

NuFlex® 311 SELF-LEVELING SILICONE JOINT SEALANT



NuFlex® 311 Self-Leveling Silicone Sealant is a flowable, one-part, neutral-cure, elastomeric silicone sealant. The sealant cures to form a durable, flexible, low modulus seal. The self-leveling property means reduced labour costs as no tooling is required. It is used only on horizontal applications.

■ FEATURES & TYPICAL USES:

Features:

- Neutral cure
- Self-leveling
- 100% Silicone
- Water resistant before, during, and after cure
- RTV (Room Temperature Vulcanization)
- Excellent adhesion
- Low odour

Bonds To:

- Ceramic
- Aluminium
- Concrete
- Vinyl
- Wood
- Most construction substrates

Basic uses include:

1. Non structural expansion joints
2. Horizontal joints in concrete and cementitious substrates

Other uses include:

1. Control joints in parking garages, driveways, swimming pool decks, concrete floors, sidewalks and foundations

■ SURFACE PREPARATION & APPLICATION:

Before Use: Read the label in its entirety.

Surface Preparation:

- Surfaces must be structurally sound, clean, dry, and free from oil, grease, water, dirt, or any other material and membranes that may deter adhesion.
- For porous substrates, such as concrete, wire brushing or air blasting (oil-free) is adequate.
- After the preparatory work is completed, mask where necessary to avoid spillage on to adjoining surfaces. Masking tape should be removed immediately after the sealant application is completed.

Application:

1. Cut nozzle to desired bead size and cut inner seal.
2. Use a backer rod to ensure adequate back-pressure during extrusion of the sealant which will provide good substrate wetting and adhesion, eliminate the possibility of three-sided adhesion and control the depth of the sealant.
3. The joint width and sealant depth should exceed 6.4 mm (1/4"). For joint widths in excess of 6.4 mm (1/4"), the depth of the sealant should be equal to one half of the joint width. For joint widths in excess of 25.4 mm (1"), the depth of the sealant should not exceed 12.7 mm (1/2").

Cure:

- Allow sealant time to cure in an unconfined area
- Cure time is affected by humidity, the degree of confinement, and cross-sectional thickness of the sealant.
- Sections up to 3.2 mm (1/8") thick become rubbery solids in 24 hours at 25°C (77°F) at 50% relative humidity.
- In applications where NuFlex® 311 may be partially or totally confined during cure, the time required for proper cure is generally lengthened by the degree of confinement. Every application involving confinement should be thoroughly tested before production procures.
- Curing time increases with the thickness of the sealant. A 12.7 mm (1/2") cross-section, for example, may require 3 or 4 days for complete cure. However, the cure will have penetrated the outer 3.2 mm (1/8") in about 24 hours.

Clean-up:

1. Uncured NuFlex® 311 silicone sealant cannot be removed with water.
2. Remove the bulk of the uncured sealant with a plastic scraper, being careful not to compress it into cracks or crevices.
3. Use a cloth saturated with mineral spirits, acetone, or denatured alcohol to wipe away any remaining silicone.
4. Clean the surface with soap and water if possible.



NuFlex
SEALANTS

NuFlex® 311 SELF-LEVELING SILICONE JOINT SEALANT

TYPICAL PROPERTIES:

These values are not intended for use in preparing specifications. Spec Writers; please contact NUCO Inc. before writing specifications if any further information is required.

Description	Specification
As Supplied...	
Type:	One part silicone sealant
Cure method:	Neutral, moisture cure
Specific gravity:	1.31
Application temperature range (°C (°F)):	-29° to 50°C (-20° to 122°F)
Working time (25°C (77°F)) and 50% relative humidity:	15 minutes
Full cure / adhesion time (23°C (73°F)) and 50% relative humidity:	14 to 21 days
As Cured - Physical - after 7 days at 25°C (77°F) and 50% relative humidity...	
ASTM C 611 - Durometer Hardness Shore A, points:	12
ASTM D 421 - 100% modulus, MPa (psi):	0.21 (30)
ASTM D 412 Die C - Tensile Strength, MPa (psi):	1.2 (175)
ASTM D 412 Die C - Elongation at break, percent:	500 - 600%
H-Block Elongation (12.7 mm wide x 12.7 mm deep (1/2" x 1/2") sealant joint in concrete DIN 52455)	100 - 180%
ASTM D 624 - Tear strength, kN/m (PPI):	4.9 (28)
Joint movement capability:	± 25%
ASTM C 1299 - Service temperature range:	-51° to 149°C (-60° to 300°F)

Disclosure: The information and data contained herein is BASED ON INFORMATION WE BELIEVE TO BE RELIABLE. Please read all statements, recommendations or suggestions herein in conjunction with our CONDITIONS of SALE which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions, nor do we intend them as recommendation for any use which would infringe any patent or copyright.

LIMITATIONS:

- Do not use on vertical joints
- In confined cure conditions NuFlex® 311 may discolour brass, copper or other sensitive metals.
- May stress craze polycarbonate.
- Do not use below-grade
- Do not use on:
 - Substrates that bleed oils, plasticizers or solvents (e.g. impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets or tapes)
 - Surfaces in direct contact with food
 - Surfaces that will be painted over

STORAGE AND SHELF LIFE:

- Shelf life is 24 months from the date of manufacture when stored in a clean, dry area.
- Store between 4° to 32°C (40° to 90°F).
- For best results, store the sealant in tightly closed containers when not in use.

CAUTION:

- Use in well ventilated areas and avoid breathing vapours.
- On contact, uncured sealant irritates eyes. Flush eyes with lukewarm water. Call physician.
- Avoid skin contact and DO NOT ingest.
- Consult Safety Data Sheet.

50 YEAR DURABILITY STATEMENT:

Material will remain elastic in nature for 50 years. Independent tests indicate that silicone sealant will withstand outdoor weathering for 50 years without significant performance changes. This statement applies to the sealant itself and not to the substrates to which it is bonded to. In the event of elasticity failure, return original container and sales receipt to Nuco Inc. NUCO's liability, expressed or implied is limited to the stated selling price of any goods found to be defective.

MANUFACTURER INFORMATION:

NUCO Inc. 150 Curtis Drive
Guelph, ON N1K 1N5

T: 519-823-4994
F: 519-823-1099

TF: 1-800-853-3984
E: info@nucoinc.com

SPECIFICATIONS:

NuFlex® 311 Self-Leveling Sealant meets:

- NuFlex® 311 Self-Leveling has achieved GREENGUARD GOLD Certification
- South Coast AQMD Rule 1168 Compliant
- ASTM C 920, Type S, Grade P, Class 25,
- Use NT, M, G, A, O and CAN/CGSB-19, 13-M87, Class MCG - 1 - 25 - A - L

LIMITED WARRANTY INFO:

NUCO Inc., warrants only that its product will meet its specifications for a period of 12 months following date of manufacture. NUCO shall in no event be liable for incidental or consequential damage, or improper storage. NUCO's liability, expressed or implied is limited to the stated selling price of any goods found to be defective.



AVAILABLE SIZES & COLOURS:

SKU	Colour	Size	Format
31106	Limestone	300 ml	Cartridge
31111	RV White	300 ml	Cartridge