

DESIGN AND BUILDING REQUIREMENTS

Notes to Architects, Builders and Developers Concerning Installation of Maxxon Underlayments



Building Considerations

INTERIOR BUILDING CONDITIONS

Building interior should be enclosed and maintained at a temperature above 50°F (10°C) before, during, and after installation of a Maxxon Underlayment. This temperature should be maintained until both the structure and subfloor temperatures are stabilized and underlayment meets the acceptable dryness level. For steel deck applications contact Maxxon Corporation for preparation/installation details.

DESIGN

The structural floor should be adequate to withstand design loads, including construction loads, with deflection limitations of L/360. Both the structural subfloor and floor joist must comply with manufacturers' maximum span criteria. Typically a deflection limitation of L/360 is adequate for Maxxon Underlayments. Some floor coverings, such as marble, stone, travertine and ceramic tile, may require a stiffer floor system. Maxxon Underlayments are non-structural and therefore cannot be expected to reinforce structurally deficient subfloors. Necessary allowances should be made for expected live, concentrated, impact, and/or dead loads including the weight of the finished floor goods assembly.

Additional consideration should be taken for concentrated/dynamic loads. U.S. building codes typically specify a uniform live load of 40 pounds per square foot for residential floor designs. This load is intended to account for large loads that can occur in a building. In reality these loads are not uniform, but rather consist of items such as furniture and appliances that actually induce concentrated loads far exceeding 40 lbs per sq ft. Rolling concentrated loads such as office chairs, wheelchairs, and motorized scooters add turning, twisting, repetition, and other dynamics which should also be taken into consideration. Determining the appropriate structural design of the floor is not the responsibility of Maxxon nor the Maxxon applicator.

Maxxon Underlayments will not structurally bridge over expansion joints, saw cuts or structural cracks. Expansion joints should be allowed to continue through the underlayment. The architect or structural engineer must specify expansion joints and show their location in areas that will receive hard surface floor goods such as ceramic or marble tile, and hardwood flooring.

END USE

Maxxon Underlayments are not resurfacing toppings for heavy-duty industrial floors or chemical environments requiring customized industrial toppings. Excessive service conditions, such as steel or hard-plastic wheeled traffic, dragging heavy metal equipment or loaded

pallets with protruding nails over the floor can cause gouging and indentation. Maxxon Underlayments cannot resist stresses caused by structural movement, and are intended for interior use only. They are not intended for use as a wear surface* or where they will come in prolonged contact with water.

Moisture Mitigation

Maxxon Underlayments installed above crawl spaces must be protected by a vapor barrier.

Maxxon Underlayments are not a vapor barrier and are not designed to be installed on or below grade except over properly tested concrete substrates. The general contractor/project superintendent, architect, specifier, or building owner shall test on grade, below grade, or elevated slabs for MVER (Moisture Vapor Emission Rate) as per ASTM F1869 (Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride) or RH (Relative Humidity) as per ASTM F2170 (Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes). Maxxon strongly recommends determining the RH content (%) on slabs to be treated using in situ probes. Alternatively, Anhydrous Calcium Chloride testing may be used to determine the MVER in lb/24 hrs • 1000 ft² (grams/hr • m²) as per ASTM F1869. The testing must be carried out before application of a Maxxon Moisture Vapor Barrier. If the MVER or RH of the concrete substrate exceeds the floor covering manufacturer's respective requirements for the finished flooring system, the concrete should be treated with a moisture vapor barrier, such as Maxxon DPM or Maxxon MVP, before installing a Maxxon Underlayment.**

Underlayment Installation

PRODUCT THICKNESS OVER WOOD SUBFLOORS

SUBFLOOR THICKNESS	TRUSS, BEAM OR JOIST SPACING	MINIMUM THICKNESS OF UNDERLAYMENT
19/32" (15 mm) [5/8"]	16–19.2" o.c. (406–487 mm)	3/4" (19 mm)
19/32" (15 mm) [5/8"]	19.2–24" o.c. (487–610 mm)	1" (25 mm)
23/32" (19 mm) [3/4"]	16–24" o.c. (406–610 mm)	3/4" (19 mm)

The subfloor must be broom clean and contaminant free. Before pouring Maxxon Underlayment, the subfloor is coated with a company-approved primer.

*Certain Maxxon Underlayments may be used as a wear surface with Maxxon approved sealers. Contact your Maxxon Regional Representative for more information.

**For details on moisture vapor barrier installation, contact your Maxxon Regional Representative.

