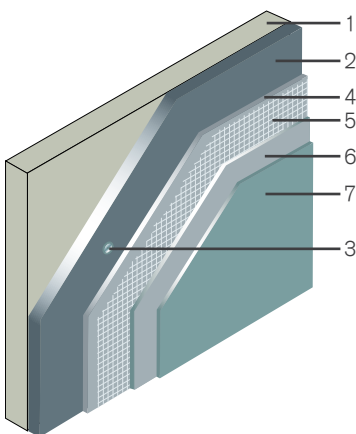


External Wall Insulation System Overview & Benefits



External Wall Insulation

Diagram 1
External Wall Insulation
- Typical sequence of system layers



1. Substrate
2. Insulation
3. Fixing
4. Basecoat render
5. Mesh
6. Basecoat render
7. Finish

System Overview

Introduction

Structherm's quick and easy-to-use system is based on a sequence of layers built up to form a thermally insulated, weatherproof and attractive envelope, suitable for a wide variety of building types. The layers consist of a CFC and HCFC free insulant overlaid in turn with reinforcing mesh, basecoat render and a decorative finish.

System Options

The system has various options offering clients a choice of insulant and surface finish to suit individual requirements. Please refer to specific datasheets for each option.

Insulants

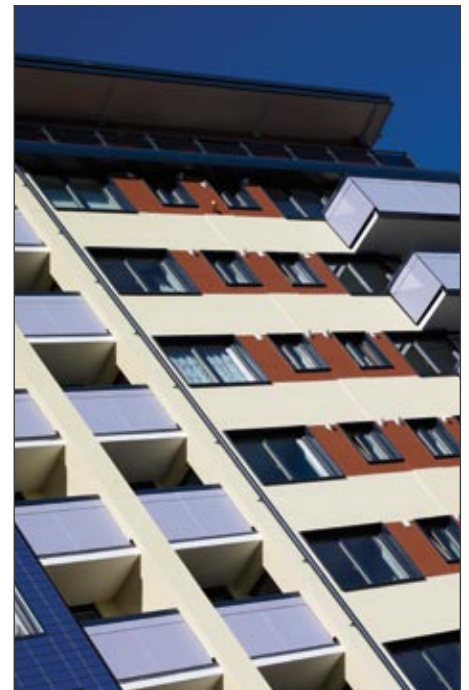
There are five insulants to choose from:

1. Expanded Polystyrene (EPS)
2. Enhanced EPS
3. Mineral Wool
4. Polyisocyanurate (PIR)
5. Phenolic

All insulants are available as rigid boards in standard sizes of 1200 x 600mm and in a range of thicknesses typically in increments of 10mm.

System Finishes

1. Acrylic or Silicone
2. Dash Aggregate
3. Brick Effect Render
4. Acrylic Brick Slips



Areas Of Application

Structherm EWI systems are suitable for any of the following provided that the substrate is structurally sound:

1. Refurbishment of low rise social housing
2. Refurbishment of high rise social housing
3. Refurbishment of private housing
4. New build projects
5. Commercial premises including office blocks
6. Schools, colleges and other educational establishments

System Benefits

The unique characteristics of Structerm's External Wall Insulation systems offer many benefits:

1. Thermal performance

Significantly improves the thermal efficiency of walls, thereby reducing fuel consumption and CO₂ emissions.

2. BBA certification

Structerm External Wall Insulation systems are backed by full BBA Certification confirming that the products have a minimum design life of 30 years. BBA Certificate No. 96/3243, product sheets 1, 2, 3, and 4.

3. Impact resistance

Hard body impact tests have been carried out on the systems in accordance with ETAG 004 : 2011 and have been proven suitable for Category I and Category II locations.

4. Easy handling, rapid installation

The low weight of the rigid insulation boards means they are easily handled by one person, and readily cut or shaped on site to suit complicated configurations.

5. Fire

The systems are classified as class 0 or 'low risk' as described in the national Building Regulations. They have attained BS 8414 part 1 (fire performance of external cladding systems) and for use in high rise applications have been tested and meet the performance criteria set out in BRE Report BR 135 : 2003 using mineral wool and phenolic insulations.

6. Acoustic performance

Transmission of external airborne noise is much reduced using the system.

7. Insulants

Five standard insulants are available giving a range of thermal performance figures to suit any application.

8. Renders and surface finishes

The external render face offers a high level of weather protection and is virtually maintenance free.

9. Moisture

In addition to their water resistant properties, renders are also vapour permeable to allow natural drying of existing walls.

10. Condensation

Condensation risk analysis calculations carried out prior to specification to ensure the dew point is moved to the outside of the system, meaning condensation does not occur within the wall.

11. Ancillary materials

A range of standard profiles and fixings for finishing corners and edges complements the system components, offering complete continuity of the system across the building façade.

12. Minimising disruption

In refurbishment projects, occupants do not have to vacate the building because all work access and installation are external.



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