

# **Loose Lay Resilient Installation Guidelines**

## Important Information before You Begin

# Installer/Owner Responsibility

Carefully inspect all materials before installation. Materials installed with visible defects are not covered under the warranty. Do not install - if you are not satisfied with the flooring; contact store immediately. Final quality checks and approval of the product is the sole responsibility of the owner and installer. Make sure you are installing the correct color; no claims will be accepted for color once the material is installed. Please read the provided warranty for your product before installation.

The installer/owner must determine that the job-site environment and sub-floor surfaces meet applicable construction and material industry standards. The Manufacturer declines any responsibility for job failure resulting from deficiencies caused by sub-floor or job-site environment or installation related items. All sub-floors must be clean, flat, dry and structurally sound.

#### **General Information**

- Prior to installation material should be stored in a climate-controlled environment between 65-85 F (18.3-29C) degrees prior to installation. Allow the material to acclimate for a minimum of 48 hours prior to installation.
  - Store cartons flat and square on top of one another. Select a storage location that is away from vents, direct sunlight, etc..
- To help prevent discoloration or fading from UV light/direct sunlight use of blinds and/or drapes is recommended. Additionally, high direct temperature from sunlight may result in thermal expansion causing the material to buckle or expand this is **NOT** a defect of the material.
  - Install material from several cartons at a time to blend the material.
  - Carefully inspect material prior to installation If any concerns with the material contact the place of purchase and do NOT install the material.
  - Use the proper leveling compounds to provide a flat surface subfloors should be 3/16" in 10' or 1/8 in 6' the use of a 6' level can help to determine the
    - flatness of the subfloor.
  - Moisture testing is required and should be performed with the proper testing equipment.

# **Approved Subfloors**

All substrates to receive resilient flooring must be tested for moisture. Do Not install material if the moisture levels exceed the limits set forth in the installation guidelines or are in excess of the adhesive's moisture limits. All substrates must be clean, flat, dry and structurally sound. Substrates must be free of contaminants such as dust, paint wax, oil residual adhesive, mold, mildew and or other foreign material that may impact the bond of the adhesive. DO NOT use any chemicals or solvents to remove foreign materials as the residual residue can damage the adhesive or LVP thus resulting in product failure.

**Wood Panel Type Substrates** - New and existing panel type wood floors should meet the ASTM F1482, Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.

**Double layered** – APA rated plywood subfloor minimum 1" thick and APA underlayment grade panels approved for use under resilient flooring. Any failures of the wood panel substrates fall under the warranty of the panel manufacturer. Do **not** install over fire treated and or pressure treated plywood.

**Concrete Substrates** - New and existing concrete subfloors should meet the guidelines of the latest edition of ACI 302 and ASTM F 710, "Standard Practice for

Preparing Concrete Floors to Receive Resilient Flooring" available from the American Society for Testing and Materials.

## **Lightweight Concrete**

New and existing light weight concrete floors should meet the ASTM F2471, Standard Practice for Installation of Thick Poured Lightweight Cellular Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring.

All recommendations and guarantees as to the suitability and performance of lightweight concrete under resilient flooring are the responsibility of the lightweight concrete manufacturer. The installer of the lightweight product may be required to be authorized or certified by the manufacturer. Correct on-site mixing ratios and properly functioning pumping equipment are critical. To ensure proper mixture, slump testing is recommended.

**Ceramic Tile** – Existing tile must be clean, flat and structurally sound. If needed grout lines and surface must be filled with an appropriate self-leveling compound.

**Existing Resilient** – must be single layer, non-cushioned and fully adhered. If needed apply an embossing material and conduct bond test. Prior to remove all after

market waxes or polishes and conduct an adhesive bond test. Follow adhesive manufacturer's requirements for proper bonding and adhesive application.

#### **Non-Approved Subfloors**

Wood subfloors/Sleepers or Wood flooring installed directly over concrete, OSB, Hardwood Flooring, Masonite, Carpet or Carpet Padding, Floating wood or laminate floors, Rubber or Cork floors.

#### DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES.

Previously installed resilient floor covering products and the asphaltic or cutback adhesives used to install them may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of asbestos or crystalline dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm.

Unless positively certain that the previously installed product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions on removing all resilient covering structures. www.RFCI.org.

