

Concrete

Yeti-Anchor™ Sandwich Panel Connector

Yeti Anchors link Sandwich Panel layers, transferring forces to the structure, while allowing movement and reducing heat transfer for insulation.

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About Us

Clarity in Design, Confidence in Construction

Engineers, architects, and contractors trust CFS to deliver their projects. From residential to large infrastructure, we mitigate risk and you build with confidence, with our industry-leading products and AI-driven design software.

Our Mission

To accelerate the delivery of buildings and infrastructure.

Our Certifications



Our Companies



Market leading products for residential and commercial sectors.

Clariti

A collaborative AI teammate built to help ambitious design teams achieve more.

Our Expertise



Masonry

- AMS Masonry Support
- Prolock™ Brick-Slip Soffits and Lintels
- Wall Ties & Restraints
- Lintels
- Windposts



Concrete

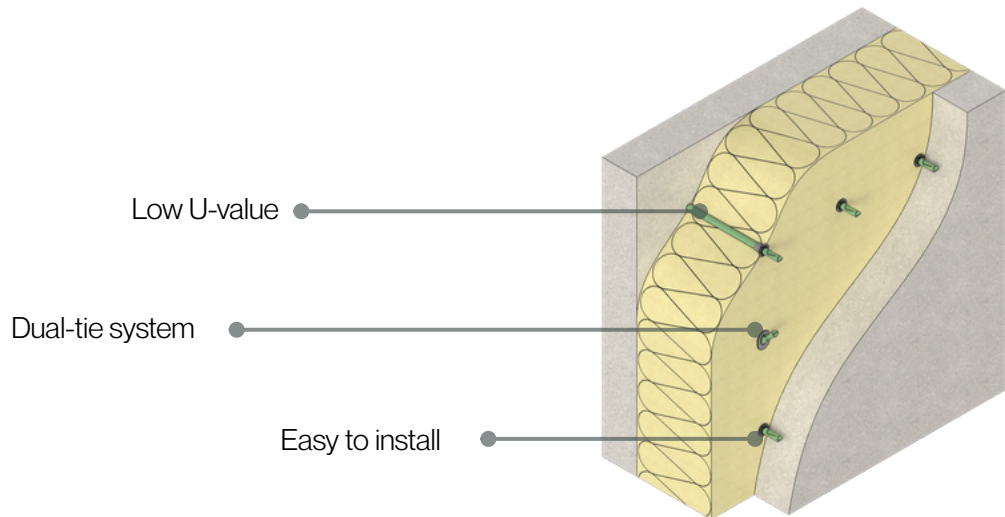
- Colossus™ Panel Hanger
- Column and Wall Shoes
- Yeti™ Sandwich Panel Connectors
- Lifting and Fixing Systems
- Cast-in Channel and T-bolts
- Ski Channels



Features

Yeti Sandwich Panel Anchors Features

The Yeti-Anchor is a durable, insulating connector for precast and tilt-up insulated concrete panels. Made from glass-fiber reinforced polymer, it replaces metal connectors to eliminate thermal bridging, enhancing energy efficiency and preventing condensation, mold, and corrosion in buildings.



Features



Low U-value

Sophisticated glass fibre reinforced polymer material with advanced thermal properties.



Dual-tie System

Reduces the number of anchors required.

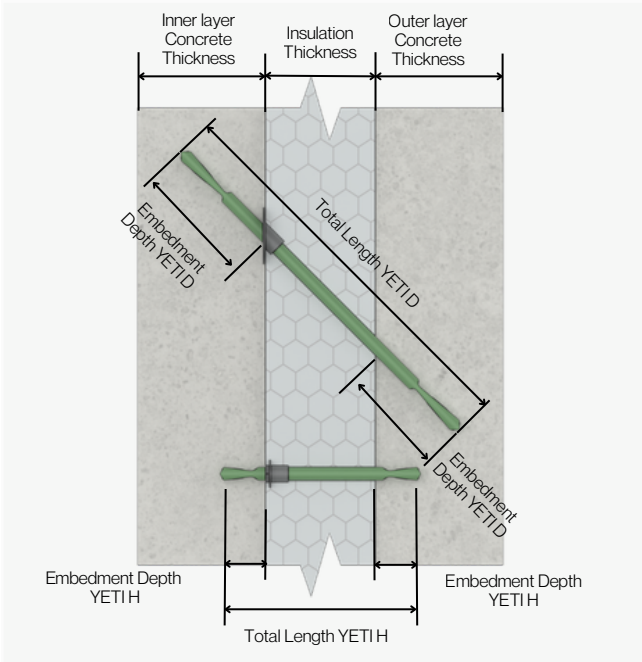


Easy to Install

Two installation options make the process straightforward.



