

# Underseal® CRM™

## Product Overview



*Underseal® CRM™ - Chemical Resistant Membrane - is a strong, 85-mil, robust pre-applied membrane that has been designed and tested to withstand elevated concentrations of soil, water and vapor contaminants. When installed below the slab and behind vertical walls, Underseal® CRM™ creates a barrier preventing water & vapor from transmitting into the structure.*

*Underseal® CRM™ provides a continuous seal underneath the concrete slab and behind vertical "blindsides" cast in place concrete walls. A strong mechanical bond is developed between the membrane and concrete at the time of pouring as the concrete intermingles with the fibers of the nonwoven geotextile fabric. Underseal® CRM™ is typically installed horizontally over a prepared subbase such as compacted soil, mud slab or #57 stone. It can also be used in vertical applications.*



**Lasting Durability:** Tough 3-layer composite membrane - Technology that has stood the test of time.



**Outstanding Puncture Resistance:** 2 times higher than the new AC 527 requirement - Better protection against backfill damage.



**Strong Mechanical Bond:** Our inner fibrous layer embeds itself into the cured concrete creating a very strong mechanical bond - ensures our waterproofing system staying in place.



**Resistant to Water Migration:** An adhesive bond is created when heat from the concrete slab while curing, causes our compound to melt onto the concrete's positive side surface creating a continuous sealed structure.



**Jobsite Adaptability:** Flexible material that adapts to job site irregularities for ease of installation.



**Superior Joints:** Strong laps seams create a long lasting, water tight system - Outperforms the new AC 527 standard (ASTM 1876) by more than 150%.



**Crack Protection:** Underslab is thicker than most competitive products giving it stress-absorbing and elongation properties that maintain a watertight seal if cracks develop in the base material or the slab.



**Helps Manage Harmful Gases :** Acts as a barrier against toxic contaminants methane and radon gas, which may attempt to enter the structure through cracks in the concrete.

Property	Test Method	Typical Value
Film Color		Black/Silver
Membrane Thickness	ASTM D 1000	85 mils
Tensile Strength of 1" Width	ASTM D 4632	440 lbs.
Hydraulic Transmissivity of a Geosynthetic Using a Constant Head	ASTM D 4716	No measurable flow
(In-plane) Hydraulic Transmissivity of a Geosynthetic by Radial Flow	ASTM D 6574	No water flow
breaking strength of 1" width sample	ASTM D 882	14,220 PSI
Elongation - Ultimate failure of Rubberized asphalt	ASTM D 412	839%
Permeance to Water Vapor Transmission	ASTM E 96 Method B	0.02 Perms
Crack Cycling	ASTM C 836 Tested @ -15°F	No effect
Peel Adhesion to Concrete	ASTM D 903	31.3 lbs./in.
Lap Peel Adhesion	ASTM D 1876	8.7 lbs./in.
Low Temperature Flexibility	ASTM D 1970 180° bend over 1" mandrel at -20°F (-29°C)	No effect
Puncture Resistance (minimum)	ASTM E 154	256 lbs.
Resistance to Hydrostatic head (minimum)	ASTM D 5385	231 ft.
Exposure to Soil Fungi	GSA-PBS 07115 (16 weeks)	No effect
Resistance to Permeance by Methane Gas	ASTM D 1434 tested using 99.99% purity	$< 5 \times 10^{-16}$ mol/m <sup>2</sup> •s•Pa
Resistance to Radioactive Radon Gas	Radon Reduction Technology Laboratory % reduction in radon gas diffusion	97.10%
Water Absorption (maximum)	ASTM D 570	0.1%

## Companion Products



**Underseal®  
Fabric Tape**



**CR™  
Seam Tape**



**Ultra  
CRM™**



**CR™ Liquid  
Membrane**



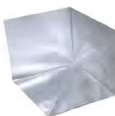
**CR™  
Sealant**



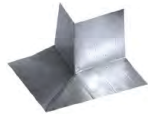
**Polyflow®  
15**



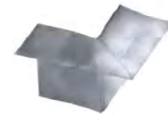
**Polyflow®  
18**



**CR™ Inside  
Corner Boot**



**CR™ Outside  
Corner Boot**



**CR™ Pit Top  
Corner Boot**

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