SECTION 07 92 00

JOINT SEALANTS

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\*\* NOTE TO SPECIFIER \*\* Tower Sealants; Caulks and sealants.
This section is based on the products of Tower Sealants, which is located at:
2095 Memorial Park Rd.
Gainesville, GA 30504
Tel: 866-897-7568
Fax: 866-897-7569
Email: tech@towersealants.com
Web: <http://www.towersealants.com>

Contacts:
Primary: Barry Moore. Email: Bmoore@towersealants.com. Phone: (770) 722-5013
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 [ [Click Here](https://www.arcat.com/arcatcos/cos52/arc52567.html) ] for additional information.

Tower Sealants is a manufacturer of top quality caulks and sealants. With the strong financial backing of M-D Building Products, Tower Sealants started construction of its new state of the art manufacturing facility in September of 2005 and opened for business March 1st of 2006. Understanding the need for quality, service and innovation in an ever growing paint store channel, Tower Sealants recruited a strong and industry respected management team to focus on these markets. Tower Sealants developed high quality formulations that deliver productivity and efficiencies to the professional painter. In addition, Tower purchased the latest mixing and packaging technology to deliver consistent de-aerated products with air-free filling.

1. GENERAL
	1. SECTION INCLUDES
		1. Caulks and Sealants:

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + - 1. Urethane elastomeric joint sealant. (AU-1 Commercial Construction Sealant)
			2. Acrylic urethane sealant. (Tower Tech2)
			3. Acrylic siliconized sealant. (Accura TT-S 230) (Accura Plus) (Tub and Tile)
			4. Acrylic modified emulsion sealant: (The Accelerator) (Tower Expansion Joint and Vertical Sealant)
			5. Acrylic siliconize latex/vinyl blend. (Accura)
			6. Silicone sealants. (Tower Tech3)
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
		2. Section 03 41 16 - Precast Concrete Slabs.
		3. Section 03 47 13 - Tilt-Up Concrete.
		4. Section 04 20 00 - Unit Masonry.
		5. Section 07 24 00 - Exterior Insulation and Finish Systems
		6. Section 08 50 00 - Windows.
		7. Section 09 21 16.33 - Gypsum Board Area Separation Wall Assemblies.
	1. REFERENCES
		1. ASTM International (ASTM):
			1. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
			2. ASTM C834 - Standard Specification for Latex Sealants.
		2. California Air Resources Board (CARB).
		3. South Coast Air Quality Management District (SCAQMD).
		4. Tower Common Building. Substrate Adhesion Test (TCBSAT).
		5. United States Federal Specifications and Standards (FED):
			1. FED TT-S-00230C - Sealing Compound, Elastomeric Type, Single Component (For Calking, Sealing, and Glazing in Buildings and Other Structures).
			2. FED TT-S-001543A - Interim Federal Specification: Sealing Compound: Silicone Rubber Base (For Caulking, Sealing, and Glazing in Buildings and Other Structures).
	2. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data:
			1. Manufacturer's data sheets on each product to be used.
			2. Preparation instructions and recommendations.
			3. Storage and handling requirements and recommendations.
			4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern and color.
		2. Shop Drawings: Include details of materials, construction and finish. Include relationship with adjacent construction.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
		2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
		3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
			1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
			2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
			3. Retain mock-up during construction as a standard for comparison with completed work.
			4. Do not alter or remove mock-up until work is completed or removal is authorized.
	1. PRE-INSTALLATION CONFERENCE
		1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
		2. Protect from damage due to weather, excessive temperature, and construction operations.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	4. WARRANTY

\*\* NOTE TO SPECIFIER \*\* Delete Warranty options not required

* + 1. Manufacturer's Standard Product Performance Warranty: Submit manufacturer's standard 10 year limited product warranty upon Date of Substantial Completion.
			1. Warranty Areas: \_\_\_\_\_\_\_.
		2. Manufacturer's Labor and Material Warranty: Submit manufacturer's standard 5 year limited product warranty upon Date of Substantial Completion.
			1. Warranty Areas: \_\_\_\_\_\_\_.
			2. Purchase, applicator, and project must be documented and registered with manufacturer.
			3. Project must be made available for inspection by manufacturer or manufactures representative.
				1. Requires documentation including photos and/or video.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Tower Sealants, which is located at: 2095 Memorial Park Road, Gainesville, GA 30504; ASD Phone: 866-897-7568; Fax: 866-897-7569; Email: tech@towersealants.com; Web: www.towersealants.com

