



3030 SCIOTO DARBY EXECUTIVE COURT / HILLIARD, OHIO 43026-8989

dri-lok.com

DRI-LOK WATERPROOFING SYSTEM SPECIFICATIONS
SECTION 07 BELOW GRADE FOUNDATION WATERPROOFING

GENERAL

1.0 **SCOPE OF WORK**

The work under this heading shall include all labor, materials, equipment and supervision required to install DRI-LOK Waterproofing protection as specified or where shown on the contract drawings.

2.0 **RELATED WORK BY OTHERS**

2.1 Proper preparation of areas to receive waterproofing including removal of any protruding /sharp materials, patching of concrete, and filling or leveling of uneven surfaces.

2.2 Removal of all water and debris from excavation where waterproofing is required. Supply placing and compaction of backfill.

3.0 **QUALIFICATION OF MANUFACTURER**

Materials, application methods and equipment shall be of manufacture and type by: DRI-LOK Systems, LTD. 3030 Scioto Darby Executive Court Hilliard, Ohio 43026-8989 and have 50+ years manufacturing and installation experience under the name: DRI-LOK Waterproofing System, LTD.

4.0 **STORAGE OF MATERIALS**

All DRI-LOK bentonite materials stored at the job site shall be kept dry, properly covered and protected, and shall be on a platform off the ground. Elastic binder shall be kept hot per manufacturer requirements and remain on application vehicle until needed.

5.0 **SPECIAL CONDITIONS**

5.1 DRI-LOK Waterproofing shall not be applied in standing water, ice, snow, or during precipitation.

5.2 Do not apply where there are indications of alkaline, brine, or acids in the backfill material. Where there are alkaline, brines, or acids, they are to be of no more than a PH of 10 and no lower than a PH of 5 and a maximum brine content of 2 percent.

5.3 This waterproofing system, DRI-LOK Waterproofing System can be applied to foundation walls that are made of brick, stone, CMU masonry, concrete, green concrete walls, wood lagging (where plywood is installed), steel sheet piling, C.I.P. structural decks, under plaza decks, and on top of compacted subgrade for under floor waterproofing.

5.4 DRI-LOK waterproofing can be applied to vertical walls that are damp but not where running water is present. Manufacturer to approve the extent of the above condition prior to application.

5.5 DRI-LOK waterproofing can be applied to footers that are damp but have no standing water.

5.6 DRI-LOK Systems, LTD. shall coordinate with contractor for best application of waterproofing due to weather and timing of backfill.

5.7 DRI-LOK waterproofing can be applied in zero degrees Fahrenheit temperatures. Manufacturer to approve zero-degree conditions prior to application.

5.8 DRI-LOK Systems, LTD. will supply material sheets to architect or contractor when requested.

6.0 WORK CONDITIONS

6.1 The contractor shall provide proper access to the work area for equipment.

6.2 Sufficient storage space at work area for required work materials.

7.0 PRODUCTS

Exterior below grade waterproofing products shall be either pure Wyoming type Bentonite clay or Bentonite clay compound and elasticized binder, as specified herein.

8.0 MATERIALS

8.1 DRI-LOK Waterproofing is a hot spray-applied mineral waterproofing consisting of Wyoming type Bentonite and an elasticized binder.

8.2 DRI-LOK Waterproofing requires no protection board, drainage boards or drainage mats applied over product.

9.0 CONDITION OF WORK SURFACES

9.1 Walls and footing shall be clean, dry and free of protrusions and obstructions. All debris and standing water shall be removed.

9.2 Damaged or honeycombed concrete shall be patched, and penetrations shall be grouted with a cement grout or link seals installed around penetration.

9.3 Horizontal below grade surfaces shall be dry, free of obstructions and prepared to receive waterproofing or as recommended by the manufacturer.

9.4 Damages to the waterproofing by other trades shall be the responsibility of such other trades. Repairs shall be made by the waterproofing contractor.

10.0 INSPECTION OF AREA

Prior to beginning work, representatives of the contractor, architect, and the waterproofing contractor shall examine the areas to be waterproofed. Areas not properly prepared shall be put in acceptable condition.

11.0 APPLICATION (Vertical Walls)

11.1 Apply DRI-LOK Waterproofing by hot spray-applied methods in a nominal 1/4" thick (250 Mil) seamless membrane, filling all joints, honeycombed areas and openings around pipes to as great a depth as possible. Thickness to be selected by architect, general contractor or recommended by the manufacturer to best suit the conditions.

11.2 Place a double thickness membrane at the construction joints and surrounding all pipe penetrations extending outward at least two inches in all directions.

11.3 Extend the waterproofing to the edge of the footings or as indicated on the drawings.

11.4 Waterproofing shall be self-supporting against the wall and resistant to weather damage to allow the contractor adequate time for placement of backfill. All vertical and horizontal edges shall be tightly sealed against the wall to protect against rain and run off water. Backfill may be placed immediately, but no longer than 5 days after application.

