Product name

Diamond Seal T80

Manufacturer

Produced in Philippines by
Diamond Dry Mortars Inc.

Product description / General Purpose

Diamond Seal T80 is a two-component cementitious polymer modified waterproofing. Diamond Seal T80 creates a semi flexible membrane that will prevent water penetration in concrete, mortar and other rigid mineral substrates.

Features:
- Easy to apply with brush or trowel
- Easy to mix with electric stirrer
- No water required
- Very good adhesion
- Protects against water penetration
- Protect against carbonation
- Non-corrosive to steel
- Paintable

Uses:
- Interior and exterior waterproofing
- Sealing fine hairline cracks in concrete and mortar.
- Pore- and concrete honeycomb filling
- Waterproofing of basements and cellars
- Waterproofing of swimming pools
- Waterproofing of bathrooms, balconies and terraces.

Product data	
Colour	Part A: Off-white powder Part B: White liquid Mixed product: Off-white slurry
Thickness per coat	Minimum 1-1.5 mm. Minimum 2 coats required; 3 coats recommended if higher water pressure is expected.
Yield	2.0 kg/m^2/mm thickness Approximately 20m^2 of waterproofing in 2 mm thickness per 80 kg set of Diamond Seal T80.
Mixing ratio:	Mix 3 parts (in kg) of powder (part A) to 1 part (in kg) of liquid (part B). If a stiffer mix is required to be applied with towel approximately 10% less liquid should be used.
Pot life (working time)	30 mins
Waiting time between coats	3-6 hours depending on temperature
Shelf life	12 month if product is stored in dry conditions
Packing	24 kg part A (powder) + 8 liters pail part B

Limitations
- Never mix with cement, aggregates, water or admixtures.
- Only install over rigid, mineral substrates.

Surface preparation
- Ensure the substrate is sound, clean and free from any dust, loose particles and contamination like oil, grease including form-oil compounds
- Very smooth surfaces such as power troweled concrete should be mechanically abraded, or acid etched before application.
- Deeply contaminated substrates must be abraded to a clean sound surface.
- If the quality and strength of the concrete substrate is not good, it should be primed with Diamond Acrylic Primer.
- If not priming, it is recommended to pre-vetting the surface.

Surface priming
- Priming the surface with Diamond Acrylic Primer prior to application of Diamond Seal T80 will improve adhesion.

Mixing instructions
- Shake the liquid (Part B) before using it. Pour Part B into a clean mixing bucket. Add half of the powder (Part A) into the bucket while mixing with an electric stirrer. Add the rest of Part A and mix until a uniform lump free consistency has been achieved. If a bit stiffer mix is required: hold back a bit of Part B.
- Mix for minimum 3 minutes.

Physical data	Typical test result
Bonding strength - 7 days - 28 days	 Minimum 0.7 N/mm^2 Minimum 0.8 N/mm^2
Compressive Strength (EN 196-1) 7 days 28 days	 Minimum 15 N/mm^2 Minimum 20 N/mm^2
Mortar density	2 kg/liter

Application
- Apply Diamond Seal T80 using a stiff brush.
- Apply the 1'st coat with brush strokes in the same direction. Make sure all small holes and cracks will be filled up.
- Apply the 2'nd coat in a crosswise direction to the 1'st coat to ensure 100% coverage. The 2'nd coat can be applied as soon as the first coat has hardened to a touch dry surface.

