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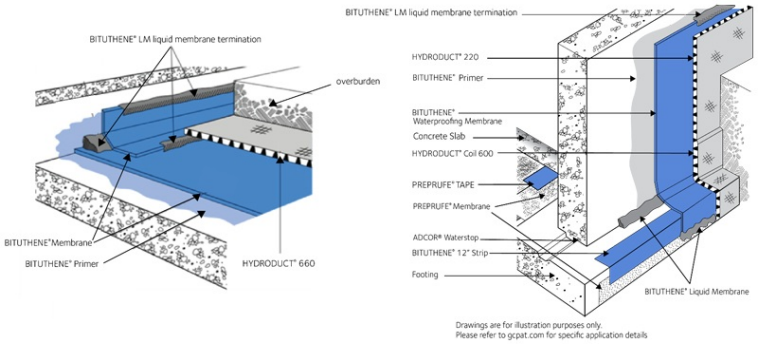
BITUTHENE® 4000 System Data Sheet

Membrane and Surface Conditioner System

Product Description

GCP Applied Technologies' ("GCP") BITUTHENE® 4000 system combines a robust, flexible, pre-formed membrane made of a high performance, cross laminated, HDPE carrier film with a tacky, self-adhesive rubberized asphalt compound and BITUTHENE® 4000 surface conditioner.

BITUTHENE® 4000 surface conditioner is water-based primer that is specifically formulated to promote adhesion by binding dust and concrete efflorescence to help provide a suitable surface for the BITUTHENE® 4000 waterproofing membrane. For convenience, BITUTHENE® 4000 surface conditioner is packaged inside each roll of BITUTHENE® 4000 membrane.



Product Advantages

- Provides a barrier to water, moisture and gas — physically isolating the structure from the surrounding substrate
- Excellent adhesion — Special adhesive compound engineered for use with BITUTHENE® 4000 surface conditioner
- Cross-laminated, high density polyethylene carrier film provides high tear strength, puncture and impact resistance
- Cold applied — Simple application to substrates, including low temperature applications
- Reduced inventory and handling costs due to the inclusion of primer in the packaging
- Wide application temperature range — Excellent bond at temperatures as low as 25°F (-4°C)
- Designed to accommodate a wide range of building configurations and details
- RIPCORD® integrated filament —Split release on demand feature allows for ease of installation in detailed areas

System Components

Membrane

BITUTHENE® 4000 membrane – Self-adhered, rubberized asphalt waterproofing membrane

Ancillary components (Data sheets for all system components are available at gcpat.com.)

- BITUTHENE® 4000 surface conditioner – Water-based latex primer adhesive with added alcohol to allow application at low temperatures
- BITUTHENE® B2 LVC adhesive primer - Low VOC, solvent-based primer to increase adhesion of the BITUTHENE® 4000 membrane to concrete surfaces
- BITUTHENE® LM liquid membrane – Two-component, elastomeric, liquid-applied detailing compound
- BITUTHENE® mastic – Rubberized, asphalt-based mastic
- PREPRUFE® Detail Tape – Double-sided self-adhesive tape
- HYDRODUCT® drainage composite – High impact and creep-resistant geo-composite and protection layer
- BITUTHENE® Deck Prep surface treatment – Surface leveler for application to uneven or rough concrete surfaces

Limitations of Use

- The BITUTHENE® 4000 membrane and BITUTHENE® 4000 surface conditioner are specifically designed for use as detailed in this product data sheet, and are not intended for any other use. Contact GCP Technical Support if any other use is anticipated or intended.
- The BITUTHENE® 4000 membrane is designed for waterproofing surfaces where in-service temperatures will not exceed 130°F (54°C).
- Do not use BITUTHENE® mastic to terminate the BITUTHENE® 4000 membrane to PREPRUFE® pre-applied waterproofing systems. Terminations to PREPRUFE® membranes should only be done with BITUTHENE® LM liquid membrane.

Special note: When this information is printed from the gcpat.com global website, a footer appearing on this document may contain wording restricting its applicability to the United States. Note that the information and references in this document also apply to North, Central and South America.

Safety and Handling Information

Read and understand the product label and safety data sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements. SDSs can be obtained by contacting your local GCP representative or office, by calling GCP toll free at 1-866-333-3SBM (3726) and in some cases from our website at gcpat.com.

Storage

The BITUTHENE® 4000 membrane should be stored upright. Storage temperatures should not be below 25°F (-4°C) and should not exceed 90°F (32°C).

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 at 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 and not limited to product data sheets and contractor manuals, technical bulletins, detail drawings and detailing recommendations. Please review all materials prior to installation of BITUTHENE® 4000 membranes. For technical assistance with detailing and problem solving, please call toll-free at (866) 333-3SBM (3726).

Temperature

- Apply BITUTHENE® 4000 membranes and BITUTHENE® surface conditioner only in dry weather and when air and surface temperatures are 25°F (-4°C) or above.
- BITUTHENE® B2 LVC adhesive primer and BITUTHENE® 4000 surface conditioner should only be applied in dry weather when the temperature is above 25°F (-4°C). See separate product information sheets and applicable application instructions.

Surface Preparation

Surfaces must 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 seven-days for normal weight structural concrete and 14 days for lightweight structural concrete). For horizontal applications, double the above cure times of concrete if placed over non-vented decks. Certain conditions, such as unusually wet weather or late removal of forms, may require longer dry times.

Dry weather application of BITUTHENE® 4000 membranes and BITUTHENE® 4000 surface conditioner is preferred. On vertical applications, if time is critical and damp conditions are unavoidable, BITUTHENE® B2 LVC adhesive primer may be used in place of BITUTHENE® surface conditioner. The use of BITUTHENE® B2 LVC adhesive primer may allow priming and installation of BITUTHENE® 4000 membranes on damp surfaces or green concrete. When using BITUTHENE® B2 LVC adhesive primer, priming may begin as soon as the concrete will maintain structural integrity.

Only use form release agents that will not transfer to the concrete. Remove forms as soon as possible from below horizontal slabs to prevent entrapment of excess moisture. Excess moisture may lead to blistering of the membrane.

Cure concrete with clear, resin-based curing compounds that do not contain oil, wax or pigment. See Technical Letter 5, Curing Compounds and Form Release Agents. Before application of BITUTHENE® surface conditioner and BITUTHENE® 4000 membranes, allow concrete to thoroughly dry following any rain (except with BITUTHENE® B2 LVC adhesive primer as noted above). Do not apply any products to frozen concrete.

Repair substrate defects such as spalled or poorly consolidated areas. Remove sharp protrusions and form match lines. For rough or uneven deck surfaces, use BITUTHENE® Deck Prep surface treatment as a repair and leveling agent. See BITUTHENE® Deck Prep surface treatment product information sheet for details. On masonry surfaces such as rough concrete block and brick walls, apply a parge and trowel cut mortar joints flush to the face of the concrete blocks and bricks.

Surface Conditioning

BITUTHENE® 4000 surface conditioner is ready to use, and can be applied by spray or roller. For best results, use a pump-type air sprayer with a fan tip nozzle. Apply BITUTHENE® 4000 surface conditioner to clean, dry, frost- free surfaces at a coverage rate of 300 ft^2/gal (7.4 m^2/L). Coverage should be uniform. The surface conditioner should not be applied so heavily that it puddles or runs. Do not apply conditioner directly to BITUTHENE® 4000 membranes. Allow BITUTHENE® 4000 surface conditioner to dry until the substrate returns to its original (dry) color. At low temperatures or in high humidity conditions, dry time may be extended to greater than one hour.

BITUTHENE® 4000 surface conditioner is clear when dry and may remain slightly tacky. In general, conditioning should be limited to what can be covered within 24-hours. In situations where long dry times may prevail, substrates may be conditioned up to 24-hours in advance. Substrates must be reconditioned if dirt or dust accumulates on the conditioned surface. Tools should be cleaned with water before the surface conditioner dries.

Application on Horizontal Surfaces

Note: PREPRUFE® 300R and 300R Plus pre-applied membranes are strongly recommended and are the preferred products for below slab applications or for any application where the membrane is applied before concrete is poured. See PREPRUFE® membrane waterproofing product information sheets at gcpat.com.

All horizontal surfaces to receive BITUTHENE® 4000 membranes should be sloped to drain at least 1/8 in./ft. (11 mm/m). When a minimum slope of 1/8 in. /ft. (11 mm/m) cannot be achieved, two layers of BITUTHENE® 4000 membranes or 80-mils of BITUTHENE® Deck Prep surface treatment and one layer of BITUTHENE® 4000 membranes maybe an option. Contact your local GCP representative for more details.

Apply the membranes from the low point to the high point so that laps shed water. Overlap all seams at least 2.5 in. (65 mm). Stagger all end laps. Roll the entire membrane firmly, and completely as soon as possible. Use a linoleum roller or standard water-filled garden roller less than 30 in. (760 mm) wide, weighing a minimum of 75 lbs (34 kg) when filled. Cover the face of the roller with a “conforming” material such as 1/2 in. (13 mm) plastic foam sheeting or two wraps of indoor-outdoor carpet to allow the membrane to fully contact the primed substrate. Seal all T-joints and membrane terminations with BITUTHENE® LM liquid membrane by the end of the day of membrane application.

Application on Vertical Surfaces

Apply BITUTHENE® 4000 membranes in lengths up to 8 ft (2.5 m). Overlap all seams at least 2.5 in. (65 mm). On walls higher than eight feet, apply membranes in two or more “shingled” lifts, with the upper sheet overlapping the lower by at least 2.5 in. (65 mm). Roll all membranes with a hand roller.

Terminate the membranes at grade level. Press each membrane firmly to the wall with the butt end of a hardwood tool such as a hammer handle 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® LM liquid membrane or BITUTHENE® mastic. A termination bar may be used to ensure a tight seal. If the wall has been only partially covered by the end of the working day, apply a maximum ¼" bead of BITUTHENE® mastic tooled thin or BITUTHENE® LM liquid membrane along the exposed edges of the membrane at its temporary terminations to prevent vertical drainage of precipitation, which could undermining the membrane adhesion. Terminate the membranes 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. A 1/8 in. (3 mm) x 1 in. (25 mm) aluminum termination bar aligned with the top of the membrane is recommended for terminations on CMU, in earth covered decks and in earth-bermed applications where soil cannot be fully compacted. See technical letter 26 about BITUTHENE® membrane terminations for additional information.

Membrane Repairs

Patch tears and inadequately lapped seams with additional membrane. Clean any damaged membrane with a damp cloth and dry. Slit fish-mouths and repair with a patch extending 6 in. (150 mm) in all directions from the slit, and seal edges of the patch with BITUTHENE® LM liquid membrane. Inspect all membranes thoroughly before covering, and repair any damaged areas.

Drainage

HYDRODUCT® drainage composites are recommended for both active drainage and protection of the membranes. See HYDRODUCT® drainage composite product data sheet at gcpat.com.

Insulation

Always apply BITUTHENE® 4000 membranes directly to primed or conditioned structural substrates. Insulation, if used, must be applied over the membranes. Do not apply BITUTHENE® membranes over insulation or lightweight insulating concrete.

Flood Testing (Horizontal Surfaces Only)

Flood test all horizontal applications with a minimum 2 in. (51 mm) head of water for 24-hours. Mark any leaks and repair when the membrane is dry. Before flood testing, be sure the structure will withstand the dead load of the water. For highly sloped decks, segment the flood test to avoid excessively deep water near drains. Conduct the flood test 24-hours after completing the application of BITUTHENE® 4000 membranes. Immediately after flood testing is completed and all necessary repairs have been made, install HYDRODUCT® drainage composite to protect the BITUTHENE® membranes from damage by other trades.

As an alternate to flood testing, appropriate electronic leak detection may be used to check the integrity of the system.

Protection of Membrane

To prevent damage from other trades, construction materials or backfill, protect BITUTHENE® 4000 membranes immediately after application. To avoid potential blisters, place protection immediately where temperatures are above 77°F (25°C).

- On vertical applications, use HYDRODUCT® 220 drainage composite. Adhere HYDRODUCT® 220 Drainage Composite to membranes with PREPRUFE® Detail Tape. Alternative methods of protection are to use nominal 1.0 lb/ft^3 (16kg/m^3), min. 1 in. (25 mm) extruded polystyrene or min.1/4 in. (6 mm) asphaltic hardboard. Such alternatives do not provide positive drainage to the system. If 1/4 in. (6 mm) extruded polystyrene protection board is used, backfill must not contain sharp rock or aggregate over 2 in. (50 mm) in diameter or any debris that might puncture the protection board and/or the membranes. See Technical 27 Letter Protection Courses used with GCP Waterproofing Systems for additional information.
- On horizontal applications, use HYDRODUCT® 660 Drainage Composite. Alternate methods of protection are to use 1 in (25 mm) extruded polystyrene or ¼" asphaltic hardboard.

Placing Steel

On horizontal applications when placing steel over properly protected membranes, use concrete bar supports (dobies) or chairs with plastic tips or rolled feet to prevent damage from sharp edges. Use special care when using wire mesh, especially if the mesh is curled.

Backfill

Place backfill as soon as possible. (See Protection of Membrane above) Use care during backfill operation to avoid damage to the waterproofing system. Follow generally accepted practices for backfilling and compaction. Backfill should be added and compacted in 6 in. (150 mm) to 12 in. (300 mm) lifts.

Approvals

- City of Los Angeles Research Report RR 24386 Miami-Dade County Code Report NOA 18-1109.01
- U.S. Department of Housing and Urban Development (HUD) HUD Materials Release 628j
- BITUTHENE® 4000 membranes carry a Underwriters' Laboratory Class A Fire Rating (Building Materials Directory (File TFGU.R7910) when used in either of the following constructions:
  1. Limited to noncombustible decks at inclines not exceeding 1/4 in. (6 mm) to the horizontal 1 ft (0.3 m). One layer of BITUTHENE® waterproofing membrane, followed by one-layer of 1/8 in. (3 mm) protection board, encased in 2 in. (50 mm) minimum concrete monolithic pour.
  2. Limited to noncombustible decks at inclines not exceeding 1/4 in. (6 mm) to the horizontal 1 ft (0.3 m). One layer of BITUTHENE® waterproofing membrane, followed by one layer of DOW styrofoam PD insulation board [2 in. (50 mm) thick]. This is covered with one layer of 2 ft x 2 ft x 2 in. (0.6 m x 0.6 m x 50 mm) of concrete paver topping.

Physical Properties for BITUTHENE® 4000 Membrane

PROPERTY	TYPICAL VALUE	TEST METHOD
Color	Dark gray-black	
Dimensions	3 ft x 66.7 ft roll (200 ft^2)	
Thickness	60 mils (1.5 mm) nominal	ASTM D3767—method A
Flexibility, 180° bend over 1 in. (25 mm) mandrel at -25°F (-32°C)	Unaffected	ASTM D1970

Tensile strength, Membrane, die C	325 psi (2240 kPa) minimum	ASTM D412[1]
Tensile strength, film	5,000 psi (34.5 MPa) minimum	ASTM D882[1]
Elongation, ultimate failure of rubberized asphalt	300% minimum	ASTM D412[1]
Crack cycling at -25°F (-32°C), 100 cycles	Unaffected	ASTM C836
Lap shear	20 lbs (89 N)	ASTM D1002[2]
Peel strength	11 lbs/in. (1926 N/m)	ASTM D903[4]
Puncture resistance, Membrane	50 lbs (222 N) minimum	ASTM E154
Resistance to hydrostatic head	230 ft (70m) of water	ASTM D5385
Permeance	<0.1 perms	ASTM E96, section 12—water method
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 at a speed of 4 in. (102 mm) per minute.
3. Individual Roll Length may vary +/- 1%
4. Test conducted with BITUTHENE® 4000 surface conditioner at minimum application temperature

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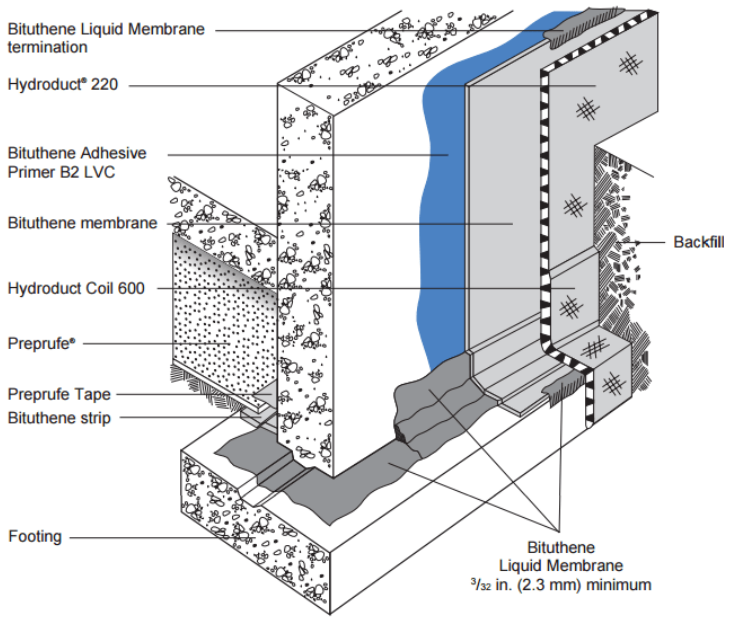
Last Updated: 2023-04-28
gcpat.com/solutions/products/bituthene-post-applied-waterproofing/bituthene-4000-membrane

BITUTHENE® Adhesive Primer B2 LVC Data Sheet

Specially formulated low VOC primer for use with GCP self-adhered membranes on green concrete or damp substrates

Product Description

BITUTHENE® Adhesive Primer B2 LVC is a low VOC primer in solvent specially formulated to provide good initial adhesion of GCP self-adhered membranes. In addition, its formulation promotes the adhesion of GCP self-adhered membranes to green concrete and damp surfaces. The VOC (Volatile Organic Compound) content is <200 g/L and is compliant with all state and local VOC requirements for adhesives and sealants. Architectural and industrial maintenance regulations limit the VOC content in products classified as adhesive primers. Refer to technical letters at gcpat.com for the most current list of allowable limits.



Use

BITUTHENE® Adhesive Primer B2 LVC is used to prime green concrete (less than seven day cure for normal structural concrete). It is also used to prime damp concrete, masonry, gypsum sheathing or wood surfaces on which GCP self-adhered membranes will be applied.

