

RD35

Cl/sfb | (21.9) | Km1 | (K2) |
Ref: RD002 | November 2008

Foil-faced glass mineral wool slab which is an integral component of Robust Detail masonry separating wall construction E-WM-8 and E-WM-14.

DESCRIPTION

RD35 is a specially engineered high performance acoustic slab, installed between wall ties in a masonry wall cavity. The foil-faced product is supplied in a 1200mm x 455mm dimension, compatible with conventional wall tie spacing. RD35 has been developed as an acoustic insulant in masonry party walls and, following extensive site testing, has been approved as Robust Detail E-WM-8 and E-WM-14 by the RD Assessment and Approval Committee. Party walls constructed to E-WM-8 or E-WM-14 incorporating RD35 will meet the performance requirements of Part E without the need for pre-completion site sound tests whilst removing the need for a wet-applied parge coat. A normal internal lining of plasterboard on dabs, fixed directly to the bare block face is all that is required, offering significant cost savings.

ENVIRONMENTAL INFORMATION

RD35 is made from glass mineral wool, one of the most environmentally friendly materials available.

Sustainable

RD35 is manufactured from silica sand, the earth's most abundantly occurring mineral and a sustainable, infinite resource.

Recyclable

Approximately 80% of the raw material used in the production of Isover RD35 is recycled, far more than any comparable product. The recycled material can be post-consumer glass (from housing generation projects) or waste glass from flat glass manufacture, which would otherwise go to landfill.

Environmental

The manufacturing process does not use or contain CFC's, HCFC's or other damaging gases - nor has it ever. In addition, the unique resilience of Isover glass mineral wool enables high compression packing which means more insulation in a smaller space than almost any other insulant. The result is better vehicle utilisation, reducing the environmental impact of transportation.

EcoHomes/Sustainable Homes

RD35 achieves full credit under BRE EcoHomes performance for zero Ozone Depletion Potential (ODP) and a Global Warming Potential (GWP) of zero. Credit will also be issued with RD35 under pre-completion sound testing, delivering + 5dB above minimum Part E requirements.

STANDARDS

Building Regulations England and Wales. The use of RD35 in E-WM-8 or E-WM-14 in houses and apartments will allow compliance with the performance requirements of Part E without the need for pre-completion sound testing.

Building Regulations Scotland. The Robust Detail scheme is referred to in the Scottish Building Standards: Technical Handbook: Section 5: Noise (formerly Part H) and is currently undergoing a full review with the intention of incorporating as an alternative method of compliance.

Quality Assurance Standard
RD35 is manufactured under a BSI Quality Assurance Scheme in accordance with BS EN ISO 9002: 1994.



Certificate number: FM 01032

RD35 - MAJOR BENEFITS TO HOUSEBUILDERS

- Part E - Robust Detail E-WM-8 and E-WM-14 approval.
- No need to use wet trades - no parge coating is required.
- Avoids the need for pre-completion testing - no site sound test required.
- Significant cost saving compared to 'parge coat' Robust Details.
- Provides the opportunity to gain up to 3 credits towards The Code for Sustainable Homes.
- Totally non-combustible - A1 Euroclass rating.
- Sustainable - made from sand, an infinite natural resource.
- Environmental - up to 80% recycled waste glass goes into the production process.



Isover

The World's Leading Acoustic and Thermal Insulation

PRODUCT PERFORMANCE

RD35 is a unique and fundamental component of Robust Details E-WM-8 and E-WM-14 party wall construction. This construction system has been proven by an intensive programme of in-situ site testing in accordance with the protocol laid down by Robust Details Limited.

Airborne Performance Requirements laid down in Part E (min)	Site tested performance: RD35 in E-WM-8 or E-WM-14	
	Airborne Range	Airborne Mean
45 dB DnT,w + Ctr	47-58 dB DnT,w + Ctr	52 dB DnT,w + Ctr

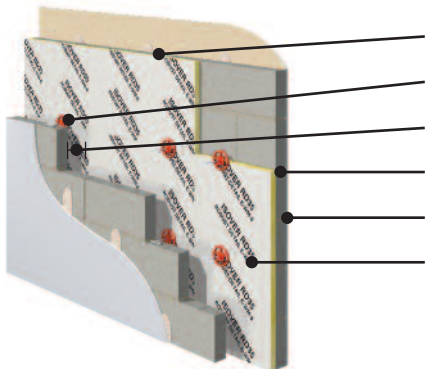
The table above shows performance figures obtained from at least 30 field tests on separating walls incorporating RD35. Note: For airborne performance, the higher the value, the better the sound insulation.

