



Designated by Government
to issue
European Technical
Approvals

Thermal Economics Ltd

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**Agrement
Certificate
No 90/2436**
*Third issue**

ALREFLEX RANGE OF DRY LINING WALL INSULATION

Isolation de murs
Kerndämmung

Product

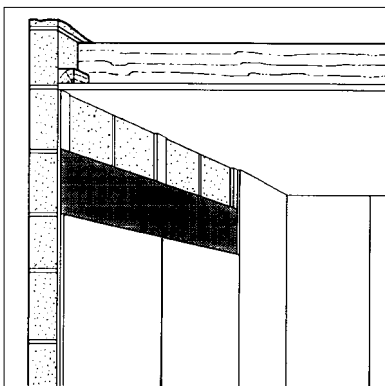
• *THIS CERTIFICATE REPLACES CERTIFICATE No 83/1205 AND RELATES TO ALREFLEX RANGE OF DRY LINING WALL INSULATION, COMPRISING ALUMINIUM FOIL-FACED POLYTHENE BUBBLE SHEET.*

• *The products are for use as an insulating dry lining for walls of dwellings or buildings of similar occupancy, type and conditions.*

• *They can be used to improve the thermal insulation of existing and new, solid and cavity brick and blockwork walls.*


• *The material is manufactured by Meuwissen Industrie BV Holland and marketed in the UK by Thermal Economics Ltd.*

These Front Sheets must be read in conjunction with the accompanying Detail Sheets, which provide information specific to product type.




Building Regulations — Detail Sheet 1

1 The Building Regulations 1991 (England and Wales)

 The Secretary of State has agreed with the British Board of Agrément the aspects of performance to be used by the BBA in assessing the compliance of internal dry lining systems with the Building Regulations. In the opinion of the BBA, Alreflex Range of Dry Lining Wall Insulation, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements.

Requirement:	B2	Internal fire spread (linings)
Comment:		When used in accordance with this Certificate, the products will be enclosed by plasterboard, which is considered Class 0 in accordance with Table A5 of the Approved Document. The systems meet this Requirement. See section 7.3 of these Front Sheets.
Requirement:	L1	Conservation of fuel and power
Comment:		The products can contribute to meeting this Requirement. See sections 2.1 and 2.2 of the accompanying Detail Sheets.
Requirement:	Regulation 7	Materials and workmanship
Comment:		The products are acceptable. See section 10 of these Front Sheets.

2 The Building Standards (Scotland) Regulations 1990 (as amended)

 In the opinion of the BBA, Alreflex Range of Dry Lining Wall Insulation, if used in accordance with the provisions of this Certificate, will satisfy or contribute to satisfying the various Regulations and Technical Standards as listed below.

Regulation:	10	Fitness of materials
Standard:	B2	Selection and use of materials, fittings, components and other manufactured products
Comment:		The products are acceptable.
Regulation:	13	Means of escape from fire, facilities for fire-fighting and means of warning of fire in dwellings
Standard:	E2.42	Resistance to surface spread of flame
Comment:		When installed in accordance with this Certificate, the products will be enclosed by plasterboard, which is considered Class 0 in accordance with Table 4 to Standard E2.42. It may therefore be used on the internal surfaces of rooms in every purpose group (Table 1 to Standard E2.42). See section 7.3 of these Front Sheets.
Regulation:	18	Preparation of sites and resistance to moisture
Standard:	G4.1	Interstitial condensation
Standard:	G4.2	Surface condensation
Comment:		When installed in accordance with this Certificate, the products will not promote surface or interstitial condensation. See section 3.1 of the accompanying Detail Sheets.
Regulation:	22	Conservation of fuel and power
Standard:	J2.2	Performance standards
Comment:		The products can contribute to meeting this Standard. See sections 2.1 and 2.3 of the accompanying Detail Sheets.

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3 The Building Regulations (Northern Ireland) 1990 (as amended 1991 and 1993)



In the opinion of the BBA, Alreflex Range of Dry Lining Wall Insulation, if used in accordance with the provisions of this Certificate, will satisfy the various Building Regulations as listed below.

Regulation:	B2	Fitness of materials and workmanship
Comment:		The products are acceptable. See section 10 of these Front Sheets.
Regulation:	C6	Condensation
Comment:		The products are acceptable. See section 3.1 of the accompanying Detail Sheets.
Regulation:	E15	Restriction of spread of flame over surfaces of walls and ceilings
Comment:		When installed in accordance with this Certificate, the products will be enclosed by plasterboard, which is considered Class 0 in accordance with the requirements of this Regulation. The products may therefore be used on the internal surfaces of buildings in every purpose group (Table to Regulation E15). See section 7.3 of these Front Sheets.
Regulation:	F2	Conservation of fuel and power
Comment:		The products can contribute to meeting this Regulation. See sections 2.1 and 2.4 of the accompanying Detail Sheets.

Technical Specification

4 Delivery to site and storage

4.1 Alreflex Range of Dry Lining Wall Insulation is delivered to site in rolls, sealed with adhesive tape bearing installation instructions, the manufacturer's trade name and the BBA identification mark incorporating the number of this Certificate. The products are marked at regular intervals with a batch number.

