

## **SPECIFICATIONS FOR SUBSTRATES\***

In order for us to deliver the Duradek Waterproofing System to you as promised, and when promised, we need your cooperation. We have prepared a list of items that must be taken care of BEFORE our people can do their job. Special attention to these matters in ADVANCE will surely eliminate hold-ups, misunderstanding and callbacks. They are:

## **GENERAL**

- 1. All decks should be sloped 1/4" per foot. Decks with inadequate slope will have puddles at random over the surface as the building settles and the surface expands, contracts and warps.
- 2. Draining the water over the edge of the deck (and possible into a gutter) is the most problem free method. Drains and scuppers can be used effectively if required.
- 3. Plan the positioning of each drain or scupper considering the slope of the deck. Before the membrane is installed it is easy to add a few more outlets to be sure the water will be carried away. After the membrane is already down, putting in more water outlets is time consuming and expensive.
- 4. If in the rainy season, try to keep your decks covered to keep them from getting wet and warped if they cannot be waterproofed immediately. Protecting the decks from the hot sun will keep them from checking and cracking if left exposed. The better surface you can give us, the better finished product we will give you.
- 5. For a perfect waterproof installation, the membrane should be overlapped by the building paper AND the exterior cladding (siding). If the cladding must go on before the decks are waterproofed, try to leave the bottom loose to the membrane can be tucked up underneath.
- 6. If the building is to be stuccoed, you may consider making provisions to put on the membrane afterwards. This will reduce the possibility of damage or difficult clean up. Special counter flashings can be cut and installed on the walls before the stucco installation begins. The finished stucco will overlap the Duradek wall flashing and stop a few inches above the deck surface. When the stucco is complete, the membrane can be tucked underneath this counter flashing for complete waterproofing protection.
- 7. The decks must be given to the installers free of construction debris. Extra time involved in cleaning off decks may result in an additional charge.
- 8. Railings should always be installed AFTER the membrane. Try to avoid penetrating the deck with screws or posts, as these will require caulking to provide an adequate waterproof seal. Caulking is the weak link in the system and is an annual maintenance item for the building owner. Where possible, fasten rails to the fascia board instead of on the deck surface, or consider using Durarail mounted to the deck surface.

9. The membranes should be protected afterwards so they are not damaged by other subtrates or moving in/out of the building. Your dealer can take care of this (for a fee of course) or you can do it yourself with plywood, plastic, cardboard, etc. Do not use tarpaper or any bitumenimpregnated products, as there may be some color transfer in hot weather.

## WOOD SURFACES

- Moisture content of 12% 14% is ideal
  - o If less than 12%, let acclimate for two to seven days
  - o If more than 14%, let air dry
- Grade should be APA rated "Sturd I Floor" tongue and groove exterior fir or pine plywood OR underlayment as the top surface
  - All wood surfaces that are not suitable for direct contact with Duradek vinyl (CDX, OSB, AdvanTech, Pressure Treated, or extremely weathered plywood) must be overlayed with a suitable surface
- Thickness of plywood over joists or sleepers should be 3/4"
  - Overlays should ½" minimum of grade above
  - o Cement board also makes a good overlay
  - o Any dimensional lumber that is to be covered with Duradek should be overlayed
- Place plywood panels so that the surface grain is at right angles to the joists
  - o Center panels over beams to reduce ridging
  - o Stagger end joints in each succeeding row
  - o At outside drip edge, extend plywood to finished line of deck including trims and fascia boards
  - o When installing overlays, stagger all joints from original layout
- Space plywood to avoid ridging at butt and T&G joints
  - o Gap 1/16" if moisture content is 12% 14%
  - o Gap 1/8" if moisture content is less than 12% or is unknown
- Space fasteners 4" 6" along panel edges and 8" 10" along the joists
  - o Fasteners should be  $2'' 2\frac{1}{2}$ " coated deck screws
  - o Spiral or ring shank hot dipped nails are acceptable
    - Drive nails on a slight angle to reduce backout
  - o Slightly recess all fastener heads
  - o Gluing is helpful
    - Urethane adhesive is preferred over construction adhesive

## **CONCRETE SURFACES**

- Concrete must be completely cured
  - o Allow 28 days for most concrete
  - o Allow 14 days for lightweight concrete
- Slabs must be free of curing compounds, dirt or any other foreign matter
- All foreign matter and raised areas must be mechanically removed
- Fill cracks and minor spalling with cement based leveler
- Severely spalled surfaces should be resurfaced or overlayed with cement board
- Sealed concrete surfaces will need additional preparation by the installer