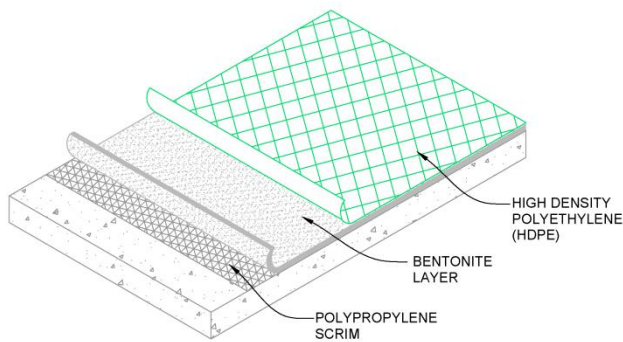
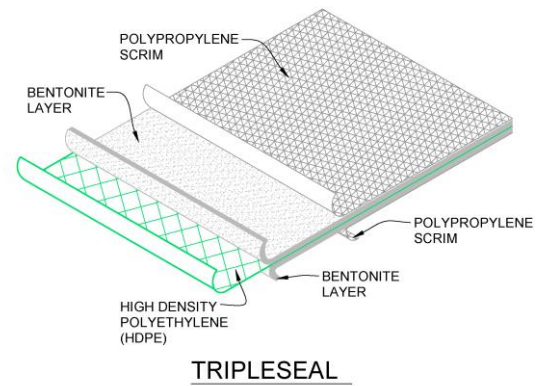
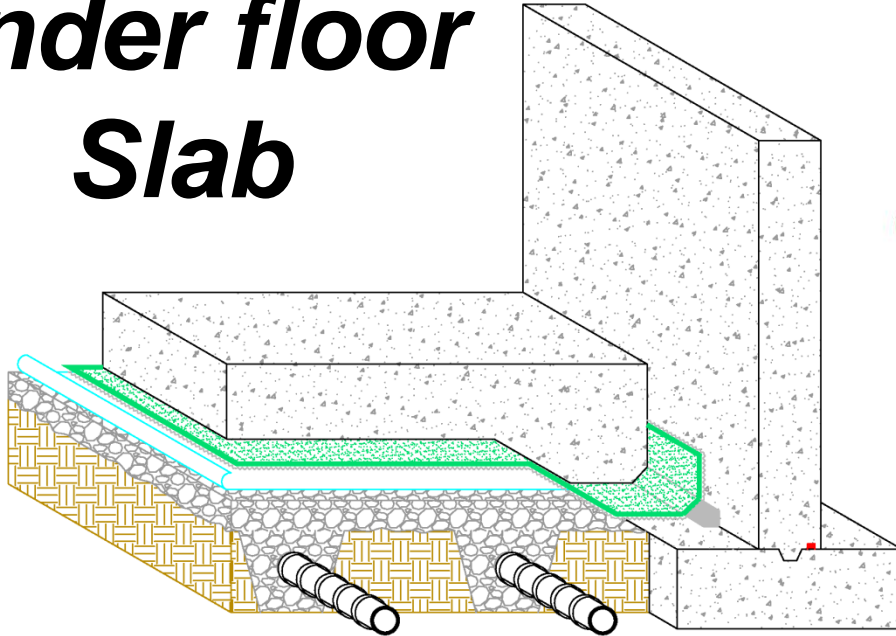


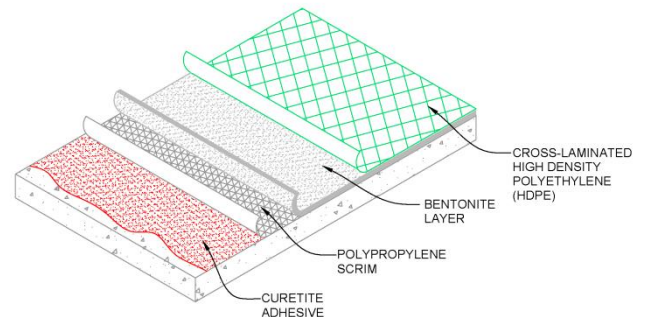
TEGRA SEAL

Done Once. Done Right.

Book 4: Under floor Slab



TEGRATITE PLUS



**TEGRASEAL 500 OR 1000
WITH CURETITE ADHESIVE**

Installation Guidelines and Details



INSTALLATION GUIDELINES

Under Slab Applications

TegraSeal Products, LLC manufactures multiple waterproofing systems designed for various building specifications.

The TegraTite Plus system consists of a 20 mil HDPE membrane laminated to 1 lb per SF of high swell bentonite clay with a protective scrim overlay. This waterproofing system can be installed with the bentonite clay facing up or down depending on contractor preference or specification.

Under floor application of TegraTite Plus with the bentonite clay facing up has its seams typically stapled and sealed with TegraSeal's proprietary CureTite Mastic Adhesive applied in and over seams.

TegraTite Plus installed with the bentonite clay facing down is typically stapled and taped with TegraSeal's Seam Tape or Bitumen Tape.

The TegraSeal 500 waterproofing system is adhered in place when installed. There are no nails or staples used in this system, which makes it an ideal solution for vapor and gas prevention.

The TegraSeal 500 can be installed with the bentonite clay facing up or down and also utilizes the CureTite Mastic Adhesive or TegraSeal Bitumen Tape for seaming.

The TegraSeal 500 consists of a 4 mil cross laminated HDPE membrane, modified bentonite clay and scrim. It weighs 0.6 lbs per SF and is applied to surfaces with CureTite Adhesive.

A TegraSeal 1000 is also available and weighs 1 lb per SF.

The TegraSeal TripleSeal waterproofing system consists of bentonite clay laminated to both sides of a 20 mil HDPE plastic. There is no up or down because it forms a waterproofing seal in every direction. TripleSeal is ideal for the toughest waterproofing projects. The TripleSeal system also uses the CureTite Mastic Adhesive to adhere in and over its seams.

All TegraSeal waterproofing systems are available with polymer modified bentonite for contaminate resistance or elevated Sodium conditions. Simply specify CSR after selecting your system.

GENERAL INSTRUCTIONS

- a. Protect waterproofing from rain and elements—keep covered until installed.
- b. Ensure storage area is free from standing water and is properly drained.
- c. TegraTite Plus and TripleSeal may be installed over uncured, damp or frozen surfaces.
- d. TegraSeal 500 or 1000 may be installed over any surface reasonably clean and able to absorb or evaporate the CureTite Adhesive.
- e. Use a safety knife to cut and trim the all waterproofing membranes.
- f. Contact TegraSeal Products, LLC whenever excessive conditions of acid, alkali, or salt brine exist.
- g. TegraTite Plus, TripleSeal and TegraSeal 500 waterproofing systems require confinement on both sides equivalent to or above 24 lbs per SF.