4.2 The products should be stored in clean, dry conditions.

4.3 Since the products are combustible, care must be exercised when storing large quantities on site. The products must not be exposed to open flame or other ignition sources and must be stored away from flammable material such as paint and solvents.

Design Data

5 General

5.1 When used and correctly installed in accordance with this Certificate, Alreflex Range of Dry Lining Wall Insulation will significantly improve the thermal insulation of existing and new, solid or cavity masonry walls (masonry includes clay and calcium silicate bricks, concrete blocks, natural and reconstituted stone blocks) of dwellings and buildings of similar occupancy, type and condition.

5.2 The walls of new buildings must be designed and constructed in accordance with the relevant Codes of Practice, eg BS 5628 : Part 3 : 1985.

5.3 The walls must be in a good state of repair with no evidence of rain penetration or damp or frost damage.

5.4 The installation of insulated dry lining systems requires careful detailing around doors and windows to achieve a satisfactory surface for finishing. In addition, every attempt should be made to minimise the risk of cold-bridging at reveals and where heavy party walls are attached to the external wall (see Figure 5 of the appropriate Detail Sheet). In new work the construction must be designed to accommodate the thickness of the dry lining, particularly at reveals, heads, sills and in relation to ceiling height.

5.5 With dry lining installations that form a void, services can be incorporated behind the dry lining, making chasing of the wall unnecessary. Where possible, penetration of the products by services such as light switches or power outlets should be kept to a minimum.

5.6 When the product is to be used in existing buildings it should be realised that a small reduction in room size will occur and that permanent fixtures, eg baths, will present difficulties.

5.7 Provided the product is installed in a neat manner, the jointing and finishing systems specified are capable of providing a satisfactory surface for direct decoration without the need for further plastering.

5.8 Installation of plasterboard must be in accordance with the relevant sections of BS 8212 : 1988.

6 Infestation

The use of insulated dry lining does not in itself promote infestation but the creation of voids within the wall structure may provide habitation for insects or rodents in areas already infested. Such infestation may be difficult to eradicate. There is no food value in the materials used.

7 Performance in relation to fire

7.1 The fire resistance of a wall will not be affected when the products are installed within an insulated dry lining in accordance with this Certificate.

7.2 Although the products are combustible they are difficult to ignite and have a Class 1 surface spread of flame when tested on the foil face. When used in the context of this Certificate, they are unlikely to become ignited within the cavity; if fire does penetrate into an unventilated cavity, the amount of air present within the cavity will be insufficient to support combustion and flame spread will be minimal.



7.3 The position of the system with regard to the Building Regulations 1991 (England and Wales), the Building Standards (Scotland) Regulations 1990 (as amended) and the Building Regulations (Northern Ireland) 1990 (as amended 1991 and 1993) is dependent upon the rating of the plasterboard and may therefore be used in all situations requiring an Class 0 surface rating. Details of such situations are contained in the appropriate Regulations.

8 Impact resistance

Resistance to impact damage will vary with the thickness of plasterboard used. However, the minimum batten spacings detailed in section 5.3 of the appropriate Detail Sheet will provide reasonable resistance to such damage.

9 Wall-mounted fittings

The recommendations of the manufacturer are to be followed. Any object fixed to the wall, other than lightweight items, eg framed pictures, must be fixed through the lining board into the solid wall, or into a batten, using recommended proprietary fixings.

10 Durability



The durability of the materials is satisfactory. Provided the products are used in accordance with this Certificate and the manufacturer's instructions, and are fixed to satisfactory stable and durable backgrounds by fully trained site labour, they should have a life equal to the building in which they are installed. Under normal conditions of occupancy a dry lining system is unlikely to suffer damage, but if damage does occur repairs are easily carried out.

Bibliography

- BS 5628 *Code of practice for use of masonry*
Part 3 : 1985 *Materials and components, design and workmanship*
- BS 8212 : 1988 *Code of practice for dry lining and partitioning using gypsum plasterboard*

Conditions of Certification

11 Conditions

11.1 The quality of materials, the method of manufacture and the quality control procedures have been assessed and found satisfactory by the BBA and must be maintained to this standard throughout the period of validity of this Certificate. This Certificate will remain valid for an unlimited period provided that:

- (a) the specification of the products is unchanged, and
- (b) the manufacturer continues to have the products checked by the BBA.

11.2 Where reference is made in this Certificate to any Act of Parliament, Regulation made thereunder, Statutory Instrument, Code of Practice, British Standard, manufacturer's instruction or similar publication, it shall be construed as reference to such publication in the form in which it is in force at the date of this Certificate.

11.3 In granting this Certificate, the BBA makes no representation as to the presence or absence of patent rights subsisting in the products and/or as to the legal right of Thermal Economics Ltd to market, install or maintain the products.

11.4 It should be noted that any recommendations relating to the safe use of these products which are contained or referred to in this Certificate are the minimum standards required to be met when the products are used. They do not purport in any way to re-state the requirements of the Health and Safety at Work etc Act 1974, or of any other statutory or Common Law duties of care, or of any duty of care which may in the future exist; nor is conformity with such recommendations to be taken as satisfying the requirements of the 1974 Act or of any other present or future statutory or Common Law duties of care. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage incurred in respect of personal injury arising as a direct or indirect result of the use of these products.