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.
	1. URETHANE ELASTOMERIC JOINT SEALANTS

\*\* NOTE TO SPECIFIER \*\* AU-1 is a highly elastic, non-sagging, high-performance construction sealant with extreme resistance to aging. Uniquely formulated from state of the art ingredients, including Aqueous Polyurethane Dispersion (PUD), which makes it an ideal sealant for commercial and industrial applications. Requires no mixing or priming to bond at the molecular level to most construction materials. Paintable and will never bleed through the paint finish or create tacky surfaces, making it resistant to dirt pickup. Once cured is exceptionally resistant to mold and mildew. Outstanding UV resistance and maintains high elasticity and adhesion in all climates even after years of exposure. VOC compliant nationwide including all CARB and SCAQMD requirements. Can be used with confidence in all weather conditions and does not lose elasticity under constant, varying mechanical stress.

* + 1. Basis of Design: AU-1 Commercial Construction Sealant as manufactured by Tower Sealants.
			1. Composition: An Aqueous Polyurethane Dispersion (PUD) acrylic polymer.
			2. Description: For commercial building industry sealant applications.
				1. Highly elastic, non-sagging, high-performance construction sealant with extreme resistance to aging.
				2. Requires no mixing or priming to bond at molecular level to most construction materials.
				3. Paintable. Will never bleed through paint finish or create tacky surfaces, making it resistant to dirt pickup.
				4. Cured state has exceptional mold and mildew resistance.
				5. Outstanding UV resistance and maintains high elasticity and adhesion in all climates even after years of exposure.
				6. VOC compliant nationwide including all CARB and SCAQMD requirements.
				7. Can be used with confidence in all weather conditions
				8. Does not lose elasticity under constant, varying mechanical stress.
			3. Standards Compliance:
				1. ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, G, A and O.
				2. Exceeds TCBSAT-30.
			4. Features:
				1. Ready to use. No mixing.
				2. No primer required for most substrates.
				3. Application: Gun and tool.
				4. Joint Size: Seals up to 2 inch (51 mm) with proper joint design.
				5. Aging and Weathering Resistance: Exceptional.
				6. Available in sausages for less jobsite waste and lower disposal costs.
				7. Paint and tint with standard latex paint.
				8. Superior adhesion to construction materials over long periods of time.
				9. Meets VOC requirements for all 50 states.

Less than 1.5 percent less exempt solvents.

* + - * 1. Joint movement capacity of 50 percent, plus or minus 25 percent with 800 percent elongation providing excellent flexibility for moving joints

\*\* NOTE TO SPECIFIER \*\* Delete color options not required. Custom colors are available; contact manufacturer for details.

* + - 1. Color: White.
			2. Color: Off White.
			3. Color: Almond.
			4. Color: Tan.
			5. Color: Stone.
			6. Color: Limestone.
			7. Color: Aluminum Gray.
			8. Color: Woodtone.
			9. Color: Bronze.
			10. Color: Black.
			11. Color: \_\_\_\_\_\_\_\_.
			12. Cure Time: At 75 degrees F (24 degrees C); 50 percent relative humidity.
				1. Joint Size: 1/2 x 1/4 inch (13 x 6 mm)

\*\* NOTE TO SPECIFIER \*\* Lower temperatures and/or higher humidity will extend curing times. In such cases painting should be delayed until the sealant has time to cure.

Tooling Time: 15 minutes.

Tack Free Time: 60 minutes.

Paintable: 6 to 8 hours.

* + - 1. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Interior and Exterior: Curtain wall joints.
				2. Vertical and Horizontal Joints: Mullion joints.
				3. Expansion and Control Joints: Above grade.
				4. Concrete Panel Joints: Stucco.
				5. Tilt-Wall Joints: Fascia.
				6. Exterior Insulation and Finish Systems (EIFS): Parapets.
				7. Siding; Aluminum, Wood and Vinyl: Flashing.
				8. Window Frames; Aluminum, Wood and Vinyl: Precast units.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrate options not required.

* + - * 1. Aluminum.
				2. Building and house wraps.
				3. Cement board.
				4. Ceramic and porcelain tile.
				5. Clay concrete roof tiles.
				6. Concrete.
				7. Galvanized.
				8. Glass.
				9. Masonry.
				10. Natural stone.
				11. Stucco.
				12. Vinyl siding.
				13. Wood.
	1. ACRYLIC URETHANE SEALANT

\*\* NOTE TO SPECIFIER \*\* As the leader in water based sealant technology Tower Sealants has developed a new line of sealants that meet the rigid requirements of ASTM C-920. Tower Tech2™ is a one-component, high performance, gun-grade, urethane modified acrylic sealant that offers unsurpassed flexibility and adhesion.

