

PRODUCT DATA SHEET

Sikaflex® HY 150

(formerly MSeal NP 150)

LOW-MODULUS, NON-SAG, ELASTOMERIC, HYBRID SEALANT

PRODUCT DESCRIPTION

Sikaflex® HY 150 is a high-performance, very low-modulus, high-movement, non-sag, fast-curing, hybrid sealant.

USES

- Vertical or horizontal
- Exterior or interior
- Above grade
- Joints with high-movement
- In place of silicone sealants
- Storefront systems
- Expansion joints
- Panel walls
- Precast units
- Aluminum, vinyl, and wood window frames
- Fascia
- Parapets
- Sanitary applications
- Rough opening liquid flashing
- Window setting adhesive bead
- Window flange sealant
- Air infiltration sealant
- Low surface energy (LSE) substrates with Sika® Primer-173
- Perimeter weather seal
- Transition seam sealant

Substrates

- EIFS
- Stucco
- Aluminum
- Concrete
- Masonry

- Wood
- Stone
- Metal
- Vinyl
- Fiber cement siding

CHARACTERISTICS / ADVANTAGES

- Superior adhesion results in a long-lasting bond, helping to reduce callbacks
- Low modulus to accommodate for joint movement (100% extension in EIFS joints with little stress on bond line)
- Can be painted with elastomeric coatings soon after installation • Easy to gun and tool, speeding up application
- Wide temperature application range
- Weather resistant for long-lasting weathertight seals
- Fast curing helps to speed up job site production
- Non-staining formula for use on stone and other sensitive substrates
- Available in ProPaks to reduce job site waste and lower disposal costs
- Meets all state and federal VOC regulations
- Can adhere to green concrete in as little as 72 hours after pour
- Adheres to low-energy surfaces including polyethylene, polypropylene, and polyolefins

APPROVALS / STANDARDS



**SEALANT · WATERPROOFING
& RESTORATION INSTITUTE**

Issued to: Master Builders Solutions Constructions Systems, LLC US
Product: MasterSeal NP 150

C719: Pass Ext:+50% Comp:-50%

Substrate: Primed Mortar, Unprimed Aluminum, & Unprimed Glass (mortar substrates were primed with MasterSeal P179)

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

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SEALANT VALIDATION
www.swrionline.org

- ASTM C 920, Type S, Grade NS, Class 50, Use NT, M, A, and O*
- -capable of +100/-50% movement under typical field
- ASTM C 1382 for use with EIFS wall systems at 100% Extension
- Federal Specification TT-S-001543A, Type II, Class A, Type Nonsag
- Federal Specification TT-S-00230C, Type II, Class A
- Corps of Engineers CRD-C-541, Type II, Class A
- CFI accepted
- USDA-compliant for use in areas that handle meat and poultry.
- AAMA 714-15 Voluntary Specification for Liquid Applied Flashing Used to Create a Water-Resistive Seal Around Exterior Openings in Buildings.

*Refer to substrates in Where to Use

Note: All testing with Sikaflex® HY 150 at 20 mils unless otherwise noted

PRODUCT INFORMATION

| | |
|---------------------------|---|
| Packaging | <ul style="list-style-type: none"> ▪ 300 ml (10.1 fl oz) cartridges, 30 cartridges per carton ▪ 20 oz (590 ml) ProPaks, 20 per carton |
| Shelf Life | 15 months when properly stored |
| Storage Conditions | Store in original, unopened containers in a cool, dry area. Protect unopened containers from heat and direct sunlight. Storing at elevated temperatures will reduce shelf life. |
| Color | White, Stone, Limestone, Black, Medium Bronze, Aluminum Gray, Tan, Off-White, Special Bronze, Precast White |

