

LOXON™ H1

One Component Low Modulus Hybrid Sealant



PRODUCT DESCRIPTION

Loxon™ H1 is a one component, low modulus, high performance, high movement, fast-curing, non-sag, gun-grade, moisture cure, hybrid sealant. It is designed for a wide range of sealing and caulking applications. After curing, Loxon™ H1 exhibits a flexible, resilient, rubber-like appearance that adheres to a wide variety of substrates. The combination of extreme flexibility (ASTM C920 Class 50) and very low modulus make this sealant excellent for properly constructed EIFS substrates. 100% extension in EIFS joints with minimal stress on bond line. Loxon™ H1 is VOC compliant in all 50 states.

APPLICATIONS

Expansion joints, vertical or horizontal, interior / exterior, above grade, joints with high movement, aluminum, vinyl and wood window frames, vinyl siding, skylights, doors, foundations, fascia, precast units, store front assemblies, panel walls, roofing, sanitary applications and parapets.

SUBSTRATES

EIFS, cementitious board, masonry, stucco, concrete, wood, vinyl, aluminum, steel, ceramics, clay and concrete roof tiles, stone.

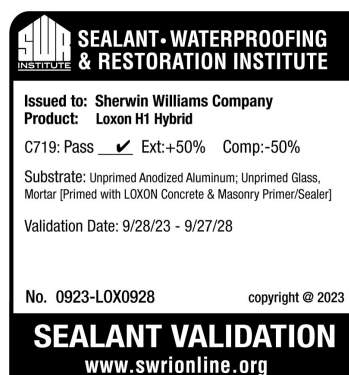
Meets or exceeds the following specifications:

- ASTM C-920, Type S, Grade NS, Class 50, Use: NT, A, M, O
- Federal Specification TT-S-00230 C, Type II, Class A, Non-Sag
- Federal Specification TT-S-001543A, Type II, Class A, Non-Sag

PRODUCT AVAILABILITY*

Sales #	SKU	Color	Size
650858988	LX51H0010	White	10.1 oz Cartridge
650859002	LX51H4110	Limestone	10.1 oz Cartridge
650859028	LX51H5010	Black	10.1 oz Cartridge
650859119	LX51H4143	Limestone	20 oz Sausage
650859127	LX51H2143	Stone	20 oz Sausage
650859135	LX51H5043	Black	20 oz Sausage
650859143	LX51H3543	Medium Bronze	20 oz Sausage
650859150	LX51H3643	Special Bronze	20 oz Sausage
650859168	LX51H4543	Aluminum Gray	20 oz Sausage
650859176	LX51H2243	Tan	20 oz Sausage
650859184	LX51H0143	Off-White	20 oz Sausage
651003253	LX51H7143	Redwood Tan	20 oz Sausage

* Not all products are stocked in all DSCs.



ASTM TEST DATA

Artificial weathering: no cracking via ASTM G155 xenon arc, 2,000 hrs

TABLE 1: TYPICAL UNCURED PROPERTIES*

Property	Value	Test Method/Note
Tack free Time	90 minutes	ASTM C679
Curing Time @75°F, 50% relative humidity	2-5 days depending on bead size	Varies with relative humidity
Flow, Sag or Slump	Passes	ASTM C639
Staining	Passes	ASTM C510

TABLE 2: TYPICAL PROPERTIES* (After full cure at 75°F & 50% RH)

Property	Value	Test Method/Note
Hardness (Shore A)	16+/- 2	ASTM C661
Tensile Strength	140-180 psi	ASTM D412
Elongation	800-1,000%	ASTM D412
Adhesion in Peel	35 pli	ASTM C794
Stain & Color Change	Passes	ASTM C510
Ozone Resistance	Good	
Joint Movement Capability	+ or - 50%	ASTM C719
Extension	100%	ASTM C1382
UV Resistance	Good	ASTM C793

*Values given above are not intended to be used in specification preparation.

The physical properties of fully cured Loxon™ H1 will remain relatively unchanged over a temperature range of -40°F to 180° F.

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LIMITATIONS

Not recommended for:

- Areas subjected to continuous water immersion.
- Joints contaminated with grease, wax, corrosion, bitumen or cement laitance.
- Horizontal joints in floors or decks where abrasion or physical abuse is encountered.
- Special architectural finishes without proper testing.

LOXON™ H1 sealant should be dry tooled. Tooling techniques using solvents or soapy solutions are not recommended.

All surfaces must be evaluated for adhesion prior to use. Not designed as a glazing sealant. Do not apply on glass or plastic glazing panels.

LOXON™ H1 is exceptional where color retention is critical. Check tack-free time to prevent dirt pickup.

During the cure time of LOXON™ H1, do not expose to other uncured sealants, alcohol based materials or solvents, acids, or solvent-based materials, and certain petroleum based products.

Until the sealant is fully cured, do not expose the sealant to any mechanical stress. Uncured sealant will not respond properly to cyclic expansion and contraction of the joint specified for the cured sealant only.

