



**CTF-IV3** is a flat or tapered CG (cellular glass), multi layer, insulation board with square edge and used in ballasted inverted roof applications to create drainage falls over any suitable waterproofing system. In accordance with ETAG 031 and CTF Insulation's Agreement Certification, the boards must be installed with CTF-FS1 (cement board) and CTF-K Shield & CTF-K Tape (WFRL). The product's robust environmental credentials, very high compressive strength and dimensional stability make this ideal for inverted roof application.

## Technical Data

### CTF-10

Reaction to fire		A1	EN 13501-1
Thermal conductivity	@ 10% <i>c</i>	0.036 W/m <sup>2</sup> K	EN 10456
Density	+/-10%	100kg/m <sup>3</sup>	EN 1602
Compressive strength	@10% deformation	500kpa	EN 826
Compressive creep		CC (1.5/1/50) 225	EN 1606
Length	600mm – 1200mm	+/-5mm	EN 823
Width	450mm - 600mm	+/- 2mm	EN 823
Thickness	30mm – 200mm	+/- -2mm	EN 8223
Vapour resistance		$\mu = \infty$	EN 10456
Hygroscopicity		Xero	

### CTF-FS1

Reaction to fire	Euroclass rating	A1	EN 13501
Thermal conductivity	6-10mm	0.244W/m <sup>2</sup> K	EN 12667
Density	@10% <i>c</i>	1300kg/m <sup>3</sup>	EN 12667
Vapour permeability		Pass	EN 12667
General board size	1200mm	600mm	EN 13165
	1200mm	2400mm	EN 13165
Board thickness	6mm-10mm		EN 13165
Heat resistance		Pass	EN 12467
Water absorption		<35%	EN 12467
Freeze / thaw resistance		Pass	EN 12467

### CTF-K Shield

Length	50m	EN 13859 & ETAG 031
Width	1500mm	EN 13859 & ETAG 031
Thickness	0.61mm	EN 13859 & ETAG 031
Water resistance	W1	EN 13859 & ETAG 031
Tear resistance	150-180N	EN 13859 & ETAG 031
Water vapour resistance	0.17Mns/g-0.034Mns/g	EN 13859 & ETAG 031
Resistance to static loading	W1@20kg	EN 13859 & ETAG 031
UV water & heat ageing	in accordance with	EN 13859 & ETAG 031
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Exposure to solutions of	NaCl, Ca(OH) <sub>2</sub> & H <sub>2</sub> SO <sub>3</sub>	EN 13859 & ETAG 031



The manufacturer reserves the right to alter these products. All data was produced under test conditions. No warranty is implied or given as to the performance of these products in any variation from test conditions.



## Features

- A1 non combustible
- CFC, HFC and HCFC free
- Ozone Depletion Potential "ODP" zero
- Global Warming potential "GWP" <5
- BRE Green Guide A (system dependant)

## Installation & Fixing

All roof dimensions, position of rainwater outlets and any obstructions must be checked against the appropriate design drawing supplied. Insulation boards should be installed over a suitable waterproofing membrane system.

The design drawing supplied should be followed to lay CTF-IV3 flat and/ or tapered boards from *setting out points* noted, generally laying towards low points unless otherwise instructed.

The boards are loose laid and covered immediately with CTF-FS1 boards, CTF-K Shield & CTF-K Tape and followed by suitable ballast. Gutters and sumps should be cut on site to suitable dimensions.

Only install areas of insulation system which can be covered with CTF-FS1, WFRL and ballast to ensure they remain dry. Insulation must be always protected from the ingress of water; night joints should be installed to prevent this. Appropriate stop battens should be installed to protect insulation boards' open edges during installation.

## Storage & Handling

CTF-IV3 boards are easy to handle. Material should be stored on pallets or skids ideally under cover internally or failing that, on a level surface, suitably covered with waterproof tarpaulin to prevent prolonged exposure to sunlight. The pallets/ skids should be secured to prevent movement or damage. The products must not be exposed to open flame or other ignition sources. Care must be taken to avoid contact with solvents and materials containing organic components.

## Protection

Adequate temporary protection must be provided above the installed insulation system especially where any of the following occur:

- Unloading materials onto roof
- Temporary walkways and access
- Storing materials on roof
- Or any other activity that can cause damage to the system

Under no circumstances should the system be used as a working platform including skips, scaffolding or other trades material storage unconnected to the roofing works.