* + 1. Basis of Design: Tower Tech2 Sealant as manufactured by Tower Sealants.
			1. Description:
				1. Acrylic Urethane: One-component, high performance, gun-grade.
				2. Formulated to reduce dirt pickup.
				3. Eliminates yellowing and shiners.
				4. Internally plasticized resin.
				5. No mixing or priming.
				6. Bonds to most materials, including concrete, wood and masonry.
				7. Flexible, durable airtight, water resistant seal.
				8. offering exceptional protection.
				9. Once cured the bead is mildew resistant.
				10. Safe for UV exposure.
				11. No discoloration.
			2. Features:
				1. Ready to use. No mixing.
				2. No primer required for most substrates.
				3. Application: Gun and tool.
				4. Water based.
				5. Weathering Resistance: Produces long-lasting weather-tight seals.
				6. Wide temperature application range. Suitable for all climates.
				7. Meets VOC requirements for all 50 states.

Less than 1.5 percent less exempt solvents.

* + - * 1. Joint movement capacity of 50 percent, plus or minus 25 percent with 800 percent elongation providing excellent flexibility for moving joints.

\*\* NOTE TO SPECIFIER \*\* Delete color options not required.

* + - 1. Color: White.
			2. Color: Off White.
			3. Color: Limestone.
			4. Color: Tan.
			5. Color: Stone.
			6. Color: Aluminum Gray.
			7. Color: Gray.
			8. Color: Redwood Tan.
			9. Color: Brown.
			10. Color: Bronze.
			11. Color: Clear.
			12. Cure Time: At 75 degrees F (24 degrees C); 50 percent relative humidity.
				1. Joint Size: 1/2 x 1/4 inch (13 x 6 mm).

\*\* NOTE TO SPECIFIER \*\* Lower temperatures and/or higher humidity will extend curing times.

Tooling Time: 15 minutes.

Tack Free Time: 60 minutes.

* + - 1. Applications: Above grade; interior and exterior.

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Siding: Wood, vinyl, and aluminum.
				2. Surfaces: Cement, concrete, and hardboard.
				3. Trim.
				4. Curtain wall construction.
				5. Stucco.
				6. Panel walls.
				7. Precast units.
				8. Window and door installation.
				9. Fascia.
				10. Parapets.
				11. Vinyl siding.
				12. Expansion joints.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrate options not required.

* + - * 1. Concrete.
				2. Masonry.
				3. Aluminum.
				4. Wood.
				5. Cement board.
				6. Galvanized.
				7. Vinyl Siding.
			1. Property:
				1. Pigment: Calcium carbonate.
				2. Solids: Approximately 70 percent.
				3. Service Temp: Minus 40 to 180 degrees F (minus 40 to 82 degrees C).
				4. Temperature Application Range: 40 degrees F (4.4 degrees C) and rising.
				5. Max Temp Application: Air temp 95 degrees F (35 degrees C) and substrate less than 120 degrees F (49 degrees C).
				6. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One Cycle: Equals 16 hours at 0 degrees F (minus 18 degrees C) and 8 hours at 75 degrees F (24 degrees C).

* + - * 1. Consistency: 10 to 25 G/S at 75 degrees F (24 degrees C); SEMCO Gun at 50 psi (344.7 kPa).
				2. Coverage: 10.1 fl oz (0.299 L) equals 53 linear ft (16.15 m) at a 3/16 inch (4.8 mm) bead.
	1. ACRYLIC SEALANTS, SILICONIZED

\*\* NOTE TO SPECIFIER \*\* Accura TTS-230 is a premium 100 percent acrylic elastomeric sealant that features superior elongation and recovery. It offers excellent durability, forms an airtight, water resistant seal and can be painted. Once cured, the bead is mildew resistant. Exceeds Fed. Spec TT at-00230C, Type-S, Class B and ASTM C-920, Grade NS, Class 12.5

