

TECHNICAL DATA SHEET

DESCRIPTION

Sure Bond J58 is a 100% solids, two component, high modulus, medium viscosity, moisture tolerant structural epoxy adhesive that may be used in temperatures between 40 °F - 100 °F (4 °C - 38 °C) and meets the requirements of ASTM C881 and AASHTO M-235.

USE

The primary use of the Sure Bond J58 is for bonding fresh concrete to hardened concrete. Sure Bond J58 has excellent adhesion to most construction materials. Sure Bond J58 may be used for anchoring bolts, dowels and reinforcing steel in concrete.

FEATURES

- Acceptable for use in USDA inspected facilities
- Ideal for bonding fresh concrete to hardened concrete
- Secondary use for anchoring dowels, bolts and reinforcing steel
- Medium viscosity pumpable formula
- Moisture tolerant
- Excellent adhesion to most materials
- Tested and compliant per CDPH V1.2



PROPERTIES

Meets ASTM C881 / AASHTO M235:

Type I*, II, IV*, & V* Grade 2 Class B.

Type I**, II, IV*, & V* Grade 2 Class C.

*With exception of tensile strength

** Approved at temperatures greater than 75 °F (24 °C)

Acceptable for use in USDA inspected facilities.

UL Certified – Drinking Water System Components to NSF/ANSI/CAN 61

See Appendix A below for more information

VOC

Sure Bond J58 has a VOC content of 0 g/L .

Compliant with all Canadian and U.S. VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

Estimating Guide

Apply Sure Bond J58 at a thickness of approximately 20 mils (80 sq. ft./gal., 1.96 sq. M/L).

Packaging

PRODUCT CODE	PACKAGE	SIZE	
		Gallons	Liters
307267	Unit	1	3.8
307268	Unit	2	7.6

STORAGE

The material should be stored at 40°-95°F (4°-35°C). Shelf life of properly stored, unopened containers is 24 months.

Surface Preparation:

Surface to be bonded must be clean and sound. Remove oil, dirt, grease, laitance, curing compounds and other foreign matter that may cause a problem with bond. Abrasive blast cleaning and mechanical removal methods are recommended.

Mixing

Condition material to 65° - 85°F (18° - 29°C) before using. Premix each component then place 1 part by volume of Component A and 1 part by volume of component B into a clean pail and mix for three minutes with a low speed drill using a Jiffy mixer or paddle until uniformly blended. Mix only what can be used within the pot life. Air, material, and surface temperatures must be 40°F (4°C) prior to mixing or installation.

Placement:

As a structural adhesive and for bonding fresh concrete to hardened concrete, apply the Sure Bond J58 material neat by brush or roller and work into substrate. While Sure Bond J58 is still tacky, place the fresh concrete.

For anchoring dowels, bolts, reinforcing steel, etc., the depth of the hole should be approximately 9 to 15 times the bolt diameter. The space (annulus) around the bolt in the hole should not exceed 1/8 in. (0.3 cm). Always dispense the Sure Bond J58 into the anchoring hole filling from the bottom up. Insert the bolt, dowel or anchor turning slowly during insertion. After insertion, the hole should be completely full of epoxy.

TECHNICAL DATA SHEET

To produce a mortar for interior patching repairs, mix 1 to 4-1/2 parts by volume clean, dry, well graded silica sand to 1 part by volume of mixed Sure Bond J58. Mix thoroughly until all of the sand is wet and evenly dispersed. First, apply a prime coat over the area to be repaired with the neat Sure Bond J58. Place the mortar working it well into the surface of the concrete before the prime coat becomes tack free. Lifts should not exceed 1 in. (2.5 cm) in thickness.

CLEAN UP

Tools and Equipment: Clean before the epoxy sets. Use xylene or Dayton Superior Citrus Cleaner J48.

LIMITATIONS**FOR PROFESSIONAL USE ONLY**

Minimum age of concrete must be 21-28 days from date of placement depending on curing and drying conditions. Not recommended for any anchoring and doweling application where there may be a sustained tensile load, including overhead applications. If the Sure Bond J58 is no longer tacky during bonding operations, and within 16 hours after application of the bonder, clean and solvent wipe the area and re-apply the Sure Bond J58 Epoxy. If more than 16 hours has lapsed since application, the area must be lightly sanded or abraded and solvent wiped clean prior to re-application of the Sure Bond J58.

Always test a small amount of Sure Bond J58 to ensure that the product is mixed properly and that the material will harden properly before proceeding with the installation.

Do not thin with any solvents.

Surface, ambient and material temperatures must be 40°F (4°C) or above.

Do not expose stored or uncured product to cold temperatures below 35°F (2°C), for any length of time.

Epoxies may yellow, discolor, or chalk upon exposure to strong sources of Ultra-Violet radiation such as from sunlight, and some types of industrial artificial lighting.

Note: High temperatures will accelerate the setting time and cool temperatures will slow the setting time. As a general rule, the gel time of the epoxy will be cut in half for each 10° to 15° increase in temperature above 75°F (24°C).

PRECAUTIONS**READ SDS PRIOR TO USING PRODUCT**

- Component A – Irritant
- Component B – Corrosive
- Product is a strong sensitizer
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements
- Cured epoxy resins are innocuous

MANUFACTURER

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TECHNICAL DATA SHEET**WARRANTY**

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

TECHNICAL DATA SHEET
Appendix A
TABLE 1: Sure Bond J58 Performance to ASTM C881-15^{1,2,3}

Property	Cure Time	ASTM Standard	Units	Sample Conditioning Temperature	
				Class B	Class C ⁴
				40 °F (4 °C)	75 °F (24 °C)
Gel Time – 60 Gram Mass	----	C881	Min	220	52
Pot Life (1 gallon) ^{5,6}	----	C881	Min	30	
Tack-Free-Time	----	D2377	----	6 hr 30 min	2 hr 55min
Compressive Yield Strength	7 day	D695	PSI (MPa)	12,100 (83.4)	14,600 (100.6)
Compressive Modulus			PSI (MPa)	777,700 (5,362.05)	820,400 (5,656.4)
Viscosity	----	C881	cP	9,180	7,160
Bond Strength Hardened to Hardened Concrete	2 day	C882	PSI (MPa)	2,890 (19.9)	2,930 (20.2)
	14 Day		PSI (MPa)	3,230 (22.27)	3,480 (23.9)
Bond Strength Fresh to Hardened Concrete			PSI (MPa)	2,200 (15.1)	
Heat Deflection Temperature	7 days	D648	°F (°C)	120 (48.8)	
Water Absorption	24 Hours	D570	%	0.1	
Linear Coefficient of Shrinkage	----	D2566	in/in	0.001	
Tensile Strength	7 day	D638	PSI (MPa)	2,850 (19.6)	6,700 (46.2)
Tensile Elongation	7 day	D638	%	0.3	1.0

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.

2. Full cure is listed above to obtain the given properties for each product characteristic.

3. Results may vary due to environmental factors such as temperature, moisture and type of substrate.

4. Class C is applicable from temperatures of 75 °F (24 °C) to 100 °F (38 °C).

5. Property not referenced in ASTM C881.

6. Pot life is measured as the workable and applicable time of 1.0 gallon (3.8 L) when mixed at 75 °F (24 °C).

Not recommended for any anchoring and doweling application where there may be a sustained tensile load, including overhead applications.