



TegraTite-PLUS Waterproofing Membrane

Product Description

TegraTite-Plus is a multi-layer waterproofing membrane consisting of bentonite, virgin high-density polyethylene, and a protective layer of non-woven polypropylene. The tough HDPE membrane provides the primary waterproofing envelope while the expandable bentonite clay provides the self-sealing reassurance under hydrostatic conditions. The polypropylene fabric protects the bentonite from exposure to inclement weather and direct installation of shotcrete.

Basic Uses

TegraTite-Plus waterproofing membrane is used on structures below grade and is especially effective where the waterproofing is applied before the walls or floor are poured. TegraTite-Plus is effective for blindside installation such as lagging, under floors, and elevator pits. It has outstanding performance when used under conditions of high water head.

Packaging

3.5' x 21.5' (1.1 m x 6.6 m) or 75 SF (7 m²) standard rolls. Customized lengths are available by SPECIAL ORDER.

INSTALLATION

For complete installation guidelines, please contact TegraSeal Products LLC for details.

Preparatory Work

TegraTite-Plus requires firm background to maintain 24 lb per sf compression. Fill voids or spaces more than 1" with grout and/or plywood. Remove nails and sharp protrusions over 1/4" (6.4 mm). Installation may proceed on damp or frozen surfaces, but standing water must be removed. Cover lagging boards and soldier piles with drainage layer. Complete installation at penetrations (utility and/or tiebacks) as described by the manufacturer.

Lagging

TegraTite-Plus rolls are installed, either vertically or horizontally with the bentonite side towards the concrete structure, by nailing across the top every 20" (0.51 m), lapping seams at least 4" (10.2 cm).

Overlap seams as shingles. Close the seams with nails at 2' (0.6 m) o.c. and box staple between.

Under Slab

TegraTite-Plus waterproofing system will provide a waterproof seal and a vapor barrier. Roll out membrane over compacted earth or mud slab. Overlap and stagger seams at least 4" (7.6 cm). Fasten with staples or nails. Tie in the floor to other surfaces as described by the manufacturer. Protect area from flooding prior to concrete pour.

Protection

The TegraTite-Plus waterproofing system does not require an additional protection course for most applications. For special applications, contact your TegraSeal Representative for details.

Storage

Protect from moisture. Store on skid or pallet, cover with polyethylene or tarp.

Availability

Available nationwide through TegraSeal distributors. Contact TegraSeal at 800-815-1816 or www.tegraseal.com for details.

Limitations

TegraTite-Plus installation must be confined by a minimum of 24 psf. Keep TegraTite-Plus dry, protect from exposure to the elements. TegraTite-Plus is resistant to many common contaminants in soil. Please contact TegraSeal for compatibility testing.

Warranty

TegraSeal Products, LLC (TegraSeal) warrants its products will be delivered free of defects in materials and workmanship. TegraSeal will replace the material or refund the purchase price. TegraSeal makes no other warranty, including an implied warranty of merchantability or fitness for a particular purpose. TegraSeal shall not be liable for any other loss or damage. Contact TegraSeal to discuss specific details and warranty periods.



TYPICAL PHYSICAL PROPERTIES

Physical Property	Test Method	Value
Membrane		Green 20-mil virgin resin HDPE
Bentonite		Sodium Montmorillonite
Weight		1 lb per sq foot (4.89 kg/m ²)
Puncture Resistance	ASTM E154-88	171 lbs. (77.5 kg)
Tensile Strength: Membrane	ASTM D638	MD: 3660 psi (25.2 MPa) TD: 3650 psi (25.2 MPa)
% Elongation at break-	D638 Type 4 Dumbbell	>700%
Resistance to hydrostatic head	ASTM D751 Procedure A	174 ft. (52.9 m) of water
Permeability:	ASTM E96-80	0.53 x 10 ⁻¹³ cm/sec or 0.84 ng/ m ² .s.Pa
Resistance to micro organisms: (bacteria, fungi, mold, yeast)	ASTM E154-88 Section 13	0.033 Perms or grains/ft ² * hr * inHg Unaffected
Toxicity:		Low. Do not ingest
Staining:		No known incompatibilities
Chemical Resistance:		Extremely high resistance to chemicals & gases. Contact manufacturer for specific information.
Freeze/thaw cycles:		No effect before or after installation.
Installation Temperatures	ASTM D746, ASTM D1238	-40°F to 150°F (-40°C to 65.5°C)
Life Expectancy:		Both high density polyethylene and bentonite have life expectancy measurable in thousands-of-years.