* + 1. Basis of Design: Accura TTS-230 Government Spec Sealant as manufactured by Tower Sealants.
			1. Physical and Chemical Characteristics:
				1. Vehicle: 100 percent acrylic emulsion polymer / siliconized.
				2. VOC Less exempt solvents: Less than 1.5 percent.
				3. Pigment: Calcium carbonate.
				4. Solids: Approximately 82 percent.
				5. Weight per Gallon: 13.2 plus or minus 0.5 lbs (6 plus or minus 0.23 kgs).
				6. Specific Gravity: Approximately 1.58.
				7. Service Temperature: Minus 35 to 180 degrees F (minus 37 to 92 degrees C).
				8. Temperature Application Range: 40 degrees F (4.4 degrees C) and rising.
				9. Max Temp Application: Air temp 95 degrees F (35 degrees C) and substrate less than 120 degrees F (49 degrees C).
				10. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One Cycle: Equals 16 hours at 0 degrees F (minus 18 degrees C) and 8 hours at 75 degrees F (24 degrees C).

* + - * 1. Dynamic Joint Movement: Tested to plus or minus 12.5 percent.
				2. Flash Point: None.
				3. Consistency: 12.5 to 22.5 G/S at 75 degrees F (24 degrees C); SEMCO Gun at 50 psi (344.7 kPa).
				4. Applications: Interior and exterior.
				5. Life Expectancy: 60 year performance.
				6. Shelf Life: 24 months when stored at 50 to 80 degrees F (10 to 27 degrees C).
				7. Coverage: 10.1 fl oz (0.299 L) equals 54 linear ft (16.5 m) at a 3/16 inch (4.8 mm) bead.
				8. Odor: Mild sweet acrylic.
				9. Tooling Time: 10 to 15 minutes.
				10. Tack Free Time: 45 minutes.

\*\* NOTE TO SPECIFIER \*\* A 100 percent Acrylic Sealant with silicone is designed for slower curing to allow for easier tooling. This caulk is available in brilliant white or off whites and meets the requirements of ASTM C-834 Type OP, Grade-18C. Available in white and off whites.

* + - 1. Composition: 100 percent acrylic emulsion polymer; siliconized.
			2. Description: Superior adhesion and durability. Cured bead is flexible, durable airtight, water resistant , and mildew resistant seal. Offers protection from environmental conditions. For use on a wide variety of interior and exterior surfaces.
			3. Standards Compliance:
				1. ASTM C-920, Grade NS, Class 12.5: Exceeds.
				2. ASTM C-834, Type OP, Grade -18 degrees C: Exceeds.
				3. Fed. Spec TTS-00230C, Type S, Class B: Exceeds.
			4. Performance Characteristics:
				1. Up to 1/2 inch (13 mm) in properly designed joints.
				2. Guarantee: 60 years.
			5. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete application options not required.

* + - * 1. Windows.
				2. Doors.
				3. Counters.
				4. Trim.
				5. Sinks
				6. Siding.
				7. Penetrations.
				8. HVAC.
				9. Flashings.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrates options not required.

* + - * 1. Masonry.
				2. Concrete.
				3. Porcelain.
				4. Ceramic tile.
				5. Glass.
				6. Brick.
				7. Wood.
				8. Metal.
				9. Marble.
		1. Basis of Design: Tower Accura Plus Acrylic Sealant as manufactured by Tower Sealants.
			1. Composition: 100 percent acrylic emulsion polymer / siliconized.
			2. Description: Delivers superior adhesion and durability. Cured bead is a flexible, durable airtight, water resistant, and mildew resistant seal. Offers exceptional protection from environmental conditions. Low odor, easy to apply, and soap and water cleanup. For use on a wide variety of interior and exterior surfaces.
			3. Standards Compliance:
				1. ASTM C-834, Type OP, Grade -18 degrees C: Exceeds.
			4. Performance Characteristics:
				1. Up to 3/8 inch (9.5 mm) in properly designed joints.
				2. Guarantee: 50 years.
				3. Interior and exterior.
			5. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Windows.
				2. Doors.
				3. Counters.
				4. Trim.
				5. Sinks
				6. Siding.
				7. Penetrations.
				8. HVAC.
				9. Flashings.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrates options not required.

* + - * 1. Masonry.
				2. Concrete.
				3. Porcelain.
				4. Ceramic tile.
				5. Glass.
				6. Brick.
				7. Wood.
				8. Metal.
				9. Marble.
			1. Physical and Chemical Characteristics:
				1. Vehicle: 100 percent acrylic emulsion polymer; siliconized.
				2. VOC Less exempt solvents: Less than 1.2 percent.
				3. Pigment: Calcium carbonate.
				4. Solids: Approximately 82.5 percent.
				5. Weight per Gallon: 14.00 plus or minus 0.5 lbs (6.35 plus or minus 0.23 kgs).
				6. Specific Gravity: Approximately 1.65.
				7. Service Temperature: Minus 35 to 180 degrees F (minus 37 to 92 degrees C).
				8. Temperature Application Range: 40 degrees F (4.4 degrees C) and rising.
				9. Max Temp Application: Air temp 95 degrees F (35 degrees C).
				10. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One Cycle: Equals 16 hours at 0 degrees F (minus 18 degrees C) and 8 hours at 75 degrees F (24 degrees C).