PREPARATION:

1. Prepare substrate/base/sub grade
 - a. Level and compact the original earth, or granular aggregate base.
2. Vapor barrier. (Detail 0704-10)
 - a. Cover compacted base with 6 mil polyethylene for TergaTite Plus and TripleSeal, 20 mil HDPE for the TegraSeal 500 or 1000.
 - b. Cut around any penetrations.
 - c. Over lap seams 3-4”.
 - d. Staple the seam every 6”-12” for TergaTite Plus and TripleSeal Systems. No stapling for the TegraSeal 500 or 1000 waterproofing systems.
3. Install as specified by the Architect or Engineer. (Detail 0704-10)

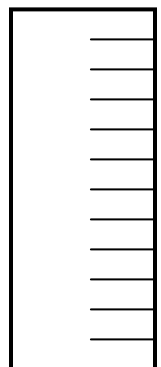


Figure 1

4. Utility Penetrations. (Detail 0704-50)
 - a. Apply TegraSeal Mastic around the penetration.
 - b. Cut a waterproofing membrane strip: 6" wide to wrap the pipe with 2" overlap. Every 2", cut 4" flanges across the strip (Figure 1).
 - c. Wrap the strip around the pipe with flanges spreading out.
 - d. Hold the collar with pipe clamp or TegraSeal Seam Tape and/or fasteners.
 - e. Trowel TegraSeal Mastic to fill voids and cover with a collar.

WATERPROOFING SYSTEM INSTALLATION:

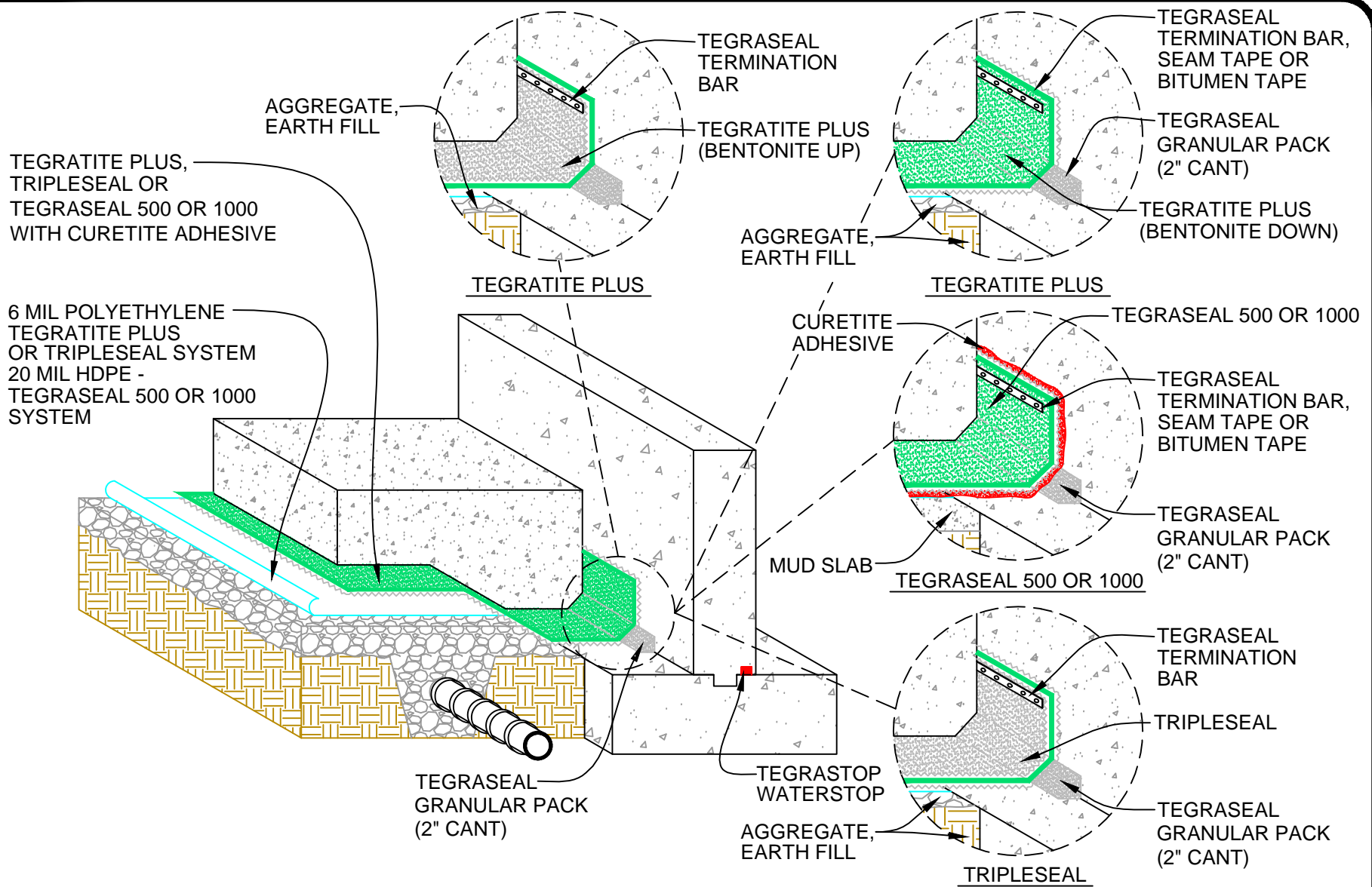
5. Tie-in under slab to wall or footing (Detail 0704-20)
 - a. Footings- wrap waterproofing sheet inside the form.
 - b. Place waterproofing sheet up and above the footing form to provide for a proper tie-in to under floor or wall waterproofing. Typical tie in is 4" – 6".
6. Tie-in under slab to lagging walls with footings and pile caps, (Details 0704-22).
 - a. Hang the 20 mil HDPE down the lagging wall and inside the form of the footing.
 - b. Concrete piling (if applicable)- Cut hole in waterproofing membrane and wrap tightly around the piling. Pour TegraSeal Granular Pack cant around the piling or use TegraSeal Mastic and cover with a waterproofing membrane collar.
 - c. Wrap the form with waterproofing membrane, extending up the lagging wall above the cold joint and up the footing above the form. Tie in overlap seams 4" – 6".