11.5 Backfill shall be of granular nature, clean, free of debris, rock, lump clay, or foreign materials. Where sand is used, it shall be free of salts, acids or other like contaminants. (See special conditions).

12.0 APPLICATION (Wood Lagging and Piling)

12.1 Surfaces of wood lagging to have plywood installed to the wood lagging to create an acceptable surface to install waterproofing.

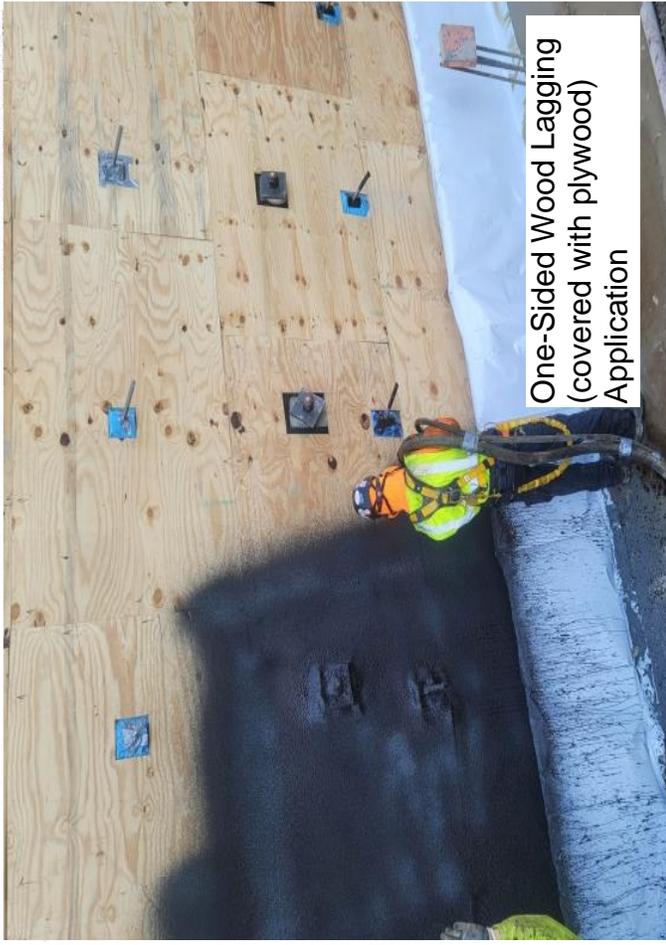
12.2 Fill all joints to as great a depth as possible.

12.3 Hot spray-applied DRI-LOK waterproofing in a nominal 3/8" (375 Mil) thick seamless membrane below 30'.

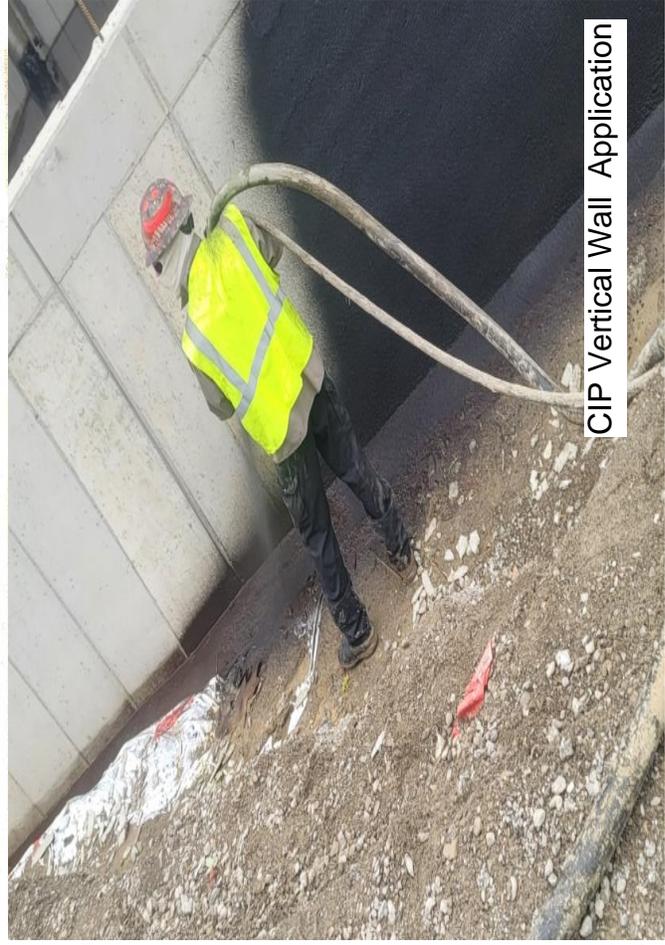
12.4 Extend the waterproofing inward at least 6" at the juncture of the grade and the lagging or piling.

