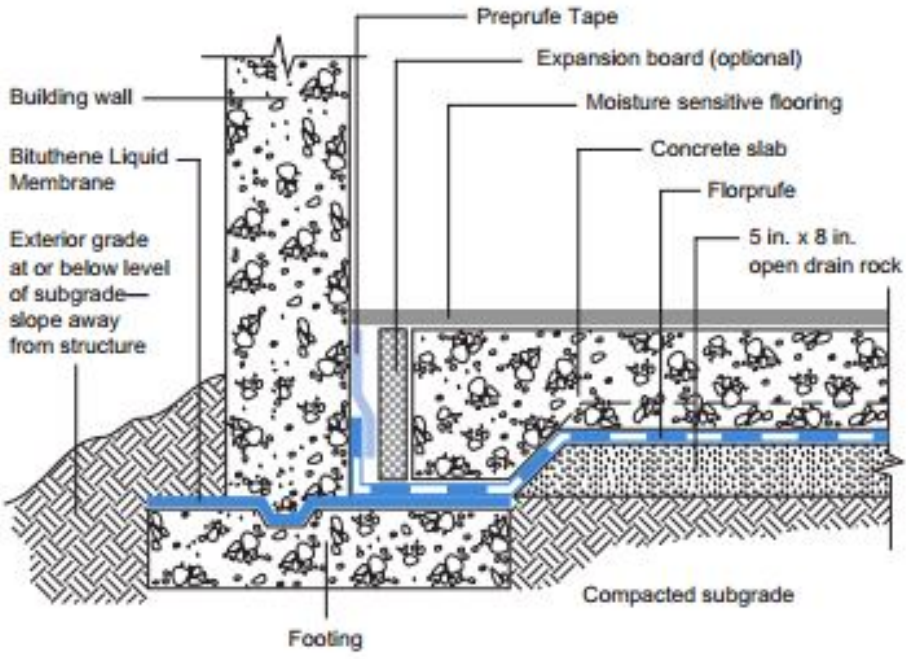
FLORPRUFE® 120

Integrally bonded vapor protection for slabs on grade

Product Description

FLORPRUFE® 120 is a high performance vapor barrier with GCP's Advanced Bond Technology™ that forms a unique seal to the underside of concrete floor slabs. Comprising a highly durable polyolefin sheet and a specially developed, non-tacky adhesive coating, FLORPRUFE® 120 seals to liquid concrete to provide integrally bonded vapor protection.

FLORPRUFE® exceeds ASTM E1745 Class A rating.



Product Advantages

- Forms a powerful integral seal to the underside of concrete slabs
- Protects valuable floor finishes such as wood, tiles, carpet and resilient flooring from damage by vapor transmission
- Direct contact with the slab complies with the latest industry recommendations
- Remains sealed to the slab even in cases of ground settlement
- Ultra low vapor permeability
- Durable, chemical resistant polyolefin sheet
- Lightweight, easy to apply, kick out rolls
- Simple lap forming with mechanical fixings or tape

Use

- FLORPRUFE® 120 is engineered for use below slabs on grade with moisture-impermeable or moisture-sensitive floor finishes that require the highest level of vapor protection.
- FLORPRUFE® complies with the latest recommendations of ACI Committees 302 and 360, i.e. for slabs with vapor sensitive coverings, the location of the vapor barrier should always be in direct contact with the slab [1].
- The membrane is loose laid onto the prepared sub-base, forming overlaps that can be either mechanically secured or taped. The unique bond of FLORPRUFE® to concrete provides continuity of vapor protection at laps. Alternatively, if a taped system is preferred, self-adhered PREPRUFE® Tape can be used to overband the laps.
- Slab reinforcement and concrete can be placed immediately. Once the concrete is poured, an integral bond develops between the concrete and membrane.

1 ACI 302.1R-96

Installation

Health & Safety

Refer to relevant Safety Data Sheet. Complete rolls should be handled by 2 persons.

FLORPRUFE® 120 can be applied at temperatures of 25ºF (-4ºC) or above. Membrane installation is unaffected by wet weather.

Installation and detailing of FLORPRUFE® 120 are generally in accordance with ASTM E1643-98.

Prepare substrate in accordance with ACI 302.1R Section 4.1. Install FLORPRUFE® 120 over the leveled and compacted base. Place the membrane with the smooth side down and the plastic release liner side up facing towards the concrete slab. Remove and discard plastic release liner. End laps should be staggered to avoid a build up of layers.

Succeeding sheets should be accurately positioned to overlap the previous sheet 2 in. (50 mm) along the marked lap line

Laps

1. Mechanical fastening method

To prevent the membrane from moving and gaps opening, the laps should be fastened together at 39 in. (1.0 m) maximum centers. Fix through the center of the lap area using 0.5 in.(12 mm) long washer-head, self-tapping, galvanized screws (or similar) and allowing the head of the screw to bed into the adhesive compound to self-seal. It is not necessary to fix the membrane to the substrate, only to itself. Ensure the membrane lays flat and no openings occur. (See Figure 1.) Additional fastening may be required at corners, details, etc. Continuity is achieved once the slab is poured and the bond to concrete develops.

OR

2. Taped lap method

For additional security use PREPRUFE® Tape to secure and seal the overlaps. Overband the lap with the 4 in. (100 mm) wide PREPRUFE® Tape, using the lap line for alignment. Remove plastic release liner to ensure bond to concrete.

Penetrations

Mix and apply BITUTHENE® Liquid Membrane detail-ing compound to seal around penetrations such as drainage pipes, etc. (See Figure 2 and refer to the BITUTHENE® Liquid Membrane data sheet, BIT-230.)

Concrete Placement

Place concrete within 30 days. Inspect membrane and repair any damage with patches of PREPRUFE® Tape. Ensure all liner is removed from membrane and tape before concreting.

Supply

FLORPRUFE® 120	
Supplied in rolls	4 ft x 115 ft (1.2 m x 35 m)
Roll area	460 ft^2 (42 m^2)
Roll weight	70 lbs (32 kg) approx.

ANCILLARY PRODUCTS
PREPRUFE® Tape is packaged in cartons containing 4 rolls that are 4 in. x 49 ft (100 mm x 15 m).
BITUTHENE® Liquid Membrane is supplied in 1.5 gal (5.7 L) pails.

Physical Properties: Exceeds ASTM E1745 Class A rating

PROPERTY	TYPICAL VALUE	TEST METHOD
Color	White	
Thickness (nominal)	0.021 in. (0.5 mm)	ASTM D3767—method A
Water vapor permeance	0.03 perms	ASTM E96—method B1
Tensile strength	65 lbs/in.	ASTM E1541
Elongation	300%	ASTM D412
Puncture resistance	3300 gms	ASTM D17091
Peel adhesion to concrete	>4 lbs/in.	ASTM D903

1. Test methods that comprise ASTM E1745 standard for vapor retarders

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