

# TECNORASO CT 10

Single Component, Polymer Modified Cementitious Pinhole Filler



Tecnoraso CT 10 is supplied as a ready to use blend of dry powders which requires only the site addition of clean water to produce a highly consistent cementitious mortar.

Tecnoraso CT 10 exhibits excellent thermal compatibility with concrete, and is fully compatible with other Repair mortars and protective coatings.



## Uses

Tecnoraso CT 10 is designed for application to minor imperfections in concrete and masonry surfaces. It is suitable for application in the range 0 to 3 mm, and can be used in the following situations:

- Filling pinholes prior to over-coating
- General re-profiling over large areas, up to 3 mm depth

## Benefits

- **Cost Effective-** No independent primer necessary
- **Time Saving-** Curing not necessary
- **High Performance-** Excellent bond to the substrate

## Specification

The filler for minor surface imperfections (up to 3 mm depth) shall be Tecnoraso CT 10 a single component, polymer modified, cementitious mortar. The material shall be capable of use without the need for an independent primer or curing system.

## Technical Support

Thermax offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer onsite technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

## Standards Compliance

Tecnoraso CT 10 has been approved by the British Board of Agreement, under Certificate No. 98/3461.

## Design Criteria

Tecnoraso CT 10 is designed for vertical and overhead use filling voids up to a depth of 3 mm. It can also be used to render over large areas, from a feather-edge up to 3 mm thickness.

## Properties

The following results were obtained at a liquid:powder ratio of 0.3:1 by weight or 1:3 by volume.

Test Method	Typical Result	
	@ 20°C	@ 35°C
Coefficient of Thermal Expansion	7 to 12 x 10 <sup>-6</sup> / °C	
Working Life (Approx.)	45 mins	20 mins
Setting Time (BS 5075)	60 mins	30 mins
Mix Density	2.0-2.14 gm/cc	
Compressive Strength @ 28 days	30 N/mm <sup>2</sup>	
Flexural Strength @ 28 days	>7 N/mm <sup>2</sup>	
Adhesion Bond Strength @ 28 days	> 1N/mm <sup>2</sup>	
Modulus of Elasticity @ 28 days	15-18 kN/mm <sup>2</sup>	

**Note:** Working life and setting time will vary dependent on ambient and substrate temperatures.

## Instructions for Use

### Preparation

Clean the surface and remove any dust, unsound material, plaster, oil, paint, grease, corrosion deposits or algae. Roughen the surface to remove any laitence and expose the fine aggregate by light scabbling or grit-blasting.

Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should then be assessed by a pull-off test.

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Thermax repair mortars require no additional preparation prior to the application of Tecnoraso CT 10.

The cleaned areas should be blown clean with oil-free compressed air before continuing. All prepared areas should be thoroughly soaked with clean water immediately prior to the application of Tecnoraso CT 10. Any residual surface water should be removed prior to commencement.

## Mixing- Small Quantities

Care should be taken to ensure that Tecnoraso CT 10 is thoroughly mixed. Small quantities (up to 5 kg) can be mixed using a suitable mixing drum or bucket. Greater quantities should be mixed using a forced-action mixer. Mixing in a suitably sized drum using an approved spiral paddle attached to an approved slow speed (400/500 rpm) heavy-duty drill is an acceptable alternative.

If mixing small quantities by hand, Tecnoraso CT 10 should be volume-batched. Add 3 volumes of the Tecnoraso CT 10 powder (loose-filled to excess and struck off level with the top of the measuring container) to one volume of potable water. This should be mixed vigorously until fully homogeneous.

## Mixing- Large Volumes

For larger volumes, place 9 litres of cool, potable water in to the mixer and, with the machine in operation, add one full 30kg bag of Tecnoraso CT 10 and mix continuously for 3 to 5 minutes until fully homogeneous.

Water addition may vary slightly according to both the ambient temperature and the desired consistency of the mix, but it should not exceed 9 litres.

**Note:** In all cases Tecnoraso CT 10 powder must be added to the water.

## Application

Apply the mixed Tecnoraso CT 10 to the prepared substrate, up to 3 mm thickness, by steel trowel. It should be applied with minimum of working and be allowed to partly set before finally trowelling to a smooth finish.