- 12.5 Reinforcing steel may be placed and concrete may be poured immediately, after white plastic has been installed over the DRI-LOK Waterproofing membrane. White Plastic to be applied on all vertical surfaces for blindside waterproofing.
- 13.0 APPLICATION (Under Slab, Between Slabs and Plaza Decks)**
- 13.1 Hot spray-applied DRI-LOK membrane in nominal 1/4"(250 Mil) or 3/8"(350 Mil) thick seamless membrane by spray methods as recommended by the manufacturer.
- 13.2 Hot spray-applied over prepared grade, compacted subgrade or concrete mud slabs. Where installed on horizontal surface with a 4 mil - 6 mil white polyurethane sheet.
- 13.3 Penetrations through the slab shall be carefully treated, extending the membrane upwards around penetrations through the slab at least 2 inches.
- 13.4 Place a double thickness coating at all joints formed at the juncture of the footing and extend upwards to grade on adjacent walls.
- 13.5 The concrete slab shall be placed as soon as sufficient waterproofed areas are available, but no longer than 5 days after application.

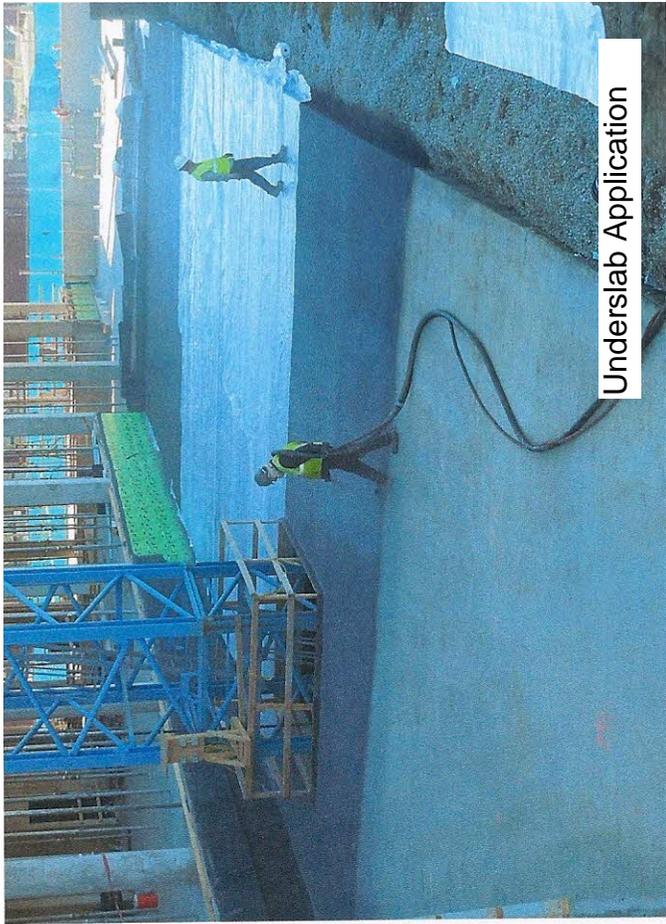
END OF SECTION



One-Sided Wood Lagging
(covered with plywood)
Application



CIP Vertical Wall Application



Underslab Application



Stone/Brick Vertical
Wall Application



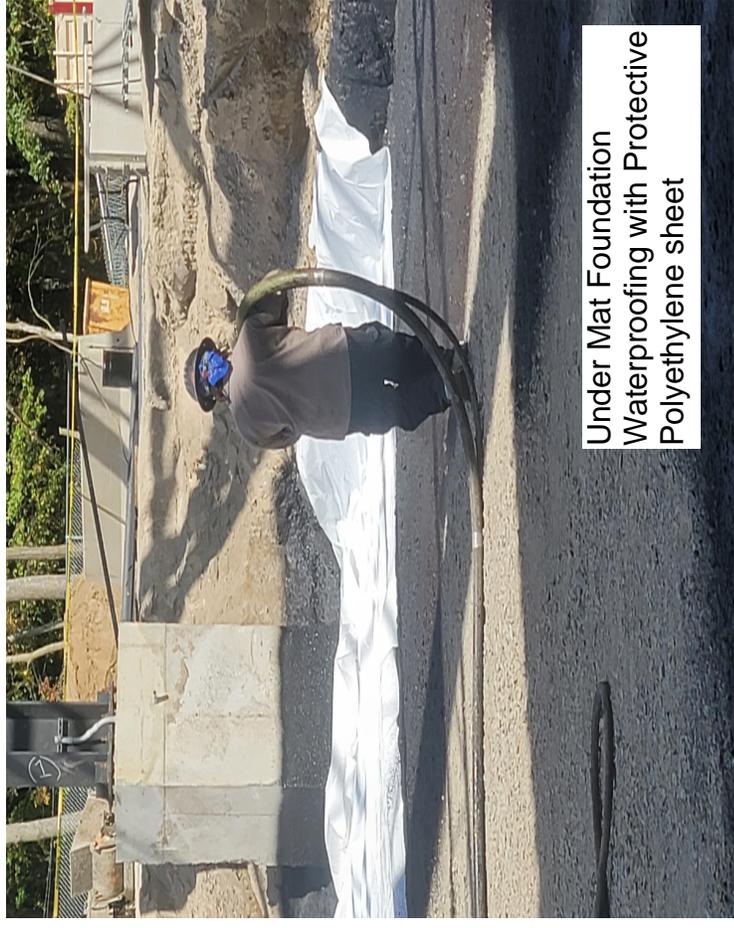
CMU Masonry Perimeter
Damproofing/Waterproofing
Application