BITUTHENE® Adhesive Primer B2 LVC is used for vertical and horizontal applications at 25 ºF (-4 ºC) or above.

Application Procedures

Safety, Storage and Handling Information

GCP products must be handled properly. Vapors from solvent-based primers and mastic are harmful and flammable. For these products, the best available information on safe handling, storage, personal protection, health andenvironmental considerations has been gathered. SDS (Safety Data Sheet) are available at gcpat.com and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the SDS before use.

Supply

BITUTHENE® PRIMER B2 PROPERTY	VALUE
Unit Size	5 gal (18.9 L) pail
Weight	44 lbs (20 kg)/pail
Units per pallet	48 pails
Coverage	325–425 ft^2/gal (7.5–10.0 m^2/L)

BITUTHENE® Adhesive Primer B2 LVC is subject to a 18 months standard shelf life provided it is stored as per GCP recommendation.

Product Application

BITUTHENE® Adhesive Primer B2 LVC may be applied by roller or brush. Use a heavy nap roller made of natural material, such as lamb's wool.

Stir until a uniform color and consistency is achieved.

Apply it to clean, dirt free, frost-free surfaces at an approximate coverage rate of 325–425 ft^2/gal (7.5–10.0 m^2/L). Do not apply to frozen concrete or to areas with standing or visible water. Do not use during wet weather. Allow BITUTHENE® Adhesive Primer B2 LVC to dry one hour or until tack-free. Dry time may be longer in cold temperatures Deep puddles of primer should be avoided as this will lengthen drying time. Rollers or brushes should be dipped into pans. Avoid pouring primer directly onto a horizontal substrate. Do not apply directly to GCP self-adhered membrane.

In general, priming should be limited to an area that can be covered with membrane within 24 hours. Areas that accumulate significant amounts of dust or dirt must be reprimed before membrane is applied.

Although it may be used on green concrete and damp surfaces, moisture may become trapped under the membrane. This may result in blistering, particularly on warm, sunny days. Therefore, cover the membrane as soon as possible to minimize blistering. If blistering occurs, allow membrane to cool and re-roll with heavy roller. Blisters over 4 in. (100 mm) in diameter should be cut and patched.

Clean tools with mineral spirits at the end of each day. Mineral spirits is a combustible liquid and should be used only in accordance with the manufacturer's safety recommendations. Do not use solvents to clean hands or skin.

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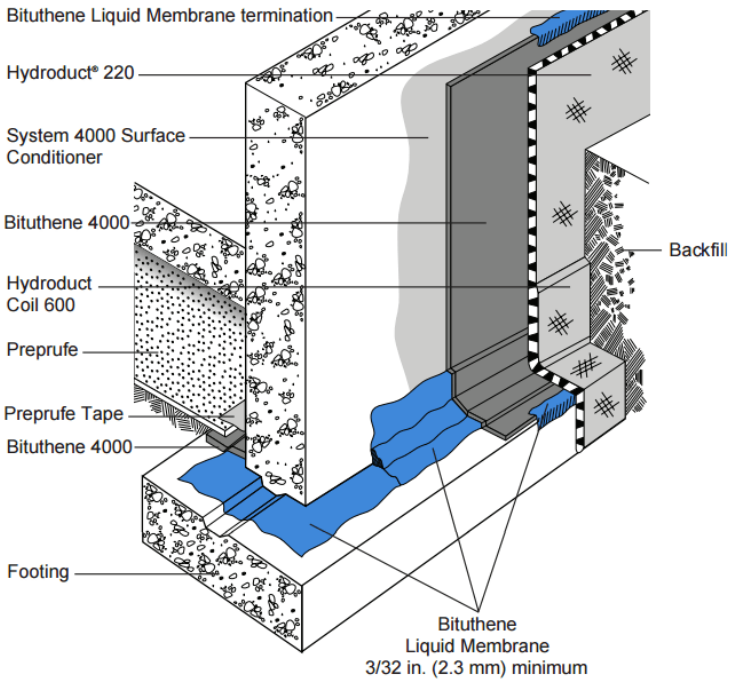
Last Updated: 2022-12-06

BITUTHENE® Liquid Membrane Data Sheet

Two component, elastomeric, liquid applied detailing compound for use with GCP waterproofing membranes

Product Description

BITUTHENE® Liquid Membrane is a two component, elastomeric, cold applied, trowel grade material designed for a variety of uses with the GCP waterproofing systems. The VOC (Volatile Organic Compound) content is 10 g/L. Architectural and industrial maintenance regulations limit the VOC content in products classified as architectural coatings. Refer to Technical Letters for the most current list of allowable limits.



Product Advantages

- Liquid applied
- Waterproof
- Tough, rubber-like
- Chemically cured
- Cold applied
- System compatible

Use

BITUTHENE® Liquid Membrane is ideally suited for the following uses:

- Fillet material at inside corners
- Reinforcement material at inside corners
- Flashing material around drains, protrusions, curbs and parapets
- Sealing material at terminations
- Repair material for defects on concrete surfaces
- Flashing material at corners

The two parts of BITUTHENE® Liquid Membrane are mixed on site and troweled on to provide a simple and quick waterproofing detailing aid in conjunction with BITUTHENE®, PREPRUFE® and PROCOR® systems.

Compatibility

BITUTHENE® Liquid Membrane is completely compatible with BITUTHENE®, PREPRUFE® and PROCOR®, and with existing asphalt or coal tar-based waterproofing materials. It is also compatible with cured silicone and polyurethane sealants. It is not compatible with creosote, pentachlorophenol, linseed oil or polysulfide-based sealants.

Supply

BITUTHENE® Liquid Membrane (Parts A & B)		
Unit size	1.5 gal (5.7 L)	4 gal (15.1 L)
Net weight per unit	16 lbs (8 kg)	44 lbs (20 kg)
Units per pallet	100	24

Physical Properties

PROPERTY	TYPICAL VALUE	TEST METHOD
Part A Color	Black	
Part B Color	Clear	
Mixture of Parts A and B Color	Black	
Solids content	100%	ASTM D1644
Elongation	250% minimum	ASTM D412
Peel strength	5 lbs/in. (880 N/m) minimum	ASTM D903
Flexibility, 180° bend over 1 in. (25 mm) mandrel at -25°F (-32°C)	Unaffected	ASTM D1970

Application Procedures

Safety, Storage and Handling Information

BITUTHENE® products must be handled properly. Vapors from solvent based primers and mastic are harmful and flammable. For these products, the best available information on safe handling, storage, personal protection, health and environmental considerations has been gathered. Safety Data Sheets (SDS) are available on the web site and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the SDS before use.

Surface Preparation

All surfaces must be dry and free from dirt, grease, oil, dust or other contaminants. BITUTHENE® Liquid Membrane may be applied at temperatures of 25°F (-4°C) or above. Store in a dry place above 40°F.

Mixing

Add the entire contents of the Part B container to Part A and mix for 3 to 5 minutes until uniform. Part A is black and Part B is clear. Take care to scrape material from the side and bottom of the containers to ensure thorough mixing. A low speed (150 rpm) mechanical mixer with flat paddle blades is required. Do not apply any material if streaks can be seen due to insufficient mixing. Once mixed, BITUTHENE® Liquid Membrane must be applied by trowel within 1.5 hours. More time is available at lower temperatures.

At high temperatures, thickening and curing will be faster. Material that has thickened must be discarded. The material will cure to a very flexible rubber-like material.

BITUTHENE® Liquid Membrane must be applied at a minimum thickness of 3⁄16 in. (2.3 mm) unless otherwise noted on details. 32 In fillet applications, the face of the fillet should be a minimum of ¾ in. (20 mm). In corner flashing application details, it should extend 6 in. (150 mm) in each direction from the corner. BITUTHENE® Liquid Membrane will adhere to primed or unprimed concrete.

BITUTHENE® Liquid Membrane should be allowed to cure at least 24 hours before flood testing.

Coverage

As a fillet material, 1 gal (3.8 L) will cover approximately 100 linear feet (30 m). As a flashing material, 1 gal (3.8 L) will cover approximately 17 f^2 (1.6 m^2). As a fillet and reinforcement, 1 gal (3.8 L) will cover approximately 14 linear feet (4.3 m).

Cleaning

Clean tools and equipment with mineral spirits before BITUTHENE® Liquid Membrane has cured. Mineral spirits is a combustible liquid and should be used only in accordance with the manufacturer's safety recommendations. Do not use solvents to clean hands or skin.

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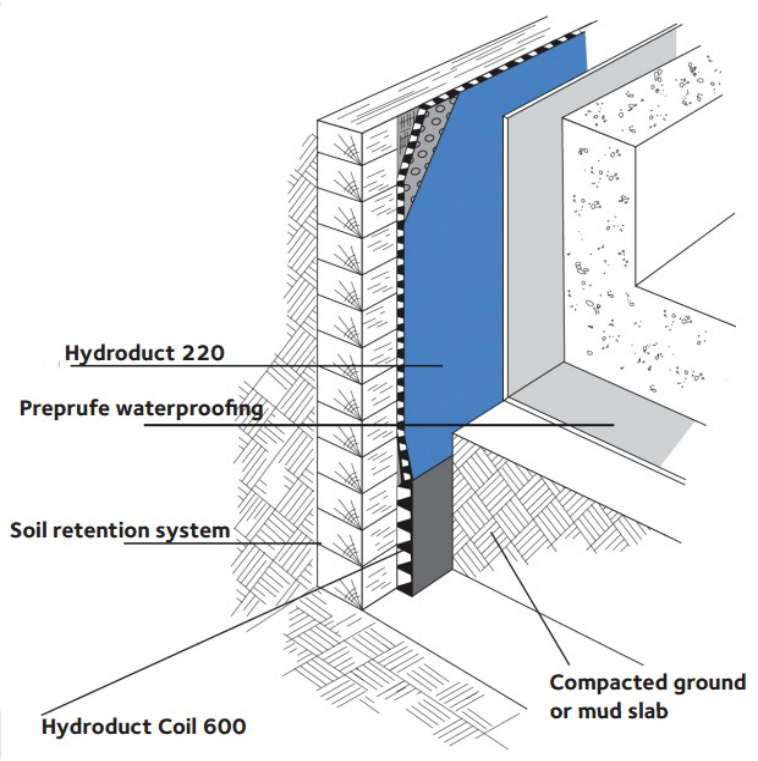
Last Updated: 2022-12-06

HYDRODUCT® 220 Data Sheet

Drainage composite for use as a combined drainage and protection layer with GCP waterproofing membranes

Product Description

HYDRODUCT® 220 is a strong, preformed 0.44 in. (11 mm) thick geocomposite drainage sheet system, comprising a hollow studded polypropylene core, covered on one side with a nonwoven, needle punched polypropylene filter fabric and on the other side with a smooth polymeric film.



Uses

HYDRODUCT® 220 is designed primarily for use with waterproofing materials in vertical installations.

HYDRODUCT® 220 has been specially developed to provide a simple and highly practical collector and deflector of unwanted ground water on foundation walls, retaining walls, tunnels and planters. It can be used with PREPRUFE®, PROCOR®, or BITUTHENE® waterproof membranes. When installed it protects the membrane from damage and minimizes the build-up of percolated surface water against the structure. The construction of the studded sheet also creates an air void to isolate the structure from the effects of the surrounding ground.

HYDRODUCT® 220 has been designed to withstand ground pressures and the compaction forces of wet concrete to maintain a high water flow capacity. The drainage sheet must be connected into the site drainage system to minimize hydrostatic build-up and collect infiltrated water using HYDRODUCT® Coil 600 or traditional perforated pipes wrapped and linked with the geotextile filter fabric to prevent clogging.

Product Advantages

- Enhances waterproofing—eliminates hydrostatic pressure build-up
- Efficient water collector/deflector—can be used as a sandwich drainage layer between lagging and the reinforced concrete structure
- Smooth polymeric sheet—compatible with PREPRUFE® , PROCOR® , or BITUTHENE® membranes Simple
- Convenient drainage and protection layer—serves as robust membrane protection and drainage
- Geotextile fabric filter—allows ground water to pass into the drain core while restricting the movement of soil particles
- High flow capacity
- Rot proof—unaffected by permanent immersion in water, bacteria, dilute acids and alkalis
- Economical—eliminates imported aggregate drainage layers
- Studded core—allows water to flow to designated drainage collection points

Application Procedures

Safety, Storage and Handling Information

All construction products must be handled properly. Safety Data Sheets (SDS) are available and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the SDS before use.

Installation

Position HYDRODUCT® so that the geotextile fabric filter is facing toward the groundwater, soil or overburden. The solid polymeric film provides extra protection for waterproofing such as PROCOR® or BITUTHENE® and should not be removed. In vertical applications, HYDRODUCT® 220 Drainage Composites can be applied to the substrate vertically but should extend from the perimeter discharge pipe to a point approximately 6 in. (150 mm) below the anticipated grade line.

When adhering HYDRODUCT® 220 directly to BITUTHENE® waterproofing membranes, PREPRUFE® Detail Tape should be used. When using PREPRUFE® Detail Tape, press firmly to ensure good adhesion.

Substrate and job site conditions will determine the attachment pattern. Additional consideration should be given in high wind exposures. Abut adjacent rolls with excess fabric overlapping in shingle fashion.

For inside and outside corners, abut adjoining drainage composite at the corner. Cover open core with extra geotextile filter fabric. The exposed core along the top terminations should be covered with a strip of geotextile to prevent intrusion of soil into core. At the bottom termination extend the HYDRODUCT® 220 Drainage Composite out from the structure so that it passes behind and under the perimeter discharge pipe. Additional geotextile should be wrapped over the pipe to prevent soil intrusion.

To secure HYDRODUCT® 220 around protrusions, apply PREPRUFE® Detail Tape around the protrusion in a picture frame configuration. Cut HYDRODUCT® 220 to fit snugly around the protrusion. Press the cut edge firmly into PREPRUFE® Detail Tape.

HYDRODUCT® 220 should be covered promptly. Do not leave HYDRODUCT® 220 exposed to sunlight for more than two weeks.

Motor vehicles, construction equipment or other trades should not be allowed directly on the HYDRODUCT® 220.

Supply

HYDRODUCT®	
Roll size	4 ft x 50 ft (1.2 m x 15.2 m) 200 ft^2 (18.6 m^2)
Packaging	6 rolls/pallet
Weight	39 lbs (17.7 kg)/roll
Complimentary Materials	
PREPRUFE® Detail Tape	2 in. x 50 ft (50 mm x 15 m) rolls

Physical Properties

PROPERTY	TYPICAL VALUE	TEST METHOD
Drainage Core		
Thickness	0.40 in. (10 mm) nominal	ASTM D1777
Compressive strength	15,000 lbs/ft^2 (718 kPa)	ASTM D6364
Flow rate (gradient 1.0,)	18 gal/min./ft (224 L/min./m)	ASTM D4716
Geotextile	**Typical Value**	**Test Method**
Tensile strength	100 lbs (445 N)	ASTM D4632
Apparent opening size	70 U.S. sieve (0.21 mm)	ASTM D4751
Flow rate	165 gal/min./ft^2 (6724 L/min./m^2)	ASTM D4491
CBR puncture	275 lbs (1.23 kN)	ASTM D6241

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

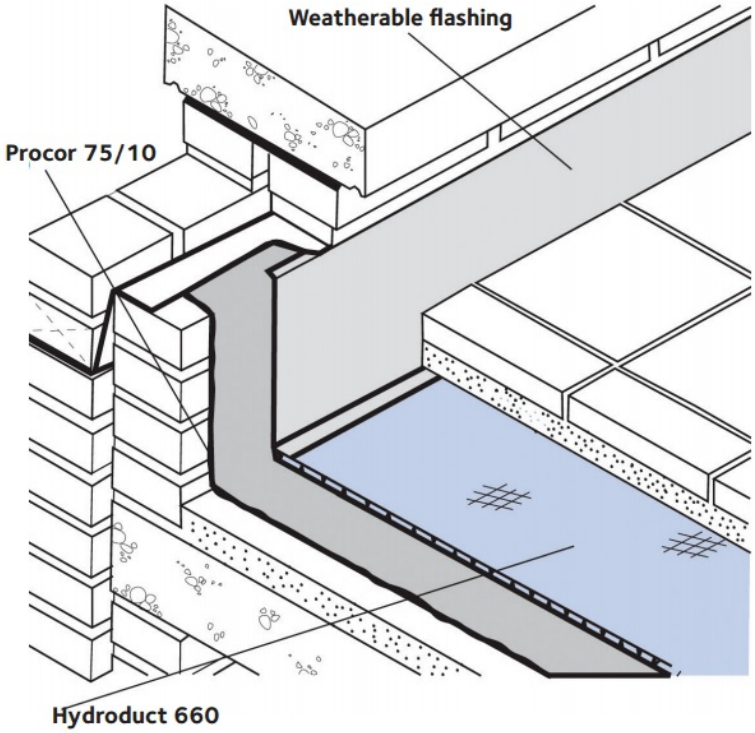
Last Updated: 2023-02-28
gcpat.com/solutions/products/hydroduct-drainage-composite/hydroduct-220

HYDRODUCT® 660 Data Sheet

High impact, creep-resistant drainage composite and protection layer for use with GCP waterproofing membranes in all horizontal applications

Product Description

HYDRODUCT® 660 is a highly robust, preformed, 0.44 in. (11 mm) thick geocomposite drainage sheet system, comprising a heavy duty, studded polypropylene preformed membrane. This is covered on one side with a nonwoven, needle punched polypropylene filter fabric and on the other side with a smooth polymeric film. This film allows the HYDRODUCT® 660 to be placed against waterproofing membrane and should not be removed.



Uses

HYDRODUCT® 660 Drainage Composite is designed to collect and transport water to drainage outlets. It can be used on all horizontal applications regardless of the type of overburden and serves as a combination drainage and protection course for all GCP waterproofing membranes.

The high strength, nonwoven geotextile is designed to maintain permeability while protecting the drainage composite from job site damage prior to, and during, the installation of the overburden. The high permittivity of the nonwoven geotextile facilitates the removal of water from a concrete pour, thus enhancing the concrete cure, as well as providing drainage after installation. The geotextile is securely bonded to the core to prevent intrusion of the fabric into the core during service. The high modulus backing film ensures compatibility when used with either PROCOR® fluid applied waterproofing membranes, or with BITUTHENE® waterproofing membranes.

