

# PREPRUFE<sup>®</sup> 800XP Composite Membrane

Self-adhesive waterproofing membrane composite with built in protection against backfill coupled with an aggressive, synthetic non-asphaltic adhesive that bonds integrally to foundation walls.

# Product Description

PREPRUFE® 800XP foundation waterproofing composite is a two-in-one system featuring a waterproofing membrane with a unique built-in protective layer that eliminates the time-consuming process of installing protection course. This flexible yet highly durable system significantly reduces labor time while minimizing installed costs. PREPRUFE® 800XP saves time and money by eliminating the need for a layer membrane protection. Having a self-protecting solution eliminates cleanup time, additional material costs and helps speed up construction time. This results in a faster, durable and easier to install system solution, at a fraction of the cost.



Drawing is for illustrative purposes only. Refer to GCP standard details.

# Product Advantages

- Tough durable, resilient and unaffected by almost all backfill.
- Aggressive Adhesion Synthetic, non-asphaltic adhesive for aggressive adhesion and peel resistance to concrete.
- Fully Bonded Creates a watertight seal, especially when installed with PREPRUFE® 300R Plus or PREPRUFE® 160R Plus pre-applied membranes, to form a complete, below-grade waterproofing system.
- Enhanced Productivity Lightweight, flexible and conforms to substrate voids for quick and easy application.



- Elastomeric Accommodates movements and bridges concrete shrinkage cracks.
- UV Resistant Longer UV stability.
- Water and Vapor Barrier Provides protection for all basements which need to be leak free.
- Gas resistant Contributes to methane, carbon dioxide and radon gas mitigation.
- Sustainable Made with Red List Free materials meets the criteria for Living Building Challenge (LBC).

# System Components

#### Membranes

- PREPRUFE<sup>®</sup> 800XP Membrane for application to surfaces at ambient temperatures of 40 °F (5 °C) or above.
- PREPRUFE<sup>®</sup> 800XP Low Temperature Membrane for low temperature applications when surface and ambient temperatures are between 25 °F (-4 °C) and 60 °F (16 °C).

### Ancillary Components (the most current Data Sheets for all system components are available on gcpat.com)

- BITUTHENE<sup>®</sup> Liquid Membrane Two component, elastomeric, liquid applied detailing compound.
- PREPRUFE<sup>®</sup> Detail Tape Double sided self-adhesive tape.

#### Limitations of Use

- Approved uses only include those uses specifically detailed in this Product Data Sheet and other current Product Data Sheets that can be found at gcpat.com. PREPRUFE® 800XP membranes are not intended for any other use. Contact GCP Technical Services where any other use is anticipated or intended.
- PREPRUFE<sup>®</sup> 800XP membranes are designed where in-service temperatures will not exceed 130 °F (54°C).

# Safety and Handling Information

Users must read and understand the product label and Safety Data Sheets (SDS's) for each system component before use. All users should acquaint themselves with this information prior to working with the material. Carefully read detailed precaution statements on the product labels and SDS's before use. The most current SDS's can be obtained from our web site at gcpat.com or by contacting GCP toll free at 1-866-333-3SBM (3726).

# Storage

The rolls of PREPRUFE® 800XP composite membranes are to be transported only in boxes packed upright on shrinkwrapped pallets and must be stored upright on site. The stacking of membrane is not allowed. Store membrane where temperatures will not exceed 90°F (32°C) for extended periods. All products must be stored in a dry area away from high heat, flames or sparks. Store only as much material at point of use as is required for each day's work. Punctual or lineal loading and exposure to solvent vapor shall be avoided.



#### Installation

#### Technical Support, Details and Technical Letters

The most up to date detail drawings and technical letters are available at gcpat.com. For complete application instructions, please refer to the current GCP Applied Technologies Contractor Handbook and Literature on (www.gcpat.com). Documents in hardcopy as well as information found on websites other than www.gcpat.com may be out of date or in error. Before using this product it is important that information be confirmed by accessing www.gcpat.com and reviewing the most recent product information, including without limitation Product Data Sheets and Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations. Please review all materials prior to installation of PREPRUFE® 800XP Membrane. For technical assistance with detailing and problem solving please call toll-free at (866) 333-3SBM (3726).

