

Form #025

Super-Lok Installation & Floor Preparation Instructions

General Notes

These installation instructions are specific to Super-Lok backing, both pattern and non-pattern products. They are not applicable for all sub-floor conditions. If you have any questions concerning the proper installation (or use) of Tandus Centiva Super-Lok backings, or on specific products on this backing system please contact Tandus Centiva Installation Services at 800-241-4902, ext 2625, 2623, 2129, 2023 or 2670. All products should be inspected for dye lot, style, color, size, quality and shipping damage prior to installation and should not be installed if any irregularities are observed. Except for any differences as noted herein, all Tandus Centiva Super-Lok carpet is to be installed in accordance with the minimum standards set forth in the CRI Carpet Installation Standard. Copies are available at www.carpet-rug.org. It is solely the responsibility of the installation contractor to insure that the sub-floor is properly prepared prior to installation.

Installer Certification

Tandus Centiva does not require installers to be certified prior to performing the installation of broadloom products on Super-Lok backing on actual jobsites; however, Installation Contractors must have a practical working knowledge of various carpet constructions, of pattern carpet installation in direct glue down, double glue down over separate cushion, and stretch-in installations. This would include skill at pattern matching, a working knowledge of stretching and stay nailing pattern carpet, cutting and straightening pattern edges, and the use of other mechanical devices as required to attain an acceptable pattern match. Pattern carpet installation requires more time and skill than non-patterned carpet styles.

Super-Lok

Super-Lok products are 12ft to 15ft in width, and on pattern products the pattern scale may vary from the full width of the carpet, to smaller pattern intervals within the width and length of the product. Before proceeding with the instructions provided below the installer must know the width and length of the pattern repeat (where applicable), and either be provided with a detailed floor plan showing the direction the carpet is to be installed, or be advised in writing of the pattern direction. The installation should not begin without a complete understanding of these installation parameters.

Site Requirements

Tandus Centiva Super-Lok products are intended for indoor installations on dry, properly prepared sub-floors. This product is not intended for installation on walls, ramps, outdoors, or on wet surfaces. Tandus Centiva is not responsible for product failure of any kind if these floor preparation and installation instructions are not adhered to. Only installation materials approved by Tandus Centiva should be used. Be certain to read and adhere to the shelf life and freeze-thaw stability information that is printed on the label of the installation materials.

Moisture & pH

Excessive moisture and/or high pH on any sub-floor, especially concrete, can cause adhesive and product failure. For all Tandus Centiva Super-Lok products, the maximum allowable moisture vapor emission rate (MVER) from the sub-floor is 5.0 pounds, as tested according to ASTM F-1869 (<u>Std. Test method for measuring Moisture Vapor Emission Rate of Concrete</u>). The required pH range must not exceed 9.0 as tested according to ASTM F-710. The In-Situ/RH (relative humidity) requirement on concrete is not to exceed 85% as tested according to ASTM F-2170 (<u>Std. Test method for measuring Relative Humidity in Concrete</u>). This provides two methods of determining potential moisture issues. Tandus Centiva requires that at least 1 MVER and 2 RH tests be performed on the initial 1000 sq. ft. of each project. In addition, a minimum of one test, alternating between MVER and RH, per 1000 sq. ft. is required for the balance of the project. When In-Situ RH testing has been eliminated from the test protocol, the Maximum Allowable MVER will revert to 3 lbs/24 hr/1000 sq. ft. Refer to our Technical Services Bulletin "Moisture and pH Testing of Tandus Centiva Products" for specific instructions on test methods, ambient conditions, and other requirements.

More accurate and representative MVER, RH and pH test results can be achieved when the HVAC systems is functioning 24/7 for two weeks prior to installation, and the temperature and ambient relative humidity has acclimated to occupancy conditions. In cases where the flooring substrate is light weight concrete MVER results are not an accurate method of evaluating the conditions of the flooring substrate. RH testing is the only accurate moisture test method. Gypsum based self leveling compounds used as a topcoat over existing concrete or wood subfloors are tested in accordance with ASTM F-2659 using an Electronic Moisture Meter.

