



Product Name

ISOVER Metac - high performance insulation

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. Thermal and sound insulation in Timber Rafters, Timber Frame Walls and Metallic Buildings non-residential applications.

ISOVER G3 Touch – all our mineral wool products are manufactured using G3 Touch technology High performance mineral wool insulation, naturally strong & gentle - made from recycled materials.





ISOVER Metac



W/mK 0.034

BENEFITS AND FEATURES

| | |
|------------------------|--|
| THERMAL | Thermal Conductivity 0.034 W/mK. Delivers excellent u-values, improving BER rating while reducing energy bills and carbon footprint. Requires less thickness than standard mineral wool insulation |
| ACOUSTIC | Excellent Acoustic Performance Metac helps to substantially reduce rain, wind and traffic noise to provide increased levels of acoustic comfort within a home |
| FIRE | Excellent Fire Safety - A1 Fire Rated, highest possible rating. Completely fire safe - Euroclass A1 fire rating when classified in accordance with BS EN 13501-1. |
| MOISTURE | Vapour permeable breathable insulation. Improves energy performance and reduces heating & cooling costs. |
| STRENGTH | Excellent Recovery and strength, no slump when installed in rafters or wall studs. Self supporting slab in a roll |
| EASY TO INSTALL | Friction fits between timber joists. Easy to install. |
| BREATHABILITY | 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.* |

| | |
|----------------------------------|---|
| ENVIRONMENTAL CREDENTIALS | Made from recycled glass. Minimal manufacturing and on-site wastage. Low carbon footprint at manufacture and during transport. |
| 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 |
| TEMPERATURE | Temperature behaviour use up to 150 °C |
| SPECIFIC HEAT CAPACITY | 0.84 kJ / (kg×K) |
| WATER VAPOUR DIFFUSION | 1-2 EN 12086 |



STANDARDS & CERTIFICATION

| | |
|---------------------------|---|
| QUALITY | We hold a Quality Management Standard BS EN ISO 9001: 2008 for manufacturing. |
| CE | All products are manufactured in accordance with the CE marking requirements under the Construction Products Regulation, |
| PRODUCT STANDARDS | All our products are manufactured in accordance with product standard: BS EN 13162: 2008 and BS EN 13172 Evaluation of Conformity. |
| ENVIRONMENT | ISOVER is an ISO 14001:2004 (Environmental Management System) accredited manufacturing facility. This accreditation ensures that all products are manufactured to the stringent standards set out by this management system. EN ISO 13162 EMS 551706 003 BS EN ISO 9001: 2000 |
| INDOOR AIR QUALITY | 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. |

DURABILITY

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.

APPLICATIONS

Pitched Roof, Masonry Walls, Timber Frame Walls, Floors, Roofs, External Walls, Attic, Suspended Floors



ISOVER Metac Applications

Pitched Roof Counter Battens

| INSULATION 1ST LAYER | Insulation 2nd Layer | Airtightness and Moisture Control | Board Lining | U-Value W/m ² K |
|----------------------|----------------------|-----------------------------------|-------------------------|----------------------------|
| 200mm Comfort 35 | 50mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.15 |

Pitched Roof- Insulation between rafters

| INSULATION | Airtightness/ Moisture Control | Board Lining | U-Value W/m ² K |
|-------------|--------------------------------|-------------------------|----------------------------|
| 180mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.22 |
| 220mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.17 |
| 300mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.13 |

Timber Frame Dryling Timber Frame Walls

| INSULATION TIMBER STUDS | Insulation in Optima | Airtightness and Moisture Control | Board Lining | U-Value W/m ² K |
|-------------------------|----------------------|-----------------------------------|-------------------------|----------------------------|
| 150mm Metac | 60mm Comfort 35 | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.16 |

Masonry Dry Lining Cavity Wall - Partial Fill

| INSULATION | U value W/m ² K | Total thickness of drylining system (mm) |
|-------------|----------------------------|--|
| 100mm Metac | 0.19 | 132.50 |

Masonry Drylining Hollow Block

| INSULATION | U value W/m ² K | Total thickness of drylining system (mm) |
|-------------|----------------------------|--|
| 100mm Metac | 0.28 | 132.50 |

Masonry Drylining Concrete wall

| INSULATION | U value W/m ² K | Total thickness of drylining system (mm) |
|-------------|----------------------------|--|
| 100mm Metac | 0.27 | 132.50 |

Masonry Drylining Single Brick Construction

| INSULATION | U value W/m ² K | Total thickness of drylining system (mm) |
|-------------|----------------------------|--|
| 100mm Metac | 0.27 | 132.50 |

Masonry Cavity Walls Partial/ Full Fill + Optima

| CAVITY INSULATION | Drylining Insulation | Airtightness/ Moisture Control | Board Lining | U-value W/m ² K |
|-------------------|----------------------|--------------------------------|-------------------------|----------------------------|
| 85mm Hi-Cav 33 | 100mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.16 |
| 100mm Hi-Cav 34 | 100mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.14 |

Timber Frame Insulation between studs

| INSULATION | Airtightness and Moisture Control | Board Lining | U-Value W/m ² K |
|-------------|-----------------------------------|-------------------------|----------------------------|
| 150mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.26 |
| 180mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.21 |
| 220mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.19 |

Timber Frame Insulation between studs and counter batten

| INSULATION | Insulation in counter batten | Airtightness/ Moisture Control | Board Lining | U-value W/m ² K |
|-------------|------------------------------|--------------------------------|-------------------------|----------------------------|
| 150mm Metac | 50 mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.19 |
| 180mm Metac | 50 mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.17 |
| 220mm Metac | 50 mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.15 |

Timber Frame Drying Timber Frame Walls

| INSULATION TIMBER STUDS | Insulation in Optima | Airtightness and Moisture Control | Board Lining | U-value W/m ² K |
|-------------------------|----------------------|-----------------------------------|-------------------------|----------------------------|
| 150mm Metac | 50 mm Metac | Vario membrane + tapes | 12.5mm Gyproc WallBoard | 0.18 |

For more applications and product details, please visit www.isover.ie

Variants

| VARIANTS | Thickness (mm) | Width (mm) | Length (mm) | Pack area (m ²) | Rolls per pallet |
|----------------|----------------|------------|-------------|-----------------------------|------------------|
| Metac G3 Touch | 50 | 1200 | 9300 | 11.16 | 18 |
| Metac G3 Touch | 100 | 1200 | 6000 | 7.20 | 18 |
| Metac G3 Touch | 150 | 1200 | 4100 | 4.92 | 18 |
| Metac G3 Touch | 150 | 3x400 | 4100 | 4.92 | 18 |
| Metac G3 Touch | 180 | 1200 | 3400 | 4.08 | 18 |
| Metac G3 Touch | 180 | 3x400 | 3400 | 4.08 | 18 |
| Metac G3 Touch | 220 | 1200 | 2900 | 3.48 | 18 |

Basic Installation Steps



1. 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.



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



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



3. 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.



7. 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.



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



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



5. 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.



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

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