



# ATTIC SOLUTIONS

Insulation, Airtightness & Moisture Management Solutions for Attic Floors





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# ATTIC FLOOR APPLICATION OVERVIEW ISOVER INSULATION & VARIO® SYSTEM

Isover offers a comprehensive range of products for attic floors, both in New Build and Renovation projects.

Isover Spacesaver delivers high performance for traditional attic floor applications where a layer of insulation is placed between and above attic floor trusses. Comfort 35 & Isover Timber Frame Roll 35 also offer improved thermal performance for attic applications. When combined with the Vario® system, they provide excellent performance and help to keep energy consumption and fuel bills down.

- → High performance thermal insulation ranging from 0.035 0.044.
- ✓ Friction fitting insulation with Metac eliminating air gaps
- Vapour permeable insulation for maximum protection from moisture and condensation issues
- **⊘** Excellent Indoor air quality Eurofins Gold Comfort



























W/mK 0.035 - 0.044





### Where to use





Residential



New and Old



# STANDARDS AND CERTIFICATION

We hold a Quality Management Standard BS EN ISO 9001: 2015 for manufacturing.
Our products are manufactured in accordance with the CE marking requirements under the Construction Products Regulation.
All products are manufactured in accordance with product standard: BS EN 13162:2012+A1:2015 and BS EN 13172 Evaluation of Conformity.
Isover is an ISO 14001:2015 (Environmental Management System) accredited manufacturing facility. This accreditation ensures that all products are manufactured to the stringent standards set out by this management system.
Awarded the highest standard in indoor air quality - Eurofins "Gold" Label The Gold Certificate means that Isover mineral wool is certified as an outstanding material in terms of Indoor Air Quality emissions regulations.
Fire Performance Euroclass classification of the product is related to the organic content, which cannot increase with time. Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air. (See std EN13162:2012 Annex ZA,Table ZA.1) Will not accelerate corrosion with steel, copper or aluminium. Will not sustain vermin, nor breed or promote fungi or bacteria.
Our products have been manufactured to BES60001 to ensure their constituent materials have been responsibly sourced.







With purpose built facilities, dedicated resources in Kingscourt and Dublin as well as **NEW Online Training, Saint-Gobain** Technical Academy offers a wide range of FREE training courses and webinars to upskill and educate construction industry professionals.

#### The mix of interactive training, live demo and theory courses include:

- Airtightness and moisture management
- Acoustics in Buildings
- Dry lining systems for installers and supervisors
- nZEB in Practice
- Fire performance in buildings
- Renovation solutions
- ROI Building Regulations & Compliance
- Internally insulating existing external walls: The challenges faced and a possible solution

...and much more

#### Sign up for our NEW Online **Training Courses at**

www.saint-gobain.ie







**REGISTER NOW** 

# Sign Up TODAY! Get the know-how with the Saint-Gobain **Technical Academy**









New Build U-Values: 0.16 Pitched Roof Renovation U-Values: 0.25 Pitched Roof

# **BUILDING REGULATIONS** REPUBLIC OF IRELAND

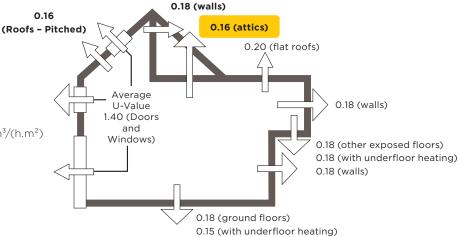
The following is a guide to thermal building regulations for new & existing dwellings, delivering comfort and energy savings through effective thermal insulation.

