The Isover Yellow Guide to Buildings Insulation

New Build | Renovation | Commercial

ISOVER
SAINT-GOBAIN

Your environment. It's the nature of our business.

Buildings Insulation

Technical Advice and Support Line

including New Build Residential, Renovation and Commercial

Tel: **0115 945 1143**

e-mail: **isover.enquiries@saint-gobain.com**

Advice on

- U-Value and Condensation Risk calculations for Constructions using Isover and British Gypsum products
- Product Application Information
- Thermal, Fire and Acoustic performance

ISOVER SAINT-GOBAIN

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www.isover.co.uk

Contents

Your environment, **it's the nature of our business**

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.

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.

Also at the heart of our strategy is our 3 Point Plan for environmental sustainability. This dynamic plan adopts the life cycle concept, guides our efforts to continuously improve the way in which our products and processes impact your environment, and seeks to ensure that Isover and our products use...

- **Less Materials**
- **Less Energy**
- **Less Emissions**

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

3pointplan for environmental sustainability

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Icon Guide

Isover enables easy identification of a products application and performance through a set of easily identifiable images at the top of every page. These icons also appear on all product packaging.

Application Icons:

Icons on each product page indicate the most appropriate application at a glance.

- Pitched Roof - Loft Floor
- Pitched Roof - Loft Room-In-The-Roof
- Walls - External
- Walls - Partition
- Walls - Separating
- Walls - External & Separating
- Floors - Floating - Under/Between
- Metallic Buildings
- Various applications

Performance Icons:

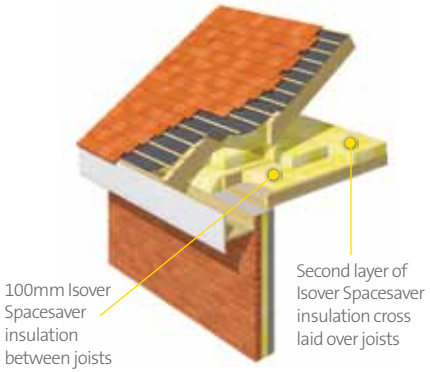
Icons on each product page indicate the products characteristics at a glance.

- Acoustic insulation
- Thermal insulation
- Easy to install
- Energy savings
- Euroclass A1 fire rating
- Non-combustible
- Protected planet
- Recycled glass - up to 86%
- Water resistant
- Sound resistant - Robust Details compliant

Isover Spacesaver

Loft Floors
Loft Room-In-The-Roof

A glass mineral wool roll providing thermal insulation for domestic loft floors. Rolls are pre-perforated to 3x386mm and 2x580mm widths to fit between common joist spacing.

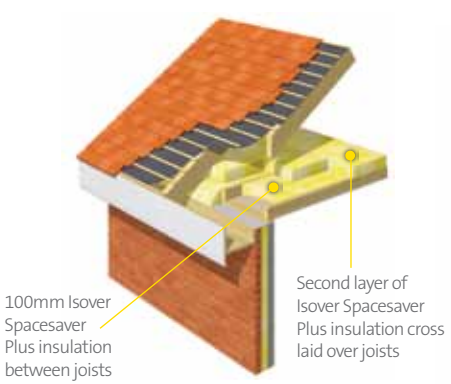


Features	Benefits
• Thermal conductivity of 0.043 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• 1160mm wide pre-perforated glass mineral wool rolls	• Pre-perforated at 3x386mm and 2x580mm rolls to fit between common joist spacing. • Push fits between joists
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Spacesaver corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 10 kg/m³' ref 815320005 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Spacesaver	5200013753	100	1160	9170	10.64	24	255.36
Isover Spacesaver	5200013754	150	1160	6030	6.99	24	167.76
Isover Spacesaver	5200013755	170	1160	5390	6.25	24	150
Isover Spacesaver	5200013758	200	1160	3880	4.5	24	108

Isover Spacesaver Plus

A glass mineral wool roll providing increased thermal insulation for domestic loft floors. Rolls are pre-perforated to 3x386mm and 2x580mm widths to fit between common joist spacing.

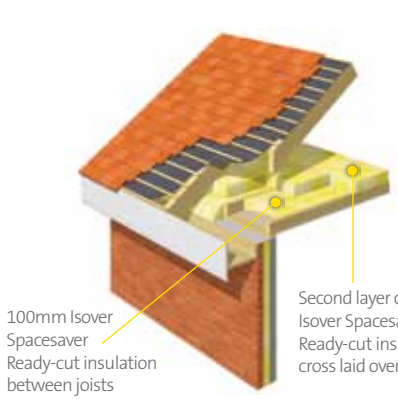


Features	Benefits
• High thermal performance with a thermal conductivity of 0.040 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• 1160mm wide perforated glass mineral wool rolls	• Pre-perforated at 3x386mm and 2x580mm rolls to fit between common joist spacing. • Push fits between joists
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Spacesaver Plus correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Spacesaver Plus	5200013779	100	1160	7000	8.12	24	194.88
Isover Spacesaver Plus	5200013780	150	1160	4670	5.42	24	130.08
Isover Spacesaver Plus	5200013781	200	1160	3500	4.06	24	97.44

Isover Spacesaver Ready-cut

A glass mineral wool roll providing thermal insulation for domestic loft floors. Easy to install, rolls are ready cut to provide either half or third widths to suit 400mm or 600mm joist spacing.



Features	Benefits
• Thermal conductivity of 0.043 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• 2 x 580mm or 3 x 386mm ready cut glass mineral wool rolls	• Ready cut to fit between common joist spacing • Push fits between joists
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Spacesaver Ready Cut correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 10 kg/m³' ref 815320005 which achieves a summary rating of A+ within Domestic, Health, Industrial, Commercial, Retail, Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Spacesaver Ready-cut	5200013751	100	3 x 386	9170	10.62	24	254.88
Isover Spacesaver Ready-cut	5200013752	100	2 x 580	9170	10.64	24	255.36
Isover Spacesaver Ready-cut	5200013818	150	2 x 580	6030	6.99	24	167.76
Isover Spacesaver Ready-cut	5200013819	150	3 x 386	6030	6.98	24	167.52
Isover Spacesaver Ready-cut	5200013756	200	3 x 386	3880	4.49	24	107.76
Isover Spacesaver Ready-cut	5200013757	200	2 x 580	3880	4.50	24	108

Thermal Performance Guide

The following tables show the U-Values achieved using Isover insulation laid in the roof void. U-Values are based on the first 100mm layer of insulation laid between the joists, and the remaining thickness installed as a second layer, cross laid over the joists to reduce cold bridging.

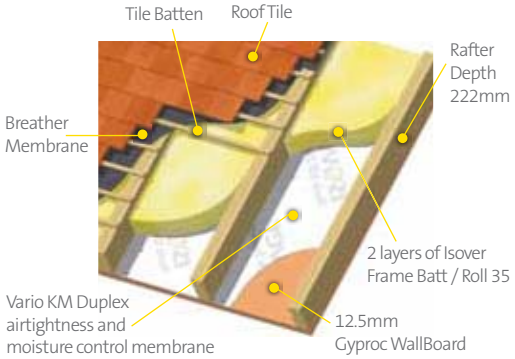
Isover Spacesaver & Isover General Purpose Roll (Thermal conductivity = 0.043 W/mK)

Between Joists (mm)	Over Joists (mm)	Combined thickness (mm)	U-Value achieved (W/m^2K)
100	170	270	0.16
100	200	300	0.14

Isover Spacesaver Plus (Thermal conductivity = 0.040 W/mK)

Between Joists (mm)	Over Joists (mm)	Combined thickness (mm)	U-Value achieved (W/m^2K)
100	150	250	0.16
100	200	300	0.13
100	300	400	0.10

A glass mineral wool batt/roll providing thermal and acoustic insulation for new-build Room-In-The-Roof or loft conversions. The batts/rolls push-fit between rafters at 600mm centres without the need for measuring or cutting.

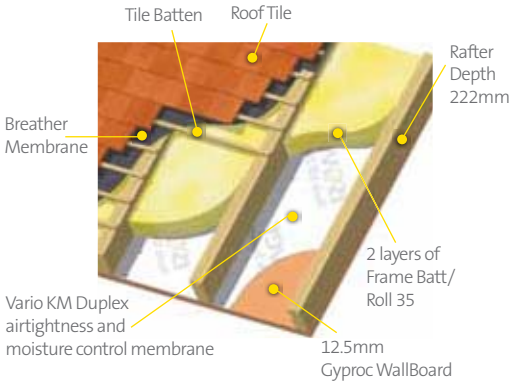


Features	Benefits
• Excellent thermal performance with a thermal conductivity of 0.035 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2006 (England & Wales) and Section 6 (Scotland)
• 570mmx1175mm glass mineral wool batts and 2 x 570mm wide ready cut glass mineral wool rolls	• Compatible with 600mm timber stud centres • Push fits with no need for additional fixings
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Frame Batt 35 and Frame Roll 35 correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Frame Batt 35	5200430538	90	570	1175	10	6.70	16	107.20
Isover Frame Batt 35	5200013659	100	570	1175	8	5.36	16	85.76
Isover Frame Batt 35	5200013891	140	570	1175	6	4.02	16	64.32

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Frame Roll 35	5200013777	90	2 x 570	5300	6.04	18	108.72
Isover Frame Roll 35	5200013902	140	2 x 570	4000	4.56	18	82.08

A high performance air-tightness and moisture management membrane installed internally to roofs, walls and floors in timber frame constructions.



