

ARCHITECTURAL GUIDE SPECIFICATIONS

SENCORABLES LLC

FloorX, Pressure Sensitive Underlayment
Created January 2018

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Limited permission is hereby granted to incorporate portions of this guide specification into project specifications requiring the use of Sencorables' FloorX, Pressure Sensitive Underlayment.

Edit suggested guide specifications in accordance with project requirements. Delete, add, or modify text as required.

These guidelines do not supersede Sencorables' Installation Instructions.

Sencorables shall not be liable for any damages arising out of the use of this guide specification. You are responsible for the accuracy of all project specifications, including these.

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PART 1 GENERAL

1.1 SECTION INCLUDE

**** NOTE TO SPECIFIER **** Delete items below not required for project.

- A. Pressure Sensitive underlayment for the following flooring applications:
 - 1. Solid wood and engineered wood.
 - 2. Laminate and floating engineered wood.
 - 3. Carpet and carpet tile
 - 4. Luxury vinyl tile and planks.
 - 5. Tile
 - 6. Epoxy

1.2 RELATED SECTIONS

**** NOTE TO SPECIFIER **** Add any sections below relevant to this project.

1.3 REFERENCES

**** NOTE TO SPECIFIER **** Delete references from the list below that are not actually required.

- A. ASTM International (ASTM):
 - 1. ASTM E-648 - Standard Test Method for Critical Radiant Flux Floor Covering Using a Radiant Heat Energy Source, also referenced to as NFPA 253 and FTM Standard 372.
 - 2. ASTM F-710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
 - 3. ASTM F-1869 - Moisture Vapor Emission Rate of Concrete Subfloor.
 - 4. ASTM F-2170 - Determining Relative Humidity in Concrete Floor Slabs using In-Situ Probes.
- B. Surface Flammability of Carpets and Rugs (16 CFR Chapter II, Subchapter D, Part 1630 CPSC FF 1-70) also referenced to as ASTM D2859.
- C. British Spill Test:
Test Protocol: A swatch of underlayment is placed face yarn upward. From a height of 1 meter, 100 milliliters of a blue dye solution is poured on the carpet. A blotting cloth under the carpet measures how much of the dye passes through the face and the backing of the carpet in a 24-hour time period. The piece of carpet is rated between 1 and 4 (1—no transfer of dye through the sample; 2—minimum discoloration, but hardly visible; 3—very visible but light in color; or 4—very visible and deep in color).
- D. Moisture Penetration under Dynamic Crush Test (10,000 impact test)
Test Protocol: A swatch of underlayment is placed under a dynamic crush apparatus that strikes the carpet at 10.0 pounds per square inch. A small amount of red dye solution is poured onto the surface with a filter paper under the back of the carpet. At the conclusion of the required cycles (usually 10,000), the filter paper is graded in this manner: 1 — no

transfer of dye through the sample; 2 — minimum discoloration, but hardly visible; 3 — very visible but light in color; or 4 — very visible and deep in color.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings: Including but not limited to installation and perimeter details.

1.5 QUALITY ASSURANCE

- A. Product Requirements:
 - 1. Flammability: Meets or exceeds Federal Flammability Standard: CPSC FF 1-70 (Pill Test).
 - 2. Radiant heat: Meets or exceeds Standard Test Method for Critical Radiant Flux (ASTM E-648, also referenced to as NFPA 253 and FTM Standard 372.
 - 3. Spill test: Meets or exceeds British spill test Method E.
 - 4. Water Penetration by Impact: Meets or exceeds Moisture Penetration under Dynamic Crush Test

**** NOTE TO SPECIFIER **** Include a mock-up if the project size and/or quality warrant taking such a precaution.

- B. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, HANDLING, AND STORAGE

- A. Store materials in manufacturer's labeled packaging until ready for installation.
- B. Store materials in a clean, dry environment, protected from the elements on a smooth and level surface.
- C. Storage temperature should be between 65° F (18° C) and 85° F (29° C).
- D. Protect from damage. Do not stack more than 3 cartons high. Do not drop cartons. Do not double stack pallets. Ensure labels face up so that production numbers and site location can be easily read.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
- A. All areas should be fully enclosed, weather-tight with the permanent HVAC system in operation.
- B. The temperature should be maintained at a minimum of 65° F (18° C) and a maximum of 85° F (29° C) for 48 hours prior to, during, and 48 hours after installation. Thereafter, maintain a room temperature between 55° F (13° C) and 100° F (38°C).
- D. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 WARRANTY

