Certifying Roof Deck Constructions for Wind Resistance

An uplifting experience

Building codes often require that roof deck constructions and coverings be designed to resist design wind load pressures in accordance with structural requirements specified in the code. They also require testing of various roof constructions to specific standards. To more effectively enforce these code requirements, it is important to understand two things: the general requirements in the testing standards and the markings that identify certified roof deck constructions.

Section 1504.3 of the 2009 International Building Code requires roof systems with built-up, modified bitumen, fully adhered or mechanically attached single-ply through fastened metal panel roof systems, and other types of membrane roof coverings to be tested in accordance with UL 580, UL 1897 or FM 4474. It also requires through fastened or standing seam metal panel roof systems to be tested in accordance with UL 580.

UL 580 roof deck construction certifications

Roof deck constructions Classified for uplift resistance are covered under the Roof Deck Constructions product category (TGWX) found in the UL Online Certifications Directory at **www.ul.com/database.** These roof deck assemblies have been investigated for their ability to resist both external and internal pressures associated with high velocity winds. Uplift Classifications are derived from tests conducted in accordance with UL 580, the Standard for Tests for Uplift Resistance of Roof Assemblies. This test

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