Product Safety
Please refer to Diamond Material Safety Data Sheet.
The product is a cement-based product and may cause skin irritation. Avoid contact with skin by wearing suitable clothing and gloves. In the event of contact with skin, wash with clean water to minimize possible irritation. If any material gets into the eyes, wash immediately and repeatedly with eyewash or clean water. If the irritation persist, seek medical treatment.
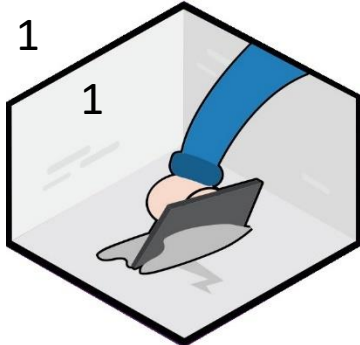
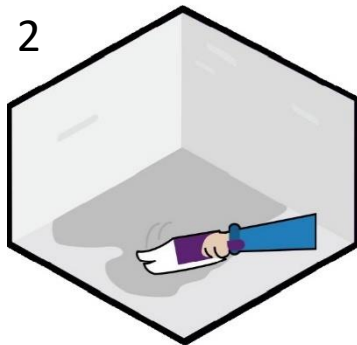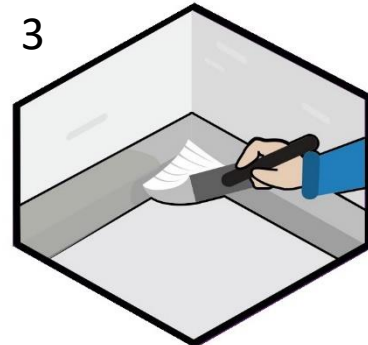## Fire resistance
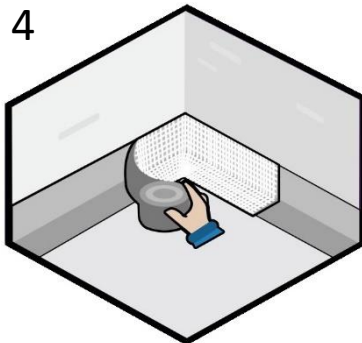The product is non-combustible.

Order of application

1

The substrate should be concrete or cement based floor screed. Holes, cracks and weak parts should be repaired with cement based mortar before water proofing.
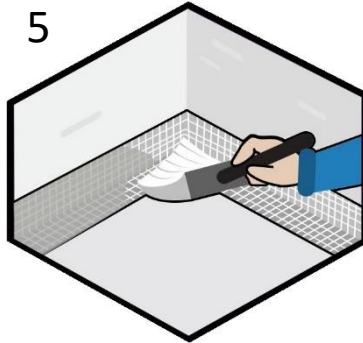
2

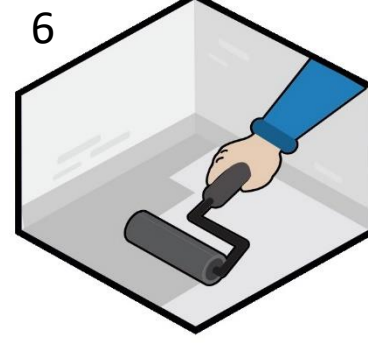Dry and absorbent substrate should be pre-wet with water or treated with **Diamond Acrylic Primer.**

3

All corners and joints are brushed with one layer **of Diamond Seal T80** at minimum 50 mm on each side of the corner.
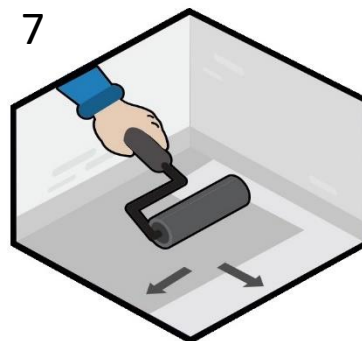
4

Mesh is fitted into the first layer of **Dimond Seal T80**, 50mm on both sides of the corner or joint.
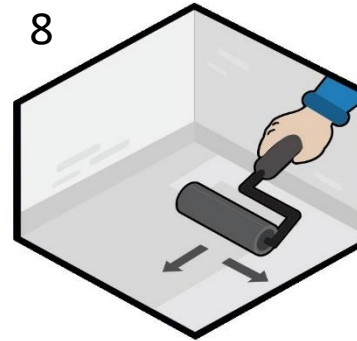
5

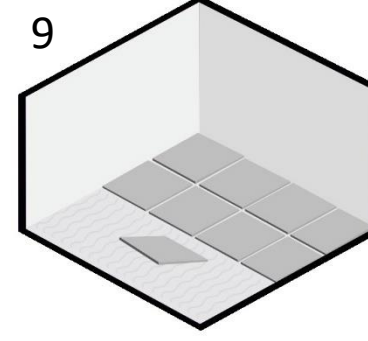On top of the mesh, brush one more layer of **Diamond Seal T80.**

6

The whole area should be coated with **Diamond Seal T80**. Application with roller or brush. Thickness 1 to 2 mm.

7

When first layer is touch-dry the second layer of **Diamond Seal T80** is applied. It is important that the second layer is applied perpendicular to the first layer.

8

In areas subject to increased water pressure such as swimming pools and water tanks it is recommended to apply a third layer of **Diamond Seal T80**.

9

2 days after application the surface is ready for tiling, rendering or application of screed. **Diamond Seal T80** is not recommended as the final top coat.