#### Republic of Ireland

New Dwellings TGD - Part L - 2019

Minimum standards for U-Values

Upper limit for air permeability is 5m<sup>3</sup>/(h.m<sup>2</sup>)

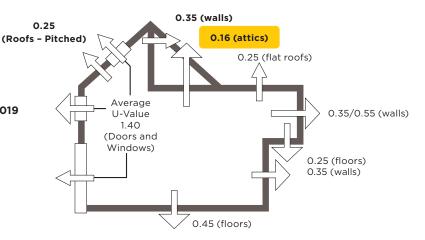


For more information you can contact our technical team on free phone (ROI) 1800 744480 or go to www.isover.ie

#### **Republic of Ireland**

Existing Dwellings TGD - Part L - 2019

Minimum standards for U-Values



For more information you can contact our technical team on free phone (ROI) 1800 744480 or go to www.isover.ie



Contact our technical team for more info

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# BUILDING REGULATIONS NORTHERN IRELAND

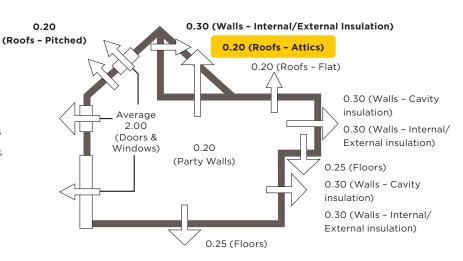
The following is a guide to thermal building regulations for new & existing dwellings, delivering comfort and energy savings through effective thermal insulation.

#### **Northern Ireland**

#### New Dwellings - DFP Technical Booklet F1:2012

Minimum standards for U-Values

Upper limit for air permeability is  $10m^3/(h.m^2)$ 



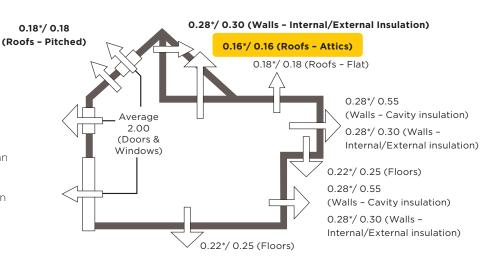
For more information you can contact our technical team on phone (NI) 0845 339 0159 or go to www.isover.ie

#### **Northern Ireland**

#### Existing Dwellings - DFP Technical Booklet F1:2012

Minimum standards for U-Values

These regulations are split across new thermal elements added to an existing dwelling, for example a new extension or dormer & upgraded thermal elements within the existing building



\*figures refer to a new element added to an existing dwelling i.e. extension, dormer etc.

For more information you can contact our technical team on phone (NI) 0845 339 0159 or go to www.isover.ie



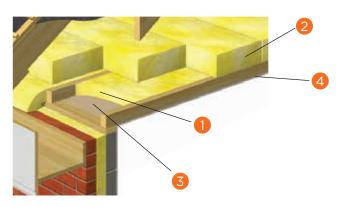
## **ATTICS**

#### **Insulation Between & Over Joists**

- 1. Isover insulation between joists
- 2. Second layer of Isover insulation cross laid over joists
- 3. Vario® membrane + tapes
- 4. See boarding options table



30 Minutes Fire Resistance (Typically 3 Storey Dwellings, As Well As 2 Storey Attic Spaces Intended For Conversion To Habitable Spaces)



#### **Boarding Options**

47mm Truss

1 x 15mm FireLine to 35mm x 44mm Counter Battens with 35x63mm noggings to all board edges

2 x 12.5mm FireLine to 35mm x 44mm Counter Battens, with no noggings require

1 x 15mm FireLine to 35mm x 63mm Counter Battens

#### Note:

Noggings (of equivalent size to counterbattens) required to all board edges unless noted otherwise

