

TECHNICAL BULLETIN

Understanding Wind Uplift in Roof Deck Applications

Black Label™ Roof Deck Products incorporate advanced technologies, including specialized conventional decking solutions, a range of wood species, deck tile dimension options, pressure-fit pin connections, adjustable post-installation heights, and self-leveling pedestal systems.

Our roof deck products have been widely used across numerous projects in the United States, and there have been no reported cases of uplift damage. The superior design and innovative technology of our systems ensure they meet or exceed specifications for roof deck tiles, decking, and pedestals.

Black Label™ Deck Tiles are classified as Class A Fire Rated and fall under the Limited Combustible materials category, akin to Fire-Treated Wood.

Featuring a **Class 1 Durability** rating and constructed with stainless steel fasteners, Black Label[™] deck tiles offer the same exceptional longevity as our traditional decking products.

The Black Label[™] Decking, Deck Tile, and Pedestal System are designed to manage gravity, perimeter containment, and mechanical connections to comply with wind uplift standards. This system functions by creating a pressure-equalizing, air and water permeable deck that balances uplift forces. It achieves this through a combination of ballast, pressure equalization, and, in more extreme conditions, mechanical connections.

The 2012 update to the IBC code raised the allowable wind speeds across all regions. However, there are currently no specific IBC or ICC-ES criteria or ASTM test protocols for roof deck **tiles**, **decking**, and **pedestal** applications. While some manufacturers may refer to the ASTM TAS 108 test protocol, which is used for evaluating air-permeable, ridged, discontinuous roof systems like clay and concrete tiles, this protocol is not recognized by ICC-ES for roof deck systems. This is because the test does not address the physical attachment of pedestals to the roof substrate, as required by the protocol. Consequently, testing for all possible conditions and scenarios remains challenging.

To address this, we rely on engineering assessments to validate product performance under varying wind uplift conditions. Black Label™ Guides, which have been certified in Florida—a state known for its rigorous standards— provide this necessary data. These guides support designers during the specification phase and aid code officials in the approval process. They should be included in any submittal process.

This technical bulletin aims to offer up-to-date information on roof decks and wind uplift but **does not serve as a guarantee or warranty of any kind**, including warranties of merchantability or fitness for a particular purpose. The information provided should not replace the need for thorough analysis, investigation, and due diligence by engineers, specifiers, architects, builders, contractors, or owners concerning the selection, application, installation, and construction of Black Label[™] Roof Deck Tile, Decking, and Pedestal Systems for specific locations or applications.