#### **General Subfloor Requirements**

- **Clean:** All wood and concrete subfloors must be swept clean or vacuumed to remove dust and debris. Do not install flooring over any chemically treated subfloor.
- **Flat:** All wood and concrete subfloors must be flat within 1/8" over a 6' span, or 3/16" over a 10' span. All areas of the subfloor must be checked prior to installation. High spots can be sanded or grinded down and low spots filled with appropriate patching compounds. A cementitious patching/leveling compound is advised with a minimum compressive strength of 3000 psi. F-Number System: Overall values of FF 36/FL 20 may be appropriate for resilient floor coverings.
- **Dry:** <u>Wood subfloors</u> should be dry. **The moisture in wood subfloors should not exceed 12%.** If high moisture is present stop installation until the moisture source has been corrected. Use a pin type moisture meter to measure the moisture content of the subfloor.
  - <u>Concrete subfloors</u> must be fully cured for at least 60 days. Concrete subfloors must be tested for moisture by conducting a Calcium Chloride test (ASTM F 1869) or Relative Humidity In-Situ Probe test (ASTM F 2170). Calcium Chloride test results cannot exceed 8 lbs. per 1000sqft in 24hrs. Relative Humidity In-Situ probe test should not exceed 85%. Concrete should be between 7-9 per pH test (ASTM F710)
- Do NOT install over any sleeper systems, wood subfloor or wood flooring that is directly installed over a concrete subfloor doing so may trap moisture under the flooring and damage the wood subfloor/flooring.
  Crawl Space Ground in the crawl space must be dry and the ground covered 100% with a 6-mil black polyethylene. Clearance from ground to the bottom of the floor joists is a minimum of 18" s and the perimeter venting must be a minimum of 1.5% of the total square footage of the crawl space area. Where necessary, local regulations prevail.

# Radiant Heat Systems

- There must be a minimum of a ½" (13mm) separation between the heating element and the underside of the flooring.
- The radiant heat system must have been tested and in operation for 2 weeks or more prior to installation to remove excess moisture from the subfloor.
- The radiant heating system needs to be lowered to 65 degrees and the floor needs to be close to room temperature 65 to 75 degrees.
- After the flooring is installed, slowly raise the temperature to the preferred comfort level (over at least a 3-day timeframe) after installation or at the onset of colder weather conditions.
- The radiant heat system must be controlled and the surface temperature of the flooring must never be allowed to exceed 85°F.

## **Basic Tools and Equipment**

Broom or vacuum, moisture meter, chalk line & chalk, tape measure, safety glasses, utility knife, straight edge

#### **APPROVED ADHESIVES**

The following adhesives are listed as approved. Follow the adhesive labels instructions for requirements and application. TEC® Flexera® High Tack Premium Universal Adhesive Parabond Fusion Series 4700, Taylor Pinnacle®, Dynamic®, and Versatile® Resilient Adhesives Mapei Eco 399 and Eco 811 Roberts 2350 and 7350

#### **INSTALLATION**

- Prior to installing properly prepare the area clean the subfloor, check the flatness of the subfloor and make any corrections needed to achieve the proper flatness of the subfloor.
- Test the subfloor for moisture to ensure that the proper moisture levels are in place.
- Using a tape measure determine the squareness of the room/s and adjust as needed. You will start at the longest wall preferably at an outside wall and begin to apply the adhesive per the adhesive manufacturer's instructions.

#### **Loose Lay Installation Option (Full Spread Preferred)**

- Apply adhesive at the perimeter walls Apply adhesive with proper trowel the width of the trowel. And add an additional X pattern of adhesive from corner to corner. If runs or rooms are greater than 12' x 12' divide the room into equal quadrants use the perimeter method to apply adhesive for each quadrant and use the x pattern per quadrant.
- Areas subject to heavy traffic, rolling loads and pivot point must be installed using a full spread adhesive installation method. And use a permanent set adhesive.
- Follow adhesive manufacturer's installation guidelines and use the proper trowel for correct spread rate. Use only acrylic based adhesives approved for the use of resilient products only.
- Center of the room installation is also an option Find the center point in the room and divide the room into equal sections creating quadrants. Make two perpendicular lines that intersect the center point of the room. Snap working lines and install the planks.
- Work from several cartons of material at a time to blend the material and create a random look.
- Do NOT install over expansion joints.
- Roll the floor with a 75–100-pound roller per the adhesive instructions.

# **POST INSTALLATION**

- Remove excess adhesive from surface of the flooring with the recommended cleaner per the adhesive manufacturer's instructions. A water dampened clean terry cloth rag and and/or rubbing alcohol can be used to removed dry adhesive. If needed use odorless mineral spirts applied to a white terry cloth rag to remove dried adhesive
- Install trim and base elements and use a silicone caulk where needed.
- Allow a minimum of 24 hrs. post installation to light foot traffic and 48 hrs. if moving heavy materials across the floor.
- When moving heavy objects or fixtures across the floor protect the floor with HDF/MDF fiberboard or thin plywood to protect the floor
- Allow for a minimum of 3 days prior to wet cleaning the floor or using a neutral Ph cleaner.

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