

# Tetral Tape with liner

## Technical Data Sheet (TDS)



### Product description

Tetral Tape is a closed cell crosslinked polyethylene (PE) foam laminated with plastic film and acrylic adhesive. The material (PE) has numerous applications due to its stable and firm nature. It is highly resilient and tough for its weight.

Tetral Tape is supplied as a standard grey or black colour. The foam comes in 20m rolls with varying widths.

Tetral tape is widely used in the roofing industry as sealant tape. It is typically applied to ensure a watertight seal, prevent leaks and reduce noise with movement in roofing sheets. These tapes are also commonly used in:

- Floor or partition walls
- Windows, doors, cabinets
- Automotive parts
- HVAC system duct gasket, pipe insulation

### Material Properties:

**Material:** Closed cell crosslinked Polyethylene (PE) foam

**Density:** 30+-3 kg/m<sup>3</sup>

**Tensile Strength:** ≥0.20 Mpa

**Elongation at Break** ≥110%

**Water Absorption:** ≤0.0019 g/cm<sup>3</sup>

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

**Colours:** Grey or black

### Fire performance:

**Melting point:** 300°C

**Flash point:** 340°C

**Autoignition temperature:** 450-500°C

**Fire rating:** UL94 HBF

### Product Features

- ✓ It comes in 20m lengths, with widths ranging from 25mm-75mm.
- ✓ Adhesive liner on the back for secure connection
- ✓ Gap seal and weather sealant
- ✓ Reduces noise and potential abrasion with sheets moving
- ✓ Moisture, dust and draught seal

### Product Application

**Sealant Foam Tape** is typically applied to specific areas in roofing installations to ensure a watertight seal, reduce noise and prevent abrasion. Here's areas you can apply the tape:

1. **On Purlins**
  - applied between purlins and roofing sheets—metal or polycarbonate—to prevent direct contact, reducing noise, wear, and potential abrasion for both materials
2. **Seams and Joints:**
  - Apply the tape along the seams where two roofing panels meet. This includes overlaps between metal, polycarbonate, or fibreglass sheets.
3. **Ridge Caps:**
  - Place the tape under ridge caps to seal the joint between the cap and the roofing panels, preventing water ingress.
4. **End Laps:**
  - Use the tape at end laps, where one panel overlaps another, to create a tight seal and prevent moisture from penetrating through the overlap.
5. **Around Roof Penetrations:**
  - Apply the tape around roof penetrations, such as chimneys, vents, and skylights, to seal the gaps between these elements and the roofing material.
6. **Eave and Gutter Areas:**
  - Place the tape where roofing panels meet eaves or gutters to seal the junction and prevent water from seeping underneath the roof.

**Purlin tape** is a protective foam tape that is applied between metal roofing sheets and structural purlins. It serves as a crucial component in metal roofing systems to enhance performance and durability.

Updated 05/11/24



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#### Where to apply Purlin Tape:

- **Direct Contact Points:** Apply along the purlins or battens where metal roofing panels will rest.
- **Under Fasteners:** Positioned to cushion the areas around screws or bolts, reducing wear and tear.
- **Across Roof Spans:** Use continuously along the length of purlins to maintain consistent protection.

Purlin tape is a cost-effective and essential product for optimising metal roofing installations, ensuring longevity, and preventing damage from environmental factors or material interactions.

## 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 Tetral Tape 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 Tetral Tape has been tested for low water absorption 0.40% which prevents the penetration of water to cause undue dampness and damage to the building.

## Product Information

Detail	Notes	Test method
Material	Closed Cell Crosslinked Polyethylene (PE) foam coated with acrylic adhesive with liner	
Density	30 ±3 kg/m <sup>3</sup>	GB/ T6364-1995
Thermal conductivity	≤0.0327 w/m*k	GB/ T10297
Tensile Strength	≥0.20 Mpa	GB/ T6344
Moisture resistance factor	1.2 x 10 <sup>3</sup>	GB/ T17794
Coefficient	≤2.4 x 10 <sup>-10</sup> g/(M*S*Pa)	GB/ T17794
Elongation at Break	110%	GB/ T6344
Water absorption ratio in a vacuum	0.40%	GB/ T1034-86
Compressed Set (23±2°C, 22H)	10%	GB/ T6669
Peel Strength	≥9n/ 25mm	ASTM D3330
Shear Strength	≥15 hours	ASTM D3654
Service temperature range	-50°C to +90°C	GB/T 17794

Product code	Name	Colour	Thickness	Tolerance	Width	Lenth
E5PT50	PURLIN TAPE 50MM LINED 20M ROLL	Grey	5mm	±0.5	50mm	20m
E5PT75	PURLIN TAPE 75MM LINED 20M ROLL	Grey	5mm	±0.5	75mm	20m
E5FTL20B	SEALANT TAPE LINED 20M ROLL 25 X 3MM	Black	3mm	±0.3	25mm	20m

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

Fire performance:

Detail	Notes
Softening range	110-130°C
Thermal degradation temperature	200-250°C
Melting point	300°C
Flash point	≥340°C
Autoignition temperature	450-500°C
Flame speed	≤40mm/ min
Horizontal Burning distance	<125mm
Fire rating	UL94 HBF



Updated 05/10/2024



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