



# Sil 295 FPS-NB

Neutral Cure Silicone  
Field Pigmentable,  
Sealant No Bleed



## Technical Data Sheet

### DESCRIPTION

**BONDAFLEX Sil 295 FPS-NB** is a field pigmentable sealant, no bleed, versatile weather sealant/adhesive, one component plus color pack, non-sag elastomeric, neutral cure silicone sealant. Meets the requirement of ASTM C-920, Type S, Grade NS, Class 50/50, Use NT, M, G, O; TT-S-00230C, Type II Class A; CAN/CGSB-19.13-M87, AAMA 802.3 and California Air Resources Board 2003 requirements for Volatile Organic Compound content.

### WHERE TO USE

#### Construction Application

- Conventional glazing
- Perimeter sealing of windows, doors and skylights
- Expansion joints
- Precast expansion joints
- Unitized curtainwall assembly and field installation

#### Structure

- Buildings
- Schools
- Parking
- Plazas
- Stadiums
- Prisons

#### Location

- Vertical and horizontal
- Interior and exterior
- Above grade

#### Substrate

- Glass, aluminum, metal, tile, fiberglass, plastic, ceramic, masonry, concrete, brick, powder coated aluminum, fluoropolymer painted surfaces, vinyl, PVC, granite, limestone, sandstone, marble and wood

### FEATURES

- One-part plus color pack
- Unaffected by most atmospheric conditions
- Non-staining
- Joint movement  $\pm 50\%$
- Excellent adhesion
- Excellent gunnability in all temperatures
- 16 Bondaflex standard plus custom plus 52 Ucolors

### BENEFITS

- Minimizes need for custom colors and error with mixing two-parts, reduces lead time, and lowers waste
- Extremely long service life
- Compatible with natural stone and masonry
- Excellent flexibility for dynamic joint movement
- Bonds to most substrates without priming including many Kynar®, and anodized aluminum finishes, concrete, masonry
- All season ease of application
- Matches a variety of substrates & other Bondaflex products

### TYPICAL PROPERTIES

Cured (21 days @ 77°F (25°C) and 50% RH)  
Movement Capability, %

100% Modulus, psi (MPa)

Hardness, Shore A (Full Cure)

Tensile Strength, psi (MPa)

Elongation at Break, %

Peel Strength, pli

Accelerated Weathering  
10,000 hrs.

Staining

#### Uncured

Skin-Over Time

Tack-Free Time

Cure Rate

Extrusion Rate g/min  
1/8" orifice @ 90 psi

Slump of Sealants

Rheological, Vertical  
@ 120°F (49°C)

Volatile Organic Content:

Service Temperature

+50 / 50

55 (0.38)

20

230 (1.59)

800

30 average

No change

passes

25 min.

50 min.

1/8 inch/24 hrs.

150

nil

non-sag

2.58 % by wt.  
29 g/L  
0.25 lbs/gal

-80°F to 350°F  
-62.2°C to 176.6°C

### TEST METHOD

ASTM C-719

ASTM D-412

ASTM C-661

ASTM D-412

ASTM D-412

ASTM C-794

QUV

Weatherometer

ASTM C-1248

MNA CTM

ASTM C-679

MNA CTM

ASTM C-1183  
modified

ASTM D-2202

ASTM C-639

## PACKAGING

- 1.5 white base for Ucolor
- Ucolor Packs sold separately

## STORAGE/SHELF LIFE

When stored in the original, unopened containers at or below 90°F (32°C), shelf life is one year. A product skin may form in the pails. Remove prior to use.

## COLORS: Ucolor in the field

Adobe Tan, Almond, Aluminum, Beige, Black, Bronze, Colonial White, Dusty Rose, Gray, Hartford Green, Ivy Green, Limestone, Medium Bronze, Quarry Red, Sandstone and White. Plus the full range of 52 Ucolors. Custom colors are available upon request. Ask your local Representative for more information.

