



## UK NATIONAL SYMPOSIUM "COMBATING CONDENSATION"

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### "ENERGY EFFICIENCY"

A PAPER PRESENTED AT THE 1988 COMBATING CONDENSATION SYMPOSIUM

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#### THE ENERGY SURVEYOR

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The Energy Surveyor is not intended to possess the expertise of a Chartered Heating Engineer or Surveyor, or to have expert knowledge of any area associated with the task. It is necessary for the Energy Surveyor to have an understanding of all the areas associated with his task and to be subject to ongoing training to enhance his ability to promote energy efficiency in housing. He will be able to adapt more easily to the task if he has an existing background and practical knowledge of the construction industry or, specifically, of heating in the domestic or industrial sector.

He is intended to be an advisor and co-ordinator in that he will influence and move both contractor and client towards an understanding and practice of energy efficiency by identifying and persuading both to adopt pertinent 'guides to good practice'. He must be, and must remain, the honest broker, building and retaining the trust and respect of both contractor and client.

Whilst being a responsible advisor, he must also ensure that the interface between contractor and client is maintained. He must ensure that the NRS Heating Advice Service is not in any way, construed or implied, allowed to give the impression of being a contractor or the agent of contractors.

GD/CAT/CKR 9 June 1987

#### ENERGY SURVEYOR : WORKING ADVICE NOTES

These notes are to be used in conjunction with the house record cards and follow up systems. Care should be taken when undertaking an Energy Efficiencfy Survey, to obtain not only details of the construction and typoe of dwelling, but also to observe and note the occupancy and lifestyle which may be contributary factors to excessive fuel usage.

Spending time giving advice can only be justified where positive action areas are identified. Getting to know the householder should not be allowed to cloud the objective. The telephone conversation and the caller coming into the office must be logged in the day-book for follow-up.

Getting into the home to conduct a full survey is essential in achieving an authentic apprasial of all aspects of heating and insulation. Close questioning of their use of heating and inspection of insulation emplacement is important if only that householders are inclined to understate the usage of fuel consuming appliances and to be sometimes dismissive of some areas of the insulation aspects.

Typical instances are undersized cylinder jackets and cold water storage tanks lacking an insulated lid, loft access doors uninsulated and lacking a draught proofing seal etc.

The survey may well reveal that only minor areas of action are possible or the householder is only willing - for whatever reasons - to undertake minor works. These areas must be pursued and actioned. If, as a result of this, a saving of energy can be quantified by a reduction of fuel bills, or increased comfort is recognised, the householder is more likely to respond to suggestions of further measures on follow-up. We must also remember, as Robert Burns so aptly put it, 'many a mickle maks a muckle'. Information of housing which has already had insulation measures from VOs and Town Hall records.

#### FAMILY SIZE

The larger the family, the greater the possibility of more rooms being in use at the same time and requiring higher temperatures than normal - bedrooms, for instance, where children may pursue hobbies, or where more adult children and teenagers spend time on homework or study. Children move in and out of the house more often than adults, causing loss of heat from the house. Older persons tend to confine themselves more to the home, windows remain closed with condensation problems often occurring as a result of lack of ventilation and heat in unused rooms.

#### WORK PATTERN

Establish ages of occupants; if multiple adult occupation, check possible shift working which may cause extension of the heating day.

#### ANCILLARY HEATING

When central heating is installed, check if other sources of heating are used, where, when and why?

#### Establish:

- 1 Is the central heating suitably sized?
- 2 Is it serviced regularly?
- 3 Are the radiators functioning properly?

Check temperature on visit; do the family prefer low or high temperature lifestyle, or is the temperature set by the lack of controls on the system?

We cannot and must not impose changes in lifestyle, but being aware of possible economies which may be achieved can allow you to provoke thought and action if the opprtunity is presented to do so!

#### HOUSE RECORD CARD

Before any action can be taken, we need to establish some basic information of the physical aspects of the property; in essence, 'where are we now?'

The details required are a brief description of the property allied to the present methods of space heating, water heating and insulations.

People move in and out of the houses, so therefore we will use the address as the identification method and box-file by street or road etc.

#### CONFIRM:

- 1 Address in full, including post code.
- 2 Type of property:
  - a) Terraced, semi-detached, detached or flat.
  - b) Roof: pitched, flat or both (small sketch may be necessary in survey report).
  - c) Walls: solid, cavity or both.
  - d) Floors: solid, timber, suspended or both.

- 3 Occupants' names and number; 'C' for children, 'A' for adults eg C4 A2.
- 4 Current standards of thermal insulations (see criteria for assessments).
- 5 Heating report (see criteria for assessment).

The house record card should only be dated at the point where positive contact has been made with the householder. Any improvements made over and above the existing standards and equipment, established at the point of survey, should be noted on the record card with the completion date and details of the improvement.

THE HOUSE RECORD CARD NEVER LEAVES THE OFFICE!

#### SURVEY/AUDIT REPORT

This is a reflection of the detail required in the House Record Card, but with facility for hand notes and where required accompanying sketch details. All survey/audit reports will immediately cause the raising of an action file and any further details, notes, correspondence will be appended to the Survey/Audit Report.

#### ACTION/WORKING FILES

Filed alphabeticaly, full name, in top loading filing cabinet. Notes on the House Record Cards should give dated, but cryptic reference to actions, visits, correspondence etc contained in this file: whilst ever there remains work which can be done to improve the energy efficiency of the house to the standards set out in the 'Criteria for Assessment', the file will remain active, and only when the householder has clearly expressed that he has carried out all the action he intends or can undertake, will it be filed in 'Records'. Diarying for follo-up will be at the discretion of the Energy Surveyor, but should not exceed 3 months.

