



# Insulating rafters? It's easy with ISOVER Metac High performance insulation

Want to know more?



See our Metac video

**ISOVER**  
SAINT-GOBAIN

Sustainable insulation solutions

# WHAT IS METAC?

Metac G3 Touch is a high performance low lambda mineral wool insulation roll with both excellent thermal and acoustic properties. Metac is designed for a wide range of applications where space is at a premium and a low U-value is required.



A SELF-SUPPORTING SLAB ON A ROLL – IDEAL FOR VERTICAL AND PITCHED APPLICATIONS









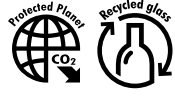
NO SLUMP DURING INSTALLATION AND LIFE OF THE SYSTEM



EUROFINS AIR COMFORT GOLD AWARD – HIGHEST STANDARD FOR A HEALTHY INDOOR ENVIRONMENT



# WHY USE METAC?

	FEATURE	BENEFIT
	Excellent thermal performance	Delivers excellent u-values, improving BER rating while reducing energy bills and carbon footprint. Requires less thickness than standard mineral wool insulation.
	Friction fits between rafters	Very easy to install. Conforms to any variations in rafter alignment and stays in place over time allowing for natural movement of timbers.
	Breathable	The breathability of Metac compliments the dynamic characteristics of the Vario™ intelligent membrane range.  When installed with Vario XtraSafe, Metac can be fully filled between rafters below both breathable and non-breathable roofing systems*
	A1 fire-rating	Metac is non-combustible. With the highest possible A1 classification it is one of the safest materials available.
	Acoustic insulation	Metac helps to substantially reduce rain, wind and traffic noise to provide increased levels of acoustic comfort within a home.
	Easy to transport	Metac's compact roll format makes it very easy to transport and handle. This means fewer trips to your provider and no pre-cutting before it can be brought into tight spaces like attics.
	Environmentally friendly	Made from recycled glass. Low carbon footprint at manufacture.



\* For full guidance on full fill solutions contact our Technical Support Team.

## WHERE TO USE METAC?

 <b>Pitched Roof</b> Rafters	 <b>Walls</b> Internally Insulated	 <b>Metallic Buildings</b>
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How to insulate between your rafters in

# 10 EASY TO FOLLOW STEPS

## Before you begin – you should have:

- ❑ Safe secure access to your attic
- ❑ Safe working platform to stand on in attic
- ❑ Correct protective clothing as required
- ❑ Adequate lighting
- ❑ Suitable ventilation or breathability if using a Vario full fill solution

Tip: In traditional roof build ups, adequate ventilation is essential to prevent interstitial condensation. It is therefore important for the provision of suitable ventilation or vapour breathability in the appropriate location depending on the nature of the roof build up. Using Metac with an Isover Vario membrane can permit full fill solutions (See Step 7).



## STEP 1 HOW MUCH DO YOU NEED?

Before you start, you will need to work out how many rolls of insulation you need

- ✓ Measure the depth and the width of your rafters and choose the product thickness to suit the thermal performance requirements.
- ✓ Measure the length of the building (dimension running opposite to the direction of the rafters) and the span (length) of the rafters.
- ✓ Multiply twice the span of the rafters by the length of the building.



## STEP 2 WHAT DO YOU NEED?

You will need...

- ✓ A sharp insulation knife
- ✓ Goggles
- ✓ Gloves
- ✓ Hard hat
- ✓ Face mask
- ✓ Measuring tape
- ✓ METAC insulation
- ✓ Vario membrane + tapes



## STEP 3

Lift your Metac insulation into the attic – whilst keeping the packaging on.



## STEP 4

Measure and cut the roll to match the width between your rafters allowing approximately 10mm extra on dimension. Open one section at a time as and when you are ready to install it.

INFORMATION & TECHNICAL SUPPORT

For more information go to:

[www.isover.ie](http://www.isover.ie)

Need some help?

Do you have a question?

Contact our TECHNICAL TEAM:

**1800 744 480**

[tech.ie@saint-gobain.com](mailto:tech.ie@saint-gobain.com)



### STEP 5

Unroll it to allow full thickness recovery and then cut to length using a straight edge to help ensure a clean straight cut.



