STUCCO FUTURES

Lath Orientation and CI Installations

June 5, 2026

The June 5, 2026 Stucco Futures session focused on lath orientation and continuous insulation (CI) installations. A representative of the Stucco Manufacturers Association (SMA) led a discussion of field experience, code language, and product specification, joined by contractors, manufacturers, and standards contributors.

The Question

Does ASTM C1063 clearly govern lath orientation and fastening in CI assemblies, where lath is attached to furring rather than structural framing?

Two Lath Types

- **Expanded metal lath (EML):** made by slitting and stretching sheet metal. Its diamond openings form a directional cup that affects mortar retention.
- **Welded wire lath:** a non-directional grid. Performance is governed by wire gauge, mesh opening size, and fastener placement.

ASTM C1063 addresses orientation differently for each type, and field application is inconsistent.

The Orientation Debate

C1063 requires EML to be installed with cups oriented to receive and retain mortar, with the long dimension of the diamonds perpendicular to framing. In practice, EML is frequently installed horizontally in CI assemblies, where crews are working with thicker substrates and less familiar fastening sequences. Cup orientation is often overlooked or reversed.

A key ambiguity is that C1063 references orientation relative to framing members, but in a CI assembly the attachment point is typically a furring strip or hat channel. Two positions emerged:

- The performance intent, mortar embedment and mechanical key, applies regardless of substrate.
- Furring members are functionally distinct from framing members, so the language does not unambiguously govern CI installations.

The presenter's position was that the gap is in the standard's language, not a license to deviate from installation best practice. An ASTM contributor noted that the C11 committee has this language under active review, with clarification anticipated in the next revision cycle.

CI Assembly Field Issues

- **Fastener length and pullout:** in CI assemblies of 2 inches or more, fastener length is critical and often under-specified. Some fasteners selected for the CI thickness left inadequate embedment into framing.
- **Trim accessory shimming:** at windows and doors, trim must be shimmed to stay in plane with the cladding through the CI thickness. This is often omitted or improvised.
- **Drainage continuity:** drainage must run continuously from top to bottom, with attention to transitions at penetrations, openings, and base conditions.

Structural Sheathing with Drainage Plane

A manufacturer representative introduced a sheathing system that integrates a drainage plane with a defined fastening pattern for attaching cladding through CI. NFPA 285 compliance was confirmed for multi-story construction, and the system includes an engineering letter specifying fastener type, spacing, and embedment. The representative offered to share the letter and the NFPA 285 report. Discussion also touched on how welded wire lath interfaces with the panel surface, particularly fastener placement relative to crosswire geometry.

Fastener Placement Relative to the Crosswire

A field photo shared during the session prompted close review. One participant observed that fasteners appeared above the crosswire rather than below it, contrary to specifications that call for fasteners to bear below the crosswire for maximum mechanical resistance. This matters because:

- It reduces system performance in ways that are difficult to detect after installation.
- It appears in litigation exhibits as evidence of deficient installation.

Current installation documentation from manufacturers and standards is not always explicit about fastener placement relative to crosswire geometry, particularly for vertical lath installations.

Construction Defect Litigation

A Florida participant described the types of failures generating claims in Texas and Florida:

- Water intrusion at penetrations
- Lath corrosion in coastal climates
- Inadequate drainage at base conditions

One contractor is coordinating a group of contractors preparing formal complaint letters about specification and enforcement gaps. Interested parties can contact that member directly.

Industry News

The National One Coat Stucco Association has formally dissolved and been absorbed into SMA. Its technical resources, AIA programs, and membership now sit under SMA, which holds a broader national mandate covering both one-coat and three-coat systems, a step toward a more unified industry voice.

What It Means in Practice

Installers and specifiers should not wait for the standard to be clarified. Follow the performance intent: orient lath to retain mortar, select fastener length for the full CI thickness, shim trim to the cladding plane, keep drainage continuous, and place fasteners below the crosswire.

What Remains Unresolved

- How will the next C1063 revision treat orientation over furring members in CI assemblies?
- How can manufacturers and standards make fastener placement relative to crosswire geometry explicit, especially for vertical lath?
- Should construction litigation become a dedicated future topic?

What do you think?

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