Sikaflex® 2c NS EZ Mix

Two-Component, Non-Sag, Polyurethane Elastomeric Sealant

Description
Sikaflex® 2c NS EZ Mix is a two-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a non-sag consistency.

Where to Use
- Intended for use in all properly designed working joints with a minimum depth of 6 mm (1/4 in).
- Ideal for vertical and horizontal applications.
- Can be applied at temperatures as low as 4°C (39°F).
- Adheres to most substrates commonly found in construction.
- Submerged environments, such as canal and reservoir joints.

Advantages
- Capable of ± 50 % joint movement.
- Chemical cure allows the sealant to be placed in joints exceeding 13 mm (1/2 in) in depth for non-moving joint.
- High elasticity with a tough, durable, flexible consistency.
- Exceptional cut and tear resistance.
- Exceptional adhesion to most substrates without priming.
- Available in 35 standard architectural colours.
- Colour uniformity assured via Color-pak system.
- Available in pre-pigmented Limestone Grey (no Color-pak needed) (special order only).
- Non-sag even in wide joints.
- ANSI/NSF 61 approval for contact with potable water (special order only).
- Easy to mix.
- Paintable with water, oil, and rubber-base paints.
- Booster pak available for faster cure in cold weather.
- Meets ASTM C 920, Type M, Grade NS, Class 25, use T, NT, M, G, A, O.
- Meets Federal Specification TT-S-00227E, Type II, Class A.
- Meets Federal Specification TT-S-001543A
- Meets Federal Specification TT-S-00230C
- Meets CAN/CGSB 19.24 - M90.
- USDA approved.
- Canadian Food Inspection Agency acceptance.
- Ministry of Transport Québec acceptance.
- UL Fire Stopping Approved (FF-S-1034, FW-S-1020, HW-S-1018, WW-S-1037)
- Traffic grade available, see Sikaflex 2c NS EZ Mix TG for specifications.

Technical Data

Packaging
5.7 L and 11.4 L units (1.5 and 3 US gal. units)
Booster pak sold separately

Colours
35 standard architectural colours are available.
Special colours available on request.

Yield
Linear Meter of Sealant per Liter

<table>
<thead>
<tr>
<th>Width</th>
<th>Depth</th>
<th>6 (¼)</th>
<th>13 (¼)</th>
<th>19 (½)</th>
<th>25 (1)</th>
<th>32 (1¼)</th>
<th>38 (1½)</th>
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<tbody>
<tr>
<td>mm (in)</td>
<td>mm (in)</td>
<td>6 (%)</td>
<td>13 (%)</td>
<td>19 (%)</td>
<td>25 (%)</td>
<td>32 (%)</td>
<td>38 (%)</td>
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<tr>
<td>6 (¼)</td>
<td>24.8</td>
<td>12.4</td>
<td>6.2</td>
<td>8.3</td>
<td>4.1</td>
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<tr>
<td>13 (¼)</td>
<td>12.4</td>
<td>6.2</td>
<td>8.3</td>
<td>4.1</td>
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<tr>
<td>19 (½)</td>
<td>8.3</td>
<td>4.1</td>
<td>2.8</td>
<td>1.7</td>
<td>1.2</td>
<td>1.0</td>
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<tr>
<td>25 (1)</td>
<td>6.2</td>
<td>3.1</td>
<td>2.1</td>
<td>1.6</td>
<td>1.0</td>
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<tr>
<td>32 (1¼)</td>
<td>5.0</td>
<td>2.5</td>
<td>1.7</td>
<td>1.2</td>
<td>1.0</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>38 (1½)</td>
<td>4.1</td>
<td>2.1</td>
<td>1.4</td>
<td>1.0</td>
<td>0.8</td>
<td>0.7</td>
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Shelf Life
1 year in original, unopened packaging. Store dry between 4° - 35°C

Properties at 23°C (73°F) and 50% R.H.

Application Temperature
4° to 38°C (39° to 100°F), ambient and substrate temperatures. Sealant should be installed when joint is at mid-range of its anticipated movement.

Service Range
-40° - 77°C (-40° - 170°F)

Curing Rate ASTM C 679
Tack-free 8-10 hrs
Final cure 3 days

Working Time 5.7 L (1.5 US gal.) unit
Sikaflex® 2c NS EZ Mix 6 hrs
6 hrs 4-6 hrs 3 hrs
W/1 Booster 2-3 hrs 2 hrs 1 hr
W/2 Boosters 1.5 hrs 1 hr < 1 hr

Tear Strength ASTM D 624
7.88 N/mm (45 lb/in)

Shore A Hardness ASTM D 2240
25 ± 5
How to Use

Surface Preparation

All joint interfaces must be clean, sound, and frost-free. Joint interfaces must be free of oils, grease, curing compound residues, and any other foreign matter that might prevent bond. Ideally, this should be accomplished by mechanical means. Bond breaker tape or backer rod must be used in bottom of joint to prevent bond.