Anchor Setting Out



Layout Details

Proper design ensures load transfer, movement accommodation, and thermal performance. The Yeti-Anchor is tested in accordance with ICC-ES AC308 acceptance criteria for fibre reinforced composite anchors anchored in concrete. Diameters are differentiated by colour to correspond with final layouts.

Thermal Insulation

The Yeti-Anchor, which is made of a continuous glass-fibre reinforced polymer with exceptional performance, is robust, extremely durable, and thermally insulating.

This material has a thermal conductivity of only 0.7W/mK which can be shown in U-value calculations to reduce insulation thickness and wall footprint. Due to the low thermal conductivity the anchors are excluded from U-Value calculations to BS EN ISO 6946.

Fixing Specifications



Design Notes:

- **Horizontal Anchors:** for non-composite panels with an internal layer that can hold all of the weight, horizontal anchors are an easy fix.
- **Horizontal and Diagonal Anchors:** a combination of these anchors permits thicker external layers and higher shear loads.

Installation

Installation	YETI 50 H (mm)	YETI 50 D (mm)
Layer Thickness Compatibility	From 60mm	From 60mm
Embedment Depth Axial to Anchor	50	67
Embedment Depth Perpendicular to Panel	50	50
Insulation Hole Diameter	8mm for YETI-8 14mm for YETI-15	8mm for YETI-8 14mm for YETI-15
Installation Angle	90°	45°

Design Notes:

- The Yeti-Anchor is small, lightweight, and easy to install, boosting the efficiency of precast concrete production. Compatible with most insulation types, it provides a modern, thermally-efficient solution for façade construction, benefiting both precast plants and architects.
- Unless hanging elements from the outer layer has been considered in the anchor layout design, elements should be fixed back to the structural layer with stainless steel rod and resin.

Physical and Mechanical Properties

Properties	YETI-8	YETI-15
Cross Section Area	50.3mm ²	177mm ²
Area Moment of Inertia	201mm ⁴	2,485mm ⁴
Thermal Conductivity	0.7W/m.K	0.7W/m.K
Flexural Modulus ASTM DT90	50,200 MPA	50,200 MPA
Tensile Strength D3039/D3039M	1,380 MPa	1,380 MPa

Design Notes:

- Yeti Anchors are fire tested in accordance with ASTM E119 (receiving a 4 hour fire rating) and NFPA 285 (passed for flame spread). Reports available on request.
- ICC Evaluation Report ICC-ESR 3820



Features

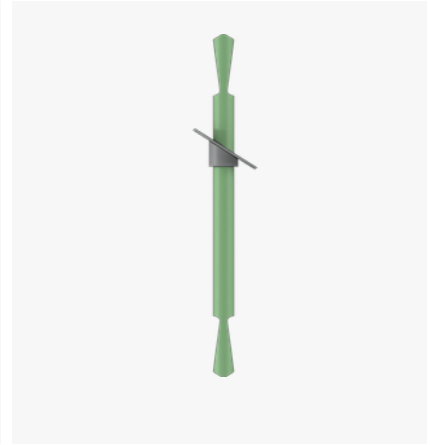
Yeti Sandwich Panel Anchor Range



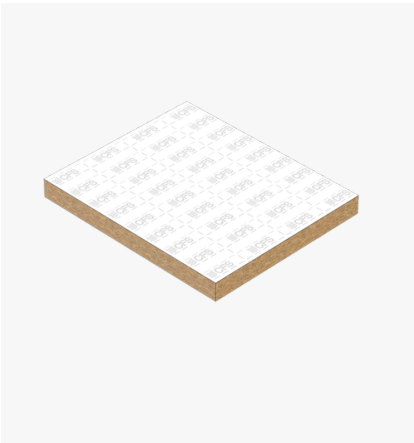
YETI-8-50-H
Straight with an 8mm diameter



