Wire Tying Along Horizontal Side Laps

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Section 7.8.1 of ASTM C1063 states that side laps of metal plaster bases must be wire tied between supports at intervals not more than 9 inches.

Historically, Structa Wire laths have not been wire tied at side laps. Over many years, the resulting stucco claddings have not shown or experienced failures at these lap joints.

Structa Wire undertook a series of experiments to determine if there were any measurable or observable differences between wire tying and not wire tying the side laps of its Structa laths. These experiments were conducted over walls with sheathing.

A series of panels were cast – half were wire tied and identical versions were not. The key factors evaluated were wire positions for both lath courses at the lap joint prior to and after plastering; degree of embedment at the lap joints; measurement ofstucco thicknesses at the lap joint; tensile pull tests of the panels across the lap joint; and observation of location of first crack in relation to the lap joint location.

The results showed that the wire tied panels and Structa lath non-wire tied panels performed equivalently for each criterion. For Structa non-tied panels, the tensile load strengths were actually higher.

As a result of these experiments and successful history with non wire tied side laps wire laths, Structa Wire approves the installation of its laths over sheathing without the need for wire tying of the side laps.

NOTE: In situations where the two courses of lath are not laying flat and in close proximity of the sheathing, the side laps of the lath must be tied. Further if the lath is bulging away from the sheathing, the lath is to be tightened by twisting of wires by pliers or by other means.

If you require further information, please do not hesitate to reach out to us at 1-800-887-4708.