In the opinion of the British Board of Agrément, Alreflex Range of Dry Lining Wall Insulation is fit for its intended use if used as set out in this Certificate. Certificate No 90/2436 is accordingly awarded to Thermal Economics Ltd.

On behalf of the British Board of Agrément

A handwritten signature in black ink, appearing to read 'P. Q. Newson'.

Director

Date of issue: 14th March 1990

**Amended Certificate issued 17th June 1994 to include references to the revised national Building Regulations, addition of the 1L-1 product, addition of metal furrings method of fixing, and conversion into Detail Sheet format.*



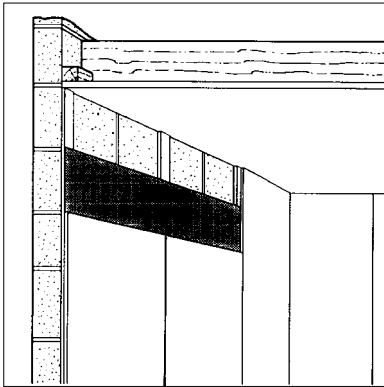
Thermal Economics Ltd

Certificate No 90/2436

ALREFLEX 2L-2 DRY LINING WALL INSULATION

DETAIL SHEET 2

Product



- THIS DETAIL SHEET RELATES TO ALREFLEX 2L-2 DRY LINING WALL INSULATION, A POLYTHENE BUBBLE SHEET FACED ON BOTH SIDES WITH ALUMINIUM FOIL.

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, common information relating to the product, and the Conditions of Certification, respectively.

Technical Specification

1 Description

1.1 Alreflex 2L-2 Dry Lining Wall Insulation consists of two layers of polythene bubble sheet faced on both sides with an aluminium foil lining. The foil is protected by a thin polythene film.

1.2 The product is supplied in rolls with characteristics of:

length (m)	25
width (m)	1.2 and 1.5
thickness (mm)	6.5 ± 0.5
weight (gm ⁻²)	350 ± 30

1.3 All components are subject to routine factory quality control.

1.4 Ancillary components include:

Alreflex Aluminium Tape supplied in rolls 45 m long by 50 mm wide
 preservative treated timber battens
 galvanized metal furring channels
 screws
 nails or staples
 plasterboard to BS 1230 : Part 1 : 1985
 double-sided adhesive tape.

2 Thermal insulation

2.1 For the purposes of determining compliance with statutory or other building requirements, the Building Research

Establishment have determined that the thermal resistance values given in Table 1 may be used.

Table 1 Thermal resistance

	Minimum airspace either side of the Alreflex 2L-2 (mm)	
	20	25
Thermal resistance ⁽¹⁾ (m ² KW ⁻¹)	1.20	1.36

(1) These values relate to the total resistance of the Alreflex 2L-2 and the two cavities.



2.2 Using the above thermal resistance value, the U value of a wall construction may be calculated in accordance with Approved Document L1 of the Building Regulations 1991 (England and Wales). The calculated U value may then be used to meet the requirements of the Elemental Approach with regard to the maximum U value of walls or may be used in one of the alternative solutions or calculation procedures set out in paragraphs 1.3 and 1.11 to 1.21, respectively.



2.3 When using the Elemental Approach to satisfy the requirements of the building fabric part of Regulation 22 of the Building Standards (Scotland) Regulations 1990 (as amended) the calculated U value of a wall covered with the product must not exceed the appropriate values given in the Table to J2.3. Alternative solutions using calculated trade-offs or energy targets are set out in J2.4 and J2.5, respectively.



2.4 When using the Elemental Approach to satisfy the requirements of DoE(NI) Technical Booklet to Part F of the Building Regulations (Northern Ireland) 1990 (as amended 1991 and 1993) the calculated U value of a wall covered with the product must not exceed the appropriate values given in Table 1. Alternative solutions using calculated trade-offs or energy targets are set out in Sections 1.11 to 1.16.

2.5 The ultimate thermal performance of the system will depend on the construction of the wall against which it is installed. The dynamic performance of a structure can be determined by the admittance procedure given in Section A5 (1986) of the CIBSE Guide.

2.6 The dynamic thermal performance of a building can be expressed as a ratio called the response factor (Equation A3.36 of the CIBSE Guide). This factor is about 2.5 for a thermally lightweight building and about 6 for a heavyweight building. The use of any form of insulation will affect this factor and it should be considered when designing heating systems for new buildings. Modifications to existing heating systems may also have to be considered in buildings being upgraded by the installation of the product. Methods of sizing heating plant are given in Section A9 (1986) of the CIBSE Guide.

3 Condensation and hygrothermal characteristics



3.1 As Alreflex 2L-2 is covered on both sides by polythene coated aluminium foil, it has a negligible water vapour permeance. The use of Alreflex Aluminium Tape enables the vapour barrier to be completed.

3.2 The use of the product does not preclude the normal precautions against formation of condensation, especially in rooms expected to have high humidities.

3.3 When using this type of product due consideration must be taken of the overall installation to minimise perforations by services, eg light switches and power outlets, and the joints at ceiling and skirting level must be well sealed.

3.4 As with any other insulation applied to the inside of a wall, there may be a risk of cold-bridging from the floor or ceiling, particularly in concrete slab construction, It has been demonstrated that the use of coving at the wall ceiling joint will significantly reduce the problem.