Features	Benefits
• Proven to achieve excellent air tightness levels	• Ideal for use in low energy and Passive House constructions and buildings with mechanical ventilation and heat recovery systems
• Active moisture management	• Protects structural elements from moisture damage • Ensures insulation works to optimum levels
• Nylon based micropore membrane with breathable properties	• 3 times stronger than polythene membrane so less likely to damage during transit and installation • Easy to handle and cut, resulting in more efficient installation
• Specially developed tape and sealant systems fully compatible with Vario membrane	• Non ageing tapes for fast and efficient joining • Ensures maximum performance of Vario system for the lifetime of the property

Product	Order code	Units	Measure
Vario KM Duplex Membrane	5200013886	1 Roll (60m²)	40m x 1.5m
Vario Powerflex	5200013892	1 Box (10 rolls)	25m
Vario KB1	5200013893	1 Box (5 rolls)	40m
Vario DS Sealant	5200013894	1 Box (12 cartridges)	310ml per cartridge

Thermal Performance Guide

The following constructions meet the required U-Value of 0.20 W/m²K in Room-In-The-Roof applications to comply with 2006 Building Regulations. For advice on complying with 2010 Building Regulations please call our Technical Advice Line on: 01159 451 143

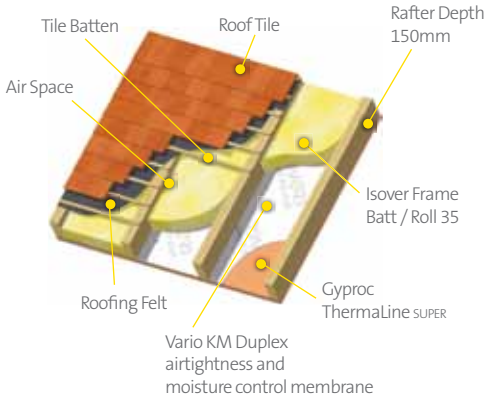
Construction Type	Rafter Depth mm	Tiling Underlay	Airspace between Underlay & Insulation (mm)	Counter Batten on top of Underlay	Installation	Internal Air Tightness / Moisture Control Membrane	Ceiling Lining	U-Value (W/m²K)
Construction A	150	Conventional Felt	50	No	100mm Frame Batt	Vario / KM Duplex	60mm Gyproc ThermaLine SUPER	0.20
Construction B	100	Conventional Breather Membrane	None	Yes				0.20

Construction A - Isover Frame Batt 35 in 150mm rafter depth

Solution to meet the Isover suggested U-Value of 0.20 W/m²K

Maintaining a 50mm airgap between the roofing felt and the insulation.

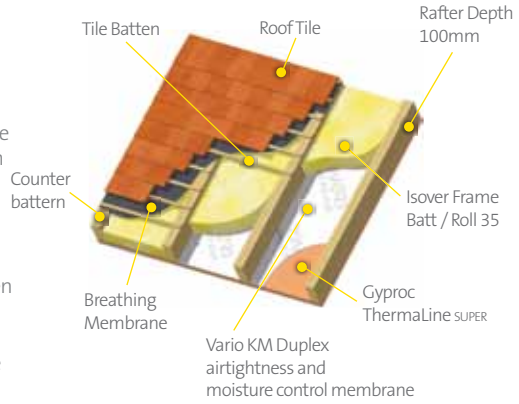
Tiled or slated roof on tiling battens on counter battens (in the same plane as the rafters) on conventional breather membrane fixed to 48mm x 150mm softwood rafters. Isover Frame Batt 35, 100mm thickness, installed between the rafters - no airgap between breather membrane and Isover insulation. Vario KM Duplex membrane fixed to inner face of the rafters. Internal lining of 60mm Gyproc ThermaLine SUPER.



Construction B - Isover Frame Batt 35 in 100mm rafter depth

Solution to meet the Isover suggested U-Value of 0.20 W/m²K

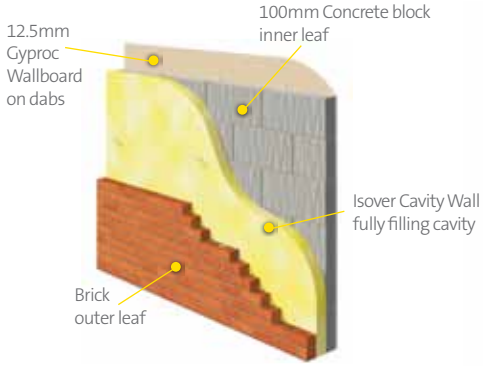
Installing conventional breather membrane beneath roofing tiles - no airgap required between membrane and insulation. Suitable for re-roofing projects. Tiled or slated roof on tiling battens on counter battens (in the same plane as the rafters) on conventional breather membrane fixed to 48mm x 100mm softwood rafters. Isover Frame Batt 35, 100mm thickness, installed between the rafters - no airgap between breather membrane and Isover insulation. Vario KM Duplex membrane fixed to inner face of the rafters. Internal lining of 60mm Gyproc ThermaLine SUPER.



Isover Cavity Wall Slab (CWS)

Masonry External Walls
Masonry Separating Cavity Walls
Framed Walls

A glass mineral wool full-fill cavity slab providing thermal performance in masonry cavity walls to meet Part L Building Regulations (England and Wales).

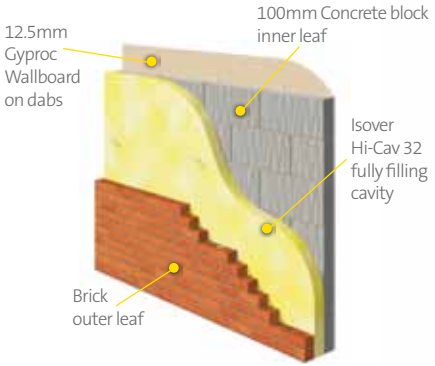


Features	Benefits
• Excellent thermal performance with a thermal conductivity of 0.036 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales)
• Excellent acoustic properties	• Full fill solution helps minimise flanking sound transmission along the wall cavity
• BBA Approved (Certificate No. 90/2465)	• Full independent approval for use in masonry walls (England & Wales) • Approved for use in severe exposure zones • Approved for use in buildings up to and including 25 metres in height
• Euroclass A1 fire rating	• Totally non-combustible
• Isover CWS corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic, Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Cavity Wall Slab	5200013665	50	455	1200	20	10.92	20	218.40
Isover Cavity Wall Slab	5200013862	65	455	1200	16	8.74	25	218.50
Isover Cavity Wall Slab	5200013885	75	455	1200	16	8.74	20	174.80
Isover Cavity Wall Slab	5200013670	80	455	1200	14	7.64	20	152.80
Isover Cavity Wall Slab	5200013671	85	455	1200	12	6.55	20	131.00
Isover Cavity Wall Slab	5200013672	90	455	1200	12	6.55	20	131.00
Isover Cavity Wall Slab	5200013887	100	455	1200	12	6.55	20	131.00
Isover Cavity Wall Slab	5200013660	125	455	1200	8	4.37	25	109.25

Isover Technical Advice Phone: **01159 451 143** email: **isover.enquiries@saint-gobain.com**

A higher performing glass mineral wool full-fill cavity slab providing excellent thermal performance in masonry cavity walls to meet or exceed the requirements of Part L Building Regulations (England and Wales), enabling U-Values as low as 0.13 W/m²K within a typical 400mm wall width.



Features	Benefits
• Superior thermal performance with a thermal conductivity of 0.032 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales)
• Excellent acoustic properties	• Full fill solution helps minimise flanking sound transmission along the wall cavity
• BBA Approved (Certificate No. 90/2465)	• Full independent approval for use in masonry walls (England & Wales) • Approved for use in severe exposure zones • Approved for use in very severe exposure zones if greater than 150mm • Approved for use in buildings up to and including 25 metres in height
• 455mm x 1200mm glass mineral wool slab	• Compatible with conventional wall tie spacing ensuring ease of installation
• Isover Hi-Cav 32 corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 48 kg/m³' ref 815320004 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Hi-Cav 32	5200013874	50	455	1200	14	7.64	15	114.60
Isover Hi-Cav 32	5200013875	65	455	1200	12	6.55	15	98.25
Isover Hi-Cav 32	5200013876	75	455	1200	10	5.46	15	81.90
Isover Hi-Cav 32	5200013877	85	455	1200	8	4.37	15	65.55
Isover Hi-Cav 32	5200013878	100	455	1200	6	3.28	15	49.20

Thermal Performance Guide

The following U-Values are based on a cavity wall of brick outer leaf and a 100mm concrete block inner leaf finished internally with 12.5mm Gyproc WallBoard on dabs, and with Isover Cavity Wall Slab or Isover Hi-Cav 32 insulation slabs completely filling the wall cavity. U-Value calculations assume 6.7% mortar fraction and cavities 100mm and above using thermal break wall ties. Calculated to the combined method of BS EN ISO 6946.

Isover Cavity Wall Slab (CWS) (Thermal conductivity = 0.036 W/mK)

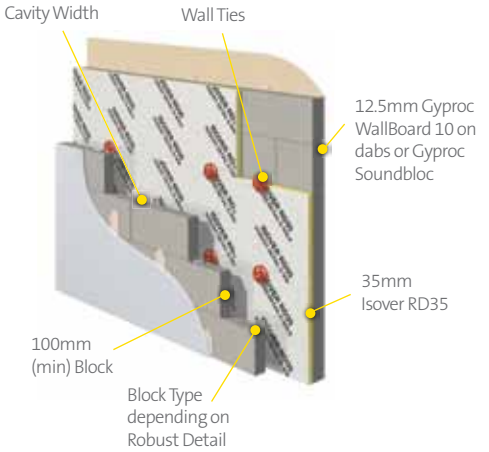
U-Value (W/m²K)	Block type			
	Typical Aircrete		Typical 7N	Dense Concrete
	100mm λ = 0.11	100mm λ = 0.15	100mm λ = 0.51	100mm λ = 1.13
	Appropriate thickness (mm) of Isover Cavity Wall Slab to achieve U Value (W/m²K)			
0.35	65	65	85	85
0.34	65	75	85	85
0.33	65	75	85	100
0.32	75	75	100	100
0.30 / 0.31	75	85	100	100
0.29	85	85	100	115
0.28	85	100	115	115
0.27	100	100	115	115
0.26	100	100	115	125
0.25	100	115	125	125
0.24	115	115	125	130
0.23	115	125	130	140
0.22	125	125	140	140
0.21	125	130	150	150
0.20	140	140	160	160

Isover Hi Cav 32 (Thermal conductivity = 0.032 W/mK)

U-Value (W/m²K)	Block type			
	Typical Aircrete		Typical 7N	Dense Concrete
	100mm λ = 0.11	100mm λ = 0.15	100mm λ = 0.51	100mm λ = 1.13
	Appropriate full-fill thickness (mm) of Isover Hi-Cav 32 to achieve U-Value (W/m²K)			
0.30	75	75	85	100
0.28 / 0.29	75	85	100	100
0.27	85	85	100	100
0.26	85	100	125	125
0.24 / 0.25	100	100	125	125
0.23	100	125	125	125
0.22	125	125	125	135
0.20 / 0.21	125	125	135	150
0.19	135	135	150	150
0.18	135	150	160	160
0.17	150	150	170	170
0.16	160	170	175	185
0.15	170	175	200	200
0.14	185	200	200	-
0.13	200	-	-	-

Isover RD35

A foil-faced glass mineral wool batt designed for use in E-WM-8, E-WM-14 and E-WM-15 Robust Detail wall constructions to exceed Part E Building Regulations (England and Wales) and Section 5 (Scotland). Provides excellent acoustic performance in dry-finish masonry party walls, removing the need for parge coats.