TECHNICAL INFORMATION

| | | | | | | | |
|--------------------------------------|---|--|--------------------|--------------|-----------|--------------------|--|
| Shore A Hardness | 17 | (ASTM C 661) At standard conditions | | | | | |
| Tensile Strength | 140-180 psi | (ASTM D 412) | | | | | |
| Tensile Modulus of Elasticity | 100% modulus | 35 psi (.24 MPa) (ASTM D 412) | | | | | |
| Elongation at break | 800–1,000% | (ASTM D 412) | | | | | |
| Elongation | 100% | (ASTM C 1382) | | | | | |
| Movement Capability | ±50% | (ASTM C 719) | | | | | |
| Adhesion in peel | <table border="0"> <tr> <td>Aluminum</td> <td>35 pli (6.2 kg/cm)</td> <td>(ASTM C 794)</td> </tr> <tr> <td>Concrete*</td> <td>36 pli (6.4 kg/cm)</td> <td>pli (kg/cm), (minimum 5 pli [0.89 kg/cm])</td> </tr> </table> | Aluminum | 35 pli (6.2 kg/cm) | (ASTM C 794) | Concrete* | 36 pli (6.4 kg/cm) | pli (kg/cm), (minimum 5 pli [0.89 kg/cm]) |
| Aluminum | 35 pli (6.2 kg/cm) | (ASTM C 794) | | | | | |
| Concrete* | 36 pli (6.4 kg/cm) | pli (kg/cm), (minimum 5 pli [0.89 kg/cm]) | | | | | |

*Concrete primed with Sika® Primer-179 for water immersion as indicated in

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BUILDING TRUST



| | | |
|---------------------------------|---|--------------------------|
| | ASTM C 920. | |
| Tear Strength | 40 lb/in (7.1 kg/cm) | (ASTM D 1004) |
| Shrinkage | None | |
| Service Temperature | -40 to 180°F (-40 to 82°C) | |
| Resistance to Weathering | Xenon arc 2,000 hours | No Cracking (ASTM G 155) |
| | Weight loss, after heat aging | < 10% (ASTM C 1246) |
| Color | Passes(No visible stain) | (ASTM C 510) |
| Design Values | AAMA 714-15 Voluntary Specification for Liquid Applied Flashing Used to Create a Water-Resistive Seal Around Exterior Openings in Buildings | |



| PROPERTY | RESULTS | TEST METHOD |
|--|---|--|
| Peel Adhesion Control AAMA 714 Sec 5.1 UV exposure Sec 5.3 ASTM G154 Elevated temperature AAMA 714 Sec 5.4 Thermal cycling AAMA 714 Sec 5.5 7 day water immersion AAMA 714 Sec 5.7 | Tested over concrete (mortar), CMU, plywood, aluminum at 12 mils thickness Pass control and after conditioning, min. 5 pli | AAMA 714 Sec 5.1, ASTM C794-18 |
| Nail Sealability | Pass, before and after thermal cycling, 24 hours at 40 °F with 31.75 mm (1 1/4") head of water. | (AAMA 714 Sec 5.2 (AAMA 711 Sec 5.2), ASTM D1970-13) |
| Accelerated Aging | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 21 days (504 hours) to Cycle 1 of ASTM G155. | AAMA 714 Sec 5.3, ASTM G155 |
| Crack Bridging | Pass, no failure after 10 cycles with 1/8" gap and water holdout of 550 mm (21.7") for 24 hours. | AAMA 714 Sec 5.6, ASTM C1305 |
| Elevated Temperature | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage at 50 °C (122 °F), 65 °C (149 °F), and 80 °C (176 °F) | AAMA 714 Sec 5.4 |
| Thermal Cycling | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage at 10 cycles | AAMA 714 Sec 5.5 |
| Water Immersion | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 7 days | AAMA 714 Sec 5.7 |
| Adhesion to Damp Substrates | Pass, min 5 pli, over mortar | AAMA 714 Sec 6.1 and 6.2 |
| Water Vapor Permeability | 5.8 perms @ 20 mils 5.4 perms @ 30 mils | AAMA 714 Sec 6.3, ASTM E96 Method B |