3.5 Insulated dry lining has been successfully used in the rehabilitation of buildings suffering from surface condensation of walls where the dampness has been caused by the lack of thermal insulation.

Installation

4 General

4.1 Pre-lagged water pipes may be accommodated within the void created by the dry lining system.

4.2 All joints and perforations in Alreflex 2L-2 Dry Lining Wall insulation must be securely sealed with Alreflex Aluminium Tape.

4.3 Bearing surfaces for timber battens and metal furrings should comply with BS 8212 : 1988. The depth of timber battens or metal furrings will determine the air space achieved on either side of the product. The thickness of Alreflex 2L-2 must also be considered as part of the design specification to achieve the required air space (see Table 1).

5 Procedure

Timber batten method

5.1 Preservative-treated timber battens, in accordance with BS 5268 : Part 5 : 1989, are fixed horizontally to the wall with suitable fixings, eg wire-cut nails, screws and plugs (see Figures 1 to 5). Adequate time should be allowed for CCA-based preservatives to be fixed and for the solvents from solvent-based preservatives to evaporate.

5.2 The product is butt-jointed on the battens then stapled or fixed with clout nails to the battens and pulled tight to maintain a cavity between it and the wall. The joints are sealed with Alreflex Aluminium Tape.

5.3 Counter battens, suitable for plasterboard application, are then fixed vertically over the Alreflex 2L-2 by nailing them to the battens behind the Alreflex 2L-2. The battens must be fixed at centres not exceeding 450 mm and 600 mm for plasterboard thicknesses of 9.5 mm, and 12.5 mm or greater, respectively.

Metal furrings method

5.4 Galvanized metal furrings are fixed to the wall at vertical centres using dabs of gypsum bonding compound (see Figure 5). The centres must be no more than 400 mm and 600 mm for plasterboard thicknesses of 9.5 mm, and 12.5 mm or greater, respectively.

5.5 Approximately 100 mm lengths of double-sided adhesive tape are applied to the metal furrings at 200 mm intervals. The release paper should be temporarily left on the tape to allow for a trial fit and to enable the product to be cut to the required size.

5.6 The release papers are removed from the tape and the pre-cut Alreflex 2L-2 is carefully adhered and butt-jointed over the metal furrings. The product

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must be sufficiently taut to maintain the cavity between it and the wall. All joints are sealed with Alreflex Aluminium Tape.

5.7 Preservative treated timber battens, in accordance with BS 5268 : Part 5 : 1989, with a nominal cross-section of 19 mm by 38 mm, are fixed vertically to the metal furrings with self-tapping steel screws. The plasterboard is fixed onto the battens in the usual manner.

