

## Avoiding the risks of increased thermal insulation

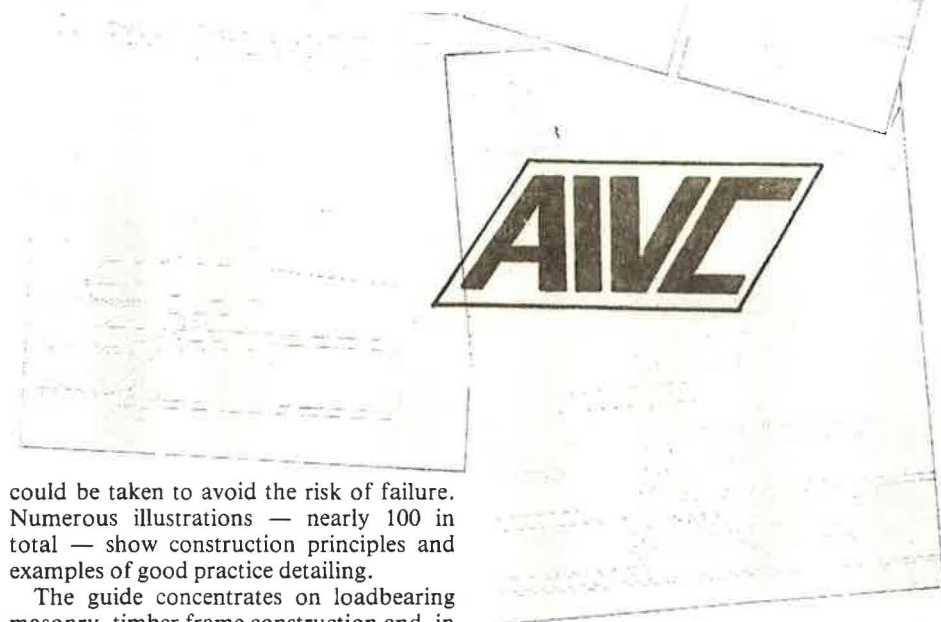
An important new guide to good practice construction to avoid the possible risks of increased levels of thermal insulation has just been published by BRE. *Thermal insulation: avoiding risks* is specifically designed to be used in conjunction with Approved Document L supporting the revised Building Regulations for England and Wales, which lays down the increased insulation values required. It is also for use in support of new regulations in Scotland and Northern Ireland.

Based on BRE research and experience accumulated over many years, the guide was subjected to extensive comment by all sides of the industry before publication.

Research has shown that technical issues that were not important for uninsulated constructions may become more significant when they are better insulated. For example, certain parts of the construction remain colder and create a greater risk of interstitial condensation, and changes to traditional forms of construction to improve the insulation could lead to damp penetration.

With traditional building, there was often a considerable safety margin inherent in the construction. With increased levels of insulation, this may be less so, and correct design and specification, as well as careful attention to good workmanship and supervision, may be necessary to ensure trouble-free building.

The guide explains the technical risks which may be associated with meeting the new building regulation requirements for roofs, walls, windows, and floors. For each element, the guide highlights the most important issues and describes actions that



Examples of good practice detailing in the new BRE guide

could be taken to avoid the risk of failure. Numerous illustrations — nearly 100 in total — show construction principles and examples of good practice detailing.

The guide concentrates on loadbearing masonry, timber frame construction and, in some respects, profiled sheet cladding. It does not give guidance on which constructions meet particular U values.

The guide is available now from BRE

Publications Sales (see back page for details). It is also included in the set of Building Regulations documents being published by HMSO, at a discounted price.

## Information transfer to developing countries

Two new steps to help in disseminating practical guidance on low-cost housing and building have been taken by BRE's Overseas Division. One is an international cooperative project, the Gatekeeper programme, in which agents in developing countries will provide a two-way link between BRE and potential users of its information. The other is the development of Overseas Information Papers, a series of illustrated leaflets designed for the man on the site or at the drawing board.

The Gatekeeper programme has got under way in Latin America with the appointment of an agent at the University of Biobio in Chile. He will make contact with potential users of BRE technical know-how, including professionals, housing authorities, universities, builders, builders' merchants and aid agencies, to identify the type of information they need. He will ar-

range for translation and distribution to them of relevant BRE publications, monitor the usefulness of the information, and identify new requirements. The programme will extend to include Peru, Colombia and Ecuador; later the plan is to incorporate information about South American technology into Overseas Division publications and produce a local bulletin.

BRE has also made contact with possible agents in India and China. The emphasis of the programme is on low-cost housing and sanitation for the under-privileged, but other BRE advice will also be made available for more sophisticated building.

### Low-cost sanitation

The first Overseas Information Paper (OIP 1/89) stems from the Division's work on low-cost non-sewered sanitation. It reports the development of a moulded concrete lin-

ing block originally designed for pit latrines but also suitable as a permeable lining for soakaways and shallow wells.

The BRE work on sanitation has included development of a powerful and robust suction tanker, known as BREVAC, for mechanised emptying of pit latrines. Information about this and the economics of operation is contained in a new Overseas Building Note (OBN 193); this long-standing series contains both technical information and theoretical background and thus complements OIPs.

During the next year or so, topics covered in the OBN and OIP series will include the selection of soil for stabilised blocks, materials for hot climates, making good concrete, the production of rice husk ash cement, and cyclone-resistant housing. Copies of leaflets in both series are available from BRE Publications Sales.