

PRODUCT DESCRIPTION

Stonset TG4 is a four component, fast-setting, epoxy based grout that is used for permanent horizontal repairs to concrete floors and structural surfaces. Stonset TG4 exhibits exceptional strength and good chemical resistance.

USES, APPLICATIONS

Stonset TG4 may be used for repairing deep holes, ruts and erosions in concrete floors and for changing the pitch of floors in preparation for coating and overlayment in areas requiring grout in thicknesses of 2.5 cm or greater. Some typical applications for this rapid hardening, epoxy based grout are:

- Production floors
- Workshops
- Loading docks and ramps.

PRODUCT ADVANTAGES

- Excellent mechanical strength
- Minimal shrinkage
- Good chemical resistance
- Rapid hardening
- Easily installed to clean, sound substrate
- Factory proportioned packaging ensures consistent, high-quality and simplified mixing
- Easy to use, fast-setting, labour saving system
- Economical in areas where grout is required in thicknesses of 2.5 cm or greater.

PACKAGING

Stonset TG4 is supplied in units for easy handling. Each unit consists of:

- 1 carton of Stonset TG5 containing:
 - 6 foil bags of Part A (curing agent)
 - 6 poly bags of Part B (resin)

- 6 individual bags of Stonset TG5 Part C (aggregate)
- 2 individual bags of Stonset TG4 Part D (pea gravel)

COVERAGE

Approximately 0.078 m³ per unit.

STORAGE CONDITIONS

Store all components of Stonset TG4 at or above 16°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

SUBSTRATE PREPERATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e. abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG10) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

PHYSICAL CHARACTERISTICS

Compressive Strength (ASTM C-579)	27 N/mm2 after 7 days
Tensile Strength (ASTMC-307)	5 N/mm2 after 7 days
Flexural Strength (ASTM C-580)	9 N/mm2 after 7 days
Hardness (ASTM D-2240, Shore D)	86 to 88
Flexural Modulus of Elasticity (ASTM C-580)	5.8 kn/mm2
Density	1.76 kg/m3
Pot Life (@ 24°C)	30 minutes
Initial Set (ASTM C-308 @24°C)	2 to 3 hours

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual grout system, including binder and filler, were used as test specimens

PRIMING

Stonset TG4 must be used in conjunction with Standard Primer in all applications. The prepared substrate should be primed prior to application of Stonset TG4. Also, after initial set of the grout, the top surface must be primed with Stonset Primer before the application of a Stonhard overlayment

MIXING

Note: Do not start mixing until the substrate is properly prepared and dry, with the temperature of both the Stonset TG4 and the substrate at least 16°C.

- 1 Empty the contents of 3 Part B bags (resin) and 3 Part A bags (curing agent) into a clean mixing pail. Using a drill and Jiffy Mixer, mix the liquids thoroughly for one minute.
- 2 Empty the liquids into a rotating blade mortar mixer or other bulk mixer of suitable size to handle at least 0.04 cm³ of material. Add one bag of Part D (pea gravel) and mix for a minimum of 30 seconds.
- 3 Add 3 bags of Part C (aggregate) to the mixer and mix for at least one minute or until a homogenous mixture is obtained.

POT LIFE

Stonset TG4 has a working time of 30 minutes at 24°C.

APPLYING

The mixed Stonset TG4 must be placed before the Standard primer has cured. Spread and compact Stonset TG4 with a steel finishing trowel to a thickness of 2.5 cm or more. Stonset TG4 must be well compacted prior to finishing the surface. Deep areas must be placed and compacted in 5 cm lifts.

When filling holes and ruts, use the surrounding floor level as a guide for the trowel. For larger areas or changing floor levels, use screeds and a straight-edge with a 1.22 m level to obtain the desired thickness.

CURING

The initial set time for Stonset TG4 is 2 to 3 hours. Overlayment may begin at this time. Ultimate physical characteristics will be achieved in 7 days. The curing time may vary depending upon ambient and surface conditions.

RECOMMENDATIONS

- Minimum ambient and surface temperatures are 16°C at the time of application.
- Apply only on clean, sound, properly prepared substrate.
- Material must be mixed to a uniform consistency. Do not mix over 3 minutes.
- Application and curing times are dependent upon ambient and surface conditions.
- Clean tools immediately with either scouring pads or mineral spirits. Hardened material will require mechanical removal.

PRECAUTIONS


- Both liquid Parts A and B are skin and eye irritants, avoid contact.
- The use of safety glasses and impervious gloves is required during application.
- In case of contact, flush the area with copious amounts of water for 15 minutes and seek medical attention. Wash skin with soap and water.
- Use only with adequate ventilation.

NOTES

- Material Safety Data Sheets for Stonset TG4 are available on line at www.stoncor-europe.com under Tech Info or upon request.
- For environments not referenced in the Chemical Resistance Guide, consult Stonhard's Technical Service Department for recommendations.
- A staff of technical service engineers is available to assist with application, or to answer questions related to Stonhard products.
- Requests for technical literature or service can be made through local sales representatives and offices, or corporate offices located worldwide.

CE MARKING

The harmonized European Standard EN 13813 "Screed material and floor screeds - Screed materials - Properties and requirements" specifies the requirements for screed materials for use in floor construction internally. Resinous flooring systems as well as resinous screeds fall under this specification they have to be CE-labelled as per Annex ZA., Table ZA.1.5 and 3.3 and fulfil the requirements of the given mandate of the Construction Products Regulation no. 305/2011

	
StonCor Europe Rue du Travail 9 1400 Nivelles, Belgium	
I3	
DOP-2013.11.001	
EN 13813 SR-C25-F9-B2.0	
Synthetic resin screed material for use internally in buildings (system as per Product Data Sheet)	
Release of corrosive substances:	SR
Compressive strength:	C25
Flexural strength:	F9
Adhesion strength by pull-off test:	> B2.0
Chemical resistance:	CRG ¹
1 CRG: see Stonhard Chemical Resistance Guide	

IMPORTANT:

Stonhard believes the information contained here to be true and accurate as of the date of publication. Stonhard makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice.

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STONHARD[®]
www.stoncor-europe.com

European Offices:					
Belgium	+32 674 93 710	Spain/Portugal	+351 707 200 088	Germany	+49 240 541 740
France	+33 160 064 419	United Kindom	+44 125 63 36 600	The Netherlands	+31 165 585 200
Poland	+48 422 112 768	East Europe	+48 422 112 768	Italy	+39 022 53 751