



Technical Information Bulletin: 1001

Venting LWIC Installed Over Structural Concrete

and Other Non-Venting Substrates

The physics of removing moisture laden air from Lightweight Insulating Concrete (LWIC) systems installed over non-venting substrates has not changed in over fifty years. Non-venting substrates include structural concrete, twin tees, precast units and installing LWIC over existing roofs in a re-roofing application.

The basic concept of removing moisture laden air requires one of several avenues of moisture removal to be present. These avenues include vertical openings from the building's inside to its outside through the system as in vertical protrusions such as piping, air conditioning units and other protrusions. Other avenues include edge venting of the roofing membrane and installing one-way stack vents. Each of these avenues allow moisture laden air to be dissipated out of the LWIC system into either exterior air or the building's interior where air conditioning removes moisture from the air.

Vertical protrusions may allow air to move into the building where air conditioning is able to remove moisture from the air.

Edge venting installed as part of the roofing details allow moisture laden air to move from internal high pressure conditions to low pressure conditions associated with outside air. Edge venting details may be installed around each vertical protrusion and at the exterior edge of roofing or parapet walls.

One-way stack vents installed in accordance with the manufactures instructions, will act in the same fashion as an edge venting detail.

For specific LWIC system venting recommendations, consult the supplier of the LWIC material for further details.