Priming

Priming is typically not necessary. Most substrates only require priming if sealant will be subjected to water immersion after cure. Testing should be done, however, on questionable substrates, to determine if priming is needed. Consult Technical Service or Sikaflex® Primers Technical Data Sheet for additional information on priming.

Note: Most Exterior Insulation Finish Systems (EIFS) manufacturers recommend the use of a primer. When EIFS manufacturer specifies a primer or if on-site bond testing indicates a primer is necessary, Sikaflex® 429/202 Primer is recommended. On-site adhesion testing is recommended with final system prior to the start of a job.

Mixing

Pour entire contents of Component B into pail of Component A. Add entire contents of Color-pak into pail and mix with a low-speed drill (400–600 rpm) and proper mixing paddle. Mix for 3–5 min to achieve a uniform colour and consistency. Scrape down sides of pail periodically. Avoid entrapment of air during mixing.

When mixing in cold weather < 10°C (50°F), do not force the mixing paddle to the bottom of the pail. After adding Component B and Color-pak into Component A, mix the top 1/2 to 3/4 of the pail during the first minute of mixing. After scraping down the sides of the pail, mix again for another minute. The paddle should reach the bottom of the pail between the first and second minute of mixing. Scrape down the sides of the pail a second time and then mix for an additional 2–3 min until the sealant is well blended. When using a booster pak add entire content into component A prior to mixing.

Note: When mixing 11.4 L (3 US gal.) unit, two containers of Component B and two color-paks must be used. Color-pak must be used with tint base. For pre-pigmented Limestone base, just mix with low speed drill and Sikaflex® paddle (no Color-pak needed).

Application

Recommended application temperatures 4° - 38°C (39° - 100°F). Pre-conditioning units to approximately 21°C (70°F) is necessary when working at extremes. Move pre-conditioned units to work areas just prior to application.

Apply sealant only to clean, sound, dry, and frost-free substrates. Sikaflex® 2c NS EZ Mix should be applied into joints when joint slot is at mid-point of its designed expansion and contraction. To place, load directly into bulk gun or use a follower plate loading system. Place nozzle of gun into bottom of joint and fill entire joint. Keeping the nozzle deep in the sealant, continue with a steady flow of sealant preceding nozzle to avoid air entrapment. Also, avoid overlapping of sealant since this also entraps air. Tool as required. Proper joint design for moving joints is 2:1 width to depth ratio, with a recommended 6 mm (1/4 in) minimum and 13 mm (1/2 in) maximum depth of sealant. For non-moving joints, the width to depth ratio can vary. To accelerate the cure of Sikaflex® 2c NS EZ Mix in cold weather temperatures, add Sikaflex® 2c booster.

Clean Up

Uncured material can be removed with Sika® Equipment Cleaner/Epoxy Thinner or Sika® Hand Cleaner. Cured material can only be removed mechanically.

Limitations

- The ultimate performance of Sikaflex® 2c NS EZ Mix, depends on good joint design and proper application.
- Some substrates require priming. Please refer to the Sikaflex® Primers Technical Data Sheet or consult with Sika Technical Services.
- Minimum depth in working joint is 6 mm (1/4 in).
- Maximum expansion and contraction should not exceed 50% of average joint width.
- Do not cure in the presence of curing silicones.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Allow 3-day cure before subjecting sealant to total water immersion.
- Avoid exposure to high levels of chlorine. (Maximum level is 5 ppm).
- Do not apply when moisture vapour transmission exists since this can cause bubbling within the sealant.
- Avoid over-mixing sealant.
- Light colour shades tend to yellow over time when exposed to ultraviolet rays.
- When overcoating, an on-site test is recommended to determine actual compatibility.
Caution

Component A - Irritant - Avoid contact. Product is a skin, respiratory and eye irritant. Use of safety goggles and chemical resistant gloves recommended. Use of a NIOSH approved respirator required if TLVs are exceeded. Use with adequate ventilation.
Component B - Combustible - Sensitizer - Irritant - Contains Xylene. Keep away from heat, sparks and open flame. Use with adequate ventilation. Product is a respiratory and skin sensitizer. Avoid contact. Product is an eye, skin, and respiratory irritant. Use of safety goggles and chemical resistant gloves recommended. Use of a NIOSH approved respirator required if TLVs are exceeded.

First Aid

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician. For respiratory problems, remove to fresh air. Remove contaminated clothing and wash before re-use. Discard contaminated shoes.

For more information, consult Sika Material Safety Data Sheet.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY