Construction Grade Joint Sealants



Product Name: TOWER TECH² ™

Acrylic Urethane Elastomeric Sealant

Product Description:

Tower Tech² ™ is a one-component, high performance, gun-grade, Acrylic Urethane Elastomeric Sealant. Formulated from premium technology reduces dirt pickup, eliminates yellowing and shiners. Internally plasticized resin requires no mixing or priming to bond to most materials, including concrete, wood and masonry.

Tower Tech² $^{\text{TM}}$ has superior adhesion, durability with 50% joint movement capability and 800% elongation. It forms a flexible, durable airtight, water resistant seal offering exceptional protection. Once cured the bead is mildew resistant. Tower Tech² $^{\text{TM}}$ is safe for UV exposure and will not discolor.

Features		Benefits
•	Ready to use	No mixing; reduces labor costs
•	Joint movement capability ±25%	Flexibility provides long lasting water tight joints
•	Easy to gun and tool	Speeds application and makes neater joints
•	Eight standard colors	Matches popular materials and substrates
•	Water Based	Easy clean-up
•	Primer less application	Lowers installation costs
•	Weather resistant	Produces long-lasting weather-tight seals
•	Wide temperature-application range	Suitable for all climates
•	Compatible with most coatings	May be painted acrylics and elastomeric coatings
•	Low VOC content	Less exempt solvents 1.5%

Basic Uses

APPLICATIONS

- Siding Wood, Vinyl, Aluminum
- o Surfaces Cement, Concrete, Hardboard
- o Trim
- Curtain Wall Construction
- o Stucco
- Panel Walls
- Precast Units
- Window & Door Installation
- Fascia
- Parapets
- Vinyl Siding
- Expansion Joints

SUBSTRATES

- o **Concrete**
- Masonry
- o Aluminum
- o Wood
- Cement Board
- Galvanized
- Vinyl Siding

LOCATIONS

- Interior and Exterior
- Above Grade





APPLICATION

PRIMING:

Tower Tech² ™ is generally considered a non-priming sealant. It is the user's responsibility to check the adhesion of the cured sealant on typical test joints at the project site before and during application consult Technical Services for additional information.

SURFACE PREPARATION:

Surfaces to be caulked must be dry and free of all dirt, dust, oil, mildew, loose paint, old caulk or other contaminates. Bare surfaces should be primed before caulking. Only apply when sealant, surface and air temperatures are above 40° F and rising. Do not apply on surfaces that exceed 120°F, or when rain is expected.

INSTALLATION:

Tower Tech² ™ comes ready to use. U-shaped joints should have the proper size backer rod or bond breaker tape installed to prevent 3 point adhesion. The sealant must reach deepest point of the joint. Remove excess with a clean rag and water. Tooling the joint flush with a putty knife is recommended. Tooling results in the correct bead shape, a neat joint, and maximum adhesion. 90° joints can be tooled smooth with a moistened rag to a minimum bead size of 3/8″.

CURE TIME @ 75° F (24° C) 50% relative humidity Joint Size 1/2" X 1/4"

Tooling Time: 15 Minutes
Tack Free Time: 60 Minutes

The cure of Tower Tech² ™ varies with temperature and humidity. Lower temperatures and humidity will extend curing times.

PHYSICAL & CHEMICAL CHARACTERISTICS:

PROPERTY VALUE

Vehicle: Proprietary Urethane/Modified Acrylic Blend (Siliconized)

Volatile: Predominately Water Pigment: Calcium Carbonate Solids: Approximately 70%

VOC Content: Non-Chemically Curing Compound <1.5% Less Exempt Solvents

Weight per Gallon: 9.3 ± 0.5

Specific Gravity: Approximately 1:1
Service Temp: -40°F to 180°F
Application Range: 40°F and rising.

Max Temp Application: Air temp 95° and substrate less than 120°F

Freeze Thaw Stability: Passes 5 Cycles@ 0°F (Cycle=16hrs. @ 0°F, 8hrs at 75°F)

Dynamic Joint Movement: Approximately + - 25%

Flash Point: Not Applicable

Consistency: 10 to 25 G/S @ 75°F (SEMCO Gun at 50psi)

Applications: Interior / Exterior

Life Expectancy: Lifetime Warranted Performance

Shelf Life: 12 months when stored at 50° F to 80° F Coverage: 10.1 fl oz = 53 linear ft. at a 3/16'' bead

