

TAKTL® Facade and Wall Elements are manufactured with Architectural Ultra High Performance Concrete. TAKTL is over four times as strong as traditional precast concrete and performs exceptionally well in harsh conditions that cause most concrete to crack and degrade over time. TAKTL cast elements have an intrinsic finish that weathers to a natural patina. In order to regulate the flow of moisture between the material surface and the environment, MicroSeal/T™, a hydrophobic, breathable finish, is applied to all panels before shipment. MicroSeal/T is invisible and does not affect the rich, natural appearance of the panel.

MicroSeal/T sealer provides a baseline level of non-sacrificial graffiti protection. For some colors and textures, or for applications where a higher level of protection is required, the coating protocol may need to be adjusted in order to achieve the desired anti-graffiti performance.

MicroSeal/T features:

- Non sacrificial properties
- Zero VOC
- Breathable
- Invisible, does not change surface appearance
- Excellent UV stability
- Resistance to alkali attack
- Tack-free after drying
- No blushing, peeling, or yellowing



#### MicroSeal/T™ PRODUCT DATA

Solvent	Water
Appearance	Yellowish to orange slightly cloudy liquid
VOC (less exempt solvents)	0 g/L
Flash Point	None
Density	8.2 lb/gal

#### MicroSeal/T™ PERFORMANCE DATA

STANDARD	PROPERTY	RESULT
ASTM 6578	Graffiti Resistance	Clean ability Level of 3 after 25 cycles
ASTM 653	Accelerated Weathering	No change in resistance after 2,000 hours
ASTM D6490	Breathability	>90% Breathable

**Cleaning** To clean and maintain TAKTL panels, use only water and mild detergent. For best results:

1. Do not use harsh cleaners, solvents or abrasives; they might alter the appearance of the panels.
2. Use only a mild detergent with water and a soft scrub brush (if required).
3. Rinse the detergent off completely with clean water, brushing lightly with a soft plastic brush to ensure complete removal.
4. Power washing is an acceptable means of cleaning. Use a wide nozzle at a minimum of 5 feet from the surface of the panel. Close range and small (concentrated) nozzle size will damage the finish.
5. For media-blasted surfaces, isopropyl alcohol may be used with a microfiber cloth to remove fingerprints or debris.
6. Allow panel face to dry thoroughly and evenly.

If the surface is being cleaned frequently, MicroSeal/T may need to be re-applied to the panels. Re-application requirements will vary based on the type of protection required, the texture of the panel, and the color of the panel. Please discuss performance and re-application requirements with your TAKTL representative to ensure that project requirements are met.

## REMOVING GRAFFITI

Microseal/T™ sealer provides a baseline level of non-sacrificial graffiti protection. The recommended method for removing graffiti is with Citristrip® Stripping Gel.

*Follow all Citristrip Stripping Gel manufacturer safety instructions and precautions as outlined in the Material Safety Data Sheet.*

**[1] Mix** Shake the Citristrip container well.

**[2] Apply** Citristrip cleaner can be applied successfully using the following methods:

- [A]** Apply the cleaner liberally to the defaced surface in accordance with the manufacturer's instructions, using a paintbrush.
- [B]** Allow the cleaner to sit on the surface for 10 minutes. Scrub lightly with a plastic brush to see if the graffiti will come off. If the graffiti is not fully loosened from the surface, leave the cleaner on for further increments of 10 minutes until it appears the graffiti is no longer on the surface.
- [C]** Rinse the cleaner off completely, brushing lightly with the plastic brush to ensure that all of the cleaner and graffiti is removed from the surface.
- [D]** If the graffiti is not sufficiently removed, repeat the process. Do not leave the cleaner on the surface longer than necessary to remove graffiti.
- [E]** Once the graffiti is removed and the panel is rinsed, allow it to dry.
- [F]** If residue from the cleaner is still visible on the dry panel, wipe or rinse the panel a second time.
- [G]** The cleaner will affect the appearance of the panel when wet, so it is advised to treat the entire defaced panel in order to maintain a uniform-looking part.

After approximately 3 cleanings and depending on site-specific conditions, the coating may need to be re-applied to the panels. Re-application requirements will vary based on the type of protection required, the texture of the panel, and the color of the panel. Please discuss performance and reapplication requirements with your TAKTL representative to ensure that project requirements are met.

## APPLICATION

**[1] When To Use** MicroSeal/T should be applied to a dry surface. Air, surface, and material temperature must be between 40°F (5°C) and 85°F (30°C). Do not apply MicroSeal/T if rain is expected within 2 hours following the application.

**[2] Prepare** Surfaces to be treated should be clean, free of dirt and dust, and dry.

**[3] Mask** Windows, steel, and other surrounding components should be masked with tape.

**[4] Dilution + Storage** MicroSeal/T must be diluted with deionized water and isopropyl alcohol before use, according to the table below.

MATERIAL	GRAMS	CUPS	x6	x7	x12
MICROSEAL/T	700	0.422	2.5	3.0	5.1
DEIONIZED WATER	700	0.422	2.5	3.0	5.1
ISOPROPYL ALCOHOL	105	0.060	0.36	0.4	0.7

Application of concentrated MicroSeal/T can mar surface aesthetics. Once mixed, the MicroSeal/T solution can be stored in an airtight container for a maximum of 4 hours prior to use. Do not allow the solution to freeze.

**[5] SPRAY APPLICATION** Do not apply MicroSeal/T with a sprayer if wind speeds exceed 10 mph at the time of application.

**[A]** MicroSeal/T can be applied with an HVLP spray gun with a fluid tip size of 1.8 mm. The incoming air pressure should be regulated to 40 psi. Use a spray gun distance of 12"-18" from the panel and use the widest fan width setting. If wind unexpectedly becomes an issue, it is possible to reduce the fan spread and spray with the gun closer to the face.

**[B]** The volume of MicroSeal/T applied and application timing are critical. Two back-to-back coats of MicroSeal/T solution should be applied. Two coats are used to ensure that enough of the active ingredient in MicroSeal/T is delivered to the panel surface while also ensuring that no coat is applied too heavily. A heavy coating that creates rundown or dripping can mar the surface aesthetics. Practicing with a spare piece of concrete is highly recommended.

**[I]** Apply a thin coat of MicroSeal solution to the concrete face with controlled, even strokes along the pattern's length (i.e. spray along an oriented pattern, regardless of panel orientation). Start at one end of the panel and work to the opposite end. This first coat should fully wet out the face of the concrete panel, but care must be taken to avoid rundown or dripping.

**[II]** Allow the first coat to dry for approximately one minute and then begin applying the second coat. Start the second coat at the same end of the panel where the first coat was started. This second coat should fully wet out the face of the concrete panel, but care must be taken to avoid rundown or dripping.

**[6] Clean** Tools can be rinsed with a mixture of water and dish-washing liquid.