5.8 Finishes, eg skirting or coving, may then be applied in the usual manner.

Figure 1 General arrangement

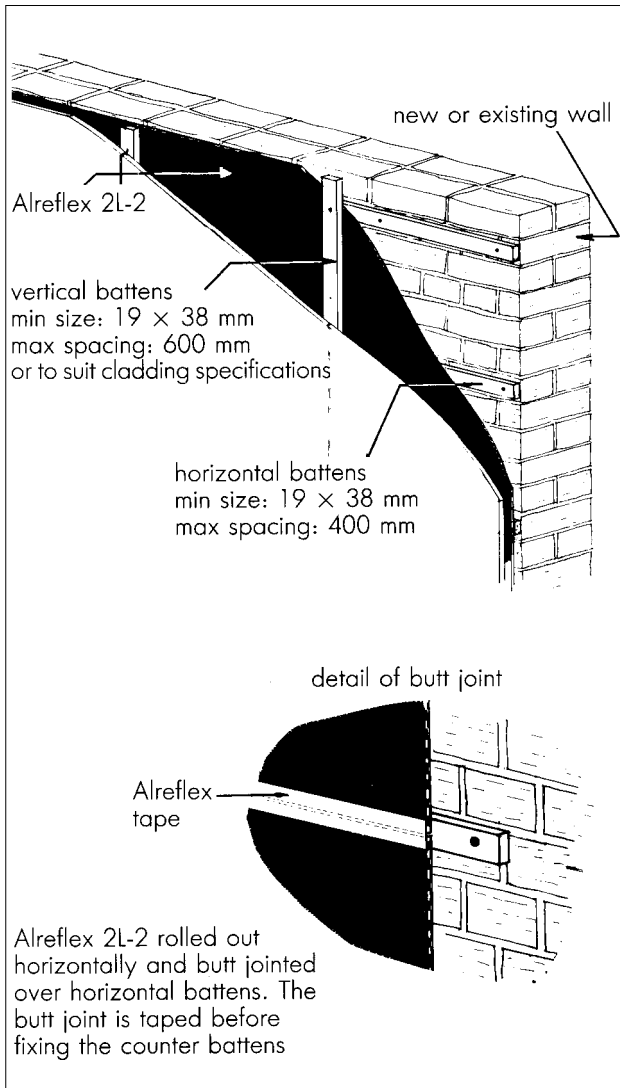


Figure 2 Typical door or window reveal detail

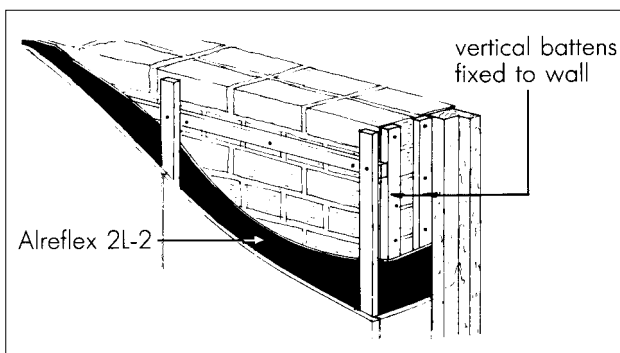


Figure 3 Typical external corner detail

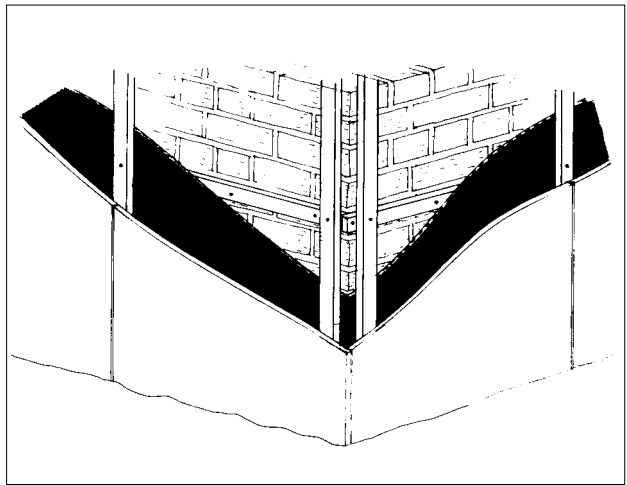


Figure 4 Typical internal corner detail

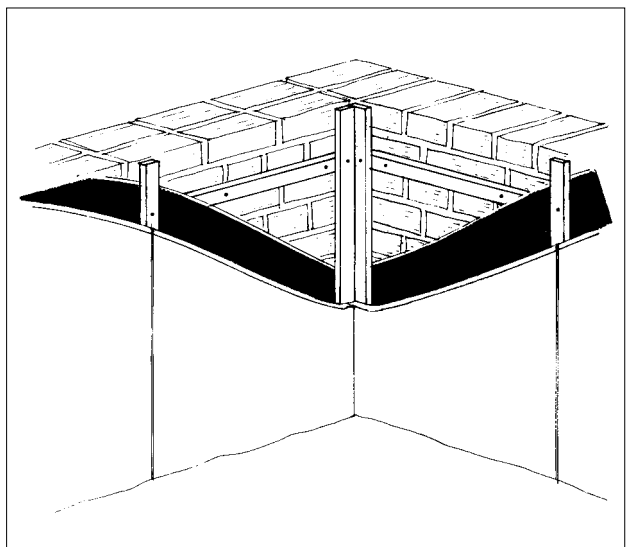
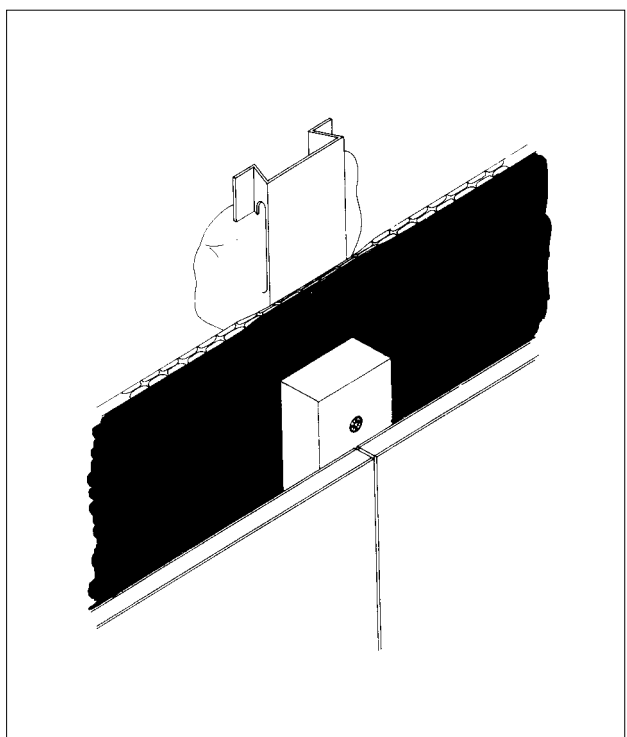


Figure 5 Metal furrings method



Technical Investigations

The following is a summary of the technical investigations carried out on Alreflex 2L-2 Dry Lining Wall Insulation.

6 Tests

6.1 As part of the assessment resulting in the issue of Certificate No 83/1205, tests were carried out to determine:

dimensional accuracy
behaviour in relation to fire.

6.2 Existing data on properties in relation to fire, formation of condensation and durability were also examined.

6.3 The manufacturing process was examined, including the methods adopted for quality control, and details obtained of the quality and composition of the materials used.

6.4 Sites were visited to assess the practicability of installation.

7 Other investigations

7.1 A re-examination was made of the data and investigations on which the previous Certificate was based. The conclusions drawn from those data remain valid.