Product Advantages

- Universal horizontal application—suitable for all overburdens including concrete
- Damage and creep-resistant—high compressive strength core resists traffic loads and site damage to maintain drainage flow
- High flow capacity
- Enhances waterproofing—eliminates hydrostatic head build up
- Securely bonded fabric—restricts intrusion into core Polymeric backing film—compatible with both sheet and liquid waterproofing membranes
- Lightweight—easy to install without special equipment
- Simple, convenient, drainage and protection layer—robust membrane protection

Application Procedures

Safety, Storage and Handling Information

All construction products must be handled properly. Safety Data Sheets (SDS) are available and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the SDS before use.

Installation

HYDRODUCT® 660 can be placed over waterproofing membranes, concrete or wood providing job site conditions allow the composite to remain as placed. Additional ballast consideration should be given in high wind exposures. Abut all edges tightly with the excess geotextile placed over the adjacent roll in shingle fashion.

To secure HYDRODUCT® 660 around protrusions, apply PREPRUFE® Detail Tape around the protrusion in a picture frame configuration. Cut HYDRODUCT® 660 to fit snugly around the protrusion. Press HYDRODUCT® 660 core firmly into the PREPRUFE® Detail Tape.

HYDRODUCT® 660 should be covered promptly. Do not leave HYDRODUCT® 660 exposed to sunlight for more than two weeks. Motor vehicles, construction equipment or other trades should not be allowed directly on the HYDRODUCT® 660.

Supply

HYDRODUCT®	
Roll size	4 ft x 50 ft (1.2 m x 15.2 m) 200 ft^2 (18.6 m^2)
Packaging	6 rolls/pallet
Weight	54lbs (24.4 kg)/roll
Complementary Materials	
PREPRUFE® Detail Tape	2 in. x 50 ft (50 mm x 15 m) roll/16 rolls per carton

Physical Properties

PROPERTY	TYPICAL VALUE	TEST METHOD
Drainage Core		
Thickness	0.40 in. (10 mm) nominal	ASTM D1777
Compressive strength	18,000 lbs/ft^2 (862 kPa)	ASTM D6364
Flow rate (gradient 1.0)	21 gal/min./ft (261 L/min./m)	ASTM D4716
Geotextile		
Tensile strength	205 lbs (912 N)	ASTM D4632
Apparent opening size	80 U.S. sieve (0.177 mm)	ASTM D4751
Flow rate	100 gal/min./ft^2 (4075 L/min./m^2)	ASTM D4491
CBR puncture	580 lbs (2.58 kN)	ASTM D6241

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

Last Updated: 2023-02-28

gcpat.com/solutions/products/hydroduct-drainage-composite/hydroduct-660

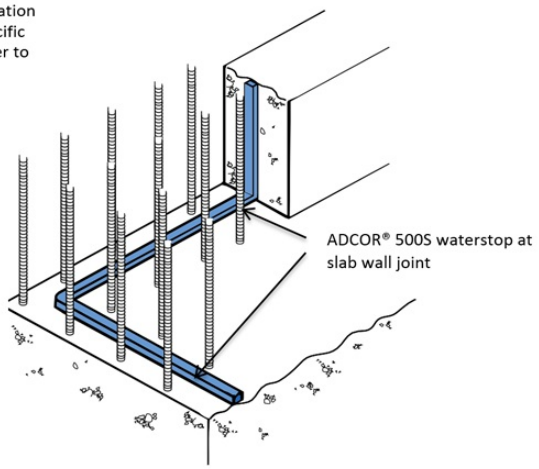
ADCOR® 500S Waterstop Data Sheet

Conformable, hydro-expansive waterstop for preventing water entry through joints in concrete sub-structures

Product Description

GCP Applied Technologies' ("GCP") ADCOR® 500S waterstop is a conformable, butyl rubber-based hydrophilic waterstop strip that expands in contact with water. When fully encapsulated by poured concrete, the expansive forces form a seal against concrete faces. This seal resists hydrostatic pressure, and is specifically engineered to stop water from entering sub-structures. The ADCOR® 500S waterstop is a unique product that has been specifically developed to provide superior performance compared to conventional bentonite and swellable rubber waterstops.

Drawings are for illustration purposes only. For specific application details, refer to gcpat.com.



Applications

- Construction joints in in-situ concrete structures
- Casting new concrete against existing
- Floor slabs cast against diaphragm retaining walls, steel sheet piles and secant piled walls
- Joints between floor slabs and pile caps
- Pipe penetrations through floors and walls

Product Advantages

- Controlled volumetric expansion reduces risk of concrete spalling
- Retains cohesive strength at both original and expanded volume
- Malleable and conformable, enabling easy application to a variety of concrete profiles and a variety of irregular substrates
- Resists at least 231 ft. (70m) hydrostatic pressure.
- Volumetric expansion min 100%

- Simple overlap jointing onsite.
- Reproducible swell after wet – dry cycling
- Unaffected by freeze/thaw cycling

System Components

Waterstop:

- ADCOR® 500S waterstop: a conformable, butyl rubber-based hydrophilic waterstop strip that expands in contact with water

Ancillary Components:

- ADCOR® 500S adhesive: One-component, caulk-applied adhesive required for attachment of the ADCOR® 500S waterstop

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.
- ADCOR® 500S waterstop is not intended for any other use. Contact GCP Technical Services where any other use is anticipated or intended.
- To be effective, waterstop networks (including ADCOR® 500S waterstop) must be continuous through all joints and penetrations.
- The ADCOR® 500S waterstop should not be used in movement joints.
- Not suitable for use with pre-cast concrete components.
- Not suitable for use without ADCOR® 500S adhesive. Mechanical fasteners should never be used as the only means of securement.
- Special Note: When this information is printed from the gcpat.com global website, a footer appearing on this document will restrict its applicability to the United States. Note that the information and references in this document are hereby expanded and apply to North, Central and South America.

Safety and Handling

Read and understand the product label and Safety Data Sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements.

SDSs can be obtained by contacting your local GCP representative or office, by calling GCP toll free at 1-866-333-3SBM (3726) and in some cases from our web site at gcpat.com.

Storage

- Observe one-year shelf life and use on a first in first out basis.
- Store in dry conditions between 40°F (4.5°C)-90°F (32°C).
- Store off ground under tarps or otherwise protected from rain, and all sources of moisture and frost.

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, Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations.

Support is also available by full-time technically trained GCP Applied Technologies field sales representatives and technical service personnel, backed by a central research and development technical services staff. For technical assistance with detailing and problem solving, please call toll-free at (866) 333-3SBM (3726).

Temperature Requirements (application)

- The ADCOR® 500S waterstop can be applied at temperatures between 25°F and 104°F.

Substrate Preparation

Substrates must be clean and dry, free of all contaminants, such as oil, loose laitance and construction debris prior to the application of the ADCOR® 500S waterstop.

- Concrete surfaces must be sound, and free of large voids and honeycombs.
- Concrete surface must be free from ice, frost and standing water.

Horizontal and Vertical Installation

1. Apply a continuous minimum 3/8" (10 mm) bead of ADCOR® 500S adhesive directly to the concrete substrate, ensuring the minimum 3" (75mm) of concrete cover will be maintained. ADCOR® 500S adhesive can be applied to damp surfaces but should not be used where the substrate is wet or has standing or flowing water.

2. The ADCOR® 500S waterstop must be installed into the ADCOR® 500S adhesive within 30 minutes of the adhesive application.

3. Remove the release paper from the roll of ADCOR® 500S waterstop before firmly pressing the waterstop into the ADCOR® 500S adhesive. Ensure full and continuous contact between the ADCOR® 500S waterstop and the ADCOR® 500S adhesive and substrate.

4. For all shotcrete applications, mechanical fastening is required to ensure full contact remains between the ADCOR® 500S and the ADCOR® 500S adhesive to the substrate. For certain other conditions, such as overhead applications, very irregular substrates or temperatures below 40°F, mechanical fastening may also be necessary.

5. When fastening is necessary, secure ADCOR® 500S to the ADCOR® 500S adhesive and substrate using masonry nails ½ –2 in. (40 mm– 50 mm) long with a washer ¾ in. (20 mm) in diameter. Powder actuated fasteners in similar length with a ¾ in. (20 mm) diameter washers may also be used. Fasteners should be spaced at a maximum of 12 in. (300 mm) on centers or as required to ensure continuous contact with the immediate substrate.

6. All joints should be overlapped side by side at a minimum of 4 in. (100mm). Ensure full contact between jointed pieces of the ADCOR® 500S waterstop.

7. The ADCOR® 500S waterstop can be bent around corners. Ensure that ADCOR® 500S adhesive fills any gaps between the ADCOR® 500S waterstop and the substrate.

8. Any damaged ADCOR® 500S waterstop must be removed and repaired with a new section of ADCOR® 500S waterstop following the above installation procedures

9. Keep the ADCOR® 500S waterstop dry prior to pouring concrete. Any sections showing evidence of premature swelling should be removed and replaced prior to concrete placement.

10. The ADCOR® 500S waterstop must be encapsulated by a minimum of 3 in. (75mm) of concrete cover.

Supply

PRODUCT	
ADCOR® 500S	3/4 in X 1 in X 16½ ft (5m) rolls 6 rolls/carton 30 cartons/pallet Pallet weight 1720 lbs.
ADCOR® 500S adhesive	13.5 oz. (400ml) sausage for caulking gun application

ADCOR® 500S Waterstop: Typical Values

PROPERTY	ADCOR® 500S WATERSTOP
Color	Light blue
Weight	0.5 lb/ft
Density	91 lb/ft^3
Volumetric Expansion in Cement Water	100% min.
Hydrostatic Head Resistance	231 ft (70m)
Service Temperature Range	248°F max.
Application Temperature	25°F (-5°C) – 104°F (40°C)
Minimum Concrete Cover	3in.

Maximum Bend	180° at 32°F (0°C)
Minimum Overlap	4 in (100mm)

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

Last Updated: 2022-12-06

Safety Data Sheet

Printing date 09/01/2017 **Version Number 1.0** **Reviewed on 09/01/2017**

*

1 Identification

Product identifier

Trade name: ***Bituthene System 4000 WP Membrane***

SDS ID Number: 2754

Relevant identified uses of the substance or mixture, and uses advised against:

Waterproofing.
Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

*

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).
Additional information:
SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.
NFPA ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Flammability = 0
Reactivity = 0

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

Results of PBT and vPvB assessment

PBT: Not applicable.

(Cont. on page 2)

Safety Data Sheet

Trade name: *Bituthene System 4000 WP Membrane*

(Cont. from page 1)

vPvB: Not applicable.

*
3 Composition/information on ingredients

Chemical characterization: Mixture

Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

*
4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: No special measures required.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.
If skin irritation occurs, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes.
If symptoms persist, consult a physician.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

*
6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Cont. on page 3)

Safety Data Sheet

Trade name: *Bituthene System 4000 WP Membrane*

(Cont. from page 2)

*

7 Handling and storage

Handling:

Precautions for safe handling
Wash thoroughly after handling.

Avoid eye and skin contact with residue from adhesive.

Release liners are slippery. Remove from work area immediately after membrane application.

Membrane is slippery when wet or covered with frost.

Release liners may cause slip and trip hazards.

Do not eat, drink or smoke when using this product.
Wash skin after handling.

For professional use only. Keep out of children's reach.

Information about protection against explosions and fires:

Removal of release liner may generate a static electrical discharge (spark).

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

*

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

(Cont. on page 4)

Safety Data Sheet

Trade name: *Bituthene System 4000 WP Membrane*

(Cont. from page 3)

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Solid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value (~):	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	Undetermined.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not applicable.
Density: (~) at 20°C (68 °F)	1g/cm³ (8.3 lbs/gal)
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.
Other information	No further relevant information available.

*

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

(Cont. on page 5)

Safety Data Sheet

Trade name: *Bituthene System 4000 WP Membrane*

(Cont. from page 4)

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

*

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected

on the eye: No irritating effect expected

inhalation: No irritating effect expected

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity: **Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**
None of the ingredients is listed.

NTP (National Toxicology Program) **K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

*

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

(Cont. on page 6)

Safety Data Sheet

Trade name: *Bituthene System 4000 WP Membrane*

(Cont. from page 5)

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

*

14 Transport information

UN-Number **DOT, IMDG, IATA**	Not applicable.
UN proper shipping name **DOT, IMDG, IATA**	Not applicable.
Transport hazard class(es) **DOT, IMDG, IATA** **Class**	Not applicable.
Packing group **DOT, IMDG, IATA**	Not applicable.
Environmental hazards: **Marine pollutant:**	No
Special precautions for user	Not applicable.
Transport/Additional information:	Not classified as a dangerous good for transport by road, rail or air.
DOT **Remarks:**	Not Regulated.
UN "Model Regulation":	Not applicable.

*

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:

Extracts (petroleum), heavy paraffinic distillate solvent

Polycyclic Aromatic Hydrocarbons

(Cont. on page 7)

Safety Data Sheet

Trade name: *Bituthene System 4000 WP Membrane*

(Cont. from page 6)

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable
None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.
If no g/L value is provided this product is not subject to above standard.

*
16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 09/01/2017 / -

The first date of preparation 12/02/2016

Number of revision times and the latest revision date 1.0 / 09/01/2017

USGHS

Safety Data Sheet

Printing date 05/08/2018 **Version Number 1.0** **Reviewed on 05/08/2018**

*

1 Identification

Product identifier

Trade name: ***Bituthene Adhesive Primer B2 LVC***

SDS ID Number: 60028

Relevant identified uses of the substance or mixture, and uses advised against:
Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

Flammable liquid and vapor.

Causes skin irritation.

May cause genetic defects.

May cause cancer.

Causes damage to organs through prolonged or repeated exposure. May cause damage to the central nervous system through prolonged or repeated exposure.

Label elements:

Hazard pictograms

GHS02 GHS07 GHS08

Danger

Hazard statements
Flammable liquid and vapor.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure. May cause damage to the central nervous system through prolonged or repeated exposure.

(Cont. on page 2)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

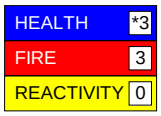
(Cont. from page 1)

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF exposed or concerned: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.

Hazard description: Flammable
NFPA ratings (scale 0 - 4)

Health = 2
Fire = 3
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *3
Flammability = 3
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

*
3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:		
68478-07-9	Hydrocarbon Resin	30-50%
95-47-6	Xylene (o)	10-20%
8052-41-3	Stoddard solvent	2.0-5.0%
63449-39-8	Paraffin waxes and hydrocarbon waxes	1.0-2.0%
8052-42-4	Asphalt	1.0-2.0%
100-41-4	Ethylbenzene	0.1-1.0%

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

*
4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact: Rinse cautiously with water for several minutes.

(Cont. on page 3)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 2)

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: CO2, sand,extinguishing powder. Do not use water.

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Avoid contact with skin.

Prevent formation of aerosols.

Flammable mixtures with air can be formed in emptied containers. Do not puncture, cut, drill, heat or weld uncleaned drums.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Use only in explosion protected area.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

(Cont. on page 4)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 3)

Empty containers may retain hazardous residue, both liquid and vapor.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: Use only in explosion protected area.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

*

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:	
95-47-6 Xylene (o)	
PEL (USA)	Long-term value: 435 mg/m³, 100 ppm
REL (USA)	Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm
TLV (USA)	Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI
8052-41-3 Stoddard solvent	
PEL (USA)	Long-term value: 2900 mg/m³, 500 ppm
REL (USA)	Long-term value: 350 mg/m³ Ceiling limit value: 1800* mg/m³ *15-min
TLV (USA)	Long-term value: 525 mg/m³, 100 ppm
8052-42-4 Asphalt	
REL (USA)	Ceiling limit value: 5* mg/m³ *15-min; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.5* mg/m³ *inh. fraction; as benzene-soluble aerosol; BEIp

Ingredients with biological limit values:	
95-47-6 Xylene (o)	
BEI (USA)	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
8052-42-4 Asphalt	
BEI (USA)	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

(Cont. on page 5)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 4)

A chemical cartridge respirator with organic vapor cartridge is required if occupational exposure limits are exceeded. A dust/mist cartridge or prefilter may be needed in addition to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value (~):	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	161 °C (321.8 °F)
Flash point:	27 °C (80.6 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	465 °C (869 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	In use, may form flammable/explosive vapor-air mixture.
Explosion limits:	
Lower:	1.7 Vol %
Upper:	7.6 Vol %
VOC Content (max):	Not determined.
Vapor pressure at 20 °C (68 °F):	7 hPa (5.3 mm Hg)
Density: (~) at 20 °C (68 °F)	1 g/cm³ (8.3 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.

(Cont. on page 6)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 5)

Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Molecular weight	Not applicable.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide
Other potentially hazardous products may also be formed.

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

*

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: Causes skin irritation.

on the eye: No irritating effect expected

inhalation: No irritating effect expected

Additional toxicological information:
The product can cause inheritable damage.
Over exposure by inhalation or ingestion may be fatal. Chemicals contained in this product can affect the skin, heart, brain, liver, kidneys, lungs and spleen. Some harmful effects are also possible through skin absorption.

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

95-47-6	Xylene (o)	3
8052-42-4	Asphalt	2B
100-41-4	Ethylbenzene	2B

NTP (National Toxicology Program)
K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

(Cont. on page 7)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 6)

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

*

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

*

14 Transport information

UN-Number	
DOT, IMDG, IATA	UN3295
UN proper shipping name	
DOT	Hydrocarbons, liquid, n.o.s.
IMDG, IATA	HYDROCARBONS, LIQUID, N.O.S.
Transport hazard class(es)	
DOT	

Class	3 Flammable liquids

(Cont. on page 8)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 7)

Label 3

IMDG, IATA

Class 3 Flammable liquids
Label 3

Packing group
DOT, IMDG, IATA III

Environmental hazards:
Marine pollutant: No

Special precautions for user Warning: Flammable liquids
Danger code (Kemler): 30
EMS Number: F-E,S-D
Stowage Category A

Transport/Additional information:

IMDG
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation": UN 3295 HYDROCARBONS, LIQUID, N.O.S., 3, III

*

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):
None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

95-47-6	Xylene (o)	14.5%

SARA Section 312/Tier I & II Hazard Categories:
Physical Hazard - Flammable (gases, aerosols, liquids, or solids)
Health Hazard - Carcinogenicity
Health Hazard - Skin Corrosion or Irritation
Health Hazard - Specific target organ toxicity (single or repeated exposure)
Health Hazard - Germ cell mutagenicity

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):
All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):
All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

616-38-6	dimethyl carbonate

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:
Ethylbenzene

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

(Cont. on page 9)

Safety Data Sheet

Trade name: *Bituthene Adhesive Primer B2 LVC*

(Cont. from page 8)

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists) **Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**	
Xylene (o)	A4
Asphalt	A4

NIOSH-Cancer (National Institute for Occupational Safety and Health)	
8052-42-4	Asphalt

Volatile Organic Compounds (VOC) reported per the Emission Standards. 192 grams/liter

*

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 05/08/2018 / -

The first date of preparation 03/04/2015

Number of revision times and the latest revision date 1.0 / 05/08/2018

USGHS

Safety Data Sheet

Printing date 10/28/2016 **Version Number 1.0** **Reviewed on 10/28/2016**

*

1 Identification

Product identifier

Trade name: ***Bituthene Liquid Membrane Part A***

SDS ID Number: 60025

Relevant identified uses of the substance or mixture, and uses advised against
Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

*

2 Hazard(s) identification

Classification of the substance or mixture

May cause cancer.

