



The Chemical Company

Masterflex[®] 3000

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

Description

Masterflex[®] joint sealing system consists of two products: Masterflex[®]3000 and Concrecive[®]2200 epoxy. Masterflex[®]3000 is a highly elastic, rot proof and chemically resistant sealing membrane. Concrecive[®]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, castings 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 expansions or irregular, broken joint flanks. Masterflex[®]3000, is Grey in colour, and is weather and waterproof.

Benefits

- Durable
- Long lasting elasticity, even at low temperatures
- Root resistant
- Resistant to a wide range of chemicals
- Cost effective
- Approved for use with potable water
- Easy to apply
- User friendly in 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 Concrecive[®]2200 adhesive thoroughly, following the manufacturer guidelines. Apply the well-mixed Concrecive[®]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.

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.

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 and pipe crossings.

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

Masterflex[®] 3000

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

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

* Properties listed are only for guidance and are not a guarantee of performance.

Standards

WRAS Approval - "Suitable for use in direct contact with Potable Water". BS 6920 : 2000

Supply form

Masterflex[®]3000 dimensions:

Thickness: 1 mm

Width 100 mm

150 mm

Thickness: 2 mm

Width 150 mm

In rolls of 20m length (all sizes)

Storage

Store under cover, out of direct sunlight and protected from extreme temperature variances.

Typical applications

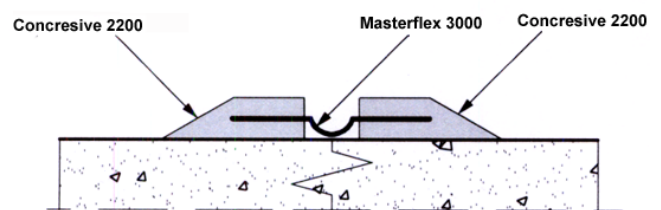


Fig 1. Sealing of cold joints

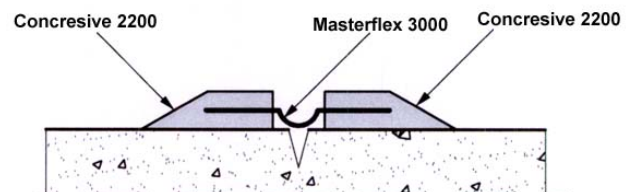


Fig 2. Sealing of cracks

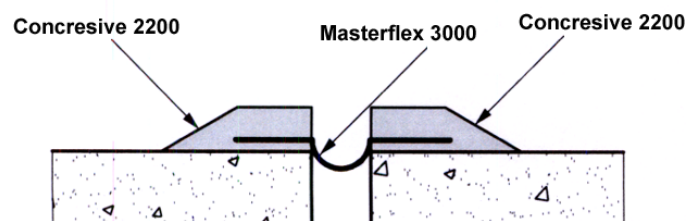


Fig 3. Sealing of expansion joints roofing of specific joints

Masterflex[®] 3000

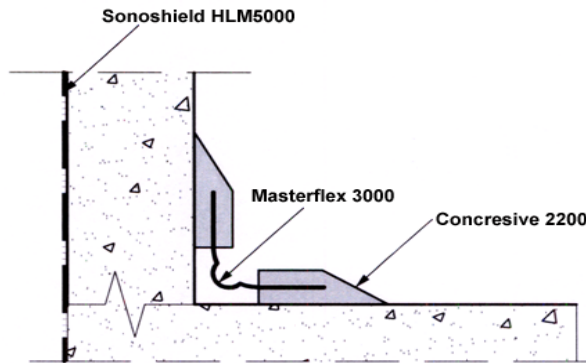


Fig 4. Sealing of a 90° construction joint

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.

Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product is fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

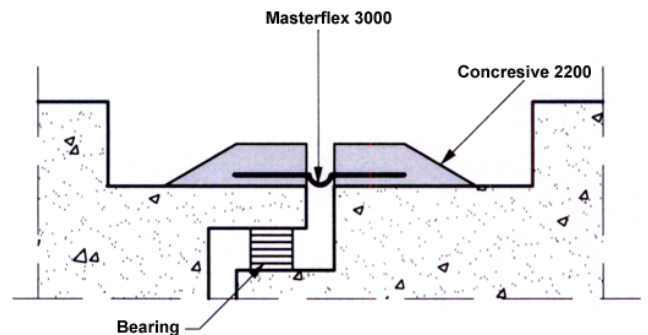


Fig 5. Waterproofing of specific joints

Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA. reserves the right to have the true cause of any difficulty determined by accepted test methods

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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