367	-1.185	0.079
19	0.479	0.339	1.088	0.122
18	-0.319	-0.399	-0.723	0.056
0	1.197	2.814	2.886	0.012
0	1.243	2.773	2.998	0.003
22	-0.407	-0.325	-0.924	0.110
16	-0.415	-0.437	-0.942	0.078
12	-0.277	-0.038	-0.649	0.082
34	-0.414	-0.409	-0.968	0.074
11	-0.145	-0.124	-0.330	0.048
14	-0.450	-0.501	-1.026	0.096
20	-0.237	-0.145	-0.569	0.078
24	0.150	0.016	0.360	0.071
32	-0.406	-0.467	-0.903	0.084
17	-0.657	-0.402	-1.463	0.104
31	-0.209	-0.078	-0.469	0.068
15	-0.529	-0.495	-1.186	0.111
27	0.322	0.112	0.706	0.098
25	-0.323	-0.257	-0.709	0.078
29	-0.263	-0.454	-0.650	0.042
28	-0.152	-0.063	-0.376	0.078
30	0.508	0.227	1.166	0.123
26	0.588	0.471	1.351	0.147

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.270000E+03				
PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.635	1.002	1.477	0.129
PRANDT B	0.631	0.992	1.470	0.129
8	-0.335	-0.235	-0.789	0.065
1	-0.409	-0.236	-0.964	0.073
13	-0.370	-0.206	-0.826	0.064
2	-0.239	-0.243	-0.533	0.048
10	-0.189	-0.168	-0.451	0.051
4	-0.231	-0.165	-0.549	0.082
9	-0.203	-0.187	-0.474	0.049
5	-0.379	-0.228	-0.886	0.067
7	-0.602	-0.261	-1.382	0.087
6	-0.611	-0.241	-1.403	0.092
19	-0.263	-0.207	-0.616	0.082
18	-0.244	-0.228	-0.573	0.046
0	1.418	2.821	2.879	0.019--
0	1.448	2.775	2.941	0.020
22	-0.407	-0.336	-0.879	0.091
16	-0.212	-0.177	-0.458	0.050
12	-0.362	-0.268	-0.821	0.097
34	-0.275	-0.189	-0.624	0.058
11	-0.271	-0.212	-0.665	0.066
14	-0.195	-0.154	-0.478	0.050
20	-0.255	-0.241	-0.581	0.058
24	-0.315	-0.244	-0.718	0.068
32	-0.318	-0.353	-0.716	0.066
17	-0.297	-0.236	-0.668	0.075
31	0.358	0.054	0.781	0.096
15	-0.229	-0.185	-0.501	0.055
27	0.580	0.327	1.256	0.149
25	-0.421	-0.326	-0.912	0.101
29	-0.184	-0.342	-0.452	0.027
28	0.391	0.191	0.962	0.139
30	0.262	0.033	0.596	0.084
26	0.644	0.472	1.467	0.146

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.300000E+03				
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PRISE	CP .98	CP MOY	CP PIC	CP .RMS
FRANDT A	0.670	1.005	1.495	0.132
FRANDT B	0.665	0.995	1.484	0.132
8	-0.488	-0.470	-1.093	0.077
1	-0.458	-0.414	-1.027	0.078
13	-0.524	-0.444	-1.198	0.101
2	-0.359	-0.441	-0.820	0.067
10	-0.541	-0.585	-1.217	0.117
4	0.457	0.336	1.027	0.118
9	-0.475	-0.507	-1.059	0.091
5	-0.392	-0.416	-0.874	0.071
7	-0.429	-0.406	-0.957	0.082
6	-0.539	-0.407	-1.203	0.094
19	0.476	0.384	1.099	0.131
18	-0.364	-0.449	-0.839	0.064
0	1.267	2.827	2.888	0.016
0	1.281	2.774	2.920	0.010
22	-0.256	-0.197	-0.575	0.066
16	-0.251	-0.265	-0.563	0.050
12	-0.752	-0.384	-1.676	0.120
34	-0.356	-0.362	-0.793	0.070
11	-0.604	-0.597	-1.444	0.152
14	-0.171	-0.160	-0.409	0.053
20	0.213	0.066	0.467	0.075
24	-0.185	-0.056	-0.406	0.074
32	-0.427	-0.454	-1.008	0.089
17	-0.309	-0.029	-0.730	0.113
31	0.461	0.216	1.112	0.136
15	-0.142	-0.110	-0.343	0.057
27	0.640	0.484	1.439	0.165
25	-0.372	-0.232	-0.837	0.097
29	-0.193	-0.314	-0.453	0.025
28	0.604	0.486	1.415	0.196
30	-0.241	-0.135	-0.570	0.065
26	0.437	0.344	1.034	0.109

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.315000E+03
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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.655	1.002	1.471	0.132
PRANDT B	0.650	0.988	1.460	0.132
8	-0.516	-0.453	-1.180	0.087
1	-0.358	-0.391	-0.819	0.070
13	-0.588	-0.499	-1.378	0.094
2	-0.338	-0.422	-0.792	0.064
10	-0.476	-0.579	-1.127	0.086
4	0.376	0.312	0.891	0.102
9	-0.510	-0.478	-1.092	0.071
5	-0.355	-0.380	-0.761	0.068
7	-0.450	-0.379	-1.015	0.076
6	-0.421	-0.388	-0.950	0.077
19	0.387	0.345	0.902	0.106
18	-0.340	-0.419	-0.792	0.064
0	1.283	2.843	2.900	0.016
0	1.320	2.799	2.983	0.009
22	-0.244	-0.158	-0.538	0.063
16	-0.258	-0.200	-0.569	0.058
12	-0.648	-0.555	-1.500	0.163
34	-0.404	-0.331	-0.937	0.075
11	-0.616	-0.737	-1.432	0.113
14	-0.166	-0.083	-0.385	0.071
20	0.200	0.103	0.454	0.065
24	-0.147	-0.011	-0.334	0.061
32	-0.385	-0.385	-0.893	0.089
17	0.303	0.026	0.703	0.158
31	0.502	0.356	1.197	0.127
15	-0.124	-0.024	-0.295	0.079
27	0.575	0.439	1.273	0.133
25	-0.310	-0.153	-0.686	0.084
29	-0.180	-0.335	-0.439	0.025
28	0.563	0.535	1.370	0.165
30	-0.232	-0.228	-0.548	0.060
26	0.338	0.192	0.797	0.081

DUREE DE L'ESSAI: 0.000HEURES,

Coefficients de pression C_q et C_p
mesurés sur la forme 152

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

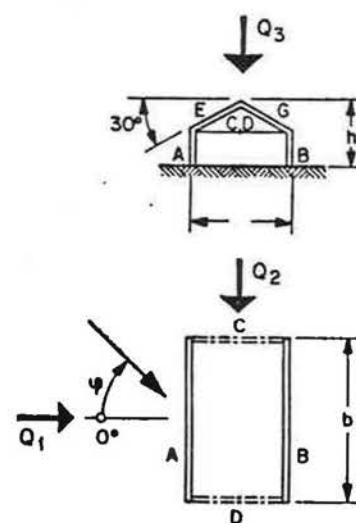


Tabelle 4.6.21

 $h : b : l = 1.35 : 2 : 1$ Toiture à 30°

		COEFFICIENTS DE PRESSION											
		c_{qe}						c_{qi}					
		surface d'application						surface d'application					
φ		A	B	C	D	E	G	A	B	C	D	E	G
0°		0,60	-0,44	-0,56	-0,44	-0,01	-0,41	-0,44	-0,44	-0,44	-0,50	-0,40	-0,42
45°		0,31	-0,43	0,43	-0,22	-0,25	-0,47	-0,26	0,04	-0,30	-0,39	-0,21	0,02
60°		0,07	-0,37	0,66	0,26	-0,25	-0,59	0,05	0,09	0,28	-0,38	0,05	0,08
		$\hat{c}_{qe} =$						Coefficient de frottement $c_t = 0$					

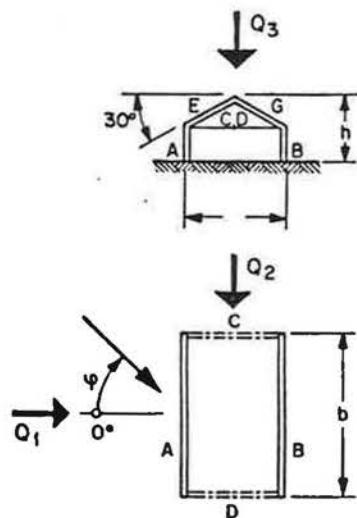
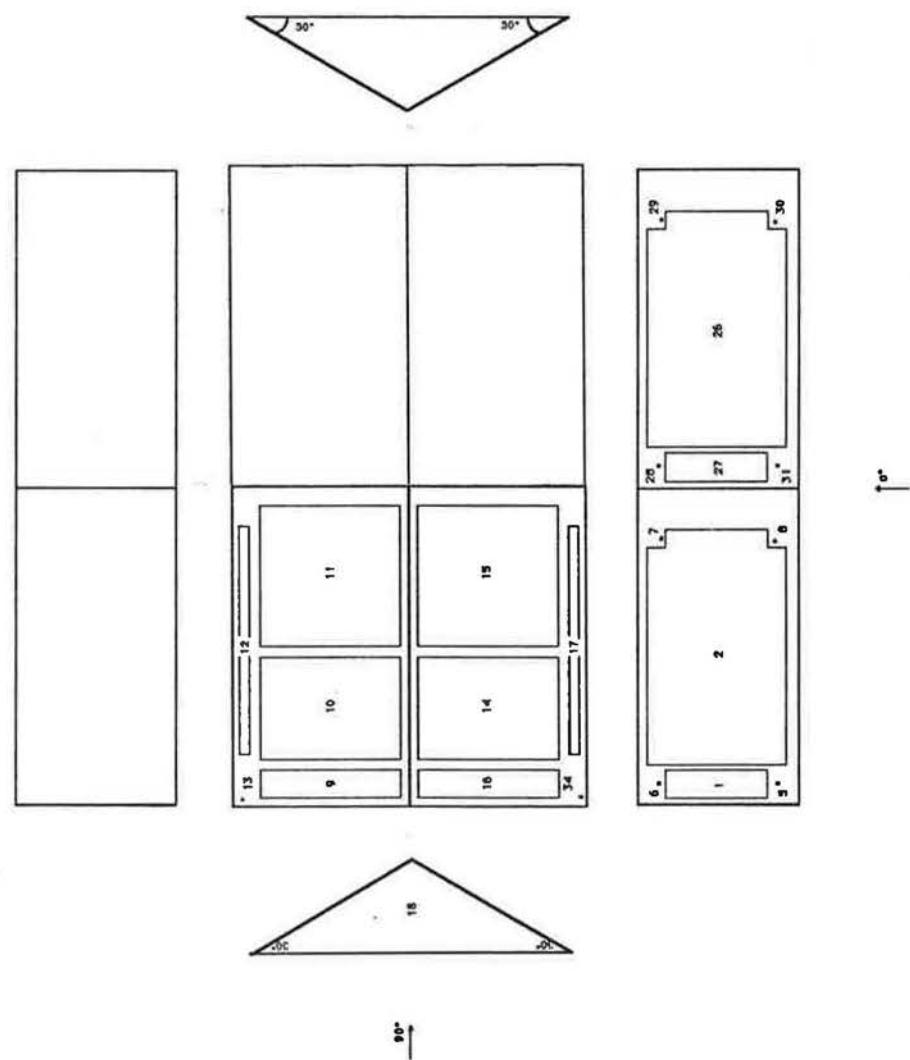


Tabelle 4.6.21

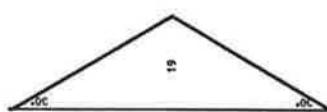
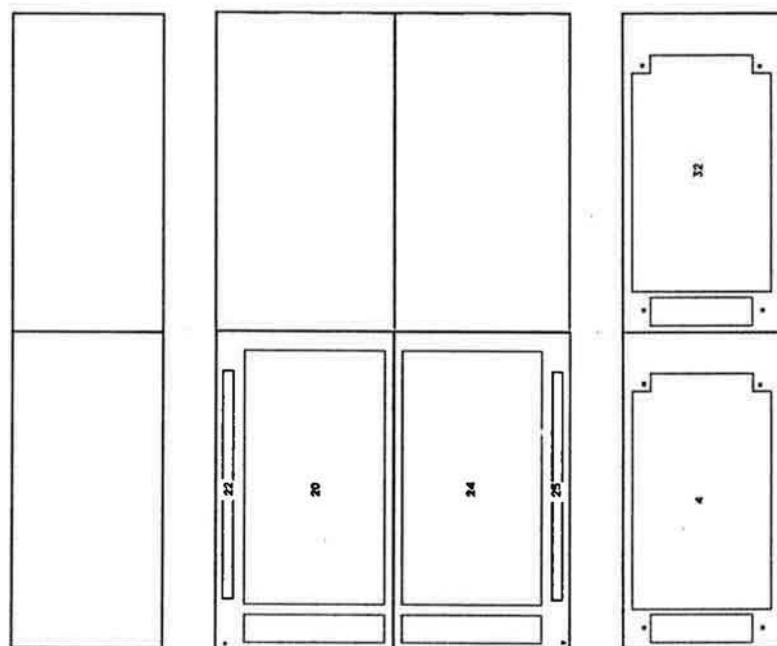
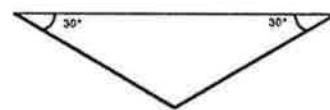
 $h : b : l = 1.35 : 2 : 1$

Toiture à 30°

COEFFICIENTS DE PRESSION												
φ	c_{pe}						c_{pi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°	0,47	-0,47	-0,55	-0,45	-0,01	-0,49	-0,49	-0,46	-0,45	-0,55	-0,48	-0,50
45°	0,20	-0,56	0,22	-0,18	-0,16	-0,37	-0,20	-0,03	-0,09	-0,50	-0,14	-0,06
60°	0,06	-0,43	0,53	-0,02	-0,18	-0,67	-0,07	0,05	0,04	-0,44	0,01	0,09
	$\hat{c}_{pe} =$						Coefficient de frottement $c_t = 0$					



MODELE N° 15 Variante 152
Numérotation des prises de pression
Surfaces extérieures



150

MODELE N° 15 Variante 152
Numérotation des prises de pression
Surfaces intérieures

ORIENTATION 0.0

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.638	1.017	1.495	0.129
PRANDT B	0.647	1.010	1.516	0.130
8	-0.293	-0.307	-0.665	0.067
1	-0.522	0.264	1.185	0.170
13	-0.740	-0.516	-1.660	0.126
2	0.606	0.468	1.360	0.156
10	-0.413	-0.485	-0.911	0.078
4	-0.454	-0.503	-1.004	0.091
9	-0.491	-0.484	-1.110	0.089
5	0.390	0.022	0.880	0.124
7	-0.383	-0.438	-0.887	0.079
6	0.550	0.222	1.273	0.190
19	-0.435	-0.445	-1.001	0.087
18	-0.561	-0.550	-1.292	0.118
22	-0.388	-0.432	-0.942	0.083
16	-0.227	-0.065	-0.552	0.105
12	-0.638	-0.528	-1.418	0.087
34	-0.741	-0.436	-1.648	0.150
11	-0.406	-0.485	-0.907	0.069
14	-0.218	-0.028	-0.487	0.107
20	-0.415	-0.500	-0.952	0.083
24	-0.401	-0.484	-0.922	0.083
32	-0.432	-0.482	-0.982	0.082
17	-0.457	-0.263	-1.039	0.177
31	0.054	0.012	0.123	0.018
15	0.244	-0.006	0.553	0.102
27	0.628	0.435	1.459	0.150
25	-0.416	-0.457	-0.966	0.085
29	0.402	0.060	0.919	0.151
28	1.342	2.812	3.068	0.018
30	-0.275	-0.153	-0.629	0.109
26	0.498	0.353	1.138	0.131

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 45.0
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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.709	1.015	1.485	0.135
PRANDT B	0.712	1.006	1.494	0.136
8	-0.144	-0.045	-0.340	0.055
1	0.599	0.485	1.415	0.151
13	-1.240	-1.037	-2.785	0.229
2	0.394	0.316	0.884	0.100
10	-0.734	-0.952	-1.612	0.147
4	-0.255	-0.111	-0.559	0.085
9	-0.914	-1.097	-2.158	0.167
5	0.582	0.391	1.374	0.133
7	-0.233	-0.021	-0.525	0.076
6	0.765	0.576	1.724	0.205
19	-0.241	-0.070	-0.527	0.093
18	0.505	0.300	1.104	0.152
0	1.263	2.856	2.915	0.012
0	1.304	2.808	3.012	0.017
22	0.360	0.110	0.773	0.111
16	-0.628	-0.016	-1.349	0.174
12	-0.611	-0.628	-1.299	0.110
34	-0.740	-0.114	-1.560	0.228
11	-0.640	-0.783	-1.518	0.122
14	-0.190	-0.086	-0.450	0.079
20	0.227	0.038	0.541	0.100
24	-0.185	-0.039	-0.441	0.089
32	-0.235	-0.282	-0.614	0.058
17	-0.356	-0.308	-0.932	0.117
31	0.131	0.235	0.307	0.014
15	-0.268	-0.174	-0.631	0.078
27	0.315	0.197	0.794	0.079
25	0.295	0.007	0.743	0.084
29	-0.220	-0.234	-0.547	0.069
28	1.201	2.844	2.983	0.010
30	-0.186	-0.200	-0.432	0.049
26	0.232	0.089	0.539	0.065

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 60.0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.662	1.011	1.498	0.129
PRANDT B	0.663	1.010	1.499	0.130
8	0.152	0.034	0.387	0.052
1	0.374	0.168	0.951	0.208
13	-1.206	-0.998	-2.879	0.249
2	0.240	0.136	0.572	0.070
10	-0.690	-0.836	-1.513	0.130
4	0.307	0.085	0.674	0.097
9	-0.820	-0.846	-1.880	0.148
5	0.422	0.123	0.968	0.213
7	0.217	0.006	0.451	0.059
6	-0.761	-0.012	-1.582	0.320
19	0.278	0.041	0.633	0.092
18	0.660	0.529	1.504	0.184
0	1.286	2.837	2.900	0.016
0	1.362	2.794	3.073	0.022
22	0.368	0.258	0.856	0.107
16	-0.880	-0.544	-2.046	0.274
12	-0.685	-0.635	-1.481	0.132
34	-1.137	-0.442	-2.457	0.307
11	-0.644	-0.681	-1.458	0.124
14	-0.245	-0.126	-0.555	0.058
20	0.341	0.216	0.804	0.102
24	0.303	0.157	0.715	0.096
32	-0.205	-0.220	-0.488	0.055
17	-0.394	-0.258	-0.937	0.098
31	0.162	0.300	0.362	0.012
15	-0.234	-0.197	-0.524	0.057
27	0.209	0.070	0.528	0.058
25	0.268	0.147	0.676	0.094
29	-0.214	-0.259	-0.502	0.052
28	1.251	2.806	2.931	0.019
30	-0.182	-0.201	-0.395	0.041
26	-0.099	-0.012	-0.215	0.050