	1st Insulation layer, fitted to depth of joists	1st Layer Lambda	Insulation 2nd Layer	2nd Layer Lambda	Airtightness	U-Value 400 centres	U-Value 600 centres
	Spacesaver 100mm	0.044	Spacesaver 170mm	0.044	Vario® System	0.16	0.16
	Spacesaver 100mm	0.044	Comfort 35 140mm	0.035	Vario® System	0.16	0.16
100mm Joist Height	Spacesaver 100mm	0.044	Spacesaver Plus 150mm	0.040	Vario® System	0.16	0.16
	Spacesaver Plus 100mm	0.040	Spacesaver Plus 150mm	0.040	Vario® System	0.16	0.16
	Spacesaver 100mm	0.044	Spacesaver 200mm	0.044	Vario® System	0.15	0.14
	Comfort 35 140mm	0.035	Spacesaver 200mm	0.044	Vario® System	0.12	0.12
	Comfort 35 140mm	0.035	Spacesaver Plus 200mm	0.040	Vario® System	0.11	0.11
	Spacesaver 150mm	0.044	Spacesaver 200mm	0.044	Vario® System	0.13	0.13
	Spacesaver 150mm	0.044	Spacesaver 150mm	0.044	Vario® System	0.15	0.15
150mm	Spacesaver 150mm	0.044	Spacesaver Plus 150mm	0.040	Vario® System	0.14	0.14
Joist Height	Spacesaver Plus 150mm	0.040	Spacesaver Plus 150mm	0.040	Vario® System	0.14	0.13
	Spacesaver 150mm	0.044	Comfort 35 140mm	0.035	Vario® System	0.14	0.13
	Spacesaver 150mm	0.044	Spacesaver 200mm	0.044	Vario® System	0.13	0.13
	Spacesaver 150mm	0.044	Spacesaver Plus 200mm	0.040	Vario® System	0.12	0.12
	Spacesaver Plus 150mm	0.040	Spacesaver Plus 200mm	0.040	Vario® System	0.12	O.11
200mm Joist Height	Spacesaver Plus 200mm	0.040	Spacesaver Plus 200mm	0.040	Vario® System	0.10	0.10

Any values are indicative, please contact our technical support team for values pertaining to your project.

#### Isover Products











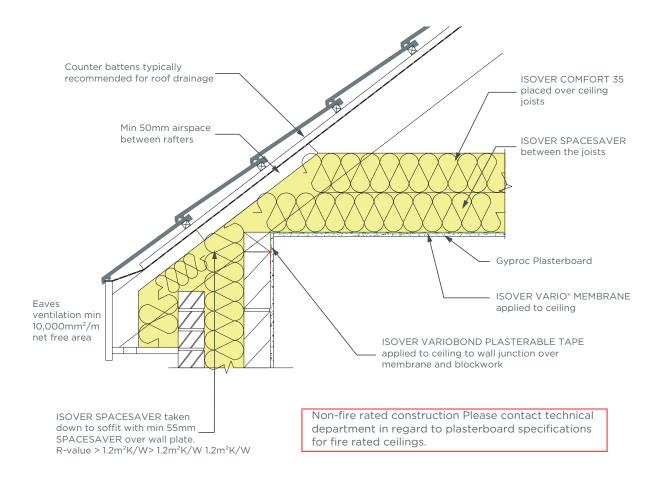


Spacesaver Roll Comfort 35

Vario® System



#### **Application CAD Details**



#### Note:

Not all standard construction details are shown on this drawing. If unsure about any detail check with site engineer.



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### **ATTIC INSTALL GUIDE**







#### How much do you need?

#### You will need to work out how many rolls of insulation you need

- 1. Check joists do you have any existing insulation in your attic?
- 2. What size are your joists? Measure depth and width. Typically joists are 100mm deep and 600mm wide.



#### What tools do you need?

#### You will need...

- A sharp insulation knife
- 2. Goggles
- 3. Measuring tape 7. Cold water tank
- 4. Brush handle
- 5. Pipe insulation
- 6. Downlighter or socket boxes
- jacket
- 8. Isover insulation

#### Cables, sockets and downlighters

Treat sockets and downlighters with a socket box and remember to leave a 75mm gap around the cable, where these cables can't be lifted above the insulation.

Ensure certified solutions (by others) are used where fire resistance is required.



#### **Ventilation**

It's important to ensure your attic space is well-ventilated to prevent a build up of moisture and condensation.

For this purpose, we recommend that you leave a gap of 50mm between the roofing membrane and the insulation at eaves of the roof.



#### Water tank and pipes

Once the first layer is completed, you should put on the tank cover and make it secure with tape.

Then, put on the pipe covers and seal with a tape - such as our Vario® MultiTape SL.

Don't put insulation under the water tank! This is best practice to avoid water tank freezing in low temperatures.

#### **First layer**

For the first layer of insulation, lift your insulation through the attic hatch whilst keeping the packaging on. Then cut the insulation to match the width of your joists. Finally for this step: Starting at the end furthest away from the attic door, simply roll and friction fit between the joists.required.

