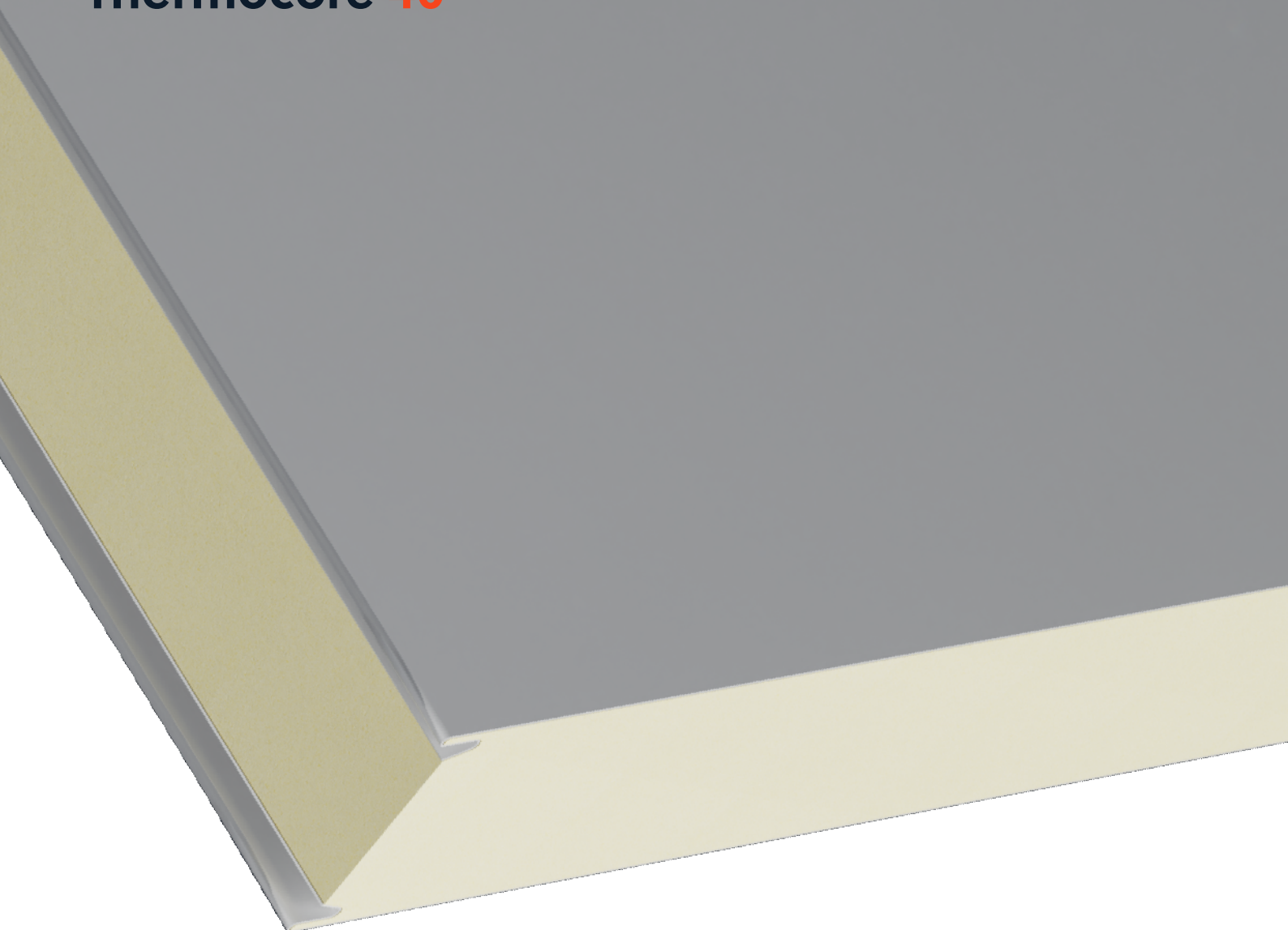


# Thermocore

Thermal wall and ceiling panels

**Thermocore 35**

**Thermocore 40**



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# Structural Performance

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## Built for thermal performance

Thermocore panels are designed for controlled environments where reliable thermal retention is essential. Suitable for both wall and ceiling applications, they help maintain stable internal temperatures in cold storage and hygienic spaces.

## Built on tested performance

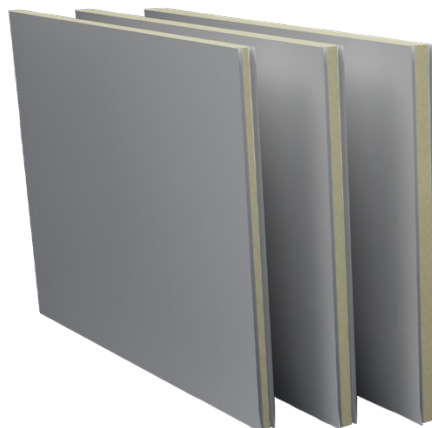
Manufactured to EN 14509:2013, Thermocore panels provide dependable thermal performance across a range of panel thicknesses. Their lightweight design makes handling and installation easier, supporting efficient installation in temperature controlled environments.