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 90,0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.648	1.014	1.457	0.130
PRANDT B	0.655	1.009	1.472	0.131
8	0.223	0.179	0.549	0.053
1	-0.821	-0.570	-2.022	0.167
13	-1.123	-0.808	-2.578	0.252
2	-0.426	-0.336	-0.979	0.112
10	-0.606	-0.554	-1.397	0.131
4	0.406	0.333	0.936	0.103
9	-0.905	-0.750	-1.901	0.188
5	-1.236	-0.565	-2.597	0.207
7	0.193	0.153	0.428	0.047
6	-0.830	-0.579	-1.841	0.152
19	0.329	0.216	0.752	0.086
18	0.661	0.601	1.513	0.187
0	1.315	2.860	2.993	0.016
0	1.288	2.778	2.933	0.021
22	0.367	0.307	0.873	0.092
16	-0.750	-0.690	-1.786	0.161
12	-0.448	-0.180	-1.083	0.081
34	-0.844	-0.671	-2.040	0.186
11	-0.240	-0.137	-0.541	0.060
14	-0.605	-0.581	-1.363	0.145
20	0.403	0.305	0.878	0.089
24	0.403	0.338	0.878	0.095
32	-0.143	-0.073	-0.325	0.050
17	-0.578	-0.259	-1.310	0.106
31	0.228	0.418	0.507	0.012
15	-0.309	-0.181	-0.686	0.079
27	-0.258	-0.116	-0.592	0.075
25	0.417	0.314	0.955	0.097
29	-0.239	-0.181	-0.555	0.039
28	1.270	2.801	2.951	0.022
30	-0.159	-0.135	-0.357	0.040
26	-0.178	-0.102	-0.397	0.045

UREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.120000E+03				
PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.707	1.018	1.553	0.134
PRANDT B	0.710	1.006	1.559	0.134
8	0.150	0.036	0.340	0.057
1	-0.452	-0.488	-1.028	0.077
13	-0.922	-0.132	-2.220	0.261
2	-0.418	-0.540	-1.007	0.076
10	-0.198	-0.092	-0.457	0.058
4	0.402	0.342	0.928	0.106
9	-0.756	-0.271	-1.691	0.211
5	-0.513	-0.479	-1.147	0.092
7	0.121	0.006	0.286	0.053
6	-0.431	-0.544	-1.018	0.088
19	0.208	0.020	0.468	0.083
18	0.535	0.368	1.203	0.124
0	1.334	2.810	2.878	0.005
0	1.352	2.758	2.916	0.017
22	0.288	0.188	0.602	0.076
16	-0.804	-0.753	-1.682	0.133
12	-0.399	-0.269	-0.922	0.122
34	-0.990	-0.849	-2.289	0.200
11	-0.248	-0.170	-0.605	0.064
14	-0.666	-0.778	-1.623	0.129
20	0.256	0.161	0.618	0.073
24	0.377	-0.328	0.908	0.098
32	-0.224	-0.252	-0.588	0.062
17	-0.629	-0.563	-1.655	0.120
31	0.151	0.294	0.361	0.013
15	-0.618	-0.683	-1.481	0.141
27	-0.465	-0.464	-1.095	0.109
25	0.393	0.309	0.927	0.104
29	-0.455	-0.395	-1.009	0.098
28	1.323	2.767	2.937	0.010
30	-0.264	-0.148	-0.586	0.091
26	-0.328	-0.312	-0.727	0.071

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.135000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
FRANDT A	0.650	1.014	1.490	0.126
FRANDT B	0.643	1.001	1.472	0.126
8	-0.157	-0.039	-0.348	0.066
1	-0.517	-0.629	-1.143	0.088
13	-0.848	-0.116	-1.929	0.266
2	-0.466	-0.603	-1.059	0.078
10	-0.188	-0.080	-0.451	0.079
4	0.347	0.252	0.830	0.114
9	0.223	0.048	0.553	0.128
5	-0.508	-0.588	-1.258	0.100
7	-0.145	-0.051	-0.328	0.051
6	-0.548	-0.664	-1.237	0.090
19	-0.301	-0.090	-0.651	0.092
18	0.348	0.142	0.753	0.102
0	1.291	2.833	2.889	0.015
0	1.308	2.774	2.927	0.014
22	0.202	0.019	0.465	0.091
16	-0.806	-0.997	-1.859	0.143
12	-0.430	-0.322	-1.077	0.138
34	-0.737	-0.819	-1.845	0.146
11	-0.249	-0.144	-0.550	0.079
14	-0.666	-0.806	-1.474	0.121
20	0.217	0.022	0.524	0.088
24	0.314	0.127	0.758	0.110
32	-0.270	-0.306	-0.613	0.059
17	-0.570	-0.594	-1.296	0.110
31	0.130	0.229	0.316	0.015
15	-0.544	-0.703	-1.322	0.111
27	-0.433	-0.560	-1.009	0.081
25	0.288	0.145	0.671	0.107
29	-0.375	-0.457	-0.885	0.068
28	1.226	2.763	2.897	0.019
30	-0.422	-0.307	-0.926	0.064
26	-0.349	-0.408	-0.765	0.061

DUREE DE L'ESSAI: 0.000HEURES,

ORIENTATION 0.180000E+03

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.627	1.021	1.539	0.132
PRANDT B	0.619	1.010	1.519	0.133
8	-0.307	-0.286	-0.704	0.072
1	-0.514	-0.487	-1.181	0.090
13	-0.625	-0.478	-1.403	0.145
2	-0.435	-0.471	-0.978	0.078
10	-0.177	-0.078	-0.401	0.088
4	-0.448	-0.473	-1.016	0.089
9	-0.254	-0.140	-0.568	0.090
5	-0.457	-0.487	-1.024	0.090
7	-0.294	-0.398	-0.850	0.081
6	-0.368	-0.475	-1.062	0.101
19	-0.335	-0.407	-0.855	0.085
18	-0.459	-0.525	-1.170	0.109
0	1.365	2.840	2.937	0.015
0	1.404	2.792	3.021	0.008
22	-0.380	-0.413	-0.899	0.084
16	-0.438	-0.494	-1.035	0.088
12	-0.472	-0.289	-1.045	0.165
34	-0.570	-0.503	-1.261	0.102
11	-0.193	-0.042	-0.485	0.092
14	-0.357	-0.493	-0.896	0.077
20	-0.396	-0.472	-0.876	0.082
24	-0.379	-0.430	-0.837	0.083
32	-0.421	-0.439	-0.930	0.089
17	-0.600	-0.522	-1.324	0.078
31	0.053	0.019	0.123	0.019
15	-0.387	-0.484	-0.896	0.067
27	-0.336	-0.407	-0.753	0.070
25	-0.373	-0.411	-0.837	0.082
29	-0.437	-0.442	-1.026	0.094
28	1.273	2.808	2.989	0.021
30	-0.521	-0.441	-1.127	0.098
26	-0.437	-0.452	-0.946	0.083

DUREE DE L'ESSAI: 0.000HEURES,

ORIENTATION 0.225000E+03

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.657	1.020	1.481	0.132
PRANDT B	0.654	1.011	1.475	0.132
8	-0.211	-0.168	-0.497	0.073
1	-0.368	-0.418	-0.868	0.070
13	-0.545	-0.524	-1.211	0.083
2	-0.383	-0.453	-0.851	0.068
10	-0.274	-0.264	-0.661	0.067
4	-0.247	-0.283	-0.597	0.057
9	-0.274	-0.334	-0.628	0.061
5	-0.322	-0.305	-0.739	0.075
7	-0.321	-0.264	-0.681	0.072
6	-0.463	-0.497	-0.982	0.085
19	-0.170	-0.120	-0.409	0.074
18	-0.357	-0.515	-0.862	0.068
0	1.286	2.839	2.911	0.013
0	1.330	2.752	3.011	0.020
22	-0.163	-0.074	-0.397	0.073
16	-0.546	-0.584	-1.333	0.099
12	-0.514	-0.383	-1.142	0.112
34	-0.758	-0.533	-1.684	0.110
11	-0.228	-0.215	-0.537	0.070
14	-0.551	-0.591	-1.295	0.101
20	-0.248	-0.213	-0.567	0.064
24	-0.267	-0.234	-0.609	0.066
32	0.348	0.195	0.801	0.119
17	-0.594	-0.604	-1.366	0.102
31	0.092	0.119	0.206	0.015
15	-0.574	-0.638	-1.281	0.097
27	-0.500	-0.631	-1.169	0.089
25	-0.228	-0.233	-0.534	0.066
29	-0.508	-0.719	-1.153	0.088
28	1.321	2.780	2.999	0.022
30	-0.497	-0.618	-1.181	0.092
26	-0.467	-0.660	-1.110	0.082

DUREE DE L'ESSAI: 0.000HEURES,

=====
ORIENTATION 0.240000E+03
=====

PRISE	CP +98	CP MOY	CP PIC	CP RMS
PRANDT A	0.651	1.019	1.502	0.133
PRANDT B	0.655	0.992	1.511	0.133
8	-0.178	0.001	-0.395	0.073
1	-0.422	-0.360	-0.936	0.091
13	-0.558	-0.441	-1.218	0.068
2	-0.373	-0.337	-0.816	0.079
10	-0.244	-0.247	-0.540	0.054
4	-0.218	-0.158	-0.482	0.058
9	-0.235	-0.302	-0.570	0.049
5	-0.233	-0.127	-0.565	0.095
7	-0.248	-0.131	-0.542	0.072
6	-0.786	-0.374	-1.721	0.102
19	0.260	0.023	0.599	0.089
18	-0.312	-0.404	-0.719	0.062
0	1.158	2.848	2.921	0.016
0	1.187	2.770	2.996	0.021
22	0.353	0.001	0.764	0.068
16	-0.409	-0.427	-0.885	0.075
12	-0.387	-0.310	-0.880	0.091
34	-0.546	-0.356	-1.241	0.090
11	-0.242	-0.230	-0.575	0.057
14	-0.440	-0.518	-1.047	0.093
20	-0.160	-0.084	-0.367	0.062
24	-0.175	-0.088	-0.402	0.067
32	0.456	0.321	1.018	0.114
17	-0.451	-0.365	-1.008	0.084
31	0.155	0.264	0.351	0.014
15	-0.593	-0.578	-1.338	0.109
27	-0.443	-0.540	-1.106	0.100
25	-0.164	-0.077	-0.409	0.070
29	-0.461	-0.598	-1.096	0.087
28	1.266	2.783	3.014	0.013
30	-0.541	-0.523	-1.267	0.101
26	-0.467	-0.611	-1.093	0.088

DUREE DE L'ESSAI: 0.000HEURES,

=====
ORIENTATION 0.270000E+03
=====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.653	1.011	1.474	0.134
PRANDT B	0.652	0.994	1.472	0.133
8	0.214	0.145	0.508	0.063
1	-0.157	-0.162	-0.372	0.038
13	-0.279	-0.201	-0.640	0.043
2	-0.123	-0.094	-0.283	0.039
10	-0.158	-0.125	-0.344	0.039
4	-0.084	-0.011	-0.184	0.045
9	-0.170	-0.173	-0.376	0.038
5	-0.145	-0.153	-0.319	0.039
7	0.180	0.122	0.401	0.054
6	-0.251	-0.216	-0.557	0.042
19	0.321	0.175	0.717	0.073
18	-0.212	-0.234	-0.473	0.042
0	1.314	2.808	2.911	0.013
70	1.318	2.727	2.922	0.007
22	0.219	0.132	0.508	0.058
16	-0.190	-0.171	-0.441	0.041
12	-0.261	-0.115	-0.607	0.056
34	-0.289	-0.196	-0.673	0.043
11	-0.163	-0.099	-0.355	0.045
14	-0.182	-0.115	-0.396	0.043
20	0.152	0.089	0.388	0.056
24	0.163	0.075	0.417	0.058
32	0.338	0.279	0.796	0.087
17	-0.224	-0.113	-0.528	0.047
31	0.211	0.403	0.475	0.011
15	-0.179	-0.089	-0.403	0.045
27	-0.292	-0.090	-0.614	0.066
25	0.188	0.079	0.397	0.056
29	-0.783	-0.692	-1.817	0.180
28	1.294	2.734	3.004	0.020
30	-1.265	-0.670	-2.905	0.263
26	-0.376	-0.303	-0.864	0.103

DUREE DE L'ESSAI: 0.000HEURES,

=====

ORIENTATION 0.300000E+03

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.640	1.006	1.470	0.126
PRANDT B	0.640	0.984	1.470	0.126
8	-0.180	-0.034	-0.408	0.068
1	-0.186	-0.133	-0.421	0.055
13	-0.558	-0.412	-1.266	0.114
2	0.244	0.079	0.554	0.068
10	-0.444	-0.525	-1.112	0.088
4	-0.198	-0.195	-0.497	0.058
9	-0.449	-0.443	-1.004	0.075
5	-0.201	-0.166	-0.450	0.045
7	-0.215	-0.049	-0.496	0.061
6	-0.248	-0.260	-0.570	0.063
19	-0.198	-0.038	-0.439	0.081
18	-0.380	-0.438	-0.844	0.068
0	1.274	2.832	2.935	0.003
0	1.304	2.749	3.006	0.015
22	-0.254	-0.125	-0.539	0.073
16	-0.296	-0.283	-0.628	0.057
12	-0.548	-0.370	-1.211	0.105
34	-0.487	-0.400	-1.077	0.074
11	-0.593	-0.624	-1.398	0.135
14	-0.268	-0.207	-0.633	0.064
20	-0.214	-0.147	-0.515	0.067
24	-0.203	-0.136	-0.487	0.065
32	0.272	0.074	0.605	0.087
17	-0.419	-0.320	-0.932	0.112
31	0.152	0.257	0.359	0.014
15	-0.256	-0.193	-0.603	0.069
27	0.271	0.172	0.621	0.084
25	-0.177	-0.093	-0.407	0.062
29	0.611	0.360	1.451	0.272
28	1.257	2.752	2.982	0.006
30	0.492	0.352	1.152	0.156
26	0.339	0.256	0.794	0.103

DUREE DE L'ESSAI: 0.000HEURES,

=====
ORIENTATION 0.315000E+03
=====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.630	1.007	1.512	0.128
PRANDT B	0.618	0.989	1.482	0.128
8	-0.149	-0.072	-0.339	0.060
1	-0.168	-0.050	-0.384	0.074
13	-0.705	-0.526	-1.573	0.117
2	0.378	0.217	0.843	0.093
10	-0.654	-0.592	-1.418	0.105
4	-0.271	-0.273	-0.588	0.055
9	-0.605	-0.590	-1.342	0.100
5	-0.190	-0.140	-0.421	0.053
7	-0.180	-0.123	-0.436	0.059
6	-0.229	-0.172	-0.554	0.081
19	-0.215	-0.181	-0.486	0.067
18	-0.394	-0.497	-0.892	0.065
0	1.278	2.797	2.861	0.002
0	1.310	2.720	2.933	0.024
22	-0.262	-0.224	-0.592	0.066
16	-0.298	-0.281	-0.674	0.063
12	-0.706	-0.620	-1.644	0.114
34	-0.530	-0.414	-1.234	0.087
11	-0.534	-0.645	-1.279	0.099
14	-0.252	-0.198	-0.604	0.075
20	-0.265	-0.249	-0.589	0.062
24	-0.240	-0.232	-0.534	0.062
32	-0.252	-0.121	-0.552	0.083
17	-0.529	-0.376	-1.159	0.134
31	0.136	0.229	0.298	0.014
15	-0.283	-0.160	-0.621	0.082
27	0.435	0.331	1.001	0.115
25	-0.221	-0.196	-0.509	0.063
29	0.695	0.559	1.557	0.194
28	1.289	2.731	2.898	0.020
30	0.538	0.316	1.179	0.128
26	0.499	0.410	1.093	0.127

DUREE DE L'ESSAI: 0.000HEURES,

Coefficients de pression C_q et C_p
mesurés sur la forme 161

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

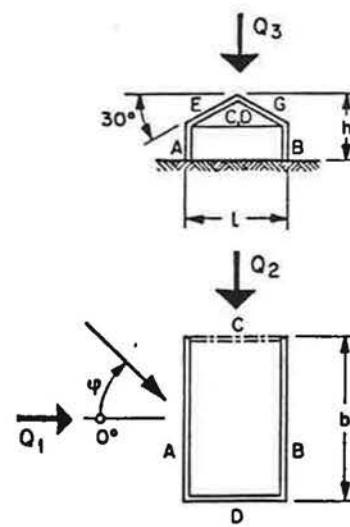
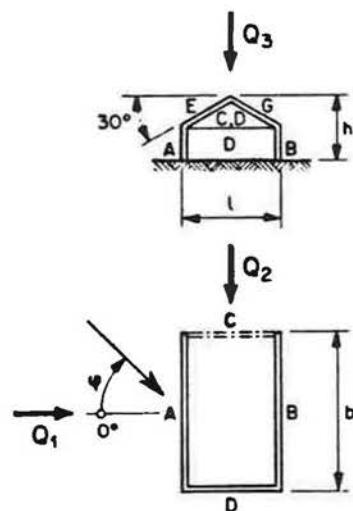