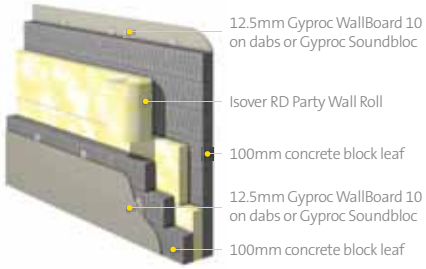


Features	Benefits
• Approved as Robust Detail E-WM-8, E-WM-14, E-WM-15	• Ensures compliance with Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland) without the need for on-site sound testing • Removes the need for a wet plaster or parge coating resulting in significant time and cost savings (Testing will be required in Scotland to meet Regulations) • Provides the opportunity to gain 3 credits towards The Code for Sustainable Homes
• 455mm x 1200mm foil-faced glass mineral wool batts	• Compatible with conventional wall tie spacing ensuring ease of installation
• Euroclass A2 fire rating	• Completely fire safe
• Isover RD35 corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 48 kg/m³' ref 815320004 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover RD35	5200013853	35	455	1200	12	6.55	20	131.00

Isover RD Party Wall Roll

Isover has developed a glass mineral wool roll designed for use in Robust Detail wall constructions to exceed Part E Building Regulations (England and Wales). Significant cost savings can be obtained since there is no need for pre-completion testing and additional savings can be made with E-WM-17 as it removes the need for wet plaster, sand/cement renders or parge coats.



Features	Benefits
• Approved as Robust Detail E-WM-6, E-WM-10, E-WM-13 and E-WM-17	• Exceeds Part E Building Regulations (England & Wales) and Section 5 (Scotland) requirements in a nominal 75mm and 100mm cavity • Significant cost savings can be obtained since there is no requirement for pre-completion testing (Testing will be required in Scotland to meet Regulations) • With E-WM-17, additional cost savings can be obtained since there is no requirement for wet plaster, sand/cement renders or parge coats and the construction can be drylined with gypsum boards directly to the inner face of the blockwork • Provides the opportunity to gain 3 credits towards The Code for Sustainable Homes
• 455mm wide glass mineral wool rolls	• Compatible with conventional wall tie spacing ensuring ease of installation • Since the product is in roll form ease of installation and acoustic performance is improved due to no/ minimal vertical butt joints
• Euroclass A1 fire rating	• Totally non-combustible
• Isover RD Party Wall Roll corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover RD Party Wall Roll	5200444674	70	2 x 455	9000	8.19	28	229.32
Isover RD Party Wall Roll	5200444686	95	2 x 455	6500	5.92	28	165.76

Acoustic Performance Guide

The acoustic performance of Robust Detail constructions are designed to meet and exceed the minimum levels stated in Approved Document E (2003). The Code for Sustainable Homes awards credits based on the acoustic performance achieved over that of current regulations.

Guidance on Acoustic regulations are given on page 46.

Isover RD35

Wall	Isover Component	Cavity Width (mm)	Block Type	Minimum dB achieved	CfSH Credits
E-WM-14	Essential	100	Aggregate Blocks	50 Dntw + ctr dB	3 credits
E-WM-15	Essential	75	Aircrete Blocks	48 Dntw + ctr dB	1 credit
E-WM-8	Essential	75	Aggregate Blocks	48 Dntw + ctr dB	1 credits

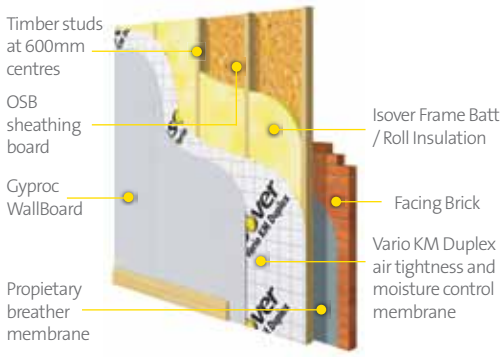
Isover RD Party Wall Roll

Wall	Isover Component	Cavity Width (mm)	Block Type	Minimum dB achieved	CfSH Credits
E-WM-17	Essential	100	Aggregate Blocks	50 Dntw + ctr dB	3 credits[2]
E-WM-17	Essential	75	Aggregate Blocks	50 Dntw + ctr dB	3 credits
E-WM-13	Optional[1]	75	Aircrete Blocks	50 Dntw + ctr dB	3 credits
E-WM-6	Optional[1]	75	Aircrete Blocks	48 Dntw + ctr dB	1 credit
E-WM-10	Optional[1]	75	Aircrete Blocks	47 Dntw + ctr dB	Meets Part E requirements

[1] RD Party Wall Roll is an optional component of this construction and is included to anticipate future regulatory requirements

[2] The E-WM-17 (100mm) construction has the potential to achieve four credits via pre-completion testing

A glass mineral wool roll or batt providing thermal and acoustic insulation for timber floors and external and separating walls.



Features	Benefits
• Excellent thermal performance with a thermal conductivity of 0.032 to 0.043 W/mK within the range	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• Excellent acoustic properties	• Helps to meet requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• 570mm x 1175mm glass mineral wool batts or 2 x 570mm ready cut rolls	• Compatible with 600mm timber stud centres • Push fits with no need for additional fixings • Two batts end-to-end typically fit standard storey height
• Euroclass A1 fire rating	• Totally non-combustible
• Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Isover Timber Frame Batt achieves the following BRE Green Guide summary ratings

Product Name	BRE Global Green Guide Specification	Element Reference	Applicable Building Type(s)	Rating
Timber Frame Batt 32	Glass wool insulation - density 48kg/m³	815320004	Domestic, Health, Industrial, Commercial, Retail, Education	A+
Timber Frame Batt 35	Glass wool insulation - density 24kg/m³	815320002	Domestic, Health, Industrial, Commercial, Retail, Education	A+
Timber Frame Batt 40	Glass wool insulation - density 12kg/m³	815320001	Domestic, Health, Industrial, Commercial, Retail, Education	A+
Timber Frame Batt 43	Glass wool insulation - density 10kg/m³	815320005	Domestic, Health, Industrial, Commercial, Retail, Education	A+

Isover Timber Frame Roll achieves the following BRE Green Guide summary ratings

Product Name	BRE Global Green Guide Specification	Element Reference	Applicable Building Type(s)	Rating
Timber Frame Roll 35	Glass wool insulation - density 24kg/m³	815320002	Domestic, Health, Industrial, Commercial, Retail, Education	A+
Timber Frame Roll 40	Glass wool insulation - density 12kg/m³	815320001	Domestic, Health, Industrial, Commercial, Retail, Education	A+

Isover Timber Frame Batts

Product	Order code	Thick-ness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Frame Batt 32 - Thermal conductivity 0.032 W/mK								
Isover Timber Frame Batt 32	5200013657	50	570	1175	9	6.03	16	96.48
Isover Timber Frame Batt 32	5200013656	90	570	1175	5	3.35	20	67.00
Isover Frame Batt 34 - Thermal conductivity 0.034 W/mK								
Isover Timber Frame Batt 34	5200013879	140	570	1175	6	4.02	16	64.32
Isover Frame Batt 35 - Thermal conductivity 0.035 W/mK								
Isover Timber Frame Batt 35	5200430538	90	570	1175	10	6.70	16	107.20
Isover Timber Frame Batt 35	5200013659	100	570	1175	8	5.36	16	85.76
Isover Timber Frame Batt 35	5200013891	140	570	1175	6	4.02	16	64.32
Isover Frame Batt 38 - Thermal conductivity 0.038 W/mK								
Isover Timber Frame Batt 38	5200430539	90	570	1175	12	8.04	20	160.80
Isover Timber Frame Batt 38	5200430540	140	570	1175	8	5.36	20	107.20
Isover Frame Batt 40 - Thermal conductivity 0.040 W/mK								
Isover Timber Frame Batt 40	5200013709	90	570	1175	14	9.38	20	187.60
Isover Timber Frame Batt 40	5200013718	140	570	1175	8	5.36	24	128.64
Isover Frame Batt 43 - Thermal conductivity 0.043 W/mK								
Isover Timber Frame Batt 43	5200013677	90	570	1175	12	8.04	24	192.96
Isover Timber Frame Batt 43	5200013673	100	570	1175	12	8.04	24	192.96
Isover Timber Frame Batt 43	5200013674	140	570	1175	8	5.36	24	128.64

Isover Timber Frame Rolls

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Frame Roll 35 - Thermal conductivity 0.035 W/mK							
Timber Frame Roll 35	5200013777	90	2 x 570	5300	6.04	18	108.72
Timber Frame Roll 35	5200013902	140	2 x 570	4000	4.56	18	82.08
Isover Frame Roll 38 - Thermal conductivity 0.038 W/mK							
Timber Frame Roll 38	5200013903	140	2 x 570	5500	6.27	24	150.48
Isover Frame Roll 40 - Thermal conductivity 0.040 W/mK							
Timber Frame Roll 40	5200013822	90	2 x 570	10130	11.55	24	277.20
Timber Frame Roll 40	5200013775	100	1160	9110	10.57	24	253.68
Timber Frame Roll 40	5200013717	140	2 x 570	6500	7.41	24	177.84
Isover Frame Roll 43 - Thermal conductivity 0.043 W/mK							
Timber Frame Roll 43	5200013770	90	2 x 570	9600	10.94	24	262.56

Thermal and Acoustic Performance Guide

Thermal Performance (External Walls)

The following U-Values are based on an external wall consisting of facing brick and a nominal 50mm cavity with an OSB sheathing board fixed to the outside of timber studs at 600mm centres. Proprietary breather membrane (reflective grade optional) fixed to the OSB board in the brickwork cavity. Stud framework filled with Isover insulation, and with Vario KM Duplex UV membrane fixed to the inner face of the studs. Wall lining finish of Gyproc WallBoard.