* + - * 1. Flash Point: None.
				2. Consistency: 12.5 to 22.5 G/S at 75 degrees F (24 degrees C); SEMCO Gun at 50 psi (344.7 kPa).
				3. Applications: Interior and exterior.
				4. Life Expectancy: 50 year performance.
				5. Shelf Life: 24 months when stored at 50 to 80 degrees F (10 to 27 degrees C).
				6. Coverage: 10.1 fl oz (0.299 L) equals 53 linear ft (16.15 m) at a 3/16 inch (4.8 mm) bead.
				7. Odor: Mild sweet acrylic.
				8. Tooling Time: 10 to 15 minutes.
				9. Tack Free Time: 45 minutes.
				10. Color: White.

\*\* NOTE TO SPECIFIER \*\* Tub and Tile is a quality siliconized acrylic adhesive caulk. It can be used on a wide variety of interior and exterior surfaces, delivering good adhesion and durability. Tub and Tile caulk forms a flexible, durable, airtight, water resistant seal that offers protection from environmental conditions and features an easy to clean bead.

* + 1. Basis of Design: Tower Tub and Tile Siliconized Acrylic Caulk as manufactured by Tower Sealants.
			1. Composition: Siliconized acrylic adhesive caulk.
			2. Description: For variety of interior and exterior surfaces; good adhesion and durability.
				1. Forms a flexible, durable, airtight, water resistant seal. Offers protection from environmental conditions. Easy to clean bead. Once Cured: Mildew resistant.
			3. Standards Compliance:
				1. Meets ASTM C-834, Type OP, Grade 0 degrees C.
			4. Performance Characteristics:
				1. Up to 1/2 inch (13 mm) in properly designed joints.
				2. Guarantee: 40 years.
				3. Interior and exterior.
			5. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Where an acrylic adhesive sealant is ideal for sealing or setting the following: Sinks, Showers, Counter Tops, and similar applications.
				2. Windows.
				3. Doors.
				4. Trim.
				5. Siding.
				6. Penetrations.
				7. HVAC.
				8. Flashings.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrates options not required.

* + - * 1. Masonry.
				2. Ceramic tile.
				3. Wood.
				4. Concrete.
				5. Glass.
				6. Metal.
				7. Porcelain.
				8. Brick.
				9. Marble.
			1. Physical and Chemical Characteristics:
				1. Vehicle: Acrylic polymer; siliconized.
				2. VOC Non-chemically curing sealant.

VOC; Less Exempt Solvents: Less than 1.5 percent.

* + - * 1. Pigment: Calcium carbonate.
				2. Solids: Approximately 72.5 percent.
				3. Weight per Gallon: 11.00 plus or minus 0.5 lbs (5 plus or minus 0.23 kg).
				4. Service Temperature: 0 to 160 degrees F (minus 18 to 71 degrees C).
				5. Temperature Application Range: 40 degrees F (4.4 degrees C) and rising.
				6. Max Temp Application: Air temp 95 degrees F (35 degrees C) and substrate less than 120 degrees F (49 degrees C).
				7. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One Cycle: Equals 16 hours at 0 degrees F (minus 18 degrees C) and 8 hours at 75 degrees F (24 degrees C).

* + - * 1. Flash Point: None.
				2. Consistency: 10 to 40 G/S at 75 degrees F (24 degrees C); SEMCO Gun at 50 psi (344.7 kPa).
				3. Life Expectancy: 40 year performance.
				4. Shelf Life: 24 months when stored at 50 to 80 degrees F (10 to 27 degrees C).
				5. Coverage: 10.1 fl oz (0.299 L) equals 54 linear ft (16.5 m) at a 3/16 inch (4.8 mm) bead.
				6. Odor: Mild sweet acrylic.
				7. Tooling Time: 10 to 15 minutes.
				8. Tack Free Time: 60 Minutes
				9. Cure Time: 24 hours before painting.
				10. Curing Time Before Use: 24 hours before exposing to water in tub or shower.

