STUCCO FUTURES

Wildland Urban Interface, Wildfire Resilience, and the Future of Stucco

September 25, 2026

The September 25, 2026 Stucco Futures Exchange focused on wildfire resilience, Wildland Urban Interface (WUI) requirements, insurance pressures, and the role stucco can play in fire-resistant wall assemblies. Manufacturers, builders, consultants, architects, contractors, and suppliers joined a pre-forum technical exchange by email and a live session, with a guest presenter opening the discussion on WUI requirements and home hardening.

Why This Matters

Wildfire resilience is no longer limited to traditional WUI regions. Risk is expanding beyond the Western U.S., and builders, owners, and insurers everywhere are asking how exterior walls will perform when fire arrives. For stucco, that is both a responsibility and an opportunity.

The Question

How should the industry communicate, test, and detail stucco assemblies so their contribution to fire-resilient building envelopes is clearly understood?

What the Discussion Revealed

- Wind-driven embers are the leading source of home ignition during wildfires and must be addressed in any fire-hardening strategy.
- Effective home hardening is systems-based, covering walls, roofs, vents, soffits, openings, and surrounding site conditions.
- Defensible space remains a critical part of wildfire mitigation, alongside building design.
- Stucco is recognized as a durable, non-combustible cladding that resists radiant heat exposure.
- Both traditional three-coat and tested one-coat stucco assemblies are being used successfully in wildfire-prone regions, including California.
- Builders are increasingly evaluating construction systems through the lens of insurability, insurance costs, and long-term resilience.

Understanding the Fire Tests

Participants clarified the difference between two commonly referenced tests. **ASTM E119** is a fire-resistance test that evaluates structural integrity and temperature transmission during fire exposure, and is commonly used to establish one-hour wall ratings. **NFPA 285** is a fire propagation test that evaluates flame spread within exterior wall assemblies. The two measure different performance characteristics and are not interchangeable.

Stucco Systems in WUI Applications

- **Traditional three-coat stucco:** a long history of fire-resistant performance, recognized in code fire-resistance provisions, and a substantial non-combustible exterior layer.
- **Tested one-coat systems:** supported by proprietary testing and approvals, and evaluated as complete tested assemblies rather than as individual components.

Insurance as a Market Driver

Insurance was one of the strongest themes of the session. Coverage is harder to obtain in some wildfire-prone areas, and rising premiums are influencing material selection. Many participants felt insurance pressure may drive adoption of resilient building practices as much as, or more than, building codes. A national homebuilder shared examples of California communities that exceed baseline code requirements through enhanced wildfire resilience programs.

Positives

- Growing homeowner and builder awareness of wildfire risk
- Increased use of non-combustible and fire-resistant materials
- Strong interest in complete-assembly performance over individual products
- Open collaboration across manufacturers, builders, designers, and contractors

Concerns

- Stucco's fire-resilience story is not communicated as clearly as it could be.
- Successful WUI compliance depends on complete assemblies and careful detailing.
- Roof assemblies, vents, and other ember entry points can undermine a fire-resistant wall.

What It Means in Practice

Wall assembly performance should be judged on tested system performance and project requirements. Stucco's value extends beyond first cost to resilience, durability, life-cycle value, fire resistance, and insurance and risk reduction. If stucco is to hold its place in resilient construction, the industry must tell that story with evidence.

Next Steps

- Develop education on the fire-resistance characteristics and real-world wildfire performance of stucco assemblies.
- Explore continued testing of stucco assemblies with continuous insulation and WUI-related performance.
- Build industry messaging around resilience, durability, life-cycle value, and insurability.
- Continue the Exchange as codes evolve and markets adapt, and invite participants to propose future topics.

What do you think?

Let us know at www.clarkdietrich.com/stuccofutures, or on LinkedIn, Instagram, or Facebook #stuccofutures