Tabelle 4.6.20

$$h : b : l = 1.35 : 2 : 1$$

Toiture à 30°

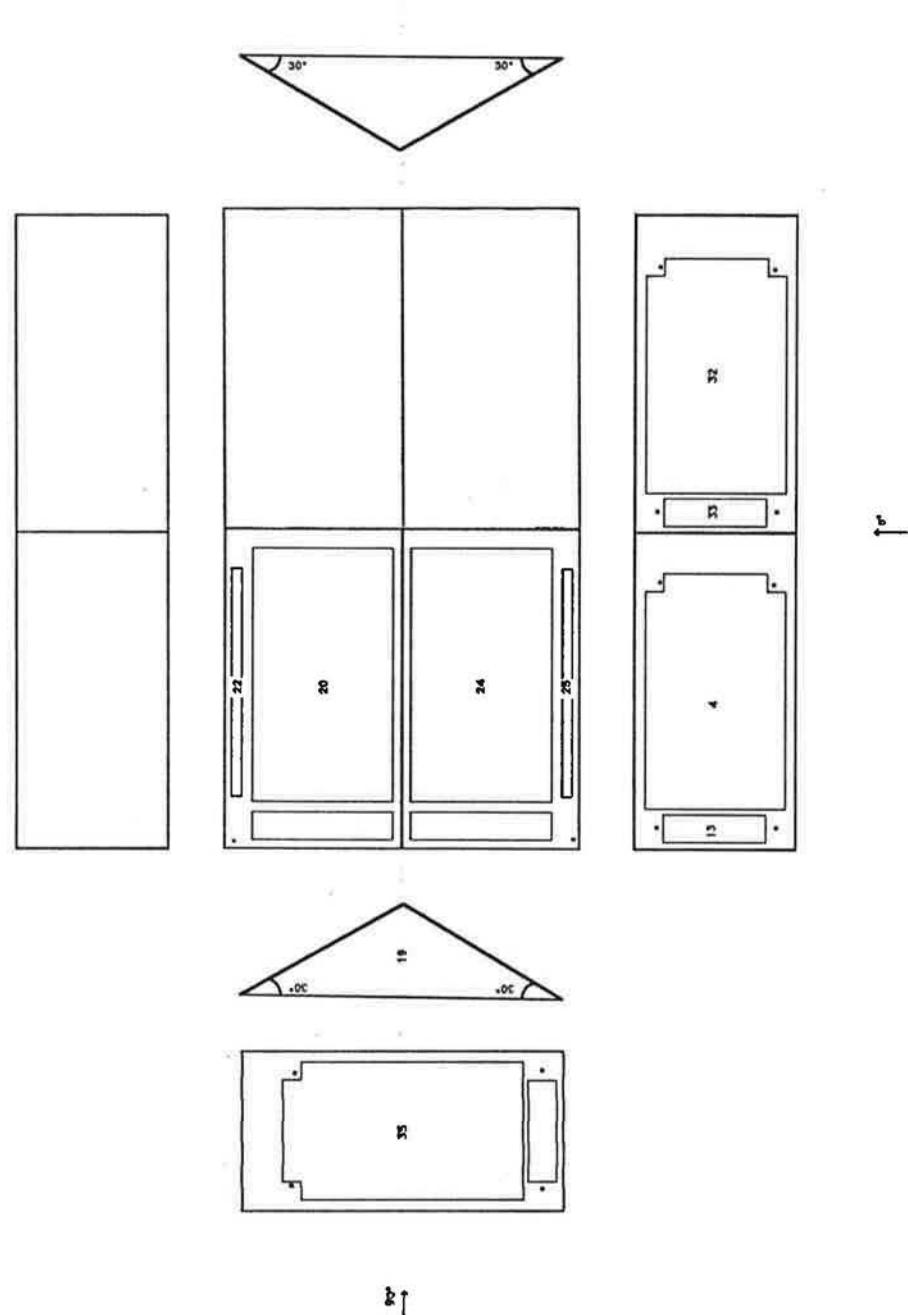


COEFFICIENTS DE PRESSION												
	c_{pe}						c_{pi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°	0,39	-0,45		-0,59	-0,05	-0,51	-0,58	-0,60		-0,64	-0,56	-0,54
45°	0,28	-0,55		-0,43	-0,16	-0,35	0,22	0,39		0,23	0,24	0,21
60°	0,13	-0,48		-0,40	-0,20	-0,67	0,40	0,52		0,42	0,43	0,44
90°	-0,22	-0,22		-0,22	-0,26	-0,26	0,51	0,51		0,51	0,54	0,54
	$\dot{c}_{pe} =$						Coefficient de frottement $c_t = 0$					

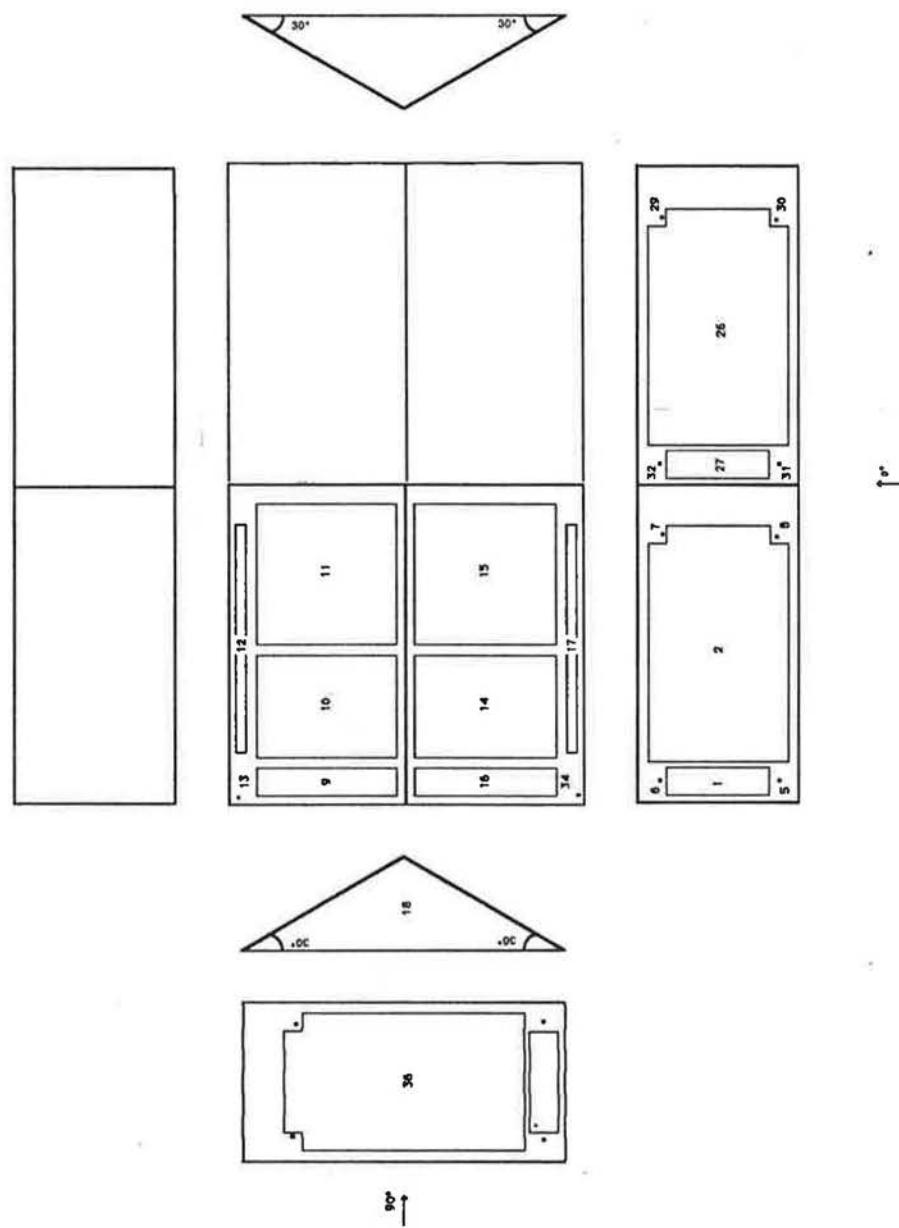
Tabelle 4.6.20

$h : b : l = 1.35 : 2 : 1$

Toiture à 30°



MODELE N° 16 Variante 161
Numérotation des prises de pression
Surfaces intérieures



MODELE N° 16 Variante 161
Numérotation des prises de pression
Surfaces extérieures

===== ORIENTATION 0.0 =====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.607	1.002	1.555	0.132
PRANDT B	0.665	0.999	1.703	0.135
8	-0.466	-0.562	-1.076	0.096
1	0.473	0.203	1.092	0.171
13	-0.603	-0.506	-1.543	0.124
2	0.525	0.446	1.343	0.154
10	-0.436	-0.468	-0.989	0.078
4	-0.503	-0.571	-1.141	0.103
9	-0.461	-0.482	-1.046	0.091
5	-0.330	-0.157	-0.748	0.121
7	-0.483	-0.540	-1.088	0.094
6	0.572	0.109	1.287	0.191
19	-0.548	-0.551	-1.182	0.097
18	-0.696	-0.643	-1.501	0.162
0	1.261	2.858	3.064	0.016
0	1.358	2.829	3.300	0.024
22	-0.476	-0.560	-1.100	0.100
16	-0.288	-0.100	-0.667	0.106
12	-0.538	-0.507	-1.309	0.084
34	-0.710	-0.552	-1.729	0.175
11	-0.365	-0.468	-0.873	0.068
14	-0.187	-0.021	-0.446	0.107
20	-0.482	-0.558	-1.153	0.097
24	-0.470	-0.535	-1.124	0.100
32	-0.559	-0.586	-1.236	0.100
17	-0.502	-0.286	-1.109	0.173
31	-0.188	-0.285	-0.419	0.024
15	-0.209	-0.017	-0.467	0.102
27	0.559	0.413	1.358	0.143
25	-0.477	-0.549	-1.157	0.101
29	0.359	0.044	0.809	0.125
28	-0.317	-0.213	-0.715	0.025
30	-0.317	-0.176	-0.668	0.112
26	0.543	0.342	1.144	0.125
35	-0.494	-0.560	-1.157	0.097
36	-0.593	-0.662	-1.388	0.123

DUREE DE L'ESSAI: 0.000HEURES,

=====

ORIENTATION 45,0

=====

PRISE CP .98 CP MOY CP PIC CP RMS

PRANDT A	0.660	0.988	1.469	0.128
PRANDT B	0.729	0.993	1.624	0.130
8	-0.290	-0.405	-0.678	0.049
1	0.554	0.424	1.296	0.154
13	-1.115	-0.960	-2.633	0.198
2	0.382	0.277	0.901	0.094
10	-0.646	-0.811	-1.509	0.126
4	-0.319	-0.420	-0.745	0.059
9	-0.773	-0.852	-1.742	0.141
5	0.496	0.345	1.119	0.143
7	-0.265	-0.368	-0.641	0.048
6	0.637	0.463	1.540	0.228
19	-0.321	-0.375	-0.704	0.056
18	0.525	0.307	1.151	0.153
0	1.337	2.841	3.044	0.013
0	1.423	2.813	3.240	0.011
22	-0.350	-0.391	-0.752	0.055
-16	-0.695	-0.117	-1.494	0.215
12	-0.595	-0.640	-1.322	0.115
34	-1.089	-0.222	-2.423	0.264
11	-0.590	-0.702	-1.364	0.113
14	-0.196	-0.080	-0.453	0.074
20	-0.313	-0.371	-0.673	0.056
24	-0.394	-0.386	-0.847	0.060
32	-0.319	-0.412	-0.738	0.056
17	-0.406	-0.317	-0.941	0.112
31	-0.114	-0.131	-0.278	0.015
15	-0.224	-0.173	-0.544	0.076
27	0.298	0.180	0.679	0.080
25	-0.342	-0.397	-0.778	0.061
29	-0.178	-0.216	-0.417	0.049
28	-0.320	-0.220	-0.749	0.019
30	-0.221	-0.257	-0.511	0.052
26	0.222	0.069	0.514	0.067
35	-0.291	-0.402	-0.703	0.057
36	0.475	0.294	1.146	0.132

DUREE DE L'ESSAI: 0.000HEURES,

=====
ORIENTATION 60.0
=====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.664	0.989	1.506	0.129
PRANDT B	0.665	0.989	1.508	0.130
8	-0.305	-0.380	-0.700	0.049
1	-0.569	-0.063	-1.306	0.260
13	-1.260	-0.926	-2.791	0.232
2	0.243	0.101	0.538	0.073
10	-0.669	-0.793	-1.590	0.129
4	-0.324	-0.384	-0.769	0.060
9	-0.819	-0.744	-1.794	0.129
5	-0.788	-0.054	-1.725	0.252
7	-0.267	-0.376	-0.634	0.047
6	-0.630	-0.184	-1.496	0.288
19	-0.321	-0.375	-0.723	0.057
18	0.642	0.492	1.446	0.185
0	1.276	2.865	3.053	0.014
0	1.371	2.820	3.281	0.012
22	-0.297	-0.362	-0.647	0.055
16	-0.946	-0.693	-2.066	0.274
12	-0.750	-0.698	-1.737	0.144
34	-1.335	-0.834	-3.091	0.458
11	-0.708	-0.757	-1.686	0.133
14	-0.316	-0.151	-0.754	0.072
20	-0.268	-0.348	-0.624	0.056
24	-0.344	-0.362	-0.802	0.060
32	-0.282	-0.389	-0.660	0.055
17	-0.365	-0.278	-0.853	0.097
31	-0.098	-0.101	-0.225	0.015
15	-0.267	-0.217	-0.613	0.055
27	0.185	0.042	0.436	0.058
25	-0.374	-0.376	-0.882	0.060
29	-0.220	-0.249	-0.518	0.039
28	-0.330	-0.245	-0.777	0.025
30	-0.209	-0.264	-0.529	0.049
26	-0.162	-0.034	-0.410	0.053
35	-0.313	-0.382	-0.742	0.056
36	0.513	0.445	1.214	0.148

DUREE DE L'ESSAI: 0.000HEURES,

===== ORIENTATION 90.0 =====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.629	0.983	1.497	0.154
PRANDT B	0.675	0.976	1.607	0.131
8	-0.348	-0.205	-0.854	0.100
1	-0.791	-0.523	-1.940	0.231
13	-1.089	-0.805	-2.618	0.240
2	-0.571	-0.412	-1.372	0.212
10	-0.730	-0.663	-1.575	0.152
4	-0.327	-0.182	-0.707	0.117
9	-0.824	-0.751	-1.940	0.179
5	-0.923	-0.515	-2.174	0.232
7	-0.375	-0.215	-0.908	0.162
6	-0.613	-0.509	-1.485	0.292
19	-0.393	-0.175	-0.894	0.087
18	0.696	0.551	1.584	0.188
0	1.308	2.815	3.148	0.139
0	1.341	2.760	3.226	0.094
22	-0.387	-0.179	-0.903	0.090
16	-0.814	-0.747	-1.900	0.213
12	-0.494	-0.335	-1.415	0.184
34	-1.810	-0.717	-5.188	0.368
11	-0.228	-0.269	-1.050	0.273
14	-1.418	-0.593	-6.517	0.495
20	-0.486	-0.056	-1.272	0.150
24	-0.348	-0.222	-0.909	0.145
32	-0.402	-0.196	-0.931	0.121
17	-0.535	-0.347	-1.236	0.192
31	0.098	0.057	0.226	0.130
15	-0.475	-0.268	-1.091	0.153
27	-0.683	-0.195	-1.582	0.175
25	-0.572	-0.161	-1.324	0.140
29	-0.453	-0.229	-1.119	0.258
28	-0.605	-0.138	-1.495	0.251
30	-0.110	-0.214	-1.104	0.256
26	-0.127	-0.090	-1.268	0.230
35	-0.076	-0.242	-1.723	0.313
36	0.059	0.418	1.344	0.160

DUREE DE L'ESSAI: 0.000HEURES,

=====
ORIENTATION 0.120000E+03
=====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.639	0.994	1.460	0.124
PRANDT B	0.651	0.997	1.485	0.126
8	-0.304	-0.391	-0.695	0.055
1	-0.416	-0.495	-0.950	0.079
13	-1.360	-0.408	-2.930	0.387
2	-0.471	-0.572	-1.015	0.077
10	-0.299	-0.126	-0.690	0.060
4	-0.304	-0.388	-0.702	0.064
9	-0.695	-0.490	-1.587	0.222
5	-0.424	-0.469	-0.969	0.083
7	-0.281	-0.376	-0.654	0.052
6	-0.414	-0.535	-0.964	0.082
19	-0.308	-0.380	-0.691	0.061
18	0.538	0.330	1.207	0.133
0	1.247	2.813	2.885	0.016
0	1.324	2.805	3.063	0.011
22	-0.314	-0.374	-0.682	0.060
16	-0.818	-0.731	-1.777	0.130
12	-0.448	-0.287	-1.025	0.120
34	-1.108	-0.881	-2.535	0.217
11	-0.240	-0.196	-0.555	0.061
14	-0.676	-0.763	-1.561	0.130
20	-0.308	-0.352	-0.687	0.060
24	-0.315	-0.355	-0.704	0.062
32	-0.329	-0.394	-0.725	0.060
17	-0.764	-0.634	-1.682	0.136
31	-0.098	-0.151	-0.225	0.016
15	-0.696	-0.744	-1.591	0.143
27	-0.496	-0.499	-1.191	0.107
25	-0.308	-0.373	-0.739	0.063
29	-0.467	-0.451	-1.009	0.085
28	-0.319	-0.399	-0.689	0.034
30	-0.294	-0.190	-0.670	0.109
26	-0.350	-0.352	-0.797	0.079
35	-0.322	-0.387	-0.728	0.061
36	0.402	0.271	0.910	0.102

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.135000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.765	1.001	1.649	0.126
PRANDT B	0.777	1.012	1.674	0.129
8	-0.328	-0.424	-0.752	0.054
1	-0.464	-0.612	-1.062	0.085
13	-0.882	-0.149	-2.033	0.268
2	-0.456	-0.612	-1.052	0.081
10	-0.194	-0.082	-0.445	0.080
4	-0.327	-0.422	-0.749	0.063
9	-0.576	0.006	-1.349	0.154
5	-0.476	-0.576	-1.115	0.086
7	-0.303	-0.413	-0.691	0.053
6	-0.500	-0.636	-1.139	0.086
19	-0.355	-0.410	-0.828	0.060
18	0.335	0.090	0.780	0.097
0	1.339	2.791	2.869	0.006
0	1.421	2.804	3.043	0.011
22	-0.329	-0.416	-0.768	0.060
16	-0.720	-0.916	-1.682	0.145
12	-0.460	-0.329	-1.075	0.137
34	-0.906	-0.836	-2.117	0.156
11	-0.218	-0.148	-0.518	0.082
14	-0.630	-0.828	-1.494	0.117
20	-0.288	-0.393	-0.731	0.061
24	-0.307	-0.398	-0.780	0.064
32	-0.326	-0.431	-0.768	0.059
17	-0.623	-0.635	-1.466	0.115
31	-0.121	-0.200	-0.285	0.017
15	-0.608	-0.717	-1.437	0.113
27	-0.450	-0.572	-1.048	0.085
25	-0.328	-0.414	-0.763	0.063
29	-0.343	-0.477	-0.799	0.062
28	-0.291	-0.456	-0.677	0.037
30	-0.413	-0.368	-0.886	0.083
26	-0.397	-0.445	-0.852	0.071
35	-0.357	-0.422	-0.805	0.061
36	0.295	0.072	0.666	0.083

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.180000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
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PRANDT A	0.643	1.000	1.459	0.124
PRANDT B	0.652	1.002	1.480	0.126
8	-0.504	-0.586	-1.150	0.104
1	-0.570	-0.475	-1.300	0.100
13	-0.658	-0.570	-1.517	0.165
2	-0.465	-0.473	-1.073	0.084
10	-0.202	-0.079	-0.441	0.089
4	-0.596	-0.583	-1.301	0.112
9	-0.286	-0.181	-0.674	0.092
5	-0.723	-0.464	-1.702	0.108
7	-0.515	-0.582	-1.155	0.103
6	-0.565	-0.488	-1.265	0.114
19	-0.554	-0.567	-1.194	0.108
18	-0.705	-0.642	-1.520	0.161
0	1.277	2.870	2.941	0.013
0	1.329	2.863	3.061	0.012
22	-0.553	-0.558	-1.286	0.109
16	-0.589	-0.539	-1.368	0.107
12	-0.426	-0.276	-1.076	0.165
34	-0.615	-0.544	-1.553	0.123
11	-0.176	-0.029	-0.419	0.091
14	-0.408	-0.513	-0.971	0.086
20	-0.517	-0.543	-1.127	0.106
24	-0.533	-0.558	-1.161	0.110
32	-0.470	-0.613	-1.167	0.112
17	-0.506	-0.546	-1.257	0.085
31	-0.179	-0.309	-0.429	0.023
15	-0.395	-0.504	-0.949	0.074
27	-0.384	-0.404	-0.913	0.073
25	-0.493	-0.562	-1.170	0.109
29	-0.438	-0.444	-0.958	0.084
28	-0.343	-0.525	-0.751	0.045
30	-0.488	-0.419	-1.444	0.104
26	-0.364	-0.434	-1.079	0.083
35	-0.519	-0.575	-1.116	0.107
36	-0.576	-0.577	-1.241	0.123

