

WHAT HAPPENED HERE?



FAILED FULLY-ADHERED ROOF HELD IN PLACE BY 50-POUND BAGS OF CONCRETE

The Achilles Heel of Fully-Adhered Roofs

This 140,000 square foot, fully-adhered roof was punctured by falling ice from the adjacent buildings. The concrete roof deck held the water so the punctures were not immediately noticed. The moisture began to degrade the facer on the isocyanurate insulation under the membrane. (Note: In a fully-adhered roof, the facer is adhered to the iso insulation and the membrane is adhered to the facer). Soon, the facer delaminated from the isocyanurate insulation. The membrane was still glued to the facer, but the facer became unadhered to the iso.

Wind over the now loose membrane caused flutter. Flutter caused more delamination. More delamination caused more flutter. Soon, the entire 140,000 square foot roof was ballooning in a wind. Fully-adhered roofs are the “darling” of the roofing industry. But, fully-adhered roofs are the most problematic, the most prone to catastrophic wind damage. The unspoken truth is that the revered fully-adhered assembly depends on a 10 cent per foot facer for survival. The facer is the weakest link and, typically, the point of failure. Introduce moisture to the facer via a puncture and the games begin.



In 37 years of real-world experience, no wind damage of this kind (or wind damage of any kind) has ever occurred to a VADA Vented Roof. Period. Full Stop! VADA Vents use physics to neutralize wind uplift pressure differentials. A puncture in a VADA Vented Roof is inconsequential. The puncture is repaired and the VADA Vents remove the moisture. No harm done. This is just one of the many reasons we assert that VADA Vented Roofs may well be the best attachment method in commercial roofing.... ever!