



## PRODUCT DATA SHEET

# Sikaflex® NP 1

(formerly MasterSeal® NP 1)

ONE-COMPONENT, ACOUSTIC/SOUND DAMPING, ELASTOMERIC, GUN-GRADE POLYURETHANE SEALANT

### PRODUCT DESCRIPTION

Sikaflex® NP 1 is a one-component, high-performance, non-priming, gun-grade, elastomeric polyurethane sealant. It requires no mixing and typically requires no priming to bond to many materials, including concrete and masonry. Used as an acoustical sealant, Sikaflex® NP 1 reduces sound transmission in partition systems to support high STC values by sealing spaces around cut-outs and at perimeters of partitions. The sealant cures to a tough rubber to form a long-lasting acoustical seal.

### USES

- Interior and exterior
- Above and below grade
- Immersed in water
- Expansion joints
- Panel walls
- Precast units
- Aluminum and wood window frames
- Roofing
- Fascia
- Parapets
- Vinyl siding
- Storefront assemblies

### Substrates

- Concrete
- Masonry
- Aluminum
- Wood
- Clay & concrete roof tiles
- Stucco
- Natural stone

### CHARACTERISTICS / ADVANTAGES

- One-component formula requires no mixing, helping to reduce labor costs
- Joint movement capability  $\pm 35\%$  provides excellent flexibility for keeping moving joints weathertight
- Easy to gun and tool, speeding up application and making neater joints
- Available in ProPaks, reducing job site waste and lowering disposal costs
- 12 standard colors to match a wide variety of common substrates
- No primer is required for most construction materials, lowering installation costs
- Weather resistant for long-lasting weathertight seals
- Wide temperature application range makes Sikaflex® NP 1 suitable for all climates
- Compatible with non-rigid coatings and can be painted
- Superior holding power for long-lasting roof tile installation
- UL listed; Passes 4-hour, 4-inch, fire and hose stream test when used with Ultra Block or mineral wool
- Suitable for water immersion with documented performance in wet areas
- Meets VOC requirements in all 50 states
- Can adhere to green concrete up to 72 hours after pour
- Can be used as an acoustic sealant to increase system STC value
- Minimizes sound transfer and supports high STC ratings

## APPROVALS / STANDARDS

- ASTM C 920, Type S, Grade NS, Class 35, Use NT, M, A, T, O\* and I
  - Federal Specification TT-S- 00230C, Type II, Class A
  - Corps of Engineers CRD-C- 541, Type II, Class A
  - Canadian Specification CAN/CGSB-19.13-M87, Classification MCG-2-25-A-N, No. 81026
  - CFI accepted
  - Underwriters Laboratories Inc.® classified (fire resistance only)
  - ISO 11600-F-25LM • STC (sound transmission class)
- \* Refer to substrates in Uses



### SEALANT • WATERPROOFING & RESTORATION INSTITUTE

**Issued to:** Master Builders Solutions Constructions Systems, LLC US  
**Product:** MasterSeal NP 1

**C719:** Pass  Ext:+35% Comp:-35%

**Substrate:** Unprimed Mortar, Unprimed Anodized Aluminum, & Unprimed Glass

**Validation Date:** 7/12/21 - 7/11/26

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## SEALANT VALIDATION

[www.swrionline.org](http://www.swrionline.org)

## PRODUCT INFORMATION

<b>Chemical Base</b>	Sikaflex® NP 1 is a one-component moisture-curing polyurethane.
<b>Packaging</b>	<ul style="list-style-type: none"> <li>▪ 300 ml (10.1 fl oz) cartridges, 30 cartridges per carton, and 12 cartridges per carton</li> <li>▪ 590 ml (20 fl oz) ProPaks, 20 per carton</li> </ul>
<b>Shelf Life</b>	Cartridges and ProPaks: 1 year when properly stored.
<b>Storage Conditions</b>	Store in original, unopened containers away from heat and direct sunlight. Storing at elevated temperatures will reduce the shelf life.
<b>Color</b>	White, Off-White, Limestone, Stone, Tan, Aluminum Gray, Medium Bronze, Special Bronze, Redwood Tan, Black, and Gray.
	For color availability in bulk packaging, call Customer Service.

## TECHNICAL INFORMATION

<b>Shore A Hardness</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;">At standard conditions</td> <td style="border-bottom: 1px solid black; text-align: center;">25 – 30</td> <td style="border-bottom: 1px solid black; text-align: right;">ASTM C 661</td> </tr> <tr> <td>After heat aging (max Shore A: 50)</td> <td style="text-align: center;">25</td> <td></td> </tr> </table>	At standard conditions	25 – 30	ASTM C 661	After heat aging (max Shore A: 50)	25	
At standard conditions	25 – 30	ASTM C 661					
After heat aging (max Shore A: 50)	25						
<b>Elongation at break</b>	800% <span style="float: right;">ASTM D 412</span>						
<b>Movement Capability</b>	±35 % <span style="float: right;">ASTM C 719</span>						
<b>Adhesion in peel</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;">30* <span style="float: right;">ASTM C 794</span></td> </tr> <tr> <td>Passes* <span style="float: right;">ASTM C 794 (after UV radiation through glass)</span></td> </tr> </table> <p>*Primed for water immersion dictated by ASTM C 920. Concrete and aluminum primed with Sikaflex® Primer-173.</p>	30* <span style="float: right;">ASTM C 794</span>	Passes* <span style="float: right;">ASTM C 794 (after UV radiation through glass)</span>				
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<b>Tear Strength</b>	50 pli <span style="float: right;">ASTM D 1004</span>						
<b>Shrinkage</b>	None						