YETI-15-50-H
Straight with a 15mm diameter



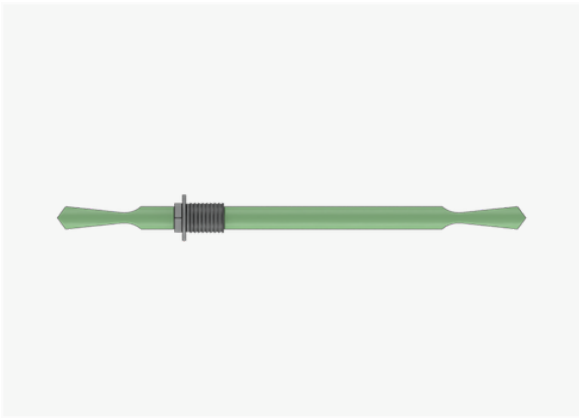
YETI-15-50-D
Diagonal with a 15mm diameter



STRATA
Strata Rockwall Slab



PT
PanelTherm



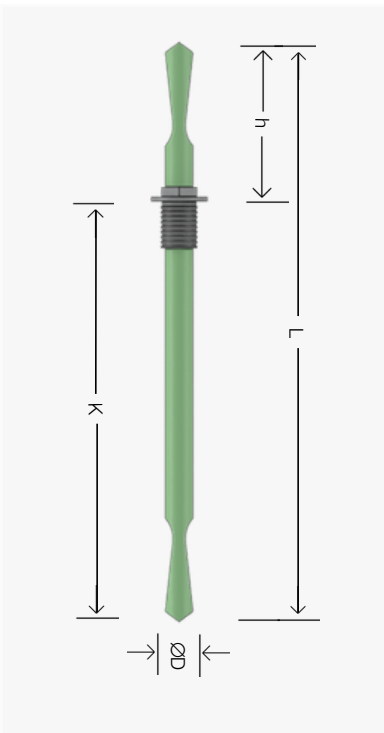
Product Details

YETI-8 Horizontal

YETI-8-50-H

Yeti-Anchors are designed for use in horizontally poured, insulated concrete sandwich panels. The YETI-8-50-H is a straight Yeti anchor with an 8mm diameter.

Geometry



SKU	ØD (mm) Diameter	L (mm) Total Anchor Length	H (mm) Minimum Anchor Embedment In Inner And Outer Layer	K (L-h) (mm) Minimum Anchor Embedment Insulation + Inner Layer	Hmin Minimum Concrete Thickness (mm)
YETI-8-50-H-150	8	150	50	100	60
YETI-8-50-H-175	8	175	50	125	60
YETI-8-50-H-200	8	200	50	150	60
YETI-8-50-H-225	8	225	50	175	60
YETI-8-50-H-250	8	250	50	200	60
YETI-8-50-H-275	8	275	50	225	60
YETI-8-50-H-300	8	300	50	250	60
YETI-8-50-H-325	8	325	50	275	60
YETI-8-50-H-350	8	350	50	300	60
YETI-8-50-H-375	8	375	50	325	60
YETI-8-50-H-400	8	400	50	350	60
YETI-8-50-H-425	8	425	50	375	60
YETI-8-50-H-450	8	450	50	400	60

Design Notes:

- Specification follows this format: YETI-8-50-H-150
- The concrete wall panel manufacturer is solely responsible for all building system panels, including the performance thereof. Neither CFS nor MagmaTech make representations to the performance of any panel fabricated with the Yeti-Anchor. Our recommendations should not be taken as inducements to infringe on any patent or violate any law, safety code or insurance regulation.

Materials

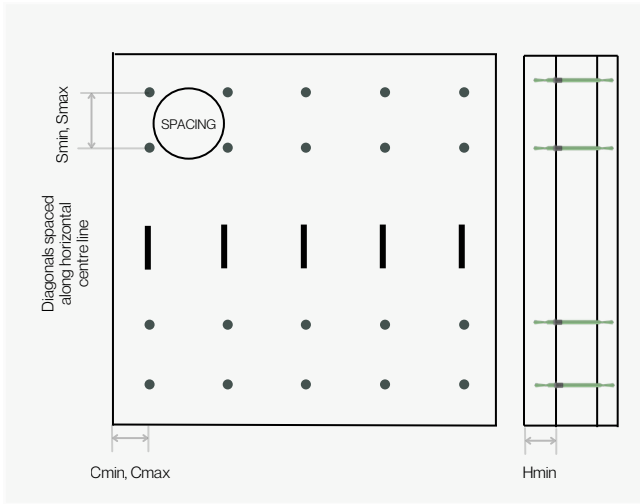
Component	Material
Yeti Anchor	Thermally insulating glass fibre reinforced polymer

Design Notes:

- The Yeti-Anchor is made from advanced thermally insulating glass fibre reinforced polymer which improves thermal efficiency by eliminating thermal bridging. It is highly durable and resistant to corrosion. Fire tested in accordance with ASTM E119 (4 hour rating) and NFPA 285.



