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CREW INSTRUCTION FOR HORIZONTAL INSTALLATIONS

Properly detail all penetrations following the approved stamped details before pouring the mud slab.

DESCRIPTION OF THE LAURENCO WATERPROOFING SYSTEM:

This system consists of a waterproofing sheet(s) 50 mils plus or minus 10% thick and an adhesive. This Laurenco System is similar in activity to a two-component system in that the sheet contains not only the same rubbers as the adhesive but is also contains the cure agents (hardeners). The adhesive, with its' solvent, acts as the catalyst. Therefore, all adhesive applications shall be applied smooth and at the minimum application rate required for the substrate

- 1. The concrete surfaces to be waterproofed shall be reasonably dry to the hand or a dark cloth. All concrete repairs, to obtain a smooth surface, shall have been completed. A good wood screed or broom finish for the concrete is acceptable (often referred to as a "sidewalk" finish). Steel trowel finish is not recommended. Scrape all projections. Do not grind. Grinding drives the cement dust into the pores of the concrete creating a barrier that is difficult to "wet" with the adhesive. The adhesive is self-priming. A primer should not be necessary.
- 2. All debris shall be removed by broom or using a blower. Dust fines can be blown to a pile which can be removed and properly disposed of. Any small balance of fines can usually be dissipated in air and left to settle.
- 3. All foreign substances that will inhibit the adhesion of the waterproofing membrane shall be removed.
- 4. Application of the membrane shall be in accordance with the contract documents, the manufacturer's specification and the approved stamped details. Acceptable waterproofing sheet placement is to run all Sheets vertically up the wall or slope (example: wall paper with laps or strapping). Turn all end of sheet terminations 2 to 3 inches onto flashing details to create a "third" ply at interior corners. All waterproofing sheets are to be installed "cap sheet" fashion. Always maintain the specified four (4) inch laps plus or minus one (1) inch.
- 5. Adhesive shall be poured from its container (pail) to form a continuous ribbon approximately 3 inches wide. This ribbon should run the full length of the run of the squeegee coat to accommodate the waterproofing sheet to be installed.
- 6. Adhesive can then be uniformly distributed over the slab using an 18 inch to 2 feet wide wood head (or metal head) squeegee equipped with a FLAT solvent resistant blade 3/4 inch to one (1) inch deep at the minimum rate of:
 - 6.1. 1.5 gallons (24 wet mils) per hundred square feet to adhere the first ply of waterproofing sheet.

- 6.2. 1 to 1.25 gallons, (16-20 wet mils) per hundred square feet in which the second ply of waterproofing sheet is to be embedded.
- 6.3. 2 gallons, (32 wet mils) per hundred square feet to fully adhere the protection course.
- 6.4. Laps are to be fully embedded with adhesive at the minimum rate of 0.50 gallons (8 wet mils) per 100 square feet.
- 7. If additional adhesive is needed (more than the original or first bead), pour a second ribbon to the desired length of the installation of waterproofing sheet. Keep the quantities in a uniform coat so that the waterproofing sheet can be embedded tightly. The sheet must be difficult to disturb once it is placed. Do not work from a puddle of adhesive, because it is difficult to distribute into a uniform adhesive coat.
- 8. Adhesive shall be distributed using a continuous pull of the squeegee the length of the area to be coated, and then the squeegee is to be reversed back-blade to the beginning. Proceed back and forth until the entire area is covered to the width and length desired to complete the designated pattern to embed the waterproofing sheet.
- 9. Adhesive must be allowed to "tack" (use a finger to touch). There shall be several thin strings (similar to yellow glue) from the finger about 2 to 3 inches long.
- 10. The waterproofing sheet shall be unrolled polyethylene side up into the adhesive using an eighteen (18-24) inch wide wood head squeegee placed in the center of the sheet immediately behind the unrolling sheet to firmly embed the center areas of the waterproofing sheet as the beginning of the embedding process. Alternately a stiff bristle broom may be utilized to embed the sheet.
- 11. Follow this beginning placement, apply pressure from the center out to firmly embed the sides and laps of the sheet. This will also help dissipate any blisters of trapped air from the installation.
- 12. Apply adhesive to the already installed first ply at minimum rate as listed in items 6.2 and 6.4 above This second coat of adhesive shall be applied uniformly and smooth. Tack (set-up) time shall be the same finger test. See no. 9 above.
- 13. The second ply shall be set so that its side laps are offset from the first ply a minimum of 18 inches. There is to be no side lap upon a previous side lap. Do not install the Laurenco Waterproofing sheets shingle fashion.
- 14. During winter and early spring installation and the probable high humidity during these seasons, a minimum cure time of the membrane (sheet and adhesive) system will be 36 to 48 hours prior to water testing. Summer is usually 12 to 24 hours.
- 15. Top coat of adhesive, for embedment of the protection course, shall be applied at the minimum rate as listed in items 6.3 and 6.4 above
- 16. For areas to be permanently exposed to UV please contact Laurenco's Technical Department for Acceptable UV protective protection sheets and liquids.

WATER TESTS

Water tests or EFVM are required on all projects to be warranted with the exception of Bronze warranties. After the water test, the membrane shall be cleaned free of moisture. A top coat of Laurenco Adhesive shall be applied at the minimum rate as listed in item 6.3 above to adhere the Laurenco Protection Course with either a tight butt joint or an overlap pattern.

All flood testing is to be performed before the protection course is in place, unless the overlap method is used (4" side and end laps +/- 1"), and the testing over the protection course is approved by Laurenco's Technical Department. ALWAYS STAY TWO (2) TO THREE (3) INCHES BELOW TOP OF FLASHING TERMINATIONS. See ASTM D5957-98.

Duration of test shall be <u>48 hours minimum</u>. Monitoring of the building interior is the responsibility of the installation contractor. Discontinue testing if snow (freezing temperatures) or substantial rain is scheduled. Re-test when conditions allow. Use sand-bags or other approved means for containment. Protection board and top coating will be applied after the flood testing is completed and accepted just prior to the installation of the insulation.

For areas to be permanently exposed to UV please contact Laurenco's Technical Department for Acceptable UV protective protection sheets and liquids.

End of horizontal field instructions.