7.2 A survey of known users of the product was carried out to assess its performance in use.

7.3 The thermal performance of the system was evaluated with respect to the measured thermal emissivity of the product.

Bibliography

BS 1230 *Gypsum plasterboard*

Part 1 : 1985 *Specification for plasterboard excluding materials submitted to secondary operations*

BS 5268 *Structural use of timber*

Part 5 : 1989 *Code of practice for the preservative treatment of structural timber*

BS 8212 : 1988 *Code of practice for dry lining and partitioning using gypsum plasterboard*



On behalf of the British Board of Agrément

Date of issue: 17th June 1994

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Director



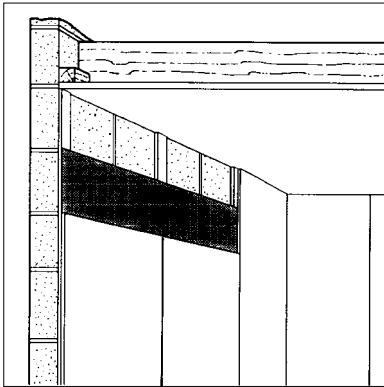
Thermal Economics Ltd

Certificate No 90/2436

ALREFLEX 1L-1 DRY LINING WALL INSULATION

DETAIL SHEET 3

Product



- THIS DETAIL SHEET RELATES TO ALREFLEX 1L-1 DRY LINING WALL INSULATION, A POLYTHENE BUBBLE SHEET FACED ON ONE SIDE WITH ALUMINIUM FOIL.

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, common information relating to the product, and the Conditions of Certification, respectively.

Technical Specification

1 Description

1.1 Alreflex 1L-1 Dry Lining Wall Insulation consists of one layer of polythene bubble sheet faced on one side with an aluminium foil lining. The foil is protected by a thin polythene film.

1.2 The product is supplied in rolls with characteristics of:

length (m)	25
width (m)	1.2 and 1.5
thickness (mm)	3.5 ± 0.5
weight (gm^{-2})	162 ± 15

1.3 All components are subject to routine factory quality control.

1.4 Ancillary components include:

Alreflex Aluminium Tape supplied in rolls 45 m long by 50 mm wide
 preservative treated timber battens
 galvanized metal furring channels
 screws
 nails or staples
 plasterboard to BS 1230 : Part 1 : 1985
 double-sided adhesive tape.

2 Thermal insulation

2.1 For the purposes of determining compliance with statutory or other building requirements, the Building Research Establishment have determined that the thermal resistance values given in Table 1 may be used.

Table 1 Thermal resistance

	Minimum airspace either side of the Alreflex 1L-1 (mm)	
	20	25
Thermal resistance ⁽¹⁾ (m^2KW^{-1})	0.60	0.68

(1) These values relate to the total resistance of the Alreflex 1L-1 and the two cavities.



2.2 Using the above thermal resistance value, the U value of a wall construction may be calculated in accordance with Approved Document L1 of the Building Regulations 1991 (England and Wales). The calculated U value may then be used to meet the requirements of the Elemental Approach with regard to the maximum U value of walls or may be used in one of the alternative solutions or calculation procedures set out in paragraphs 1.3 and 1.11 to 1.21, respectively.



2.3 When using the Elemental Approach to satisfy the requirements of the building fabric part of Regulation 22 of the Building Standards (Scotland) Regulations 1990 (as amended) the calculated U value of a wall covered with the product must not exceed the appropriate values given in the Table to J2.3. Alternative solutions using calculated trade-offs or energy targets are set out in J2.4 and J2.5, respectively.



2.4 When using the Elemental Approach to satisfy the requirements of DoE(NI) Technical Booklet to Part F of the Building Regulations (Northern Ireland) 1990 (as amended 1991 and

1993) the calculated U value of a wall covered with the product must not exceed the appropriate values given in Table 1. Alternative solutions using calculated trade-offs or energy targets are set out in Sections 1.11 to 1.16.

2.5 The ultimate thermal performance of the system will depend on the construction of the wall against which it is installed. The dynamic performance of a structure can be determined by the admittance procedure given in Section A5 (1986) of the CIBSE Guide.

2.6 The dynamic thermal performance of a building can be expressed as a ratio called the response factor (Equation A3.36 of the CIBSE Guide). This factor is about 2.5 for a thermally lightweight building and about 6 for a heavyweight building. The use of any form of insulation will affect this factor and it should be considered when designing heating systems for new buildings. Modifications to existing heating systems may also have to be considered in buildings being upgraded by the installation of the product. Methods of sizing heating plant are given in Section A9 (1986) of the CIBSE Guide.

3 Condensation and hygrothermal characteristics



3.1 As Alreflex 1L-1 is covered on one side by polythene coated aluminium foil, it has a negligible water vapour permeance. The use of Alreflex Aluminium Tape enables the vapour barrier to be completed.

3.2 The use of the product does not preclude the normal precautions against formation of condensation, especially in rooms expected to have high humidities.

3.3 When using this type of product due consideration must be taken of the overall installation to minimise perforations by services, eg light switches and power outlets, and the joints at ceiling and skirting level must be well sealed.

3.4 As with any other insulation applied to the inside of a wall, there may be a risk of cold-bridging from the floor or ceiling, particularly in concrete slab construction. It has been demonstrated that the use of coving at the wall ceiling joint will significantly reduce the problem.