Installation Data

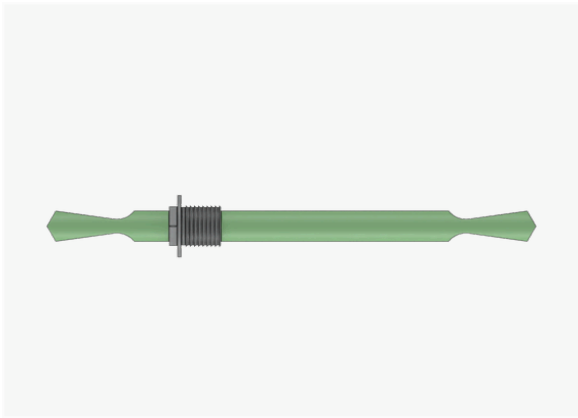


Cmin (mm)	Cmax (mm)	Smin (mm)	Smax (mm)	Hmin (mm)
Min edge distance	Max edge distance	Min anchor spacing	Max anchor spacing	Min thickness (outer skin)
100	300	200	850	60

Design Notes:

- Installed through the insulation at a 90 degree angle





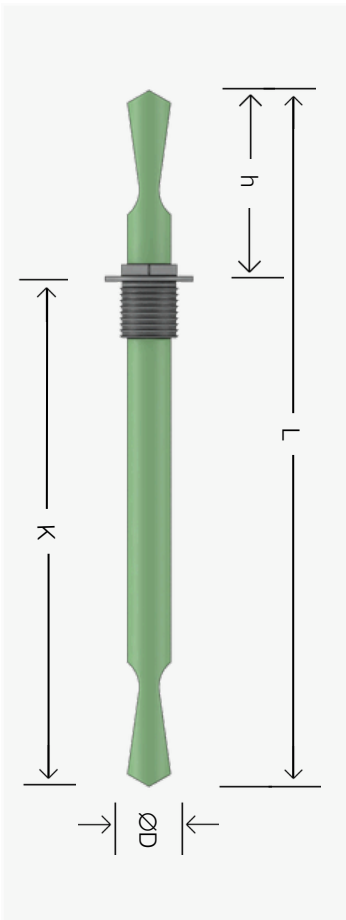
Product Details

YETI-15 Horizontal

YETI-15-50-H

Yeti-Anchors are designed for use in horizontally poured, insulated concrete sandwich panels. YETI-15-50-H is a straight Yeti anchor with a 15mm diameter.

Geometry



SKU	ØD (mm) Diameter	L (mm) Total Anchor Length	H (mm) Minimum Anchor Embedment In Inner And Outer Layer	K (L-h) (mm) Minimum Anchor Embedment Insulation + Inner Layer	Hmin (mm) Minimum Concrete Thickness
YETI-15-50-H-150	15	150	50	100	60
YETI-15-50-H-175	15	175	50	125	60
YETI-15-50-H-200	15	200	50	150	60
YETI-15-50-H-225	15	225	50	175	60
YETI-15-50-H-250	15	250	50	200	60
YETI-15-50-H-275	15	275	50	225	60
YETI-15-50-H-300	15	300	50	250	60
YETI-15-50-H-325	15	325	50	275	60
YETI-15-50-H-350	15	350	50	300	60
YETI-15-50-H-375	15	375	50	325	60
YETI-15-50-H-400	15	400	50	350	60
YETI-15-50-H-425	15	425	50	375	60
YETI-15-50-H-450	15	450	50	400	60

Design Notes:

- Specification follows this format: YETI-15-50-H-150.
- The concrete wall panel manufacturer is solely responsible for all building system panels, including the performance thereof. Neither CFS nor MagmaTech make representations to the performance of any panel fabricated with the Yeti-Anchor. Our recommendations should not be taken as inducements to infringe on any patent or violate any law, safety code or insurance regulation.