▪ Note: All testing with MasterSeal® NP 150 at 20 mils unless otherwise noted

| | | |
|-----------------------|---------|---------------|
| Extrusion rate | 2-3 sec | (ASTM C 1183) |
|-----------------------|---------|---------------|

APPLICATION INFORMATION

| Coverage | Linear Feet Per Gallon | | | |
|----------|------------------------|----------------------|-----|-----|
| | Joint Width (Inches) | Joint Depth (Inches) | | |
| | | 1/4 | 3/8 | 1/2 |
| 1/2 | 154 | - | - | - |
| 5/8 | 122 | 82 | - | - |
| 3/4 | - | 68 | 51 | - |
| 7/8 | - | 58 | 44 | - |
| 1 | - | 51 | 38 | - |
| 3/2 | - | - | 26 | - |
| 2 | - | - | 19 | - |
| 3 | - | - | 12 | - |

| Meters Per Liter | Joint Width(MM) | | | |
|------------------|-----------------|-----------------|-----|----|
| | Joint Width(MM) | Joint Depth(MM) | | |
| | | 6 | 10 | 13 |
| 13 | 12.4 | - | - | - |
| 16 | 9.8 | 6.6 | - | - |
| 19 | - | 5.5 | 4.1 | - |
| 22 | - | 4.7 | 3.5 | - |
| 25 | - | 4.1 | 3.0 | - |
| 38 | - | - | 2.2 | - |
| 50 | - | - | 1.5 | - |
| 75 | - | - | .7 | - |

| | | |
|----------------|--------|--|
| Sagging | No sag | (ASTM C 639) Rheological, (sag in vertical displacement), at 120 °F (49 °C) |
|----------------|--------|--|

| | |
|------------------|---|
| Cure Time | <p>Skins: 60-90 minutes Full cure: Approximately 1 week Immersion service: 21 days</p> <ul style="list-style-type: none"> The cure of Sikaflex® HY 150 varies with temperature and humidity. The following times assume 75 °F (24 °C), 50% relative humidity, and a joint 1/2" width by 1/4" depth (13 by 6 mm). |
|------------------|---|

| | | |
|-----------------------|--------|-----------------------------------|
| Tack Free Time | 90 min | (ASTM C 1246) Maximum 72 hours |
|-----------------------|--------|-----------------------------------|

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

| Joint Width, IN (MM) | Sealant Depth at Midpoint, IN (MM) |
|----------------------|------------------------------------|
| 1/2-3/4 (13-19) | 1/4-3/8 (6-10) |
| 3/4-1 (19-25) | 3/8-1/2 (10-13) |
| 1-3/2 | 1/2(13) |

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For Best Performance

- In cold weather, store the container at room temperature for at least 24 hours before using Sikaflex® HY 150.
- Not for use in glazing applications. Do not apply on glass and plastic glazing panels.
- For proper sealing of joint edges, all window covers must be removed before the application of sealant.
- Do not allow uncured Sikaflex® HY 150 to come into contact with alcohol-based materials or solvents.
- Sikaflex® HY 150 should not be applied adjacent to other uncured sealants and certain petroleum-based products.
- Sikaflex® HY 150 can adhere to other residual sealants in restoration applications. For best results, always clean the joint as advised in the Surface Preparation section of this data guide. A product field adhesion test for Sikaflex® HY 150 within the specific application is always recommended to confirm the adhesion and suitability of the application.
- Sikaflex® HY 150 should not be used for continuous immersion in water. Contact Technical Service for recommendations.
- Do not apply over freshly treated wood. Allow six months for weathering.
- Do not use Sika® Primer-179 on nonporous surfaces such as aluminum, steel, vinyl, or Kynar 500-based paints. Use Sika® Primer-173 on coated metals when testing dictates.
- Lower temperatures and humidity will extend curing times.
- Sikaflex® HY 150 can be painted over after a thin film or skin forms on the surface.
- In green concrete applications, sealing joints in concrete before 72 hours after concrete placement will impact the ability of the sealant to gain adhesion. Sika® Primer-179/Sika® Primer-173 should be used as a primer in green concrete applications. It is always recommended to conduct a mock-up when applying Sikaflex® HY 150 to green concrete.
- For low surface energy substrates, Sika® Primer-173 and field adhesion testing are recommended.
- Pursuant to accepted industry standards and practices, using rigid paints and/or coatings over flexible sealants can result in a loss of adhesion of the applied paint and/or coating, due to the potential movement of the sealant. However, should painting and/or coating be desired it is required that the applicator of the paint and/or coating conduct on-site testing to determine compatibility and adhesion.
- Proper application is the responsibility of the user.

Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the job site.

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.

EIFS

1. Sikaflex® HY 150 should be applied to the system base coat for best adhesion and to avoid delamination of EIFS finish applied in the joint.
2. The base coat must be sound, well bonded, properly cured, and of sufficient depth to comply with the manufacturer's specifications.
3. Certain EIFS systems require the use of a primer. Refer to the EIFS manufacturer for recommendations.

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 the adhesion of the 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 the adhesion of the sealant or to determine an appropriate primer.

PRIMING

1. Sikaflex® HY 150 is generally a non-priming sealant, but special circumstances or substrates may require a primer.

- Porous materials subject to intermittent water immersion require priming. Use Sika® Primer-179.
 - Certain architectural metal finishes may require priming with Sika® Primer-173.
 - 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 the technical data guides for Sika® Primer-179 and Sika® Primer-173.
 - For green concrete applications, Sika® Primer-173 or Sika® Primer-179 must be used.
2. Apply primer full strength with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces.

Very porous surfaces may require a second coat of MasterSeal P 179; however, do not over-apply.
3. Allow the primer to dry before applying Sikaflex® HY 150. Depending on temperature and humidity, the primer will be tack-free in 15–30 minutes. Priming and sealing must be done on the same day.

APPLICATION

How to Apply 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 a closed-cell backer rod or soft backer rod. Where the joint depth does not permit the use of a backer rod, a bond breaker (polyethylene strip) must be used to prevent three-point bonding.
4. To maintain the recommended sealant depth, install the backer rod by compressing and rolling it into the joint channel without stretching it lengthwise. The closed cell backer rod should be about 1/8" (3 mm) larger in diameter than the width of the joint to allow for compression. The 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.

Application

1. Sikaflex® HY 150 comes ready to use. Apply using a professional-grade caulking gun. Do not open cartridges, ProPaks, or pails until preparatory work has been completed.
2. Fill joints from the deepest point to the surface by holding an appropriately sized nozzle against the back of the joint.
3. Dry tooling is recommended. Proper tooling results in the correct bead shape, neat joints, and optimal adhesion.
4. Sikaflex® HY 150 can be applied below freezing temperatures down to 10 °F only if substrates are completely dry, free of moisture, and clean. Contact Technical Service for more information.

Flashing Rough Openings Application:

1. Apply a bead of Sikaflex® HY 150 in each corner of the

rough opening, ensuring that the corners are fully sealed.

2. Apply additional Sikaflex® HY 150 in a zigzag pattern onto the head, sill, jambs, and exterior substrate.
3. Spread Sikaflex® HY 150 evenly across the rough opening to form a continuous, void, and pinhole-free membrane with a 20 mil thickness.
4. Extend Sikaflex® HY 150 membrane a minimum of 4 inches onto the exterior wall, maintaining 20 mil thickness.
5. Allow Sikaflex® HY 150 to cure before the installation of windows, doors, and other assemblies.

CLEANING OF TOOLS

1. Immediately after use, clean equipment with SikaSwell®-990 or xylene. Use proper precautions when handling solvents.
2. Remove cured sealant by cutting with a sharp-edged tool.
3. Remove thin films by abrading.

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 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. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL**

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