

# Tray Roofing Foam



## Technical Data Sheet (TDS)

### Product description

Tray Roofing Foam is a high pressure expanded closed cell polyethylene (PE) foam coated with acrylic adhesive with liner. The material (PE) has numerous applications due to its stable and firm nature. It is highly resilient and tough for its weight.

Tray Roofing Foam is supplied, black and comes in 10m rolls.

It is typically installed along the central pan of the tray roofing sheet to increase panel rigidity. This reinforcement reduces the risk of oil canning, limits thermal or mechanical distortion, and mitigates vibration-induced noise.

This foam is additionally commonly used in:

- Acoustic foam for partition walls, purlins, floors etc
- Expansion joint filler
- Windows, doors, cabinets
- Automotive parts

### Product Features

- ✓ It comes in 10m lengths, with a width of 40mm and 10mm thickness
- ✓ Adhesive liner on the back for secure connection
- ✓ Stops the Tray roofing sheet in oil canning and causing a ripple.
- ✓ Reduces noise with sheets moving

### Product Application

**Tray Roofing Foam** is typically applied going up the middle of the tray roofing sheet to stop the tray from oil canning and causing ripples. It additionally reduces noise. The adhesive backing ensures secure placement and easy installation.

The foam comes in 10m rolls making it easy to handle and store.

### Relevant Building Code Clauses

B2.2 durability- Polyethylene foam is long lasting and meets the standards in B2.

C/AS4 - In Accordance with 4.17.6.e Tray Roofing Foam is an exception to surface finish requirements as it's a seal and does not require a fire rating to meet building standards.

E2. External Moisture. E2.3.1 & E2.3.2 Tray Roofing Foam has a been tested for low water absorption 0.20% which prevents the penetration of water to cause undue dampness and damage to the building.

### Product Information

Detail	Notes	Test method
Material	High-pressure Expanded Closed Cell Polyethylene (PE) foam	
Density	60 ±6 kg/m <sup>3</sup>	GB/ T6364-1995
Thermal conductivity	≤0.055 w/m*k	GB/ T10297
Tensile Strength	≥/0.60 Mpa	GB/ T6344
Moisture resistance factor	1.2 x 10 <sup>3</sup>	GB/ T17794

### Material Properties:

**Material:** High-pressure Expanded Closed Cell Polyethylene (PE) foam

**Density:** 60+/-6 kg/m<sup>3</sup>

**Tensile Strength:** ≥/0.60 Mpa

**Elongation at Break** ≥110%

**Water Absorption:** ≤0.20%

**Operating temperature range:** -50°C to +90°C

**Colours:** Grey, black or white

### Fire performance:

**Melting point:** 240°C

**Flash point:** 250°C

**Autoignition temperature:** 427°C

**Fire rating:** UL94 HBF, GB/T 8624 B2

Updated 05/11/24



94 Mowbray Street, Waltham, Christchurch  
Ph: (03) 379-2400 Email: sales@tetral.co.nz

Coefficient	$\leq 2.4 \times 10^{-10} \text{g}/(\text{M} \cdot \text{S} \cdot \text{Pa})$	GB/ T17794
Elongation at Break	$\geq 110\%$	GB/ T6344
Water absorption	0.20%	GB/ T1034-86
Compressed Set (23 $\pm$ 2°C, 22H)	8%	GB/ T6669
Peel Strength	$\geq 9\text{n}/ 25\text{mm}$	ASTM D3330
Shear Strength	$\geq 15$ hours	ASTM D3654
Service temperature range	-50°C to +90°C	GB/T 17794

Product code	Name	Colour	Thickness	Tolerance	Width	Lenth
TBC	Tray Roofing foam Lined 10M Roll	Black	10mm	$\pm 1.0\text{mm}$	40mm	10m ( $\pm 0.5\text{m}$ )

Fire performance:

Detail	Notes
Oxygen Index	31.50%
Average burning time:	31.8 s
Average combustion range	26.4mm
Thermal degradation temperature	200°C
Melting point	240°C
Flash point	250°C
Autoignition temperature	427°C
Flame speed	<40mm/ min
Horizontal Burning distance	<125mm
Fire rating	UL94 HBF, GB/T 8624 B2

For more information on Tetral products please visit our website at [www.tetral.co.nz](http://www.tetral.co.nz)

Updated 05/12/2024



94 Mowbray Street, Waltham, Christchurch  
Ph: (03) 379-2400 Email: [sales@tetral.co.nz](mailto:sales@tetral.co.nz)



Updated 05/12/2024



94 Mowbray Street, Waltham, Christchurch  
Ph: (03) 379-2400 Email: [sales@tetral.co.nz](mailto:sales@tetral.co.nz)