Use the handle of a brush or something similar to push the insulation into "hard to reach" places but take care not to compress the insulation.

# Need help? Do you have a question?

#### Watch our install videos

You can view our easy to follow Attic Insulation movie by scanning the QR code with your smart phone.

Alternatively, go to:

www.isover.ie



Contact our technical team:

Free Phone (ROI): 1800 744480 Free Phone (NI): 0845 3990159 Email: tech.ie@saint-gobain.com







#### **Walkway**

It's a good idea to put a walkway to your tank. You can do this by:

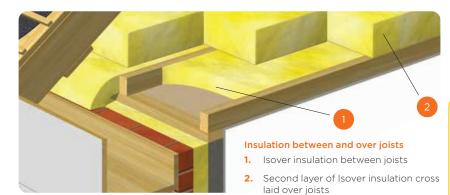
- 1. Securing timber across the joists
- 2. Laying the top of layer of insulation between them
- **3.** Then laying a walkable wood board on top

#### Top up layer

When your 1st layer is complete you are ready for the top up layer. Open Comfort 35 roll and roll out in the opposite direction across the joists, ensure you join each layer and leave no gaps

#### **Attic hatch**

Your attic hatch can be simply insulated by making a bag filled with insulation, preferably using vapour membrane. You can use Isover Vario® membrane filled with leftover insulation. Place it over the attic hatch. For extra protection - use a draft seal tape around the door surround to create an airtight seal. Exit carefully and adjust the bag in the right place. Close the hatch and you are done! Your attic is insulated!



#### **Our products**

#### **Understanding Thermal Performance**

The current building regulations require a U-Value of 0.16 for attic floors. The U-Value is defined as the rate at which heat is lost - and the lower the U-Value, the better it is for your home.

#### 1st Layer:

100mm Spacesaver (0.044 W/mK)

#### 2nd Layer:

140mm Comfort (350.035 W/mK)

#### U Value of 0.16

which meets current building regulations!

#### Checklist

#### Before you begin here's a checklist...

#### Do you have:

- 1. Secure stairs or ladder to your attic
- Board or plank to stand on don't stand between joists as your foot may go through the ceiling!
- **3.** Protective clothing face mask and gloves
- 4. Pipes and tank insulation covers
- 5. Lighting source in your attic if you have run a cable, please make sure that it's secured and doesn't cause a trip hazard
- **6.** Ventilation points check the eaves to find the ventilation grills



# **ISOVER** SPACESAVER ROLL

#### For use in Pitched roof attics



A mineral wool roll for domestic attic floors. Rolls pre-perforated to 3 x 386mm and 2 x 580mm widths to fit between common joist spacings

























W/mK 0.044

Product	Order Code	Thickness (mm)	Width (mm)	Length (mm)	Pack Area (m²)	Pack Per Pallet
Spacesaver G3 Touch	5200854520	100	1160	12180	14.13	24
Spacesaver G3 Touch	5200854529	150	1160	8050	9.34	24
Spacesaver G3 Touch	5200840154	200	1160	5200	6.03	24

# **ISOVER SPACESAVER READY CUT ROLL**

#### For use in Pitched roof attics



A mineral wool roll providing thermal insulation for domestic attic floors. Easy to install, rolls are ready-cut to provide half third widths to suit 400mm joist spacings.































**W/mK** 0.044

Product	Order Code	Thickness (mm)	Width (mm)	Length (mm)	Pack Area (m²)	Pack Per Pallet
Spacesaver Ready-Cut G3 Touch	5200861922	100	3 x 386	12180	14.10	24
Spacesaver Ready-Cut G3 Touch	5200861942	150	3 x 386	8050	9.32	24
Spacesaver Ready-Cut G3 Touch	5200861980	200	3 x 386	5200	6.03	24



# **ISOVER SPACESAVER SOLID ROLL**

#### For use in Pitched roof attics



A mineral wool solid roll providing thermal insulation for domestic attic floors.



