Cover entire floor area with selected waterproofing system – (TegraTite Plus, TripleSeal, TegraSeal 500 or 1000).

7. Sub grade - compacted earth, aggregate or mud slab (0704-10)
 - a. Install vapor barrier over stable, smoothed and compacted sub grade up to the footing. Overlap seams 6" and tape or staple down.
 - b. Pour TegraSeal Granular Pack cant along vertical to horizontal transition (0704-22 Detail 1).
 - c. Install waterproofing system sheet along the footing extending up the vertical surface.
 - d. Allow a 3" overlap, stagger sheets; securely fasten seams with staples, fasteners or tape.
 - e. Apply CureTite Mastic Adhesive in and over seams when specified.
8. Mud slab
 - a. Pour TegraSeal Granular Pack bentonite cant along vertical to horizontal transition.
 - b. Install waterproofing membrane along the footings extending up the vertical surface.
 - c. Install waterproofing membrane with minimum 3" overlap, stagger end laps; securely fasten seams with staples every 20" O.C. and staple 6" O.C.
9. Expansion Joints contact TegraSeal Products, LLC for expansion joint drawings.
10. Complete installation at utility penetrations and floor drain (Detail 0704-50, Detail 0704-51).
 - a. Cut out a circle the diameter of the pipe in the center of a 2' x 2' square of waterproofing membrane.
 - b. Cover the pipe penetration with the waterproofing material square (if necessary, cut slit in center circle).
 - c. Fill voids with TegraSeal Mastic or Granular Packs
11. Terminate vertical surfaces with a continuous strip of TegraSeal Termination Bar nailed every 12" O.C. (Details 0704-22).

CONCRETE:

12. Concrete should not be dropped from higher than 3 feet (1.22 m).



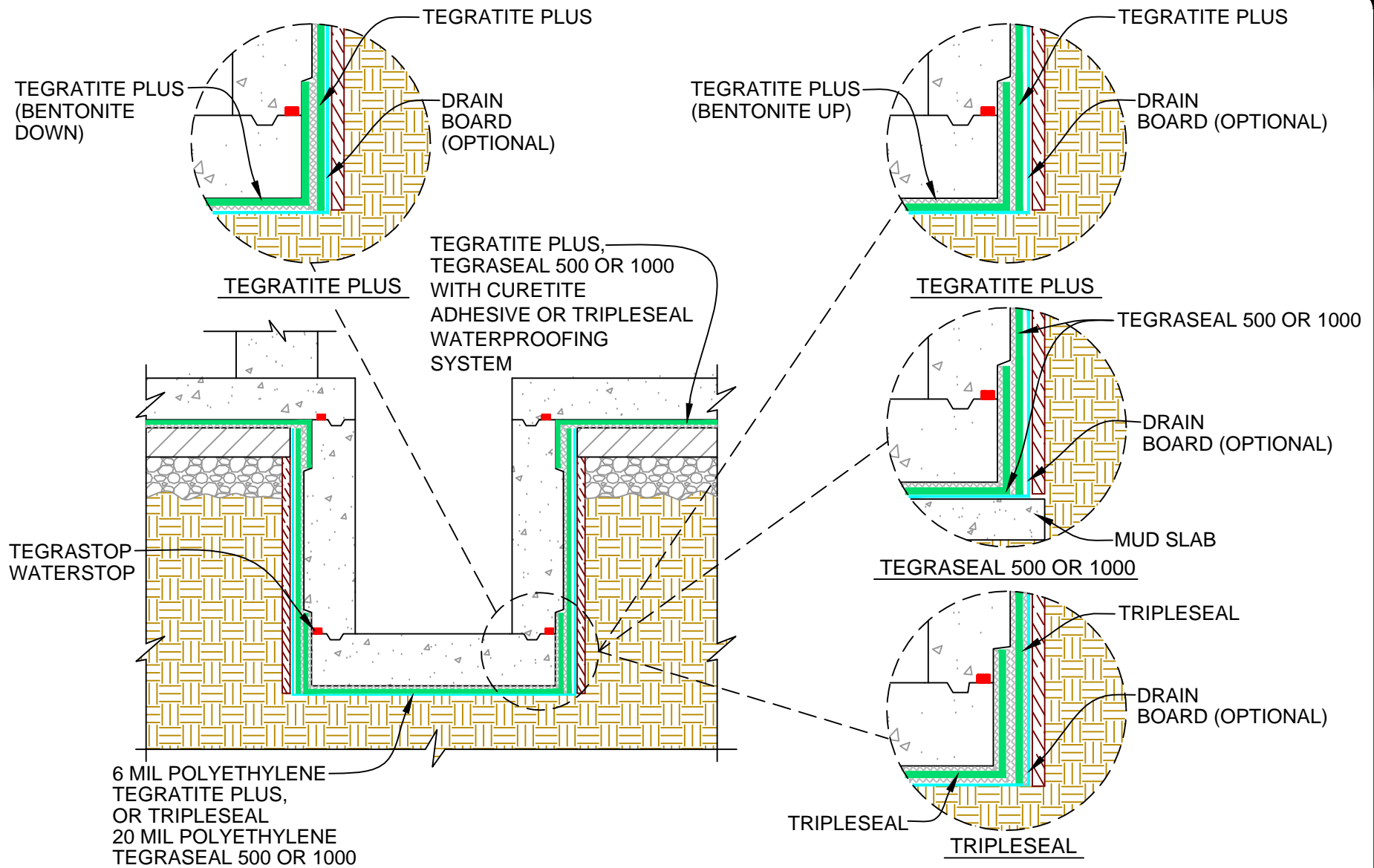
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FLOOR TO WALL TRANSITION WITH BELOW FLOOR DRAINAGE

Details:
UNDER SLAB DETAILS

Date Issued:
05/11/2010

Scale: NONE
Drawing No.: 0704-01

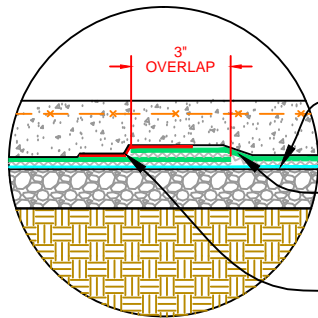


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ELEVATOR PIT CROSS SECTION DETAIL
 ALL SEAMS ADHERABLE WITH TEGRASEAL MASTIC ADHESIVE

Details: UNDER SLAB DETAILS	
Date Issued: 05/11/2010	
Scale: NONE	Drawing No.: 0704-02