- A. Manufacturer's Standard Limited Warranty

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Sencorables LLC, which is located at: 1040 Thousand Oaks Blvd, Suite E, Greenville, South Carolina, 29607, United States of America, Tel: +1-864-631-1974; Email: request info (info@floorx.com); Web: www.floorx.com

**** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; add as required**

- B. Submissions: Permitted
- C. Requests for substitutions will be considered in accordance with provisions of Section

2.2 PRESSURE SENSITIVE UNDERLAYMENT

- A. Description: A flexible 6-layer composite structure consisting of a wear resistant engineered polymer encapsulated in a spun bond moisture barrier non-woven material. Inert hot-melt adhesive and electronics.
- B. To withstand more than 2000 pounds of weight per square inch of floor surface.
- C. Flexible large size units up to 11' x 32' (3.35 x 9.75m). Standard small size tiles or individual strips are not accepted.
- D. Individual units should have their own controller that automatically connects wirelessly to a central processing unit. Clicking or connecting individual units together is not accepted.
- E. Individual units to be easily adjustable on site to follow the contour of a space without the need for special tools or risk of losing part of the sensing area.
- F. Sensing points density: 340/380 sensing point per square yard/meter or more.
- G. Information gathered per sensing point: Coordinates, pressure and time stamp.
- H. Calibration: the option of calibrating sensing points is required

- I. Deadweight: Sensing points should ignore deadweight but still measure pressure changes.
- J. Zones: Sensing points can be combined to create zones to which triggers can be assigned.
- K. Thickness: 1.38" (.80 mm).

PART 3 EXECUTION

3.01 INSPECTION

- A. Examine subfloors prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the flooring material.
- B. Inspect subfloors prior to installation to determine that surfaces are free from curing, sealing, parting and hardening compounds; residual adhesives; adhesive removers; and other foreign materials that might prevent adhesive bond. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.
- C. Ensure the subfloor is free from dust, dirt, grease, and all foreign materials.
- D. Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.
- E. Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.
- F. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.02 PREPARATION

- A. Ensure that moisture tests have been conducted and that the results do not exceed 5.0 lbs. per 1000sq.ft. in 24 hours as per ASTM F-1869 and 85% In-Situ relative humidity when tested according to ASTM F-2170.
- B. Ensure that a bond test is conducted and passed in case the material will be adhered to the subfloor or underlayment
- C. The permanent HVAC system is turned on and set to a minimum of 65°F (18°C) for a minimum of 48 hours prior to, during and after installation. Thereafter, maintain a room temperature between 55° F (13°C) and 100° F (38°C).
- D. Flooring material has been climatized to the installation area for a minimum of 48 hours prior to installation.

- E. Material have been visually inspected prior to installation.
- F. Floor plans are available at site, have been inspected and compared to the material delivered.
- G. Floor plans have material unit locations numbers that correspond with labels on cartons.
- H. Floor plans indicate electronic components location.
- I. Ensure that all recommendations for subfloor, underlayment and jobsite conditions are met prior to beginning the installation. Once the installation is started, you have accepted those conditions.
- J. Ensure the finished/final floor cover, to be installed over the material, to be onsite and ready for installation immediately after installing the material. Avoid material being exposed for more than 48 hours. Avoid heavy traffic or furniture/elements/building material placement directly on the material units.

3.03 INSTALLATION OF PRESSURE SENSITIVE UNDERLAYMENT

- A. Install Underlayment in strict accordance with the manufacturer's Installation Instructions.

3.04 CLEANING AND PROTECTION

- A. Perform initial maintenance according to the manufacturer's installation, maintenance and warranty literature. Protect installed underlayment as recommended by the manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings. No heavy traffic or furniture/elements should be placed on the underlayment before the finished floor has been installed.

END OF SECTION