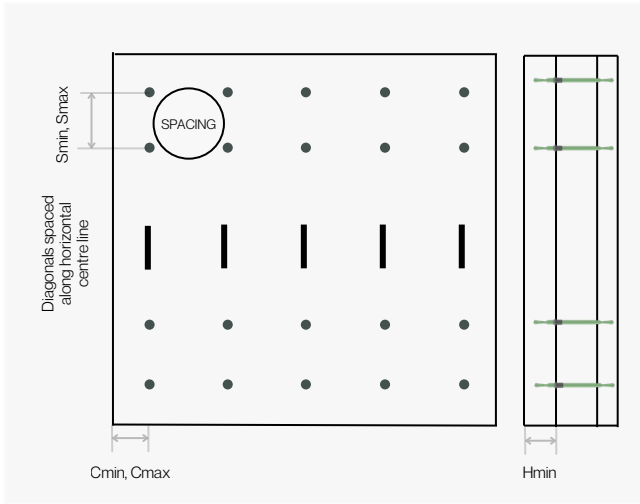
Materials

Component	Material
Yeti Anchor	Thermally insulating glass fibre reinforced polymer

Design Notes:

- The Yeti-Anchor is made from advanced thermally insulating glass fibre reinforced polymer which improves thermal efficiency by eliminating thermal bridging. It is highly durable and resistant to corrosion. Fire tested in accordance with ASTM E119 (4 hour rating) and NFPA 285.

Installation Data



Cmin (mm)	Cmax (mm)	Smin (mm)	Smax (mm)	Hmin (mm)
Min edge distance	Max edge distance	Min anchor spacing	Max anchor spacing	Min thickness (outer skin)
100	300	200	850	60

Design Notes:

- Installed through the insulation at a 90 degree angle





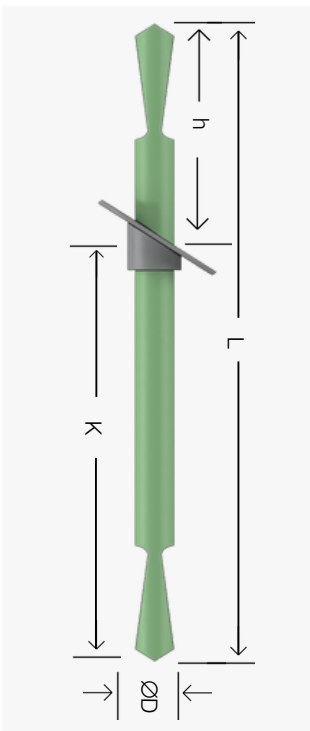
Product Details

YETI-15 Diagonal

YETI-15-50-D

Yeti-Anchors are designed for use in horizontally poured, insulated concrete sandwich panels. YETI-15-50-D is a diagonal Yeti Anchor with a 15mm diameter.

Geometry



SKU	ØD (mm) Diameter	L (mm) Total Anchor Length	h (mm) Minimum Anchor Embedment Outer Layer	K (L-h) (mm) Minimum Anchor Embedment Insulation + Inner Layer	Insulation Thickness (mm)	Hmin (mm) Minimum Concrete Thickness
YETI-15-50-D-220	15	220	50 / 70*	150	50	60
YETI-15-50-D-250	15	250	50 / 70*	180	75	60
YETI-15-50-D-290	15	290	50 / 70*	220	100	60
YETI-15-50-D-320	15	320	50 / 70*	250	125	60
YETI-15-50-D-360	15	360	50 / 70*	290	150	60
YETI-15-50-D-390	15	390	50 / 70*	320	175	60
YETI-15-50-D-430	15	430	50 / 70*	360	200	60
YETI-15-50-D-460	15	460	50 / 70*	390	225	60
YETI-15-50-D-500	15	500	50 / 70*	430	250	60
YETI-15-50-D-540	15	540	50 / 70*	470	275	60
YETI-15-50-D-570	15	570	50 / 70*	500	300	60
YETI-15-50-D-610	15	610	50 / 70*	540	325	60
YETI-15-50-D-640	15	640	50 / 70*	570	350	60

Design Notes:

- *50mm at 90° and 70mm at 45° embedment in inner and outer layer.
- Specification follows this format: YETI-15-50-D-150
- These ties are intended to be installed at a 45° angle.
- The concrete wall panel manufacturer is solely responsible for all building system panels, including the performance thereof. Neither CFS nor MagmaTech make representations to the performance of any panel fabricated with the Yeti-Anchor. Our recommendations should not be taken as inducements to infringe on any patent or violate any law, safety code or insurance regulation.