Product	Stud Size	U-Value (W/m^2K)	U-Value (W/m^2K) with additional reflective breather membrane in brickwork cavity
		15% default timber fraction	15% default timber fraction
Frame Batt 32	90mm	0.38	0.33
Frame Batt 43	140mm	0.31	0.28
Frame Batt 40	140mm	0.30	0.27
Frame Batt 34	140mm	0.28	0.25
Frame Batt 32	140mm	0.27	0.24

Acoustic Performance (Party Walls)

Approved Document E (2003) calls for a minimum DnTw 45dB airborne sound insulation (including Ctr correction factor for low frequency) in party walls. The following constructions incorporating any timber frame insulation product will comply with this requirement through the Robust Detail system.

E-WT-1 – Twin Timber Frames without cavity sheathing board

2 or more layers of plasterboard nominally 22kg/m² (typically 19mm Gyproc Plank plus 12.5mm Gyproc WallBoard) with joints staggered each side of timber frame with 90mm Isover Frame Batt 40 within each frame.

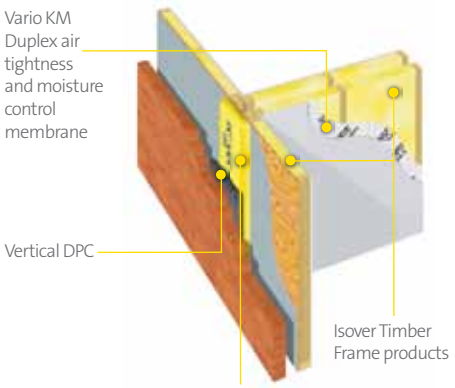
Unsheathed Construction Method of compliance: Robust Detail		
Insulation Thickness (mm)	Robust Detail	Mean performance range dB
90	E-WT-1	50

E-WT-2 – Twin Timber Frames with cavity sheathing board

2 or more layers of plasterboard nominally 22kg/m² (typically 19mm Gyproc Plank plus 12.5mm Gyproc WallBoard) with joints staggered each side of timber frame with 90mm Isover Frame Batt 40 within each frame. Sheathing board fixed to internal (cavity) side of each stud frame.

Sheathed Construction Method of compliance: Robust Detail		
Insulation Thickness (mm)	Robust Detail	Mean performance range dB
90	E-WT-2	48

A non-combustible glass mineral wool cavity barrier used to restrict the spread of smoke and flames and to minimise flanking noise transmission in concealed cavities in masonry, timber frame and steel frame constructions.



Features	Benefits
• Excellent fire properties	• Provides up to 100 minutes fire protection in concealed cavities • Helps to meet requirements of Part B Fire Building Regulations (England & Wales) and Section 2 (Scotland)
• Excellent acoustic properties	• Helps minimise flanking sound transmission along the wall cavity • Helps to meet requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• Compact product range	• Only 3 sizes needed to suit all cavity widths up to 100mm (50-65mm, 66-80mm and 81-100mm) • Allows for simple , easy and cost effective storage
• Colour coded packaging	• Avoids installation of the wrong barrier sizes on site • Allows for easier picking of the correct product in the warehouse
• Storey height product - joint free solution	• Reduces the thermal bypass effect in separating walls by providing edge-sealing at the party wall/external wall junction • Fewer joints means less chance of installer error on site and a reduction in installation time
• Euroclass A1 fire rating	• Totally non-combustible
• Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Zero Global Warming Potential (GWP)	• Excellent environmental credentials

Product	Order code	For cavity sizes (mm)	Sleeve Colour	Width (mm)	Nominal length mm	Barriers per pack
Cavity Barrier (1.2m x 100mm)						
Cavity Barrier (65)	**5200013222**	50 - 65	Yellow	100	1200	50
Cavity Barrier (80)	**5200013223**	66 - 80	Blue	100	1200	40
Cavity Barrier (100)	**5200013213**	81 - 100	White	100	1200	40
Cavity Barrier (1.2m x 300mm)						
Cavity Barrier (65)	**5200013829**	50 - 65	Yellow	300	1200	13
Cavity Barrier (80)	**5200013830**	66 - 80	Blue	300	1200	10
Cavity Barrier (100)	**5200013831**	81 - 100	White	300	1200	10
Cavity Barrier (storey height x 300mm)						
Cavity Barrier (65)	**5200013826**	50 - 65	Yellow	300	2400	8
Cavity Barrier (80)	**5200013827**	66 - 80	Blue	300	2400	5
Cavity Barrier (100)	**5200013828**	81 - 100	White	300	2400	5

Fire Performance

Isover Cavity Barriers are designed to meet the requirements laid out in Section 10 of Approved Document B 2000 (England & Wales) and Section 2 (Scotland). The documents state that barriers should be constructed to provide at least 30 minutes fire resistance. Isover Cavity Barriers have been tested for fire resistance (integrity and insulation) in accordance with BS 476: Part 20: 1987 and can provide up to 100 minutes fire resistance.

Standard Range (100mm wide barrier) - Warrington Fire Test Report No: C52472 – 30 minutes fire resistance

Party Wall and Storey Height Range (300mm wide barrier) - Warrington Fire Test Report No: 144942 – 100 minutes fire resistance

Isover Cavity Barriers achieve a Euroclass A1 fire rating – Isover glass mineral wool is a totally non combustible material.

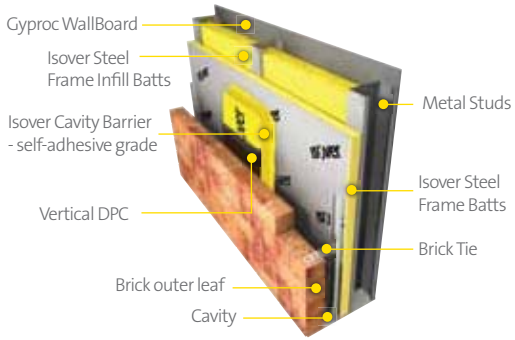
Acoustic Performance

Approved Document E 2003 and Robust Details Ltd (England & Wales) and Section 5 (Scotland) require the use of a cavity closer to reduce flanking noise transmission along the party wall and external wall cavities.

Isover Cavity Barriers meet the generic description for cavity closers and will thus ensure compliance with Part E and Robust Details in masonry, timber frame and steel frame constructions

Isover Steel Frame Batts

A non-combustible foil-faced glass mineral wool batt fixed to the outside of lightweight steel-frame external wall constructions, providing excellent thermal and acoustic insulation.

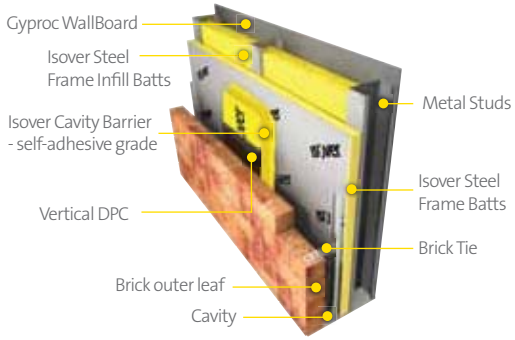


Features	Benefits
• Excellent thermal performance with a thermal conductivity of 0.032 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• Excellent acoustic properties	• Helps to meet the requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and BB93 (Acoustic Design of Schools)
• 1200mm x 1200mm foil faced glass mineral wool batts with a glass tissue backing	• Glass tissue backing provides improved rigidity and handling
• Euroclass A2 fire rating	• Totally non-combustible
• Isover Steel Frame Batts correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 48 kg/m³' ref 815320004 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pallet	Pallet area (m²)
Isover Steel Frame Batts	5200013883	50	1200	1400	40	57.6

Isover Steel Frame Infill Batts

A glass mineral wool batt friction fitted between lightweight steel-frame external walls, providing excellent thermal and acoustic insulation.

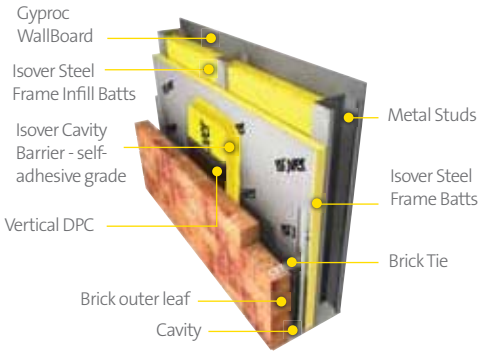


Features	Benefits
• Excellent thermal performance with a thermal conductivity of 0.036 W/mK	• Helps to meet the requirements of Part L Thermal Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• Excellent acoustic properties	• Assists in meeting requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and BB93 (Acoustic Design of Schools)
• 1200mm x 600mm glass mineral wool batts	• Compatible with 600mm stud centres • Friction fitted with no need for additional fixings
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Steel Frame Infill Batts correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials and helps towards valuable BREEAM credit points

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Steel Frame Infill Batts	5200013880	50	600	1200	16	11.52	20	230.40
Steel Frame Infill Batts	5200013881	75	600	1200	10	7.20	20	144
Steel Frame Infill Batts	5200013882	100	600	1200	8	5.76	20	115.20

Isover Self-Adhesive Cavity Barrier

A non-combustible glass mineral wool cavity barrier used to restrict the spread of smoke and flames and to minimise flanking noise transmission in concealed cavities in masonry, timber frame and steel frame constructions.



Features	Benefits
• Includes self-adhesive strips	• Allows for the barrier to be fitted directly to the foil face of the Steel Frame Batt without the need for any additional fixings
• Excellent fire properties	• Provides up to 60 minutes fire protection in steel frame cavities • Helps to meet the requirements of Part B Fire Building Regulations (England & Wales) and Section 2 (Scotland)
• Excellent acoustic properties	• Helps minimise flanking sound transmission along the wall cavity • Helps to meet the requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• Compact product range	• Only 3 sizes needed to suit all cavity widths up to 100mm (50-65mm, 66-80mm and 81-100mm)
• Colour coded packaging	• Avoids installation of the wrong barrier sizes on site • Allows for easier picking of the correct product in the warehouse
• Reduced jointing system	• Reduces the thermal bypass effect in separating walls by providing edge-sealing at the party wall/external wall junction • Fewer joints means less chance of installer error on site and a reduction in installation time
• Euroclass A1 fire rating	• Totally non-combustible
• Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Zero Global Warming Potential (GWP)	• Excellent environmental credentials and helps towards valuable BREEAM credit points

Product	Order code	For cavity sizes (mm)	Sleeve Colour	Width (mm)	Nominal length (mm)	Barriers per pack
Cavity Barrier (1.2m x 100mm)						
Cavity Barrier (65)	5200013628	50 - 65	Yellow	100	1200	50
Cavity Barrier (80)	5200013590	66 - 80	Blue	100	1200	40
Cavity Barrier (100)	5200013625	81 - 100	White	100	1200	40
Cavity Barrier (1.2m x 300mm)						
Cavity Barrier (65)	5200013835	50 - 65	Yellow	300	1200	13
Cavity Barrier (80)	5200013836	66 - 80	Blue	300	1200	10
Cavity Barrier (100)	5200013837	81 - 100	White	300	1200	10
Cavity Barrier (storey height x 300mm)						
Cavity Barrier (65)	5200013832	50 - 65	Yellow	300	1200	8
Cavity Barrier (80)	5200013833	66 - 80	Blue	300	1200	5
Cavity Barrier (100)	5200013834	81 - 100	White	300	1200	5

Fire Performance

Isover Cavity Barriers are designed to meet the requirements laid out in Section 10 of Approved Document B 2000 (England & Wales) and Section 2 (Scotland). The documents state that barriers should be constructed to provide at least 30 minutes fire resistance. Isover Cavity Barriers have been tested for fire resistance (integrity and insulation) in accordance with BS 476: Part 20: 1987 and can provide up to 100 minutes fire resistance.