Green Concrete Elevator Pit
Vertical Wall Application



CIP Vertical Wall Application



Under Mat Foundation
Waterproofing with Protective
Polyethylene sheet

SECTION 07 17 19

HOT APPLIED SPRAY-ON MODIFIED BENTONITE WATERPROOFING

PART 1-GENERAL

1.1 SUMMARY

- A. Section Includes: Hot applied Spray-on mineral waterproofing for below grade application.
- B. Specified in Other Sections:
 - 1. Excavation.

1.2 SUBMITTALS

- A. Submit manufacturer's product data and installation instructions.
- B. Submit waterproofing system warranty.

1.3 QUALITY ASSURANCE

- A. Installer: Performed only by the manufacturer or an experienced installer approved by the material manufacturer.

1.4 PRODUCT HANDLING

- A. Store, handle and protect materials in accordance with manufacturer's recommendations.

1.5 PROJECT CONDITIONS

- A. Do not start waterproofing work until piping, conduit and other projections through the substrate have been installed and substrate patched and sealed.
- B. Protect adjacent materials and surfaces from overspray of materials.
- C. Proceed with waterproofing work only when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations

1.6 WARRANTY

- A. Submit manufacturer's written five-year warranty agreeing to repair or replace work which leaks water, deteriorates excessively or otherwise fails to perform as required due to failure of materials or workmanship.

PART 2-PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Hot Applied Spray-on : DRI-LOK Systems, LTD., 3030 Scioto Darby Executive Ct., Hilliard, Ohio 43026, Phone 614-407-7152

2.2 MATERIALS

- A. Bentonite: Loose, dry high-swelling Wyoming-type granular bentonite (clay), also known as sodium bentonite, minimum 85% montmorillonite (hydrated aluminum silicate), 90% minimum passing 20-mesh sieve and 10% maximum passing 200-mesh sieve.
- B. Bentonite waterproofing: Hot Applied Spray-on mineral waterproofing consisting of Wyoming type bentonite clay and an elasticizer binder.
- C. Protection Course: Provide type recommended by product manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Proceed with waterproofing only after substrate work to receive bentonite application is complete, including penetrations (to the extent possible).
- B. Clean surfaces to be treated of oil, grease, dirt and loose material. Point and fill holes, joints and cracks flush with cement mortar or grout, grind down high spots and smooth rough surfaces.

3.2 INSTALLATION

- A. Spray apply one coat of bentonite waterproofing hot applied material, over scheduled walls below grade, covering all surfaces and filling all cracks with continuous coating free of breaks and pin holes. Extend coating from a minimum of 12" on the footing from the wall to within 2 inches below finish grade and to top of foundations walls. Spray material at manufacturer's recommended minimum temperature of 95 degrees and at a rate of 1 1/4 lb. to 1 1/2 lb. per square foot to produce a nominal 1/4 inch (250 Mil) seamless membrane thickness.
- B. Apply a double thickness to waterproofing material at all pipe penetrations, construction joints, corners and footing wall to junction points.
- C. . DRI-LOK Waterproofing shall not be applied in standing water, ice, snow, or during precipitation. DRI-LOK waterproofing can be applied in zero degrees Fahrenheit temperatures. Manufacturer to approve zero-degree conditions prior to application. DRI-LOK waterproofing can be applied to footers that are damp but have no standing water. DRI-LOK waterproofing can be applied to vertical walls that are damp but not where running water is present. Manufacturer to approve the extent of the above condition prior to application.

3.3 SUBSEQUENT OPERATIONS

- A. Protect applied waterproofing from rain or ground water damage until backfill operations are completed.
- B. Install foundation wall backfill within seven days. Place backfill in a manner that will not damage waterproofing coating.
- C. Where recommended by the manufacturer, provide protection course.

END OF SECTION