

## CS-4500 PREMIUM GRADE SEALANT

### CS-4500: Description

Seal Bond CS-4500 is a high performance, single component, gun grade sealant for common building product materials requiring high movement capabilities, while performing in extreme weather conditions. CS-4500 is a moisture curing, environmentally friendly sealant that contains no isocyanates or solvents. CS-4500 has movement capabilities of +/- 50%.

### Recommended for:

Seal Bond CS-4500 can be used safely and effectively for sealing most common substrates including: aluminum, asphalt, concrete, masonry, wood, curtain walls, expansion wall joints, EIFS, panel walls, window and door frames (interior and exterior). CS-4500 is UV protected and will not get brittle or crack over time. CS-4500 remains flexible and performs excellent at temperatures ranging from -40°F to 200°F.

### Advantages

- Extremely flexible
- Solvent and isocyanate free
- Extremely low shrinkage
- Extremely low VOC
- Non-flammable
- Excellent gunability
- Weather resistant
- Non-staining

### Benefits

- Great for high movement applications
- Safe to use
- Stays bonded where applied
- Environmentally friendly
- User friendly
- Consistent ease of use
- Long lasting seal
- Can be used on stone

### Packaging

10.3 fluid oz (305ml) cartridges  
 28 fluid oz (828 ml) cartridges

### Physical Properties

**Composition:** Proprietary Hybrid Polymer

**Odor:** Nil

**Color:** White, Gray, Black

**Consistency:** Paste

### Test Data

Shore A Hardness	20	ASTM D-661
Shear Strength	80 psi	ASTM D-1002
Tack Free Time	14 min	ASTM C-679
Cure rate	7-10 days full	Internal Test
Shrinkage	No measurable	Internal Test
	Shrinkage after	
	14 days	
Low Temperature Flex	-20°F	Pass
Service Temperature	-40°F to 200°F, Continuous Service	Temporarily resistant to 390°F
Extrusion Rate	800g/min@40 psi, 5mm orifice	
Volatiles	18.5g/L	

### Storage and shelf life

Unopened containers should be stored in a cool, dry environment between 40°F and 80°F, and protected from water, heat, and direct sunlight. Shelf life when stored properly is 10 months from date of manufacturing.

### Surface preparation

All surfaces should be clean and free of all possible contaminants that could affect the function of Seal Bond CS-4500. This includes oil, grease, tar, dirt and other foreign materials. While damp surfaces are acceptable, all standing or pooled water should be removed. Surfaces should be frost-free.

### Surface priming

While priming could always be an advantage, it should not be required, except in cases of extreme service performance expectations or prolonged water immersion.

**Joint Design**

ASTM and SWRI guidelines recommend a joint width to joint depth ratio of 2:1, with the depth no more than 1/2" thick, but no less than 1/4" thick. A backer rod, or bond breaker tape, should be utilized to prevent 3-point adhesion, and to ensure proper functionality of Seal Bond CS-4500. The backer rod sizing should be 25% larger than the joint width to ensure a snug fit.

Joint Width(in)	Joint Width(mm)	Joint Depth(in) at Median Temperature	Joint Depth(mm) at Median Temperature
1/4 - 1/2	6 - 13	1/4	6
1/4 - 3/4	13 - 19	1/4 - 3/8	6 - 10
3/4 - 1	19 - 25	3/8 - 1/2	10 - 13
1 - 2	25 - 50		13

**Yield Linear Feet Per Gallon:** Approximately 12.5 cartridges per gallon

	1/4	3/8	1/2	5/8	3/4	7/8	1
1/4	308	205	154	122	-	-	-
3/8	-	-	-	82	68	58	51
1/2	-	-	-	-	51	44	38

**Seal Bond CS-4500 Application Instructions**

CS-4500 is not a structural sealant. Recommended application temperatures are between 40°F and 100°F. If applied at lower temperatures, the cure characteristics will be affected. Ideally, joint sealing should occur at mid-exposure temperature range. This will properly address the expected expansion and contraction of the joint.

Dispense Seal Bond CS-4500 into the prepped joint in a controlled manner, to prevent pockets of air from being trapped within the sealant. Seal Bond CS-4500 should skin-over in approximately 30 minutes, depending upon atmospheric conditions and temperature. Recessed joints should be quickly ready for traffic, while flush joints should remain traffic-free until such time as the sealant is firm enough to handle rigors of traffic.

**Clean-Up**

Fresh, wet material can be removed with a light duty solvent, such as isopropyl alcohol. Mineral spirits could also be considered. Cured material will require mechanical methods of removal. Do not expose finished applications to excessive cleaning solvents.

**Compliances**

ASTM C920, Type S, Grade NS, Class 50 when used with Primer C (concrete), Uses NT, M, T, A, G and O.  
 Federal Specification TT-S-001543A, Type II, Class A, Type Nonsag  
 Federal Specification TT-S-00230C, Type II, Class A  
 Canadian Standards Board CAN 19, 13-M87 Type 2  
 USDA Compliant for non-contact use in areas involving meat and poultry

**LIMITED WARRANTY**

Seal Bond warrants that our products are manufactured and conform to strict quality assurance specifications. Improper use or storage may void warranty. Buyer understands that it is their sole responsibility to test and determine the suitability of the product for their practical purposes. Buyer's sole remedy for breach of warranty shall be strictly and exclusively limited to a refund of up to 100% of the purchase price of the non-conforming goods. 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 warranties of merchantability or fitness for a particular purpose. Manufacturer shall not otherwise be liable for losses or damages related to application methods and uses, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including negligence, warranty or strict liability. For complete warranty information visit [www.seal-bond.com](http://www.seal-bond.com)