### STEP 6

Push and friction fit the insulation in between the rafters (taking care not to compress it) keeping Metac flush with the face of the rafters.

Ensure eaves ventilation is maintained where required.



### STEP 7

ISOVER recommends installing Metac with Vario to provide the best thermal and acoustic performance coupled with airtightness and moisture protection.

**NEW** Vario XtraSafe membrane (Sd value 0.3 – 20m) is specifically designed to provide increased protection against moisture damage.

Metac can be fully filled\* between rafters when used with our Vario XtraSafe membrane installed below the insulation with Gyproc Plasterboard to complete the installation - this provides the safest solution to protect timber rafters from moisture damage.

\* For full guidance on full fill solutions contact our Technical Support Team. For more installation details visit [www.isover.ie](http://www.isover.ie)



### STEP 8

ISOVER recommends best practice by installing 50x50mm counter battens in the opposite direction below the rafters. This creates a service zone without the need to penetrate the Vario membrane.



### STEP 9

To increase U-value performance friction fit additional 50mm Metac between the counter battens.



### STEP 10

Finally use Gyproc Plasterboard applied to counter battens to complete the installation.

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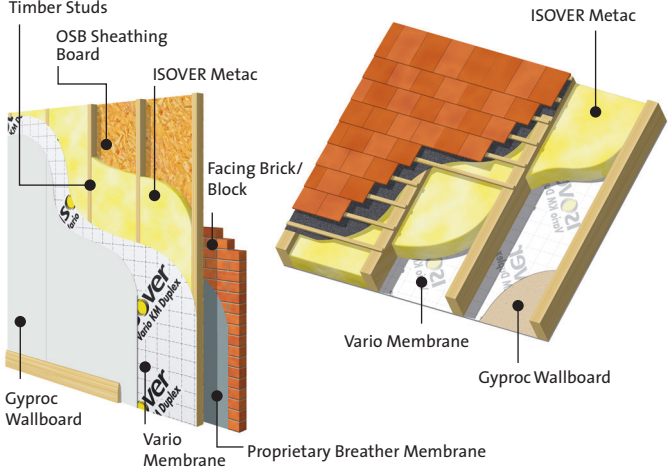
## U-VALUE - PITCHED ROOFS

Insulation thickness	Board lining	Airtightness/Moisture control	U-value W/m <sup>2</sup> K
180mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.22
150mm Metac + 42.5mm Calibel	Gyproc Wallboard	Vario membrane + tapes	0.20
150mm Metac + 50mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.18
220mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.17
180mm Metac + 50mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.16
220mm Metac + 50mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.14

When used with a breathable roofing system above, Metac can be fully filled between the rafters.

If installing a thermal laminate instead of plasterboard we recommend using Vario KM Duplex membrane as an airtight layer. For more details log onto [www.isover.ie](http://www.isover.ie)

### Timber Studs



## U-VALUE - EXTERNAL WALLS

Insulation thickness	Board lining	Airtightness/Moisture control	U-value W/m <sup>2</sup> K
150mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.26
180mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.21
220mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.19
150mm Metac + 50mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.19
180mm Metac + 50mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.18
220mm Metac + 50mm Metac	Gyproc Wallboard	Vario membrane + tapes	0.15

## PRODUCT DETAILS

Thickness mm	Width mm	Length mm	Area per roll m <sup>2</sup>	Thermal conductivity W/mK	Thermal resistance m <sup>2</sup> K/W
25	2 x 1200	10000	24	0.034	0.74
50	1200	12000	14.4	0.034	1.47
90	1200	8000	9.6	0.034	2.65
100	1200	7000	8.4	0.034	2.94
130	1200	5500	6.6	0.034	3.82
150	1200 (solid or split x 3)	4800	5.76	0.034	4.41
180	1200 (solid or split x 3)	4000	4.8	0.034	5.29
220	1200	3300	3.96	0.034	6.47



CE Marked: EN 13162:2001-10

Completely fire safe – Euroclass A1 fire rating when classified in accordance with BS EN 13502-1

[www.isover.ie](http://www.isover.ie)

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