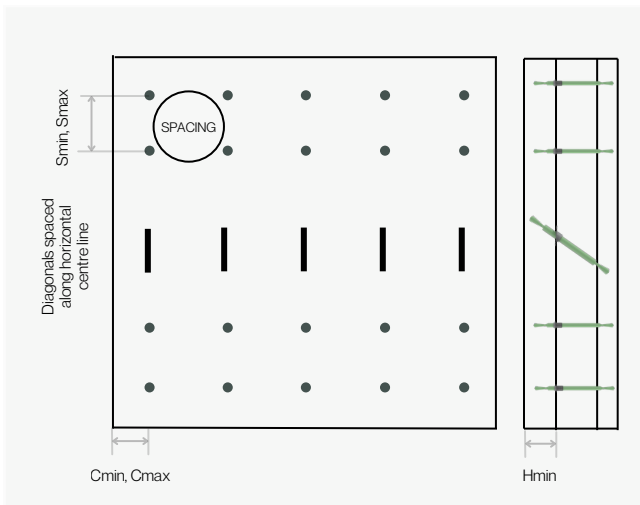
Materials

Component	Material
Yeti Anchor	Thermally insulating glass fibre reinforced polymer

Design Notes:

- The Yeti-Anchor is made from advanced thermally insulating glass fibre reinforced polymer which improves thermal efficiency by eliminating thermal bridging. It is highly durable and resistant to corrosion. Fire tested in accordance with ASTM E119 (4 hour rating) and NFPA 285.

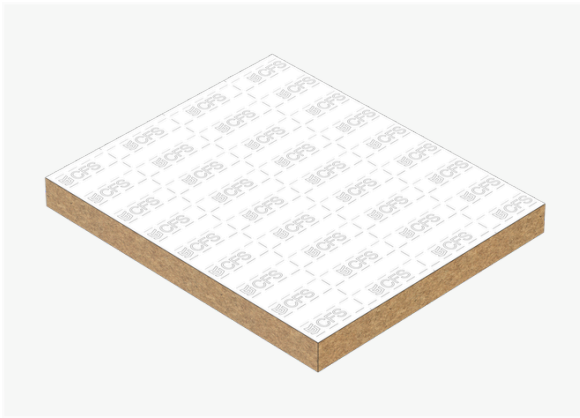
Installation Data



Cmin (mm)	Cmax (mm)	Smin (mm)	Smax (mm)	Hmin (mm)
Min edge distance	Max edge distance	Min anchor spacing	Max anchor spacing	Min thickness (outer skin)
100	300	200	850	60

Design Notes:

- Installed through the insulation at a 45 degree angle



Product Details

Strata

STRATA SLAB

CFS Strata is non-combustible, odour-free, non-absorbent rock mineral wool for concrete panels, with a Euroclass A1 fire rating. They are resistant to rot, impervious to pests, and do not promote the development of microorganisms.

Specification



Dimension	Metric	Value	Test Method	Tolerance
Thickness	mm	80-270	EN823	+/- 3mm
Width	mm	600/1000	EN822	+/- 3mm
Length	mm	1200	EN822	+/- 3mm
Thermal Performance	W/mk	0.035	EN 12667:2001	N/A
Density	KG/m ³	95	EN1602	+/-10%
Reaction To Fire	Euroclass	A1	EN13501	N/A
Loss On Ignition	%	3.8	N/A	+/-0.5%
Certification	e.g. CE	CE, EUCEB	N/A	N/A
Compressive Strength	kPa	25	EN826	N/A
Vapour Resistance	MNs/g	2400	N/A	N/A

Design Notes:

- STRATA is CE marked to BSEN 13162 or BSEN14303.
- STRATA is available in the standard board size of 1200mm x 600mm/1000mm and is available in thicknesses 50-270mm.
- The STRATA mineral wool incorporates a foil layer which has a polyethylene coating of 25g per square metre. The percentage of polyethylene compared to the mineral wool mass is extremely small. The insulation has been tested for A1 fire rating inclusive of the coated foil layer.