Product Data Sheet  
 Sikaflex® NP 1  
 June 2024, Version 01.01  
 02051100000002006

**BUILDING TRUST**



<b>Sound Insulation</b>	44 (dB)	ASTM E 90
<b>Service Temperature</b>	-40 to 180°F (-40 to 82°C)	
<b>Thermal Resistance</b>	Weight loss, after heat aging, % 3 Cracking and chalking, after heat aging None	ASTM C 792
<b>Contact with water</b>	Passes 10 weeks with movement cycling	ASTM C 1247
<b>Resistance to Weathering</b>	Passes No surface cracking	ASTM C 793 ASTM G 26
<b>Color</b>	Passes	ASTM C 510

## APPLICATION INFORMATION

<b>Coverage</b>	<b>Linear Feet Per Gallon</b>			
	<b>Joint Width (inches)</b>	<b>Joint Depth (inches)</b>		
		<b>1/4</b>	<b>3/8</b>	<b>1/2</b>
<b>1/4</b>	308	-	-	-
<b>3/8</b>	205	-	-	-
<b>1/2</b>	154	-	-	-
<b>5/8</b>	122	82	-	-
<b>3/4</b>	-	68	51	-
<b>7/8</b>	-	58	44	-
<b>1</b>	-	51	38	-
<b>1-1/2</b>	-	-	26	-
<b>2</b>	-	-	19	-
<b>3</b>	-	-	12	-
	<b>Meters Per Liter</b>			
	<b>Joint Width (MM)</b>	<b>Joint Depth (MM)</b>		
		<b>6</b>	<b>10</b>	<b>13</b>
<b>6</b>	24.8	-	-	-
<b>10</b>	16.5	-	-	-
<b>13</b>	12.4	-	-	-
<b>16</b>	9.8	6.6	-	-
<b>19</b>	-	5.5	4.1	-
<b>22</b>	-	4.7	3.5	-
<b>25</b>	-	4.1	3.0	-
<b>38</b>	-	-	2.2	-
<b>50</b>	-	-	1.5	-
<b>75</b>	-	-	0.7	-
<b>Sagging</b>	Rheological,(sag in vertical displacement) at 120 °F (49 °C)	No sag	ASTM C 639	
<b>Pot Life</b>	Extrudability, 3 seconds	Passes	ASTM C 603	
<b>Tack Free Time</b>	Passes	ASTM C 679		

## BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## APPLICATION INSTRUCTIONS

### NOTES ON INSTALLATION

TABLE 1

#### Joint Width and Sealant Depth

JOINT WIDTH, IN (MM)	SEALANT DEPTH, AT MIDPOINT, IN (MM)
¼–½ (6–13)	¼ (6)
½–¾ (13–19)	¼–¾ (6–10)
¾–1 (19–25)	¾–½ (10–13)
1–1½ (25–38)	½ (13)

### SUBSTRATE PREPARATION

Substrates must be structurally sound, fully cured, dry, and clean. Substrates should always be free of the following: dirt, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing or curing and parting compounds, membrane materials, and sealant residue.

#### Concrete, Stone and Other Masonry

Clean by grinding, sandblasting or wire brushing to expose a sound surface free of contamination and laitance.

#### Wood

New and weathered wood must be clean, dry and sound. Scrape away loose paint to bare wood. Any coatings on wood must be tested to verify adhesion of sealant or to determine an appropriate primer.

#### Metal

Remove scale, rust and loose coatings from metal to expose a bright white surface. Any coatings on metal must be tested to verify adhesion of sealant or to determine an appropriate primer.

## APPLICATION

### Joint Preparation

1. The product may be used in sealant joints designed in accordance with SWR Institute's Sealants - The Professional's Guide.
2. In optimal conditions, the depth of the sealant should be ½ the width of the joint. The sealant joint depth (measured at the center) should always fall between the maximum depth of ½" and the minimum depth of ¼". Refer to Table 1.
3. In deep joints, the sealant depth must be controlled by closed cell backer rod or soft backer rod. Where the joint depth does not permit the use of backer rod, a bond breaker (polyethylene strip) must be used to prevent three-point bonding.
4. To maintain the recommended sealant depth, install backer rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed cell backer rod should be about 1/8" (3 mm) larger in diameter than the width of the joint to allow for compression. Soft backer rod should be approximately 25% larger in diameter than the joint width. The sealant does not adhere to it, and no separate bond breaker is required. Do not prime or puncture the backer rod.

### Priming

Sikaflex® NP 1 is considered a nonpriming sealant, but special circumstances or substrates may require a primer. It is the user's responsibility to check the adhesion of the cured sealant on typical test joints at the project site before and during application. Refer to product data sheet on Sikaflex Primer-173 or Sikaflex Primer-176, and consult Technical Service for additional information.

2. For immersion applications, Sikaflex Primer-173 must be used.
3. For green concrete applications, Sikaflex Primer-173 must be used.
4. Apply primer full strength with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces. Porous surfaces require more primer; however, do not over-apply.
5. Allow primer to dry before applying Sikaflex® NP 1. Depending on temperature and humidity, primer will be tack-free in 15–120 minutes. Priming and sealing must be done on the same day.

## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always

read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com](https://usa.sika.com) or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

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**Sika Corporation**

201 Polito Avenue  
Lyndhurst, NJ 07071  
Phone: +1-800-933-7452  
Fax: +1-201-933-6225  
[usa.sika.com](https://usa.sika.com)



**Product Data Sheet**

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