Label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms

GHS08

Danger

Hazard statements
May cause cancer.
Precautionary statements
Wear protective gloves/protective clothing/eye protection/face protection.
Do not handle until all safety precautions have been read and understood.
Obtain special instructions before use.
IF exposed or concerned: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.
NFPA ratings (scale 0 - 4)

Health = 2
Fire = 1
Reactivity = 1

(Cont. on page 2)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 1)

HMIS-ratings (scale 0 - 4)

HEALTH	*2
FIRE	1
REACTIVITY	1

Health = *2
Flammability = 1
Reactivity = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

*
3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:		
8052-42-4	Asphalt	20-25%
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	10-20%
130498-29-2	Polycyclic Aromatic Hydrocarbons	0.1-0.3%

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

*
4 First-aid measures

Description of first aid measures

General information:

Get medical advice/attention if you feel unwell.

After inhalation:
If symptoms develop, supply fresh air. If required, provide artificial respiration and seek immediate medical treatment.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.

After eye contact:

If contact with residue causes eye irritation, flush eyes with water for at least 15 minutes while holding eyelids open.

After swallowing: Do not induce vomiting; immediately call for medical help.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

Special hazards arising from the substance or mixture No further relevant information available.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

(Cont. on page 3)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 2)

*

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions: Do not allow product to reach sewage system or any water course.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

*

7 Handling and storage

Handling:

Precautions for safe handling

Open and handle receptacle with care.

Prevent formation of aerosols.
Avoid contact with skin and eyes.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

*

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:	
8052-42-4 Asphalt	
REL (USA)	Ceiling limit value: 5* mg/m³ *15-min; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.5* mg/m³ *inh. fraction; as benzene-soluble aerosol; BEIp

Ingredients with biological limit values:	
8052-42-4 Asphalt	
BEI (USA)	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
130498-29-2 Polycyclic Aromatic Hydrocarbons	
BEI (USA)	Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

Additional information: The lists that were valid during the creation were used as basis.

(Cont. on page 4)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 3)

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value (~):	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	200 °C (392 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not determined.
Density: (~) at 20 °C (68 °F)	1.1 g/cm³ (9.18 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.

(Cont. on page 5)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 4)

Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Molecular weight	Not applicable.
Other information	No further relevant information available.

*

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No further relevant information available.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide
Other potentially hazardous products may also be formed.

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

*

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected

on the eye: No irritating effect expected

inhalation: No irritating effect expected

Additional toxicological information: May cause cancer.

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

69012-64-2	Silica, fume	3
8052-42-4	Asphalt	2B
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	1
130498-29-2	Polycyclic Aromatic Hydrocarbons	2A

NTP (National Toxicology Program)
K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

(Cont. on page 6)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 5)

*

12 Ecological information

Toxicity

Aquatic toxicity:	
64742-04-7 Extracts (petroleum), heavy paraffinic distillate solvent	
LC/EC/IC50 (static)	18.8 mg/l (algae) (OECD guideline 201)

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

*

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

*

14 Transport information

UN-Number **DOT, IMDG, IATA**	Not applicable.
UN proper shipping name **DOT, IMDG, IATA**	Not applicable.
Transport hazard class(es) **DOT, IMDG, IATA** **Class**	Not applicable.
Packing group **DOT, IMDG, IATA**	Not applicable.
Environmental hazards: **Marine pollutant:**	No
Special precautions for user	Not applicable.
Transport/Additional information:	Not classified as a dangerous good for transport by road, rail or air.
DOT **Remarks:**	Not Regulated.

(Cont. on page 7)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 6)

UN "Model Regulation": Not applicable.

*
15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):
None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):
None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: Health Hazard - Carcinogenicity

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):
All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):
All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

69012-64-2	Silica, fume
69102-90-5	1,3-Butadiene, homopolymer, hydroxy-terminated
25791-96-2	Glycerol, propylene oxide polymer
8001-78-3	Castor oil, hydrogenated
1332-58-7	Natural aluminosilicate (Kaolin)

California Proposition 65

Chemicals known to cause cancer:
Extracts (petroleum), heavy paraffinic distillate solvent
Polycyclic Aromatic Hydrocarbons
Quartz (SiO2)
4-vinylcyclohexene
1,3-Butadiene

Chemicals known to cause reproductive toxicity for females:

100-40-3	4-vinylcyclohexene
106-99-0	1,3-Butadiene

Chemicals known to cause reproductive toxicity for males:

106-99-0	1,3-Butadiene

Chemicals known to cause developmental toxicity:

106-99-0	1,3-Butadiene

Carcinogenicity Categories

EPA (Environmental Protection Agency)
None of the ingredients is listed.

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

Asphalt	A4
Natural aluminosilicate (Kaolin)	A4

NIOSH-Cancer (National Institute for Occupational Safety and Health)

8052-42-4	Asphalt

Volatile Organic Compounds (VOC) reported per the Emission Standards. (gr/L) 10 gr/L (as applied)

*
16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

(Cont. on page 8)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 7)

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Other Information:

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.
Date of preparation / last revision 10/28/2016 / -

The first date of preparation 03/03/2015

Number of revision times and the latest revision date 1.0 / 10/28/2016

Safety Data Sheet

Printing date 10/31/2016 **Version Number 1.2** **Reviewed on 10/31/2016**

*

1 Identification

Product identifier

Trade name: ***Bituthene Liquid Membrane & Deck Prep Part B***

SDS ID Number: 583

Relevant identified uses of the substance or mixture, and uses advised against
Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

*

2 Hazard(s) identification

Classification of the substance or mixture

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms

GHS07 GHS08

Danger

Hazard statements
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause respiratory irritation.

(Cont. on page 2)

Safety Data Sheet

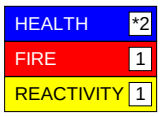
Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 1)

May cause damage to organs through prolonged or repeated exposure.
Precautionary statements
Avoid breathing dust/fume/gas/mist/vapors/spray
[In case of inadequate ventilation] wear respiratory protection.
Wear eye protection / face protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
NFPA ratings (scale 0 - 4)

Health = 2
Fire = 1
Reactivity = 1

HMIS-ratings (scale 0 - 4)



Health = *2
Flammability = 1
Reactivity = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

*
3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:		
26447-40-5	Methylenediphenyl diisocyanate, mixture of isomers	30-50%
101-68-8	Diphenylmethane-4,4'-di-isocyanate	30-50%
61788-32-7	Terphenyl plasticiser, hydrogenated	10-20%
78-40-0	Triethylphosphate	1.0-3.0%

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

*
4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact:

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

After swallowing:

Rinse mouth.

Never give anything by mouth to an unconscious person.

Do not induce vomiting; immediately call for medical help.

(Cont. on page 3)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 2)

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

*

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

*

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

*

7 Handling and storage

Handling:

Precautions for safe handling

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with skin.

Avoid contact with eyes.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

*

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

(Cont. on page 4)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 3)

Control parameters

Components with limit values that require monitoring at the workplace:	
101-68-8 Diphenylmethane-4,4'-di-isocyanate	
PEL (USA)	Ceiling limit value: 0.2 mg/m³, 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m³, 0.005 ppm Ceiling limit value: 0.2* mg/m³, 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m³, 0.005 ppm
61788-32-7 Terphenyl plasticiser, hydrogenated	
REL (USA)	Long-term value: 5 mg/m³, 0.5 ppm
TLV (USA)	Long-term value: 4.9 mg/m³, 0.5 ppm nonirradiated
78-40-0 Triethylphosphate	
WEEL (USA)	Long-term value: 7.45 mg/m³

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic

(Cont. on page 5)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 4)

Odor threshold:	Not determined.
pH-value (~):	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	208 °C (406 °F)
Flash point:	212 °C (414 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not determined.
Density: (~)	Not determined.
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix. Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Molecular weight	Not applicable.
Other information	These are typical values and do not constitute a specification.

*

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No further relevant information available.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide
(possible HCN)
Other potentially hazardous products may also be formed.

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

*

11 Toxicological information

Delayed and immediate effects and chronic effects from short or long term exposure
May cause damage to organs through prolonged or repeated exposure.

(Cont. on page 6)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 5)

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:		
101-68-8 Diphenylmethane-4,4'-di-isocyanate		
Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 9400 mg/kg (rabbit)
Inhalation	LC50, 4h	0.49 mg/l (rat)

Primary irritant effect:

on the skin: Causes skin irritation.

on the eye: Causes serious eye irritation.

inhalation:
Harmful if inhaled.
Causes damage to organs.
May cause respiratory irritation.

Ingestion: May cause damage to organs through prolonged or repeated exposure.

Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

Additional toxicological information: Suspected of causing cancer.

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity: **Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**		
101-68-8	Diphenylmethane-4,4'-di-isocyanate	3

NTP (National Toxicology Program) **K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

*

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects

No further relevant information available.

(Cont. on page 7)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 6)

*

13 Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

*

14 Transport information

UN-Number **DOT, IMDG, IATA**	Not applicable.
UN proper shipping name **DOT, IMDG, IATA**	Not applicable.
Transport hazard class(es) **DOT, IMDG, IATA** **Class**	Not applicable.
Packing group **DOT, IMDG, IATA**	Not applicable.
Environmental hazards: **Marine pollutant:**	No
Special precautions for user	Not applicable.
Transport/Additional information:	Not classified as a dangerous good for transport by road, rail or air.
DOT **Remarks:**	Not Regulated.
UN "Model Regulation":	Not applicable.

*

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

101-68-8	Diphenylmethane-4,4'-di-isocyanate	30.9%

SARA Section 312/Tier I & II Hazard Categories:
Health Hazard - Carcinogenicity
Health Hazard - Acute toxicity (any route of exposure)
Health Hazard - Skin Corrosion or Irritation
Health Hazard - Respiratory or Skin Sensitization
Health Hazard - Serious eye damage or eye irritation
Health Hazard - Specific target organ toxicity (single or repeated exposure)

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

39310-05-9	Methylenebis(isocyanatobenzene) polymer

(Cont. on page 8)

Safety Data Sheet

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 7)

68956-74-1	Quaterphenyls
26140-60-3	Terphenyl plasticiser unhydrogenated

California Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenicity Categories

EPA (Environmental Protection Agency)

101-68-8	Diphenylmethane-4,4'-di-isocyanate	D, CBD

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable
None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards. (gr/L) 10 gr/L (as applied)

*
16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 10/31/2016 / 1.1

The first date of preparation 08/03/2006

Number of revision times and the latest revision date 1.2 / 10/31/2016

USGHS

Safety Data Sheet

Printing date 04/13/2018 **Version Number 1.0** **Reviewed on 04/13/2018**

*

1 Identification

Product identifier

Trade name: ***Hydroduct® Waterproofing Products***

SDS ID Number:
2902

Additional Information: Full product name listing available in Section 16.

Relevant identified uses of the substance or mixture, and uses advised against:

Waterproofing.
Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

*

2 Hazard(s) identification

Classification of the substance or mixture

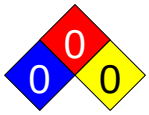
The product is not classified, according to the Globally Harmonized System (GHS).
Additional information:
SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.
NFPA ratings (scale 0 - 4)



Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0
Flammability = 0
Reactivity = 0

(Cont. on page 2)

Safety Data Sheet

Trade name: *Hydroduct® Waterproofing Products*

(Cont. from page 1)

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

*

3 Composition/information on ingredients

Chemical characterization: Mixture

Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

*

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: No special measures required.

After skin contact: Due to the physical nature of this product adverse effects are not likely.

After eye contact:

Rinse cautiously with water for several minutes.
If symptoms persist, consult a physician.

After swallowing: Due to physical nature of this product, ingestion is not likely.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

*

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Wear personal protective equipment.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

*

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up: No special measures required.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Cont. on page 3)

Safety Data Sheet

Trade name: *Hydroduct® Waterproofing Products*

(Cont. from page 2)

*

7 Handling and storage

Handling:

Precautions for safe handling For professional use only. Keep out of children's reach.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Protect from heat and direct sunlight.

Specific end use(s) No further relevant information available.

*

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: Use good personal hygiene practices.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: No chemical-protective gloves required.

Eye protection:

Safety glasses with side shield protection.

Body protection: Use personal protective equipment as required.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Solid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value (~):	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

(Cont. on page 4)

Safety Data Sheet

Trade name: *Hydroduct® Waterproofing Products*

(Cont. from page 3)

Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	Undetermined.
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not applicable.
Density: (~) at 20 °C (68 °F)	1 g/cm³ (8.3 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.
Other information	No further relevant information available.

*

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

*

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected

on the eye: No irritating effect expected

inhalation: No irritating effect expected

(Cont. on page 5)

Safety Data Sheet

Trade name: *Hydroduct® Waterproofing Products*

(Cont. from page 4)

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity: **Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**
None of the ingredients is listed.

NTP (National Toxicology Program) **K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

*

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

*

13 Disposal considerations

Disposal methods:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

*

14 Transport information

UN-Number
DOT, IMDG, IATA Not applicable.

(Cont. on page 6)

Safety Data Sheet

Trade name: *Hydroduct® Waterproofing Products*

(Cont. from page 5)

UN proper shipping name
DOT, IMDG, IATA Not applicable.

Transport hazard class(es)

DOT, IMDG, IATA
Class Not applicable.

Packing group
DOT, IMDG, IATA Not applicable.

Environmental hazards:
Marine pollutant: No

Special precautions for user Not applicable.

Transport/Additional information: Not classified as a dangerous good for transport by road, rail or air.

DOT
Remarks: Not Regulated.

UN "Model Regulation": Not applicable.

*

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):
None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):
None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):
All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):
All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable
None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.
If no g/L value is provided this product is not subject to above standard.

(Cont. on page 7)

Safety Data Sheet

Trade name: *Hydroduct® Waterproofing Products*

(Cont. from page 6)

*

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

This SDS is for the following products: Hydroduct® 220, Hydroduct® 225, Hydroduct® 500, Hydroduct® 500 RS, Hydroduct® 550, Hydroduct® 550 RS, Hydroduct® 600, Hydroduct® 600 coil, Hydroduct® 660.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 04/13/2018 / -

The first date of preparation 04/13/2018

Number of revision times and the latest revision date 1.0 / 04/13/2018

USGHS

Safety Data Sheet

Printing date 11/10/2016 **Version Number 1.0** **Reviewed on 11/10/2016**

*

1 Identification

Product identifier

Trade name: ***Adcor 500S***

SDS ID Number: 2734

Relevant identified uses of the substance or mixture, and uses advised against
Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified according to the Globally Harmonized System (GHS).

Label elements:

Hazard pictograms Not applicable.

Not applicable.

Hazard statements Not applicable.
NFPA ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Flammability = 0
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

(Cont. on page 2)

Safety Data Sheet

Trade name: *Adcor 500S*

(Cont. from page 1)

*
3 Composition/information on ingredients

Chemical characterization: Mixture

Hazardous components: Not applicable.

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

*
4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact: Rinse cautiously with water for several minutes.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

*
6 Accidental release measures

Environmental precautions: No special measures required.

Methods and material for containment and cleaning up: No special measures required.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

*
7 Handling and storage

Handling:

Precautions for safe handling No special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

(Cont. on page 3)

Safety Data Sheet

Printing date 11/10/2016 **Version Number 1.0** **Reviewed on 11/10/2016**

Trade name: *Adcor 500S*

(Cont. from page 2)

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

*

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Protective gloves

Eye protection:

Safety glasses with side shield protection.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Solid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value (~):	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.

(Cont. on page 4)

Safety Data Sheet

Trade name: *Adcor 500S*

(Cont. from page 3)

Flammability (solid, gaseous):	Not determined.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not applicable.
Upper:	Not applicable.
VOC Content (max):	Not applicable.
Vapor pressure:	Not applicable.
Density: (~)	Not determined.
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.
Other information	No further relevant information available.

*

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used and stored according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected

on the eye: No irritating effect expected

inhalation: No irritating effect expected

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity: **Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**
None of the ingredients is listed.

(Cont. on page 5)

Safety Data Sheet

Trade name: *Adcor 500S*

(Cont. from page 4)

NTP (National Toxicology Program) K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects

No further relevant information available.

*

13 Disposal considerations

Waste treatment methods

Comply with Federal, State and local regulations.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

*

14 Transport information

UN-Number DOT, IMDG, IATA	Not applicable.
UN proper shipping name DOT, IMDG, IATA	Not applicable.
Transport hazard class(es) DOT, IMDG, IATA Class	Not applicable.
Packing group DOT, IMDG, IATA	Not applicable.

(Cont. on page 6)

Safety Data Sheet

Trade name: *Adcor 500S*

(Cont. from page 5)

Environmental hazards: Not applicable.

Special precautions for user Not applicable.

Transport/Additional information:

DOT
Remarks: Not Regulated.

*

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):
None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):
None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: None

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):
None of the ingredients is listed.

CEPA (Canadian DSL):
None of the ingredients is listed.

Right to Know Ingredient Disclosure:
Article - NON Regulated/Hazardous Components

California Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenicity Categories

EPA (Environmental Protection Agency)
None of the ingredients is listed.

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable
None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.
If no g/L value is provided this product is not subject to above standard.