Moisture vapor emission testing, relative humidity, and pH testing indicate the moisture levels and pH of the concrete sub-floor at the time of installation. These tests do not provide static results and both moisture and pH can increase over time. Tandus Centiva is not responsible for product failure as a result of changes in sub floor conditions, including increases in moisture and pH levels after installation.

PH Testing

Preparing the surface of a concrete slab for pH testing requires the following attention to detail. Make sure the concrete surface is adequately cleaned of any adhesives, primers, curing compounds, surface contaminants, etc. Exercise care not to over clean the surface of the concrete removing the thin layer of carbonation. This can result in higher, non-responsive pH readings. Slightly wet the concrete sub floor surface with a small amount of distilled water and allow the water to stand for one minute. Apply pH test paper to the wet concrete surface and allow the pH test paper to remain in contact with the wet area for one minute. The pH test paper will change color depending on the pH of the wetted surface and a color scale is provided with the pH test papers for comparison. Note: pH test paper commonly supplied in MVER test kits only measures up to a pH of 12 accurately.

Installation of Tandus Centiva products on sub-floor conditions that exceed the specifications and limitations provided in this document will void the applicable limited warranties. Tandus Centiva does not represent or make any express or implied warranties that Tandus Centiva floor covering products will or will not affect, prevent or cure any other moisture or alkalinity-related issues that may arise because of the moisture and alkalinity levels found in the concrete. Tandus Centiva expressly disclaims such express or implied representations or warranties.

Temperature & Humidity

The temperature of the interior environment, including the sub floor should be no lower than 65°F and no higher than 90°F at least 72 hours prior to, during and after the installation. Tandus Centiva Super-Lok products and installation materials should be stored between 65°F and 90°F for at least 48 hours prior to installation. Relative humidity should not exceed 65% as it will extend adhesive set times.

Floor Inspection

The sub-floor must be structurally sound and dry prior to installation. Concrete subfloors must comply with ASTM C-150 Standard Specification for Portland cement. Curing compounds, sealers, finishes, or other chemical treatments used on the sub floors must be chemically and physically compatible with the Super-Lok adhesive systems, or they must be removed or skim coated with a Portland cement based; or other Tandus Centiva approved patching product. Chemically abated floors or the use of chemical adhesive removers prior to the installation of Tandus Centiva Super-Lok backing, and adhesive systems can result in product or installation failures and are neither recommended nor warranted. If you have questions concerning the compatibility of specific chemicals with Tandus Centiva Super-Lok backing, or adhesive systems please contact the Tandus Centiva Field Technical Service Department at 800-241-4902 ext 2625, 2623, 2129, 2023 or 2670.

Floor Cleaning

Clean the sub-floor of all excess concrete spots, solid debris or paint spots using suitable scraping methods. Completely remove all wax, dirt, grease, paints or old adhesives (especially cutback or emulsion). DO NOT use solvents or any other chemical adhesive removers to clean the sub-floor. Sweep and vacuum the floor after patching and debris removal. DO NOT use an oil-based or silicone based sweeping compound. Smooth, nonporous floors should be damp mopped prior to product installation. Make sure all perimeter areas are clean. Contact Tandus Centiva for more specific floor preparation guidelines including installation over cutback, or information on installation where other types of adhesive are present. Where existing, non-asbestos containing cutback adhesive is present, remove the old cutback to the substrate by wet scraping. Before attempting removal be certain the cutback adhesive does not contain asbestos. A licensed asbestos contractor should perform removal of asbestos containing cut back adhesive in accordance with state and federal requirements. Tandus Centiva should be contacted before any chemical abatement to insure that the abatement method does not create future installation issues or failures.

Floor Patching and Leveling

All sub-floors should be level. Concrete sub-floors patches or self leveling products should be toweled smooth and conform to the ASTM F-2873 Standard for compressive strength. The subfloor should be flat to within 1/8" in 10 feet. Cracks, holes and depressions can be filled using a Portland Cement/Latex fortified patching material, or other Tandus Centiva approved patching material. Do not install over loose tile (VAT, VCT or other loose existing flooring substrates).