3.5 Insulated dry lining has been successfully used in the rehabilitation of buildings suffering from surface condensation of walls where the dampness has been caused by the lack of thermal insulation.

4 General

4.1 Pre-lagged water pipes may be accommodated within the void created by the dry lining system.

4.2 All joints and perforations in Alreflex 1L-1 Dry Lining Wall Insulation must be securely sealed with Alreflex Aluminium Tape.

4.3 Bearing surfaces for timber battens and metal furrings should comply with BS 8212 : 1988. The depth of timber battens or metal furrings will determine the air space achieved. The thickness of Alreflex 1L-1 must also be considered as part of the design specification to achieve the required air space (see Table 1).

5 Procedure

Timber batten method

5.1 Preservative-treated timber battens, in accordance with BS 5268 : Part 5 : 1989, are with a nominal cross-section of 19 mm by 38 mm, are fixed at vertical centres to the wall with suitable fixings, eg wire-cut nails, screws and plugs (see Figures 1 to 5). Centres must be not more than 400 mm and 600 mm for plasterboard thicknesses of 9.5 mm, and 12.5 mm or greater, respectively. Adequate time should be allowed for CCA-based preservatives to be fixed and for the solvents from solvent-based preservatives to evaporate.

5.2 The product is butt-jointed on the battens with the foil facing the wall, then stapled or fixed with clout nails to the battens and pulled tight to maintain the cavity between it and the wall. The joints are sealed with Alreflex Aluminium Tape.

5.3 The plasterboard is fixed over the Alreflex 1L-1 and onto the battens in the usual manner.

Metal furrings method

5.4 Galvanized metal furrings are fixed to the wall at vertical centres using dabs of gypsum bonding compound (see Figure 5). The inner face of the metal furring must be a minimum of 20 mm from the wall face and centres must be no more than 400 mm and 600 mm for plasterboard thicknesses of 9.5 mm, and 12.5 mm or greater, respectively.

5.5 Approximately 100 mm lengths of double-sided adhesive tape are applied to the metal furrings at 200 mm intervals. The release paper should be temporarily left on the tape to allow for a trial fit and to enable the product to be cut to the required size.

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5.6 The release papers are then removed from the tape and the pre-cut Alreflex 1L-1 is carefully adhered and butt-jointed over the metal furrings. The product must be applied with the foil facing the wall and be sufficiently taut to maintain the cavity between it and the wall. The plasterboard is fixed over the product and secured to the metal furrings using self-tapping screws.