If a very smooth finish is required, a small amount of water may be flicked on to the surface of the Tecnoraso CT 10 with a paint brush prior to final trowelling.

Do not proceed with the application when rainfall is imminent unless in a sheltered or protected situation.

## Finishing

Tecnoraso CT 10 is finished by striking off with a straight edge and closing with a steel or plastic float. Note that water can be drawn to the surface if 'overworking' with the float occurs, and an unsightly finish may result.

Damp sponges or plastic floats may be used to achieve a desired surface texture, but care should again be taken not to overwork the surface.

## Curing

Curing is not generally required. However, under extreme conditions - high temperatures and drying winds - it may be prudent to use TM Bond AR as a curing agent.

TM Bond AR does not require mechanical removal prior to overcoating.

## Cleaning

Tecnoraso CT 10 should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can only be removed by mechanical means.

## Over Coating with Protective / Decorative Finishes

Tecnoraso CT 10 may be over coated with a protective / decorative coating after about 48 hours, dependent on ambient conditions. Thermax recommend the use of the T-Guard range of protective, anti-carbonation coatings. These products provide a decorative and uniform appearance as well as protecting parts of the structure which have not been repaired and might otherwise be at risk from the environment.

## Limitations

- Tecnoraso CT 10 should not be used when the temperature is below 5°C and falling.
- Do not proceed with the application when rainfall is imminent unless in a sheltered or protected situation.
- The product should not be exposed to moving water during application or prior to initial set.

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- If any doubts arise concerning temperature or substrate conditions, consult the local Thermax office.

## High Temperature Working

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

- Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
- Keep equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.
- Try to avoid application during the hottest times of the day, and in direct sunlight.
- Make sufficient material, plant and labour available to ensure that application is a continuous process.

## Storage

### Shelf Life

All products have a shelf life of 12 months if kept in a dry store in the original, unopened bags or packs @ 25°C.

### Storage Conditions

Store in dry conditions in the original, unopened bags or packs. If stored at high temperatures and/or high humidity conditions the shelf life may be considerably reduced to 4 to 6 months.

### Packing

Tecnoraso CT 10: 30 kg bags  
TM-Bond SBR: 25 and 200 litre drums  
TM Bond AR: 1 and 5 litre packs

### Coverage and Yield

Tecnoraso CT 10: 5 kg/m<sup>2</sup> at 3 mm thick  
TM Bond AR: 6 to 8 m<sup>2</sup> per litre

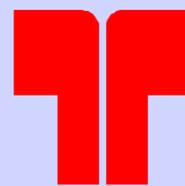
**Note:** Actual coverage of Tecnoraso CT 10 will be wholly dependent upon the general substrate condition. It is recommended, therefore, that site trials over a typical area are carried out to determine actual usage.

## Other Segments:

- Concrete Admixtures • Surface Treatments • Grouts & Anchors • Repair & Rehabilitation
- Protective Coatings • Industrial Flooring • Waterproofing • Sealants • Adhesives

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## THERMAX

Thermax Limited  
Environment House, Plot No.90-92  
BG Block, MIDC, Bhosari,  
Pune 411 026, India.  
Tel: +91-20-67156000  
Fax: +91-20-27120206  
Customer Care: 18002090115 (India  
toll free)  
Email : [enquiry@thermaxglobal.com](mailto:enquiry@thermaxglobal.com)

Ahmedabad

Tel: +91-79-26575408 • Fax: +91-79-65577270

Bengaluru

Tel: +91-80-22371721 • Fax: +91-80-22371726

Chennai

Tel: +91-44-24303400 • Fax: +91-44-24353841

Delhi

Tel: +91-11-46087200 • Fax: +91-11-26145311

Hyderabad

Tel: +91-40-23253700 • Fax: +91-40-23253799

Kolkata

Tel: +91-33-66070800 • Fax: +91-33-66070999

Mumbai

Tel: +91-22-67542222 • Fax: +91-22-22040859

Thermax World-wide

UK, USA, UAE, Germany, Belgium, Denmark,  
Russia, Saudi Arabia, Thailand, Malaysia,  
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