*

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

(Cont. on page 7)

Safety Data Sheet

Trade name: *Adcor 500S*

(Cont. from page 6)

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 11/10/2016 / -

The first date of preparation 11/10/2016

Number of revision times and the latest revision date 1.0 / 11/10/2016

Safety Data Sheet

Printing date 06/11/2019 **Version Number 2.0** **Reviewed on 06/11/2019**

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1 Identification

Product identifier

Trade name: ***ADCOR 500S Adhesive***

SDS ID Number: 2966

Relevant identified uses of the substance or mixture, and uses advised against:
Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

May cause an allergic skin reaction.

Label elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms

Warning

Hazard statements
May cause an allergic skin reaction.
Precautionary statements
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
If on skin: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulations.
NFPA ratings (scale 0 - 4)

Health = 2
Fire = 1
Reactivity = 0

(Cont. on page 2)

Safety Data Sheet

Trade name: *ADCOR 500S Adhesive*

(Cont. from page 1)

HMIS-ratings (scale 0 - 4)

HEALTH	2
FIRE	1
REACTIVITY	0

Health = 2
Flammability = 1
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:		
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	0.1-<1%

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

After skin contact:
Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact: Rinse cautiously with water for several minutes.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:

Most important symptoms and effects, both acute and delayed Allergic reactions

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Wear personal protective equipment.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

(Cont. on page 3)

Safety Data Sheet

Trade name: *ADCOR 500S Adhesive*

(Cont. from page 2)

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling Prevent formation of aerosols.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Rubber or other impervious gloves should be worn to prevent skin contact.

Eye protection:

Safety glasses with side shield protection.

(Cont. on page 4)

Safety Data Sheet

Trade name: *ADCOR 500S Adhesive*

(Cont. from page 3)

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Paste
Color:	White
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value (~):	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not determined.
Density: (~) at 20 °C (68 °F)	1.5 g/cm³ (12.5 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Molecular weight	Not applicable.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity

Stable under normal conditions.

No further relevant information available.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

(Cont. on page 5)

Safety Data Sheet

Trade name: *ADCOR 500S Adhesive*

(Cont. from page 4)

Possibility of hazardous reactions
No dangerous reactions known.
No further relevant information available.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritating effect expected

on the eye: No irritating effect expected

inhalation: No irritating effect expected

Sensitization: May cause an allergic skin reaction.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity: **Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**
None of the ingredients are listed.

NTP (National Toxicology Program) **K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

(Cont. on page 6)

Safety Data Sheet

Trade name: *ADCOR 500S Adhesive*

(Cont. from page 5)

*

13 Disposal considerations

Disposal methods:

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Dispose of contents/container in accordance with local/regional/national/international regulations.

*

14 Transport information

UN-Number **DOT, IMDG, IATA**	Not applicable.
UN proper shipping name **DOT, IMDG, IATA**	Not applicable.
Transport hazard class(es) **DOT, IMDG, IATA** **Class**	Not applicable.
Packing group **DOT, IMDG, IATA**	Not applicable.
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport/Additional information: **DOT** **Remarks:**	Not Regulated.
UN "Model Regulation":	Not applicable.

*

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories: Health Hazard - Respiratory or Skin Sensitization

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

	Proprietary Nonhazardous Polymer - NJTSN 801416152
471-34-1	Calcium carbonate; limestone powder

(Cont. on page 7)

Safety Data Sheet

Trade name: *ADCOR 500S Adhesive*

(Cont. from page 6)

	Proprietary plasticizer - NJTSN 801416153

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:	
67-56-1	Methanol

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists) **Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**
None of the ingredients are listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards. 30 g/l

*

16 Other information

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

The first date of preparation 10/31/2018

Number of revision times and the latest revision date 2.0 / 06/11/2019

USGHS

BITUTHENE® Waterproofing Membrane with HYDRODUCT® Drainage Composite

Five Year Material Warranty

WARRANTY NO. _____

NAME OF BUILDING _____

LOCATION OF BUILDING _____

NAME OF OWNER _____

CONTRACTOR _____

BITUTHENE MEMBRANE TYPE BITUTHENE® 4000

HYDRODUCT DRAINAGE COMPOSITE TYPE _____

TOTAL AREA (SF) _____

DATE OF COMPLETED INSTALLATION _____

GCP Applied Technologies Inc. ("GCP") hereby warrants that for a period of Five (5) years from the date of completion of installation identified above:

1. Water will not leak directly through any individual BITUTHENE® Membrane as a result of deterioration of the sheet caused by ordinary wear and tear and the effects thereof.

2. The BITUTHENE® Membrane will bridge ruptures caused by cracking of the immediate substrate up to 1/16th of an inch wide.

3. The HYDRODUCT® Drainage Composite core will maintain a compressive strength of 10,000 pounds per square foot.

4. The HYDRODUCT® Drainage Composite will protect the BITUTHENE® Membrane from rupture from backfill containing no aggregate larger than 1½ inches in diameter.

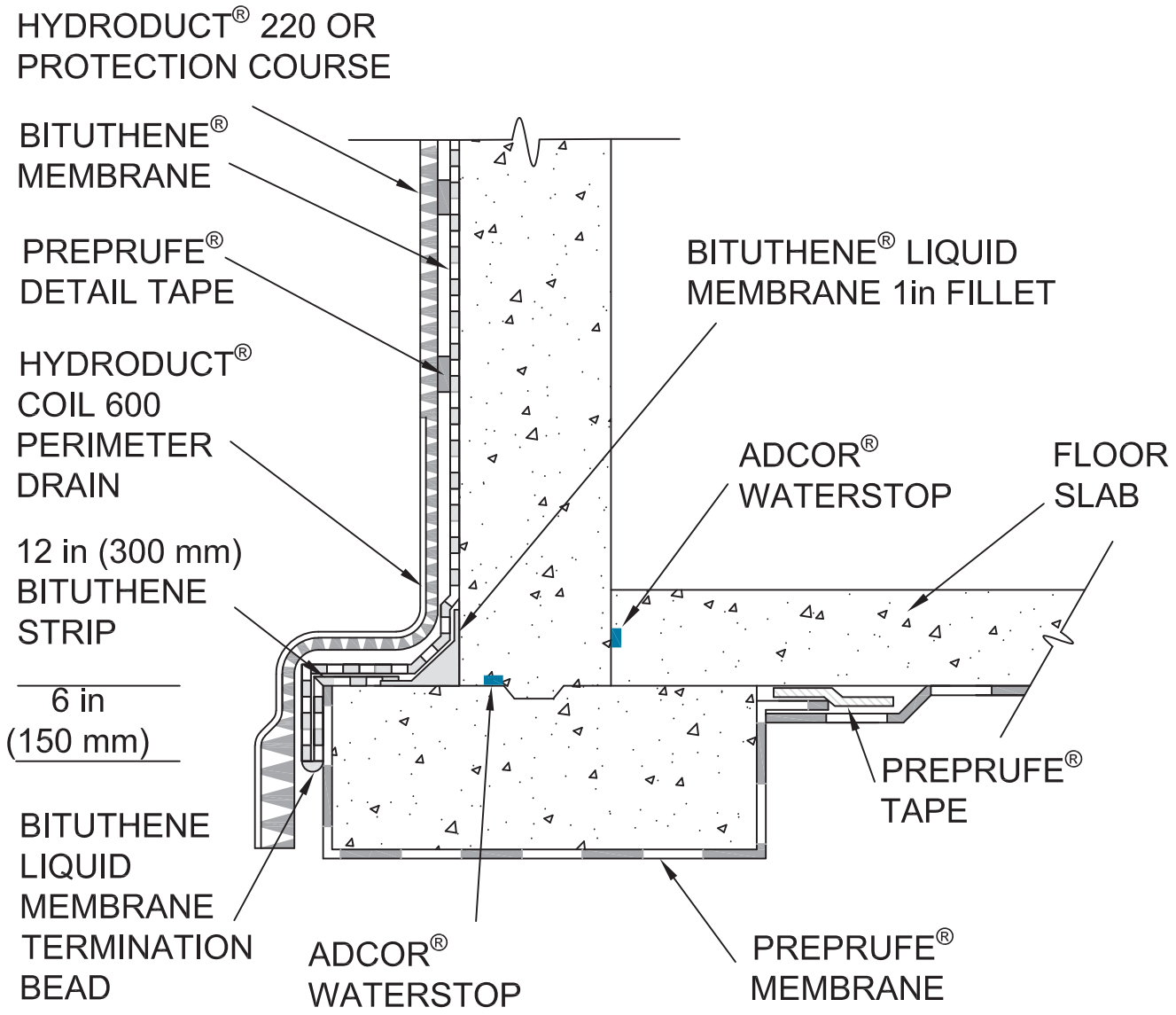
If at any time during such Five (5) year period the BITUTHENE® Membrane or HYDRODUCT® Drainage Composite is found by GCP not to comply with this warranty, then GCP will supply to the owner replacement BITUTHENE® Membrane or HYDRODUCT ® Drainage Composite in a quantity equal to the material found to be nonconforming, with a value not to exceed the purchase price for the material paid to GCP for the original installation.

This warranty does not apply to any failure caused by or due to workmanship or improper installation of the BITUTHENE® Membrane or HYDRODUCT® Drainage Composite, abuse of the BITUTHENE® Membrane or HYDRODUCT® Drainage Composite, or chemical incompatibility with other materials, acts of God, inadequate or faulty design of the subject structure or to repairs or installations made by other persons. In addition, this warranty does not cover any costs or expenses associated with 1) the removal, excavation or replacement of any material in connection with the testing, repair, removal or replacement of the BITUTHENE® Membrane or HYDRODUCT® Drainage Composite and, 2) damages or repairs of any kind or nature to the subject building or its' contents from leaking water or otherwise.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY AND ALL OTHER GUARANTEES OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDINGWITHOUT LIMITATION THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES OF THE OWNER FOR ANY BREACH OF THIS WARRANTY SHALL BE LIMITED TO THOSE HEREIN PROVIDED TO THE EXCLUSION OF ANY AND ALL OTHER REMEDIES. GCP SHALL NOT BE LIABLE IN ANY CASE FOR ANY DAMAGE TO THE BUILDING OR THE CONTENTS THEREOF, NOR WILL IT BE RESPONSIBLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PENAL DAMAGES. NO AGREEMENT VARYING OR EXTENDING THE FOREGOING WARRANTY REMEDIES WILL BE BINDING UPON GCP UNLESS IN WRITING, SIGNED BY A DULY AUTHORIZED OFFICER OF GCP.

GCP Applied Technologies Inc.

By Title _____ Date _____



NOTE: GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

FOUNDATION WALL
FLOOR SLAB AT FOOTING LEVEL (OPTION - 2)
BITUTHENE® WATERPROOFING SYSTEM

DRAWING:	BIT-002
SCALE:	Not to scale
EFFECTIVE DATE:	07/01/2016
SUPERCEDES:	04012015

INSTALLATION INSTRUCTIONS

Foundation Wall

Floor Slab At Footing Level (Option – 2)

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

1. Install the field membrane in accordance with the Bituthene Data Sheet section on Installation
2. Form a .75 in (20 mm) fillet of Bituthene® Liquid Membrane in corner extending 2.5 in (65 mm) onto wall and footing. Allow to cure.
3. Apply a 12 in (300 mm) Bituthene Strip centered over the outside corner of the footing.
4. Apply Bituthene membrane down wall, onto horizontal surface of footing, and around outside corner of footing.
5. Extend Bituthene membrane a minimum of 6 in (150 mm) down vertical surface of footing, lapping onto Preprufe membrane. Do not apply primer to the back of the Preprufe membrane for installation of the Bituthene membrane. Preprufe installation instructions can be found on the Preprufe data sheet at www.gcpat.com.
6. Apply bead of Liquid Membrane on all terminations.
7. Apply Preprufe membranes and Hydroduct® according to the installation instructions found on the data sheet.

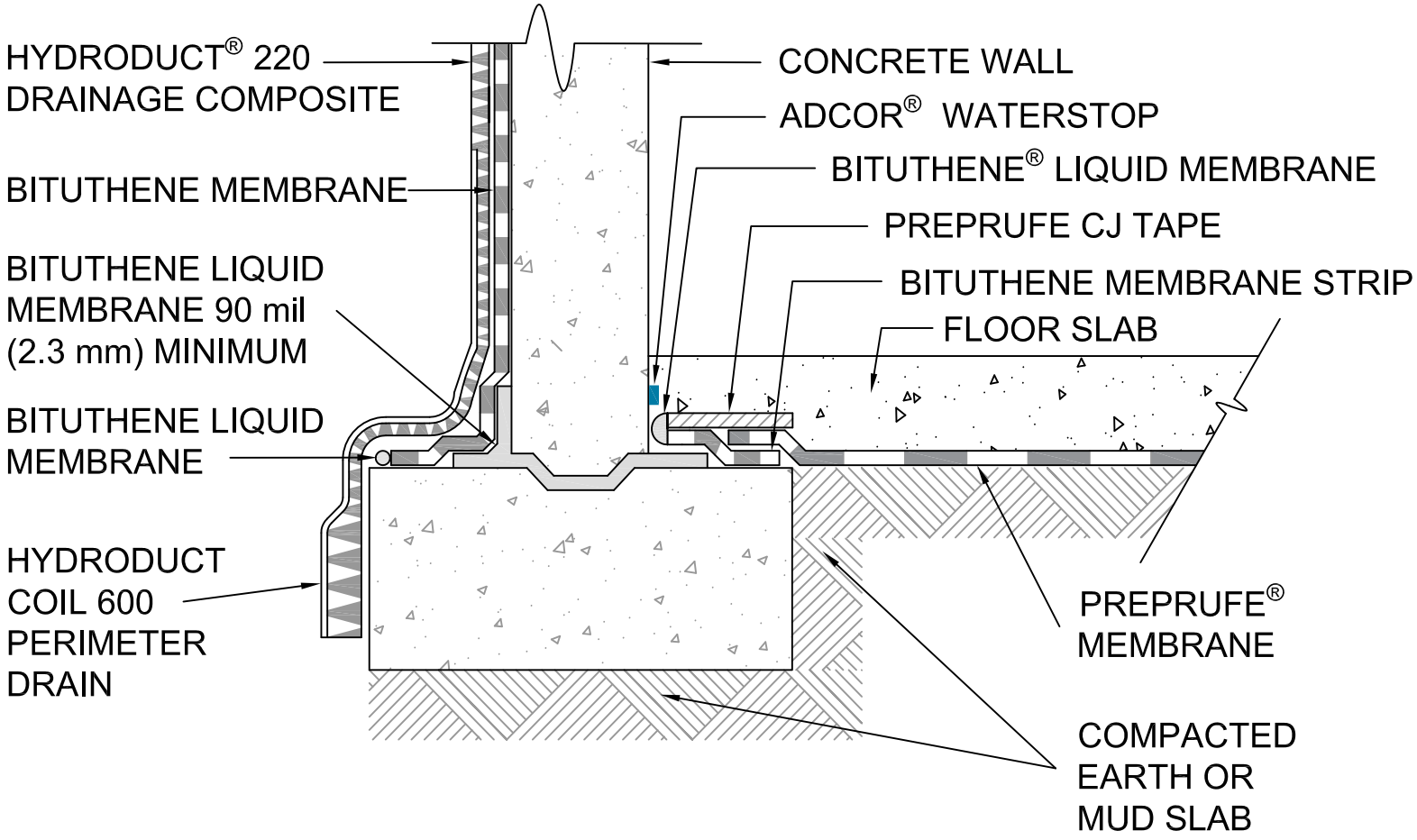
Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation. It is acceptable to apply Bituthene membrane directly over freshly applied Bituthene Liquid Membrane (LM) provided the LM does not displace.

Provides temporary protection for the Preprufe membrane at the tie-in location until the Bituthene membrane tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe membrane and the Bituthene membrane prior to backfilling.

Ensure Adcor® waterstop is encapsulated with a min. of 3 in (75 mm) concrete cover. Avoid installing Adcor® waterstop in areas where it may be subjected to prolonged exposure or immersion in water prior to concrete placement. A GCP injectable waterstop should be considered if the waterstop may be exposed and or immersed in water prior to concrete placement or when access to Adcor® waterstop is limited after installation by rebar. Apply Adcor® waterstop according to the installation instructions found on the data sheet.
GCP may require an alternative GCP waterstop based on design conditions GCP's discretion.

