

GREENSCAPES® GS-110

ROOT BARRIER, VAPOR BARRIER, & PROTECTION COURSE

DESCRIPTION

GS-110 is a 10-mil (0.25 mm) thick, single ply polyethylene sheet used as a root barrier with an extensive GreenScapes Assembly. GS-110 can also be used in deeper assemblies where no woody species are to be planted. GS-110 is manufactured with polyethylene resins that provide high tensile strength, high puncture resistance, low moisture vapor permeability as well as excellent resistance to root penetration and decay.

APPLICATIONS

GS-110 is typically installed above the waterproofing membrane/protection course and below other components including insulation and drainage layers.

- GS-110 is primarily used in the Strataseal HR Protected Membrane Roof Assembly, Plaza Deck Assembly, Greenroof Assembly, or Landscaped Assembly as the root barrier protection layer. For applications that require a welded root barrier overlap seam use GS-120 Root Barrier.
- GS-110 may also be used as a protection course for fully cured Hydrofix & LDC 60 waterproofing systems.
- GS-110 may also be used as a vapor barrier and meets ASTM E1745 requirements for A, B, and C performance classes.

INSTALLATION

Install GS-110 Root Barrier over the waterproofing membrane assembly. Unroll and install GS-110 over the waterproofing protection course with minimal wrinkles and air pockets. Overlap adjacent sheet edges a minimum 12" (300 mm) and tape with CETCO Seamtape. Extend GS-110 installation up all roofing termination points and flashing to provide total root protection to all roof/ flashing surfaces that will be subsequently covered with growing media.

If being used as a protection course for Hydrofix or LDC 60 membranes, reduce the overlap to a minimum 4" (100 mm) and tape with CETCO Seamtape.

Cut as required to fit around all penetration and drainage details. As applicable, seal all cut edges and seal around detail with Seamtape. As GS-110 Root Barrier is installed loose-laid, temporary ballasting may be required prior to the installation of subsequent topping materials. Temporary ballast should be a material that will not puncture the root barrier such as sand bags and milled lumber. Upon completion of the root barrier layer installation, install subsequent toppings as soon as possible within 30 days to avoid prolonged UV exposure.

For vapor barrier installations, install GS-110 with 6" (150 mm) overlaps and tape with CETCO Seamtape. Complete all detailing around penetrations with CETCO Seamtape.

PRECAUTIONS

GS-110 is not designed for extended UV exposure. GS-110 must be covered within 30 days to prevent deterioration to the sheet.

PACKAGING

GS-110 roll size is 15 feet (4.5 m) x 100' (30.5 m) - 1500 sq ft (139 sq m) per roll. Typical roll weight: 74 lbs (33.5 kg).

PHYSICAL PROPERTIES

PROPERTY	TEST STANDARD	TYPICAL VALUE
Tensile Strength	ASTM E154	10.5 N/mm
Puncture Resistance	ASTM D1709B	2600 g
Permeance		
New Material	ASTM E154 Section 7, E96	0.0146 Perms
After Conditioning	ASTM E154 Section 8, E96	0.0153 Perms
	ASTM E154 Section 11, E96	0.0151 Perms
	ASTM E154 Section 12, E96	0.0160 Perms
	ASTM E154 Section 13, E96	0.0181 Perms

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UPDATED: MARCH 2025 (Supersedes all previous versions)

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