

BEST PRACTICES FOR COMMERCIAL RESILIENT FLOOR INSTALLATIONS

A pre-installation checklist is a reliable way to ensure everything needed to install a new floor at a large facility is where it is needed, when it is needed and that all required tests and measurements have been accounted for in a reliable, recognized manner.



All of the big flooring manufacturers – including Tarkett, Armstrong, Shaw and more – provide preferred methods of installation for professional flooring installers to follow when laying their brand of resilient floor. The methods in flooring brand installation guidelines and instructions are typically based on tried and true techniques for a floor to install successfully and to perform long term. There are many factors to take into consideration for a flooring job to be successful. Flooring installer skill is where it starts so only experienced professional flooring installers should take on a large resilient flooring project in a commercial facility.



To be effective, when awarded a new project, the flooring contractor and the floor installer should begin by reading the installation instructions then follow the directions start to finish. A floor should not be installed if the environment is one that is not recommended by the flooring manufacturer. For example, if the floor is out of the specified range of level, or if relative humidity in the slab is too high

– STOP. Do not proceed with the floor installation.

Long term performance and maintaining a like new appearance of a floor is dependent upon the compulsory steps found within a flooring manufacturer's specification for installing LVT, sheet vinyl, rubber and other resilient flooring materials.

Before the scheduled start of a new commercial floor installation, the flooring contractor or installer will need to handle and store the flooring material with care. This involves stacking and storing cartons of flooring planks or tiles squarely, adhering to the stacking limits set in the installation instructions. Even in transit, only stack boxed planks or tiles as high as indicated in the installation



instruction documents.

Example from a Tarkett Installation Instruction Document:

HANDLING AND STORAGE

1. All Tarkett products must be stored in an indoor, climate controlled space and be protected from the elements. Temperature must be maintained between 65°F (18.3°C) and 85°F (29.4°C) with a relative humidity between 40% and 60%.
2. All cartons must be stored on a dry, flat, level surface. Cartons must be carefully stacked squarely on top of one another and never be stored on edge. Take caution not to over stack the cartons and never double stack pallets. Always protect carton corners from damage by tow-motors and other traffic.

To avoid distortion of roll flooring goods – store sheet flooring rolls on end. When relocating large bulky sheet vinyl or rubber flooring rolls, within a warehouse or to a job, do so cautiously to avoid damaging the material. Use a fork lift, floor jack or other warehouse moving aid to sufficiently support the weight of the flooring material while in transit. Be aware of and avoid obstacles that could distort or damage the flooring product in transit or while being stored. When transporting flooring materials to the jobsite – boxed or rolled – securely fasten materials in a vehicle, large enough to fully support the weight and size, so the materials do not shift, get crushed or otherwise distorted in transit.



As flooring product is being prepared to move to the facility where it will be installed, all ancillary materials for installing the floor – including floor adhesive, subfloor patch, transitional molding, cove base, shoe molding, etc – should also be gathered. These installation materials should be transported to the job along with the flooring planks, tiles or rolls so all items acclimate to the environment at the same time. Having everything together, on site, will also help to prevent delays while the job is in progress.

A pre-installation checklist is a reliable way to ensure everything needed to install a new floor at a large facility is where it is needed, when it is needed and that all required tests and measurements have been accounted for in a reliable, recognized manner. A flooring job pre installation checklist should include dates, materials, special tools, tests, requirement milestones and any other pertinent details. Flooring brand, pattern identifiers, quantities of flooring material is a good place to start with pertinent details for a successful flooring job.



Deadlines for ordering materials, expected installation start date and the window of time allotted to complete the work are also important to capture on a pre installation checklist. Include as much detail as possible like type of floor, adhesive selection, moldings, etc along with item numbers, descriptions, and quantities for each. Before materials are ordered, the pre-installation check list should be compared to the flooring manufacturer's printed instructions to ensure compliance with the flooring brand's specifications for adhesive and other critical installation materials. This puts the flooring installation team in a good position if a problem arises with the floor after the facility is in use, provided the items listed were documented as ordered and delivered to the job site. Flooring manufacturer warranties typically indicate that adhering to their instructions is mandatory for the warranty to be in effect.

The pre-installation checklist should carry over to the job so the team on-site can confirm they have the correct flooring pattern, style, batch, color and quantity along with the right adhesive, and underlayment if required, and that enough of all materials are on site to finish installing the resilient floor before laying the floor even begins. All ancillary items should be reviewed in the same, methodical way to be absolutely sure that everything is on-site as expected and in good condition to complete the project including transitional moldings, cove base, shoe moldings and patching compounds.

