**TWIN LOC-NAIL BASE SHEET FASTENER**

**BASE SHEET, RECOVERY BOARD, AND INSULATION ATTACHMENT TO LIGHTWEIGHT INSULATING CONCRETE, STRUCTURAL WOODFIBER, AND POUR GYPSUM**

**COMPOSITION - Factory pre-assembled components consisting of:**

**Tube:** Precision formed from coated steel to prevent corrosion. The tube is shaped to easily penetrate decking and existing membranes.

**Disk:** Precision formed from coated steel to prevent corrosion, 2.7” diameter. Securely clamped to tube and rib reinforced to resist cupping.

**Locking Staple:** Precision formed from stainless steel wire.

**TECHNICAL DATA**

**Approvals:** Twin Loc-Nails maintain Factory Mutual and Miami-Dade County Approvals.

**Fastening Pattern:** Consult Factory Mutual or Miami-Dade County requirements for recommended pattern in normal, exposed, and hurricane areas.

**Field Testing:** On-site withdrawal testing should always be performed to evaluate the ability of the roofing substrate to satisfactorily accept and retain fasteners. Such testing may alter fastener selection and modify applicable fastening patterns. The Twin Loc-Nail should always be embedded into the structural roof deck to a depth of at least 1”.

**INSTALLATION**

**Equipment:** Always use a Twin Loc Driver or Twin Loc Insulation Driver. Consult TRUFAST for the specific driver for your application.

**Method:** Drive Twin Loc-Nail perpendicular to roof deck, seating cap flush with roofing surface. Once tube is set, drive the locking staple into the tube/disk unit until the top of the staple is flush with the cap (see illustration).

**Operation:** When locking staple is driven, its dual wire legs diverge, anchoring the fastener in place (see illustration). Uplift resistance may vary depending on the density and integrity of the substrate.

**PRODUCT SELECTION**

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<tbody>
<tr>
<td>TWL-1400</td>
<td>Twin Loc-Nail, 1.4” (35.6 mm)</td>
<td>500</td>
<td>26 lbs.</td>
<td>15,000</td>
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<tr>
<td>TWL-1800</td>
<td>Twin Loc-Nail, 1.8” (45.7 mm)</td>
<td>500</td>
<td>28 lbs.</td>
<td>15,000</td>
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<td>TWL-2800</td>
<td>Twin Loc-Nail, 2.8” (71.1 mm)</td>
<td>500</td>
<td>34 lbs.</td>
<td>15,000</td>
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<tr>
<td>TWL-3800</td>
<td>Twin Loc-Nail, 3.8” (96.5 mm)</td>
<td>500</td>
<td>42 lbs.</td>
<td>15,000</td>
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<tr>
<td>TWL-4800</td>
<td>Twin Loc-Nail, 4.8” (121.9 mm)</td>
<td>250</td>
<td>27 lbs.</td>
<td>7,500</td>
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Roofing disk is securely clamped to the tube

Existing membrane

Factory pre-inserted staple

Recovery board

First impact sets tube. Second impact actuates staple.

As locking staple is driven, its dual wire legs diverge, anchoring the fastener in substrate
USING THE TWIN LOC-NAIL

Fastener density and spacing vary depending on applicable uplift requirements. Local codes, governing approval bodies, membrane manufacturers, and individual roofdeck manufacturers all may have specific requirements that need to be addressed prior to beginning any roofing project. The Twin Loc-Nail should always be embedded into the structural roofdeck to a depth of at least 1". The following illustrates typical FM Global recommended fastening patterns widely accepted by membrane and roofdeck manufacturers.

FASTENING GUIDE I

BASE SHEET ATTACHMENT FOR BUILT-UP OR MODIFIED BITUMEN ROOF COVERS
CLASS I-90 WINDSTORM CLASSIFICATION

An FM approved base sheet is fastened in the field on the roof with Twin Loc-Nails installed 9" on center in 2" wide base sheet side laps and 18" on center staggered in 2 rows, equally spaced, between the base sheet side laps.

When fastening meter-wide material with this pattern, expect to use approximately 86 fasteners per square (100 ft²).

FASTENING GUIDE II

RECOVERY BOARD AND INSULATION ATTACHMENT UNDER BUILT-UP AND MODIFIED BITUMEN ROOF COVERS • CLASS I-90 WINDSTORM CLASSIFICATION

An FM approved recovery board/insulation, suitable for use with minimum 3-ply built-up or modified membranes, is fastened with 8 Twin Loc-Nails per 4' x 4' board in a diamond in a box pattern (1 fastener per 2 ft²).

Consult FMRC for a complete listing of approved recovery boards/insulations.

FASTENING GUIDE III

RECOVERY BOARD AND INSULATION ATTACHMENT UNDER FULLY ADHERED SINGLE PLY MEMBRANES • CLASS I-90 WINDSTORM CLASSIFICATION

An FM approved recovery board/insulation, suitable for use with fully adhered single ply membranes, is fastened with 12 Twin Loc-Nails per 4' x 4' board in 4 rows of 3 fasteners per row (1 fastener per 1.33 ft²).

Consult FMRC for a complete listing of approved recovery boards/insulations.

DISCLAIMER

The performance specifications published in this TRUFAST® product literature are based on controlled laboratory tests and are intended as a guideline only. They are not guaranteed in any way by the ALTENLOH, BRINCK & CO. U.S., INC. (the manufacturer), since building design, engineering, and construction, including workmanship and materials, are beyond the control of the manufacturer.