#### RECORDS

All the files placed in the filing cabinet under this heading, where it is recognised that further potential exists, shall be diaried for further contact in six months time to assess the effectiveness of the measure taken and to determine if the climate of opinion and response has affected the client's desire to carry out any further measures.

Diarying continues until such time as all measures have been taken or until there is clear evidence that further work (or no work at all) will be undertaken and the file is closed.

#### CLOSED FILES

The Development Consultant will examine all closed files on a six monthly basis to analyse reasons for negative responses.

GJD/CKR 9 June 1987 

#### NRS HEATING ADVICE SERVICE

#### CREATING THE CLIMATE FOR ENERGY EFFICIENCY

To achieve awareness of the benefits by all concerned in the Hillsborough area requires initial and consistent development of a heading which is meaningful to the householder and to all the associated and interested parties. Cultivated enthusiasm will only be possible if a number of householders are prepared to identify the service as having positive benefits to offer and to commit themselves to spending money to secure the identified benefits. Not only must they be convinced of the validity of the measures suggested, but also of the ability of the Energy Surveyor, through the agency of NRS, to ensure that the agreed actions are carried through in a competent and professional manner.

After discussion with interested and involved parties and with the benefit of conversations with householders, it was determined that this unit of NRS should be called: 'The Heating Advice Service', and a set of 'Background Notes' was prepared as the format for publication attendant to the launch of the unit on 15 May 1987.

#### EILLSBOROUGH NRS HEATING ADVICE SERVICE - BACKGROUND NOTES

The Hillsborough NRS Heating Advice Service intends to demonstrate a neighbourhood approach to the sensible use of fuel in the homes of mixed income groups in an area of predominantly pre-1919 houses.

The Heating Advice Service is an integral unit of the Hillsborough Neighbourhood Revitalisation scheme. NRS, Hillsborough, Sheffield is a joint private and voluntarily funded initiative established as a partnership between the National Home Improvement Council (NHIC) and Sheffield City Council to offer an advice, information and building agency service to the residents of Hillsborough in order to encourage and help them to carry out repairs, improvements and maintenance to their homes. Further assistance provided on a fee-paying basis covers contract evaluation, specification and management, grant administration and servicing of finance through building societies and banks. In recognition of the significant value of the Heating Advice Service a direct grant has been made to NRS by the Energy Efficiency Office, which is allied to further support from the Association for the Conservation of Energy (ACE), to establish a working unit within NRS consisting of a development consultant, an energy surveyor, and a support team of community liaison assistants. The Heating Advice Service is further supported as necessary by other members of the NRS team, by the national charity, Neighbourhood Energy Action, through the Energy Action (NEA) project 'Keep

Sheffield Warm' and by specialist technical advisers from local industry who are committed to helping.

The Heating Advice Service unit will create awareness of energy efficiency with an approach which simplifies the understanding of the subject and will demonstrate in practical terms to the householder how they as individuals may be able to reduce fuel bills and enjoy a greater degree of comfort in their home by:

- \* the provision of a free walk-round survey of any residential property on request in order to diagnose its energy efficiency needs;
- \* follow-up action with the householder to carry out any more detailed technical specification that might be required;
- \* a written report to the householder providing both pratical recommendations for action and advice on how to proceed;
- \* organising on an agency or referral basis, the remedial or improvement work to be done; and
- \* after completion of any work, providing any follow-up advice and support that may be required.

It is intended that the full 18 months programme will demonstrate that an understanding of energy efficiency will result in householders accepting the required work as an integral part of any improvement and repair work to their homes.

The Hillsborough area of Sheffield is a microcosm of many older inner city areas of the UK where there are signs of physical decay of housing and where many of the property owners have low incomes.

It is intended to demonstrate by a close and sustained approach to energy efficiency in the home, with sound advice and access to capital, that effective and meaningful results can be achieved and that the concept of energy efficiency is realised in practical terms as an essential feature of area based renewal of housing.

The work of the Heating Advice Service and the lessons learned will provide the model approach which can be replicated not only throughout the expanding programme of NRS projects in England and Wales, but throughout all area based urban renewal initiatives.

GJD/CKR



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Thank you for your letter of 6 May to which I am replying also on behalf of the Secretary of State.

I am very glad to hear that the energy survey and advice work has started in the Hillsborough Scheme. It is a pioneering project which will I hope benefit not only Hillsborough residents but also those living in the other areas which NRS is planning to tackle. The EEO has been looking for ways in which home energy surveys and advice can be given to householders, and I am hopeful that NRS Hillsborough is a project that will demonstrate how it can be done.

DAVID HUNT



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20 May 1987

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HILLSBOROUGH NRS

Thank you for your letter of 6 May about your plans for the development of the Hillsborough NRS Heating Advice Service. David Hunt has replied to your letter and was, I know, disappointed that his visit to Hillsborough had to be cancelled because of the election. I will see what I can do to interest our Ministers in the scheme after the election, and maybe arrange a visit to Hillsborough later this year. Meanwhile, Peter Fullerton and Jeff Hoare are ready to give you any help that they can in promoting the project.

I liked the Heating Advice Service handout that you are using to advertise the scheme. It contains all the essentials without any of our technical jargon which is so often meaningless to householders! We shall be following your progress at Hillsborough with interest, as we hope it can be a model for all other NRS schemes to follow.

Tun seedy

hollin Tantie

W I Macintyre Director General

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