\*\* NOTE TO SPECIFIER \*\* Delete color option not required.

* + - * 1. Color: White.
				2. Color: Clear.
	1. ACRYLIC SEALANTS, MODIFIED EMULSION

\*\* NOTE TO SPECIFIER \*\* This unique modified acrylic silicone is formulated to be spray painted immediately or brushed in just 30 minutes, without the phenomena of spider webbing. For best results this product should be tooled within 10 minutes after application. This caulk meets the requirements of ASTM C-834 Type OP, Grade -18 C. Available in white only.

* + 1. Basis of Design: The Accelerator Sealant as manufactured by Tower Sealants.
			1. Composition: Is a premium (proprietary) modified acrylic based sealant.
			2. Description: Can be spray painted immediately or brush/roll in 30 minutes. For use on a wide variety of interior and exterior surfaces, delivering good adhesion and durability. Forms a flexible, durable airtight water resistant seal. Once cured is mildew resistant. Low odor. Easy to apply. Soap and water cleanup.
			3. Standards Compliance:
				1. Exceeds ASTM C-834, Type OP, Grade Minus 18 degrees C.
			4. Performance Characteristics:
				1. Up to 1/2 inch in properly designed joints.
				2. Guarantee: 50 years.
				3. Interior and exterior.
			5. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Windows.
				2. Doors.
				3. Siding.
				4. Mouldings.
				5. Crown moulding.
				6. Base board.
				7. Trim.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrates options not required.

* + - * 1. Masonry.
				2. Concrete.
				3. Ceramic Tile.
				4. Brick.
				5. Wood.
				6. Metal
			1. Physical and Chemical Characteristics:
				1. Vehicle: 100 percent modified acrylic emulsion polymer.
				2. VOC: Non-chemically curing sealant.

VOC less exempt solvents: Less than 1.5 percent.

* + - * 1. Pigment: Calcium carbonate.
				2. Solids: Approximately 87 percent.
				3. Weight per Gallon: 14.00 plus or minus 0.5 lbs (6.35 plus or minus 0.23 kgs).
				4. Specific Gravity: Approximately 1.7.
				5. Service Temperature: Minus 25 180 degrees F (minus 32 to 82 degrees C).
				6. Weight per Gallon: 14.00 plus or minus 0.5 lbs (6.35 plus or minus 0.23 kgs).
				7. Max Temp Application: Air temp 95 degrees F (35 degrees C) and substrate less than 140 degrees F (60 degrees C).
				8. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One Cycle: Equals 16 hours at 0 degrees F (minus 18 degrees C) and 8 hours at 75 degrees F (24 degrees C).

* + - * 1. Flash Point: None.
				2. Consistency: 10 to 20 G/S at 75 degrees F (24 degrees C); SEMCO Gun at 50 psi (344.7 kPa).
				3. Applications: Interior and exterior.
				4. Life Expectancy: 50 year performance.
				5. Shelf Life: 24 months when stored at 50 to 80 degrees F (10 to 27 degrees C).
				6. Coverage: 10.1 fl oz (0.299 L) equals 55 linear ft (16.76 m) at a 3/16 inch (4.8 mm) bead.
				7. Odor: Mild sweet acrylic.
				8. Tooling Time: 5 to 10 Minutes.
				9. Paint Time:

Airless Spray: Immediately.

Brush/Roller: 30 Minutes.

* + - * 1. Tack Free Time: 30 Minutes.
				2. Color: White.
		1. Basis of Design: Tower Expansion Joint Sealant and Vertical Sealant as manufactured by Tower Sealants.
			1. Composition: 100 percent acrylic urethane acrylic based product.
			2. Description: Expansion joint repair sealant. To repair large or small vertical control or expansion joints. Single component, non-sag, water-based acrylic sealant for vertical applications. Primeless application. Cured state is mildew and UV resistant. Paintable.
			3. Standard Compliance:
				1. ASTM C-920, Class 12.5, Type S, Grade NS (Non-sag): Exceeds.
			4. Performance Characteristics:
				1. Use in gaps up to 2 inches (51 mm).
				2. Used to repair large or small vertical control or expansion joints.
				3. VOC Less Exempt Solvents: Less than 1.5 percent
				4. Soap and water cleanup.
			5. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Control joints.
				2. Expansion joints.
				3. Concrete Walls.
				4. Stucco Walls.
				5. Brick Walls.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrate options not required.