BIT-002Inst.doc



NOTES: -THE FOOTING KEYWAY SHOULD BE FORMED TO CREATE A REGULAR AND UNIFORM SHAPE ALLOWING PROPER DETAILING OF THE BITUTHENE LIQUID MEMBRANE.
-GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

gcp applied technologies

FOUNDATION WALL
FLOOR SLAB AT FOOTING LEVEL (OPTION - 4)
BITUTHENE® WATERPROOFING SYSTEM

DRAWING:	BIT-004
SCALE:	Not to scale
EFFECTIVE DATE:	07/01/2016
SUPERCEDES:	04012015

INSTALLATION INSTRUCTIONS

Foundation Wall

Floor Slab At Footing Level (Option – 4)

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

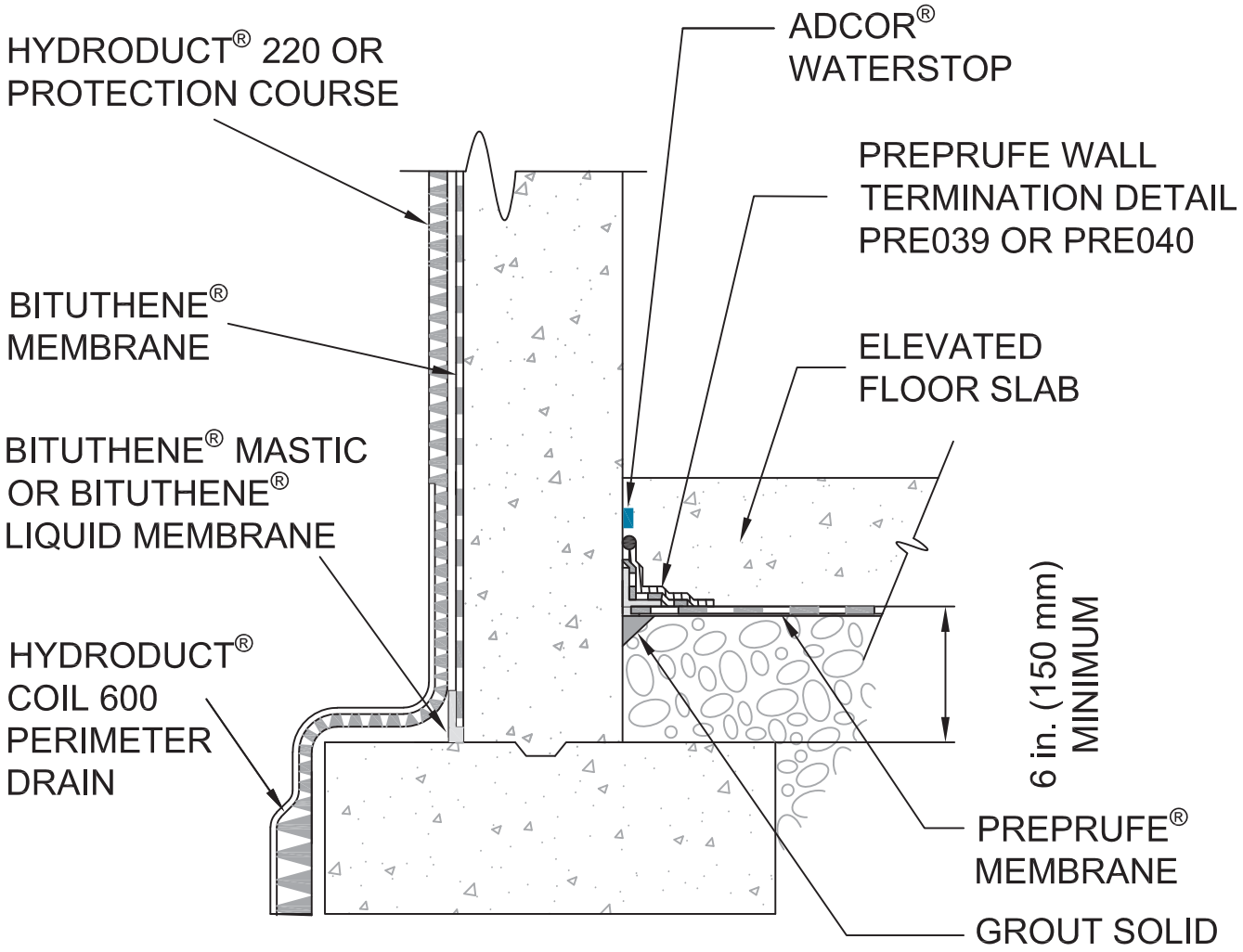
1. Apply Bituthene Liquid Membrane to a thickness of 90-mil (2.3 mm) on the horizontal surface of the footing in the keyway. Extend the Liquid Membrane a minimum of 2.5 in (65 mm) onto the horizontal surface of the footing on each side of the foundation wall, and extend up the external foundation wall surface a minimum of 2.5 in (65 mm).
2. Apply a strip of Bituthene membrane onto the Liquid Membrane that extends beyond the internal foundation wall surface.
3. Apply Preprufe® membrane in accordance with the Preprufe data sheet and overlap the Preprufe membrane onto the Bituthene Strip a minimum of 3 in (75 mm).
4. Install Preprufe CJ Tape centered over the edge of the Preprufe membrane and adhere it to the Bituthene strip and Preprufe membrane.
5. Apply a termination seal of Bituthene Liquid Membrane along the Preprufe Tape and Bituthene Strip termination.
6. Install the Bituthene on the wall in accordance with the Bituthene Data Sheet section on installation.
7. Apply bead of Liquid Membrane on all terminations.
8. Apply Preprufe and Hydroduct according to the installation instructions found on the data sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTES: - INTENDED FOR PROJECTS WITH PERMANENT DEWATERING OR NON-HYDROSTATIC CONDITIONS
- GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

FOUNDATION WALL
ELEVATED FLOOR SLAB (OPTION - 2)

BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT-006
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATION INSTRUCTIONS

Foundation Wall

Elevated Floor Slab (Option – 2)

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

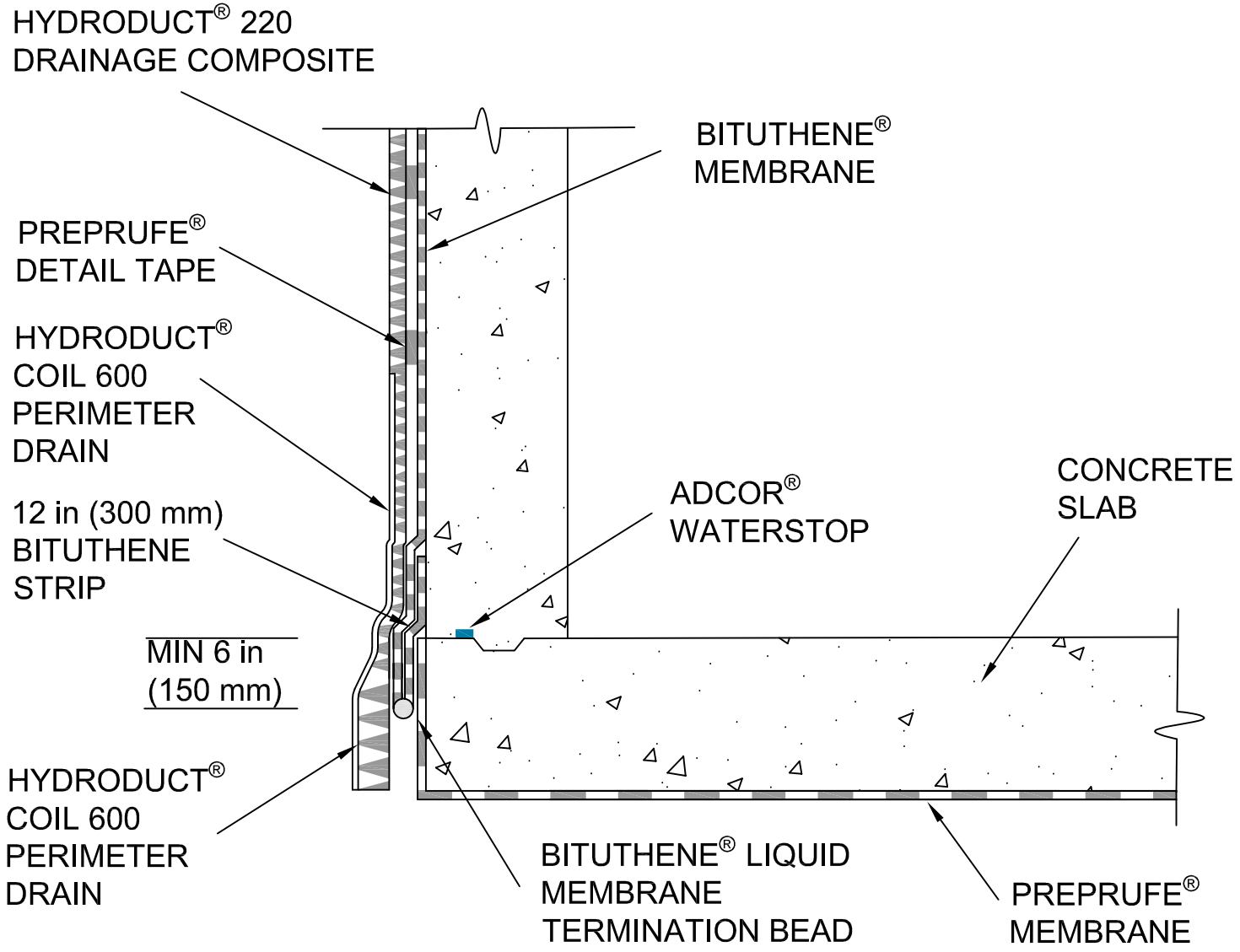
1. Install the field membrane in accordance with the Bituthene® Data Sheet section on Installation.
2. Apply membrane to within 1 in (25 mm) of base of wall.
3. Apply Bituthene Liquid membrane in corner, extending over membrane a minimum of 1 in (25 mm).
4. Terminate the Preprufe at the foundation wall.
5. Apply Preprufe Wall Termination detail PRE039.
6. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTE - GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

FOUNDATION WALL
FLUSH TO STRUCTURAL SLAB

BITUTHENE® WATERPROOFING SYSTEM

DRAWING:	BIT-008-B
SCALE:	Not to scale
EFFECTIVE DATE:	03/01/2016
SUPERCEDES:	NEW

INSTALLATION INSTRUCTIONS

Foundation Wall

Flush to Structural Slab

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface.

Detailing

1. Install Preprufe membrane in accordance with the Preprufe Data Sheet section on installation.
2. Apply a 12 in (300 mm) Bituthene strip centered over the construction joint of slab to wall lapping a minimum of 6 in (150 mm) onto the fully adhered Preprufe membrane.
3. Apply Bituthene membrane on the vertical wall and extend Bituthene a minimum of 6 in (150 mm) down the vertical face of slab and onto the previously installed Bituthene strip.
4. Apply a bead of Liquid Membrane on all terminations.
5. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.
6. Install Hydroduct Coil 600 Perimeter Drain.

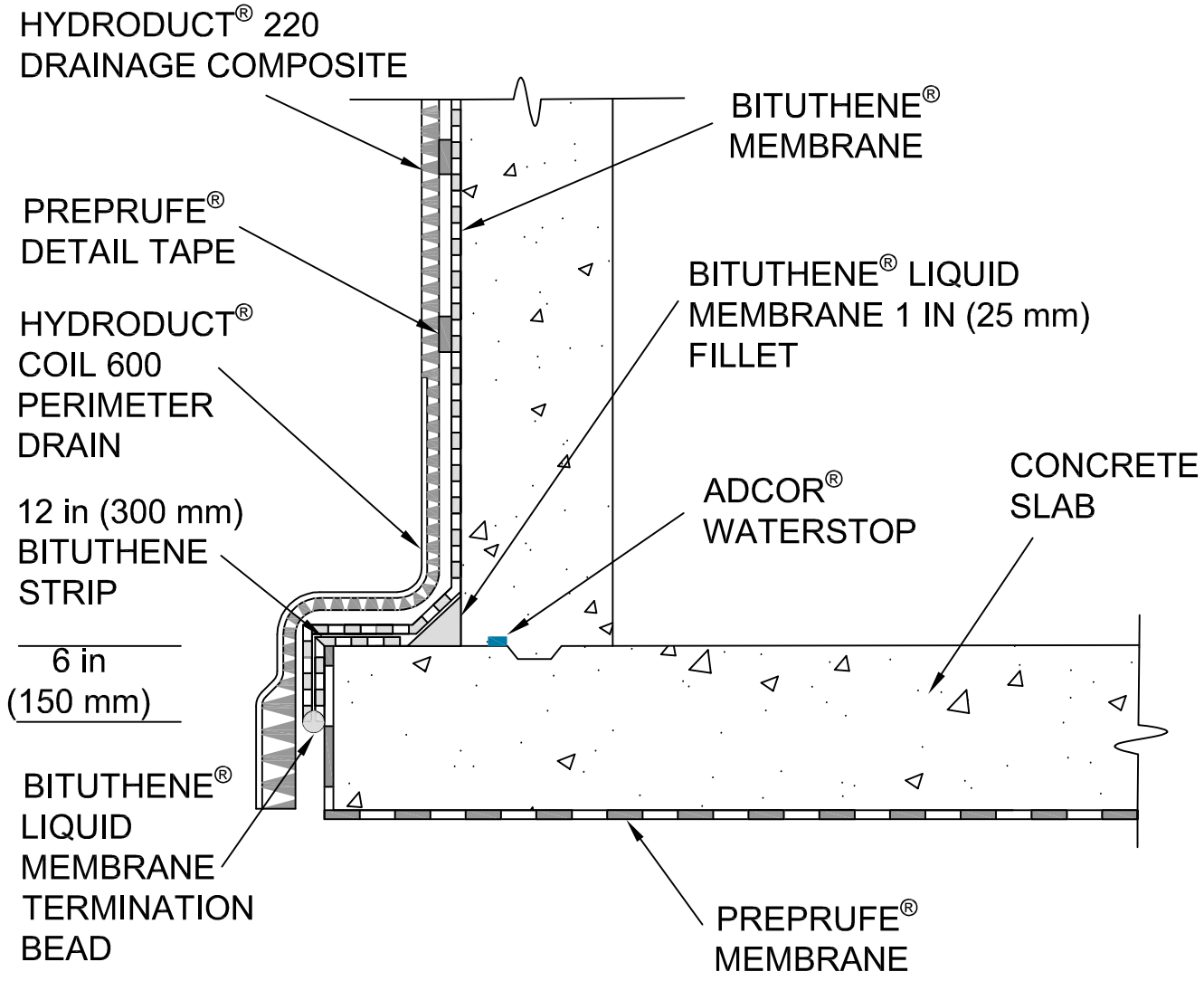
Special Notes

Bituthene® membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Provide temporary protection for Preprufe at the tie-in location until the Bituthene tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Bituthene prior to backfilling.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTE - GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

FOUNDATION WALL
STRUCTURAL SLAB - OPTION 2
BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT-008-A
SCALE: Not to scale
EFFECTIVE DATE: 03/01/2018
SUPERCEDES: 07/01/2016

INSTALLATION INSTRUCTIONS

Foundation Wall

Structural Slab (Option – 2)

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface.

Detailing

1. Install Preprufe membrane in accordance with the Preprufe Data Sheet section on installation.
2. Install a .75 in (20 mm) fillet of Bituthene Liquid Membrane in corner extending 2.5 in (65 mm) onto wall and footing. Allow to cure.
3. Apply a 12 in (300 mm) Bituthene strip centered over the outside corner of the footing.
4. Apply Bituthene membrane down wall, onto horizontal surface of the footing, and around the outside corner of the footing.
5. Extend Bituthene a minimum of 6 in (150 mm) down vertical surface of footing, lapping onto Preprufe membrane. Do not apply primer to the back of the Preprufe for installation of the Bituthene.
6. Apply a bead of Liquid Membrane or Mastic on all terminations.
7. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

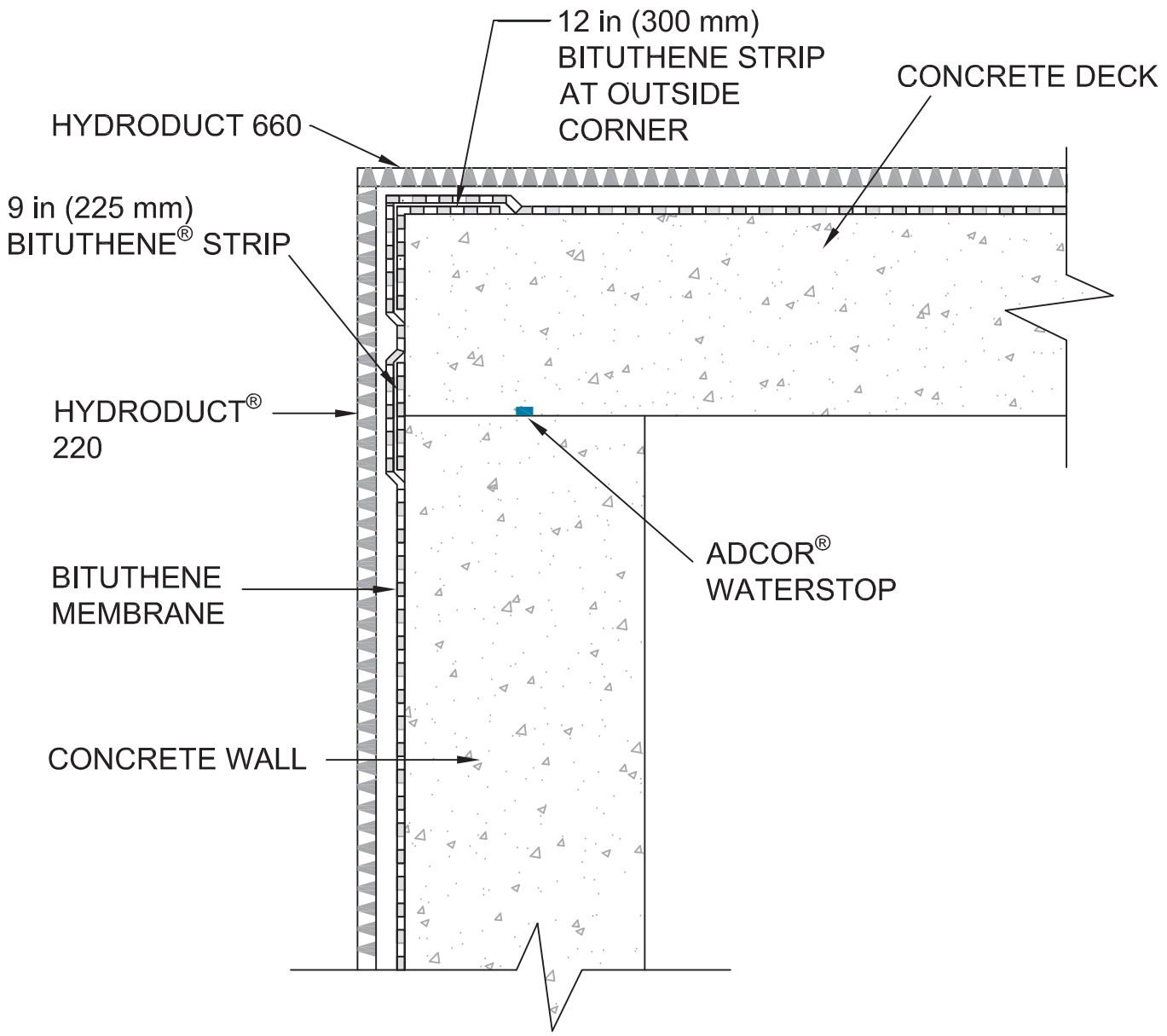
Special Notes

Bituthene® membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Provide temporary protection for Preprufe at the tie-in location until the Bituthene tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Bituthene prior to backfilling.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTE - GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

PLAZA DECK TO WALL TIE IN

BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT-012
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATION INSTRUCTIONS

Plaza Deck to Wall Tie In

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing.