TEGRATITE PLUS



TYPICAL OVERLAP

TEGRASEAL 500 OR 1000 WITH CURETITE ADHESIVE (BENTONITE DOWN)

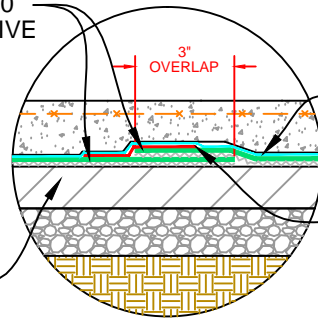
6 MIL POLYETHYLENE

TEGRATITE PLUS (BENTONITE DOWN)

TEGRASEAL SEAM TAPE OR BITUMEN TAPE

MUD SLAB

TEGRASEAL 500 OR 1000

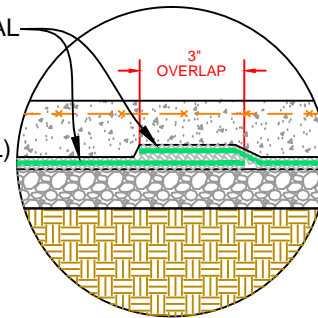


TYPICAL OVERLAP

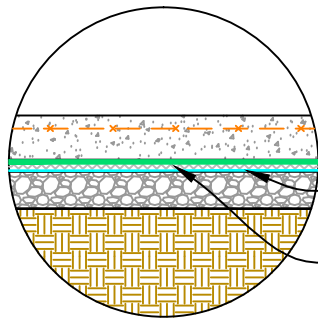
20 MIL HDPE PROTECTION COVER (TYPICAL)

TEGRASEAL BITUMEN TAPE

TRIPLESEAL



TYPICAL OVERLAP



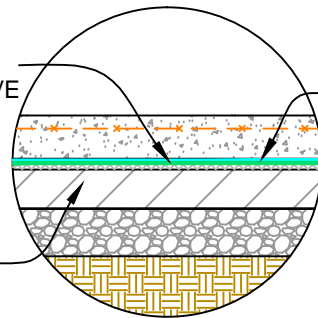
TYPICAL UNDER FLOOR

TEGRASEAL 500 OR 1000 WITH CURETITE ADHESIVE (BENTONITE DOWN)

6 MIL POLYETHYLENE

TEGRATITE PLUS (BENTONITE DOWN)

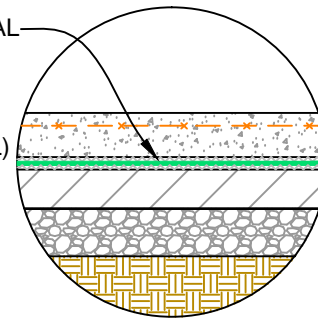
MUD SLAB



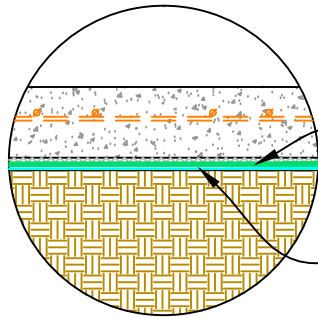
WITH MUD SLAB

20 MIL HDPE PROTECTION COVER (TYPICAL)

TRIPLESEAL



WITH MUD SLAB

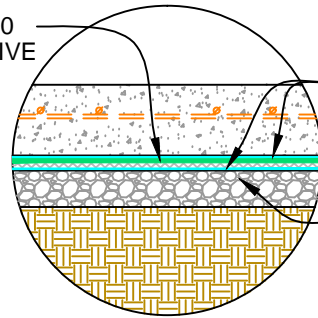


WITHOUT MUD SLAB

TEGRASEAL 500 OR 1000 WITH CURETITE ADHESIVE (BENTONITE DOWN)

TEGRATITE PLUS (BENTONITE UP)

6 MIL POLYETHYLENE

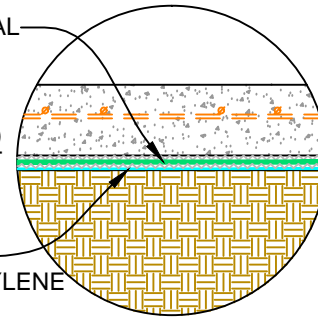


WITH OUT MUD SLAB / PROTECTION SHEET

20 MIL HDPE PROTECTIVE COVER (TYPICAL) AND BASE SHEET

TRIPLESEAL

AGGREGATE
6 MIL POLYETHYLENE (TYPICAL)



WITHOUT MUD SLAB



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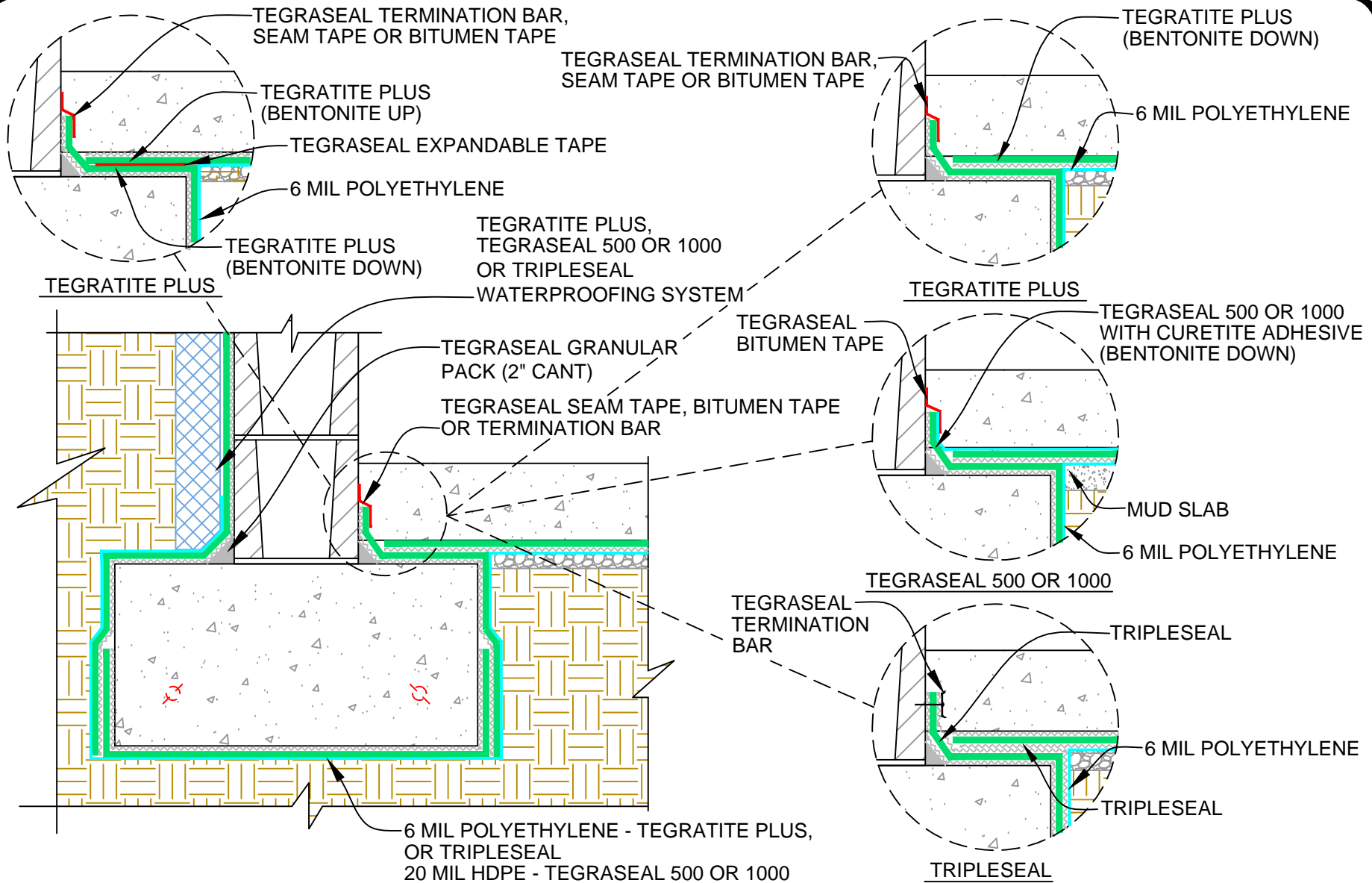
UNDER FLOOR
WATERPROOFING CROSS SECTION