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.225000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
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PRANDT A	0.710	1.011	1.492	0.129
PRANDT B	0.711	1.007	1.494	0.130
8	0.498	0.381	1.149	0.155
1	-0.379	-0.409	-0.874	0.078
13	-0.506	-0.412	-1.304	0.083
2	-0.343	-0.450	-0.884	0.075
10	-0.255	-0.253	-0.564	0.063
4	0.607	0.399	1.340	0.164
9	-0.267	-0.302	-0.609	0.056
5	-0.489	-0.386	-1.116	0.093
7	0.519	0.393	1.201	0.155
6	-0.462	-0.473	-1.069	0.086
19	0.545	0.398	1.302	0.161
18	-0.324	-0.436	-0.776	0.062
0	1.246	2.856	2.917	0.013
0	1.258	2.822	2.945	0.016
22	0.512	0.405	1.242	0.161
16	-0.575	-0.569	-1.397	0.115
12	-0.404	-0.358	-0.958	0.109
34	-0.803	-0.559	-1.908	0.128
11	-0.230	-0.209	-0.536	0.070
14	-0.728	-0.596	-1.698	0.122
20	0.607	0.420	1.333	0.159
24	0.602	0.404	1.322	0.161
32	0.566	0.390	1.335	0.163
17	-0.597	-0.602	-1.407	0.109
31	0.257	0.493	0.625	0.029
15	-0.550	-0.648	-1.339	0.110
27	-0.491	-0.600	-1.135	0.095
25	0.532	0.398	1.229	0.165
29	-0.501	-0.637	-1.099	0.079
28	0.147	0.105	0.321	0.044
30	-0.639	-0.603	-1.464	0.124
26	-0.498	-0.640	-1.141	0.087
35	0.537	0.396	1.260	0.162
36	-0.356	-0.453	-0.836	0.065

DUREE DE L'ESSAI: 0.000HEURES,

POSITIONER MODELE A 240.000 DEG

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ORIENTATION 0.240000E+03

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PRISE CP .98 CP MOY CP PIC CP RMS

PRANDT A	0.706	1.006	1.559	0.129
PRANDT B	0.704	0.999	1.555	0.129
8	0.660	0.508	1.471	0.163
1	-0.408	-0.337	-0.908	0.091
13	-0.391	-0.338	-0.954	0.072
2	-0.332	-0.353	-0.809	0.084
10	-0.215	-0.241	-0.477	0.051
4	0.706	0.527	1.565	0.171
9	-0.239	-0.275	-0.578	0.046
5	-0.310	-0.198	-0.751	0.120
7	0.665	0.526	1.496	0.158
6	-0.475	-0.389	-1.069	0.094
19	0.693	0.524	1.487	0.169
18	-0.326	-0.406	-0.701	0.058
0	1.248	2.879	2.932	0.014
0	1.266	2.841	2.975	0.014
22	0.687	0.529	1.592	0.166
16	-0.429	-0.445	-0.994	0.076
12	-0.329	-0.299	-0.836	0.095
34	-0.402	-0.409	-1.021	0.087
11	-0.224	-0.226	-0.521	0.053
14	-0.459	-0.530	-1.069	0.094
20	0.636	0.551	1.489	0.168
24	0.634	0.542	1.484	0.170
32	0.715	0.511	1.620	0.170
17	-0.470	-0.427	-1.066	0.105
31	0.329	0.593	0.727	0.033
15	-0.624	-0.615	-1.380	0.116
27	-0.466	-0.548	-1.131	0.102
25	0.616	0.533	1.495	0.171
29	-0.443	-0.571	-1.027	0.080
28	0.172	0.207	0.399	0.047
30	-0.635	-0.533	-1.426	0.129
26	-0.519	-0.612	-1.165	0.093
35	0.625	0.524	1.471	0.168
36	-0.379	-0.431	-0.890	0.067

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.270000E+03

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PRISE CP .98 CP MOY CP PIC CP RMS

PRANDT A	0.671	1.002	1.532	0.130
PRANDT B	0.669	0.998	1.528	0.130
8	0.612	0.500	1.435	0.157
1	-0.172	-0.167	-0.403	0.043
13	-0.316	-0.189	-0.661	0.050
2	-0.147	-0.109	-0.308	0.041
10	-0.185	-0.138	-0.411	0.046
4	0.658	0.511	1.464	0.161
9	-0.214	-0.174	-0.467	0.042
5	-0.182	-0.181	-0.396	0.045
7	0.626	0.509	1.392	0.156
6	-0.218	-0.179	-0.484	0.047
19	0.657	0.525	1.496	0.160
18	-0.193	-0.222	-0.440	0.040
0	1.335	2.872	2.926	0.013
0	1.348	2.825	2.954	0.017
22	0.682	0.535	1.527	0.162
16	-0.221	-0.170	-0.494	0.044
12	-0.298	-0.153	-0.724	0.071
34	-0.266	-0.187	-0.647	0.045
11	-0.209	-0.132	-0.464	0.054
14	-0.166	-0.129	-0.369	0.045
20	0.708	0.543	1.574	0.162
24	0.696	0.539	1.546	0.163
32	0.635	0.499	1.516	0.162
17	-0.246	-0.128	-0.586	0.051
31	0.372	0.632	0.805	0.032
15	-0.197	-0.115	-0.426	0.049
27	-0.231	-0.120	-0.541	0.064
25	0.617	0.523	1.447	0.163
29	-0.718	-0.664	-1.662	0.159
28	0.247	0.336	0.571	0.056
30	-1.528	-0.738	-3.507	0.302
26	-0.404	-0.321	-0.927	0.099
35	0.675	0.513	1.511	0.158
36	-0.191	-0.215	-0.428	0.041

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.300000E+03

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PRISE	CF .98	CF MOY	CF PIC	CF RMS
PRANDT A	0.684	1.000	1.544	0.131
PRANDT B	0.693	0.988	1.564	0.131
8	0.522	0.399	1.201	0.129
1	-0.209	-0.174	-0.480	0.058
13	-0.650	-0.467	-1.487	0.118
2	0.256	0.047	0.586	0.069
10	-0.501	-0.515	-1.080	0.085
4	0.588	0.408	1.267	0.134
9	-0.494	-0.449	-1.165	0.079
5	-0.251	-0.258	-0.594	0.058
7	0.463	0.425	1.162	0.129
6	-0.240	-0.279	-0.603	0.065
19	0.524	0.419	1.214	0.131
18	-0.329	-0.399	-0.762	0.062
0	1.234	2.844	2.901	0.004
0	1.258	2.805	2.956	0.011
22	0.520	0.408	1.152	0.129
16	-0.283	-0.276	-0.628	0.055
12	-0.509	-0.427	-1.329	0.128
34	-0.428	-0.369	-1.118	0.079
11	-0.599	-0.626	-1.403	0.120
14	-0.235	-0.226	-0.550	0.062
20	0.537	0.431	1.227	0.132
24	0.538	0.437	1.231	0.133
32	0.496	0.399	1.232	0.130
17	-0.400	-0.330	-0.995	0.111
31	0.312	0.573	0.705	0.026
15	-0.251	-0.205	-0.567	0.067
27	0.293	0.142	0.662	0.084
25	0.534	0.418	1.209	0.133
29	0.565	0.153	1.207	0.280
28	0.285	0.340	0.609	0.046
30	0.497	0.197	1.110	0.196
26	0.336	0.208	0.751	0.102
35	0.535	0.421	1.198	0.134
36	-0.323	-0.400	-0.722	0.064

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.315000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
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PRANDT A	0.698	0.999	1.498	0.130
PRANDT B	0.692	0.992	1.485	0.131
8	0.394	0.211	0.910	0.113
1	-0.187	-0.103	-0.433	0.076
13	-0.938	-0.577	-2.038	0.138
2	0.340	0.184	0.738	0.094
10	-0.589	-0.571	-1.404	0.105
4	0.389	0.220	0.929	0.120
9	-0.638	-0.555	-1.507	0.107
5	-0.241	-0.236	-0.568	0.063
7	0.445	0.231	0.990	0.115
6	-0.265	-0.198	-0.588	0.089
19	0.405	0.232	0.958	0.120
18	-0.329	-0.426	-0.777	0.064
0	1.312	2.841	2.912	0.004
0	1.317	2.795	2.922	0.012
22	0.427	0.231	0.950	0.122
16	-0.295	-0.271	-0.658	0.065
12	-0.823	-0.601	-1.731	0.115
34	-0.634	-0.424	-1.333	0.094
11	-0.624	-0.605	-1.420	0.098
14	-0.254	-0.208	-0.577	0.077
20	0.426	0.239	0.981	0.117
24	0.432	0.250	0.995	0.118
32	0.420	0.209	0.945	0.120
17	-0.531	-0.378	-1.193	0.133
31	0.248	0.429	0.535	0.020
15	-0.290	-0.172	-0.625	0.085
27	0.457	0.297	1.049	0.115
25	0.425	0.233	0.975	0.121
29	0.641	0.516	1.379	0.181
28	0.206	0.253	0.444	0.035
30	0.461	0.365	1.050	0.123
26	0.467	0.379	1.063	0.127
35	0.458	0.228	1.058	0.121
36	-0.352	-0.431	-0.813	0.064

DUREE DE L'ESSAI: 0.000HEURES,

VAL. INIT.:

173.000	0.861120E+06	0.880000E+04	0.176000E+04
106.000	0.000	18.000	0.000
275.000	3.000	0.000	0.409600E+04
2.000	36.300	22.610	0.542
0.000	1.000	0.000	17.000
2.000	-0.409716E+04	-0.933	-0.914
157.780	0.000	0.000	0.000
0.000	0.002	0.012	0.021
0.064	0.000	0.000	0.000

INITIALISATION SCANIVALVE

Coefficients de pression C_q et C_p
mesurés sur la forme 162

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

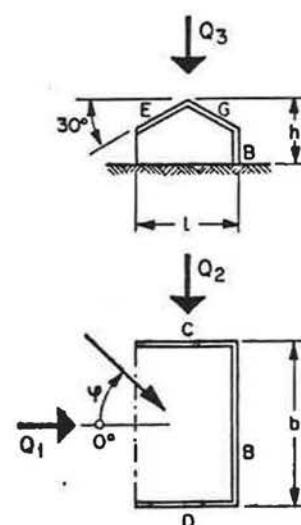


Tabelle 4.6.18

$h : b : l = 1.35 : 2 : 1$

Toiture à 30°

COEFFICIENTS DE PRESSION

ψ	surface d'application						surface d'application						
	c_{qe}						c_{qi}						
	A	B	C	D	E	G		A	B	C	D	E	G
0°	-	-0,38	-0,56	-0,56	-0,20	-0,41	-	0,47	0,54	0,54	0,54	0,54	0,54
45°	-	-0,43	0,36	-0,46	-0,24	-0,63	-	0,46	0,45	0,49	0,45	0,45	0,44
60°	-	-0,40	0,44	-0,41	-0,27	-0,56	-	0,38	0,35	0,42	0,31	0,30	0,30
180°	-	0,58	-0,54	-0,51	-0,36	-0,22	-	-0,29	-0,29	-0,29	-0,31	-0,31	-0,30
	$\hat{c}_{qe} =$						Coefficient de frottement $c_t = 0$						

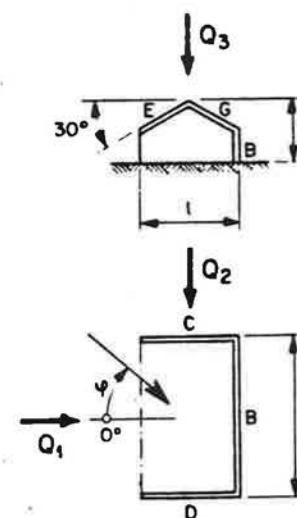


Tabelle 4.6.18

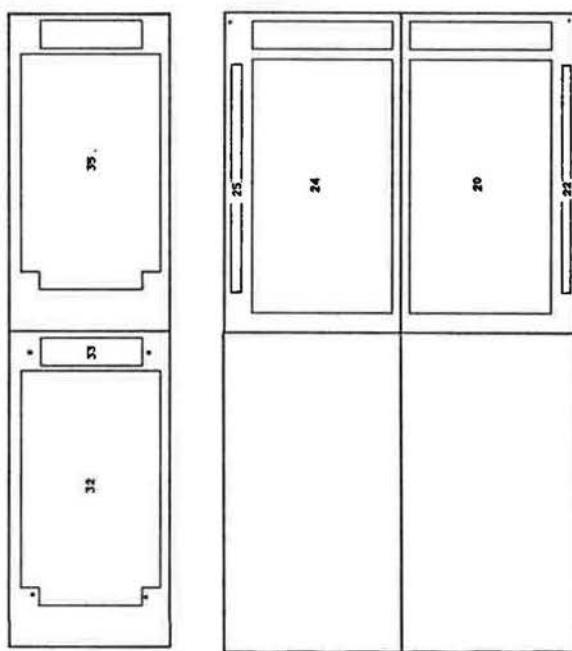
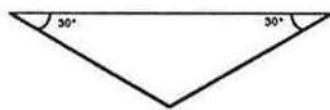
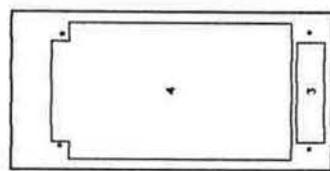
 $h : b : l = 1.35 : 2 : 1$ Toiture à 30°

COEFFICIENTS DE PRESSION												
c_{pe}							c_{pi}					
surface d'application							surface d'application					
φ	A	B	C	D	E	G	A	B	C	D		
0°	-	-0,43	-0,48	-0,48	-0,04	-0,46	-	0,38	0,38	0,37	0,38	0,37
45°	-	-0,53	0,15	-0,47	-0,19	-0,68	-	0,30	0,28	0,32	0,30	0,29
60°	-	-0,46	0,31	-0,44	-0,21	-0,65	-	0,11	0,10	0,19	0,12	0,11
180°	-	0,36	-0,58	-0,58	-0,46	-0,06	-	-0,39	-0,40	-0,40	-0,40	-0,40

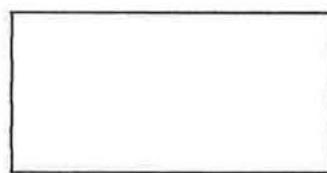
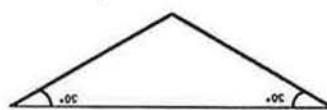
$c_{pe} =$

Coefficient de frottement $c_t = 0$

3

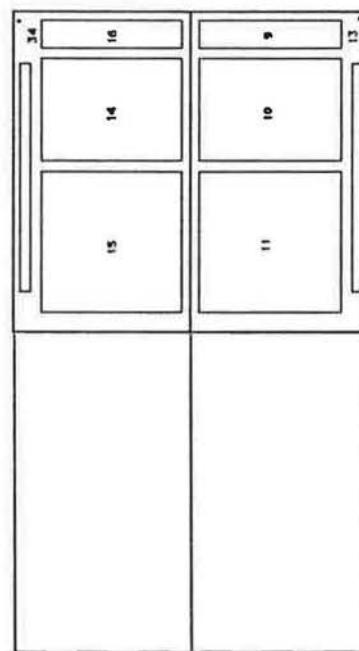
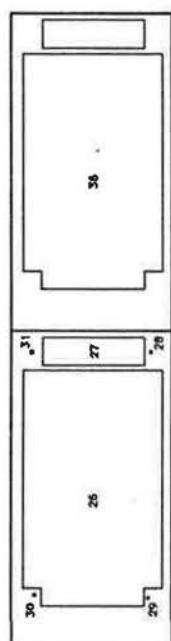
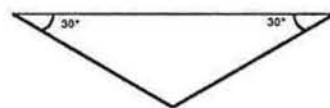
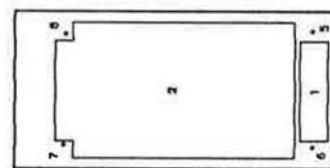


4



MODELE N° 16 Variante 162
Numérotation des prises de pression
Surfaces intérieures

b



b



MODELE N° 16 Variante 162
Numérotation des prises de pression
Surfaces extérieures

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ORIENTATION 0.0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.604	1.004	1.527	0.131
PRANDT B	0.616	1.008	1.556	0.133
8	-0.371	-0.346	-0.909	0.078
1	-0.827	-0.780	-2.024	0.159
13	-0.737	-0.491	-1.619	0.182
2	-0.561	-0.483	-1.231	0.115
10	-0.210	-0.051	-0.496	0.103
4	0.536	0.367	1.267	0.130
9	-0.276	-0.128	-0.715	0.112
5	-1.030	-0.757	-2.665	0.205
7	-0.568	-0.389	-1.345	0.108
6	-1.019	-0.834	-2.412	0.199
19	0.576	0.371	1.241	0.121
18	-0.741	-0.487	-1.596	0.152
0	1.217	2.930	2.993	0.010
0	1.236	2.906	3.041	0.014
22	0.512	0.343	1.166	0.123
16	-0.535	-0.475	-1.218	0.091
12	-0.428	-0.230	-1.002	0.163
34	-0.641	-0.486	-1.500	0.114
11	-0.191	-0.036	-0.423	0.095
14	-0.433	-0.459	-0.963	0.076
20	0.539	0.365	1.196	0.118
24	0.541	0.379	1.202	0.121
32	0.456	0.380	1.137	0.120
17	-0.472	-0.500	-1.177	0.077
31	-0.225	-0.356	-0.530	0.035
15	-0.386	-0.465	-0.909	0.065
27	-0.339	-0.388	-0.795	0.067
25	1.280	2.886	3.007	0.012
29	-0.476	-0.425	-1.132	0.090
28	0.299	0.184	0.711	0.080
30	-0.616	-0.424	-1.582	0.100
26	-0.365	-0.435	-0.938	0.080
35	0.487	0.379	1.147	0.119
36	-0.398	-0.426	-0.938	0.078