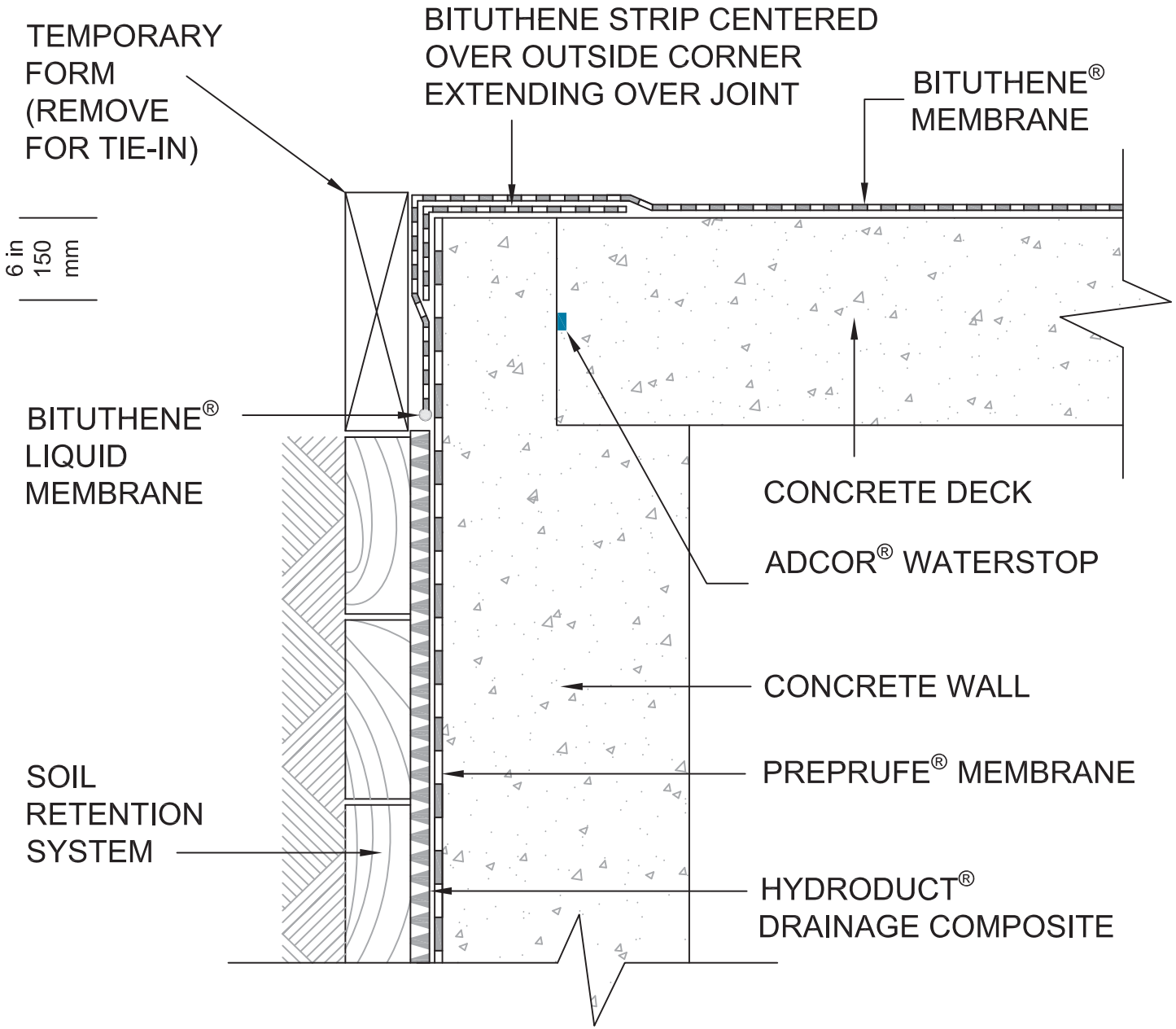
1. Apply a 12 in (300 mm) Bituthene Strip centered over the outside corner between the top of the wall and the deck.
2. Apply a 9 in (225 mm) Bituthene Strip centered over the cold joint between the wall and deck. Note this detail is for non-movement joints.
3. Apply field membrane in accordance with the Bituthene Data Sheet section on Installation.
4. Install membrane from the low point to the high point so that laps shed water.
5. Apply bead of Bituthene Liquid Membrane or Mastic on all terminations and T-Joints.
6. Apply Hydroduct 220 on the wall and Hydroduct 660 on the deck according to the respective Hydroduct Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTE - GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

gcp applied technologies

TIE INTO PLAZA DECK WATERPROOFING

BITUTHENE® WATERPROOFING SYSTEM

DRAWING:	BIT-014
SCALE:	Not to scale
EFFECTIVE DATE:	07/01/2016
SUPERCEDES:	04012015

INSTALLATION INSTRUCTIONS

Tie into Plaza Deck Waterproofing

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

1. Install Preprufe Membrane onto the vertical soil retention system up to the level of the horizontal deck.
2. Place concrete and remove top 12 in (300 mm) of temporary soil retention to gain access to the wall.
3. Apply a 12 in (300 mm) Bituthene strip centered over the outside corner.
4. Apply a Bituthene Strip centered over the cold joint. In this detail, the Bituthene Strip is an extension of the Bituthene Strip for the outside corner. Do not apply primer to the back of the Preprufe for installation of the Bituthene.
5. Install the field membrane in accordance with the Bituthene Data Sheet section on Installation.
6. Install membrane from the low point to the high point so that laps shed water.
7. Apply bead of Bituthene Liquid Membrane on all terminations and T-Joints.
8. Apply Hydroduct 220 on the wall and Hydroduct 660 on the deck according to the respective Hydroduct Data Sheet.

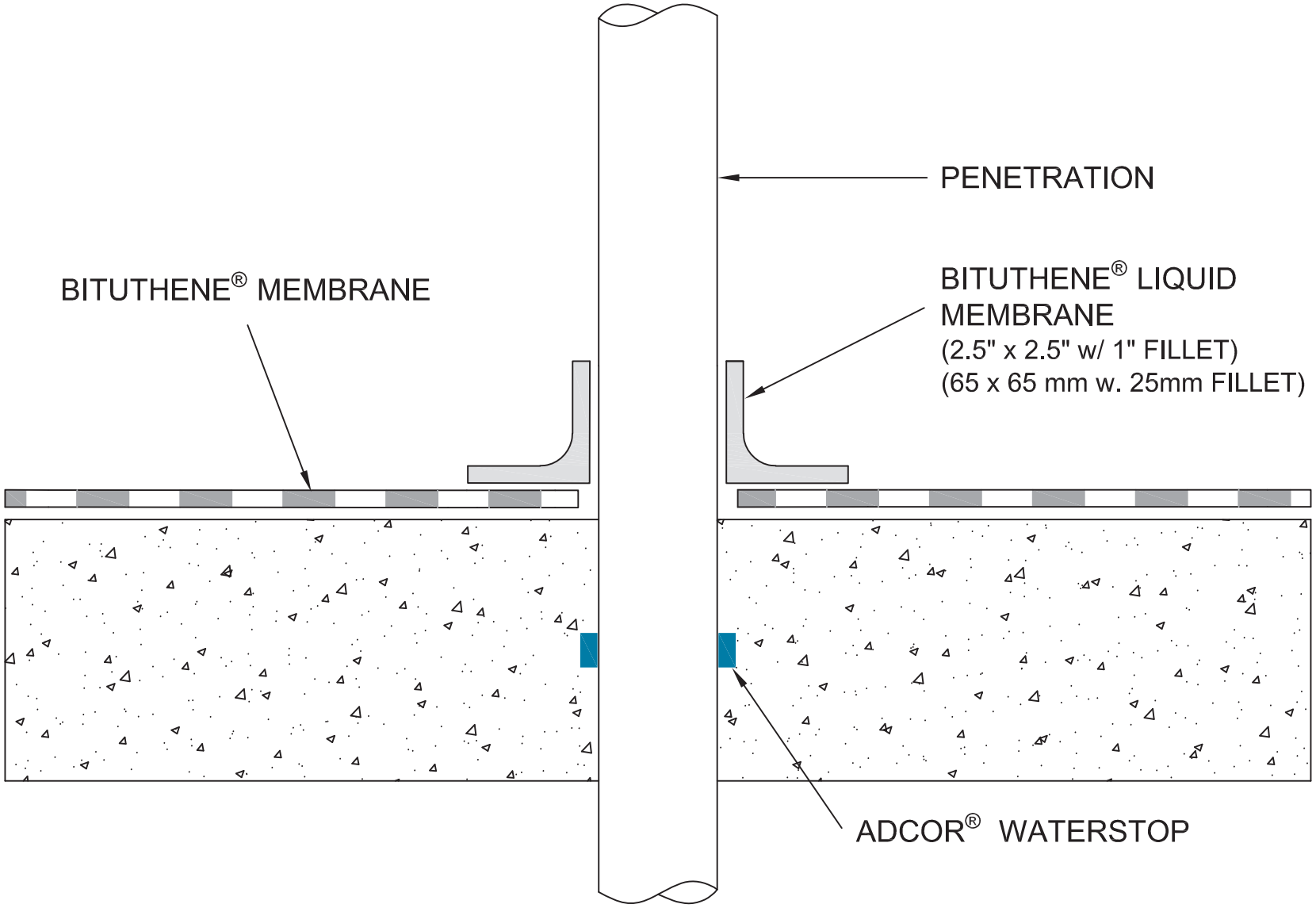
Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Provide temporary protection for Preprufe at the tie-in location until the Bituthene tie-in is installed. The tie-in should be completed and backfilled as soon as possible. An approved protection course must be used over the exposed Preprufe and the Bituthene prior to backfilling.

Ensure Adcor® waterstop is encapsulated with a 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTES - HYDRODUCT® OR APPROVED PROTECTION COURSE NOT SHOWN FOR CLARITY
- GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

gcp applied technologies

PENETRATION

BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT-016
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATION INSTRUCTIONS

Penetration

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

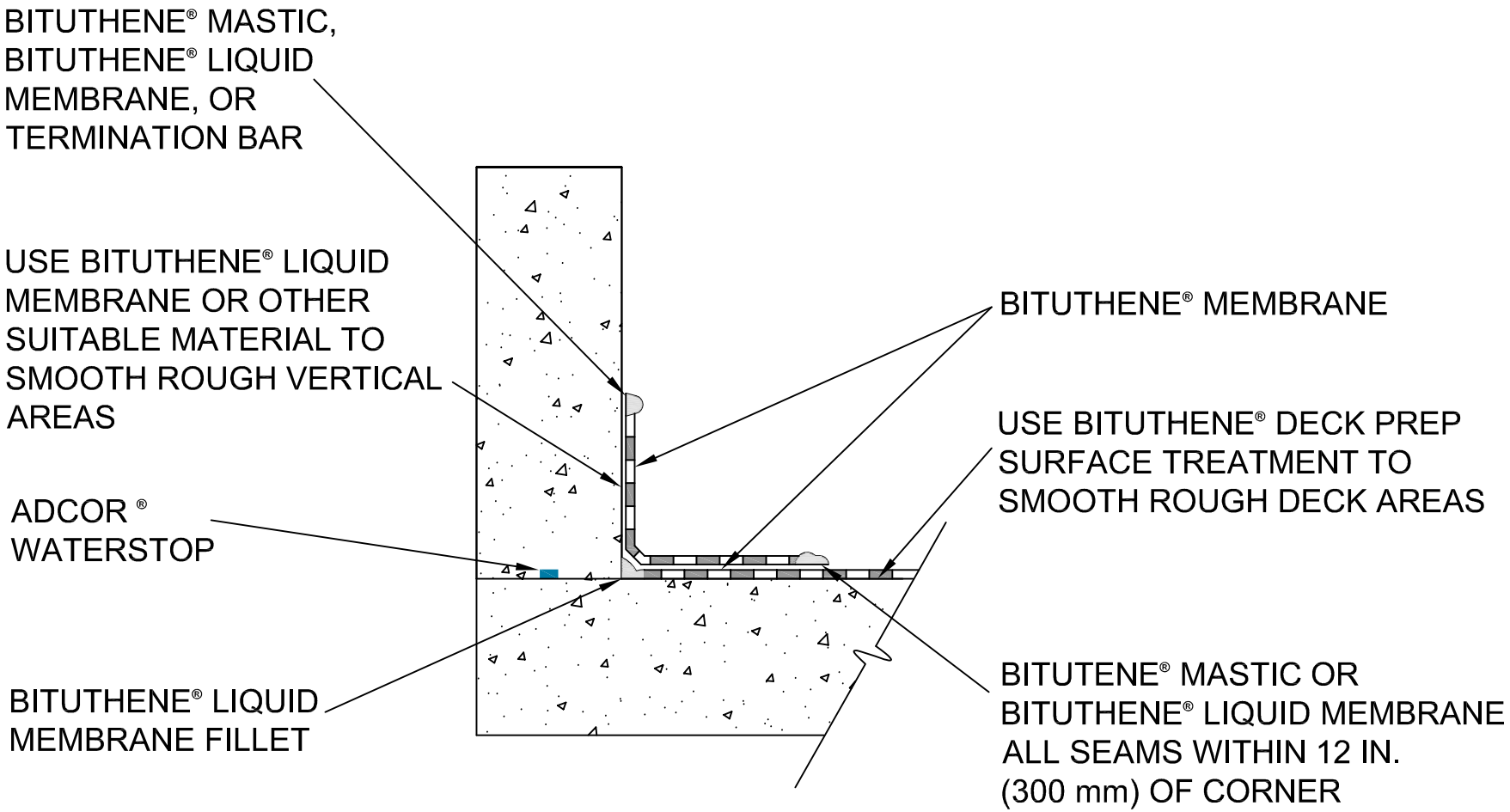
1. Ensure the surface of the penetration is clean and grouted solid to prevent movement.
2. Apply Bituthene membrane onto substrate in accordance with the Bituthene Data Sheet section on Installation.
3. Cut membrane to allow for penetration. Membrane should be within 0.5 in (15 mm) in of penetration after cutting.
4. Apply 90-mil (2.3 mm) thick Bituthene Liquid membrane 2.5 in (65 mm) onto penetration and onto membrane.
5. Apply Hydroduct 220 for vertical applications or Hydroduct 660 for horizontal applications according to each according to Hydroduct Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTES - HYDRODUCT OR APPROVED PROTECTION COURSE NOT SHOWN FOR CLARITY
- GCP MAY REQUIRE AN ALTERNATE GCP WATERSTOP BASED ON DESIGN CONDITIONS

gcp applied technologies

PLAZA DECK
DECK TO WALL INSIDE CORNER
BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT-019
SCALE: Not to scale
EFFECTIVE DATE: 03/01/2018
SUPERCEDES: 07/01/2016

INSTALLATION INSTRUCTIONS

Plaza Deck

Deck to Wall Inside Corner

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

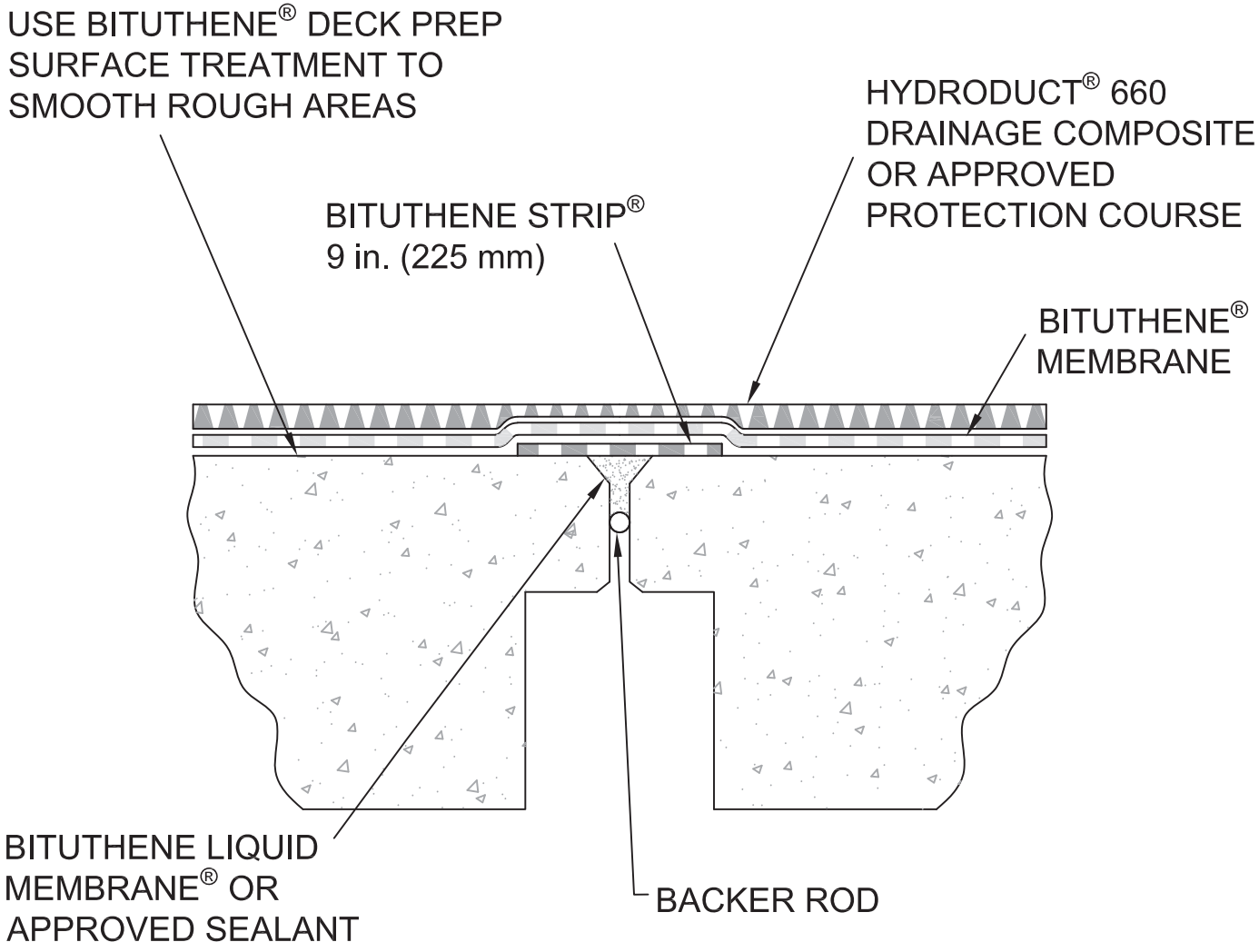
1. Apply Bituthene Liquid membrane or other suitable material to smooth rough vertical areas to prepare the surface to receive the Bituthene membrane.
2. Apply Bituthene Deck Prep surface treatment on horizontal surface to smooth rough deck areas to prepare the surface to receive the Bituthene membrane.
3. Apply Bituthene membrane on the horizontal surface in accordance with the Bituthene Data Sheet section on Installation. Apply membrane to within 1 in (25 mm) of base of wall.
4. Form a .75 in (20 mm) fillet of Bituthene Liquid Membrane in corner.
5. Apply a strip of Bituthene membrane 12 in (300 mm) on horizontal, turn inside corner, and continue on vertical surface a minimum of 6 in (150 mm) beyond the level of the finished surface.
6. Apply bead of Liquid Membrane on all terminations.
7. Apply Hydroduct 220 according to Hydroduct 220 Data Sheet.

