

**TECHGRIP<sup>™</sup> C2****MULTI-SUBSTRATE PRIMER****DESCRIPTION**

TECHGRIP C2 is a water-based epoxy dispersion primer for adhering TECHTHANE<sup>®</sup> spray linings to concrete, metal, wood, and other rigid substrates. C2 provides adhesion of the TECHTHANE elastomer to the substrate, as well as a chemical and permeation-resistant barrier between the two materials. In application, C2 is user-friendly with a long pot life, no exotherm, no induction period, and a fast dry time on the substrate. C2 also has a long primer recoat window and a long TECHTHANE lining application window.

**SUMMARY INFORMATION**

## PROPERTY

Application Environment	40-120°F (4-50°C), 0-100% RH
Application Equipment	spray / roller
Mix Ratio	1:1 by volume
Pot Life	4 hours @ 75°F (24°C)
Coverage	100-400 ft. <sup>2</sup> /gal. @ 2-8 mils (9.0-37.0m <sup>2</sup> @ 0.05-0.20mm)
Thickness Per Coat, recommended	2-8 mils (0.05-0.20 mm) wet
Coats Recommended	Concrete: 2+ Metal: 1-2
Dry Time	4 hours @ 75°F (24°C)
TECHTHANE <sup>®</sup> Application Window, optimum	4-24 hours @ 75-100°F (24-38°C)
Colors Available	White, custom
Thinning	Water - optional

**PROPERTIES OF LIQUID PRIMER**

PROPERTY	PART 'A'	PART 'B'	MIXED (A+B)
Solids, %, by volume	53	46	50
Flash Point, TCC, °F (°C)	> 220 (104)	> 220 (104)	> 220 (104)
Viscosity, Brookfield, cps/mPs @ 75°F (24°C)	1,000	3,000	1,500
VOC, lbs./gal. (g/L)	0.62 (74)	0.06 (7)	0.40 (48)

**COVERAGE**

Theoretical coverage is approximately 800 ft.<sup>2</sup> (78.0m<sup>2</sup>) per mil (0.025mm) of thickness (20m<sup>2</sup>/μm/L). Actual coverage varies depending on the substrate type, thickness applied, and application conditions. On concrete, typical thicknesses range from 4-8 mils (0.10-0.20mm), and on smooth, sandblasted metal, typical thickness is 2 mils (0.05 mm).

**APPLICATION****Equipment**

TECHGRIP C2 is applied by brush, roller, or spray, or a combination of these (such as spraying then rolling). Brushes or rollers should have a coarse nap for concrete surfaces and a short nap for metal surfaces, and capable of applying an even coat of primer to the desired surface. New brushes or rollers should be used for each new priming job and spray equipment must be thoroughly clean.

**Surface Preparation**

TECHGRIP C2 must only be applied to clean, properly prepared surfaces as follows:

**CONCRETE:** New concrete must be at least 28 days old. Old concrete must be first high-pressure detergent washed and rinsed to remove all traces of dirt, oils, salts, and other contaminants prior to blasting. Water blast to remove skim layer, loose concrete, dirt, release agents, etc., to provide a sound surface with an even, rough texture similar to that of medium grit sandpaper. Allow to dry. Fill large holes with TECHGRIP C1 and large cracks with TECHTHANE T150 caulk or equivalent.

METAL: Detergent wash to remove entrained contaminants. Gritblast to SSPC-SP-10 / NACE 2 / Sa 2.5 "Near White Metal Blast" or greater. Use only a sharp grit such as fractured slag or silica. Clean away grit and dust.

Note: Gritblasting of metal should not be performed when the relative humidity is greater than 85% or when the temperature of the metal surface is less than 5°F (2.8°C) above the dew point.

## Mixing Components

Re-mix each component before mixing together (this is less important if the entire container is to be used at one time). Mix together in a 1:1 ratio A:B by volume, and blend thoroughly with a drill mixer. Ensure a good mix by blending longer than appears necessary.

## Thinning

TECHGRIP C2 typically requires no thinning and is usable as supplied. If necessary, add water to desired consistency.

## Pot Life

The pot life of TECHGRIP C2 is approximately four (4) hours after mixing. *Although C2 will remain liquid after 4 hours, it will not function properly at this point and must be replaced with freshly-mixed material.* C2 has no exotherm, so any quantity can be mixed at one time. C2 has no induction period, so it can be used immediately after mixing.

## Application

Apply to all surfaces that will be topcoated with TECHTHANE.

CONCRETE: For most thorough coverage and penetration of pinholes, application by spray followed by rolling is recommended. Work C2 well into the surface & apply multiple passes and/or coats.

GENERAL/METAL: Apply coats in an even, overlapping manner, thoroughly wetting out the surface, but avoiding puddles, runs, and drips. Apply a maximum of 8 wet mils (0.20 mm) per coat.

Let coats cure at least 4 hours at 70-90°F (21-32°C) prior to applying any additional coats or topcoating with TECHTHANE.

## OUTGASSING OF CONCRETE SUBSTRATES

A common problem with applying linings to concrete surfaces is blowholes and blisters caused by entrained air exiting the porous substrate. If outgassing is a problem, its effects can be minimized in the following manners: 1) Apply TECHGRIP C2 and the TECHTHANE lining when the temperature of the concrete is dropping (This may be many hours after the ambient temperature begins dropping.) 2) Apply at least two primer coats, working each well into the surface. Spray, roll, and re-roll each coat. 3) Wet the surface with water prior to each primer coat, making a 'whitewash' effect when the primer is applied. Follow with additional coat(s) 4) Topcoat with linings that set quickly, faster than bubbles or holes can form.

*Test lining a primed area prior to full-scale lining is highly recommended to gauge the likelihood of outgassing potential.*

## DRYING TIME / APPLICATION WINDOW

The time required for TECHGRIP C2 to cure is dependent primarily upon ambient and substrate temperature. Note that concrete temperature can vary significantly from ambient temperature. The following are typical cure times based on equal ambient and substrate temperature and 50% relative humidity:

CURE	50°F (10°C)	75°F (24°C)	100°F (38°C)
tack-free	5 hours	3 hours	2 hours
walk-on	8 hours	4 hours	3 hours
C2 recoat minimum	8 hours	4 hours	3 hours
C2 recoat maximum	10 days	7 days	5 days
TECHTHANE app. min.	8 hours	4 hours	3 hours
TECHTHANE app. max.	48 hours	36 hours	24 hours

## AVAILABILITY

TECHGRIP C2 is available in 2 gal. (7.6L), 10 gal. (37.8L), and 100 gal (378L) units, in white or gray. Custom colors are available.

## SHELF LIFE / STORAGE

Under proper storage conditions, TECHGRIP C2 is good for 1 year. Containers should be kept tightly sealed and stored in a cool area protected from direct sunlight and temperature extremes. Optimum storage temperature is 50-75°F (10-25°C). Exposure to temperatures below 32°F (0°C) will result in severely degraded product quality. Containers that have been opened should be resealed quickly to prevent evaporation.

## CLEAN UP

Due to the fast drying and high solvent resistance of TECHGRIP C2, clean equipment *immediately* after use. Wet C2 can be cleaned with soap and water. Tacky-firm C2 must be cleaned with solvent. Cured C2 requires physical abrasion to remove, with soaking in household vinegar helpful.

## SAFETY

Avoid contact of TECHGRIP C2 components with skin and clothing. If contact occurs, wash thoroughly with soap and water. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. If swallowed, do not induce vomiting, call a physician immediately.

*Refer to the Material Safety Data Sheet (MSDS) for further information prior to use of this material.*

## FOR INDUSTRIAL USE ONLY

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