

## ICF FOUNDATION MEMBRANE

### FOUNDATION MEMBRANE



Self-adhesive membrane specially suited for sealing of insulated concrete foundations (ICF).

- Superior adhesion
- UV resistant; 90-day Exposure
- Easy Installation

#### PRODUCT PURPOSE

Application	Waterproofing	
Building Part	Foundations	
Substrates	Modular concrete form of expanded or extruded polystyrene (ICF)	
	Concrete	PWF

#### PRODUCT CHARACTERISTICS

Technology	SBS modified bitumen
Surface	Trilaminare woven polyethylene
Underface	Silicone release film
Installation Method	Self-adhesive
Operating Temperature	-45 °C to 70 °C (-49 °F to 158 °F)
Maximum exposure	90 days

#### PROPERTIES

Properties	STANDARDS	FOUNDATION MEMBRANE ICF
Thickness	-	1.0 mm (40 mils)
Roll weight – 18 m <sup>2</sup> (195 ft <sup>2</sup> )	-	20 kg (44 lbs)
Tensile strength, MD/XD	ASTM D5147	12.4/12.7 kN/m (70.8/72.5 lbf/in)
Ultimate elongation, MD/XD	ASTM D5147	52 / 24%
Tear resistance, MD/XD	ASTM D1876	375 / 400 N (84 / 90 lbf)
Cold temperature flexibility	ASTM D5147	-30 °C (-22 °F)
Static puncture	ASTM D5602	400 N (90 lbf)
Lap adhesion	ASTM D1876	3 227 N/m (18.4 lbf/in)
Peel resistance	ASTM D903	632 N/m (3.6 lbf/in)
Water absorption	-	< 0.1%e
Water Vapour Permeance	ASTM E96 (Procédure B)	< 2.5 ng/Pa.s.m <sup>2</sup> (< 0.04 perm)
Termite Resistance	See Trinity/ERD report S10030SC.04.08	Pass
Radon resistance <sup>(1)</sup>	ISO DIS 11665-13	2.68 x 10 <sup>8</sup> 14.10 <sup>(2)</sup>

\*See Evaluation Report CCMC 13630-R (for waterproofing) and Evaluation Report CCMC 14080-R (for dampproofing).



(Nominal values)

(1) Materials with higher radon resistance are considered less permeable to radon and can therefore more effectively prevent or reduce radon transmission.

(2) Under the test conditions, the radon resistance of the membrane was 14.1 times greater than the radon resistance of a standard 6 mil thick polyethylene membrane.

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### INSTALLATION

Storage	Rolls should be stored upright. If the products are stored outdoors, cover them with an opaque protective cover after removing the covers provided at delivery.	
Minimum Application Temperature	10 °C to 50 °C (50 °F to 122 °F) Winter grade: -10 °C to 10 °C (14 °F to 50 °F)	
Required Products	H <sub>2</sub> O PRIMER	<b>OR</b> EXTERIOR PRIMER
	<b>AND</b> ELASTOMERIC SEALER	
Tools Required	 Smoothing roller	 Tape measure
Surface Preparation	ICF FOUNDATION MEMBRANE can generally be installed without primer over clean, dry ICF surfaces requiring dampproofing. If ICF FOUNDATION MEMBRANE is intended to be used in areas requiring waterproofing or if specific conditions call for the use of primer, such as high concentration of dust, use H <sub>2</sub> O PRIMER a waterbased primer. Solvent-based primers may damage the polystyrene and therefore must not be used.	
Installation	<ol style="list-style-type: none"> <li>1. If conditions require, treat the substrate with H<sub>2</sub>O PRIMER. EXTERIOR PRIMER is required on concrete.</li> <li>2. Install a gusset (small cut of membrane) on all interior or exterior corners of the foundation that will be covered with ICF FOUNDATION MEMBRANE.</li> <li>3. Measure the height of the foundation to be covered and cut a membrane strip of this dimension, then cut that part in half to get two strips.</li> <li>4. Cover the corners of the foundation laying a membrane strip to reinforce the inside or outside angles from the foundation. It is important to position the membrane by sticking one side at a time.</li> <li>5. Begin the installation from a corner of the foundation, from the top down.</li> <li>6. Remove a 10 cm (4 in) piece of the paper back from the underface to adhere to the upper portion of the membrane to the support. This will allow the membrane to stick to the foundation by itself.</li> <li>7. Continue to remove the protective film and press the membrane well, with a rubber roller, to increase adhesion.</li> <li>8. Provide an overlap of 10 cm (4 in) between each membrane edge (a dotted line on the membrane indicates the overlap area).</li> <li>9. At the bottom of the wall, the membrane must cover 2/3 of the foundation from the footing.</li> <li>10. To complete the seal, the top edge of the membrane and where the membrane meets with the concrete footing must be sealed with a bead of polystyrene-compatible sealant (such as SOPREMA's ALSAN FLEX 2945 or Chem Link's M-1). The membrane must be entirely covered with backfill. The bottom of the ICF FOUNDATION MEMBRANE can be sealed with these same sealants or with RESISTO's ELASTOMERIC SEALANT.</li> </ol> <p>* When installed below a temperature of 10 °C (50 °F) or when required, it is recommended to mechanically fasten the top edge of the membrane every 30 cm (12 in) with a termination bar, or with 25 mm (1-inch) diameter washers at a distance of 38 mm (1 ½ in) from the top edge of the membrane and spaced at a maximum distance of 450 mm (18 in) o.c. On concrete foundations and PWF, apply RESISTO's ELASTOMERIC SEALANT on top of the membrane around the foundation and at the bottom of the footing to prevent water infiltration.</p>	
Tricks / Tips	In the case of rocky or clay soils, a protective panel such as a rigid insulation panel must be installed before backfilling (such as SOPRA-XPS). If the substrate is concrete, ensure that the curing period is sufficient before installing the membrane. To install a dimpled membrane over the ICF FOUNDATION MEMBRANE please contact the RESISTO technical service.	