Special Notes

Bituthene® Membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor® waterstop is encapsulated with 3 in (75 mm) of concrete cover minimum. Apply Adcor® waterstop according to the installation instructions found on the data sheet.

GCP may require an alternative GCP waterstop based on design conditions, at GCP's discretion.



NOTE - FOR JOINT WHERE MOVEMENT IS EXPECTED (ACTIVE JOINTS) SEE EXPANSION JOINT COVER DETAIL BIT 024.

gcp applied technologies

PASSIVE JOINT COVER

BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT 022
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATIONINSTRUCTIONS

Passive Joint Cover

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

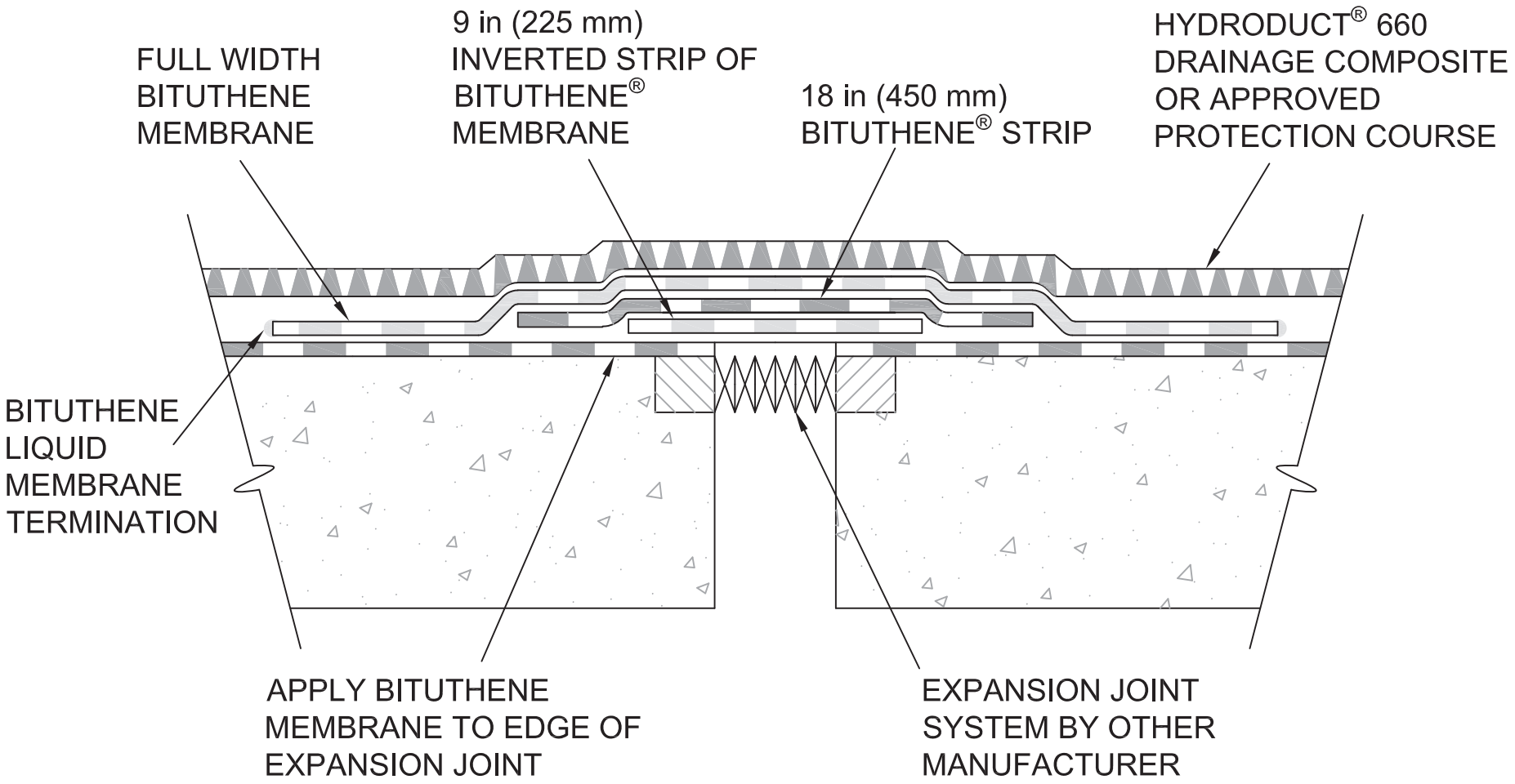
All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

1. Apply Bituthene Deck Prep Surface Treatment on horizontal surface to smooth rough deck areas to prepare the surface to receive the Bituthene membrane.
2. Apply backer rod in passive joint and fill joint with Bituthene Liquid Membrane or appropriate sealant.
3. Position 9 in (225 mm) Bituthene membrane strip centered over the passive joint.
4. Apply Bituthene membrane on the horizontal surface in accordance with the Bituthene Data Sheet section on Installation.
5. Install membrane from the low point to the high point so that laps shed water.
6. Apply bead of Bituthene Liquid Membrane on all terminations and T-joints.
7. Apply Hydroduct 660 according to Hydroduct 660 Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.



NOTES:
- FOR JOINT WIDTHS UP TO 2 IN. (50 mm) WITH A MAXIMUM OF 1 IN. (25 mm) MOVEMENT
- FOR JOINTS WITH EXPECTED MOVEMENT OF LESS THAN 0.5 IN. (15 mm) A 6 IN. (150 mm) INVERTED STRIP IS ACCEPTABLE.
- A WATERPROOF EXPANSION JOINT SYSTEM BY OTHERS MUST BE SELECTED FOR THE WIDTH AND EXPECTED MOVEMENT OF THE JOINT, SEE TECHNICAL LETTER 11 FOR ADDITIONAL INFORMATION.

gcp applied technologies

EXPANSION JOINT COVER DECK OR WALL

BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT 024
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATION INSTRUCTIONS

Expansion Joint Cover

Deck or Wall

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

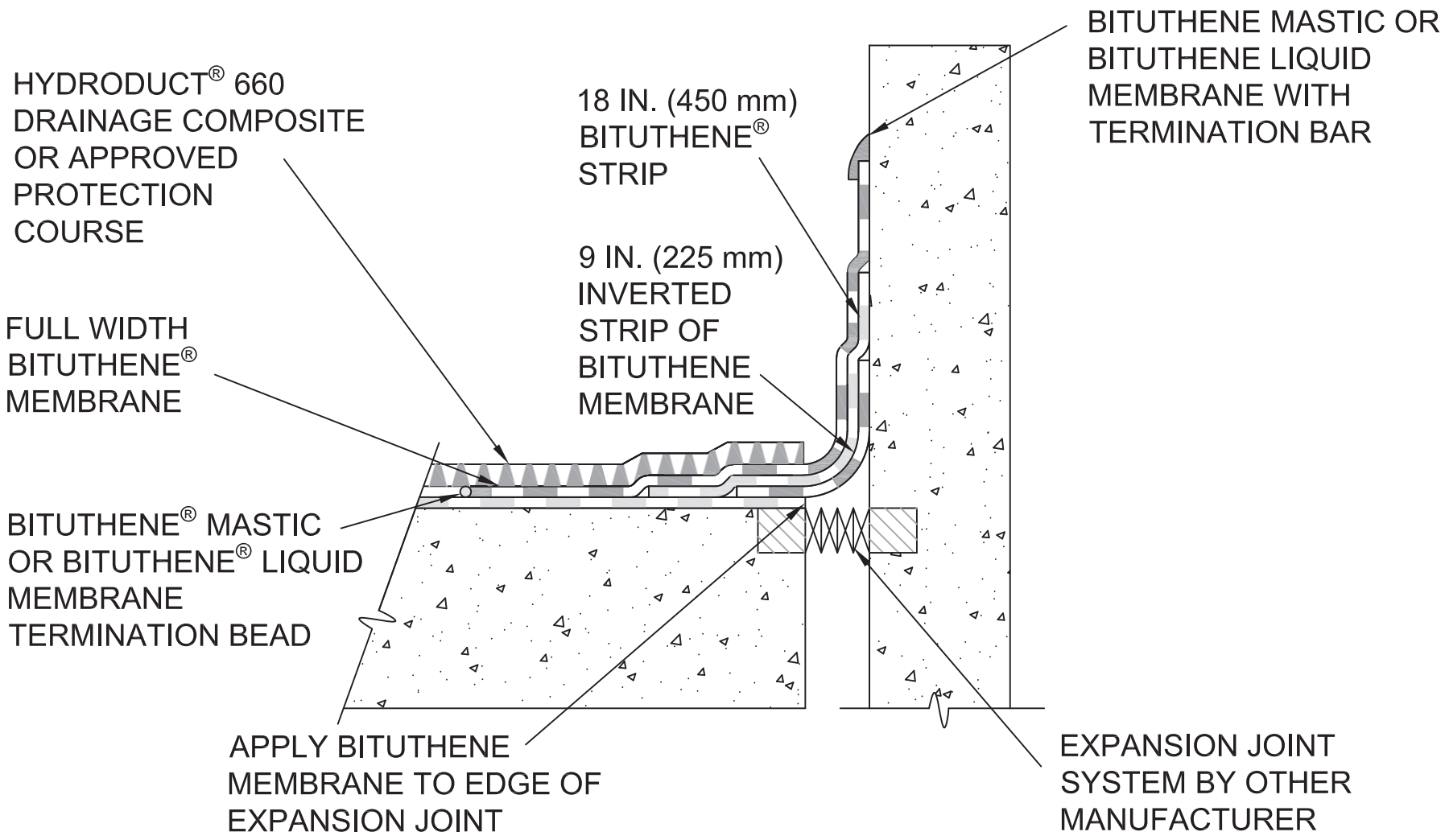
All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

1. Install expansion joint system, by other manufacturer, according to manufacturer's installation instructions.
2. Apply Bituthene Deck Prep Surface Treatment on horizontal surface to smooth rough deck areas to prepare the surface to receive the Bituthene membrane.
3. Apply Bituthene membrane on the horizontal surface in accordance with the Bituthene Data Sheet section on Installation. Install membrane from the low point to the high point so that laps shed water. Terminate at edge of expansion joint.
4. Apply 9 in (225 mm) inverted Bituthene membrane strip centered over the expansion joint.
5. Apply 18 in (450 mm) Bituthene membrane strip centered over the expansion joint and lapped onto field membrane.
6. Apply full width, 36 in (900 mm) Bituthene membrane strip centered over the expansion joint cover and lapped onto the field membrane
7. Apply bead of Bituthene Liquid Membrane on all terminations and T-joints.
8. Apply Hydroduct 660 according to Hydroduct 660 Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.



NOTES: - FOR JOINT WIDTHS UP TO 2 IN. (50 mm) WITH A MAXIMUM OF 1 IN. (25 mm) MOVEMENT. IF EXPECTED MOVEMENT IS LESS THAN 0.5 IN. (15 mm) A 6 in. (150 mm) INVERTED STRIP IS ACCEPTABLE
- A WATERPROOF EXPANSION JOINT SYSTEM BY OTHERS MUST BE SELECTED FOR THE WIDTH AND EXPECTED MOVEMENT OF THE JOINT, SEE TECHNICAL LETTER 11 FOR ADDITIONAL INFORMATION.

gcp applied technologies

EXPANSION JOINT COVER DECK TO WALL JUNCTION

BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT 025
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATION INSTRUCTIONS

Expansion Joint Cover

Deck to Wall Junction

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

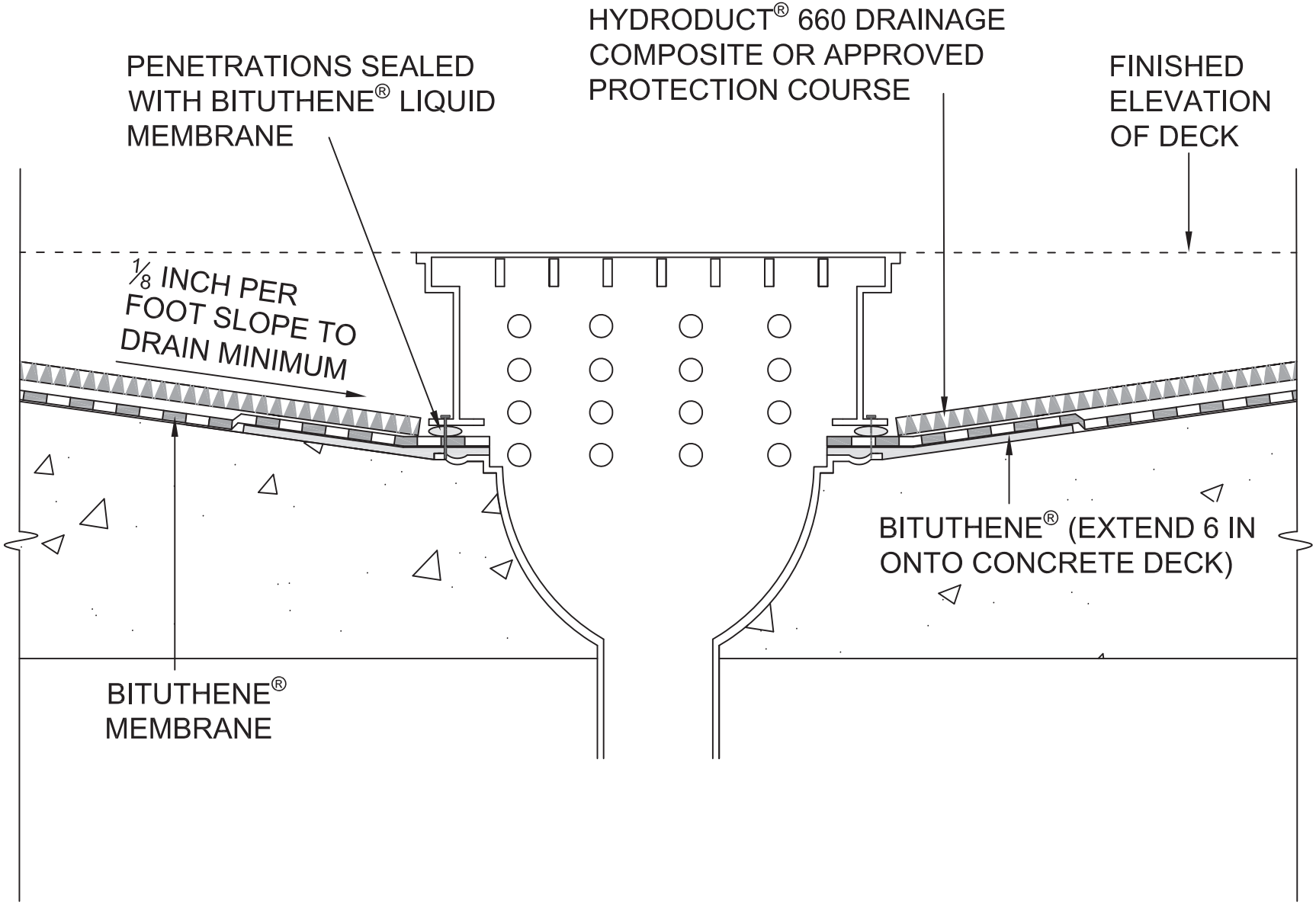
All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

1. Apply Bituthene Deck Prep surface treatment on horizontal surface to smooth rough deck areas to prepare the surface to receive the Bituthene membrane.
2. Install expansion joint system, by other manufacturer, according to manufacturer's installation instructions.
3. Apply Bituthene membrane on the horizontal surface in accordance with the Bituthene Data Sheet section on Installation. Terminate at edge of expansion joint.
4. Apply 9 in (225 mm) inverted Bituthene membrane strip centered over the expansion joint with half of the strip on the horizontal surface and half of the strip on the vertical surface.
5. Apply 18 in (450 mm) Bituthene membrane strip centered over the expansion joint and lapped onto field membrane. Half of strip should be on horizontal surface and half of strip should be on the vertical surface.
6. Apply a full width of Bituthene membrane on top of the 18 in (450 mm) strip, with half the membrane on the horizontal surface and half the membrane on the vertical surface.
7. Install a termination bar at the top leading edge of the Bituthene on the wall and seal with Liquid Membrane or Mastic.
8. Apply bead of Liquid membrane or Mastic on all terminations.
9. Apply Hydroduct 220 for vertical applications and Hydroduct 660 for horizontal applications according to each Hydroduct Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.



DRAIN
BITUTHENE® WATERPROOFING SYSTEM

DRAWING: BIT026
SCALE: Not to scale
EFFECTIVE DATE: 07/01/2016
SUPERCEDES: 04012015

INSTALLATION INSTRUCTIONS

Drain

Prior to Membrane Installation, Review the Bituthene® Data Sheet

Surface Prep

All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that may hinder the adhesion or regularity of the membrane installation. The surface should also be free from frost, dirt, grease, oil or other contaminants as outlined in the Bituthene® Data Sheet section on Surface Preparation. Clean loose dust and dirt from the surface and prime with appropriate primer.

Detailing

1. Ensure that the drain flange (by others) is properly installed before membrane application.
2. Clean drain flange thoroughly.
3. Install a collar of 60-mil (1.5 mm) of Bituthene Liquid Membrane or Bituthene membrane to the flange, extending 6 in (150 mm) onto the deck.
4. Apply Bituthene membrane on the horizontal surface in accordance with the Bituthene Data Sheet section on Installation.
5. Apply clamping ring in a bead of Bituthene Liquid membrane.
6. Apply bead of Liquid membrane or Mastic on all terminations.
7. Apply Hydroduct 660 according to Hydroduct 660 Data Sheet.

Special Notes

Bituthene membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.