Exterior Building Materials Testing

Southwest Research Institute® (SwRI®) studies fire dynamics and develops unique engineering and scientific resources to address fire testing of commercial and residential roofing materials in accordance with the ASTM E108 and UL 790 fire test standards. Flame spread, burning brand, intermittent flame and other tests are performed to classify different roofing components according to severity of the fire.

Capabilities

SwRI has the facilities and personnel required to perform the following tests for external roofing components:

• ASTM E108 – Standard Test Methods for Fire Tests of Roof Coverings
• UL 790 – Tests for Fire Resistance of Roof Covering Materials
• UL 2218 (Hail Drop) – Standard for Impact Resistance of Prepared Roof Covering Materials
• AC 07, Section 4.5 (Penetration)

Wildland-Urban Interface Building Test Standards

• CA SFM 12-7A-4 Fire Resistant Standards for Decks and Other Horizontal Ancillary Structures
• CA SFM 12-7A-1 Fire Resistant Standards for Exterior Wall Siding and Sheathing
• CA SFM 12-7A-3 Fire Resistant Standard for Eaves

SwRI has worked with the California State Fire Marshal (CA SFM), ASTM E05 and E14 subcommittees, and various commercial clients to promote the understanding of wildland-urban interface fires. These fires, typically characterized by quick spread due to ignition of dried vegetation, have plagued homeowners and insurance agencies for decades. As new standards are developed with fire exposures representative of actual forest fires, the risk of both property and life loss is greatly reduced.

We welcome your inquiries. For additional information, please contact:

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