Details:
UNDER SLAB DETAILS

Date Issued:
05/11/2010

Scale:
NONE

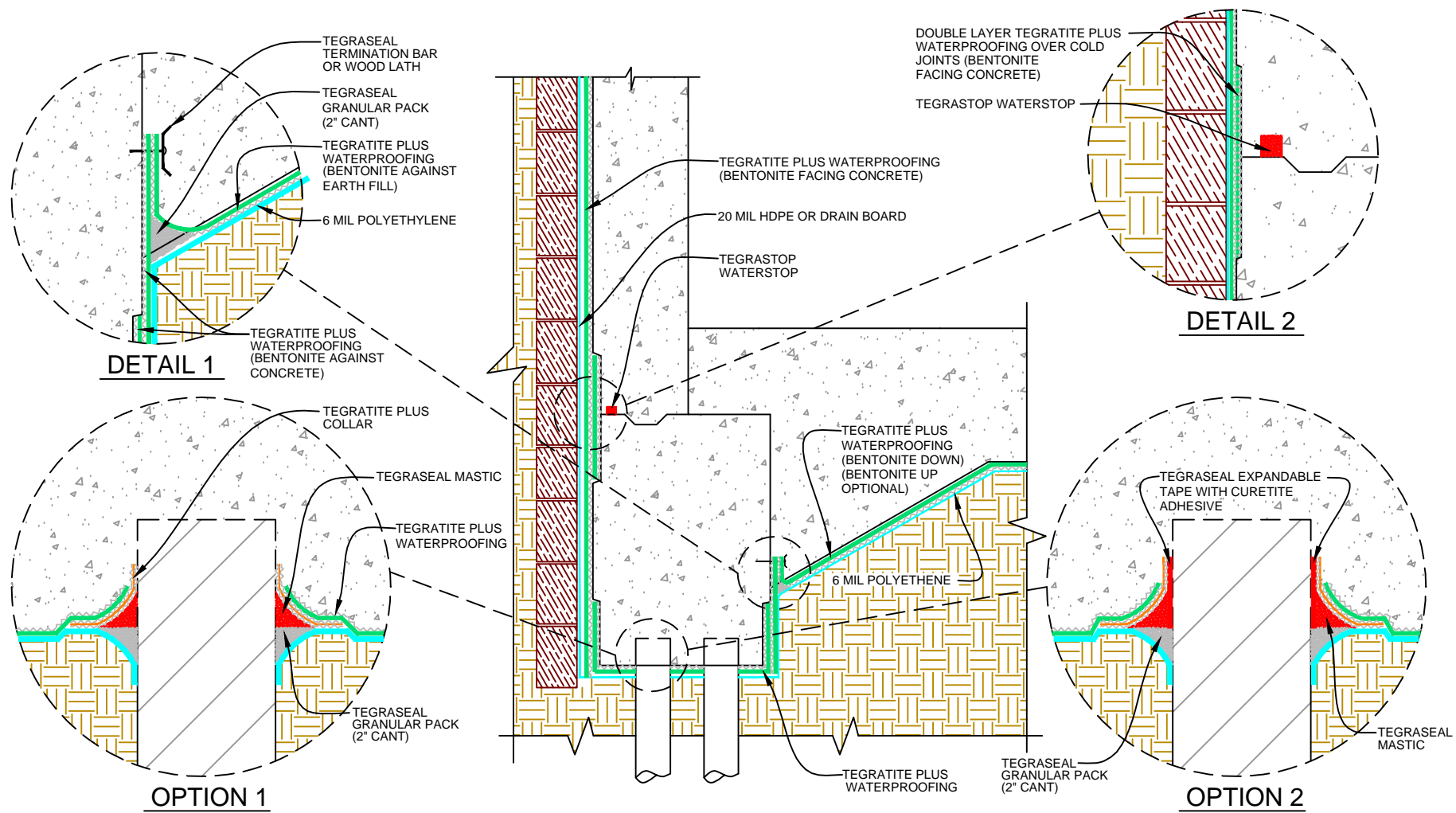
Drawing No.:
0704-10



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FOOTING TO FLOOR TRANSITION CROSS SECTION

Details: UNDER SLAB DETAILS	
Date Issued: 05/11/2010	
Scale: NONE	Drawing No.: 0704-20

