



System: Hydrogel

Application: Vertical Walls, Tunnels, Planter Boxes

System Thickness: 106 mils (2.7 mm)

	1st Layer	2nd Layer	3rd Layer
Product Name	Hydrogel (90 mils 2.3 mm)	GFG16 (16 mils 0.8 mm)	e.drain 6000

DESCRIPTION

HydroGel hot fluid-applied polymer rubber gel waterproofing assembly is comprised of a single-component, 99% solids, VOC-free monolithic fluid membrane that is protected by a high density polyethylene (HDPE) protection sheet to allow for immediate QA/QC. HydroGel’s Polymer Rubber Gel Technology creates a non-curing, self-healing, and self-sealing waterproofing layer that is non-slumping, flexible, and does not off-gas or lose film thickness after application. HydroGel assemblies dynamically respond to substrate movement, eliminate lateral water migration, and have excellent crack-bridging and crack-sealing capabilities.

HydroGel - Vertical Assembly is a redundant field-installed composite vertically applied waterproofing system for walls, tunnel exteriors, and tunnel interiors with shotcrete liners. Designed to be installed in most temperaure conditions and for projects where performance is paramount, HydroGel - Vertical Assembly combines the benefits of a self-healing and structurally responsive monolithic fluid applied waterproofing membrane with EPRO’s GFG Series HDPE vapor barrier protection course. HydroGel - Vertical Assemblies provide a post-applied waterproofing solution that can be applied over green concrete, as a restoration membrane over previously applied waterproofing systems, and in below freezing weather conditions.

HydroGel is applied using either specialized hot melt pumps for spray applictiaon or traditional hot melt gravity pour equipment for squeegee and trowel application.

HydroGel - Vertical Assembly can be used in conjunction with over excavated wall construction, two-sided formwork, precast concrete, and concrete masonry units (CMU).

BENEFITS

- Self-heals damage to membrane.
- Self-seals cracks to prevent lateral water migration.
- No VOCS, no volume loss, and primer-free application.
- Seamless fluid application fully bonds to substrate.
- Composite assembly meets Class A vapor barrier standards.
- Fast installation in all temperatures (0 - 120°F | -18 - 49°C).
- Designed for new construction and green concrete applications.
- Designed to restoration applications over rough substrates and previously installed waterproofing.

LIMITATIONS

- Requires specialized hot melt equipment for application.
- HydroGel must be installed with a protection course.

SYSTEM COMPONENTS

- Waterproofing: HydroGel
- Protection Course: GFG16, GFG20X
- Drainage Course: e.drain 6000
- Ancillary Products: SkrimTape, DuroTape, BentoTak, e.stop gu

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 EPRO systems are used on the below-grade envelope.

Typical Physical Properties

Physical Property	Test Method	Value
Solids Content	ASTM D 1353	99%
Hardness	ASTM C 836-89	80
Resistance to Decay	ASTM E 154-88	0% moisture permeation and weight change
Peel Adhesion to Concrete	ASTM C 836; C 794	5.8 lbf/in (1015 N/m), Pass
Extensibility after Heat Aging	ASTM C 836; C 1522	1/4" (6.35 mm) No Cracking, Pass
Cold Temperature Crack Bridging	ASTM C 1305	Unaffected at -15°F (-26°C), Pass
Hydrostatic Pressure Resistance (max psi = 45)	ASTM C 1306	> 100 ft (31.64 m, 45 psi) (11 days duration)
Permeance to Water Vapor Transmission	ASTM E 96, Method B	0.016 perms (0.915 ng/(Pa*s*m ²))
Deflection, HDPE (GFG20X)	ASTM E 154	3.2-inches (81.28 mm)
Puncture Resistance, HDPE (GFG20X)	ASTM E 154	125 lbf (21,890 N/m)
Tensile Strength MD, HDPE (GFG20X)	ASTM D 412	3891 psi (26.82 Mpa)
Elongation MD, HDPE (GFG20X)	ASTM D 412	486% (4.861)
Tensile Strength CMD, HDPE (GFG20X)	ASTM D 412	3405 psi (23.47 Mpa)
Elongation CMD, HDPE (GFG20X)	ASTM D 412	399.5% (3.995)