Standard Range (100mm wide barrier) - Warrington Fire Test Report No: C52472 – 30 minutes fire resistance

Party Wall and Storey Height Range (300mm wide barrier) - Warrington Fire Test Report No: 144942 – 100 minutes fire resistance

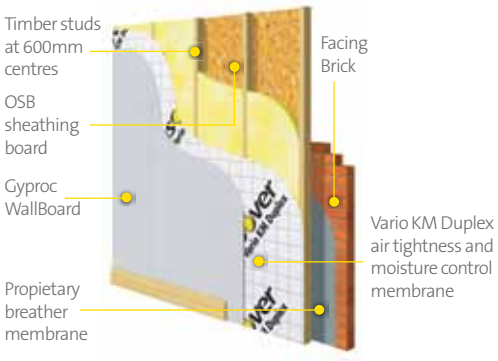
Isover Cavity Barriers achieve a Euroclass A1 fire rating – Isover glass mineral wool is a totally non combustible material.

Acoustic Performance

Approved Document E 2003 and Robust Details Ltd (England & Wales) and Section 5 (Scotland) require the use of a cavity closer to reduce flanking noise transmission along the party wall and external wall cavities.

Isover Cavity Barriers meet the generic description for cavity closers and will thus ensure compliance with Part E and Robust Details in masonry, timber frame and steel frame constructions

A high performance air-tightness and moisture management membrane installed internally to roofs, walls and floors in timber frame constructions.



Features	Benefits
• Proven to achieve excellent air tightness levels	• Ideal for use in low energy and Passive House constructions and buildings with mechanical ventilation and heat recovery systems
• Active moisture management	• Protects structural elements from moisture damage • Ensure insulation works to optimum levels
• Nylon based micropore membrane with breathable properties	• 3 times stronger than polythene membrane so less likely to damage during transit and installation • Easy to handle and cut, resulting in more efficient installation
• Specially developed tape and sealant systems fully compatible with Vario Membrane	• Non ageing tapes for fast and efficient joining • Ensures maximum performance of Vario system for the lifetime of the property

Product	Order code	Units	Measure
Vario KM Duplex Membrane	5200013886	1 Roll (60m²)	40m x 1.5m
Vario Powerflex	5200013892	1 Box (10 rolls)	25m
Vario KB1	5200013893	1 Box (5 rolls)	40m
Vario DS Sealant	5200013894	1 Box (2 cartridges)	310ml per cartridge

Thermal and Acoustic Performance

The following tables show the U-Values achieved using Isover insulation. U-Values are based on an Isover Steel Frame Batt fitted between typical gauge studs and an Isover Steel Frame Batt fixed to the outside of the frame to increase performance and reduce cold bridging.

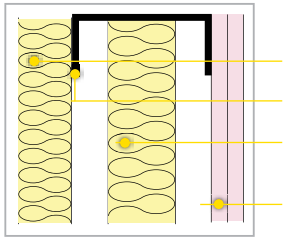
U-Value (W/m²K) achieved	Product Required	
	Steel Frame Batt fixed to outside of steel frame (mm)	Steel Frame Infill Batt between studs (mm)
0.29	50	50
0.26	50	75
0.25	50	100

Acoustic Performance - Laboratory Tested Solutions

Laboratory tests conducted at the BRE conclusively prove that Isover insulation products provide far superior acoustic performance in comparison to rigid foams.

External Walls - Acoustic Performance on Internal Leaf to External Walls

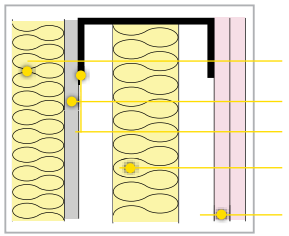
Insulation fixed to outside of studs - see table



Insulation type	R_w	R_w + Ctr
50mm Isover Steel Frame Batts	**39dB**	**34dB**
30mm Polyurethane Foam	34dB	30dB

Metsec Substantiation Report MFD392

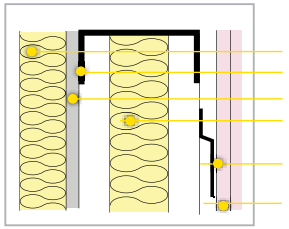
Insulation fixed to outside of studs - see table



Insulation type	R_w	R_w + Ctr
50mm Isover Steel Frame Batts	**43dB**	**39dB**
30mm Polyurethane Foam	35dB	33dB

Metsec Substantiation Report MFD393

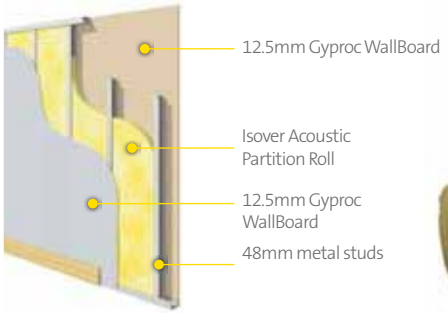
Insulation fixed to outside of studs - see table



Insulation type	R_w	R_w + Ctr
50mm Isover Steel Frame Batts	**48dB**	**40dB**
30mm Polyurethane Foam	42dB	38dB

Metsec Substantiation Report MFD394

A glass mineral wool roll providing high levels of acoustic insulation in partitions, walls and floors to meet acoustic requirements in domestic and non-residential applications. The product carries a system lifetime performance guarantee when used in British Gypsum SpecSure warranted drywall and floor systems.



Features	Benefits
• Excellent acoustic properties	• Provides high levels of acoustic insulation in partitions, party walls and floors
• Fully tested and approved for use with drywall and acoustic floor systems	• Covered by the SpecSure Warranty with guaranteed lifetime performance when used as a part of British Gypsum systems
• 1200mm wide ready cut glass wool rolls	• Compatible with 400mm and 600mm stud centres
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Acoustic Partition Roll (APR 1200) correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable BREEAM credit points

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Acoustic Partition Roll	5200013786	25	2 x 600	20000	24	24	576
Isover Acoustic Partition Roll	5200013785	25	3 x 400	20000	24	24	576
Isover Acoustic Partition Roll	5200013787	50	2 x 600	13000	15.60	24	374.40
Isover Acoustic Partition Roll	5200013789	65	2 x 600	10000	12	24	288
Isover Acoustic Partition Roll	5200013790	75	2 x 600	12200	14.64	24	351.36
Isover Acoustic Partition Roll	5200013792	100	2 x 600	9170	11	24	264

Internal Partitions

Part E Building Regulations 2003 calls for minimum 40dB airborne sound insulation in imperforate internal partition walls.

A partition wall constructed from1 layer of 12.5mm Gyproc WallBoard each side of timber studs at 600mm centres, with Isover Acoustic Partition Roll within the cavity.

Timber Stud Partitions

Method of Compliance: Tested British Gypsum Report Reference A026012			
Insulation thickness (mm)	Timber stud thickness (mm)	Lab sound insulation 100-3150 Hz, R_w dB	Fire resistance (mins)
65	63	40	30

A partition wall constructed from 1 layer of 12.5mm Gyproc WallBoard TEN each side of timber studs at 600mm centres, with Isover Acoustic Partition Roll within the cavity centres, with Isover Acoustic Partition Roll within the cavity.

Method of Compliance: As described in Approved Document E			
Insulation thickness (mm)	Timber stud thickness (mm)	Lab sound insulation 100-3150 Hz, R_w dB	Fire resistance (mins)
25	75	40	30

Metal Stud Partitions

1 layer of 12.5mm Gyproc WallBoard each side of GypFrame metal studs at 600mm centres with Isover Acoustic Partition Roll within the cavity.

Method of Compliance: Tested British Gypsum A206032 and A206045			
Insulation thickness (mm)	Lab sound insulation 100-3150 Hz, R_w dB	Fire resistance (mins)	Gypframe Metal Stud (mm)
25	40	30	48
50	42	30	70

Party Walls

Part E Building Regulations 2003 calls for a minimum DnTw 45dB airborne sound insulation in party walls (includes additional Ctr correction factor for low frequency noise). The following construction incorporating Isover Acoustic Partition Roll will comply with this requirement as a Robust Detail.

2 or more layers of plasterboard nominally 22Kg/m^2 (typically 19mm Gyproc Plank plus 12.5mm Gyproc WallBoard) with joints staggered, each side of twin timber frames with a minimumof 65mm Isover Acoustic Parition Roll in each frame.

Twin Timber Frames with or without cavity sheathing board

Unsheathed Construction: Method of compliance: Robust Detail		
Insulation thickness (mm)	Robust Detail	Mean performance range dB
65	E-WT-1	50

Sheathed Construction: Method of compliance: Robust Detail		
Insulation thickness (mm)	Robust Detail	Mean performance range dB
65	E-WT-2	48

Fire Performance

Made from non-combustible materials, Isover Acoustic Partition Roll is completely fire safe, achieving a Euroclass A1 fire rating when classified in accordance with BS EN 13501-1

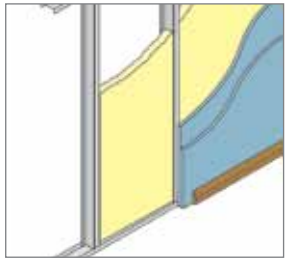
Internal Partitions

60 minutes

Two layers of Gyproc SoundBloc board (2 x 12.5mm) each side of 92mm Gyproc metal studs at 600mm centres plus 90mm Isover Acoustic Partition Roll using more than one layer in the cavity.