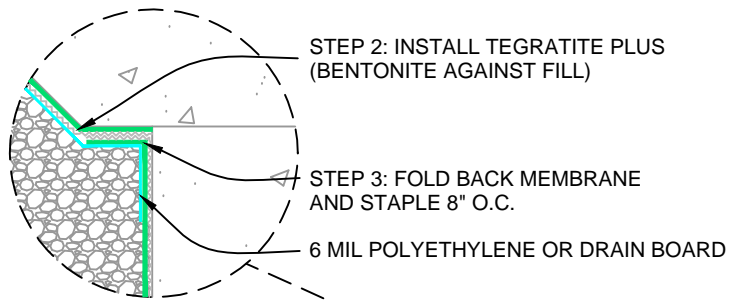


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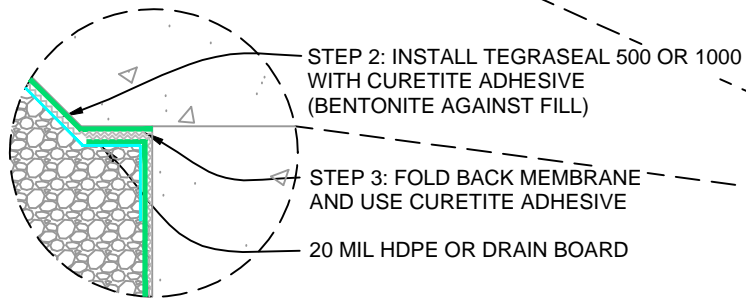
WATERPROOFING AROUND EXTERIOR PILECAPS

NOTE: TEGRASEAL 500 OR 1000 AND TRIPLESEAL ALTERNATIVE DRAWINGS ALSO AVAILABLE

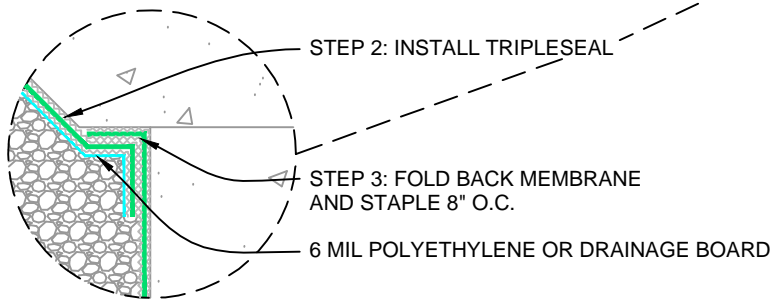
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Date Issued: 05/11/2010	
Scale: NONE	Drawing No.: 0704-22



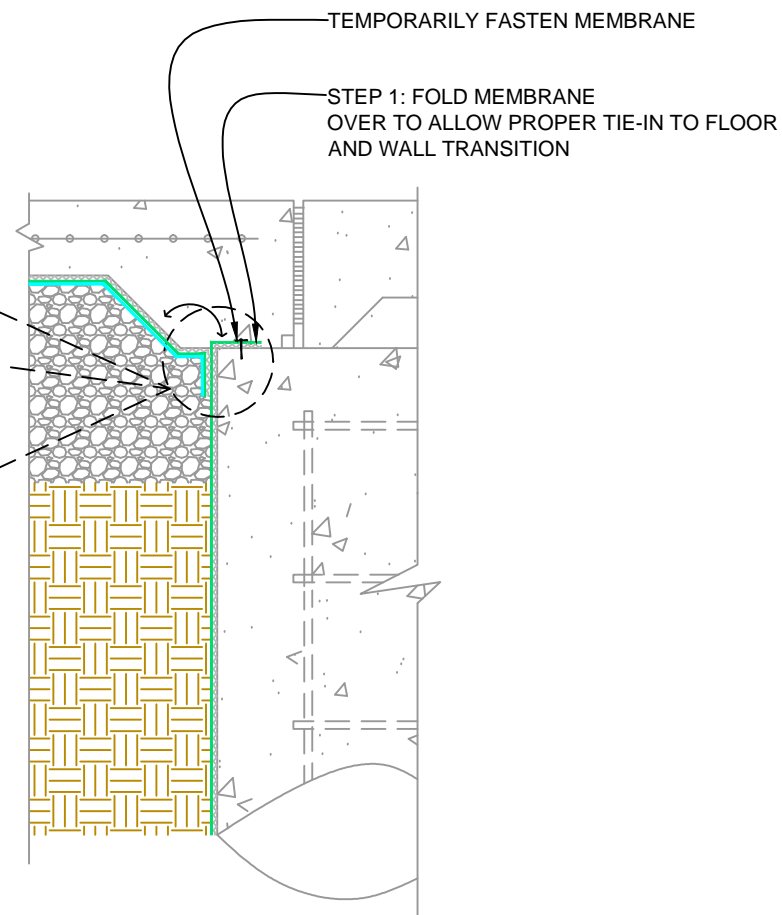
TEGRATITE PLUS



TEGRASEAL 500 OR 1000



TRIPLESEAL



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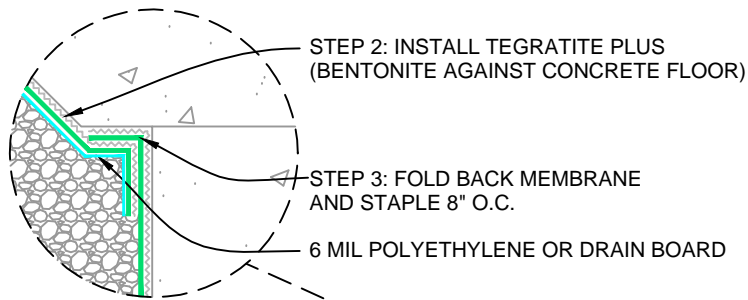
**BENTONITE DOWN/ MEMBRANE UP
WATERPROOFING PILECAP BELOW FOOTING**