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 45.0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.652	1.001	1.541	0.137
PRANDT B	0.652	1.002	1.541	0.138
8	-0.283	-0.321	-0.674	0.066
1	0.579	0.350	1.379	0.187
13	-0.892	-0.129	-2.050	0.240
2	0.358	0.153	0.824	0.111
10	-0.206	-0.096	-0.487	0.073
4	0.446	0.282	1.053	0.106
9	-0.574	-0.107	-1.433	0.197
5	0.479	0.282	1.196	0.163
7	-0.293	-0.325	-0.696	0.080
6	0.677	0.403	1.612	0.242
19	0.453	0.294	1.084	0.102
18	0.380	0.145	0.910	0.129
0	1.193	2.911	2.968	0.014
0	1.210	2.879	3.011	0.014
22	0.460	0.265	1.012	0.104
16	-0.819	-0.874	-1.803	0.143
12	-0.479	-0.282	-1.082	0.132
34	-1.122	-0.857	-2.535	0.170
11	-0.230	-0.154	-0.501	0.077
14	-0.702	-0.812	-1.528	0.117
20	0.460	0.285	1.081	0.108
24	0.478	0.289	1.122	0.111
32	0.515	0.310	1.123	0.120
17	-0.576	-0.609	-1.257	0.105
31	-0.252	-0.382	-0.579	0.039
15	-0.555	-0.697	-1.274	0.109
27	-0.483	-0.564	-1.109	0.086
25	1.319	2.902	3.029	0.013
29	-0.517	-0.462	-1.261	0.077
28	0.230	0.091	0.562	0.071
30	-0.489	-0.348	-1.045	0.099
26	-0.405	-0.434	-0.865	0.071
35	0.401	0.285	0.948	0.103
36	-0.452	-0.615	-1.069	0.075

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 60.0

PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.583	1.002	1.534	0.136
PRANDT B	0.589	1.001	1.549	0.137
8	-0.232	-0.179	-0.524	0.069
1	0.591	0.444	1.336	0.141
13	-1.202	-0.582	-2.883	0.453
2	0.442	0.309	1.060	0.119
10	-0.391	-0.155	-0.870	0.071
4	0.347	0.100	0.774	0.115
9	-0.795	-0.558	-1.870	0.255
5	0.461	0.315	1.086	0.106
7	-0.210	-0.144	-0.537	0.098
6	0.614	0.464	1.572	0.175
19	0.286	0.103	0.734	0.108
18	0.463	0.327	1.189	0.149
0	1.250	2.908	2.963	0.013
0	1.277	2.869	3.026	0.019
22	0.287	0.075	0.700	0.119
16	-0.673	-0.712	-1.638	0.120
12	-0.412	-0.260	-0.986	0.115
34	-0.957	-0.843	-2.287	0.190
11	-0.203	-0.201	-0.501	0.060
14	-0.585	-0.749	-1.442	0.114
20	0.282	0.094	0.749	0.115
24	0.290	0.095	0.772	0.118
32	0.405	0.111	0.968	0.120
17	-0.621	-0.624	-1.485	0.118
31	-0.243	-0.358	-0.557	0.039
15	-0.663	-0.692	-1.523	0.122
27	-0.500	-0.482	-1.094	0.096
25	1.375	2.878	3.008	0.019
29	-0.539	-0.420	-1.326	0.092
28	-0.175	-0.062	-0.430	0.094
30	-0.272	-0.178	-0.682	0.112
26	-0.317	-0.345	-0.795	0.075
35	0.351	0.099	0.790	0.114
36	-0.478	-0.570	-1.076	0.076

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 90.0

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.664	0.996	1.541	0.133
PRANDT B	0.665	0.993	1.542	0.134
8	-0.197	-0.027	-0.518	0.091
1	0.466	0.256	1.228	0.135
13	-1.422	-0.827	-3.130	0.274
2	0.520	0.423	1.145	0.132
10	-0.561	-0.579	-1.245	0.117
4	-0.325	-0.338	-0.720	0.071
9	-0.972	-0.709	-2.275	0.172
5	0.379	0.031	0.886	0.096
7	0.493	0.149	1.119	0.152
6	0.516	0.124	1.172	0.151
19	-0.296	-0.316	-0.691	0.064
18	0.734	0.484	1.713	0.166
0	1.331	2.913	2.977	0.014
0	1.335	2.869	2.984	0.019
22	-0.295	-0.362	-0.758	0.075
16	-0.739	-0.665	-1.899	0.152
12	-0.417	-0.367	-1.009	0.100
34	-0.898	-0.651	-2.173	0.183
11	-0.367	-0.294	-0.847	0.087
14	-0.640	-0.615	-1.478	0.130
20	-0.286	-0.333	-0.648	0.067
24	-0.291	-0.339	-0.660	0.069
32	-0.252	-0.294	-0.628	0.062
17	-0.472	-0.317	-1.176	0.110
31	-0.153	-0.124	-0.373	0.032
15	-0.351	-0.262	-0.858	0.087
27	-0.266	-0.155	-0.668	0.088
25	1.194	2.876	2.998	0.020
29	-0.203	-0.166	-0.454	0.039
28	-0.296	-0.318	-0.661	0.056
30	-0.191	-0.164	-0.446	0.049
26	-0.179	-0.128	-0.419	0.051
35	-0.287	-0.338	-0.700	0.065
36	-0.430	-0.489	-1.052	0.108

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.120000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.616	0.994	1.494	0.133
PRANDT B	0.616	0.993	1.492	0.135
8	0.481	0.289	1.103	0.111
1	-0.180	-0.022	-0.412	0.097
13	-0.954	-0.746	-2.245	0.167
2	0.479	0.336	1.127	0.123
10	-0.636	-0.694	-1.429	0.110
4	-0.361	-0.448	-0.810	0.062
9	-0.534	-0.680	-1.390	0.106
5	-0.181	-0.187	-0.470	0.067
7	0.667	0.464	1.570	0.174
6	-0.277	-0.203	-0.652	0.102
19	-0.326	-0.426	-0.765	0.058
18	0.591	0.386	1.387	0.156
0	1.244	2.945	3.037	0.014
0	1.228	2.882	2.998	0.018
22	-0.379	-0.494	-0.887	0.065
16	-0.868	-0.537	-2.032	0.252
12	-0.623	-0.570	-1.509	0.113
34	-0.975	-0.535	-2.361	0.309
11	-0.623	-0.663	-1.497	0.123
14	-0.352	-0.154	-0.846	0.070
20	-0.328	-0.449	-0.779	0.059
24	-0.321	-0.444	-0.761	0.062
32	-0.324	-0.419	-0.770	0.059
17	-0.430	-0.302	-1.023	0.109
31	0.085	0.064	0.213	0.034
15	-0.236	-0.215	-0.593	0.060
27	0.237	0.067	0.548	0.074
25	1.307	2.900	3.024	0.015
29	-0.196	-0.219	-0.470	0.048
28	-0.270	-0.370	-0.647	0.046
30	-0.259	-0.256	-0.582	0.054
26	-0.102	-0.017	-0.229	0.063
35	-0.320	-0.445	-0.762	0.058
36	0.311	0.127	0.740	0.117

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.135000E+03

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PRISE CP .98 CP MOY CP PIC CP RMS

PRANIT A	0.680	1.008	1.508	0.134
PRANDT B	0.674	1.004	1.495	0.135
8	0.457	0.236	1.069	0.170
1	-0.206	-0.168	-0.482	0.078
13	-1.105	-0.849	-2.648	0.196
2	0.409	0.190	0.980	0.122
10	-0.623	-0.769	-1.448	0.114
4	-0.369	-0.496	-0.858	0.063
9	-0.727	-0.771	-1.698	0.121
5	-0.267	-0.303	-0.623	0.062
7	0.735	0.357	1.639	0.249
6	-0.333	-0.346	-0.743	0.078
19	-0.337	-0.481	-0.799	0.058
18	0.501	0.225	1.188	0.142
0	1.209	2.933	2.988	0.014
0	1.218	2.893	3.010	0.018
22	-0.427	-0.532	-0.968	0.065
16	-0.622	-0.113	-1.411	0.202
12	-0.615	-0.626	-1.529	0.108
34	-0.720	-0.294	-1.789	0.241
11	-0.613	-0.725	-1.419	0.108
14	-0.208	-0.109	-0.482	0.074
20	-0.354	-0.507	-0.852	0.061
24	-0.355	-0.506	-0.854	0.063
32	-0.320	-0.480	-0.801	0.059
17	-0.408	-0.354	-1.021	0.121
31	0.183	0.193	0.431	0.049
15	-0.281	-0.200	-0.661	0.081
27	0.340	0.204	0.823	0.098
25	1.264	2.927	3.059	0.019
29	-0.201	-0.157	-0.456	0.067
28	-0.303	-0.392	-0.689	0.045
30	-0.236	-0.237	-0.545	0.059
26	0.286	0.099	0.659	0.085
35	-0.358	-0.500	-0.872	0.061
36	0.445	0.312	1.085	0.117

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.180000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.672	1.006	1.516	0.136
PRANDT B	0.680	0.998	1.536	0.137
8	-1.183	-0.720	-2.710	0.162
1	-0.585	-0.384	-1.340	0.089
13	-0.573	-0.491	-1.351	0.101
2	-0.541	-0.581	-1.274	0.112
10	-0.359	-0.464	-0.856	0.070
4	-0.290	-0.397	-0.693	0.062
9	-0.410	-0.477	-0.933	0.086
5	-0.405	-0.365	-0.922	0.076
7	-0.889	-0.841	-1.966	0.161
6	-0.603	-0.436	-1.333	0.108
19	-0.300	-0.386	-0.708	0.057
18	-0.620	-0.626	-1.465	0.159
0	1.237	2.962	3.017	0.014
0	1.256	2.929	3.065	0.016
22	-0.328	-0.417	-0.769	0.060
16	-0.271	-0.161	-0.634	0.105
12	-0.569	-0.489	-1.290	0.073
34	-0.667	-0.602	-1.515	0.153
11	-0.352	-0.453	-0.795	0.059
14	-0.230	-0.074	-0.520	0.098
20	-0.302	-0.404	-0.729	0.058
24	-0.310	-0.403	-0.748	0.060
32	-0.263	-0.391	-0.678	0.055
17	-0.414	-0.310	-1.068	0.154
31	0.271	0.348	0.636	0.057
15	-0.205	-0.056	-0.480	0.091
27	0.631	0.381	1.433	0.132
25	1.334	2.907	3.030	0.018
29	0.460	0.101	1.064	0.165
28	-0.219	-0.257	-0.507	0.041
30	-0.344	-0.161	-0.750	0.117
26	0.569	0.357	1.239	0.136
35	-0.323	-0.391	-0.764	0.056
36	0.597	0.357	1.412	0.138

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.225000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.617	0.994	1.510	0.133
PRANDT B	0.625	0.993	1.529	0.135
8	-0.328	-0.365	-0.827	0.068
1	-0.445	-0.470	-1.121	0.085
13	-0.627	-0.547	-1.504	0.116
2	-0.318	-0.416	-0.763	0.062
10	-0.551	-0.555	-1.380	0.099
4	-0.350	-0.468	-0.878	0.066
9	-0.555	-0.563	-1.318	0.105
5	-0.855	-0.484	-2.029	0.121
7	-0.356	-0.371	-0.786	0.064
6	-0.686	-0.470	-1.516	0.080
19	-0.352	-0.465	-0.812	0.061
18	-0.346	-0.412	-0.800	0.061
0	1.306	2.911	2.967	0.015
0	1.320	2.875	2.999	0.016
22	-0.380	-0.501	-0.868	0.065
16	-0.277	-0.285	-0.633	0.062
12	-0.469	-0.580	-1.194	0.090
34	-0.479	-0.444	-1.221	0.092
11	-0.524	-0.617	-1.188	0.091
14	-0.277	-0.235	-0.629	0.072
20	-0.332	-0.473	-0.833	0.058
24	-0.330	-0.457	-0.828	0.059
32	-0.355	-0.484	-0.807	0.057
17	-0.484	-0.386	-1.101	0.120
31	0.157	0.148	0.365	0.043
15	-0.262	-0.205	-0.610	0.075
27	0.395	0.220	0.931	0.095
25	1.283	2.883	3.023	0.012
29	0.621	0.393	1.468	0.201
28	-0.231	-0.327	-0.545	0.040
30	0.489	0.314	1.096	0.121
26	0.435	0.291	0.974	0.105
35	-0.368	-0.457	-0.798	0.057
36	0.338	0.091	0.733	0.090

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.240000E+03

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PRISE	CP .98	CP MOY	CP FIC	CP RMS
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PRANDT A	0.542	0.999	1.487	0.132
PRANDT B	0.540	0.994	1.483	0.134
8	-0.310	-0.334	-0.720	0.065
1	-0.576	-0.445	-1.339	0.098
13	-0.522	-0.428	-1.199	0.087
2	-0.352	-0.406	-0.809	0.063
10	-0.445	-0.521	-1.012	0.085
4	-0.427	-0.438	-0.971	0.082
9	-0.438	-0.442	-1.100	0.073
5	-1.263	-0.517	-3.169	0.198
7	-0.330	-0.363	-0.756	0.058
6	-0.491	-0.436	-1.123	0.080
19	-0.386	-0.432	-0.891	0.069
18	-0.316	-0.404	-0.730	0.057
0	1.327	2.928	2.982	0.014
0	1.351	2.894	3.037	0.011
22	-0.427	-0.480	-0.973	0.077
16	-0.264	-0.288	-0.602	0.053
12	-0.522	-0.488	-1.233	0.103
34	-0.449	-0.395	-1.060	0.082
11	-0.524	-0.607	-1.351	0.115
14	-0.223	-0.241	-0.575	0.059
20	-0.360	-0.432	-0.831	0.063
24	-0.347	-0.415	-0.801	0.062
32	-0.348	-0.441	-0.797	0.058
17	-0.427	-0.326	-0.979	0.106
31	0.069	0.035	0.165	0.033
15	-0.247	-0.225	-0.593	0.061
27	0.247	0.085	0.557	0.076
25	1.345	2.913	3.037	0.010
29	-0.537	-0.097	-1.263	0.296
28	-0.227	-0.302	-0.535	0.042
30	-0.498	0.017	-1.152	0.224
26	0.303	0.114	0.702	0.098
35	-0.362	-0.402	-0.805	0.059
36	-0.114	-0.025	-0.254	0.065

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.270000E+03

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PRISE	CF .98	CF MOY	CF PIC	CF RMS
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PRANDT A	0.663	1.000	1.515	0.131
PRANDT B	0.664	1.004	1.517	0.133
8	-0.259	-0.195	-0.603	0.053
1	-0.270	-0.226	-0.629	0.056
13	-0.288	-0.194	-0.668	0.058
2	-0.204	-0.223	-0.474	0.047
10	-0.209	-0.154	-0.480	0.046
4	-0.318	-0.230	-0.732	0.079
9	-0.179	-0.173	-0.434	0.043
5	-0.505	-0.230	-1.224	0.074
7	-0.242	-0.201	-0.548	0.048
6	-0.282	-0.222	-0.639	0.055
19	-0.301	-0.288	-0.719	0.085
18	-0.181	-0.212	-0.434	0.044
0	1.255	2.905	2.956	0.013
0	1.267	2.869	2.985	0.018
22	-0.384	-0.328	-0.881	0.085
16	-0.202	-0.164	-0.462	0.047
12	-0.323	-0.237	-0.782	0.079
34	-0.296	-0.179	-0.717	0.050
11	-0.245	-0.171	-0.566	0.054
14	-0.182	-0.138	-0.422	0.049
20	-0.294	-0.287	-0.708	0.068
24	-0.260	-0.261	-0.626	0.063
32	-0.286	-0.326	-0.657	0.064
17	-0.336	-0.151	-0.772	0.063
31	-0.138	-0.138	-0.330	0.036
15	-0.184	-0.133	-0.439	0.054
27	-0.339	-0.178	-0.794	0.104
25	1.289	2.893	3.016	0.017
29	-0.653	-0.560	-1.610	0.132
28	-0.222	-0.236	-0.546	0.048
30	-1.121	-0.532	-2.612	0.185
26	-0.482	-0.401	-1.123	0.107
35	-0.249	-0.254	-0.575	0.057
36	-0.192	-0.127	-0.444	0.050

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.300000E+03

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PRISE	CP .98	CP MOY	CP PIC	CP RMS
PRANDT A	0.654	0.999	1.557	0.135
PRANDT B	0.656	0.997	1.563	0.137
8	-0.866	-0.452	-2.012	0.109
1	-0.479	-0.414	-1.113	0.109
13	-0.513	-0.432	-1.138	0.102
2	-0.408	-0.444	-0.906	0.076
10	-0.257	-0.258	-0.598	0.057
4	0.419	0.192	0.975	0.137
9	-0.289	-0.315	-0.667	0.063
5	-0.638	-0.398	-1.475	0.126
7	-0.651	-0.466	-1.481	0.107
6	-0.485	-0.404	-1.103	0.101
19	0.438	0.172	1.061	0.135
18	-0.350	-0.442	-0.848	0.072
0	1.240	2.924	2.971	0.014
0	1.262	2.902	3.024	0.013
22	0.330	0.104	0.788	0.129
16	-0.424	-0.466	-1.015	0.084
12	-0.397	-0.335	-0.922	0.115
34	-0.686	-0.464	-1.592	0.124
11	-0.258	-0.222	-0.622	0.061
14	-0.465	-0.537	-1.120	0.093
20	0.324	0.134	0.771	0.127
24	0.340	0.147	0.808	0.128
32	0.310	0.118	0.760	0.118
17	-0.523	-0.410	-1.282	0.101
31	-0.258	-0.415	-0.628	0.043
15	-0.527	-0.616	-1.285	0.119
27	-0.512	-0.526	-1.188	0.094
25	1.302	2.899	3.023	0.014
29	-0.410	-0.538	-0.935	0.069
28	-0.177	-0.033	-0.403	0.089
30	-0.444	-0.485	-0.987	0.082
26	-0.459	-0.580	-1.022	0.076
35	0.379	0.146	0.873	0.121
36	-0.386	-0.390	-0.890	0.086

DUREE DE L'ESSAI: 0.000HEURES,

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ORIENTATION 0.315000E+03

=====

PRISE	CP .98	CP MOY	CP PIC	CP RMS
-------	--------	--------	--------	--------

PRANDT A	0.698	0.998	1.602	0.136
PRANDT B	0.701	1.001	1.607	0.138
8	-0.716	-0.488	-1.724	0.128
1	-0.498	-0.446	-1.201	0.109
13	-0.650	-0.484	-1.479	0.120
2	-0.464	-0.473	-1.056	0.081
10	-0.277	-0.282	-0.659	0.071
4	0.494	0.324	1.177	0.126
9	-0.329	-0.350	-0.778	0.077
5	-0.602	-0.442	-1.425	0.120
7	-0.722	-0.519	-1.725	0.123
6	-0.499	-0.452	-1.193	0.111
19	0.462	0.330	1.151	0.121
18	-0.392	-0.475	-0.976	0.076
0	1.312	2.941	2.995	0.015
0	1.337	2.921	3.053	0.018
22	0.477	0.280	1.130	0.112
16	-0.670	-0.582	-1.588	0.110
12	-0.484	-0.406	-1.189	0.118
34	-0.893	-0.604	-2.195	0.156
11	-0.236	-0.210	-0.554	0.077
14	-0.720	-0.588	-1.691	0.106
20	0.420	0.301	1.009	0.109
24	0.420	0.311	1.010	0.113
32	0.438	0.293	1.007	0.106
17	-0.597	-0.605	-1.373	0.105
31	-0.257	-0.417	-0.605	0.046
15	-0.552	-0.628	-1.299	0.095
27	-0.468	-0.589	-1.137	0.087
25	1.251	2.885	3.035	0.011
29	-0.436	-0.629	-1.023	0.075
28	0.217	0.089	0.508	0.069
30	-0.455	-0.559	-1.070	0.078
26	-0.447	-0.620	-1.053	0.077
35	0.465	0.328	1.190	0.116
36	-0.364	-0.482	-0.932	0.077