Insulation thickness (mm)	Fire resistance (mins)	Lab sound insulation 100-3150 Hz, R_w dB
90	60	56

British Gypsum Report Reference A206234

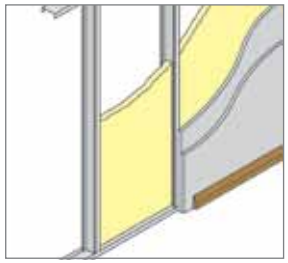


90 minutes

Two layers of Gyproc WallBoard (2 x 15mm) each side of 146mm Gyproc studs at 600mm centres plus 50mm Isover Acoustic Partition Roll in the cavity.

Insulation thickness (mm)	Fire resistance (mins)	Lab sound insulation 100-3150 Hz, R_w dB
50	90	51

British Gypsum Report Reference A206060

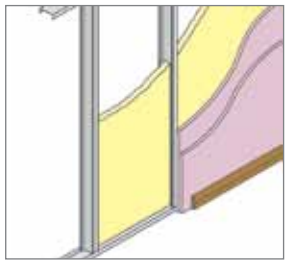


120 minutes

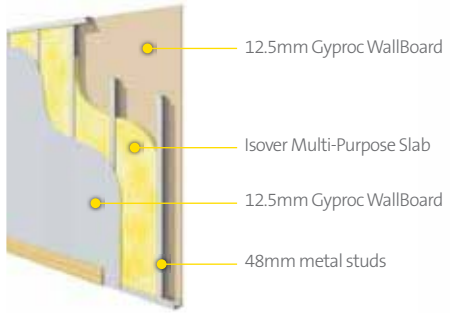
Two layers of Gyproc FireLine board (2 x 12.5mm) each side of 146mm Gyproc studs at 600mm centres plus 50mm Isover Acoustic Partition Roll in the cavity.

Insulation thickness (mm)	Fire resistance (mins)	Lab sound insulation 100-3150 Hz, R_w dB
50	120	51

British Gypsum Report Reference A206123



A glass mineral wool slab providing high levels of acoustic performance in wall-lining systems, partitions and modular building applications.

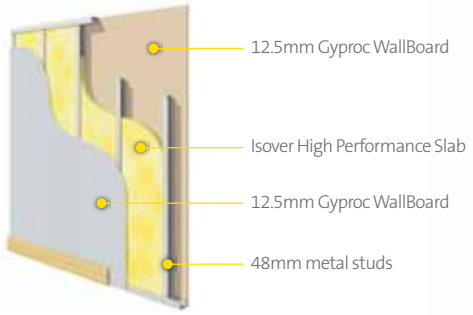


Features	Benefits
• Excellent acoustic properties	• Helps to meet the requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• Fully tested and approved for use with British Gypsum drywall systems	• Covered by the SpecSure Warranty with guaranteed lifetime performance when used as a part of British Gypsum systems
• 600mm x 1200mm glass mineral wool slab	• Compatible with 600mm stud centres • Friction fitted with no need for additional fixings
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Multi Purpose Acoustic Slabs correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic, Health, Industrial, Commercial, Retail, Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Multi Purpose Slab	5200013698	50	600	1200	20	14.40	16	230.40
Isover Multi Purpose Slab	5200013699	75	600	1200	16	11.52	16	184.32
Isover Multi Purpose Slab	5200013700	100	600	1200	10	7.20	16	115.20

Isover Acoustic Slab - High Performance

A glass mineral wool slab providing high levels of acoustic and thermal performance in wall-lining systems, partitions and modular building applications.

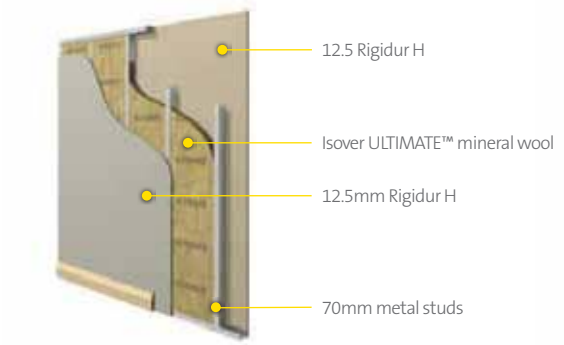


Features	Benefits
• Excellent acoustic properties	• Helps to meet the requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• Fully tested and approved for use with British Gypsum drywall systems	• Covered by the SpecSure Warranty with guaranteed lifetime performance when used as a part of British Gypsum systems
• 600mm x 1200mm glass mineral wool slab	• Compatible with 600mm stud centres • Friction fitted with no need for additional fixings
• Euroclass A1 fire rating	• Totally non-combustible
• Isover High Performance Acoustic Slabs correspond to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic, Health, Industrial, Commercial, Retail, Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover High Performance Slab	5200013701	50	600	1200	16	11.52	20	230.40
Isover High Performance Slab	5200013702	75	600	1200	10	7.20	20	144
Isover High Performance Slab	5200013703	100	600	1200	8	5.76	20	115.2

Isover ULTIMATE™ Piano Plus

A new generation mineral wool providing exceptional fire performance in a flexible and easily installed acoustic roll for use in partitions and drywall systems.



Features	Benefits
• Excellent acoustic properties	• Provides high levels of acoustic insulation in partitions, party walls and floors
• New generation mineral wool with exceptional fire performance	• Has the same high fire performing properties as stone wool but 33% lighter • Greater flexibility than stone wool allowing for tougher handling
• Fully tested and approved for use with British Gypsum drywall systems	• Covered by the SpecSure Warranty with guaranteed lifetime performance
• 2 x 610mm wide ready cut mineral wool rolls	• Compatible with 600mm timber stud centres • Friction fitted with no need for additional fixings
• Euroclass A1 fire rating	• Totally non-combustible

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover ULTIMATE™ Piano Plus	5200013884	60	2 X 610	12000	14.64	12	175.68

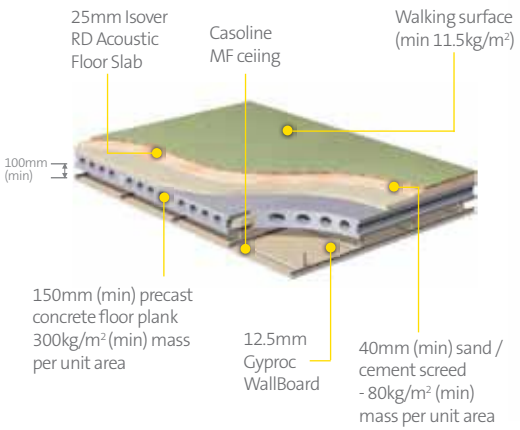
A universal glass mineral wool roll used for the thermal insulation of large areas in buildings. The rolls are supplied in 1200mm wide unsplit rolls to ensure minimal cutting and waste to enable quick installation.

Features	Benefits
• Thermal conductivity of 0.043 W/mK	• Helps to meet thermal requirements in a wide range of applications
• 1200mm wide unsplit glass mineral wool rolls	• Full width allows for quick coverage of large areas
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Modular Roll corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 10 kg/m³' ref 815320005 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials and helps towards valuable BREEAM credit points

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m^2)	Packs per pallet	Pallet area (m^2)
Isover Modular Roll	5200013820	60	2 x 600	15000	18.0	24	432
Isover Modular Roll	5200489199	60	1200	15500	18.6	24	446.40
Isover Modular Roll	5200013765	80	1200	11250	13.5	24	324
Isover Modular Roll	5200013766	100	1200	9170	11.0	24	264
Isover Modular Roll	5200013767	150	1200	6030	7.24	24	173.76
Isover Modular Roll	5200013768	200	1200	3880	4.66	24	111.84

Isover RD Acoustic Floor Slab

A stone mineral wool slab with enhanced resilience providing impact sound insulation in separating floor constructions.

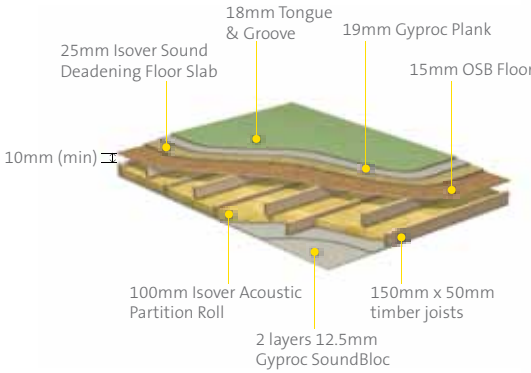


Features	Benefits
• Excellent acoustic properties for impact sound insulation	• Helps to meet the requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• High quality stone mineral wool	• Easy to handle, cut and install • Minimal on-site waste
• Robust material properties	• Resilient to damage in storage, during transportation and on site during installation
• Euroclass A1 fire rating	• Totally non-combustible

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover RD Acoustic Floor Slab	5200013705	25	625	1200	6	4.5	21	94.5

Isover Sound Deadening Floor Slab

A stone mineral wool slab designed to provide impact sound deadening performance in Type 3 timber base separating floors, as described in Building Regulations Part E (England & Wales) and Section 5 (Scotland).

