

## **CREW INSTRUCTION SHEET FOR THE V-1 AND SLOPE DECK INSTALLATIONS**

(The following instructions can be used for remedial retrofit work, as well as, new work.)

THE FOLLOWING PROCEDURES ARE TO BE USED ONLY AFTER ALL FLASHINGS HAVE BEEN INSTALLED.

### **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 applied from its container (pail) to the substrate with a roller or brush in multiple strips which will run the full length of the Sheet being installed.
6. Adhesive shall be uniformly distributed over the substrate using an 18 inch to 2 feet wide wood head (or metal head) squeegee equipped with a solvent resistant flat blade (not notched) or as an alternate a paint roller, 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. For vertical installations 1" minimum EPS or XPS insulation board may be acceptable as protection with prior written acceptance from the Laurenco Technical Department. Insulation boards are to be set in full bed of Laurenco Adhesive as described herein.
  - 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. 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. When applying with a roller, spread adhesive using short roller strokes maximum 12-18 inches to avoid excessive stringers.
  8. 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.
  9. The waterproofing sheet shall be unrolled polyethylene side up and cut into the appropriate length (5 to 7 feet) then hung on the wall embed into the adhesive using an eighteen (18) inch wide wood head squeegee placed in the center of the sheet immediately behind the unrolled sheet firmly embedding the center areas of the waterproofing sheet. Sheet lengths in sloped areas can be longer than 7 feet if provided the application is neat without wrinkles or "fish-mouths".
  10. 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.
  11. Apply adhesive to the already installed first ply at minimum rate as listed in items 6.2 and 6.4 above. The second coat of adhesive shall be applied uniformly and smooth. Tack (set-up) time shall be the same finger test. See no. 8 above.
  12. 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.
  13. Butyl sealant tape seals of all interior corners (junction of the horizontal deck and all walls and vertical projections, i.e. steel columns, conduit pipes, window washer davits, etc.). Prime coat thinly all areas to be sealed with Laurenco Adhesive. Embed the butyl sealant tape. Keep a can of water to wet fingers and tools used (i.e. scissors, knives) this will help prevent sticking.

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. Install Laurengo Protection Course or Expanded or Extruded insulation board in the wet-tacky Adhesive. When installing insulation place boards 2 to 3 inches away from its final position and slide into place.
16. For areas to be permanently exposed to UV please contact Laurengo's Technical Department for Acceptable UV protective protection sheets and liquids.

#### **WATER TESTS (SLOPED AREAS ONLY)**

17. After the water test, the membrane shall be cleaned free of moisture. A top coat of Laurengo Adhesive shall be applied at the minimum rate as listed in item 6.3 above to adhere the Laurengo Protection Course with either a tight butt joint or an overlap pattern.
18. **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") ALWAYS STAY TWO (2) TO THREE (3) INCHES BELOW TOP OF FLASHING TERMINATIONS. See ASTM D5957-98.
  - 18.1. Duration of test shall be **48 hours minimum**. 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.
19. Protection board and top coating will be applied after the flood testing is completed and accepted just prior to the installation of the insulation.
20. For areas to be permanently exposed to UV please contact Laurengo's Technical Department for Acceptable UV protective protection sheets and liquids.

**End of detailed vertical & slope field instructions.**