Approved Installation Methods

Direct glue down, double glue down over separate cushion, and stretch-in are recommended methods of installation for Tandus Centiva Super-Lok broadloom products. On double glue down, or stretch-in installations the cushion selected shall not exceed .250 in thickness, and must have a minimum density of 20 lbs. The cushion should be run perpendicular to the carpet if possible, or if run in the same direction cushion seams must be offset by at least 6" from carpet seams.

TredMOR 1562 cushion is recommended for double glue applications. The TredMOR cushion is adhered to the floor with Tandus Centiva C-TR Adhesive using a 1/16 V notch trowel. TredMOR 2568 or 2580 cushion is recommended for stretch-in installation and may be secured using Tandus Centiva C-12 Adhesive. The cushion should never exceed .250 in thickness with either of the above installation methods. Use only Tandus Centiva adhesive and seam sealer on Tandus Centiva Super-Lok for warranty protection.

Planning and Lavout

A comprehensive seaming diagram shall be prepared and approved by the purchaser before beginning the installation. Seam placement should run parallel with the main flow of traffic whenever possible. Run the carpet lengthwise down corridors whenever possible. Always dry lay the carpet, watching for any irregularities in the pattern.

Seams

Tandus Centiva pattern styles have lengthwise lines of pattern or color. For a lengthwise seam, preparation is made by row cutting the carpet. Be careful to find the pattern match before cutting. Run the row with an awl or screwdriver to open and prevent cutting yarn off. A 10-146 Roberts Cushion Back Cutter is recommended for the best seam quality. The two blade design accommodates both left and right positions for cutting closer to the yarn. Be very careful to avoid cutting any carpet that may be underneath. Keep the cutter straight up and down with the blade lowered on the side of the cut edge. Reverse the direction when you cut the other edge or lower the other blade to insure a tight seam. If desired a Roberts 10-152GT Loop Pile Cutter can be used with low, tight constructions, or with loop pile products. The two blade design accommodates left and right positions for cutting closer to the yarn. Both types of cutting devices require that Roberts Heavy Duty Slotted Blades (blue) be used.

Seam Requirements

Tandus Centiva C-XL Seam sealer is *required* for all Tandus Centiva broadloom styles. The sealer must be properly placed to lock in the yarn bundle on both sides and be of sufficient quantity to form a strong bond. For stretch-in installations use a 4 inch wide premium hot melt seaming tape like 50-375 Roberts Power-Loc Heat Bond Tape, **or equal**, with a silicone release agent on the back of the tape. For double glue down installations over separate cushion a premium hot melt seaming tape like Orcon Super3-DS Double Stick hot melt tape, **or equal** should be used with no silicone release agent on the back of the tape.

Manufacturing Tolerances

Carpet is a textile product subject to a certain amount of distortion during and after manufacturing. While extensive measures are taken by Tandus Centiva to assure pattern accuracy, perfect pattern match, and straight yarn rows at the carpet edges, they are not guaranteed. Tandus Centiva manufactures Super-Lok pattern carpet to tolerances considered workable to achieve satisfactory pattern match and straightness. If the following tolerances are exceeded, stop the installation and call for direction 1-800-241-4902, ext 2625, 2129, 2623, 2023 or 2670.

12 ft. Pattern Tolerances: Bow-1 1/2" or less across width, Skew-1 1/2" or less across width, and Pattern Elongation-1 1/2" or less in 12 feet length of carpet.

15 ft. Pattern Tolerances: Width - Bow- 2" or less across width, Skew- 2" or less across width, and Pattern Elongation-1 1/2" or less in 12 feet length of carpet.