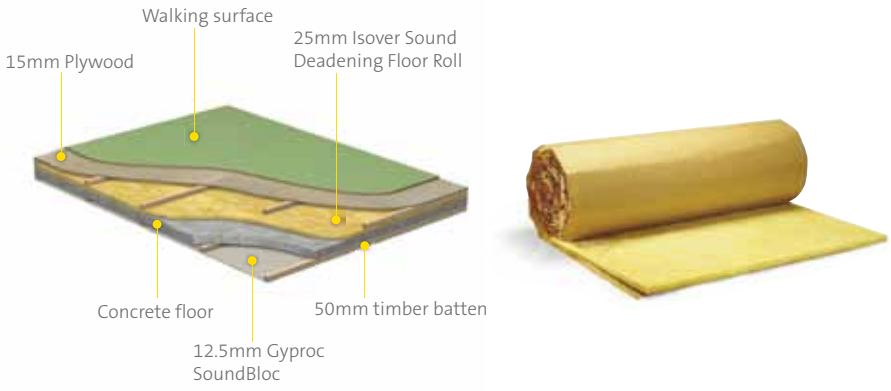


Features	Benefits
• Excellent acoustic properties for impact sound insulation	• Helps to meet the requirements of Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• High quality stone mineral wool	• Easy to handle, cut and install • Minimal on-site waste
• Robust material properties	• Resilient to damage in storage, during transportation and on site during installation
• Euroclass A1 fire rating	• Totally non-combustible

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Batts per pack	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Sound Deadening Floor Slab - Rigid Grade	5200013704	25	625	1200	8	6	18	108

Isover Sound Deadening Floor Roll

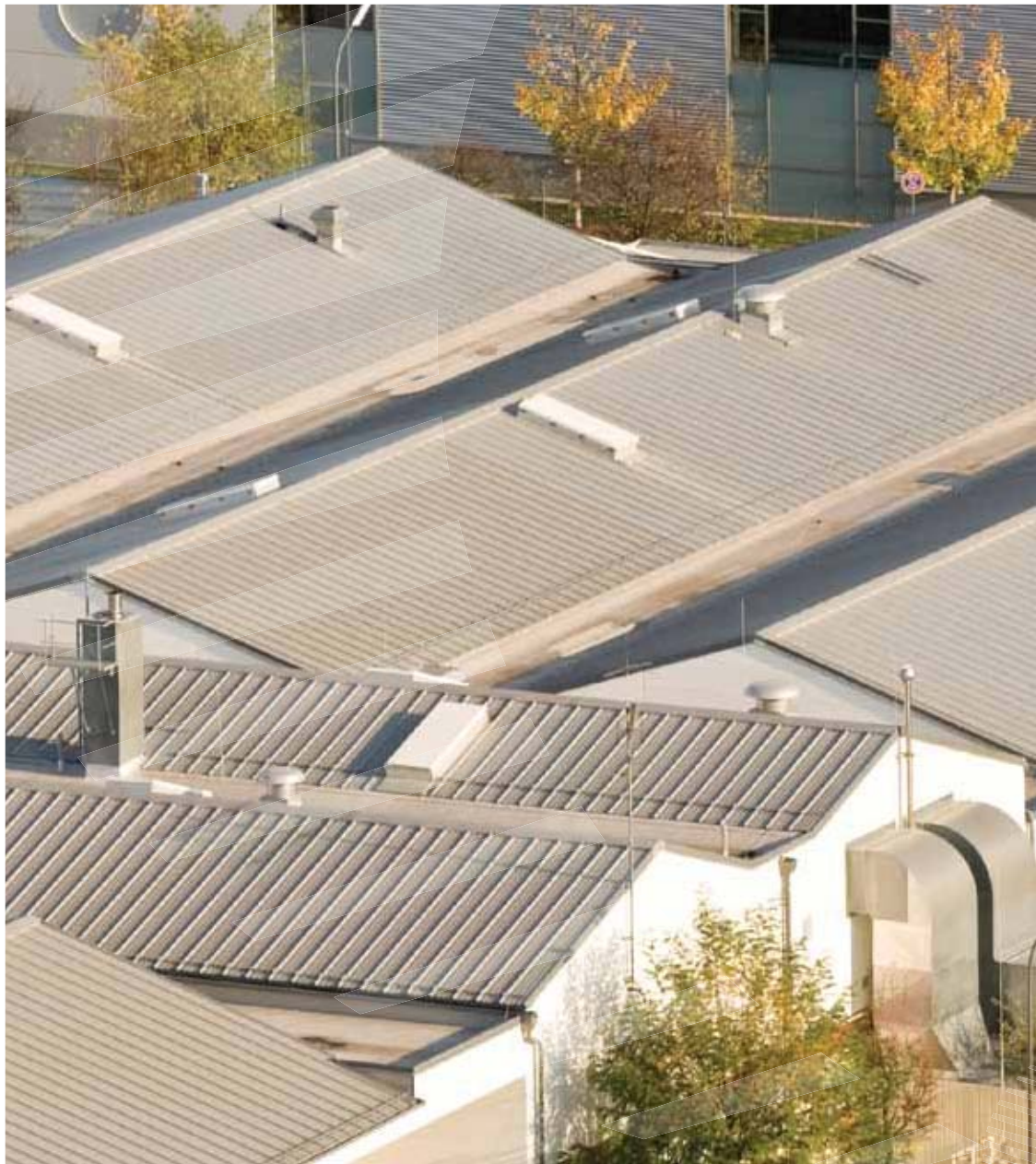
A glass mineral wool roll designed to provide the resilient layer specification for Type 2 concrete base intermediate separating floors, with either timber or screed floating layers, as described in Building Regulations Part E (England & Wales) and Section 5 (Scotland).



Features	Benefits
• Satisfies the resilient layer specification for Type 2 concrete base intermediate separating floors	• Ensures compliance with Part E Acoustic Building Regulations 2003 (England & Wales) and Section 5 (Scotland)
• 1200mm wide glass mineral wool roll, faced on one side with Kraft paper	• Kraft paper provides a stronger, more resilient product with additional tear strength
• High quality glass mineral wool	• Easy to handle, cut and install • Minimal on-site waste
• Robust flexible material properties	• Resilient to damage in storage, during transportation and on site during installation
• Isover Sound Deadening Floor Slab corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 140 kg/m³' ref 815320013 which achieves a summary rating of B within Domestic , Health , Industrial , Commercial , Retail, Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable credits for The Code for Sustainable Homes

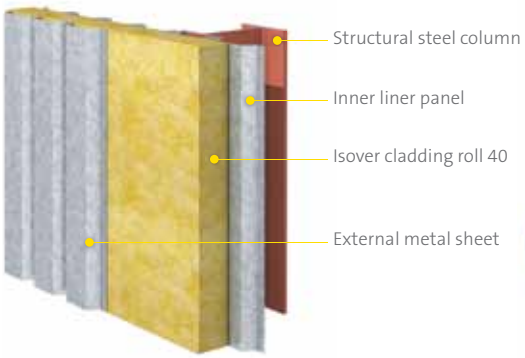
Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Sound Deadening Floor Roll	5200013817	25	1200	10000	12	24	288

Industrial Cladding



Isover Cladding Roll 40

A glass mineral wool roll with exceptional durability and tear strength, providing thermal and acoustic performance for metallic wall and roof applications. Supplied in 1200mm wide rolls to ensure minimal cutting and waste.



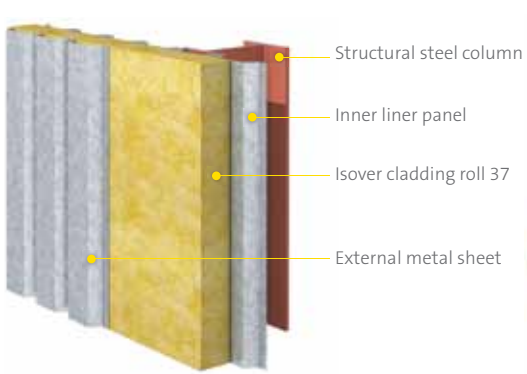
Features	Benefits
• High thermal performance with a thermal conductivity of 0.040 W/mK	• Helps to meet the requirements of Part L2A Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• Excellent acoustic properties	• Helps to reduce the internal ambient noise levels during heavy rainfall.
• 1200mm wide unsplit glass mineral wool rolls	• Allows quick coverage of large areas
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Cladding Roll 40 corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 12 kg/m³' ref 815320001 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable BREEAM credit points

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Cladding Roll 40	5200429869	60	1200	13500	16.20	24	388.80
Isover Cladding Roll 40	5200429870	80	1200	10200	12.24	24	293.76
Isover Cladding Roll 40	5200429256	100	1200	8200	9.84	24	236.16
Isover Cladding Roll 40	5200429257	120	1200	6800	8.16	24	195.84
Isover Cladding Roll 40	5200429871	140	1200	5850	7.02	24	168.48
Isover Cladding Roll 40	5200429872	160	1200	5100	6.12	24	146.88
Isover Cladding Roll 40	5200429259	180	1200	4500	5.40	24	129.60
Isover Cladding Roll 40	5200429260	200	1200	4100	4.92	24	118.08

Isover Order Placement / Order Enquiries Phone: **0800 032 2555**

Isover Cladding Roll 37

A lower lambda glass mineral wool roll with exceptional durability and tear strength, providing excellent thermal and acoustic performance for metallic wall and roof applications. Supplied in 1200mm wide rolls to ensure minimal cutting and waste.



Features	Benefits
• Excellent thermal performance with a thermal conductivity of 0.037 W/mK	• Helps to meet the requirements of Part L2A Building Regulations 2010 (England & Wales) and Section 6 (Scotland)
• Excellent acoustic properties	• Helps to reduce the internal ambient noise levels during heavy rainfall.
• 1200mm wide unsplit glass mineral wool rolls	• Allows quick coverage of large areas
• Euroclass A1 fire rating	• Totally non-combustible
• Isover Cladding Roll 37 corresponds to the BRE Global Green Guide online generic specification 'Glass wool insulation - density 24 kg/m³' ref 815320002 which achieves a summary rating of A+ within Domestic , Health , Industrial , Commercial , Retail , Education • Manufactured from up to 86% recycled glass • Zero Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of less than 5	• Excellent environmental credentials • Helps to contribute towards valuable BREEAM credit points

Product	Order code	Thickness (mm)	Width (mm)	Length (mm)	Pack area (m²)	Packs per pallet	Pallet area (m²)
Isover Cladding Roll 37	5200429251	100	1200	6100	7.32	24	175.68
Isover Cladding Roll 37	5200429253	120	1200	5050	6.06	24	145.44
Isover Cladding Roll 37	5200429254	180	1200	3400	4.08	24	97.92
Isover Cladding Roll 37	5200429255	200	1200	3000	3.60	24	86.4

Isover Technical Advice Phone: **01159 451 143** email: **isover.enquiries@saint-gobain.com**

Thermal Performance

The calculation tables below identify the U-Values achieved depending on the thickness of Isover Cladding Roll 37 / Isover Cladding Roll 40 and the roof/wall rail spacing.