* + - * 1. Masonry.
				2. Concrete.
				3. Cement.
				4. Synthetic stucco.
				5. Brick.
				6. Cement fiber board.
			1. Physical and Chemical Characteristics:
				1. Vehicle: 100 percent modified acrylic emulsion polymer.
				2. Pigment: Calcium carbonate.
				3. Solids: Approximately 70 percent.
				4. Weight per Gallon: 9.75 plus or minus 0.5 lbs (4.42 plus or minus 0.23 kg).
				5. Specific Gravity: Approximately 1.17.
				6. Service Temperature: Minus 30 to 180 degrees F (minus 34 to 82 degrees C).
				7. Temperature Application Range: 40 degrees F (4.4 degrees C) and rising. Air temp no hotter than 95 degrees F (35 degrees C) and substrate not hotter than 120 degrees F (49 degrees C).
				8. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One cycle: 16 hrs. at 0 degrees F (minus 18 degrees C), 8 hrs at 75 degrees F (24 degrees C).

* + - * 1. Flash Point: None.
				2. Consistency: Paste.
				3. Applications: Interior and exterior.
				4. Shelf Life: 24 months when stored at 50 to 80 degrees F (10 to 27 degrees C).
				5. Odor: Mild sweet acrylic.
				6. Tooling Time: 10 to 15 minutes.
				7. Tack Free Time: 30 minutes.
				8. Paint Over Time: 4 to 6 hours.
				9. Full Cure: 5 to 10 days depending on conditions and amount used.
				10. Color: Gray.
	1. ACRYLIC SILICONIZED LATEX BLEND

\*\* NOTE TO SPECIFIER \*\* This product is designed to be used where an Acrylic Adhesive Sealant is ideal for sealing or setting windows, trim, doors, sinks, counters and a variety of substrates. Available in white and clear.

* + 1. Basis of Design: Accura Acrylic Latex Caulk as manufactured by Tower Sealants.
			1. Composition: 100 percent acrylic latex and vinyl acrylic, siliconized blend.
			2. Description: General purpose caulk and sealant used on a wide variety of interior and exterior surfaces. Forms a flexible, durable, airtight, water resistant seal offering protection from environmental conditions. Once cured, bead is mildew resistant. Seals gaps, cracks, joints, and seams around windows, trim, doors, sinks, counters, siding, penetrations, hardboard and flashing. Features low VOC, soap and water clean-up. Paintable When cured.
			3. Standards Compliance:
				1. ASTM C-834, Type OP, Grade 0 degrees C: Exceeds.
			4. Performance Characteristics:
				1. Provides a flexible durable seal.
				2. Cured bead is mildew resistant.
				3. Cleans with soap and water.
				4. VOC Less than 1.5 percent, low odor.
			5. Applications:

\*\* NOTE TO SPECIFIER \*\* Delete applications options not required.

* + - * 1. Windows.
				2. Doors.
				3. Counters.
				4. Walls.
				5. Trim.
				6. Sinks.
				7. Siding.
				8. Ceilings.
				9. Penetrations.
				10. Bathrooms.
				11. Flashings.
				12. Doors.
			1. Substrates:

\*\* NOTE TO SPECIFIER \*\* Delete substrate options not required.

* + - * 1. Masonry.
				2. Concrete.
				3. Porcelain.
				4. Brick.
				5. Wood.
				6. Metal.
				7. Laminates.
				8. Aluminum.
				9. Painted surfaces.
			1. Physical and Chemical Characteristics:
				1. Vehicle: Blend of 100 percent acrylic latex and vinyl acrylic, siliconized.
				2. VOC Less water and exempt solvents: Less than 1.5 percent
				3. Pigment: Calcium carbonate.
				4. Solids: Approximately 87 percent.
				5. Weight per Gallon: 13.9 plus or minus 0.5 lbs (6.3 plus or minus 0.23 kgs).
				6. Specific Gravity: Approximately 1.67.
				7. Service Temperature: Minus 25 to 180 degrees F (minus 32 to 82 degrees C).
				8. Temperature Application Range: 40 degrees F (4.4 degrees C) and rising.
				9. Max Temp Application: Air temp 95 degrees F (35 degrees C) and substrate less than 120 degrees F (49 degrees C).
				10. Freeze Thaw Stability: Passes 5 Cycles at 0 degrees F (minus 18 degrees C).

One Cycle: Equals 16 hours at 0 degrees F (minus 18 degrees C) and 8 hours at 75 degrees F (24 degrees C).