Odor: Mild Sweet Acrylic

Tooling Time: 15 Minutes
Tack Free Time: 60 Minutes
Clean Up: Soap & Water

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CERTIFICATION & TESTING:

Property Type	Tower Tech ² Typical Values Ac U
Claims	Class 25
Tensile Properties	
Cure 1: 1d RT; 1d 50; 1 d 60 C	
Stress @ 25% Elongation (psi)	6 ± 1
Stress @ 50% Elongation (psi)	6 ± 1
Property	
Maximum Stress (psi)	160
Elongation to Break (%)	1025
Elongation at Max Stress (%)	900

Dry adhesion was measured after curing for one (1) week at room temperature, followed by two (2) weeks at 50°C. Wet adhesion was measured after additional one (1) week water soak.

Failure modes for adhesion testing are:

C = Cohesive

LC = Light Cohesive

A = Adhesive

SF = Substrate Failure.

Samples for tensile testing were laid up as 1/8" inch thick wet slabs and cured for either one (1) day at room temperature followed by one (1) day at 50°C, followed by one (1) day at 60°C or one (1) week at room temperature followed by two (2) weeks at 50°C. Tensile testing was done at 2"/min on a dumbbell sample at 75°F. Sample gauge length was assumed to 0.725

	Towar Toob ²	
Property	Tower Tech ² Typical Values	
rioporty	Typical Values	
Dry Peel Adhesion (pli) [C-794]		
Aluminum	36 C	
Glass	42 C	
Cement	7 SF	
Wet Peel Adhesion (pli) [C-794]	7 35	
Aluminum	24 C	
Glass	26 C	
Cement	19 C	
Channel Slump (mm) [C-639]	0	
Tack-Free Time		
(min) [C-679] Hardness [C-661]	60	
	15	
Formulation Characteristics		
Ph	7.5 - 8.3	
Extrusion Rate (g/sec)	20	
After 30 d @ 50° C.		
pH	< 8.3	
Flex (180° bend, ½ in mandrel) [C-793]		
After 250 hours WOM -15° F	Pass	
± 25% Joint Movement [C-719]		
Aluminum	Pass-NF	
Glass	Pass (SF)	
Cement	Pass (SF)	

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CLEAN-UP/REMOVEAL:

Immediately after use, clean equipment with soap and water.

Remove cured sealant by cutting with a sharp-edged tool.

Remove thin films by abrading.

NOTES:

Proper application is the responsibility of the user.

For best results, tool immediately after application to ensure the best possible adhesion and a smooth

Full cure of this water based sealant-should occur 7-14 days after application.

SAFETY:

See Material Safety Data Sheet for safety information or product label.

To request a Material Safety Data Sheet visit our web site at www.towersealants.com or contact Tower Sealants at 866-897-7568.

For medical emergencies only, call ChemTrec 1-800-424-9300.

Make certain the most current versions of Technical Product Data Sheet and MSDS are being used.

Call Customer Service (1-866-897-7568) to verify the most current versions.

PACKAGING:

Color	Product code	UPC CODE
White	TS-00215	84303400215 8
Off White	TS-00142	84303400142 7
Limestone	TS-00147	84303400147 2
Tan	TS-00194	84303400194 6
Stone	TS-00196	84303400196 0
Aluminum Gray	TS-00220	84303400220 2
Gray	TS-00223	84303400223 3
Redwood Tan	TS-00225	84303400225 7
Brown	TS-00227	84303400227 1
Bronze	TS-00123	84303400123 6
Clear	TS-00130	84303400130 4

SIZES:

- o 10.1 fl oz. (300 ml) cartridge
- o 12 cartridges per carton
- o 5 gallons pails; available Special order only
- o For color availability in bulk packaging Contact Customer Service.
- Custom colors are available in 250 Gallon batches (3,000 tubes) Contact Customer Service

SHELF LIFE & STORAGE

Cartridges: 2 year when properly stored. Pails: 2 years when properly stored.

Store in original, unopened containers Storage:

Store away from heat and direct sunshine.





LIMITED WARRANTY: Tower Sealants warrants that this product, provided it is properly stored and applied, will never crack, peel, or separate. If a failure occurs, return proof of purchase for replacement. Manufacturer shall not be held liable for damages in excess of the purchase price. This is the sole and exclusive remedy and liability for defects or failure of this product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESSED OR IMPLIED; INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS.

Company Information:

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Customer Service: 866-897-7568 **Fax Number:** 866-897-7569

Website: www.towersealants.com

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