Use the pre-installation checklist to check and record jobsite conditions and to help plan specifics for a successful floor installation. Important notes to include about site conditions – test results for concrete alkalinity and moisture readings, ambient room temperature, levelness of floor, porosity of concrete slab subfloor, existing floor or contaminants that may need to be removed or tested before work can begin. Completing a field survey and checklist before flooring materials arrive on the jobsite can help to avoid so many potential problems by identifying and dealing with issues on the front end of a project. This is also the perfect opportunity to plan the flooring layout for sheet goods, plank or tile. Focus should be on starting point and optimal seam locations for rolls of sheet vinyl, rubber or linoleum and to consider the most economical use of flooring material so cuts and fills are minimized. For modular lvt flooring in a large commercial space, plan pattern layout to be aesthetically pleasing and to offset or stagger the tile or plank positions in accordance with manufacturer guidelines while minimizing cuts where possible. If the project architect or interior designer has provided a specific modular layout based on floor colors or pattern, this is the perfect opportunity to ensure you can deliver the finished floor as expected



based on site conditions.

Compare the results of your completed pre installation checklist with the flooring manufacturer's specifications for interior temperature, humidity, level floor, etc for the specific brand and type of floor that is going to be installed to ensure the environment is ready for delivery and installation of the new floor. The interior space for a resilient flooring installation will need to be climate controlled, within a specified temperature and humidity range, and maintained for several weeks before the flooring installation is scheduled to begin. Floor substrate must be structurally sound, free of contaminants, level within the flooring manufacturer's identified range, and moisture content of a concrete slab underfloor must be below a specified threshold. Wood subfloors require a minimum thickness and almost always require underlayment before the floor is installed. If the site conditions do not meet minimum standards set by the flooring manufacturer's installation instructions, do not begin the floor installation job. Conditions may need to be remedied before the new resilient floor can be installed. Each point within a flooring brand's installation documents is intended to create an environment that will ensure success of the floor long after installation is completed. For example, when a facility has too much moisture or if the hvac system is not yet fully functional, the flooring adhesive may not perform as it would in the right conditions and a insufficient bond to the subfloor may result.



Key Installation Tips:

- Flooring material production, batch or run numbers should be sequential to minimize deviation in gloss, color, texture or pattern. If numbers are not sequential or if variations in appearance are noticeable, work should not begin or should stop immediately. The flooring manufacturer needs to be contacted in order to provide direction to the floor installation team on how to proceed. Flooring manufacturers will not pay labor on claims for flooring product that was installed with obvious visible

defects. It's the responsibility of the flooring installer to look for visible defects as they work.

- Commencement of the flooring installation indicates acceptance of the existing underfloor and site conditions on behalf of the flooring contractor.
- Conducting a vapor emissions test and an alkalinity test, recognized by the flooring manufacturer, and formally documenting the results will protect the flooring installer if site conditions change, post-installation, causing a flooring failure.
- If possible, don't install a new resilient floor over existing floor covering material. Performance of the new flooring is completely reliant on the condition and bond of the old floor. It's difficult to predict long-term success when laying a new floor over an existing vinyl, rubber or linoleum floor. If your situation dictates that you must install over existing resilient flooring, contact the manufacturer of the new floor for recommendations before getting started. If you find that you need to remove an existing resilient floor, STOP and have asbestos testing conducted on the old floor and its adhesive before you begin removal. If asbestos is identified, suspected, or if the decision is made to not test it's an unknown if asbestos is present so follow local state, county and municipal regulations regarding the safe removal of a floor that may contain asbestos. Don't take any chances.
- When plotting the layout for a new floor in a large commercial space, use a transit, laser or other tools designed to strike guidelines and always use white chalk lines on the subfloor for accuracy.
- When installing a modular product, work from at least two cartons to ensure blending of the product to create an installation that is consistent and uniform in shade, gloss and pattern.
- Heat welded seams is often where failure is identified post-installation. Reference my [Heat Welding post](#) for professional how-to heat welding tips and practice on scrap materials at the jobsite. Use the specified heat welding tools and seek out professional guidance if needed.
- Roll all floors – tile, plank or sheet – with a 3 section 100# roller in both directions after positioning the flooring into the adhesive.



Following a successful flooring installation, restrict foot traffic on the newly installed floor for 24 hours and prohibit heavy traffic, furniture placement and rolling loads for a minimum of 72 hours after completing installation. Thoroughly sweep the floor and clean according to initial, post-installation cleaning instructions, as appropriate. If construction type work will continue after the new floor is fully cured, protect it with non-staining paper or plywood. Use releasable, non-staining tape on all edges of protective covering to prevent small dirt particles from getting under the paper or plywood because this can cause scratches before the space is turned over to the end user. Plywood or Masonite™ runways, furniture moving aids and/or specialty moving equipment is recommended for moving large heavy items and for large furniture moves on the floor, even after it is fully cured.

To maintain a resilient floor in good condition long after a quality floor installation, follow insights and methods in the following blog posts –

[Two Bucket System, huh?](#)

[Low Maintenance Does Not Mean NO Maintenance](#)

[The Best Floor Protector, An Expert Opinion](#)