



System: E.Protect+

Former System Name: System III-MBBH

Application: Underslab

System Thickness: 196 mils

	1st Layer	2nd Layer	3rd Layer
Product Name	e.base 316	e.spray 100 mils	e.shield 205b
Former Name	Ecoshield-H16	Ecoline-S	Ecoshield-PB

DESCRIPTION

E.Protect+ Underslab is a redundant field-installed composite waterproofing, methane gas, and vapor intrusion barrier used to seal below-grade building foundations. Designed to provide the most redundant and highest level of below-grade building protection available, E.Protect+ Underslab provides unparalleled protection against hydrostatic conditions, chlorinated volatile organic compounds, and petroleum hydrocarbons. E.Protect+ Underslab is the first system ever developed to combine in one system, what others might utilize as three completely independent systems. E.Protect+ is designed for those who require the highest level of performance.

E.Protect+ Underslab is designed to be compatible with all types of building foundations.

BENEFITS

- Chemically Resistant. Provides the highest level chemical resistance to a wide range contaminants commonly found in soil and groundwater.
- Redundant: Three layers of different waterproofing materials create a composite system that is superior to the materials used on their own.
- Seamless. Composite field-installed membranes do not contain a continuous seam.
- Fully Bonded: The system mechanically bonds to any concrete overlay.
- Fast Installation: Composite systems allow for large areas to be installed very quickly, saving time and money for building owners.
- Continuous Active Protection: The bentonite layer creates a uniform self-sealing membrane.

LIMITATIONS

- Sites with brackish water and/or contamination will require compatibility testing to determine the appropriate use of bentonite.
- Extreme weather conditions can impact installation methodology.

SPECIFICATIONS, DRAWINGS, AND TECHNICAL ASSISTANCE

The most current specifications and drawings can be found on www.eproinc.com. For project specific details contact EPRO directly, or the local EPRO representative.

Site conditions, performance goals, and budget determine which system is more appropriate for a given project. For more information regarding product performance, testing, plan review, or general technical assistance, please contact EPRO.

WARRANTY

EPRO provides a wide range of warranty options for E.Series systems. For a project to be eligible for any warranty option beyond a 1-year material warranty, an EPRO Authorized Applicator must be used and the project must be registered and approved by EPRO prior to the commencement of any product application.

Warranty options available for this system include:

- Material warranty
- E.Series Labor and Material Warranty
- E.Assurance No-Dollar-Limit Warranty

For information relating to EPRO's E.Assurance warranty program, contact EPRO. All E.Assurance no-dollar-limit labor and material warranties are approved on a project by project basis. E.Assurance warranties are available for deck applications when E.Series systems are used on the below-grade envelope.

PROPERTIES	TEST METHOD	VALUE
Tensile Strength	ASTM D412	522.7 psi
Elongation	ASTM D412	911%
Adhesion to Concrete	ASTM D903	8 lbf/in
Puncture Resistance	ASTM D1709	319.6 lbf
Hydrostatic Head Resistance	ASTM D5385	100 psi (231 ft)
Water Vapor Transmission	ASTM E96	.007 perms
PCE Diffusion Rate		$4.3 \times 10^{-18} \text{ m}^2/\text{sec}$
TCE Diffusion Rate		$3.4 \times 10^{-18} \text{ m}^2/\text{sec}$