## Support when you need it

Our team is here to help you get the right solution for your environment. From first enquiry through to installation, we provide clear advice, technical support and practical guidance, so you can move forward with confidence.

# Thermocore 35

Thermocore 35 panels provide reliable insulation and a clean finish for temperature-controlled environments. Lightweight and efficient, they deliver high thermal performance for walls.



**40-75mm** thickness  
**1190mm** standard width

**High** thermal efficiency

**Walls only**

**3-7 day** lead time <sup>(1)</sup>

## Thermocore 35 technical performance

| Panel thickness | Test results                     |                                 |                       |                 |                                  |                                 |
|-----------------|----------------------------------|---------------------------------|-----------------------|-----------------|----------------------------------|---------------------------------|
|                 | U-value as per EN 14509          | R-value as per EN 14509         | Weight <sup>(2)</sup> | Sound reduction | U-value <sup>(3)</sup>           | R-value <sup>(3)</sup>          |
|                 | Wm <sup>-2</sup> K <sup>-1</sup> | m <sup>2</sup> KW <sup>-1</sup> | kg/m <sup>2</sup>     | dB              | Wm <sup>-2</sup> K <sup>-1</sup> | m <sup>2</sup> KW <sup>-1</sup> |
| 40mm            | 0.680                            | 1.470                           | 8.920                 | 19              | 0.500                            | 1.990                           |
| 50mm            | 0.540                            | 1.865                           | 9.560                 | 20              | 0.410                            | 2.440                           |
| 75mm            | 0.350                            | 2.843                           | 10.200                | 21              | 0.280                            | 3.580                           |

(1) Lead times are dependent on order quantity and selected steel type.

(2) Panel weights based on 0.5mm gauge steel to both faces.

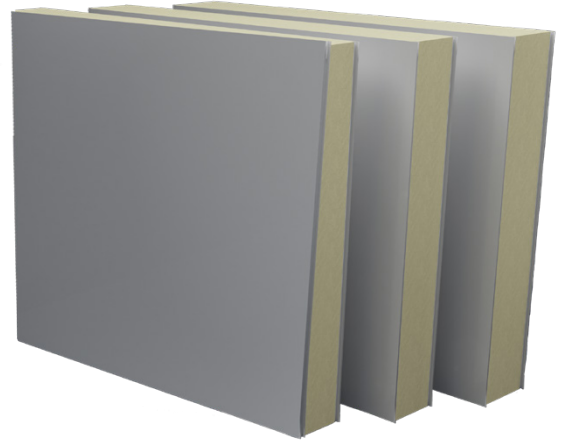
(3) We have published two sets of U-Values and R-Values. As per BS EN 14509 we have tested our full panels, including their joints. U-Value<sup>(3)</sup> and R-Value<sup>(3)</sup> considers a section in the centre of a single panel only.

| Product tolerances as per EN 14509 <sup>(4)</sup> |                 |                |                             |  |             |
|---|-----------------|----------------|-----------------------------|--|-------------|
| Length (L)  | Cover width (W) | Thickness (D)  | Squareness                  | Flatness   | Joint gap   |
| L ≤ 3m ± 5mm                                      | ± 2mm           | D ≤ 100m ± 2mm | 0.006 x nominal cover width | 1.5mm from the theoretical flat plane over 700mm | +3mm / -0mm |
| L ≥ 3m - ± 10mm                                   |                 | D ≥ 100m ± 2%  |                             |  |             |

(4) Product is produced strictly to EN 14509:2013 manufacturing tolerances.

# Thermocore 40

Thermocore 40 panels deliver high-performance insulation for cold stores, freezers and food production areas. With an enhanced PIR core, they maintain low temperatures efficiently and reliably.



100-200mm thickness  
1190mm standard width

High thermal efficiency

Walls and ceilings

3-7 day lead time <sup>(1)</sup>

## Thermocore 40 technical performance

| Panel thickness | Test results                     |                                 |                       |                 |                                  |                                 |
|-----------------|----------------------------------|---------------------------------|-----------------------|-----------------|----------------------------------|---------------------------------|
|                 | U-value as per EN 14509          | R-value as per EN 14509         | Weight <sup>(2)</sup> | Sound reduction | U-value <sup>(3)</sup>           | R-value <sup>(3)</sup>          |
|                 | Wm <sup>-2</sup> K <sup>-1</sup> | m <sup>2</sup> KW <sup>-1</sup> | kg/m <sup>2</sup>     | dB              | Wm <sup>-2</sup> K <sup>-1</sup> | m <sup>2</sup> KW <sup>-1</sup> |
| 100mm           | 0.250                            | 3.975                           | 11.640                | 22              | 0.210                            | 4.720                           |
| 125mm           | 0.200                            | 4.976                           | 12.640                | 24              | 0.170                            | 5.850                           |
| 150mm           | 0.170                            | 6.008                           | 13.640                | 25              | 0.140                            | 6.990                           |
| 175mm           | 0.140                            | 7.001                           | 14.640                | 26              | 0.120                            | 8.120                           |
| 200mm           | 0.120                            | 8.029                           | 15.640                | 27              | 0.110                            | 9.260                           |

(1) Lead times are dependent on order quantity and selected steel type.