Specification

Strata Slab 250 1200 1000 FF1

Packing Specification

Pieces Per Pack	Packs Per Pallet
1	10

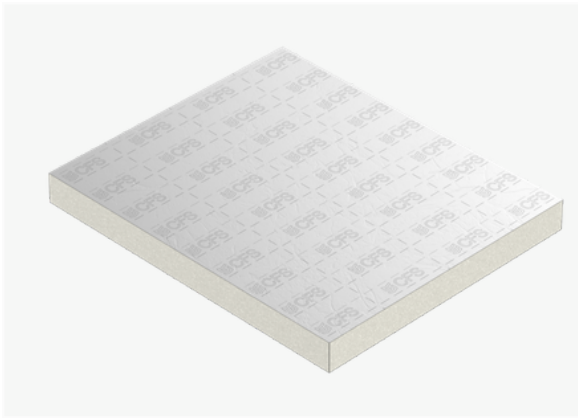
Design Notes:

- The above refers to packing details for typical thickness of 250mm.

Aluminium Foil Face

The triple layer foil face of the STRATA comprises of one layer each of aluminium 18 μm , glass fibre scrim 5x5 mm and polythene 25 g/m^2 . This layer serves as a vapour barrier and is an aid to marking prior to cutting and hole-drilling.

Dimension	Metric	Value	Test Method
Basic weight	g/m^2	89	DIN EN ISO 536
Tensile Strength Machine Dir.	N/m	4000	DIN EN ISO 1924
Tensile Strength Cross Dir.	N/m	4000	DIN EN ISO 1924
Elongation Machine Dir.	%	2.8	DIN EN ISO 1924
Elongation Cross Dir.	%	3.5	DIN EN ISO 1924
Burst Strength	kPa	200	DIN EN ISO 2758
Temperature Resistance	$^{\circ}\text{C}$	-5...+90	-
Corrosion	C/% R.H./24h	60C/95%	-
Water Vapour Permeability	$\text{g}/\text{m}^2/24\text{h}$	0.05	DIN EN ISO 12572
Infrared Reflectivity	%	85	-



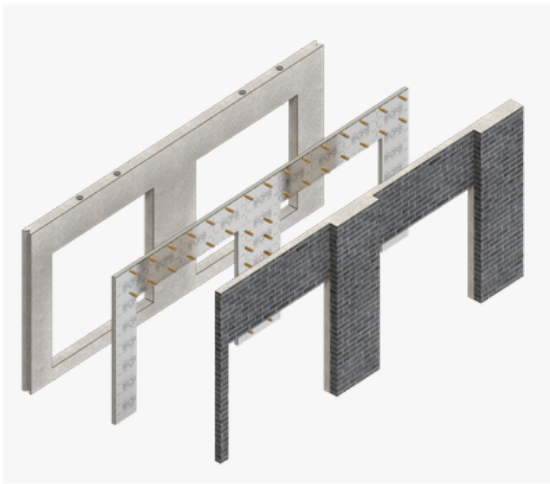
Product Details

PanelTherm

PT-2400-1200

CFS PanelTherm Insulation is a high performance cavity wall insulation. PanelTherm Insulation is easy to cut, handle and install, with a thermal conductivity value of 0.022.

Specification



Dimension	Metric	Value	Test Method	Tolerance
Thickness	mm	20-200	EN823	+/- 3mm
Width	mm	1200	EN822	+/- 3mm
Length	mm	2400	EN822	+/- 3mm
Thermal Performance	W/mk	0.022	EN15976	N/A
Dimensional Stability	Pass / Fail	Pass	EN1604	N/A
Reaction To Fire	Euroclass	F	EN13501	N/A
Loss On Ignition	%	3.8	N/A	+/-0.5%
Certification	Code	UK CA	N/A	N/A
Compressive Strength	kPA	≥ 140*	EN826	N/A

Design Notes:

- *At 10% compression.
- PanelTherm is available in the standard board size of 2400mm x 1200mm and is available in thicknesses 20-150mm.

Specification

PT-2400-1200-150 = PanelTherm 2400mm x 1200mm 150mm thick

Packing Specification

Thickness	Pieces per Pallet
20-200	12-120

Design Notes:

- The above refers to packing details for thickness between 20mm and 200mm.
- Thicknesses available in 20mm, 25mm, 30mm, 40mm, 50mm, 60mm, 70mm, 75mm, 80mm, 90mm, 100mm, 110mm, 120mm, 130mm, 140mm, 150mm, 165mm, 200mm.





Thank You

Contact us today for a quote or if you have any questions

Location	Version
CFS Unit 14-16 Westfield Estate Henley Road Medmenham SL7 2TA	1.0

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