StormDefend TTH600 System

Insulgard Security Products • Brighton, Michigan, USA



Some building materials are specifically designed to hold up in extreme situations. When that's the case, only the best safety and performance testing is acceptable.

Overview

The Challenge

In 2000, the Federal Emergency Management Agency (FEMA) introduced FEMA P-361, 'Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms.' The third edition of P-361 was introduced in 2015. This document, often shaped along with the building industry itself in response to lessons learned from natural disasters, provides guidance on the construction of safe-rooms that offer near-absolute protection from wind and debris.

Meeting the requirements of FEMA P-361 is difficult and, since the document's initial introduction in 2000, Insulgard Security Products (Insulgard) has risen to the challenge. Insulgard has remained at the forefront of designing innovative products to meet the agency's recommendations and help keep people safe. The new StormDefend TTH600 system is the company's latest effort.

The Solution

To demonstrate system effectiveness, Insulgard approached UL to become the first company with a product to earn UL Certification to ICC 500-14 and meet P-361-15 requirements.

Insulgard Security Products

Insulgard Security Products designs, manufactures and markets architectural security products and systems built to resist ballistic, blast and severe weather events. The business' products are designed and manufactured to meet specific threat levels needed by the security industry including doors, windows, secure enclosures, glazing and framing. Insulgard Security Products' architectural security solutions blend with the environment to offer exceptional aesthetics. Products are rigorously tested to meet stringent government requirements.







"When we began," said Dave, "we knew the end goal was certification but, as with anything, we knew that the best thing for us was to try to do smaller-scale testing before we would advance and that was one of the valuable assets of UL. They worked with us. They knew we were doing some R&D to begin with."

Testing from a Globally Recognized Name

UL is often mentioned when safety and performance testing are part of the conversation. With a global team and worldwide recognition, the UL name delivers confidence and peace of mind and, when Insulgard was faced with new testing, they turned to a name they knew they could trust: "When you hear 'UL Labeled,' it's got name recognition," said Gerry Sagerman, Sales Development at Insulgard. "We wanted to go in with a reputable company that had name recognition." However, their reasons for working with UL expanded quickly following their first interactions for the project.

"We ended up coming to UL prior to making the final decision as far as where we were going to do the testing...[and] the overall feeling, the honesty that we had from meeting the different team members, and the goal of UL to get the latest and greatest type of advances in technology to allow us to do this type of testing really added a lot," said Dave Mix, Designer. In part, this feeling was the result of interactions with the team at UL, but it was also the result of seeing the state of the art facilities in Northbrook, Illinois and knowing that UL is constantly working with the larger industry to help ensure that new government requirements are applied equally and consistently to all labeled products.

Historically, compliance with FEMA P-361 was recommended, but P-361-15 requires that compliance be verified by an independent third party. The testing required to demonstrate compliance was new, leading to a challenging product development environment, but UL's modular approach and flexibility allowed Insulgard to test in smaller segments before pursuing full certification.

By combining UL's flexibility and testing expertise with Insulgard's experience in product development and innovation, the new StormDefend TTH600 system became the first to earn UL Certification to ICC 500-14. Today, the building industry can turn to the StormDefend TTH600 and know they are using a quality product backed by expert testing that will help keep building occupants as safe as possible.



Learn more at UL.com/buildingenvelope



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