W/mK 0.044

Product	Order Code	Thickness (mm)	Width (mm)	Length (mm)	Pack Area (m²)	Pack Per Pallet
Spacesaver Solid G3 Touch	5200625528	100	1200	9170	11	24
Spacesaver Solid G3 Touch	5200666363	125	1160	6030	6.99	24
Spacesaver Solid G3 Touch	5200625526	150	1200	6030	7.24	24
Spacesaver Solid G3 Touch	5200625524	200	1200	3880	4.66	24

# **ISOVER SPACESAVER PLUS ROLL**

#### For use in Pitched roof attics



A mineral wool roll providing increased thermal and acoustic insulation for domestic attic floors and external walls. Rolls are pre-perforated to 3 x 386mm and 2 x 580mm widths to fit between common joist spacings.

































**W/mK** 0.040

Product	Order Code	Thickness (mm)	Width (mm)	Length (mm)	Pack Area (m²)	Pack Per Pallet
Spacesaver Plus G3 Touch	5200625357	100	1160	7000	8.12	24
Spacesaver Plus G3 Touch	5200625359	150	1160	4670	5.42	24
Spacesaver Plus G3 Touch	5200625361	200	1160	3500	4.06	24



# **ISOVER COMFORT 35**

For use in pitched roof rafters • pitched roof attics • walls insulated cavities









A high performance roll, with a tissue facing for ease of handling, which is designed for topping up attic floor insulation - easy to install, can be simply rolled out over existing insulation.



























W/mK 0.035

Product	Order Code	Thickness (mm)	Width (mm)	Length (mm)	Pack Area (m²)	Pack Per Pallet
Comfort 35 G3 Touch	5200542536	140	1200	3400	4.08	24

# **ISOVER** TIMBER FRAME ROLL 35

For use in pitched roof rafters • pitched roof attics • walls insulated cavities







A high performance pre-split roll designed for topping up attic floor insulation, which can be simply rolled out over existing insulation.































W/mK 0.035

Product	Order Code	Thickness (mm)	Width (mm)	Length (mm)	Pack Area (m²)	Pack Per Pallet
Timber Frame Roll 35 G3 Touch	5200625583	140	2x570 (1140)	4000	4.8	18
Timber Frame Roll 35 G3 Touch	5200822660	140	3x400 (1200)	4000	4.8	18



## **ISOVER VARIO® SYSTEM**

#### For use in Airtightness applications



High performance membranes with accompanying accessories unique in providing excellent levels of airtightness.















HIGH PERFORMANCE AIRTIGHTNESS AND MOISTURE CONTROL

#### **Intelligent Variable Sd Membranes**

Product	Order Code	Width (mm)	Length (m)	M² Per Roll	Pack	Packs Per Pallet	
Vario® Xtra Membrane	5200814933	1500	40	60	1 Roll	42 Rolls	
Vario® KM Duplex Membrane	5200300299	1500	40	60	1 Roll	42 Rolls	

#### **Fixed Sd Membranes**

Product	Order Code	Width (mm)	Length (m)	M² Per Roll	Pack	Packs Per Pallet	
Vario StopVap Membrane	5200815577	1500	40	60	1 Roll	46 Rolls	<b></b>

#### **Airtightness Tapes & Mastic**

Product	Order Code	Width (mm)	Length (m)	M² Per Roll	Pack	Packs Per Pallet
Vario KB1 Single Sided Tape	5200300297	60	40	2.4	5 Rolls	120 Boxes (600 Rolls)
Vario MultiTape SL+	5200431017	60	25	1.5	10 Rolls	80 Boxes (800 Rolls)
Vario MultiTape SL	5200916780	150	25	3.75	10 Rolls	24 Boxes (240 Rolls)
Vario DoubleTwin	5200678235	19	50	0.95	15 Rolls	48 Boxes (720 Rolls)
Vario Bond	5200683153	100	25	2.5	6 Rolls	48 Boxes (288 Rolls)
Vario Bond	5200683156	150	25	3.75	4 Rolls	48 Boxes (192 Rolls)
Vario Doublefit+ Mastic	5200645927	N/A	310ml	N/A	12 Cartridges	75 Boxes (900 Cartridges)



#### Isover Ireland

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