Details:
UNDER SLAB DETAILS

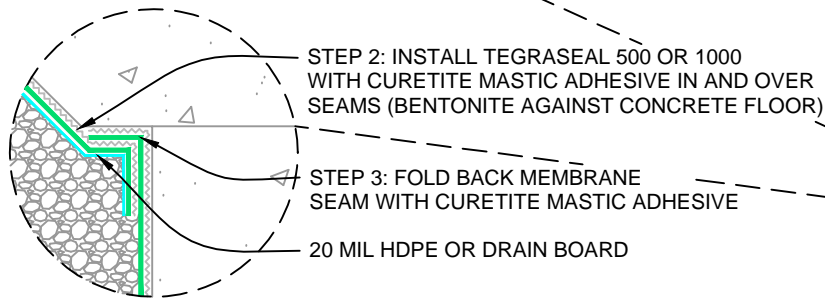
Date Issued:
05/11/2010

Scale:
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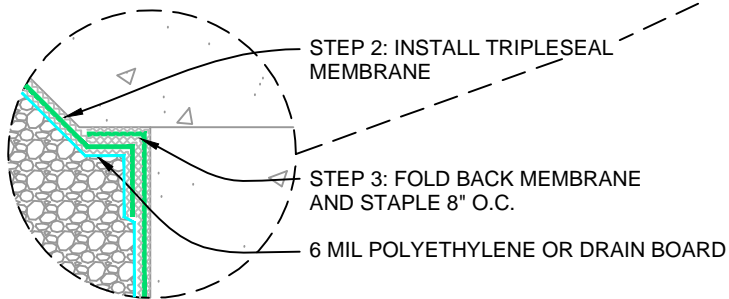
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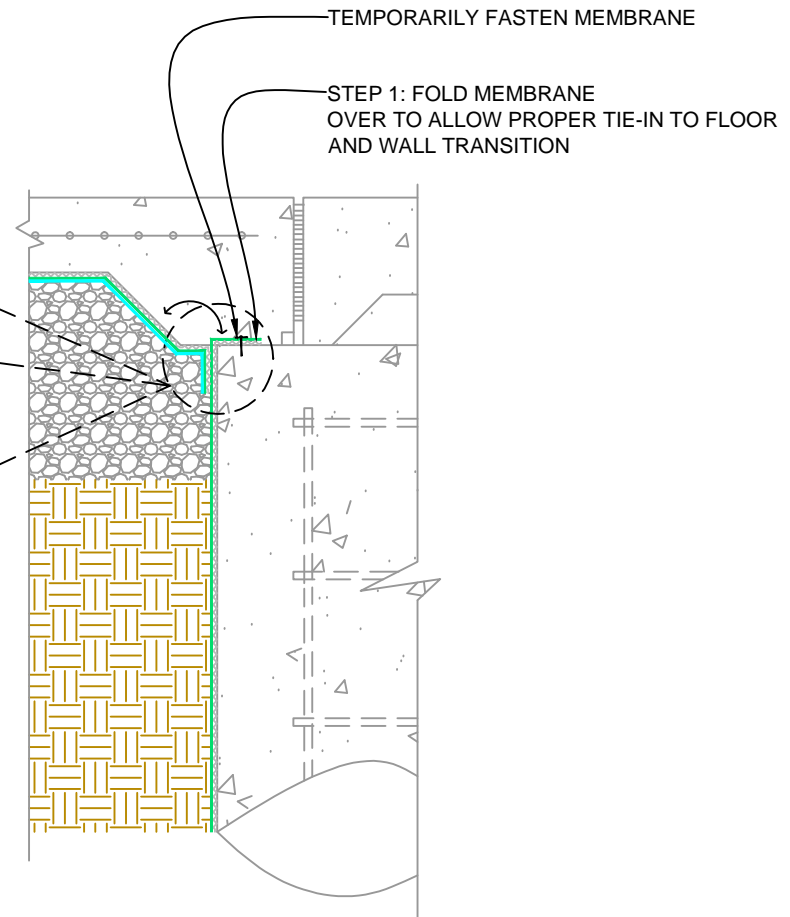
TEGRATITE PLUS



TEGRASEAL 500 OR 1000



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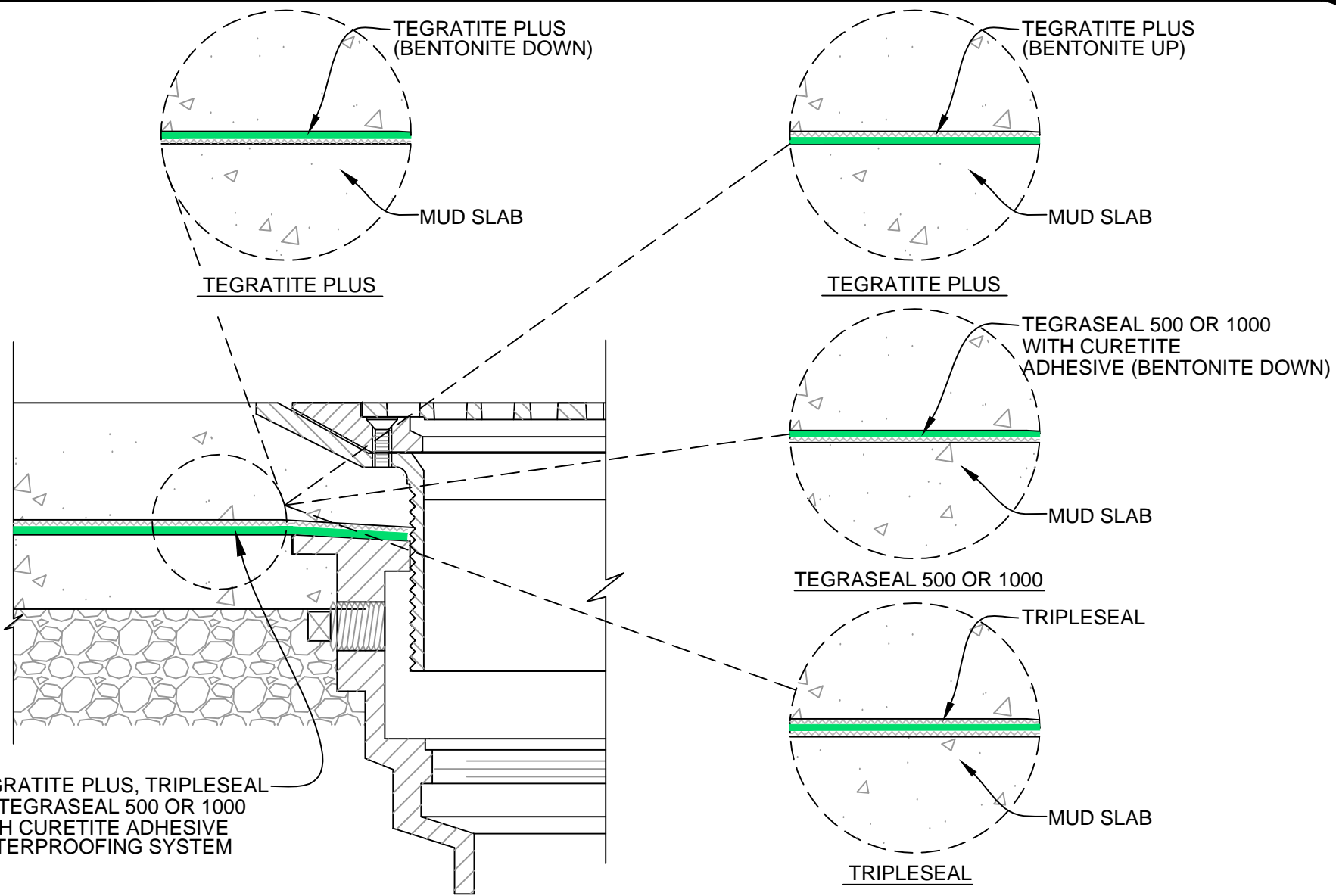
**BENTONITE UP / MEMBRANE DOWN
WATERPROOFING INTERIOR FOOTING**