5.7 Finishes, eg skirting or coving, may then be applied in the usual manner.

Figure 1 General arrangement

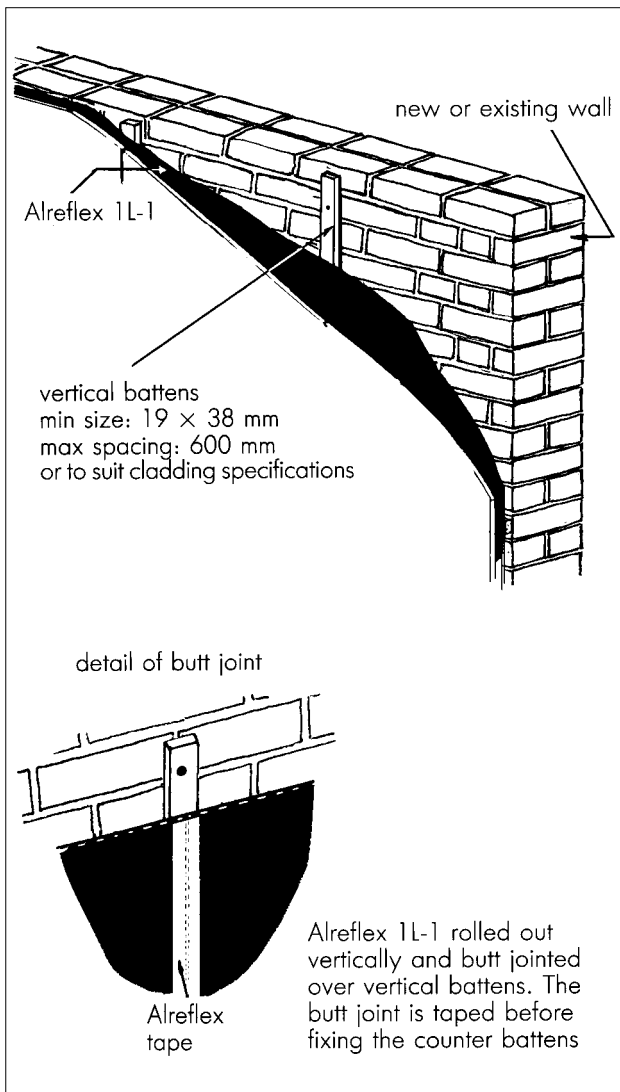


Figure 2 Typical door or window reveal detail

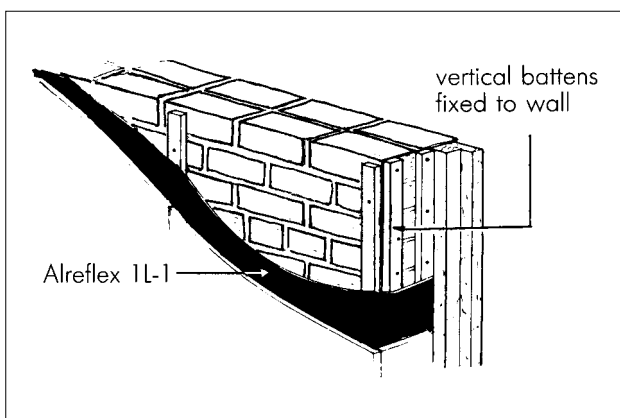


Figure 3 Typical external corner detail

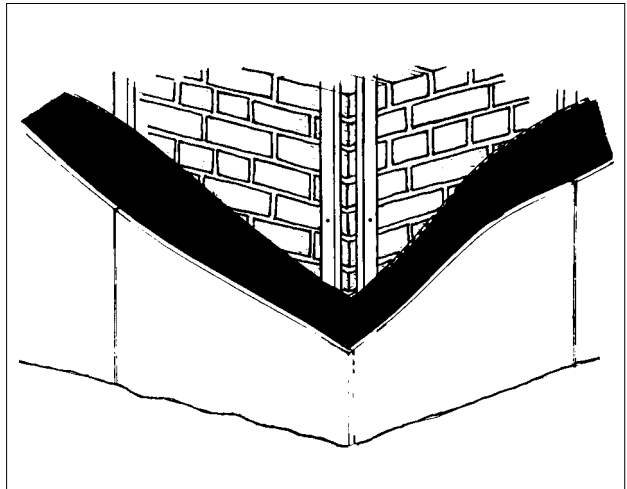


Figure 4 Typical internal corner detail

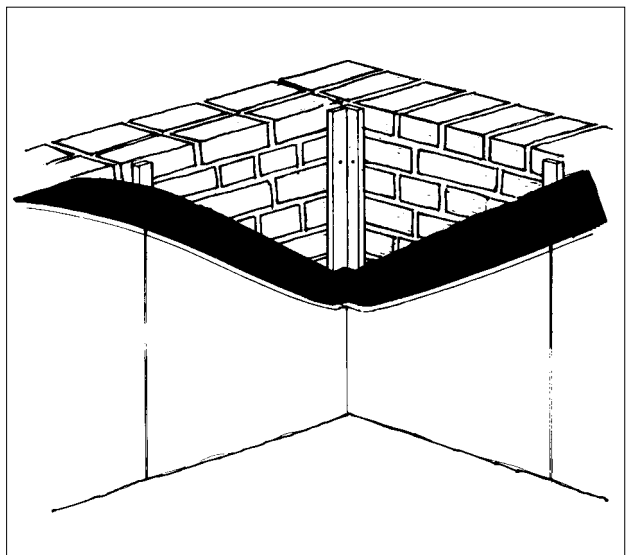
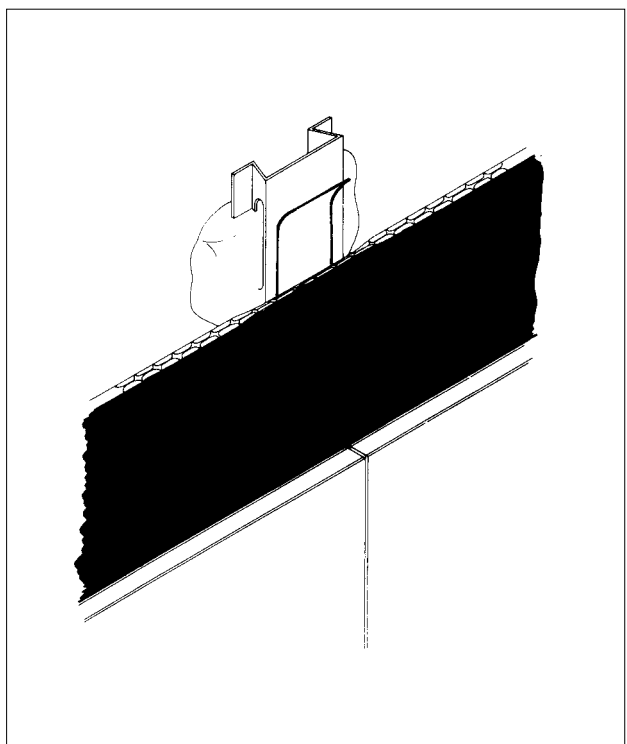


Figure 5 Metal furrings method



Technical Investigations

The following is a summary of the technical investigations carried out on Alreflex 1L-1 Dry Lining Wall Insulation.

6 Investigations

6.1 The data generated from the BBA assessment of Alreflex 2L-2 (Detail Sheet 2) was used in support of the approval for Alreflex 1L-1.

6.2 The manufacturing process was examined, including the methods adopted for quality control, and details obtained of the quality and composition of the materials used.

Bibliography

BS 1230 *Gypsum plasterboard*
Part 1 : 1985 *Specification for plasterboard excluding materials submitted to secondary operations*

BS 5268 *Structural use of timber*
Part 5 : 1989 *Code of practice for the preservative treatment of structural timber*

BS 8212 : 1988 *Code of practice for dry lining and partitioning using gypsum plasterboard*



On behalf of the British Board of Agrément

Date of issue: 17th June 1994

A handwritten signature in black ink, appearing to read 'P. C. Hewson'.

Director