# Temperature

- Apply PREPRUFE<sup>®</sup> 800XP Membrane only in dry weather and when air and surface temperatures are 40°F (5°C) or above.
- Apply BITUTHENE<sup>®</sup> Adhesive Primer B2 LVC in dry weather above 25°F (-4°C). (See separate product information sheet.)

# Surface Preparation

PRERUFE® 800XP can be applied to concrete and masonry substrates Surfaces should be structurally sound and free of voids, spalled areas, loose aggregate and sharp protrusions. Remove contaminants such as grease, oil and wax from exposed surfaces. Remove dust, dirt, loose stone and debris. Concrete must be properly cured (minimum 7-days for normal structural concrete and 14-days for lightweight structural concrete. Certain conditions, such as unusually wet weather or late removal of forms, may require longer dry times. On masonry surfaces, apply a parge coat to rough concrete block and brick walls or trowel cut mortar joints flush to the face of the concrete blocks.

If time is critical, BITUTHENE® Adhesive Primer B2 LVC may be used to allow priming and installation of membrane on green concrete. Priming after a minimum 3 day cure for concrete. Use form release agents which will not transfer to the concrete. Cure concrete with clear, resin-based curing compounds which do not contain oil, wax or pigment. Allow concrete to thoroughly dry following rain. Do not apply any products to frozen concrete.

Repair defects such as spalled or poorly consolidated areas. Remove sharp protrusions and form match lines. On masonry surfaces, apply a parge coat to rough concrete block and brick walls or trowel cut mortar joints flush to the face of the concrete blocks.

# Priming



- Apply BITUTHENE<sup>®</sup> Adhesive Primer B2 LVC by a lamb's wool roller at a coverage rate of 325–425 ft<sup>2</sup>/gal (7.5–10.0 m<sup>2</sup>/L). Allow primer to dry one hour or until tack-free.
- Apply BITUTHENE<sup>®</sup> Primer WP-3000 by spray or roller at a coverage rate of 500–600 ft<sup>2</sup>/gal (12–15 m<sup>2</sup>/L). Allow to dry one hour or until concrete returns to original color.
- Dry time may be longer in cold temperatures. Re-prime areas if contaminated by dust. If the work area is dusty, apply membrane as soon as the primer is dry.
- Do not apply any primer onto PREPRUFE<sup>®</sup> 800XP membrane.

# Application on Vertical Surfaces

Peel back the first 12 in. of release liner and apply membrane in lengths up to 8 ft. (2.5 m). Overlap all seams at least 2 in. (50 mm). On higher walls apply membrane in two or more sections with the upper overlapping the lower by at least 2 in. (50 mm). Roll all membrane with a hand roller. Terminate the membrane at grade level. Press the membrane firmly to the wall with the butt end of a hardwood tool such as a hammer handle, roller or secure into a reglet. Failure to use heavy pressure at terminations can result in a poor seal. All top of wall terminations should be sealed with BITUTHENE® LIQUID Membrane A termination bar may be used to ensure a tight seal. if used the top of the termination bar and penetration heads must be sealed with BITUTHENE® Liquid Membrane. A termination bar is required for applications on CMU. At the end of each working day, if the wall has been partially covered, apply a 0.25 in. (6 mm) bead of BITUTHENE® LIQUID Membrane tooled thin along the exposed edges of the membrane as its temporary terminations to prevent vertical drainage of precipitation undermining the membrane adhesion. Terminate the membrane at the base of the wall if the bottom of the interior floor slab is at least 6 in. (150 mm) above the footing. Otherwise, use appropriate inside corner detail where the wall and footing meet. Refer to GCP standard details for further detailing requirements. All T-Joints must be treated with a minimum 1 in. (25 mm) bead of BITUTHENE® LIQUID Membrane extending a minimum of 3 in. (75 mm) from the joint in all directions. See illustration below.



