

Sure-Weld® Adhered Roofing System

“Attachment III”

Direct Application Over Lightweight Insulating Concrete

August 2007

When specified, the Sure-Weld TPO membrane may be adhered directly to a **new approved cellular or perlite lightweight insulating concrete** with a **minimum compressive strength of 225 psi**.

The Authorized Applicator must provide Carlisle with a copy of a certification letter from the lightweight insulating concrete manufacturer which references the project name and location and contains the manufacturer's brand name, minimum compressive strength, average wet and air dry densities.

The substrate must be free of any debris, fins, loose and foreign materials. Fill any gaps in the substrate greater than 1/4" with an appropriate material.

Application Cautions

1. Do not proceed with the membrane installation until the lightweight insulating concrete substrate has cured a minimum of 48 hours. If necessary, consult with the lightweight insulating concrete manufacturer concerning additional drying time.
2. After rain or other precipitation, follow the manufacturer's requirements concerning proper visual inspection and additional drying time prior to adhering the membrane.
3. Prior to membrane installation, darker areas, especially along hairline cracks in the concrete, may serve as an indication of moisture entrapment and possible standing water beneath the surface. If this condition is found, consult with the lightweight insulating concrete manufacturer for proper corrective measures.
4. Except when lightweight insulating concrete is poured over slotted steel decks, the roofing applicator must conduct core cuts at the minimum rate of 1 every 2,000 square feet. The core cuts should be located around hairline cracks (if present) where darker areas are visible. After core cuts have been taken, the substrate should be examined for evidence of moisture above the structural deck and, if found, a wet/dry vacuum system, as recommended by the lightweight insulating concrete manufacturer, must be utilized to remove standing water from beneath the surface of the concrete.
 - a. To ensure the efficient operation of the vacuum system, a tight seal must be provided between the nozzle of the vacuum and the lightweight concrete substrate.

A one-way pressure relief vent, approved by Carlisle, must be installed over each core cut in accordance with Detail A.14.