

TECHNICAL DATA SHEET

MULTI EXPANSION TAPE

PAS-TDS-WPF-004

Description

MULTI EXPANSION TAPE is a thermoplastic active solid tape that swells when exposed to water to prevent leak paths in concrete.

Typical Applications

MULTI EXPANSION TAPE is used for waterproofing construction joints in concrete which are exposed to permanent or temporary loads from ground water, run-off water and/or surface water.

Advantages

- Active protection – up to four-fold increase from original volume when exposed to water to caulk joints against hydrostatic pressure.
- Simple jointing – no special techniques or cyano acrylic glues required.
- Delay coating – prevents premature swelling during installation and avoids spalling of fresh concrete.
- Cost effective – easily installed into a variety of existing or new structures using adhesives or mechanical fasteners.
- Accommodates complex pours – hydrophilic strip can be bent on site, overlapped and added to suit complicated shapes and pour sequences.
- Durable – exceeds the life expectancy of most structures even under repeated wet/dry cycling. Deep penetrating into substrates.

Typical Properties

Application Temp. PU joint sealer	4°C - 45°C
Application Temp. mechanical fixings	-15°C - 4°C
Dimensions	20mm x 5mm
Density	1.25 g/cm ³
Toxicity	Nontoxic
Expansion Pressure	1.06 N/mm ²
Fire Classification DIN EN 13501-1	Class E
Water Impermeability Joint Width 0.25mm Joint Width 1.00mm	2.0 bar 1.5 bar
Swelling Capacity: Mass increase 2 Hours Mass increase 24 Hour Mass increase 8 Days	50% 305% 480%
Size Expansion: (start) 2 Hours 24 Hours 8 Days	5x20x150mm 7x23x160mm 9x34x215mm 10x40x243mm

Watch Points

- The expansion tape must be stored dry.
- Make sure that the tape lies flat and planar on the concrete, without any contamination beneath the expansion tape, including air. Before concreting protect the expansion tape visually. Very swollen expansion tapes are not suitable and must be removed. Expansion tapes are unsuitable for movement joints.

TECHNICAL DATA SHEET

MULTI EXPANSION TAPE

PAS-TDS-WPF-004

Directions for Use

Surface Preparation:

Before commencing the application, knock-off all loose materials and debris to give a surface suitable to accept the MULTI EXPANSION TAPE. The method of application will be dependent on the substrate strength, texture, smoothness, alignment, and whether a housing rebate has been formed to accept the tape. During the application of expansion tape, the substrate may be matt damp, but any sheen, or puddles on the surface need to be avoided.

Positioning:

MULTI EXPANSION TAPE is generally located at the centre of walls and slabs to avoid the reinforcement but it may be positioned on the underside of slabs which are ground bearing. The method of fixing must be capable of resisting displacement from wet concrete and poker vibrators. It is essential to make a continuous network for all the joints which are subjected to water ingress or hydrostatic pressure. MULTI EXPANSION TAPE is fastened in position using the appropriate method and jointed in the straight run by closely overlapping by 100mm. Intersections at right angles, etc. are formed by direct contact at cross over points and extending 100mm past line of joint

Pipes and Penetrations:

MULTI EXTENSION TAPE is to be bonded or fastened to pipes, stanchions, sheet piling, columns etc. to form a continuous close contact strip with 100 mm overlaps at joints. It may be necessary to remove any loose paint, rust or other coatings before bonding in place with adhesive or using tying wire to prevent displacement during pouring.

Repair:

If MULTI EXTENSION TAPE is damaged prior to concreting it can be reinstated by overlapping the area with an extra length of tape extending 100 mm each side beyond the damage and fastened in the prescribed manner.

Application:

Expansion tape is bonded with MULTI SEAL PU 1, a flexible PU adhesive, or MUTI POXY 1304 for a rigid adhesive. Completely cover the prepared substrate with the mounting adhesive and press the expansion tape into the adhesive until it oozes out from beneath. After bonding, allow 3-4 hours before beginning with concrete pour. Alternatively, expansion tape can also be fixed with steel nails (min. 5 nails per metre). Ensure that the expansion tape makes complete contact with the substrate, avoiding the formation of loops and hollows. Water stop joints can be made by overlapping by 50 mm.

Equipment Care

Store in a cool, dry place out of direct sunlight.

Packing

Supplied in 4 x 10m rolls per box

Quality Assurance

Pasiffire SD Projects (Pty) Ltd production and testing programs comply with all local and international testing standards. MULTI EXPANSION TAPE jointing system shall be fastened in position to give continuous network with 100 mm minimum overlaps and installed in accordance with the manufacturer's instructions

REVISION: 3.1