Specifications

FLINTFAST® FM-90
BASE SHEET TO LIGHTWEIGHT INSULATING CONCRETE AND VARIOUS GYPSUM ROOFDECKS

Composition

**Fastener:** Precision formed from polymer coated steel to prevent corrosion. Rectangular dual gripping legs, 1.7" long.

**Disk:** Precision formed from coated steel to prevent corrosion. Integrally locked to fastener. Rib reinforced cap, 2.7" diameter.

Technical Data

**Approvals:** FM-90 fasteners maintain Factory Mutual, Underwriters Lab and Miami-Dade County Approvals.

**Fastening Pattern:** Consult Factory Mutual, Underwriters Lab or Miami-Dade 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.

Installation

**Equipment:** Always use the Magnetic Driver to ensure proper fastener installation.

**Method:** Drive FM-90 as an ordinary nail. DO NOT TOE. Seat cap flush with roofing surface.

**Operation:** As FM-90 is driven, dual legs diverge to cut a plug of deck material, and wedge and anchor the FM-90 in its own hole. No pre-drilling is required.

**Packaging:** 1,000 FM-90 fasteners per carton. Gross weight: 40 lbs. Shrink wrapped and palletized.

Elastomeric polymer coating protects exposed surfaces of fastener from corrosion. Meets FM-4470. Use only approved base sheet materials. Fastener anchors itself in its own hole by cutting an inverted wedge of concrete. No pre-drilling required.
Using The FM-90

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 following illustrates a typical Factory Mutual Approved fastening pattern widely accepted for use by membrane and roofdeck manufacturers.

Fastening Guide
Class 1-90
Windstorm Classification

An FMRC-approved base sheet is secured to an FMRC-approved lightweight insulating concrete roofdeck as outlined in the current edition of the FMRC Approval Guide and/or RoofNav.

The base sheet is secured in the field of the roof with FM-90 fasteners installed 7.5” on center in 4” wide side laps and 7.5” on center in two staggered rows, equally spaced, between the side laps.

When fastening meter-wide material with this pattern, expect to use approximately 165 fasteners per square (100 ft²).

Important:

Prior to roofing, 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 fastening selection and modify applicable fastening patterns.

Fastening Guide
Class 1-120
Windstorm Classification,
Celcore New Construction Only

An FMRC-approved base sheet is secured to an FMRC-approved lightweight insulating concrete roofdeck as outlined in the current edition of the FMRC Approval Guide and/or RoofNav.

The base sheet is secured in the field of the roof with FM-90 fasteners installed 9” on center in 4” wide side laps and 12” on center in two staggered rows, equally spaced, between the side laps.

When fastening meter-wide material with this pattern, expect to use approximately 113 fasteners per square (100 ft²).

Important:

Prior to roofing, 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 fastening selection and modify applicable fastening patterns.

For more information, contact CertainTeed Commercial Roofing Technical Services at 800-396-8134 x2.