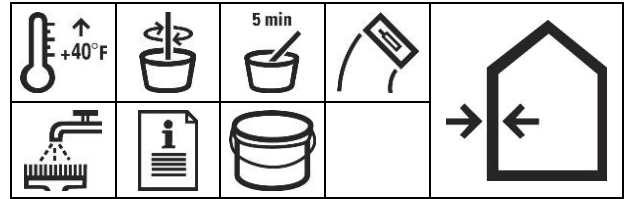


# Sto Flexyl

80235 Sto Flexyl



## Technical Data

An acrylic based, fiber-reinforced, flexible adhesive and waterproofer for use on prepared concrete, masonry, plaster, gypsum and cement sheathing surfaces. Also used as a waterproof adhesive and base coat in StoTherm® ci Systems.

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
<b>Flexibility</b>	ASTM D-522	1/2" mandrel bend @: -37°C, 0°C, 30°C (-36°F, 32°F, 86°F)	Pass
<b>Elongation (%)</b>	ASTM D-412	without mesh with mesh	7.7 10.4
<b>Surface Burning</b>	ASTM E-84	< 25 Flame Spread < 450 Smoke Developed	15 25
<b>Water Penetration</b>	ASTM E-514	10 psf pressure for 8 hours	No water penetration
<b>Vapour Permeability (U.S. perms) [ng/Pa·s·m<sup>2</sup>]</b>	ASTM E-96	Procedure B (wet) Procedure A (dry)	3.9 [220] 0.6 [33.1]
<b>Tensile Strength (psi)</b>	ASTM D-412	28 days	470
<b>Tensile Strength with mesh (psi)</b>	ASTM D-412	28 days	3880
<b>Adhesion to Concrete (psi)</b>	ASTM C-297	28 days	175
<b>Hydrostatic Pressure</b>	DIN 1048	230 foot high water column	No water penetration
<b>Freeze/Thaw Resistance</b>	EIMA 101.01	60 cycles	Pass, no delamination
<b>Water Absorption (%)</b>	ASTM D-570	24 hour immersion	4.5
<b>Abrasion Resistance (mass loss; grams)</b>	ASTM D-4060 Taber CS-10 wheel	3000 cycles 6000 cycles	0.20 0.34
<b>VOC (g/L)</b>	This product complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for architectural coatings. VOC less than 50 g/L.		

### Coverage

**As an adhesive:**  
7.4-10.2 m<sup>2</sup> (80-110 ft<sup>2</sup>) per pail when mixed with required Portland cement.

**As a base coat or as a foundation waterproofer:**  
13.9-16.7 m<sup>2</sup> (150-180 ft<sup>2</sup>) per pail.

Coverages may vary depending on application technique and surface conditions.

### Packaging

19 L (5 gallon) pail.

### Shelf Life

18 months, if properly stored and sealed.

### Storage

Protect from extreme heat [32°C (90°F)], freezing, and direct sunlight.

## Features Benefits

<b>1 Polymer-based</b>	Superior flexural strength; resists cracking
<b>2 Vapour permeable</b>	Allows substrate to breathe naturally; resists blisters caused by trapped vapour
<b>3 Versatile</b>	Can be used as an adhesive/base coat and foundation waterproofer
<b>4 Solvent-free</b>	Compliant with most state and local VOC requirements; environmentally friendly
<b>5 Water-based</b>	Cleans up with water
<b>6 Low VOC</b>	Meets South Coast Air Quality Management District Requirements

# Sto Flexyl

## Surface Preparation

**Concrete and masonry surfaces:** Surfaces must be free of frost, damage, and all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Loose or damaged material must be removed by water-blasting, sandblasting or mechanical wire brushing and repaired. Avoid application over irregular surfaces. Resurface, patch or level surfaces to required tolerance and smoothness with appropriate Sto leveling materials.

Refer to ASTM D-4258 and ASTM D-4261 for complete details on methods of preparing cementitious substrates for coatings.

**StoTherm® Exterior Insulation and Finish Systems (EIFS):** Insulation board must be rasped and free of all bond-inhibiting materials, including dust and dirt.

## Mixing

Mix Sto Flexyl with an equal amount by weight of Portland cement. Mix 1/2 batch at a time by adding approximately 10.2 kg (22-1/2 lbs.) cement to 1/2 pail of Sto Flexyl in a clean mixing pail.

Mix with a clean, rust-free electric drill and paddle. Allow to set approximately five minutes, adjust mix if necessary, then remix to a uniform consistency.

## Application

Apply only to sound and clean, dry, properly prepared, frost-free surfaces.

### As an adhesive for insulation board:

Apply a uniform coat of Sto Flexyl on the wall surface up to 3 mm (1/8") thick. Stipple the Sto Flexyl by lightly pressing the trowel into the wet adhesive then removing the trowel from the surface. Immediately install insulation board by pressing firmly into the wet adhesive.

**As a waterproof base coat:** Apply Sto Flexyl to an approximate wet thickness of 3 mm (1/8"). Work horizontally or vertically in strips of 1 m (40"), and immediately embed Sto Mesh into the wet Sto Flexyl by troweling from the center to the edges of the mesh. Avoid wrinkles in the mesh and smooth the base coat to eliminate trowel marks. Sto Flexyl must completely hide the reinforcing mesh colour when dry. Reapply additional base coat material if necessary to achieve minimum thickness as soon as the first application is dry.

**As a foundation waterproofer:** Apply Sto Flexyl to a maximum thickness of 3 mm (1/8") in one application.

The application must result in a smooth, closed surface. Repeat application when the first coat is dry, if necessary, to fill all voids, pinholes, etc.

**As a crack repair material for cracks up to 3 mm (1/8") wide in prepared concrete, masonry and plaster:** Remove surface contamination, loose and deteriorated material. Embed 6" (152 mm) wide Sto Mesh in Sto Flexyl centered over the crack and feather beyond the edges of the fabric.

### Curing/Drying

Sto Flexyl dries within 24 hours under normal conditions [21°C (70°F), 50% RH]. Cool, damp conditions extend drying and curing times.

NOTE: Sto Primer is required over Sto Flexyl prior to application of Sto Finish Coat.

Protect from rain, freezing and continuous high humidity until completely dry.

### Clean Up

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

## Health And Safety

### Health Precautions

Product is water-based. As with any chemical construction product, exercise care when handling

### WARNING!

Causes eye and skin irritation.

### Precautionary Statement

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

### FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**Spills:** Collect with suitable absorbent material such as cotton rags.

**Disposal:** Dispose of in accordance with local, state or federal regulations.

**Warning:** KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet for further health and safety information.

Safety Data Sheet (SDS) is available at [www.stocorp.com](http://www.stocorp.com)

### LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.

Refer to Sto Specifications for more complete information on proper use and handling of this product.

## Limitations

- Use Sto Flexyl only when surface and ambient temperatures are above 4°C (40°F) during application and drying period.
- Sto Flexyl is not recommended for use on wood surfaces.
- Sloped surfaces: refer to Sto details.

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### Attention

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Canada Ltd. website, [www.stocanada.com](http://www.stocanada.com).