

Hygrothane SwiftProof M 200 | Polyurea Waterproofing Membrane

Product Description

Hygrothane SwiftProof M 200 is a two-component, spray-applied pure polyurea waterproofing membrane designed for long-lasting protection against water, chemicals, and abrasion. It cures rapidly to form a seamless, monolithic membrane that easily conforms to irregular surfaces. Due to its highly reactive nature, it must be applied using specialized two-component spray equipment.

Recommended Applications

- Below-grade blindside waterproofing
- Positive side waterproofing
- ICF foundation wall waterproofing
- Car parks
- Green roofs
- Podium and plaza decks
- Bridge and tunnel deck waterproofing
- Wastewater and sewage treatment tank lining
- Secondary containment tank
- Raw water and sewer lines
- Industrial effluent treatment tanks

Features

- VOC-free and bitumen-free formula
- Can be applied at -5°C
- Solvent free, 100% solids
- High chemical resistance
- High abrasion resistance
- Tack free in 30 seconds
- Impact resistant
- Monolithic – No laps, welds or seams
- Flexible, fully bonded, and seamless membrane
- Unaffected by constant hydrostatic water pressure
- Thermoset – Does not soften at elevated temperatures

Approvals and Certifications

CCMC-compliance testing as a solution that complies with Canadian provincial building code requirements (CCMC #14144-R).

LEED documentation and International Certified EPD available. Manufacturer inventory reporting content inventory with product threshold of 100 ppm (0.01%).

Technical Properties

Attribute	Test	Results
Tensile Strength	CAN/CGSB 37-GP-56M	392N (MD) 400N (XD)
Elongation	CAN/CGSB 37-GP-56M	334% (MD) 347% (XD)
Lap Peel	ASTM D1876	1680 N/m
Peel Strength	CAN/CGSB 37.58-M86 (ASTM C794)	1726 N/m
Dimensional Stability	CAN/CGSB 37.58-M86	0.38% (MD) 0.43% (XD)
Low Temp Flexibility	CAN/CGSB 37.58-M86 ASTM C794	-40°C No Crack
Resistance to Hydrostatic Head	ASTM D5385	92 m 301 ft
Water Tightness*	CAN/CGSB 37.56-M86	Pass
Water Absorption	CAN/CGSB 37.58-M86	0.43%
Water Vapour Transmission	ASTM E96	58 ng / (Pa·s·m ²)
Horizontal Burn	UL 94	HB (Self extinguishes)
Static Puncture	CAN/CGSB 37-GP-56M	Pass (Rating 4) @ -15°C
Dynamic Puncture	CAN/CGSB 37-GP-56M	Pass (Rating 4) @ -15°C
Crack Bridging	ASTM C1305 (-20°C & 40°C)	Pass (No splitting or loss of adhesion)
Pull Adhesion on Concrete (With Primer)	ASTM D4541	5.84 MPa (847 lb/in ²)
Pull Adhesion on Concrete (Without Primer)	ASTM D4541	3.56 MPa (516 lb/in ²)
Adhesion of Poured Concrete**	ASTM D4541-M	10,000 N/m ² (1.45 lb/in ²)

Note: Values are based on a DFT of 50 mils (1.27 mm)

*After puncture, impact, chemical aging, heating aging and UV aging

**With acrylic concrete primer

Liquid Component Characteristics

Component A:	MDI (ISO) Colour: Clear 600 - 1200 cps @ 25°C 1.22 g/ml @ 25°C
Component B:	Resin 1.02 g/ml @ 25°C
Mix Ratio by Volume:	1:1 of A:B

The resin must be mixed for a minimum of 30 minutes with an electric or pneumatic mixer prior to use (i.e. Graco Low Viscosity Agitator with Expanding Blades 26C818, or equivalent).

Processing Parameters and Equipment

Pressures (dynamic):	2000-2500 psi (138-172 bar)
A&B Preheat Temperature:	155-165°F (68-74°C)
Hose Temperature:	155-165°F (68-74°C)
Container Temperature in Use:	68-104°F (20-40°C)

Application

For detailed information about application, please obtain a copy of the "Installation Guide" from your Elastochem representative.

Substrate Conditions

Substrate must be above -5°C to ensure proper adhesion and curing of the material. The temperature of the substrate should be min. 3°C above the dew point prior to application of the membrane.