* + - * 1. Dynamic Joint Movement: Tested to plus or minus 7.5 percent
				2. Flash Point: None
				3. Consistency: 8 to 18 G/S at 75 degrees F (24 degrees C); SEMCO Gun at 50 psi (344.7 kPa).
				4. Applications: Interior and exterior.
				5. Life Expectancy: 40 year performance.
				6. Shelf Life: 12 months when stored at 50 to 80 degrees F (10 to 27 degrees C).
				7. Coverage: 10.1 fl oz (0.299 L) equals 54 linear ft (16.5 m) at a 3/16 inch (4.8 mm) bead.
				8. Odor: Mild sweet acrylic.
				9. Tooling Time: 10 to 15 minutes.
				10. Tack Free Time: 45 minutes.

\*\* NOTE TO SPECIFIER \*\* Delete color options not required.

* + - * 1. Color: Clear.
				2. Color: White.
				3. Color: Brown.
				4. Color: Bronze.
				5. Color: Almond.
				6. Color: Cedar.
	1. SILICONE SEALANTS

\*\* NOTE TO SPECIFIER \*\* Tower Tech3 is ideal for use on many commercial and residential house wraps, cement fiber board and numerous building substrates. Tower Tech3 can be applied to lightly damp surfaces and is designed to be used on interior and exterior windows, window and door installations. The cured product will not crack, crumble or shrink and adheres to most common construction materials; wood, metal, vinyl siding, masonry, concrete, brick, tile, plastic, drywall/plaster, glass and painted surfaces. Once applied, Tower Tech3 can be painted in 30 minutes and exposed to water in 1 hour.

* + 1. Basis of Design: Tower Tech3 Hybrid - White Sealant as manufactured by Tower Sealants.
			1. Composition: A premium hybrid silicone sealant.
			2. Description: Single component, waterproof sealing and bonding compound.
				1. Adhesion and Durability: 50 percent total joint movement and 800 percent elongation. Forms an airtight, water resistant seal.
				2. Cured Bead: Mildew, water, and UV resistant.

It is low odor.

Will not crack, crumble or shrink.

* + - * 1. Can be applied to lightly damp surfaces.
			1. Performance Characteristics:
				1. ASTM C920, Type-S, NS Class 25, use NT, M, G, A and O: Meets.
				2. Fed. Spec. TTS-00230C and TTS-001543A. Meets.
				3. Provides a flexible durable seal.
				4. Paintable.
			2. Applications: Cracks, joints and seams around the following:
				1. Siding: Wood, cement, vinyl, cement fiber.
				2. Interior and exterior windows, window and door installations.
				3. Sealing around commercial and residential house wraps.
				4. Expansion joints.
			3. Substrates:

\*\* NOTE TO SPECIFIER \*\* Substrates Include but not limited to the following. Delete or add substrate options as required.

* + - * 1. Masonry.
				2. Brick.
				3. PVC.
				4. Concrete.
				5. Marble.
				6. Stucco.
				7. Porcelain.
				8. Ceramic tile.
				9. Commercial and residential house wraps.
				10. Wood.
				11. Glass.
				12. Metals: Stainless steel, copper, galvanized steel and aluminum.
				13. \_\_\_\_\_\_\_\_.
			1. Physical and Chemical Characteristics:
				1. Vehicle: STP-E Hybrid.
				2. Solids: 100 percent.
				3. Color: White.
				4. VOC CARB; Chemically Curing Product: Less than 3.0 wt percent.
				5. VOC; Excluding Water and Exempt Compounds: Less than 42 g/L.
				6. Hardness: Shore A 32.
				7. Service Temperature: Minus 40 to 200 degrees F (minus 40 to 93 degrees C)
				8. Dynamic Joint Movement: 50, plus or minus 25 percent.
				9. Consistency: 5 to 15 grams per second; non-sag.
				10. Shelf Life: 18 months.
				11. Coverage: 52 linear feet (15.85 mm) with 3/16 inch (4.8 mm) bead.
				12. Tooling Time: 10 to 15 minutes.
				13. Skin Forming Time: 30 minutes.
				14. Paint Over Time: 30 minutes.
				15. Water Exposure: Within 1 hour of application.
				16. Full Cure: 24 to 72 hours; dependent on joint configuration, temperature and humidity.
				17. Clean Up: Mineral spirits.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly constructed and prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions approved submittals and in proper relationship with adjacent construction.
	4. FIELD QUALITY CONTROL
		1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
	1. CLEANING AND PROTECTION
		1. Clean products in accordance with the manufacturers recommendations.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION