

# Si-COAT<sup>®</sup> 402WP<sup>™</sup>

## WATERPROOFING COLD WEATHER CURE SILICONE WALL COATING TECHNICAL DATA SHEET

### KEY FEATURES:

- **Engineered for Cold Weather:** Can be applied and will cure in temperatures as low as -4.0°F (-10°C).
- **Weatherproofing Protection:** Excellent long-term resistance to damage from sunlight or extreme temperature fluctuations, ensures durable waterproofing performance.
- **Elastomeric:** Thin film membrane (20 mil min) bridges cracks and accommodates movement due to freeze-thaw cycles up to 1/8 inch.
- **Breathable:** Allows moisture vapor to diffuse through a liquid water barrier membrane.
- **UV Performance:** All colors are formulated with IR reflectant or inorganic pigments and are tested to withstand 5000 hours of accelerated weathering testing (QUV) without chalking or fading.
- **High Solids:** Easily applied using brush, roller or airless spray equipment with increased coverage per gallon.

Si-COAT 402WP is a silicone liquid-applied, cold weather and moisture-cure, elastomeric, monolithic waterproofing silicone wall coating suitable for use in above-grade applications. The coating can be applied and cures from as low as -4°F up to 140°F (-20°C up to 60°C). This architectural coating can be used over masonry such as concrete, concrete block, brick, stone, EIFS, stucco, wood, and previously coated surfaces. It provides excellent weatherproofing protection, flexibility and durability with a long service life.

As a result of its specific chemistry, Si-COAT 402WP forms chemical bonds with the host surface to enhance adhesion properties without the need for priming and extensive site preparation.

The single component, room temperature vulcanizing (RTV) moisture cure polysiloxane technology provides superior performance and durability by allowing internal moisture vapor to diffuse out, and exterior water to be repelled. This unique ability protects surfaces from dampness, weather damage, wind-driven rain and allows drying from within the substrate. Also, due to the hydrophobicity of the coating, the surface can easily be cleaned using water under low pressure.

### PRODUCT CHARACTERISTICS AND PRACTICAL INFORMATION

Volume Solids	68%
Typical Thickness	25 ± 5 mil (508 - 762 microns) dry film thickness (DFT)
Application Rate	30 - 45 mil (762 - 1143 microns) wet film thickness (WFT)

### Approximate Theoretical Coverage:

DFT	25 mils (635 µ)
sq. ft/US gal	44
sq. m/L	1.1

### Allow appropriate loss factor:

Practical Coverage = Theoretical Coverage x [100% - Loss%].  
Coverage will vary with the substrate and porosity of surface.

### Drying Time at Low Temperature Outside (-4.0°F to 14°F; Avg 8.6°F)<sup>1</sup>:

Humidity <sup>2</sup>	85%
Skin-over Time	3 hours
Tack-free Time	5 hours
Cure Through	24 hours

<sup>1</sup>-10°C to -18°C; Avg -13°C

<sup>2</sup>Relative humidity is not an absolute measure of the concentration of water in the air.

### Drying Time at Standard Conditions\*:

Skin-over Time	15 minutes
Tack-free Time	40 minutes
Cure Through	4 hours

\*77°F (25°C) and 50% relative humidity

### REGULATORY DATA

Flash Point	107°F (42°C) PMC, ASTM D-93
VOC	2.04 lb/US gallon (245 g/liter)

### PHYSICAL PROPERTIES

(Typical properties - values not to be used as specifications)

Uncured	
Specific Gravity	1.16
Appearance	Pourable liquid
Viscosity	5,000 ± 1,000 cP
Sag	35 minimum (Leneta Anti-Sag Meter)
Cure System	RTV silicone, neutral, moisture cure
Cured At Standard Conditions* for 7 Days	
Durometer Hardness (ASTM D2240, Shore A)	28 points
Tensile Strength (ASTM D412)	180 psi (10.5 kg/cm <sup>2</sup> )
Elongation at Break (ASTM D412)	500%
Tear (ASTM D412)	32 ppi
Temperature Stability	Continuous: -76 to 392°F (-60 to 200°C)
Water Vapor Permeance (ASTM D1653)	4.4 perms (coated DensGlass)
Resistance to Wind-Driven Rain (ASTM D6904)	Pass
UV Weathering (ASTM G154)	5,000 hours
Crack Bridging Ability 60 mil @ 1/8 inch (ASTM C1305)	Pass
Crack Bridging Ability 20 mil @ 1/8 inch (ASTM C1305)	Pass

\*At standard conditions 77°F (25°C) and 50% relative humidity

### COLORS

Si-COAT 402WP is available in the following standard stocked colors: ANSI Gray #70, Dark Gray, and FS33531 (Middlestone). Other colors are available as well as custom color matching. Please contact CSL Silicones for color assistance. Terms and conditions may apply.