DUREE DE L'ESSAI: 0.000HEURES,

Coefficients de pression C_q et C_p
mesurés sur la forme 20

Définition des surfaces et des points de mesures.
Tableaux des résultats bruts

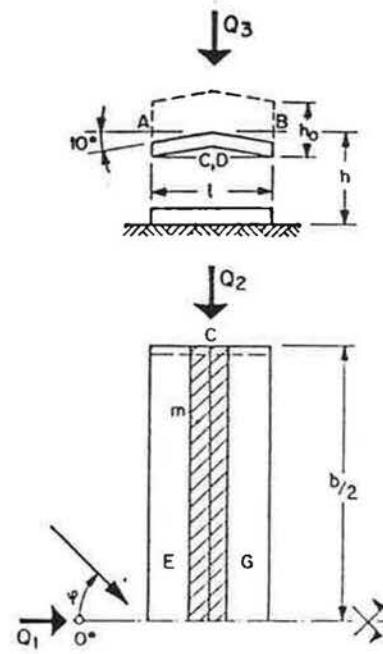


Tabelle 4.6.24.

$$h : b : l = 0.6 : 5 : 1$$

Toiture à 10°

COEFFICIENTS DE PRESSION												
	C_{qe}						C_{qi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°					-0,53	-0,26					-0,37	-0,12
15°					-0,44	-0,26					-0,35	-0,12
45°					-0,34	-0,27					-0,24	-0,11
90°					-0,28	-0,28					-0,18	-0,18

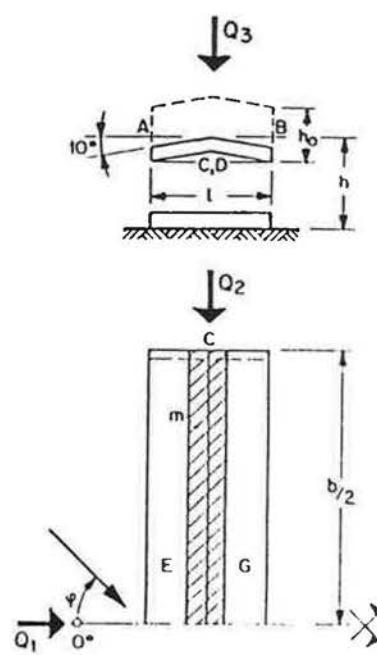
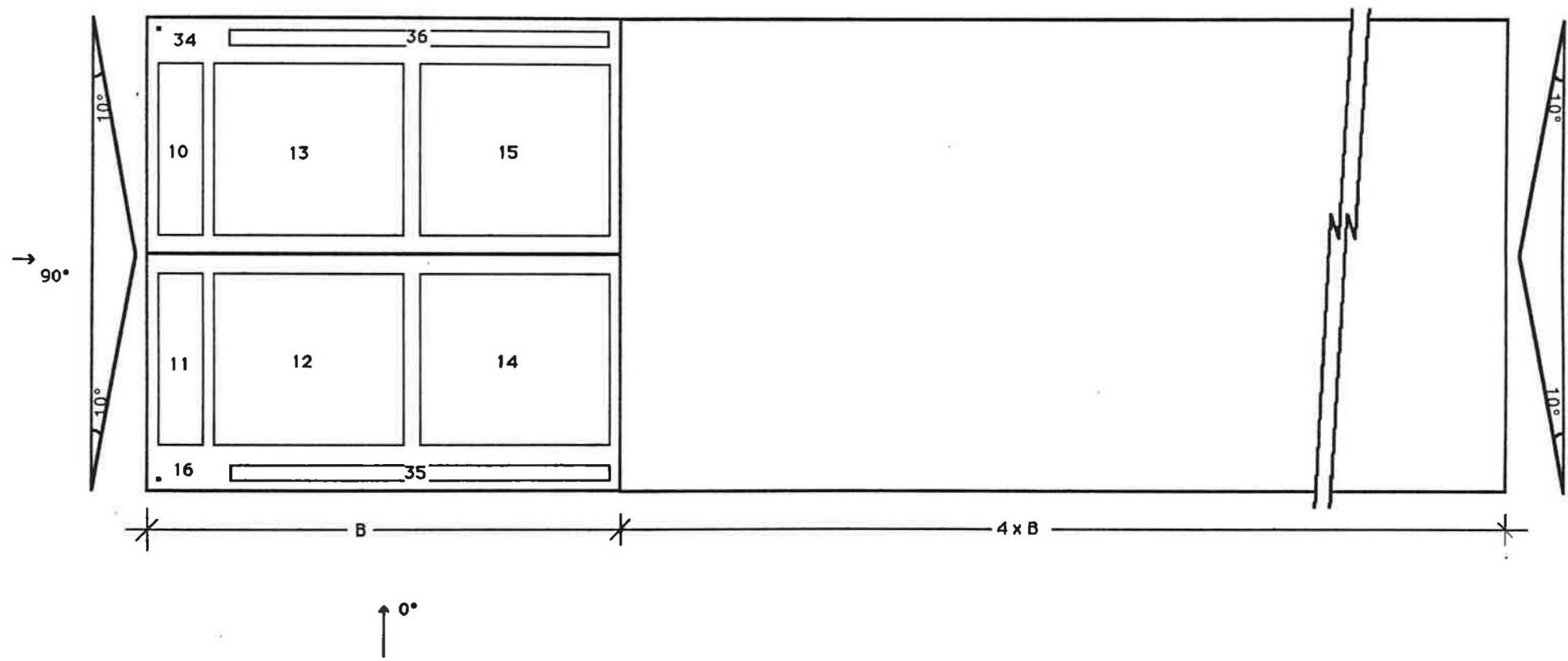


Tabelle 4.6.24

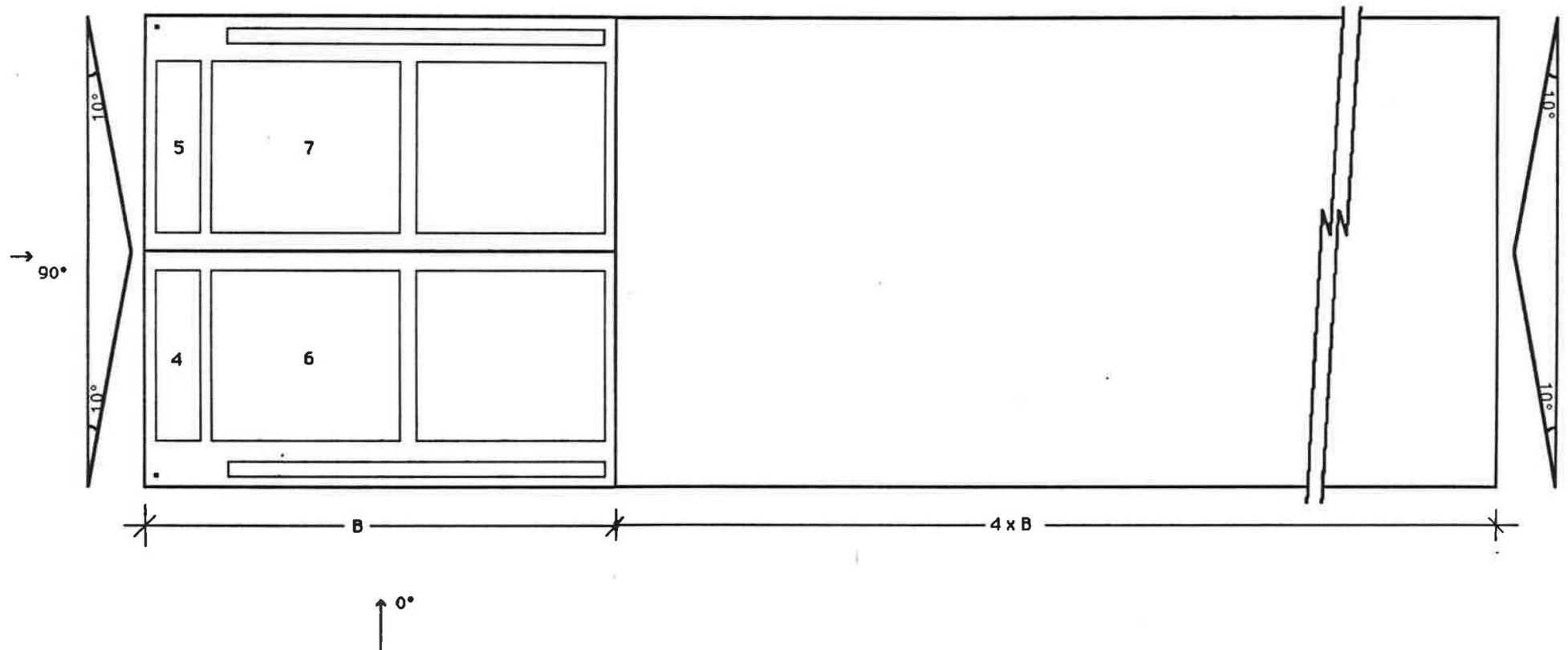
$$h:b:l = 0.6:5:1$$

Toiture à 10°

COEFFICIENTS DE PRESSION													
	C_{pe}						C_{pi}						
	surface d'application						surface d'application						
φ	A	B	C	D	E	G	A	B	C	D	E	G	
0°					-0,61	-0,44					-0,26	-0,18	
15°					-0,52	-0,45					-0,21	-0,15	
45°					-0,28	-0,43					-0,10	-0,11	
90°					-0,36	-0,36					-0,19	-0,19	



MODELE N°20
Numérotation des prises de pression
Surfaces extérieures



MODELE N° 20
Numérotation des prises de pression
Surfaces intérieures

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.259	-0.413	-0.681	0.000		
11.000	-0.307	-0.331	-0.821	0.000		
12.000	-0.523	-0.528	-1.357	0.000		
13.000	-0.232	-0.433	-0.671	0.000		
14.000	-0.543	-0.691	-1.431	0.000		
15.000	-0.268	-0.454	-0.702	0.000		
16.000	-0.871	-1.114	-2.290	0.000		
34.000	-0.231	-0.433	-0.569	0.000		
35.000	-0.731	-1.136	-1.843	0.000		
36.000	-0.228	-0.414	-0.630	0.000		

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC
4.000	-0.101	-0.063	-0.272
5.000	-0.123	-0.088	-0.311
6.000	-0.372	-0.256	-0.921
7.000	-0.121	-0.176	-0.322

=====

ORIENTATION 15.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.376	-0.477	-0.947	0.000		
11.000	-0.233	-0.217	-0.639	0.000		
12.000	-0.367	-0.397	-0.926	0.000		
13.000	-0.275	-0.457	-0.686	0.000		
14.000	-0.508	-0.639	-1.297	0.000		
15.000	-0.246	-0.450	-0.644	0.000		
16.000	-0.808	-1.044	-1.976	0.000		
34.000	-0.280	-0.520	-0.724	0.000		
35.000	-0.641	-1.017	-1.679	0.000		
36.000	-0.248	-0.407	-0.640	0.000		

=====

ORIENTATION 15.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	-0.238	-0.154	-0.633	0.000		
5.000	-0.278	-0.229	-0.772	0.000		
6.000	-0.352	-0.210	-0.904	0.000		
7.000	-0.122	-0.149	-0.322	0.000		

=====

ORIENTATION 45.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.630	-0.860	-1.657	0.000		
11.000	-0.474	-0.328	-1.205	0.000		
12.000	-0.233	-0.216	-0.577	0.000		
13.000	-0.338	-0.504	-0.848	0.000		
14.000	-0.442	-0.340	-1.035	0.000		
15.000	-0.200	-0.356	-0.538	0.000		
16.000	-0.329	-0.256	-0.811	0.000		
34.000	-0.324	-0.630	-0.891	0.000		
35.000	-0.464	-0.610	-1.199	0.000		
36.000	-0.227	-0.364	-0.559	0.000		

=====

ORIENTATION 45.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.426	-0.612	-1.138	0.000		
5.000	-0.509	-0.736	-1.351	0.000		
6.000	-0.243	-0.097	-0.598	0.000		
7.000	-0.105	-0.110	-0.274	0.000		

=====

ORIENTATION 90.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.734	-0.945	-1.815	0.000		
11.000	-0.648	-0.869	-1.661	0.000		
12.000	-0.421	-0.546	-1.082	0.000		
13.000	-0.424	-0.525	-0.975	0.000		
14.000	-0.144	-0.165	-0.385	0.000		
15.000	-0.144	-0.175	-0.363	0.000		
16.000	-0.558	-0.864	-1.513	0.000		
34.000	-0.345	-0.622	-0.915	0.000		
35.000	-0.178	-0.191	-0.448	0.000		
36.000	-0.178	-0.205	-0.437	0.000		

=====

ORIENTATION 90.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	-0.342	-0.482	-0.859	0.000		
5.000	-0.370	-0.478	-0.937	0.000		
6.000	-0.176	-0.185	-0.457	0.000		
7.000	-0.221	-0.210	-0.540	0.000		

=====

ORIENTATION 0.180000E+03

=====

POSI.	CP .98	CP MOY	CP PIC
10.000	-0.281	-0.306	-0.792
11.000	-0.239	-0.370	-0.597
12.000	-0.229	-0.394	-0.598
13.000	-0.355	-0.389	-0.939
14.000	-0.282	-0.447	-0.679
15.000	-0.476	-0.595	-1.299
16.000	-0.187	-0.337	-0.501
34.000	-0.127	-0.076	-0.316
35.000	-0.232	-0.396	-0.578
36.000	-0.806	-1.068	-2.067

=====

ORIENTATION 0.180000E+03

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	-0.206	-0.190	-0.541	0.000		
5.000	-0.165	-0.137	-0.442	0.000		
6.000	-0.166	-0.212	-0.435	0.000		
7.000	-0.490	-0.519	-1.261	0.000		

=====

ORIENTATION 0.180000E+03

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.383	-0.557	-0.964	0.000		
11.000	-0.340	-0.453	-0.843	0.000		
12.000	-0.265	-0.434	-0.655	0.000		
13.000	-0.431	-0.647	-1.152	0.000		
14.000	-0.330	-0.529	-0.798	0.000		
15.000	-0.705	-0.984	-1.815	0.000		
16.000	-0.268	-0.388	-0.672	0.000		
34.000	-0.210	-0.313	-0.573	0.000		
35.000	-0.268	-0.471	-0.697	0.000		
36.000	-1.030	-1.539	-2.638	0.000		

=====

ORIENTATION 0.180000E+03

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
1.000	-0.244	-0.438	-0.667	0.000		
5.000	-0.255	-0.388	-0.641	0.000		
6.000	-0.245	-0.404	-0.616	0.000		
7.000	-0.347	-0.499	-0.906	0.000		

Coefficients de pression C_q et C_p
mesurés sur la forme 21

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

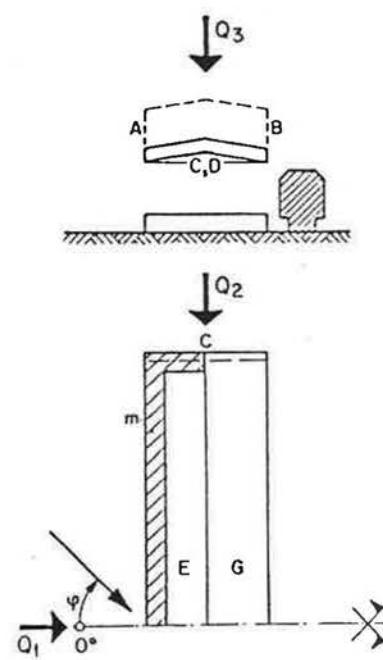


Tabelle 4.6.26

$h : b : l = 0.6 : 5 : 1$

Toiture à 10°

COEFFICIENTS DE PRESSION												
φ	c_{qe}						c_{qi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°					-0,67	-0,38				0,2	0,27	
15°					-0,66	-0,35				+0,19	0,26	
45°					-0,36	-0,37				0,19	0,22	
90°					-0,30	-0,31				-0,18	-0,17	
$c_{qe} =$						Coefficient de frottement $c_t = 0$						

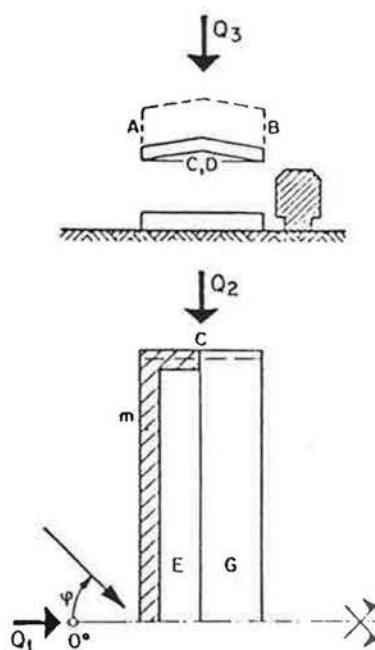
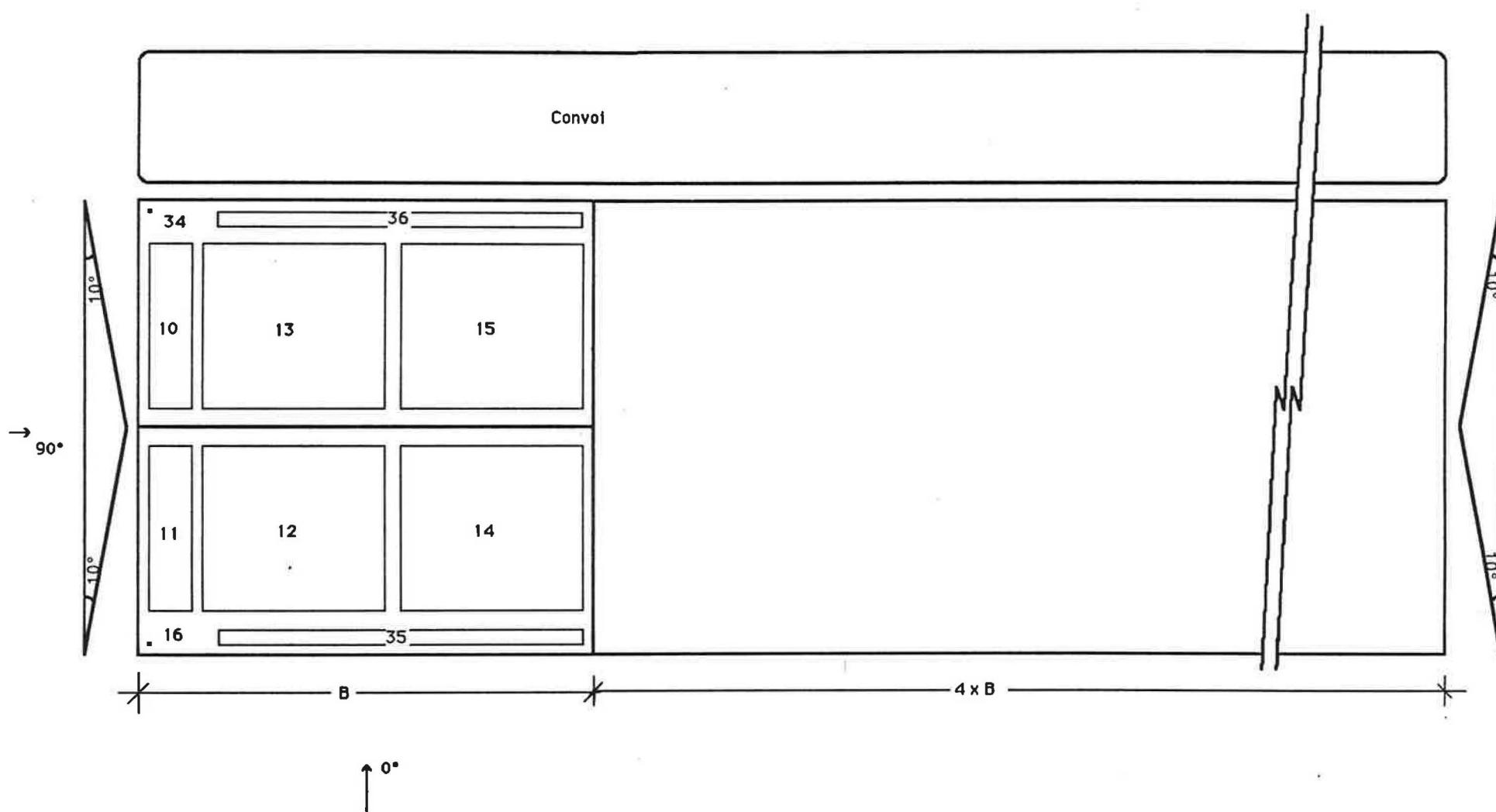


