

MASTERFLEX[®] 3000

Tape for MASTERFLEX[®] sealing system for irregular and unconventional joints

Description

MASTERFLEX[®] joint sealing system consists of two products MASTERFLEX[®] 3000 and CONGRESIVE 2200 epoxy.

The MASTERFLEX[®] 3000 is a highly elastic, rot-proof and chemically resistant sealing membrane. CONGRESIVE 2200 is a two part epoxy compound which establishes a strong bond to various types of substrate.

Fields of application

Sealing of construction joints, expansion joints, connecting joints, cracks and crevices, etc. Adheres to many types of substrate such as concrete, mortar, plaster work, steel iron, aluminum, stoneware, glass and epoxy.

Typical uses are for concrete tanks, cast and cement-pipe connections, bridge decks, tunnels, water towers and reservoirs, ponds, silos, containers, secondary tanks. MASTERFLEX[®] 3000 can be applied on dry or slightly humid substrates. It is ideal for joints with very large expansion or irregular, broken joint flanks. MASTERFLEX[®] 3000, is Grey coloured, weather and waterproof.

Benefits

- Durable
- Long lasting elasticity, even at high temperatures
- Root resistant
- Resistant to a wide range of chemicals
- Cost effective
- Approved for use with potable water
- Easy to apply
- User friendly heat welding of tape overlaps
- Can be applied horizontally, vertically and even overhead.

Application

Surface preparation:

Contact surfaces must be clean and free from dust, grease, water, oil, and other contaminants impairing adhesion. Concrete should be at least 4 weeks old. In order to provide maximum adhesion, concrete surfaces should be mechanically abraded.

Application:

Mix CONGRESIVE 2200 adhesive thoroughly, following the guidelines of the manufacturer. Apply the well-mixed CONGRESIVE 2200 on both sides along the joint or crack on the prepared substrate, preferably with a notched trowel or spatula. Layer thickness should be about 1-2 mm. When sealing cracks, or narrow joints the MASTERFLEX[®] 3000 should not be bonded along the centre line of the tape. A minimum unbonded width of 20mm is recommended to allow for expansion and contraction.

Wipe the edges of the tape with SOLVENT NO. 2, then place the clean and well-aired tape immediately into the adhesive layer and press well in with a roller. For very wide joints draw the tape suitably into the joint so that a hollow is formed. Holes punched at the edges provide added anchorage.

By warming up the membrane, it can be stretched over slight irregularities of the substrate. The same method can be used in case of corners, cavities, pipe crossing.

If individual tapes have to be connected into longer pieces (also T-pieces, etc.) they can easily be welded using a hot air blower.

In case of negative water pressure (more than 0.3 bar) back up the membrane with an adequate support, e.g. steel sheet, etc., in particular if joints are subject to large movement.

MASTERFLEX[®] 3000

***Typical properties**

Shore-Hardness A (ISO 868)	ca. 80
Tensile strength (DIN 53504 S2)	> 6 N/mm ²
Elongation at break (DIN 53504 S2)	ca. 600%
Resistance to further cracking (DIN 53363)	ca.600N/cm
Accelerated weathering (SIA 280/3) -50°C	no cracks
Compatibility with bitumen	compatible
UV resistance (SIA 280-10)	No tears
Resistance to micro-organisms (SIA 280-17)	Resistant
Water absorption (internal H&S method)	Very low absorption
Heat ageing (SIA 280-8)	5% for 1mm thickness 3% for 2mm thickness
Ozone resistance (SIA 280-7)	Level 0 for 1 & 2mm thickness

Supply form

MASTERFLEX[®] 3000 dimensions:

Thickness: 1 mm	Thickness: 2 mm
Width 100 mm and 150 mm	Width 150 mm

Storage

In rolls of 20m length (all sizes)
Store MASTERFLEX[®] 3000 well protected against sunlight at ambient temperature in dry conditions.

Typical applications

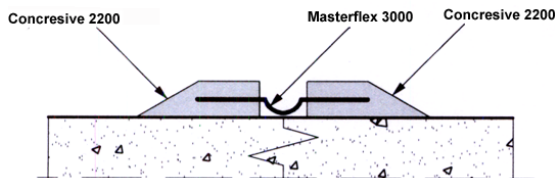


Fig 1. Sealing of cold joints

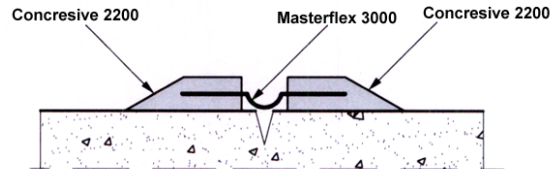


Fig 2. Sealing of cracks

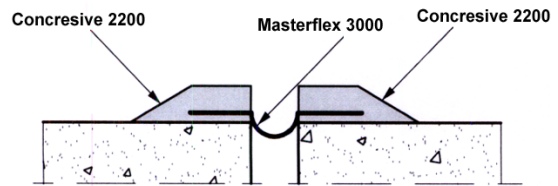


Fig 3. Sealing of expansion joints

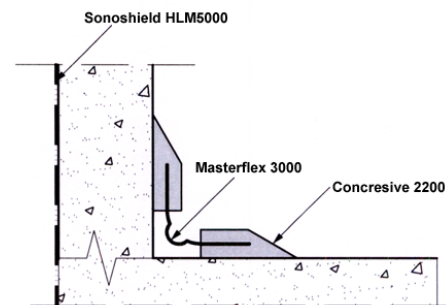


Fig 5. Sealing of a 90° construction joint

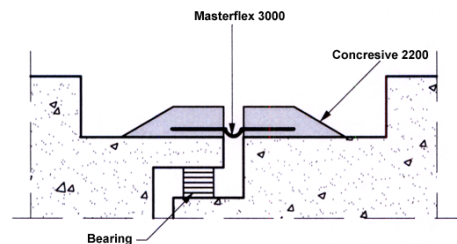


Fig 6. Waterproofing of specific joints

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* Properties listed are based on laboratory controlled tests.

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