### SURFACE PREPARATION & CLEANLINESS

All surfaces to be coated should be free of dirt, dust, chalking paint, mortar spatter, old caulking, grease, oil, release agents, curing compounds, laitance and other foreign matter including frost. In order to achieve the above conditions, cleaning the surface with a power washer should be sufficient. Allow the surface to dry completely before applying Si-COAT 402WP.

New concrete and similar materials should be cured and dried out for at least 28 days before application of Si-COAT<sup>®</sup> 402WP<sup>™</sup>. Fill voids and cracks in masonry surfaces with CSL424 Waterproofing sealant before application of Si-COAT 402WP.



If overcoating Si-COAT 402WP, ensure the coating is fully cleaned to remove all surface contamination such as dust, grease, oil, salt crystals, traffic fumes, etc. before application of a further coat of Si-COAT 402WP. In order to achieve a continuous film free of defects, back-rolling may be necessary.

#### COATING APPLICATION

**Mixing:** Si-COAT 402WP is supplied as a one-part coating (no component mixing necessary). **Mix by an air powered agitator (300 – 400 rpm) for a minimum of 5 minutes**, to ensure an even consistency of coating is obtained without air in suspension.

**Application:** All surfaces should be clean and dry prior to application. The coating should be applied in a manner that prevents runs, sags, drips, spills, etc. and that completely covers surfaces.

The temperature of the surface to be coated should be between 41 and 140°F (5 and 60°C) and environmental temperature should be at least 5°F (3°C) above the dew point prior to and during application.

When working with Si-COAT 402WP in high humidity and/or high temperature environments, it is recommended to use a pail lid adapter fitted with an agitator. This will prevent the product from skinning over and curing in the pail during application.

It is recommended that Si-COAT 402WP be applied using an airless sprayer; however, brush, or roller are also suitable methods of application for small surface areas. It is necessary to apply at a rate that will achieve a minimum of 15 ± 5 mils (254 to 508 µ) DFT. Roller and brush application will require multiple coats to achieve desired DFT even if the coverage is adequate.

Surface finish is dependent on application method. Avoid using a combination of application methods whenever possible. Superior aesthetic appearance will be obtained with airless spray application.

**Thinner:** Not recommended.

**Cleaner:** Naphtha or Odorless Mineral Spirits.

**Work Stoppages & Restarts:** Work stoppages are not recommended with only partial utilization of a container of Si-COAT 402WP. If work must stop after only a portion of a container of Si-COAT 402WP is used, seal to minimize air and moisture contact with the coating by covering the surface of the coating with a sheet of polyethylene film, then reseal the container to be airtight.

Upon reopening the container to restart work, peel back the polyethylene film. If curing of the coating has occurred, use a utility knife to cut the cured coating away from the wall of the container. Peel away the cured layer of coating to expose fresh coating underneath.

**Clean-up:** Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with Si-COAT equipment cleaner, naphtha or mineral spirits.

Fully cured coating is environmentally benign (will not harm) and is suitable for landfill disposal. However, always check local environmental regulations before disposal.

#### SYSTEMS COMPATIBILITY

Although no primer is needed prior to applying Si-COAT 402WP to most common substrates, it is recommended to do a quick field adhesion test prior to application.

Si-COAT 402WP is compatible with with all CSL neutral cure sealants, liquid flashing and transition strips.

Si-COAT 402WP has excellent tolerance to airborne chemical exposure. When severe chemical or solvent splashing/pooling is likely to occur please contact CSL Silicones Inc. for information regarding suitability.

#### SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given in this document. See Safety Data Sheet (SDS) and the container(s).

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards & regulations.

When applying Si-COAT 402WP in confined spaces ensure adequate ventilation and/or respiratory equipment is available. Consult the Si-COAT 402WP SDS for further details.

#### PACKAGING

Size (unit)	Product Volume	Net Weight	Shipping Weight
5 US gal	5.0 US gal (18.9 L)	48.4 lb (21.95 kg)	52.4 lb (23.75 kg)
50 US gal	50.0 US gal (189 L)	484 lb (219.55 kg)	502.98 lb (228.15 kg)

#### STORAGE

**Shelf Life:** 12 months from date of manufacture in the original unopened container below 90°F (32°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat or ignition. May be stored below freezing.

CSL is ISO 9001:2015 Registered

#### Disclaimer

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#### CSL Silicones Inc.

144 Woodlawn Rd. W.  
Guelph, ON N1H 1B5  
Canada

T +1 519.836.9044  
TF + 1 800.265.2753

[www.cslsilicones.com](http://www.cslsilicones.com)

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