Isover Cladding Roll 40 (Thermal conductivity = 0.040 W/mK)

Roofs	Rail Spacing (mm)		
Insulation Thickness (mm)	1200	1800	2400
60	0.77	0.73	0.70
80	0.56	0.53	0.52
100	0.44	0.43	0.42
120	0.37	0.36	0.35
140	0.32	0.31	0.30
160	0.28	0.27	0.27
180	0.25	0.24	0.24
200	0.23	0.22	0.21

Walls	Rail Spacing (mm)		
Insulation Thickness (mm)	1200	1800	2400
60	0.75	0.71	0.69
80	0.55	0.53	0.51
100	0.44	0.42	0.41
120	0.37	0.35	0.35
140	0.31	0.30	0.30
160	0.28	0.27	0.26
180	0.25	0.24	0.24
200	0.22	0.22	0.21

Isover Cladding Roll 37 (Thermal conductivity = 0.037 W/mK) Increased Thermal Performance

Roofs	Rail Spacing (mm)		
Insulation Thickness (mm)	1200	1800	2400
100	0.41	0.40	0.39
120	0.35	0.33	0.33
180	0.23	0.23	0.22
200	0.21	0.20	0.20

Walls	Rail Spacing (mm)		
Insulation Thickness (mm)	1200	1800	2400
100	0.41	0.39	0.39
120	0.34	0.33	0.32
180	0.23	0.22	0.22
200	0.21	0.20	0.20

Thermal Building Regulations

England & Wales - Building Regulations Part L1

For domestic new build properties the required U-value for roof, wall and floor elements will be decided by the designer based on a whole-building computer assessment of carbon emissions (SAP 2009 for dwellings and Simplified Building Energy Model or SBEM for non-dwellings). The U-Value can vary depending upon several factors, including air leakage rate and heating fuel type. Extension work to existing buildings have specified U-Values for newly constructed elements in an extension.

Domestic Buildings		New Build		Extensions		Conversions	
		Limiting U-Values (W/m^2K)	Recommended U-Values (W/m^2K)	Limiting U-Values (W/m^2K)	Recommended U-Values (W/m^2K)	Threshold Value (a)[1]	Improved Value (b)[1]
2006	Walls	0.35	0.28 - 0.30	0.30	0.28 - 0.30	0.70	0.35
	Cold Roof	0.25	0.16	0.22	0.16	0.35	0.16
	Warm Roof	0.25	0.16	0.22	0.16	0.35	0.20
2010	Walls	0.30	0.25 - 0.28	0.28	0.25 - 0.28	0.70	0.55[2]
	Cold Roof	0.20	0.13	0.16	0.13	0.35	0.16
	Warm Roof	0.20	0.13	0.18	0.13	0.35	0.18

[1] Upgrade those thermal elements whose U-Value is worse than the threshold value in column (a) to achieve the U-Values in column (b)

[2] A U-Value of 0.55 W/m^2K is only applicable to walls suitable for cavity insulation, other walls will be required to meet a U-Value of 0.30 W/m^2K

Scotland - Section 6

Domestic Buildings		New Build		Extensions		Conversions
		Limiting U-Values (W/m^2K)	Notional U-Values (W/m^2K)	Limiting U-Values (a)[3]	Notional U-Values (b)[3]	Limiting U-Value (W/m^2K)
2006	Walls	0.30	0.20 - 0.25	0.27	0.27	0.70
	Cold Roof	0.20	0.16	0.16	0.16	0.35
	Warm Roof	0.20	0.16	0.20	0.20	0.35
2010	Walls	0.25	0.19	0.19	0.22	0.30
	Cold Roof	0.18	0.13	0.13	0.15	0.25
	Warm Roof	0.18	0.13	0.15	0.18	0.25

[3] Where U-Values for wall and roof of the existing dwelling are poorer than 0.70 and 0.25 respectively use column (a), otherwise use column (b) - this only applies for 2010 regulations

For advice on non-domestic Building Regulations please contact our Technical Advice line on 01159 451 143

Acoustic Building Regulations

Acoustic regulations are detailed in Approved Document E (AD E) 2003 for England and Wales, and Section 5 2010 for Scotland. The tables below state the minimum required values for separating and internal elements.

Dwelling-houses/flats and rooms for residential purposes - performance standards for separating walls, separating floors, and stairs that have a separating function.

England & Wales - AD E	Airbourne sound insulation *DnT*, w + *Ctr* dB (Minimum Values)	Impact *L'nT*, w dB (Minimum Values)
	DnT,w + Ctr dB	L'nT,W dB
Purpose built dwelling-houses and flats		
Walls	45[1]	-
Floors and stairs	45	62
Dwelling-houses and flats formed by material change of use		
Walls	43	-
Floors and stairs	43	64
Scotland - Section 5	**DnT,w dB**	**L'nT,w dB**
New Build & Conversions		
Walls	56	-
Floors and stairs	56	56
Conversion of Traditional Buildings		
Walls	53	-
Floors and stairs	53	58

[1] Required performance is 43 in purpose built rooms for residential purposes

Laboratory values for new internal walls and floors within: dwelling-houses, flats and rooms for residential purposes, whether purpose built or formed by material change of use.

	Airbourne sound insulation *Rw* dB (Minimum Values)	
	England & Wales - AD E	Scotland - Section 5
Walls	40	43
Floors and stairs	40	43

Robust Details

The **Code for Sustainable Homes (CfSH)** include provision to allow credits (for sound insulation) to be awarded for those registering to use robust details (RDs). This is based on their proven performance. RD Ltd outline the threshold improvements over Building Regulation performance standards for which credits may be awarded, as indicated in the table below. For separating walls only airborne performance is applicable, for separating floors both airborne and impact performance are considered.

Scottish Building Standards - Technical Handbook - Section 5 - Noise does not recognise the Robust Detail Ltd accredited construction scheme. The use of Robust Detail approved constructions may be approved by individual Building Control offices on a project-by-project basis.

Credits	Improvement on Approved Document E	
	Airbourne sound dB (*DnT*,w + *Ctr*)	Impact sound dB (*L'n T*,w)
1	+3	-3
3	+5	-5
4	+8	-8

Frequently Asked Questions

What are the environmental properties of Isover glass mineral wool?

At Isover we take our environmental responsibility seriously. The very nature of our business is to develop insulation solutions to protect both your built environment and the natural environment. During every stage of development, from product innovation to the sourcing of raw materials through manufacture, distribution and installation, we constantly achieve improvements in our environmental impact. That is why we have developed our 3 Point Plan for environmental sustainability. This dynamic plan focuses our efforts on continuously improving the way in which our products and processes impact the natural environment and seeks to ensure that Isover and our products, when in-situ, use less materials, less energy and produce less emissions. We are proud of the successes we have already achieved, such as being the only glass mineral wool manufacturer to achieve 86% recycled content (the absolute limit) or the 20% reduction we have made in factory energy consumption, but we are committed to achieving far more.

Is it easy to fit Isover glass mineral wool?

Isover glass mineral wool is very easy to fit. It's flexible and friction fitted and holds in place between timber/metal frames/rafters without the need for additional fixings. This is unlike rigid boards which are solid, need to be cut to size and do not hold in place between timber/metal frames/rafters.

What is the fire performance of Isover glass mineral wool?

Isover glass mineral wool insulation is completely non-combustible and has a Euroclass A1 fire rating - the best attainable.

What is the density of...?

Density is not the best measure of performance for the majority of applications. For this reason it is better to specify a product depending upon the performance requirements for the system, such as thermal insulation, acoustic attenuation or fire resistance. Ultimately it is likely that a particular element needs to meet one or all of these performance requirements to comply with either legislation or specific client needs. With this information we will be able to recommend an appropriate product / system specification.

Under current regulations what U-Values are required for each area of a new residential building?

There are no set U-Values for compliance with Approved Document L1A for new-building residential buildings. The performance requirements for individual elements will be set by the designer, and will vary as required in order to give the desired SAP 2009 emission result.

Can you offer an alternative product to...?

We can offer suitable alternative products for most applications, however it is important to know what the product is being used for, and the relevant performances required i.e., acoustic, thermal or fire performance. Please contact us on 01159 451 143 with this information and we will be able to recommend an appropriate product / system specification.

How do I store Isover glass mineral wool?

LDPE HDPE

Isover glass mineral wool is compression packed using strong polythene packaging, which is recyclable according to the above classifications. All packs are then stacked on wooden pallets with a final weatherproof outer covering which allows the option of outside storage.

Does glass mineral wool absorb water?

Isover insulation does not absorb water and therefore does not sustain vermin, or promote the growth of mould, fungi or bacteria.

Glossary

BBA
>> British Board of Agrément – Independent accreditation for building construction materials and their use in their intended applications www.bbacerts.co.uk

BREEAM
>> Building Research Establishment Environmental Assessment Method - An assessment method used to calculate the environmental performance of any type of building, new or old www.breeam.org

Building Regulations - Part B
>> Approved document covering "Fire safety" www.planningportal.gov.uk

Building Regulations - Part E
>> Approved document covering "Resistance to the passage of sound". www.planningportal.gov.uk

Building Regulations - Part L
>> Approved document covering "Conservation of fuel and power". www.planningportal.gov.uk

CfSH
>> Code for Sustainable Homes – A standard for the design and construction of environmentally friendly residential buildings.

Decibel
>> A measurement of noise level, the larger the decibel (dB) the louder the noise.

DPC/DPM
>> Damp Proof Course/Damp Proof Membrane.

Euroclass A1 Fire Rating
>> A1 fire rating is the highest attainable rating. This indicates a product is completely non combustible and totally fire safe. Measured in accordance with BS EN 13501-1.

GWP
>> The Global Warming Potential (GWP) is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming.

Lambda λ (W/mk)
>> Measurement of thermal conductivity. The lower the value the more difficult it is for heat to flow through it. Sometimes referred to as k-value.

ODP
>> The Ozone Depletion Potential (ODP) is the relative amount of degradation to the ozone layer a product can cause.

Robust Detail
>> Robust Details Limited provide a selection of proven specifications which when used give compliance with Part E of the Building Regulations (England and Wales). These details may be used as an alternative to on-site pre-completion sound testing and may also attract credits under the Code for Sustainable Homes scheme. www.robustdetails.com

R Value (m^2 K/W)
>> The measure of the thermal effectiveness (thermal resistance) of a building component. The higher the value, the more effective an insulator a material is and the more difficult it is for heat to flow.

SAP
>> Standard Assessment Procedure – Calculation method used to assess the energy performance and carbon emission rates of a building. SAP is the only accepted methodology allowed to show compliance with Approved Document L1A.

Specsure®
>> British Gypsum guarantee providing a lifetime performance warranty.

ULTIMATE™
>> Isover ULTIMATE™ products have exceptional fire resistant properties, whilst retaining the lightweight benefits of glass mineral wool.

U-Value (W/m^2 K)
>> The measure of the rate of heat loss (thermal transmittance) from a building component.

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Advice on

- >> Compliance with UK Building Regulations for Ductwork Systems
- >> Consultant Performance Specifications
- >> Technical Product Range and System Applications
- >> Heat Loss and Energy Savings Calculations

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