(2) Panel weights based on 0.5mm gauge steel to both faces.

(3) We have published two sets of U-Values and R-Values. As per BS EN 14509 we have tested our full panels, including their joints. U-Value <sup>(3)</sup> and R-Value <sup>(3)</sup> considers a section in the centre of a single panel only.

### Product tolerances as per EN 14509 <sup>(4)</sup>

| Length (L)      | Cover width (W) | Thickness (D)  | Squareness                  | Flatness   | Joint gap   |
|-----------------|-----------------|----------------|-----------------------------|--|-------------|
| L ≤ 3m ± 5mm    | ± 2mm           | D ≤ 100m ± 2mm | 0.006 x nominal cover width | 1.5mm from the theoretical flat plane over 700mm | +3mm / -0mm |
| L ≥ 3m - ± 10mm |                 | D ≥ 100m ± 2%  |                             |  |             |

(4) Product is produced strictly to EN 14509:2013 manufacturing tolerances.

# Thermocore Data

## Maximum recommended spans

| Panel type             | Panel thickness |      |       |       |       |       |       |
|------------------------|-----------------|------|-------|-------|-------|-------|-------|
|                        | 50mm            | 75mm | 100mm | 125mm | 150mm | 175mm | 200mm |
| Thermocore 35          | 5.8m            | 7.9m | -     | -     | -     | -     | -     |
| Thermocore 40          | -               | -    | 10.0m | 10.4m | 10.8m | 11.3m | 11.8m |
| Thermocore 40 ceilings | -               | 5.2m | 6.0m  | 6.7m  | 7.5m  | 8.3m  | 9.2m  |

## Thermocore 40 walls | fire ratings and spans

| Thickness | Orientation | Integrity | Insulation | Grade | Max span | LPCB ref. No. |
|-----------|-------------|-----------|------------|-------|----------|---------------|
| 100mm     | V           | 30        | 30         | FR30  | 3.0m     | 142a/05       |
| 150mm     | V           | 30        | 30         | FR30  | 7.5m     | 142a/07       |
| 150mm     | V           | 60        | 30         | FR30  | 4.0m     | 142a/07       |

## Thermocore 40 ceilings | fire ratings and spans

| Thickness | Orientation | Integrity | Insulation | Grade | Max span | LPCB ref. No. |
|-----------|-------------|-----------|------------|-------|----------|---------------|
| 150mm     | C           | 60        | 30         | FR30  | 3.4m     | 142a/06       |

- Wall panel orientation, Horizontal, Vertical or Ceiling (H/V/C), relates to the long joint orientation.
- When referring to LPCB reference numbers, please consult the Technical Department or visit [redbooklive.com](http://redbooklive.com) for full installation details.

# Design for a colourful future

## GreenCoat® from SSAB

Steel plays a vital role in the built environment, and SSAB is a global leader in premium steel solutions. The company is driving innovation across the industry, developing steels with near-zero fossil CO<sub>2</sub> emissions to support a more sustainable future.

GreenCoat is SSAB's range of colour-coated steel products developed specifically for the construction market. Widely used in architectural applications, GreenCoat offers a broad choice of colours and coatings designed for durability and long-term performance. A key feature of the range is the use of Swedish rapeseed oil within the paint system, replacing traditional fossil-based oils to reduce environmental impact.

SSAB Zero™ is the world's first commercial steel made from 100 percent recycled steel, produced using fossil-free electricity, biocarbon and biogas. Paired with the GreenCoat paint system, it reduces carbon impact while maintaining the performance and durability required for construction, supporting ESG objectives and lower Scope 3 emissions.

- ▶ GreenCoat® uses Swedish rapeseed oil for a lower environmental impact.
- ▶ SSAB Zero™ is made from 100% recycled steel using fossil-free energy.
- ▶ Both finishes provide outstanding resistance to UV, corrosion and wear.
- ▶ GreenCoat® and SSAB Zero™ support ESG goals and low-carbon procurement.

## Colorcoat® pre-finished steel

### Durable and guaranteed performance

For 60 years Tata Steel has developed a range of technically leading Colorcoat® pre-finished steel products which have been comprehensively tested and manufactured to the highest quality standards.

The Colorcoat® portfolio, including Colorcoat Ultra®, Colorcoat® and Advantica® L Control, are designed to perform in demanding environments. These advanced pre-finished steel products provide longevity and durability over the life of the building.

All Colorcoat® products are certified to BES 6001 Responsible Sourcing standard.

Both Colorcoat Prisma® and Colorcoat HPS200 Ultra® have published Environmental Product Declarations (EPDs) that comply with EN 15804 and ISO 14025. For more information, please see dedicated Colorcoat® product literature.

Proven pre-finished steel technology trusted worldwide.

Designed to resist corrosion and UV.