Details:
UNDER SLAB DETAILS

Date Issued:
05/11/2010

Scale:
NONE

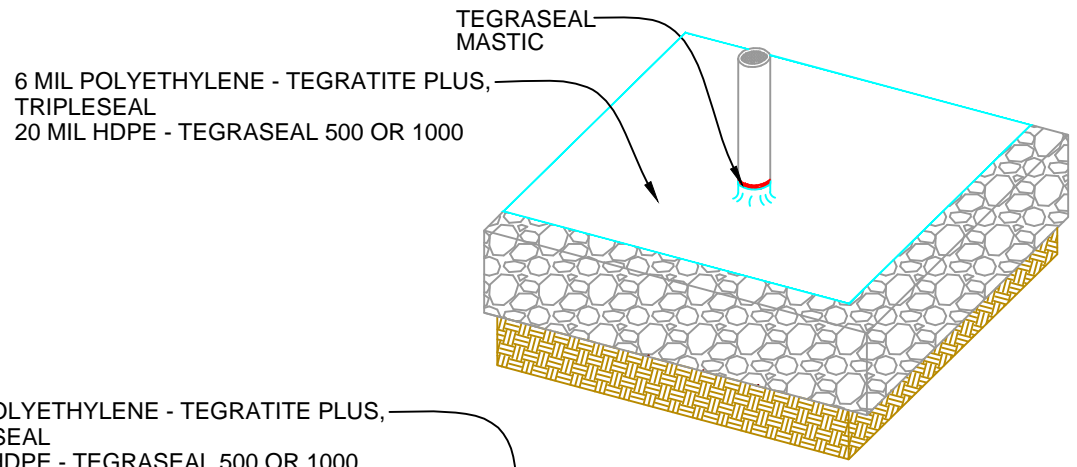
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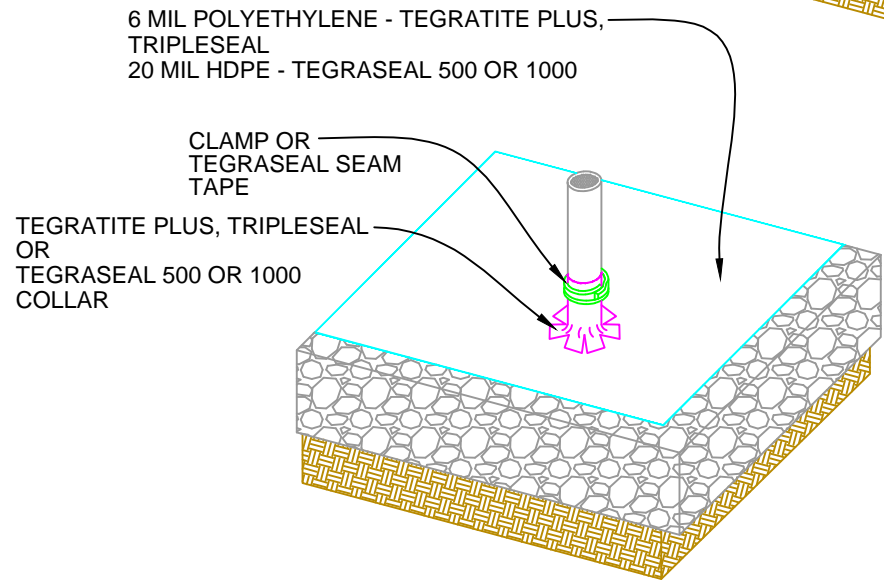
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TYPICAL DRAIN DETAIL

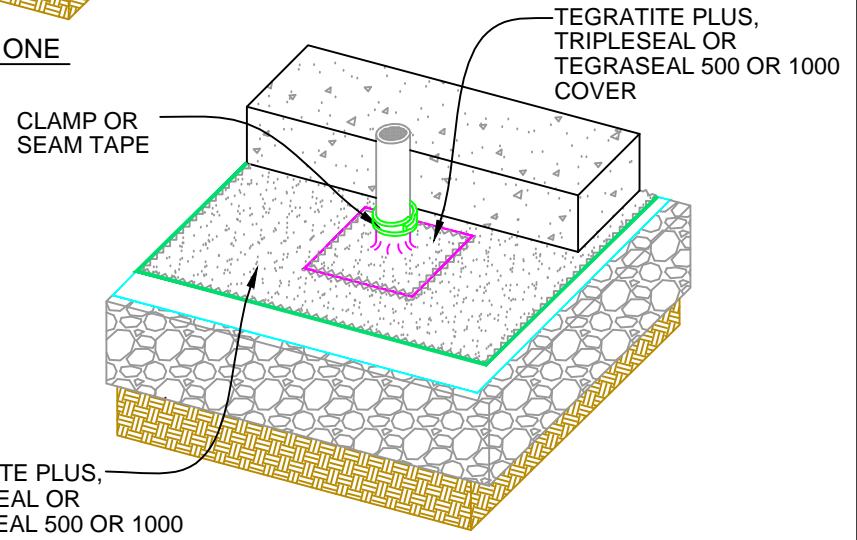
Details: UNDER SLAB DETAILS	
Date Issued: 05/11/2010	
Scale: NONE	Drawing No.: 0704-51



STEP ONE



STEP TWO



STEP THREE



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**UNDER SLAB
PIPE PENETRATION (TYPICAL)**

Details: UNDER SLAB DETAILS	
Date Issued: 05/11/2010	
Scale: NONE	Drawing No.: 0704-50



TegraSeal Products, LLC
9231 Penn Ave S, Suite 2A
Bloomington, MN 55431
Toll-free: 888-815-1816
Tel: 952-888-1816
Fax: 952-888-1786
www.tegraseal.com

This manual is provided as a general guideline for the typical installation of TegraSeal Waterproofing Membranes and is not intended to cover all potential installation details. The information provided in this manual is correct to the best of our knowledge and belief at the date of its publication. Please contact TegraSeal for additional information.