Surrounding areas should be protected from overspray by masking off (e.g. polyethylene sheet or paper). Care should be taken to prevent spray mist being carried by wind.

Concrete Substrate:

Concrete surfaces must be fully cured, structurally sound, clean, dry (<5% moisture content) and free of contaminants.

The rough surfaces of these substrates can be prepared using mechanical methods. The need for a primer will depend on the specific substrate being used.

Primers:

For Concrete Substrate:
SwiftSeal P 100 (Epoxy Primer)
SwiftSeal P 150 (Polyurethane Primer)

For Other Substrates:
Please contact your Elastochem representative.

Note: Primers should be tested for compatability before starting each project.

Coverage

Hygrothane SwiftProof M 200 is applied at a coverage rate of 16 to 20 square feet per gallon. This corresponds to a dry film thickness (DFT) of approximately 2 - 2.5 mm (80 to 100 mils). Adjust for wastage based on the area and site conditions.

THICKNESS		COVERAGE	
mils	mm	Sq. Feet	Sq. Metres
40	1.0	4000	372
50	1.3	3200	297
60	1.5	2667	248
70	1.8	2286	212
80	2.0	2000	186
90	2.3	1778	165
100	2.5	1600	149
110	2.8	1455	135
120	3.0	1333	124

Packaging

Drums	Weight	Volume
Part A (ISO)	485 lbs (220 kg)	48 gal. (182 L)
Part B (Resin)	450 lbs (204 kg)	52 gal. (197 L)

Shelf Life

12 months if stored in original containers under dry conditions at a temperature between 10-32°C. Do not store in direct sunlight.

Health and Safety Handling

When spraying or handling **Hygrothane SwiftProof M 200**, the following protective steps and equipment are recommended:

Protective Equipment

- Fabric coverall
- Nitrile gloves (when handling raw compounds)
- Palm dipped gloves (while spraying)
- Supplied full face fresh air respirator (recommended)
- Full face respirator with organic vapour cartridges (minimum)
- Use personal protective equipment (see SDS)

Exposure

- Avoid all contact with skin
- Avoid all contact with eyes
- Do not ingest or inhale the vapours

In case of exposure, please refer to the SDS for first-aid measures.

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Spills

In case of spills, contain and collect spillage with a non-combustible absorbent material, such as: sand, earth, clay-based oil absorbent (kitty-litter), etc.

For larger spills, contact Elastochem 1-877-787-2436 or any agency specialized in chemical damage control (e.g., CANUTEC at 613-996-6666).

Chemical Storage

All materials provided by Elastochem are to be sealed until ready for use. Keep containers closed during storage and out of a humid environment. Ensure the ISO container is purged with nitrogen gas if opened and placed back into storage.

Drum Storage Temperature:

ISO (A)	10-32°C (50-90°F)
RESIN (B)	10-32°C (50-90°F)

Conditions and Limitations

Proper application is the responsibility of the user. Field visits by Elastochem representatives are intended for technical recommendations only and do not include supervision or quality control on the job site.

Avoid application during inclement weather or when rain is present or imminent. Do not apply to reinforcing bars or on wet or contaminated surfaces. Protect the sprayed **Hygrothane SwiftProof M 200** membrane from punctures by using a protection board until the required topping or backfill is in place.

Hygrothane SwiftProof M 200 membrane is not intended for use as an exposed surface. The membrane must be protected from ultraviolet (UV) light within 90 days of application. **Hygrothane SwiftProof M 200** must be covered with a compatible coating or flashing material. Contact the manufacturer for recommendations on approved finished materials.

Patching materials used to fill voids in the substrate wall system must be compatible with both the substrate and the membrane.

Disclaimer

The information provided, particularly regarding the application and end use of Elastochem products, is given in good faith based on the company's current knowledge and experience when the products are properly stored, handled, and applied under normal conditions in accordance with Elastochem's recommendations.

Due to the variability in materials, substrates, and actual site conditions, no warranty regarding merchantability or fitness for a particular purpose, nor any liability arising from any legal relationship, can be inferred from this information, recommendations, or any other advice provided.

Users are not relieved of the responsibility to conduct their own testing of the products for the intended application and purpose. Proprietary rights of third parties must be respected. All orders are accepted subject to our current terms of sale and delivery.

Users should always refer to the most recent version of the product data sheet for the specific product, which can be obtained upon request or downloaded from our website at - www.elastochem.com



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