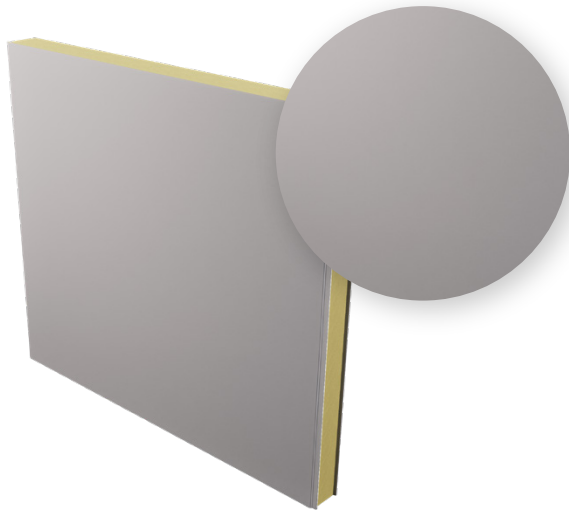
Responsibly sourced under BES 6001 accreditation.

Backed by long-term performance guarantees for peace of mind.

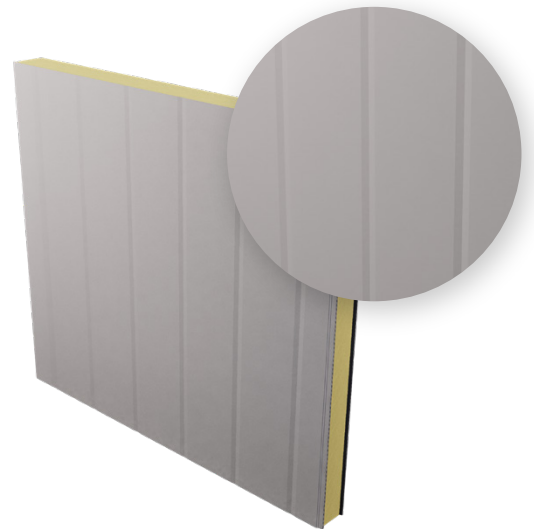
Colorcoat is a registered trademark of TATA Steel UK.

# Panel Profiles

Each Thermocore panel profile is engineered for precision, strength and consistent performance. Choose the design that best fits your application and requirements.