Achieving Pattern Match

Once the chosen installation method has been determined, and the appropriate TredMor cushion has been installed (if appropriate), it is necessary to dry lay as much of the carpet as possible before beginning the installation. The roll sequence sheet provided by Tandus Centiva is based on <u>measurement of pattern repeats</u>. Patterns are to be laid <u>starting with the longest pattern and working to the shortest</u>. The general rules of pattern matching are:

- In a large room start with your first drop (breadth of carpet) laid in the center of the room working out to the opposing walls. Work consecutive drops on either side of the first drop on match at the center point of the room, and working the pattern outward to match towards the walls. Never lay the first drop off a wall in a large room, or attempt to match the pattern starting at the wall and working towards the opposing wall. Power stretchers, crab stretchers, and the use of stay nails to hold the carpet pattern on match may be required.
- An exception to the above directions would be when there is a major hallway with offices on either side of the hallway. Then it is essential to concentrate efforts on the major hallway first, and match the pattern in the adjoining offices to the hallway as applicable. The offices cannot be laid first.
- The size of the pattern repeat and complexity of pattern elements may prevent sighting diagonal pattern lines, and only allow matching straight across the pattern. Whenever possible use both widthwise and diagonal pattern repeats to align the carpet before installation.
- On stretch-in installations it is essential to follow the installation sequence so you start with the longest pattern repeat and stretch the consecutive breadths to match, stay nailing to hold the carpet on match prior to seaming.
- It is much easier to stretch patterns than to shrink them. In direct glue or double glue down installations where it is necessary to shrink the pattern, allow the least fullness possible, and then press the fullness down into the glue as it sets up. Shrinking the pattern in stretch-in installations is virtually impossible. Stretching the opposing breadth to match is required to attain pattern match.

Installation Methods

- Prepare the floor as required for the specified installation method.
- On both double glue down and stretch-in installations secure the cushion as specified above in Approved Installation Methods.
- On stretch-in installations always use commercial tack strip (tackless strip).
- Following the pattern sequence, dry lay the carpet in the predetermined layout, checking for visible flaws and align the pattern to attain the best match.
- Trim the edges in preparation for seaming as described above.
- Follow the above instructions using the applicable materials for the chosen installation method, and proceed with installation.
- On both direct glue down and double glue down installations apply the Tandus Centiva B-19 Adhesive in accordance with the bucket label instructions either to the subfloor or TredMOR cushion.
- On direct glue down or double glue installations drop the first breadth of carpet into the wet adhesive.
- On double glue down installations place the Orcon Super3-DS Double Stick seaming tape under the first breadth with half the width of the tape exposed to go under the adjoining breadth of carpet.
- Apply a 1/8" bead of seam sealer to the first carpet edge.
- Fold the second drop into the adhesive.
- Move the drops as required to achieve pattern match, straight pattern lines, and tightly closed seams. Use stay nails or other holding methods as required in order to keep the carpet in place while the adhesive sets, or while making the hot melt seam on double glue down applications.
- On double glue down use a hot melt iron with the heat shield in place to melt the tape, and work the two cut edges together,
- Repeat the above procedures as applicable working out from the first two breaths of carpet that are installed.
- Once the adhesive has developed legs in direct glue down or double glue down installations roll the carpet to ensure 100% contact, and 100% adhesive transfer to the carpet backing. For double glue down installations do not exceed a 50 lb roller. For direct glue down installations a 75lb roller can be used.
- For stretch-in installations follow the applicable portions of the above instructions, use the required materials as defined in **Approved Installation Methods**, and stretch the carpet into place.

The methods above are necessary to complete all required lengthwise, or end seams.

Terminating the Edge

The CRI Carpet Installation Standard calls for protective transition strips. All carpet terminations or transitions to other type flooring must have a capped edge molding or protective covering at the carpet edge. Edge ravel resulting from failure to protect the edge is not covered by the manufacturer warranty. Damaged carpet at termination points is not a material defect.

See Tandus Centiva Technical Service Bulletin - Post Installation Protection of Carpet

Other: For installation over substrates not mentioned here, information on exposed edges, more detailed installation information, and/or other installation information, please contact Tandus Centiva Technical Services at 800-241-4902, ext. 2625, 2623, 2129, 2023 or 2670.