LOXON™ H1 must not be used to seal narrow joints, fillet joints, and face nail holes.

Smearing and feathering LOXON™ H1 over joints is not recommended.

Lower relative humidity and temperature will extend the curing time. Confined areas, deep joints and moisture barrier substrates may also extend the cure time.

TECHNICAL DATA:

LOXON™ H1 exhibits excellent weatherability when exposed to ultraviolet radiation, atmospheric hydrocarbons and extremes in temperature. Joints designed to accommodate 100% total joint movement will not affect the seal or adhesion bond.

Joints properly designed and sealed will extend and compress a total of 100% of the installation width with no more than 50% movement in a single direction.

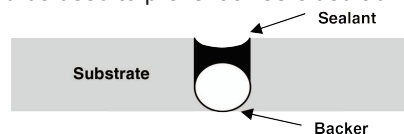
Cured sealant can be painted with emulsion or synthetic enamel paints. LOXON™ H1 will be virtually unaffected by contact with water after cure on non-porous substrates.

On porous substrates, priming is recommended if the sealant will be subjected to sporadic periods of immersion. Not intended for continuous immersion.

PRECAUTIONS: IF THIS PRODUCT IS USED IN DIRECT CONTACT WITH ANY OTHER SEALANT OR ELASTOMER A COMPATIBILITY TEST MUST BE CONDUCTED, BY PURCHASER OR USER, PRIOR TO ACCEPTANCE. LOXON™ H1 SEALANT IS NOT COMPATIBLE WITH OXIME CONTAINING SILICONE SEALANTS.

INSTALLATION: JOINT DESIGN AND PREPARATION

Joint design depends on a variety of factors, such as the maximum expansion and contraction of the substrate from thermal change. Recommended maximum joint width should not exceed 1-1/2" (1.50") (3.81cm) and the maximum joint depth should not exceed 1/2" (0.500") (12.69mm). Minimum joint width should not be less than 1/4" (0.250") (0.34mm). The sealant depth should be 1/4" (0.34mm) for joints 1/4" in width. For joints over 1/4" in width, depth should be 1/2 of the joint width but should not exceed 1/2" (0.500") (12.69mm) in depth. In order to obtain the recommended sealant mass, the joint should be filled with closed cell backer rod first, leaving the proper depth to be filled with sealant. Desirable backer rod materials are polyethylene or polyethylene non-gassing foamed rod. Do not prime or puncture the closed cell structure of polyethylene rod as bubbles could form and migrate to the surface of the curing sealant. The use of open cell backer rod is not recommended. In situations where joint depth does not allow for use of backer rod, bond breaker (polyethylene strip) should be used to prevent three-sided adhesion.



SURFACE PREPARATION:

Old sealant should be completely removed. Concrete and masonry surfaces must be free of foreign matter and contaminants. Dust and loose particles should be blown out of joints. A clean, dry, sound and uncontaminated surface is mandatory. Stone surfaces must be cohesively sound, dry and free of contaminants. Granite, limestone, marble and sandstone must be pre-tested for adhesion prior to sealant installation.

When used in conjunction with EIFS systems, Loxon™ H1 should be applied to system base coat to avoid delamination of EIFS finish. Base coat must be cured, of proper depth, well bonded and sound. Some EIFS systems may require a primer. Refer to EIFS manufacturer recommendations.

Mill finish aluminum may contain an invisible oil film or oxide. Clean with an appropriate solvent. The use of solvents may be hazardous to your health. Use only in well ventilated areas. **KEEP AWAY FROM OPEN FLAME.** Read all labeling before use and follow solvent manufacturer's recommendations and instructions for safe handling. Many high-performance coatings or unusual surface treatments may require abrasion of the surface with steel wool or fine emery paper during preparation.

PRIMING:

Certain situations or substrates may require a primer. Ensure compatibility *before* using primer. See primer PDS for details and proper use (LXPRIQD13 for **non-porous application**).

- Priming of masonry or other porous substrate joints (*with a primer suitable for hybrid sealant porous substrate application*) is recommended if the joints will be subjected to intermittent immersion.

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- b) Some metals and non-porous surfaces may require priming with LXPRIQD13.
- c) It is recommended that all surfaces be pre-tested with LOXON™ H1 sealant to determine if cleaning will be necessary to remove surface contamination. In the case of some exotic coatings, priming or other surface treatment may be necessary.
- d) LOXON™ H1 Sealant is compatible with most coatings and treatments, but due to the vast numbers of, and types of surface coatings available, Sherwin-Williams recommends pre-testing LOXON™ H1 sealant on the surface in question. Follow manufacturer's recommended recoat times for application of LOXON™ H1 sealant to primers or treatments. Check primer or treatment for surface contaminants prior to application of sealant.

METHOD OF APPLICATION:

All surfaces must be structurally sound, clean, dry, and fully cured. A field adhesion (pull test) in test joints is recommended, before application. Apply LOXON™ H1 sealant in a continuous operation, using a professional grade caulking gun and positive pressure adequate to properly fill and seal the joint.