# Membrane Repairs

Patch tears and inadequately lapped seams with membrane. Clean membrane with a damp cloth and dry. Slit fishmouths and repair with a patch extending 6 in. (150 mm) in all directions from the slit and seal edges of the patch with BITUTHENE<sup>®</sup> Liquid Membrane. Inspect the membrane thoroughly before covering and make any repairs.



#### Drainage

HYDRODUCT<sup>®</sup> drainage composites are recommended for active drainage. See HYDRODUCT<sup>®</sup> Product Data Sheet at gcpat.com.

#### Insulation

Always apply PREPRUFE<sup>®</sup> 800XP membrane directly to primed or conditioned structural substrates. Insulation, if used, must be applied over the membrane. Do not apply PREPRUFE<sup>®</sup> 800XP membranes over insulation or lightweight insulating concrete.

### Protection of Membrane

- On vertical applications PREPRUFE<sup>®</sup> 800XP membranes are durable enough to be left unprotected.
- On horizontal footing applications, such as tops of footings use two layers of membrane. PREPRUFE® 800 XP is not intended for use on elevated deck applications.

### Backfill

Place backfill as soon as possible. The membrane may be exposed to UV for a maximum of 6 months, although it is highly recommended that it is backfilled as soon as possible to prevent site/trade damage. Use care during backfill operation to avoid damage to the waterproofing system. Follow generally accepted practices for backfilling and compaction. Limit backfill to aggregates less than 3" and with no sharp edges. Backfill should be added and compacted in 6 in. (150 mm) to 12 in. (300 mm) and in lifts or drops 10' or less.

# Supply

PREPRUFE® 800XP OR PREPRUFE® 800XP LOW TEMPERATURE		
Roll Dimensions (Nominal)	3.12 ft. x 38.5 ft. roll (120 ft <sup>2</sup> ) [1.0 m x 12 m]	
Roll weight	28 lbs. (13 kg) gross	
Palletization	16 rolls per pallet	
Storage	Store upright in dry conditions below 86°F (+30°C).	

Note#1 Individual roll length may vary +/-1%

Ancillary Components (the most current Data Sheets for all system components are available on gcpat.com)

# Physical Properties: (PREPRUFE<sup>®</sup> 800XP & PREPRUFE<sup>®</sup> 800XP Low Temperature Waterproofing Membranes)

PROPERTY	TYPICAL VALUE	TEST METHOD
Color	White	
Roll Dimensions	3.15 ft. x 38.5 ft. roll (125 ft <sup>2</sup> )	



Thickness	80 mils (2.0 mm) nominal	ASTM D3767—method A
Flexibility, 180° bend over 1 in.	Unaffected	ASTM D1970
(25 mm) mandrel at -25°F (-32°C)		
Tensile strength, membrane, die C	2000 psi (8274 kPa) minimum	ASTM D412 Modified <sup>1</sup>
Elongation	375%	ASTM D 412 Modified <sup>1</sup>
Crack cycling at -25°F (-32°C), 100 cycles	Unaffected	ASTM C836
Lap Shear Strength	50 lbs. minimum	ASTM D 1002 <sup>2</sup>
Peel strength	10 lbs./in (1927 N/m)	ASTM D903 <sup>3</sup>
Resistance to hydrostatic head	>231 ft. (71 m) of water	ASTM D5385
Permeance	<0.1 perms	ASTM E96, section 12
Water absorption	0.1%	ASTM D570

Footnotes:

1. The test is run at a rate of 2 in. (50 mm) per minute.

2. The test is conducted 15 minutes after the lap is formed and run at a rate of 50 mm (2 in.) per minute @ 40°F (5°C).

3. The 180-peel strength is run at a rate of 12 in. (300mm) per minute.

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