## EXPANSION JOINT DESIGN

1. The number of joints and the joint width should be designed for a maximum of +50 and -50 % movement of joint width at time of installation.
2. The depth of the sealant should be 1/2 the width of the joint. The maximum depth is 1/2 inch (13mm) and the minimum is 1/4 inch (6mm).
3. To control joint depth, use closed cell polyethylene, non-gassing polyolefin or open cell polyurethane backer rod. If joint depth does not allow for backer rod, use polyethylene bond breaker tape to prevent three-sided adhesion.
4. Closed cell backer rod should be 25% larger than joint width; do not compress more than 40%. Open cell should be compressed 40%.
5. Do not use open cell rod in horizontal on grade joint or with E.I.F.S.
6. When installing during time of large temperature swings such as spring or fall, and in joints designed for movement greater than  $\pm 25$  %, be aware of the significant joint movement before cure, that may cause aesthetic issues such as ripples in the sealant surface. Performance will not be affected.

## SURFACE PREPARATION

The substrate must be clean, dry, frost free, sound and free of any oils, greases or incompatible sealers, paints or coatings that may interfere with adhesion.

**POROUS SUBSTRATES** – clean by mechanical methods to expose a sound surface free of contamination and laitance.

**NON-POROUS SUBSTRATES** – for cleaning non-porous substrates, use two cloth wipe method using xylene or an approved commercial solvent. Allow solvent to evaporate prior to sealant application.

## PRIMING

**BONDAFLEX Sil 295 FPS-NB** is designed to obtain adhesion without the use of a primer; however, certain substrates may require a primer. Test by applying the sealant and/or primer sealant combination to confirm results and proposed application methods. Refer to Technical Data Sheet for primers **BONDAFLEX Sil 2000**, **BONDAFLEX Sil 2100**, **BONDAFLEX Sil 2300** or **BONDAFLEX MP 1500** and contact Technical Service for additional information.

## APPLICATION

### Expansion Joint

1. After mixing, apply using professional caulking gun. Do not open product container until preparation work has been completed.
2. Apply sealant using consistent, positive pressure to force sealant into the joint.
3. Tool sealant to create a concave joint shape and maximum adhesion. Dry tooling is recommended. **DO NOT** use soapy water or other liquids when tooling.

## CLEAN UP

Remove excess sealant from substrate while uncured using a commercial solvent, such as xylene. Cured sealant may be removed by mechanical means.

## LIMITATIONS

- Do not allow sealant to come in contact with solvent during cure.
- Do not allow sealant to come in contact with curing polyurethane sealants during cure.
- Not intended for immersion.
- Sealant may be applied below freezing temperatures if substrates are completely dry, frost free and clean. Contact Technical Service for more information.
- Do not apply when substrate temperatures are below -20°F or above 130°F.
- Not intended for structural glazing. Use pre colored Sil 295 only.
- Not recommended for horizontal vehicular traffic.
- Do not apply to surfaces that will be painted as sealant surface will not hold paint.

- Do not apply to substrates that bleed oil, plasticizers or solvent.
- Do not apply to damp or wet substrates.
- Lower temperature and humidity will extend tack free and cure rates.
- Allow treated wood to age six months before application.
- Brass and copper may be discolored. Test apply prior to application.
- Test sensitive substrates, such as mirror backings for compatibility before use.

## FIRST AID

In case of eye contact, flush thoroughly with water for at least 15 minutes. **SEEK IMMEDIATE MEDICAL ATTENTION.** In case of skin contact, wash affected areas with soap and water. If irritation persists, **SEEK MEDICAL ATTENTION.** Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, **SEEK IMMEDIATE MEDICAL ATTENTION.** Refer to Material Safety Data Sheet (MSDS) for further information.

## PRECAUTIONS

**KEEP OUT OF THE REACH OF CHILDREN.** Use only with adequate ventilation. Keep container closed. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling. **DO NOT** take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

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