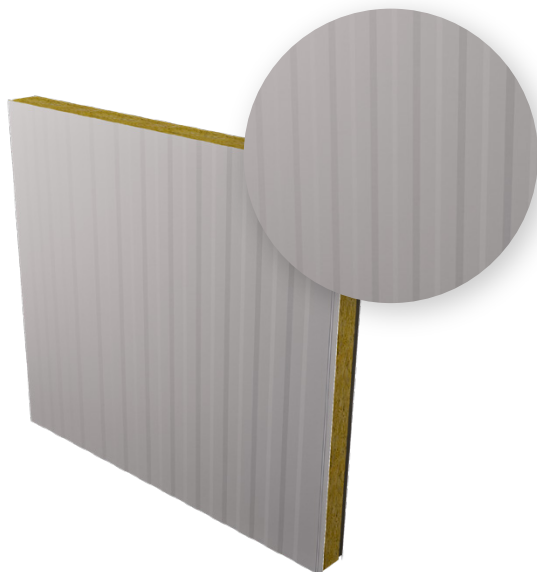


**Flat profile**



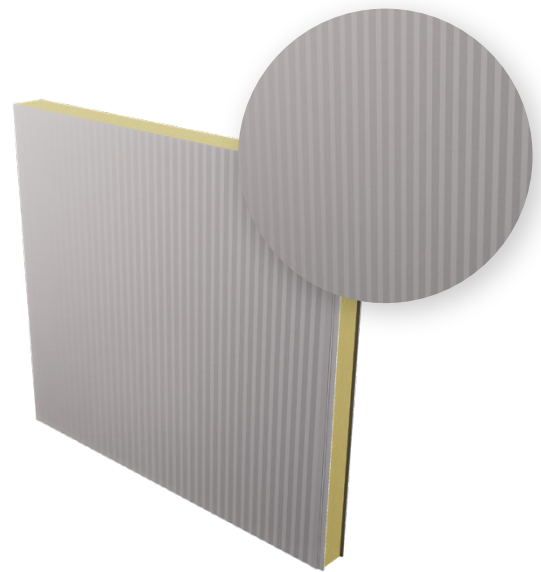
**V-rib profile**

Pitch 200mm - 5 per panel  
Nominally 1mm deep



**Castellation profile**

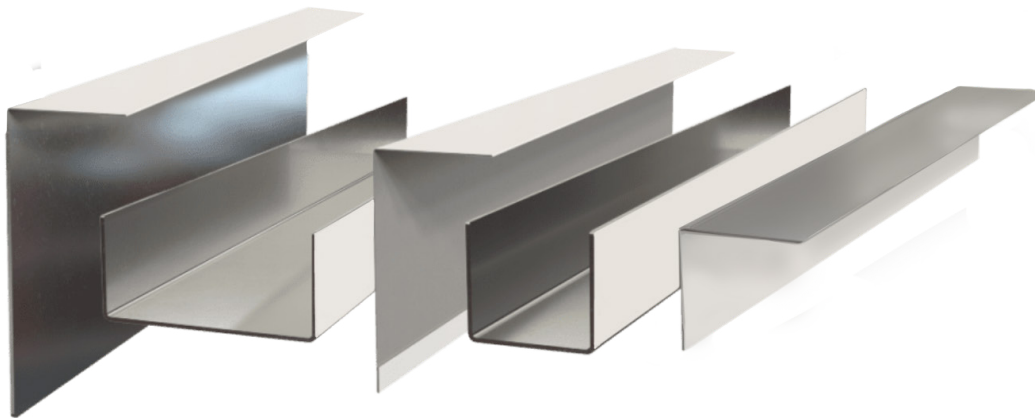
Pitch 100mm  
Nominally 1mm deep



**Micro-rib profile**

Pitch 30mm - 1 side only  
Nominally 1mm deep

# Flashings and Trims



## Finishing every detail

To get the best performance from Thermocore panels every junction needs to be finished with precision made flashings. That's why we provide a full range of flashings and trims that are designed to integrate seamlessly with Thermocore walls and ceilings. Produced from high-quality steel, our flashings can be made to custom shapes and profiles, with options for powder coating or colour matching.

## Types of flashings

- Internal angle** – neat finish for inside corners
- External angle** – clean protection for outside corners
- Internal channel** – closes junctions at panel junctions
- Offset channel** – stepped profile for alignment
- Z shape flashing** – versatile profile for returns and junctions
- Top hat flashing** – rigid cover for joints and cappings
- Galvanised angles** – durable concealed reinforcement
- Cover strip** – seals vertical or horizontal joints
- Bespoke flashings** – custom profiles to your requirements

# CustomClad

## Built around your project

Every project comes with its own challenges. CustomClad is designed to remove them.

CustomClad helps reduce time on site by preparing panels around your project before they arrive. From apertures and doorways to flashings and finishing details, every element is planned to support a cleaner, more efficient installation.



### Made to your dimensions

Doorways, side cuts and apertures all available through CustomClad.