TOOLING:

LOXON™ H1 sealant should be dry tooled. Tooling techniques using solvents or soapy solutions are not recommended. Tooling of freshly applied sealant is necessary for proper adhesion. Tool the sealant with adequate pressure to spread the sealant against the back-up material and onto the joint surfaces. If joint surfaces have been masked, remove masking tape immediately after tooling.

PAINTING:

Exercise caution if painting. When painting over LOXON™ H1 sealant with primers, top-coats or treatments, cracking or peeling of these coatings could occur because of joint movement. In general, oil-based paints are not recommended because of their relatively poor elastic properties and because of their potential interaction with the sealant chemistry, which may create non-curing conditions for the painted sealant. Do not paint over LOXON™ H1 sealant until it has formed a skin (thin film). Cure is dependent on temperature and humidity.

LOXON™ H1 sealant when applied in a typical 1/2" x 1/4" bead and backed with a suitable bond-breaker at 75°F and 50% RH, will be acceptable for painting with breathable coatings within 24 hours and non-breathable coatings after 72 hours. Warmer, more humid conditions will allow LOXON™ H1 sealant to cure more quickly and conversely, cooler and/or drier conditions will lengthen the cure time. A small test area is strongly recommended.

CLEANING:

Cured sealant is very difficult to remove. Excess sealant and smears should be dry-wiped from all surfaces while still uncured, followed with a commercial solvent such as xylol, toluol or methyl ethyl ketone. The use of these solvents (or other solvents) may be hazardous to your health.

KEEP AWAY FROM OPEN FLAME. Read all labeling before use, and follow solvent manufacturer's recommendations and instructions for safe handling. Tool and application equipment may also be cleaned with the same solvents. The dried sealant can be removed by cutting with a sharp-edged tool; thin films by abrading.

CAUTIONS

Danger. May cause an allergic skin reaction. May damage fertility. May damage the unborn child. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer.
Prevention: Obtain special instructions before use. Avoid breathing dusts/vapours. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Wear protective gloves. Wear eye or face protection. Use personal protective equipment as required. Contaminated work clothing should not be allowed out of the workplace. Response: IF exposed or concerned: Get medical attention. **IF ON SKIN:** Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing. Wash contaminated clothing before reuse. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. **Storage:** Store locked up. **Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **FOR INDUSTRIAL USE ONLY.** Please refer to the SDS for additional information. Do not transfer contents to other containers for storage. Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 58%

SHELF LIFE:

LOXON™ H1 sealant will exhibit a 15 month shelf life from the date of manufacture when stored at room temperature.

LIMITED WARRANTY

LIMITED WARRANTY: Sherwin-Williams warrants for one year from date of use if used as directed and within product shelf life (as set forth in the current Sherwin-Williams Product Data Sheet (the "PDS") for this product) that this product will be free from manufacturing defects and meet the specifications set forth in the product PDS. Sherwin-Williams makes no warranty as to appearance or color. If this product fails to meet the foregoing warranty, as your sole remedy, upon proof of purchase, we will replace the product at no cost or refund the original purchase price. Labor or costs associated with labor not included. This warranty is made to the original purchaser and is not transferable. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY, WHICH ARE ALL DISCLAIMED AND/OR LIMITED IN DURATION TO THE EXTENT PERMITTED BY LAW. WE SHALL NOT BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS) FROM ANY CAUSE WHATSOEVER.

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Coverage in Lineal Feet One cartridge (10.1fl. Oz)				
Depth in Inches				
Width in inches		1/4"	3/8"	1/2"
	1/4"	24'	-	-
	3/8"	16'	-	-
	1/2"	12'	-	-
	5/8"	10'	7'	-
	3/4"	-	6'	4'
	7/8"	-	5'	4'
	1"	-	4'	3'

When using this reference chart, you **MUST** consider the physical limitations of the product you are using. Not all products can be used in the gap sizes shown.

Performance Tips:

- Prevent Loxon™ H1 from coming into contact with oil-based sealants, uncured silicone sealants, polysulfides, or fillers that contain oil, tar or asphalt.
- LOXON™ H1 sealant will not adhere to previously applied silicone sealants.
- Protect unopened containers from direct sunlight and heat.
- In cool or cold weather, store container(s) at room temperature for at least 24 hours, before using.
- Loxon™ H1 can be applied below freezing temperatures only if: substrates are completely dry and free of moisture, and clean.
- Do not apply over freshly treated wood; treated wood must have been weathered for at least six months.
- Do not use in swimming pools or other submerged conditions.
- Substrates such as stainless steel, copper, and galvanized steel typically require the use of a primer. Loxon™ Quick Dry primer LXPRIQD13 is acceptable. Loxon™ Quick Dry primer LXPRIQD13 can also be used for Kynar 500 based coatings. An adhesion test is recommended for any questionable substrate.
- Loxon™ H1 should **not** be used in glazing applications. Do **not** apply on glass or plastic glazing panels.