Isover Installation Guide

Installing Separating Masonry Cavity Wall Insulation

ISOVER
SAINT-GOBAIN

At Saint-Gobain Isover we develop sustainable insulation solutions to protect both your built environment and the natural environment. To maintain our focus we have placed environmental responsibility at the heart of our business strategy.

The importance of correct installation

The purpose of this guide is to provide technical guidance for installing Isover insulation into separating masonry cavity walls. Quality and accuracy of installation is vitally important if a separating structure is going to meet the acoustic and thermal performance detailed at the design stage.

Mortar build-up at the bottom of the cavity, mortar snots on wall ties and insulation without tightly butted joints can all lead to substandard acoustic and thermal performance and can lead to expensive additional sound testing and corrective work.

Our vision to lead the UK mineral wool market in energy efficiency and acoustic insulation solutions will be achieved with products that meet the highest thermal, acoustic and fire safety performance levels. We will meet changing regulations first and surpass current regulations for those that wish to excel. Our products will provide best value solutions for the residential, commercial, RMI and technical building environments, be safe to use and help to protect the environment.

Isover Technical Advice

Our dedicated technical support team can provide guidance with regulation compliance, product installation and product performance.

Tel: 0115 945 1143
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Before you start

Storage and packaging

Palletised packs of Isover separating wall insulation can be stored outdoors on a flat, well-drained, hard standing surface. Loose packs must be stored under cover and off the ground until required for use. For safety reasons it is not recommended that pallets are stacked.

Free pallet repatriation service

To further support our 3 Point Plan for environmental sustainability, we are pleased to advise that a new pallet repatriation service is now available to allow removal of Isover pallets from your branch or site location, in an environmentally responsible way.

European Logisitics Management Ltd (ELM) will be providing a free collection of Isover pallets (minimum quantity applies per collection) from your preferred stockist or site location – your stockist or contractor simply has to call **0800 282 488** to arrange a collection.

Wall Ties

The level of sound insulation between buildings using masonry separating walls is highly dependent on the separation provided by the cavity between the wall leaves.

Wall Ties – separating

The following text gives generic guidance for the installation of cavity wall ties. For a detailed installation procedure and guidance, advice should be sought from the wall tie manufacturer.

Wall ties are vital for securing the structural integrity of a wall. Installing them incorrectly can lead to acoustic weak spots, cracking or even the collapse of walls.

Spacing

For walls where both leaves are thicker than 90mm, position wall ties at a maximum of 900mm horizontal x 450mm vertical centres (2.5 per m²). Ties should be evenly distributed over the wall area and should preferably be staggered.*

Around openings, position wall ties with a minimum vertical spacing of 300mm (usually 225mm to suit one block course) and no more than 225mm from the edge of the opening.

Additional Guidance

Wall ties are a primary source of acoustic transmission. For this reason it is important to prevent mortar build up around the wall ties and at the foot of the cavity.

Bridging effects can lead to significant sound transmission between the attached properties, by-passing any useful isolation effect that the cavity provides and may result in significant reduction in acoustic isolation performance.

It is important to prevent mortar build up at the base of the cavity in order to prevent it bridging the wall leaves at and above ground floor structure. Bridging effects can lead to significant sound transmission between attached properties, by-passing any useful isolation effect that the cavity provides and may result in a significant reduction in acoustic isolation performance.

* This is guidance only

Procedure

Installation procedure

Step 1

Build the first section of leading leaf to a height of three block courses along the full length of the wall with the first row of wall ties two courses up.

Step 2

Before installing the insulation, clean off any mortar snot protruding into the cavity and from any wall ties or cavity trays.

Step 3

Remove the insulation from its packaging. Ensure that the product remains in roll form but expose approximately 750mm of length.

Step 4

Position the top edge of the insulation in contact with the wall tie and the back edge in contact with the block face. The insulation should then be carefully unrolled along the full length of the wall, positioned and held in place by the wall ties.

Step 5

For effective edge sealing in a full-fill external cavity, ensure the insulation is tightly butted to the external wall insulation. For effective edge sealing in a partial filled cavity, an Isover flexible cavity barrier is required.

Procedure

Step 6

Build up the second block leaf to the top of the insulation.

Step 7

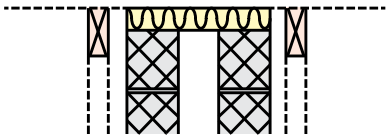
Successive sections of wall may proceed as described in points 1 to 7. Excess mortar must be removed from the cavity face and a cavity board used to prevent mortar droppings on the top edge of the insulation. When installing Isover insulation care should be taken to ensure butt joints are tightly butted and vertical joints staggered from course to course.

Step 8

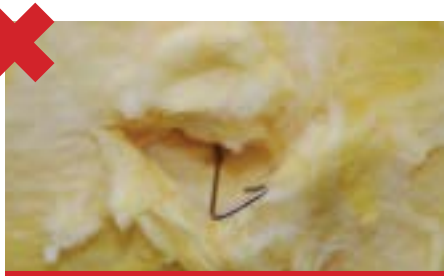
It is recommended that at corners, the insulation should be closely butted to avoid cold bridges. Ideally, the uncut edge of the insulation should be used for this purpose or an edge straight cut with a sharp knife. Folding the insulation around corners is not recommended.

Step 9

At the roof junction, compression fit Isover Cavity barriers between the wall and roof covering. The Barrier should cover the full width of the wall.



Best practice tips



Do not pierce the insulation with wall ties to prevent tearing the insulation and creating a thermal bridge.

Do not push insulation down into the cavity as a tightly butted horizontal joint cannot be ensured.

Do not bend insulation around corners as this creates air gaps within the cavity.

Do cut the insulation using a sharp knife and straight edge.

Do fit small pieces of insulation with the fibres running horizontally to the wall to ensure fully-fitted.

Do keep the top edges of the insulation clean of mortar by using a cavity board.

Do protect all exposed areas of insulation with a weatherproof material or board when work is suspended or during rain.

Do stagger vertical joints and ensure they are tightly butted.

Isover RD Party Wall Roll

A glass mineral wool roll designed for use in E-WM-17, E-WM-20 and E-WM-24 Robust Details wall constructions to exceed acoustic performance requirements set out in Building Regulations Approved Document E (England and Wales). The product also conforms to the Robust Details generic full-fill mineral wool specification for all other masonry cavity separating details.

Product	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)
Isover RD Party Wall Roll	75	2 x 455	8500	7.74
Isover RD Party Wall Roll	100	2 x 455	6000	5.46
Isover RD Party Wall Roll	125	2 x 455	5000	4.55
Isover RD Party Wall Roll	150	2 x 455	4000	3.64

- ✔ **Thermal bypass solution**
  Meets the full-fill requirement to help deliver a zero U-value for party walls as defined in Building Regulations (Approved Document L1A, Table 3).
- ✔ **Robust Details approved solution**
  Proprietary component of E-WM-17, E-WM-20 and E-WM-24 Robust Details wall constructions and also conforms to the Robust Details generic full-fill mineral wool specification for all other masonry cavity separating details.
- ✔ **Proven practical site solutions**
  No requirements for PCT (Pre-Completion Testing). Roll format ensures minimal or no vertical butt joints.
- ✔ **Removes the need for additional wet trade**
  No requirement for a wet plaster or parge coating resulting in significant time and cost savings (E-WM-17, E-WM-20 and E-WM-24 only).
- ✔ **Euroclass A1 fire rating**
  Totally non-combustible and fire safe.

www.3pointplan.co.uk www.isover.co.uk

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