CONSTRUCTION CHARACTERISTICS

Robust Detail E-WM-8 construction is based on 2 leaves of lightweight aggregate blocks (minimum cavity width 75mm leaf to leaf), with a gypsum-based 'dot-and-dab' applied board finish. A render or parge coat is not required. The nominal specified weight of the gypsum-based board is 9.8kg/m² and the board thickness can be 12.5mm or 15mm provided that the nominal weight requirement is achieved.

Robust Detail E-WM-14 construction is based on 2 leaves of lightweight aggregate blocks (minimum cavity width 100mm leaf to leaf), with a gypsum-based 'dot-and-dab' applied board finish. A render or parge coat is not required. The nominal specified weight of the gypsum-based board is 9.8kg/m² and the board thickness can be 12.5mm or 15mm provided that the nominal weight requirement is achieved.

Robust Detail E-WM-8 or E-WM-14 using RD35

	Block density	1350 to 1600 kg/m ³
	Wall ties	Insulation retaining wall ties to Approved Document E 'Tie type A'
	Cavity width	75mm (min) leaf-to-leaf (E-WM-8) / 100mm (min) leaf-to-leaf (E-WM-14)
	Block thickness	100mm (min), each leaf
	Wall finish mounted on dabs	Gypsum-based board (nominal 9.8 kg/m ²)
	Insulation	35mm RD35 foil-faced mineral wool acoustic batt
	External (flanking) wall	Masonry both leaves with 50mm (min) cavity - clear, fully filled or partially filled with insulation

RD35 slabs are installed as a partial-fill, positioned in the party wall cavity between wall ties and held in place with retaining discs in the normal manner as for installing insulation slabs in external walls. The RD35 slabs must be installed with the foil-facing the residual 40mm (minimum) cavity. The acoustic slabs must be tightly butted together, and half cuts made with a clean sharp knife. Unless the external (flanking) wall cavity is fully filled with Hi-Cav (see diagram A), the junction of party wall cavity/external wall cavity must be closed with a Cavity Barrier to prevent flanking noise transmission (see diagram B).

It is a good design detail to continue the installation of the RD35 slabs to the full height of the separating wall up to the underside of the roof.

Typical Cavity T-junction details to prevent flanking noise transmission

Diagram A

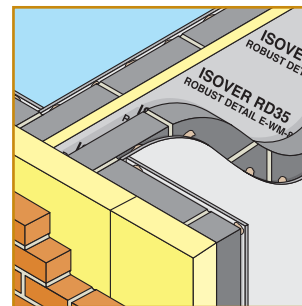
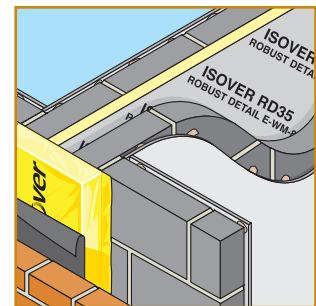


Diagram B



PACKAGING AND PHYSICAL DIMENSIONS

Isover RD35 is manufactured in slab form in a single thickness. The slabs are compression packed in individual packs using a strong polythene packaging film. The packs are then stacked on wooden pallets with final weatherproof outer covering, giving the option of outside storage.

Order code	Thickness (mm)	Width (mm)	Length (mm)	Slabs per pack	M ² per pack	Packs per pallet	M ² per pallet
13853	35	455	1200	12	6.55	20	131

Saint-Gobain Isover
Unit 7
Gotham Business Park
Leake Road
Gotham
Nottinghamshire NG11 0LB
Tel: +44 (0) 115 969 8010
Fax: +44 (0) 115 983 1675
www.isover.co.uk

Technical Support: 0115 945 1143 or E-mail isover.enquiries@saint-gobain.com

Saint-Gobain Isover reserve the right to alter or amend product specification without notice. The information given in this publication is correct to the best of our knowledge at the time of publication. Whilst Saint-Gobain Isover will endeavour to ensure publications are up to date, it is the users responsibility to check with us that it is correct prior to use.