Tabelle 4.6.26

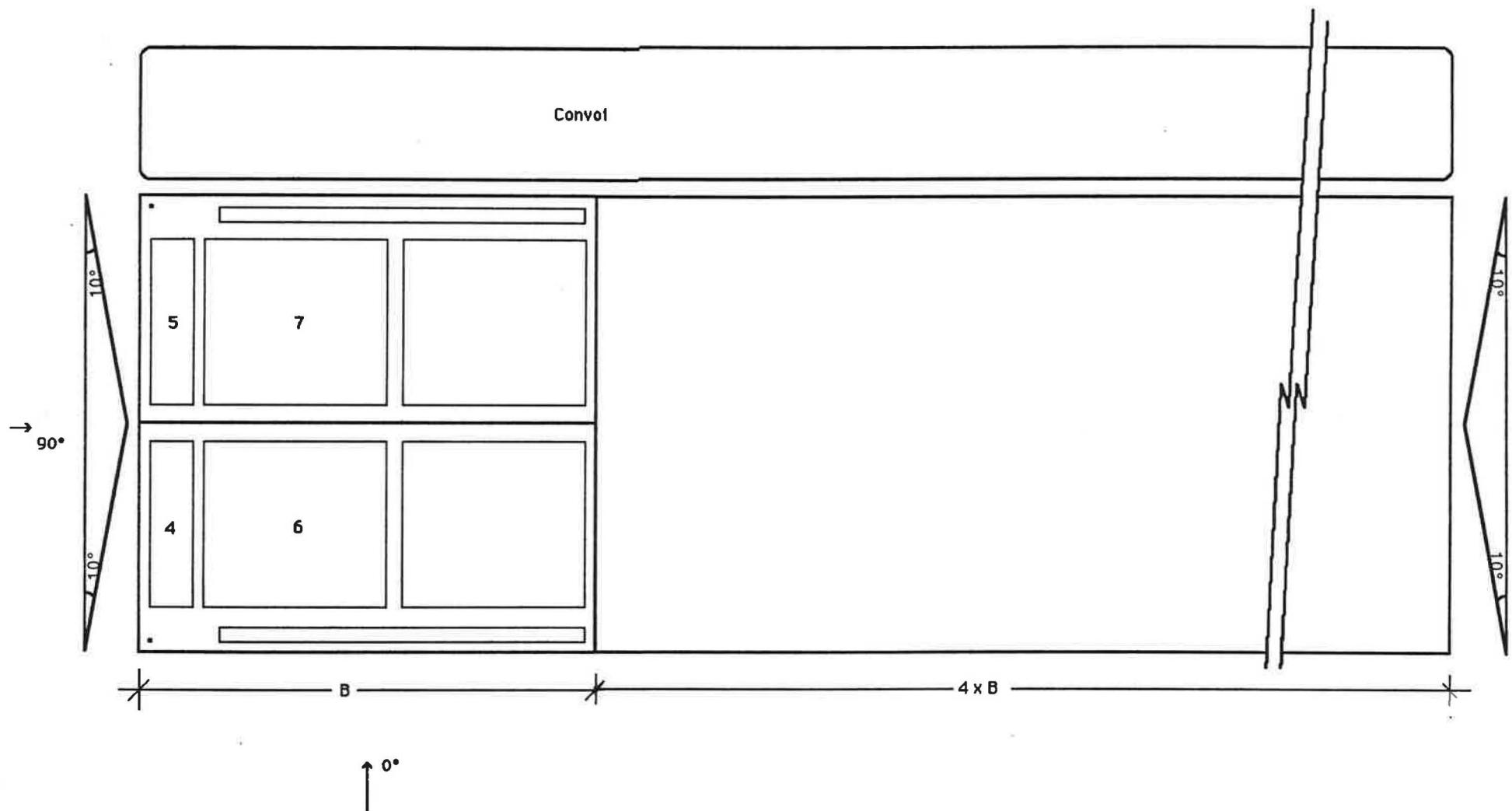
$$h : b : l = 0.6 : 5 : 1$$

Toiture à 10°

COEFFICIENTS DE PRESSION													
	C_{pe}						C_{pi}						
	surface d'application						surface d'application						
φ	A	B	C	D	E	G	A	B	C	D	E	G	
0°					-1,07	-0,65					0,16	0,22	
15°					-0,90	-0,66					0,19	0,23	
45°					-0,47	-0,60					0,16	0,16	
90°					-0,38	-0,41					-0,19	-0,20	



MODELE N°21
Numérotation des prises de pression
Surfaces extérieures



MODELE N° 21

Numérotation des prises de pression

Surfaces intérieures

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.443	-0.681	-1.122	0.000		
11.000	-0.373	-0.394	-0.951	0.000		
12.000	-0.589	-0.863	-1.522	0.000		
13.000	-0.362	-0.635	-0.980	0.000		
14.000	-0.754	-1.275	-2.044	0.000		
15.000	-0.389	-0.661	-0.973	0.000		
16.000	-0.980	-1.586	-2.816	0.000		
34.000	-0.379	-0.716	-0.974	0.000		
35.000	-0.893	-1.475	-2.401	0.000		
36.000	-0.358	-0.626	-0.900	0.000		

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	0.182	0.174	0.513	0.000		
5.000	0.236	0.202	0.620	0.000		
6.000	0.196	0.161	0.490	0.000		
7.000	0.270	0.216	0.684	0.000		

=====

ORIENTATION 15.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.554	-0.894	-1.455	0.000		
11.000	-0.302	-0.310	-0.803	0.000		
12.000	-0.506	-0.616	-1.289	0.000		
13.000	-0.357	-0.675	-0.946	0.000		
14.000	-0.818	-1.183	-2.071	0.000		
15.000	-0.334	-0.641	-0.930	0.000		
16.000	-0.818	-1.066	-2.135	0.000		
34.000	-0.385	-0.820	-1.086	0.000		
35.000	-0.940	-1.380	-2.462	0.000		
36.000	-0.324	-0.630	-0.891	0.000		

=====

ORIENTATION 15.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	0.201	0.176	0.535	0.000		
5.000	0.170	0.134	0.441	0.000		
6.000	0.193	0.188	0.509	0.000		
7.000	0.263	0.228	0.669	0.000		

=====

ORIENTATION 45.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.657	-1.056	-1.667	0.000		
11.000	-0.529	-0.424	-1.387	0.000		
12.000	-0.256	-0.279	-0.680	0.000		
13.000	-0.488	-0.721	-1.228	0.000		
14.000	-0.458	-0.656	-1.379	0.000		
15.000	-0.250	-0.485	-0.683	0.000		
16.000	-0.389	-0.369	-0.923	0.000		
34.000	-0.427	-0.807	-1.106	0.000		
35.000	-0.604	-0.886	-1.542	0.000		
36.000	-0.289	-0.510	-0.747	0.000		

=====

ORIENTATION 45.0

=====

POST.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	-0.202	-0.136	-0.491	0.000		
5.000	-0.178	-0.144	-0.470	0.000		
6.000	0.188	0.159	0.449	0.000		
7.000	0.218	0.157	0.522	0.000		

=====

ORIENTATION 90.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.773	-0.947	-1.837	0.000		
11.000	-0.644	-0.883	-1.663	0.000		
12.000	-0.444	-0.574	-1.136	0.000		
13.000	-0.469	-0.614	-1.142	0.000		
14.000	-0.160	-0.181	-0.385	0.000		
15.000	-0.149	-0.212	-0.399	0.000		
16.000	-0.614	-0.877	-1.558	0.000		
34.000	-0.414	-0.707	-1.037	0.000		
35.000	-0.181	-0.201	-0.462	0.000		
36.000	-0.177	-0.237	-0.434	0.000		

=====

ORIENTATION 90.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
4.000	-0.379	-0.499	-0.922	0.000		
5.000	-0.334	-0.496	-0.905	0.000		
6.000	-0.176	-0.191	-0.459	0.000		
7.000	-0.165	-0.203	-0.453	0.000		

Coefficients de pression C_q et C_p
mesurés sur la forme 22

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

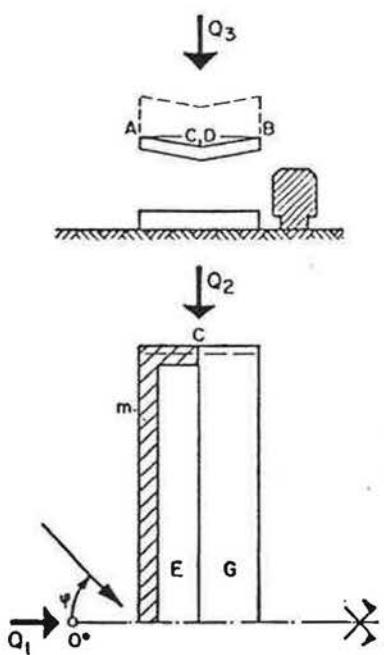


Tabelle 4.6.29

$h : b : l = 0.6 : 5 : 1$

Toiture à -10°

φ	COEFFICIENTS DE PRESSION											
	c_{qe}						c_{qi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°					-0,58	-0,39					0,2	-0,12
15°					-0,51	-0,26					0,19	-0,13
45°					-0,34	-0,13					-0,14	-0,2
90°					-0,17	-0,17					-0,3	-0,3
	$c_{qe} =$						Coefficient de frottement $c_t = 0$					

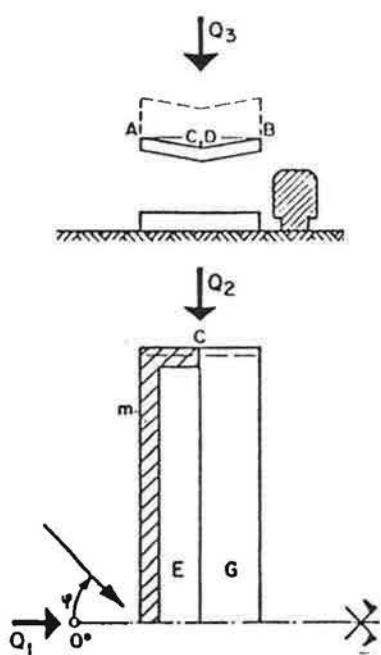
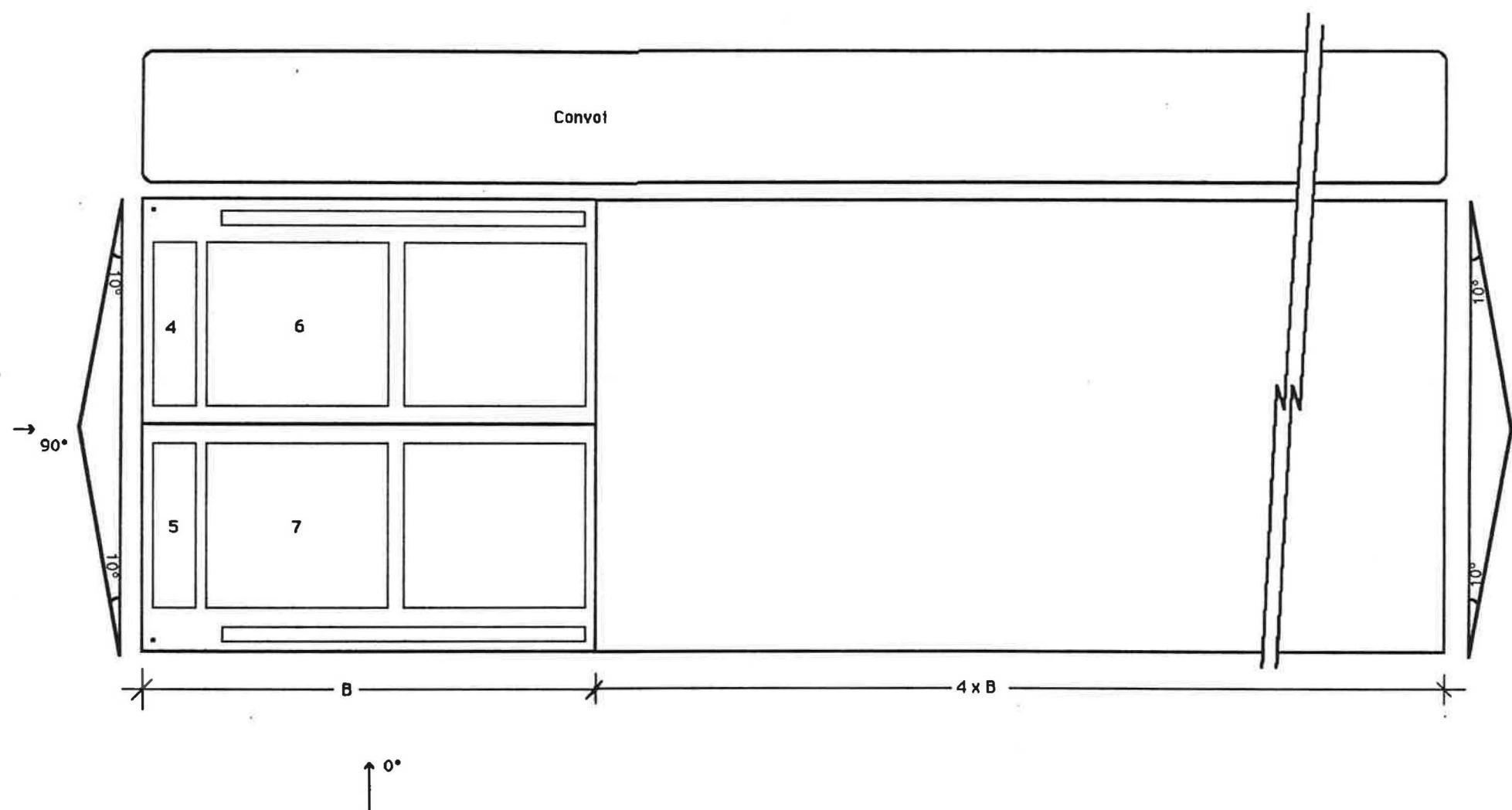


Tabelle 4.6.29

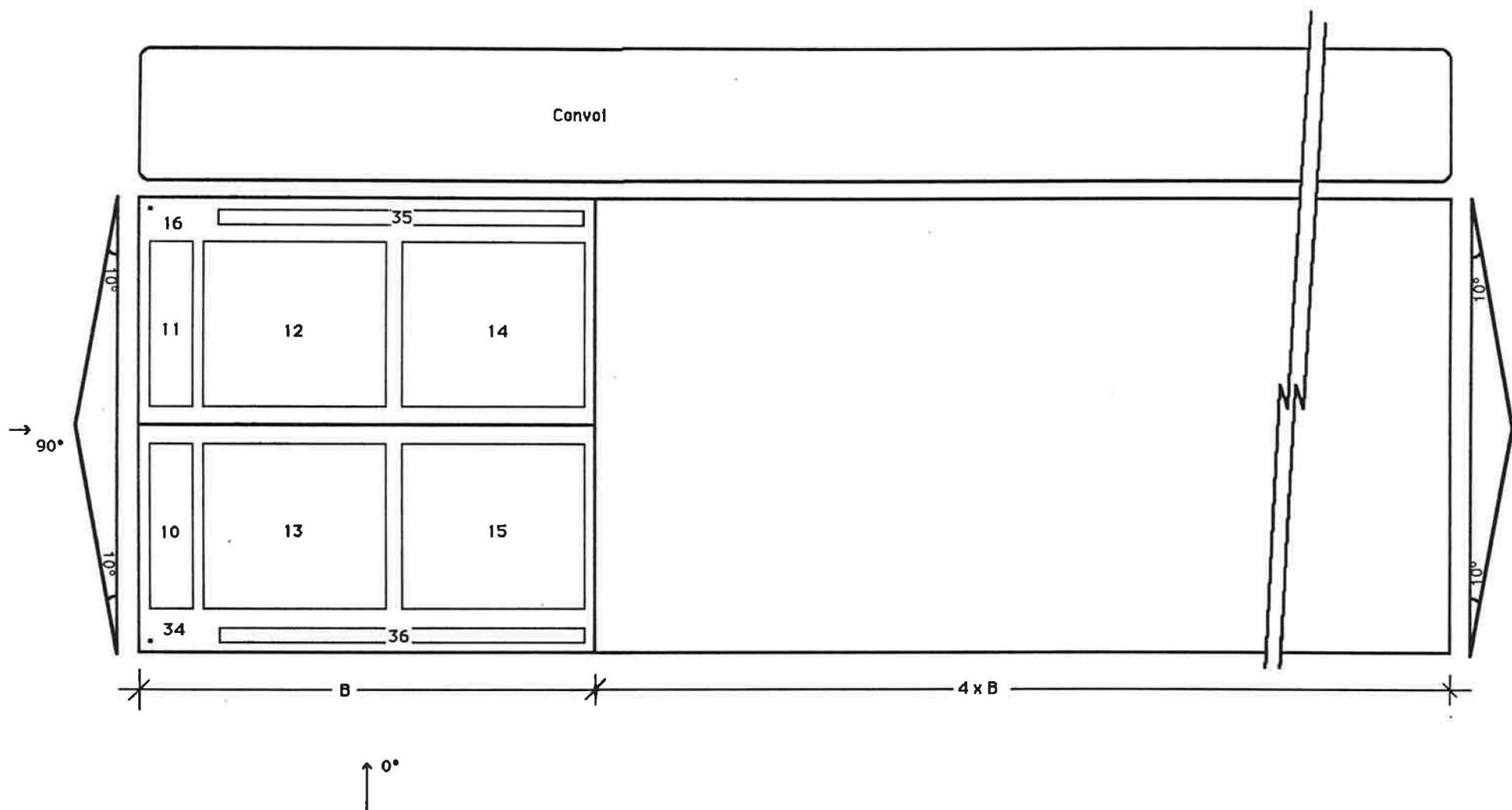
$h : b : l = 0.6 : 5 : 1$

Toiture à -10°

COEFFICIENTS DE PRESSION									
	C_{pe}						C_{pi}		
	surface d'application						surface d'application		
φ	A	B	C	D	E	G	A	B	C
0°					-0,87	-0,48			0,16 -0,10
15°					-0,85	-0,22			0,16 -0,12
45°					-0,42	-0,08			-0,05 -0,27
90°					-0,09	-0,09			-0,36 -0,36
$\hat{C}_{pe} =$						Coefficient de frottement $C_t = 0$			