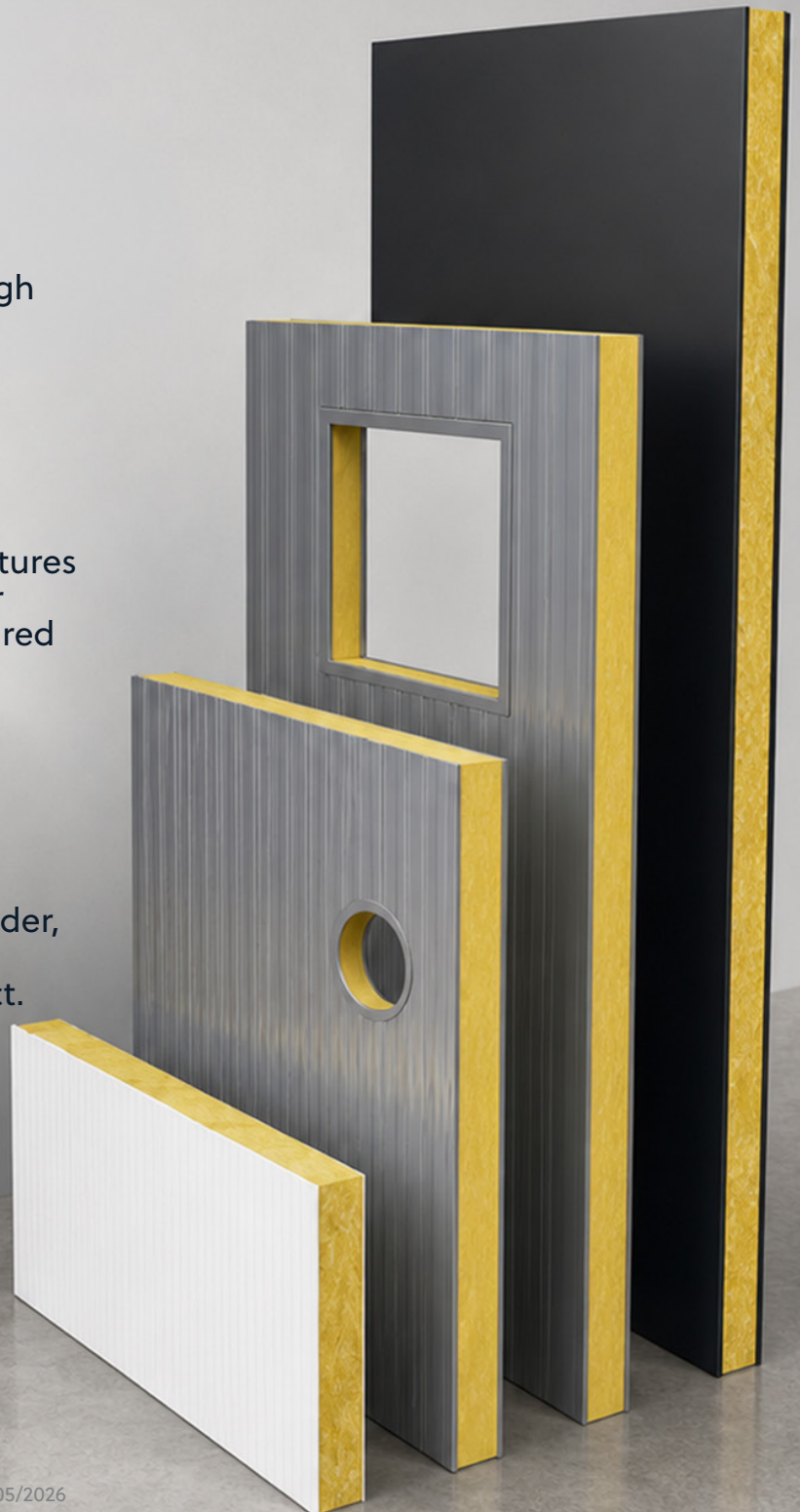
### Precision finishing, made to fit

Flashings fitted around apertures and doorways with mitred or notched finishes, manufactured to suit your project.









### Ready for installation

Panels palletised in install order, labelled and protected with Corex to support your project.



## What we can do

Whether you need simple cut panels or a fully bespoke layout with multiple apertures and details, we work with you to make sure everything is ready before it reaches site.

|   |  |
|---|--|
|  <b>Panel lengths</b><br>From 150mm up to 13,500mm                  |  <b>Apertures</b><br>From 70mm x 70mm and upwards   |
|  <b>Side cuts</b><br>From 50mm and above, with or without the joint |  <b>Doorways</b><br>Cut to your required size, with a minimum 50mm retained around the panel edge |
|  <b>Circular holes</b><br>Cut up to 152mm diameter                  |  <b>Sloped panels</b><br>And notched cut-outs available   |

## Finishing with CustomClad

- Flashings fitted around apertures and doorways with a mitred or notched finish
- Standard flashing length up to 3000mm, with flexibility on longer lengths
- 0.5mm and 0.7mm flashings supplied with safety edges
- Plain galvanised steel or powder coated finishes available

## Lead times

We aim for a 2-week lead time on CustomClad orders. Timings will depend on the detail and complexity of your project. Please contact us for an accurate lead time.

## Support that keeps things moving

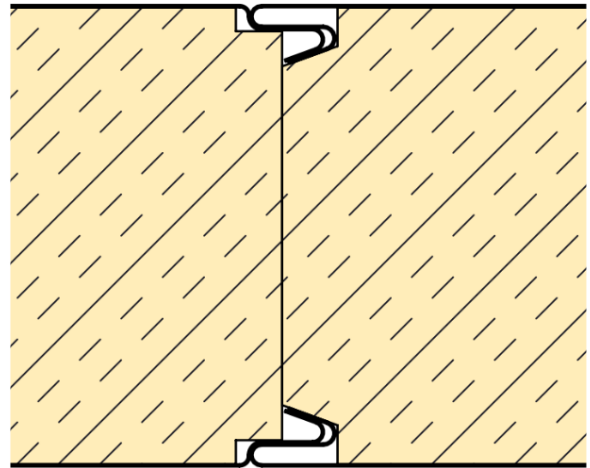
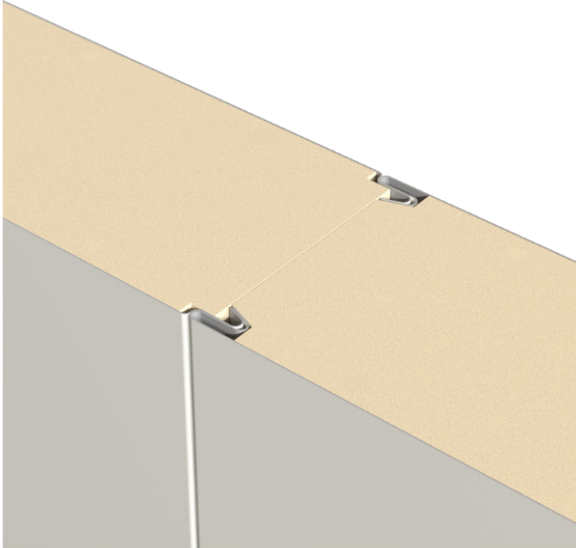
CustomClad is about more than cutting panels. It's about making installation easier, reducing risk, and helping you deliver on time.