MODELE N°22
Numérotation des prises de pression
Surfaces extérieures



MODELE N° 22
Numérotation des prises de pression
Surfaces intérieures

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	0.165	0.069	0.442	0.000		
11.000	-0.191	-0.312	-0.480	0.000		
12.000	-0.152	-0.174	-0.383	0.000		
13.000	0.222	0.141	0.570	0.000		
14.000	-0.086	-0.026	-0.258	0.000		
15.000	0.180	0.176	0.486	0.000		
16.000	-0.205	-0.362	-0.536	0.000		
34.000	0.190	0.195	0.481	0.000		
35.000	-0.161	-0.202	-0.407	0.000		
36.000	0.193	0.046	0.547	0.000		
4.000	-0.439	-0.659	-1.170	0.000		
5.000	-0.393	-0.540	-1.041	0.000		
6.000	-0.319	-0.461	-0.856	0.000		
7.000	-0.584	-0.872	-1.530	0.000		

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ORIENTATION 15.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	0.194	0.150	0.468	0.000		
11.000	-0.196	-0.289	-0.511	0.000		
12.000	-0.164	-0.185	-0.412	0.000		
13.000	0.194	0.172	0.505	0.000		
14.000	-0.103	-0.056	-0.266	0.000		
15.000	0.176	0.143	0.435	0.000		
16.000	-0.208	-0.387	-0.542	0.000		
34.000	0.196	0.266	0.517	0.000		
35.000	-0.198	-0.271	-0.494	0.000		
36.000	0.297	0.037	0.755	0.000		
4.000	-0.438	-0.645	-1.127	0.000		
5.000	-0.363	-0.508	-0.949	0.000		
6.000	-0.263	-0.221	-0.696	0.000		
7.000	-0.513	-0.849	-1.352	0.000		

=====

ORIENTATION 45.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	0.137	0.080	0.351	0.000		
11.000	-0.421	-0.421	-1.072	0.000		
12.000	-0.262	-0.338	-0.677	0.000		
13.000	0.154	0.082	0.385	0.000		
14.000	-0.142	-0.193	-0.394	0.000		
15.000	-0.119	-0.009	-0.285	0.000		
16.000	-0.403	-0.602	-1.066	0.000		
34.000	0.169	0.193	0.448	0.000		
35.000	-0.244	-0.455	-0.701	0.000		
36.000	0.317	-0.008	0.820	0.000		
4.000	-0.481	-0.708	-1.225	0.000		
5.000	-0.397	-0.620	-1.006	0.000		
6.000	-0.130	-0.079	-0.327	0.000		
7.000	-0.337	-0.417	-0.856	0.000		

=====

ORIENTATION 90.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.630	-0.841	-1.700	0.000		
11.000	-0.599	-0.835	-1.655	0.000		
12.000	-0.393	-0.458	-1.142	0.000		
13.000	-0.469	-0.552	-1.143	0.000		
14.000	-0.206	-0.266	-0.508	0.000		
15.000	-0.157	-0.195	-0.389	0.000		
16.000	-0.635	-0.879	-1.639	0.000		
34.000	-0.358	-0.663	-1.021	0.000		
35.000	-0.369	-0.456	-0.899	0.000		
36.000	-0.168	-0.127	-0.448	0.000		
4.000	-0.398	-0.587	-1.009	0.000		
5.000	-0.402	-0.590	-1.066	0.000		
6.000	-0.166	-0.086	-0.436	0.000		
7.000	-0.130	-0.044	-0.340	0.000		

=====

ORIENTATION 0.180000E+03

=====

POSI.	CP .98	CP MDY	CP FIC	GP	DELTA	DP
10.000	-0.307	-0.433	-0.739	0.000		
11.000	-0.321	-0.503	-0.832	0.000		
12.000	-0.309	-0.492	-0.782	0.000		
13.000	-0.295	-0.448	-0.716	0.000		
14.000	-0.358	-0.569	-0.957	0.000		
15.000	-0.248	-0.417	-0.632	0.000		
16.000	-0.652	-1.079	-1.710	0.000		
34.000	-0.253	-0.451	-0.614	0.000		
35.000	-0.926	-1.311	-2.266	0.000		
36.000	-0.198	-0.317	-0.509	0.000		
4.000	-0.479	-0.573	-1.186	0.000		
5.000	-0.534	-0.697	-1.398	0.000		
6.000	-0.583	-0.846	-1.483	0.000		
7.000	-0.390	-0.482	-0.950	0.000		

Coefficients de pression C_q et C_p
mesurés sur la forme 23

Définition des surfaces et des points de mesures.

Tableaux des résultats bruts

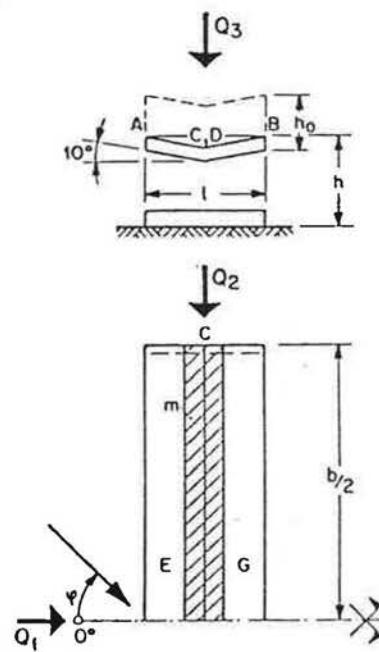


Tabelle 4.6.27.

$h : b : l = 0.6 : 5 : 1$

Toiture à -10°

COEFFICIENTS DE PRESSION												
φ	C_{qe}						C_{qt}					
	surface d'application						surface d'application					
	A	B	C	D	E	G	A	B	C	D	E	G
0°					-0,48	-0,25				-0,43	-0,31	
15°					-0,41	-0,18				-0,41	-0,31	
45°					-0,22	0,15				-0,24	-0,31	
90°					-0,13	-0,14				-0,31	-0,33	
$\bar{C}_{qe} =$						Coefficient de frottement $C_t = 0$						

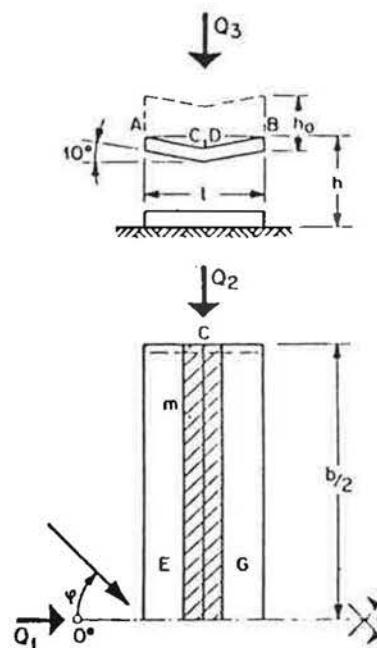
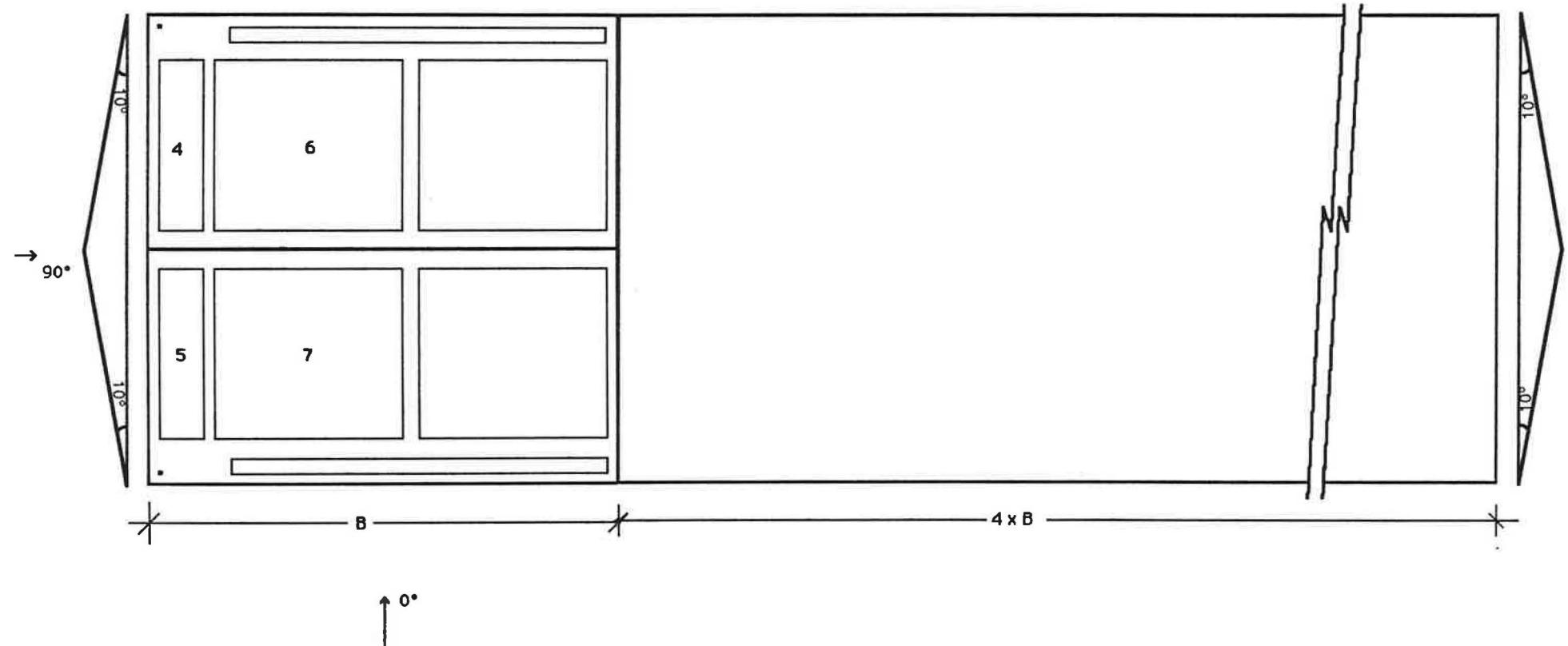


Tabelle 4.6.27.

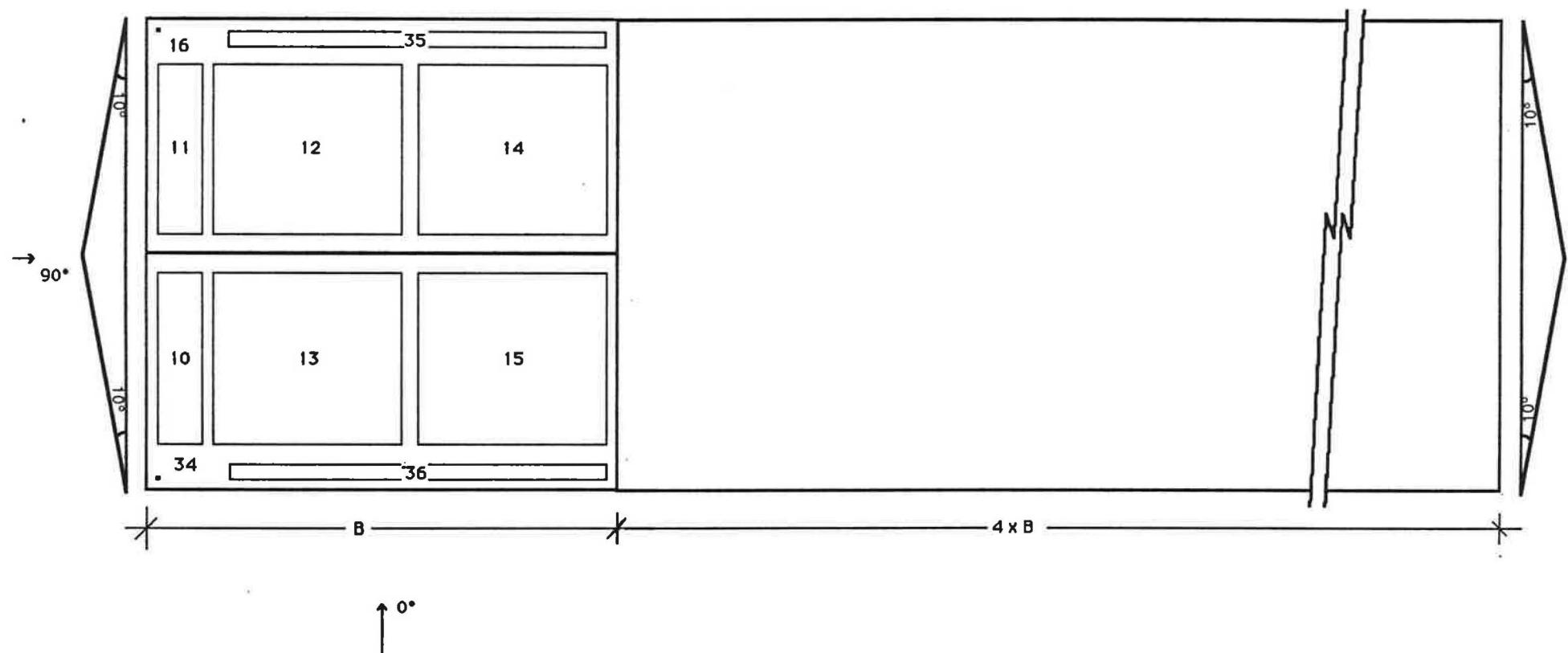
$$h:b:l = 0.6:5:1$$

Toiture à -10°

COEFFICIENTS DE PRESSION												
	C_{pe}						C_{pi}					
	surface d'application						surface d'application					
φ	A	B	C	D	E	G	A	B	C	D	E	G
0°					-0,65	-0,18					-0,26	-0,51
15°					-0,59	-0,13					-0,26	-0,56
45°					-0,25	0,02					-0,22	-0,57
90°					-0,06	-0,04					-0,37	-0,39



MODELE N°23
Numérotation des prises de pression
Surfaces extérieures



MODELE N° 23
Numérotation des prises de pression
Surfaces intérieures

=====

ORIENTATION 0.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.223	-0.089	-0.550	0.000		
11.000	-0.443	-0.660	-1.179	0.000		
12.000	-0.391	-0.604	-0.976	0.000		
13.000	-0.293	-0.145	-0.725	0.000		
14.000	-0.221	-0.419	-0.609	0.000		
15.000	-0.559	-0.377	-1.412	0.000		
16.000	-0.311	-0.464	-0.817	0.000		
34.000	-0.086	-0.019	-0.215	0.000		
35.000	-0.223	-0.366	-0.580	0.000		
36.000	-0.697	-0.861	-1.772	0.000		
4.000	-0.311	-0.414	-0.793	0.000		
5.000	-0.331	-0.363	-0.809	0.000		
6.000	-0.248	-0.176	-0.612	0.000		
7.000	-0.481	-0.654	-1.245	0.000		

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ORIENTATION 15.0

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.123	-0.037	-0.322	0.000		
11.000	-0.519	-0.786	-1.385	0.000		
12.000	-0.479	-0.664	-1.192	0.000		
13.000	-0.300	-0.142	-0.772	0.000		
14.000	-0.252	-0.447	-0.668	0.000		
15.000	-0.526	-0.386	-1.338	0.000		
16.000	-0.433	-0.574	-1.058	0.000		
34.000	0.091	0.019	0.230	0.000		
35.000	-0.232	-0.410	-0.614	0.000		
36.000	-0.704	-0.880	-1.845	0.000		
4.000	-0.323	-0.448	-0.850	0.000		
5.000	-0.251	-0.348	-0.702	0.000		
6.000	-0.184	-0.130	-0.473	0.000		
7.000	-0.411	-0.587	-1.035	0.000		

=====

ORIENTATION 45.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.250	-0.132	-0.665	0.000		
11.000	-0.658	-0.876	-1.614	0.000		
12.000	-0.481	-0.732	-1.348	0.000		
13.000	-0.149	-0.129	-0.423	0.000		
14.000	-0.265	-0.410	-0.647	0.000		
15.000	-0.320	-0.318	-0.880	0.000		
16.000	-0.503	-0.719	-1.200	0.000		
34.000	0.092	0.054	0.228	0.000		
35.000	-0.286	-0.457	-0.729	0.000		
36.000	-0.740	-0.585	-2.047	0.000		
4.000	-0.418	-0.625	-1.080	0.000		
5.000	-0.331	-0.538	-0.891	0.000		
6.000	0.147	0.018	0.410	0.000		
7.000	-0.223	-0.247	-0.596	0.000		

=====

ORIENTATION 90.0

=====

POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.679	-0.800	-1.749	0.000		
11.000	-0.613	-0.806	-1.543	0.000		
12.000	-0.452	-0.531	-1.212	0.000		
13.000	-0.475	-0.566	-1.187	0.000		
14.000	-0.207	-0.243	-0.521	0.000		
15.000	-0.150	-0.182	-0.421	0.000		
16.000	-0.534	-0.767	-1.392	0.000		
34.000	-0.406	-0.657	-1.062	0.000		
35.000	-0.447	-0.520	-1.100	0.000		
36.000	-0.162	-0.120	-0.412	0.000		
4.000	-0.364	-0.540	-0.934	0.000		
5.000	-0.383	-0.537	-0.972	0.000		
6.000	-0.139	-0.036	-0.364	0.000		
7.000	-0.129	-0.058	-0.351	0.000 -		

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ORIENTATION 0.180000E+03

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POSI.	CP .98	CP MOY	CP PIC	GP	DELTA	DP
10.000	-0.378	-0.555	-0.949	0.000		
11.000	-0.159	-0.059	-0.427	0.000		
12.000	-0.226	-0.087	-0.623	0.000		
13.000	-0.341	-0.503	-0.870	0.000		
14.000	-0.470	-0.274	-1.097	0.000		
15.000	-0.250	-0.381	-0.638	0.000		
16.000	-0.444	-0.525	-1.094	0.000		
34.000	-0.252	-0.458	-0.667	0.000		
35.000	-0.699	-0.770	-1.748	0.000		
36.000	-0.146	-0.198	-0.361	0.000		
4.000	-0.334	-0.362	-0.869	0.000		
5.000	-0.376	-0.440	-0.918	0.000		
6.000	-0.493	-0.669	-1.214	0.000		
7.000	-0.250	-0.218	-0.611	0.000		