**Speak to our team about your project. We're here to help you find the right fit.**

# System Details

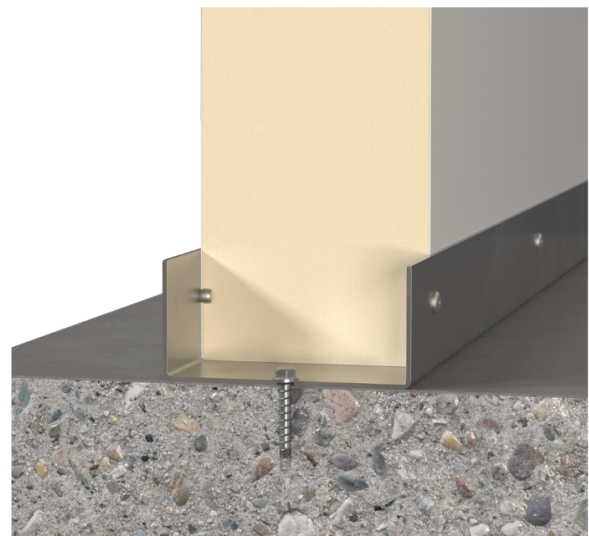
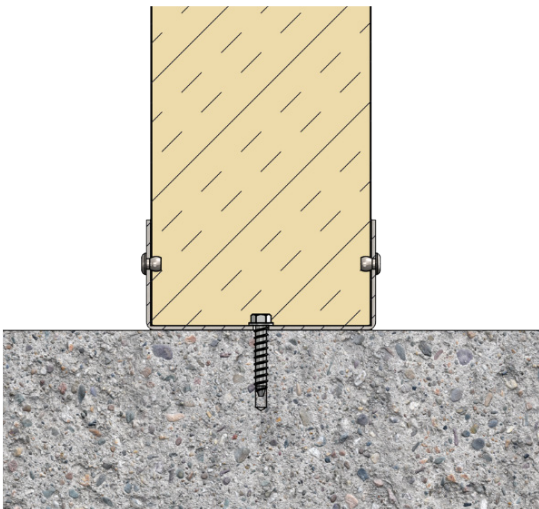
## Vertical joint details

TC-I-V-001A



## Vertical base detail

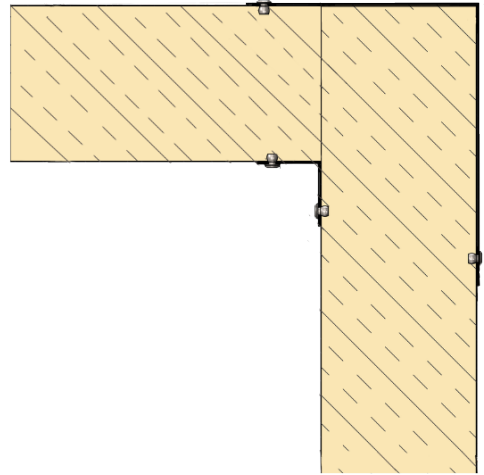
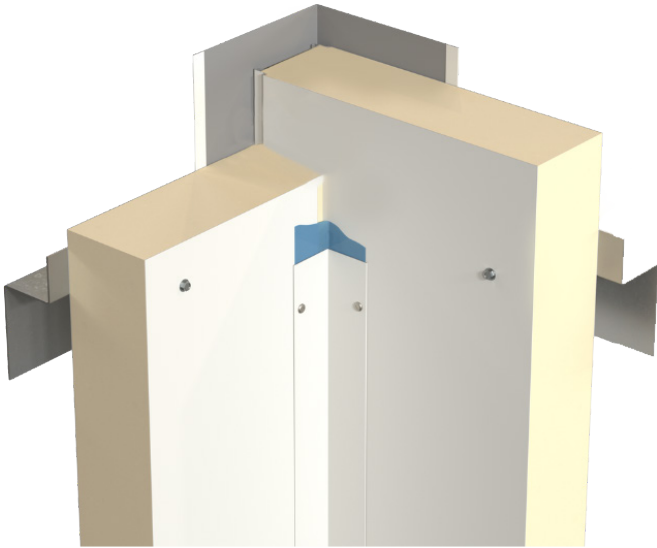
TC-I-V-003A



# System Details

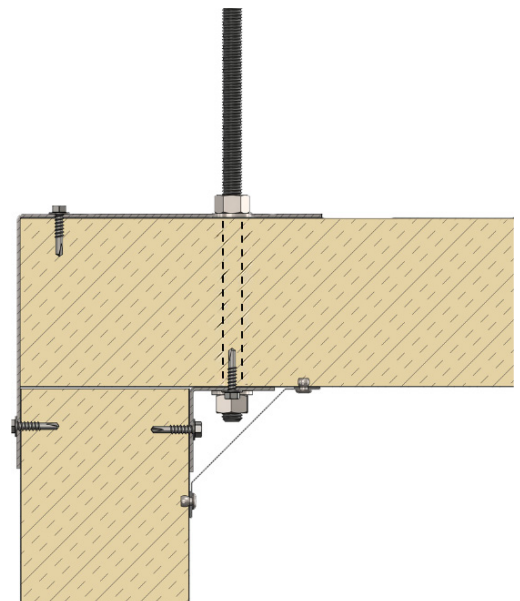
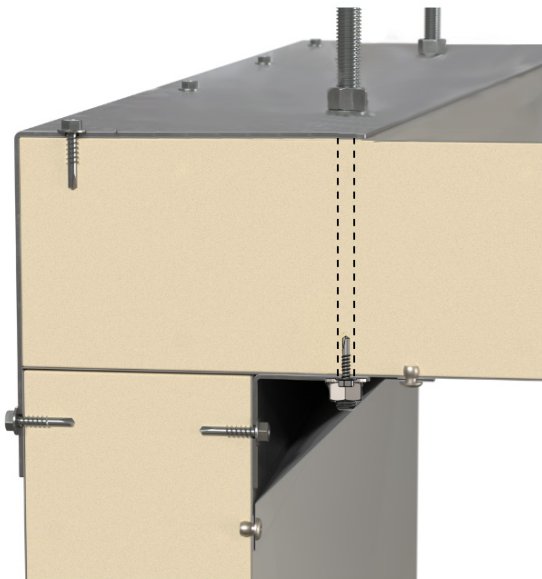
## Vertical corner details

TC-I-V-004A



## Wall / ceiling junction

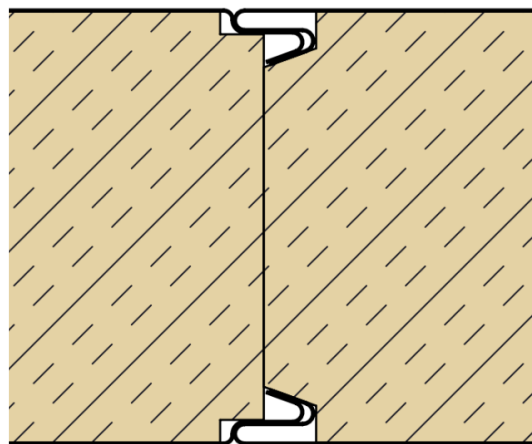
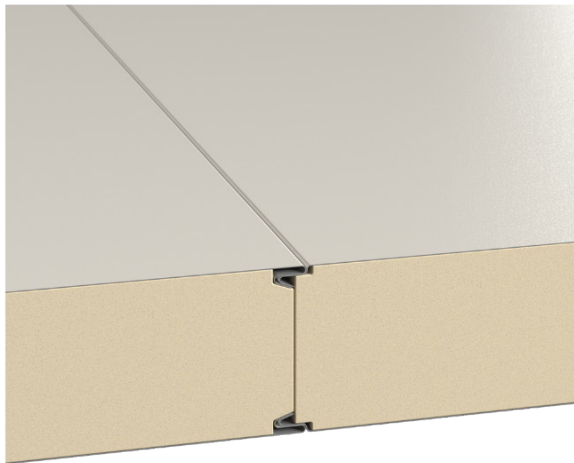
TC-I-V-008A



# System Details

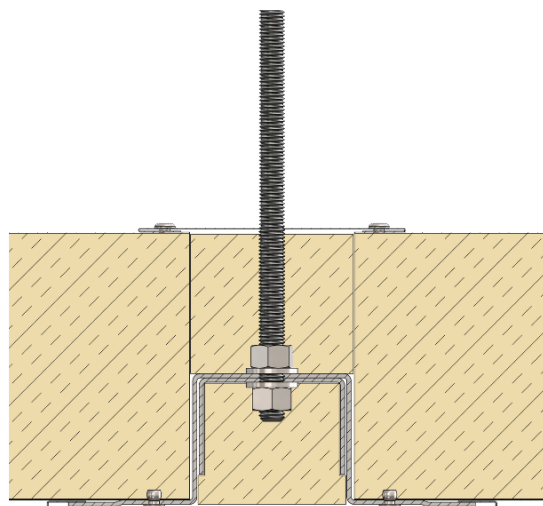
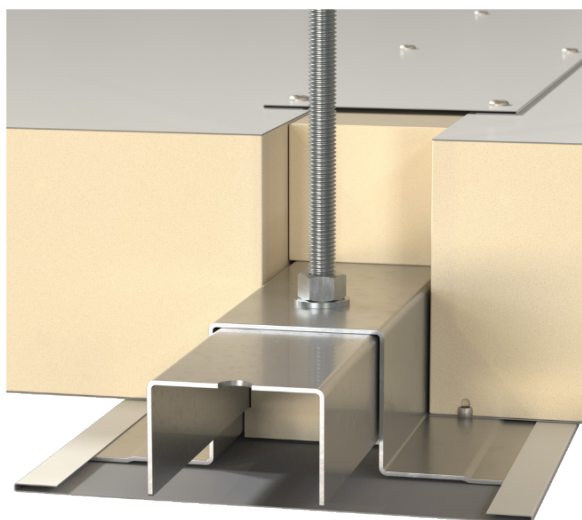
## Ceiling joint details

TC-I-C-001A



## Ceiling top hat details

TC-I-C-005A



Ceiling top hat detail is supplied by others.



## Get in touch with us

Our team is here to help with everything from product selection to technical support. Whether you're planning a new build or upgrading existing facilities, we'll make sure you get the right panel solution for your project.

### Talk to our team

 **0191 258 5052**

 **[sales@isoclad.co.uk](mailto:sales@isoclad.co.uk)**



**Scan the QR code  
for datasheets,  
certifications and  
more resources.**