

SYNSISAL® RAVENNA

SynSisal® is a flatwoven carpet that requires special care during installation. Flatwoven carpets are not installed in the same way as conventional loop pile carpets and therefore require specialized tools and methods for a successful installation. Please read the following installation recommendations carefully before starting the project. Installation by a certified carpet installer with at least 5 years of experience working with flatwoven carpets is strongly recommended.

Please note that the installation methods are provided for guidance only. The information is general and not applicable in all situations. Since carpet is a textile, it cannot be made to exact specifications and has allowable manufacturing tolerances as acknowledged by accepted industry standards.

The Carpet Manufacturer cannot be held responsible for the viability of the installation. We can only provide recommendations proven to be successful. It is up to the individual carpet installer and project leadership to follow all guidelines and industry standards for preparation, use of compatible premium quality products, and utilization of suggested methods and techniques. We emphasize that the quality installation of this carpet is solely the responsibility of the installation professional.

REQUIREMENTS BEFORE INSTALLATION

STORAGE

Carpet and related materials must be stored in a climate-controlled dry space with similar conditions to the environment in which the carpet will be used after installation. Carpets must be protected from frost, soil, dust, moisture, extreme temperatures, and other contaminants and stored on a flat surface.

CONDITIONS

The carpet must be unwrapped together with all other materials, i.e., pad, subfloor, and adhesive, in an acclimatized space at least 48 hours prior to cutting and installation. Unrolling the carpet is recommended to optimize the conditioning. The ideal room temperature lies between 64-80 °F (19-25 °C) with a relative humidity between 50-65%. Failure to condition to the local environment may result in installation failure.

METHODS

SynSisal® recommends their products be installed using one of the following methods:

- [Direct Glue Installation](#)
- [Double Stick Standard Installation](#)
- [Double Stick Kool Glide Installation](#)

For informative installation videos outlining each method, please click on the links above.

NOTEWORTHY

Please make sure that the carpet technicians are aware of and understand the content of the *SynSisal® Installation Guidelines* before starting the installation. In all cases, installers must adhere to the minimum standards as set forth in the [CRI-104 Standard for Installations of Commercial Carpet](#). Please also contact our [Technical Advisory Team](#). If you have any questions or concerns about the job.

Fabricated area rugs or runners with attached backing are not suitable for permanent installation. The underlayment used and attached to area rugs and runners are for loose lay installation only.

SUBSTRATE PREPARATION

⚠ DIRECT GLUE DOWN AND DOUBLE STICK INSTALLATIONS ON CONCRETE

Test slab for moisture emissions prior to installation. We strongly recommended that a qualified independent third-party testing agency determine the moisture and alkalinity conditions of a concrete slab prior to installation, allowing time for corrective measures if necessary. Third-party testing is a prudent and necessary safeguard for general contractors, owners, architects, and installation contractors to reduce the risk of moisture-related flooring failures. As a minimum, testing agencies or individuals are required to demonstrate verifiable experience in concrete moisture testing or be certified by a recognized organization.

TESTING

Some sort of moisture testing must always be done prior to installation. The following represent some acceptable test results and methods prior to installing SynSisal®:

- **PH - Alkalinity**
ASTM F710 Reading must be no greater than 10 with the ideal range of PH reading of 7-10
- **RH - Relative Humidity Test Methods**
ASTM-F2170 (Recommended) In-Situ Probe results no more than 60%
ASTM-F1869 Test Method Maximum Limit 3.0 lb/1000 ft² (170 µg/m²) per 24 hr.

FLOOR PREPARATION

ASTM F710 Floor must be prepared to meet *Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring*. The owner or general contractor is responsible for providing an acceptable substrate for the specified installation.

This includes, but not limited to following criteria:

- No cracks (in case of cracks, patch and seal before installation)
- Repair any unevenness so the floor is level. The floor surface should not be rough and porous
- Residual adhesives and other debris must be removed properly by mechanical method. If residual

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debris cannot be removed mechanically, patch as needed to assure a clean and level floor. Chemical stripping agents may leave residue, rendering new adhesive useless.

NOTE

The floor should be clean and free of dust, debris, and other contaminants. All loose tiles, boards, or fasteners should be removed or repaired prior to beginning the installation.

For specific instructions for preparing a floor or removing a preexisting flooring, please familiarize yourself with the Resilient Floor Covering Institute's document, *Recommended Work Practices for Removal of Resilient Floor Coverings*.

- The floor temperature is not less than 59 °F (15 °C)
- In the case of radiant heat floors, the carpet may not be continuously exposed to a temperature higher than 85 °F (30 °C) to avoid changes in material stability.
- The subfloor must be clean and vacuumed (dust-free)

The carpet and pad must be installed over an adequately prepared substrate that is suitable for the specific product and installation method selected. All cracks, holes, and flooring irregularities must be repaired to ensure a flat, smooth substrate, prevent accelerated wear, and telegraphing substrate irregularities.

INSTALLATION GUIDELINES – DOUBLE STICK OVER PAD**RECOMMENDED UNDERLAYMENT**

- TredMOR2580 (Commercial)
- FoundationXP (Light Commercial)
- TredMOR2568 (Residential)
- Healthier Choice (Residential)

PLANNING FOR SEAMS

Keep seams to a minimum. When possible, position seams so that:

- Seams run the length of the area
- Main traffic flow runs along, rather than across, the seam
- Natural light does not strike across the seam
- Seams are away from areas subject to pivoting traffic
- Seams are not immediately in front of doorway openings
- Avoid the occurrence of cross joins (head seams) as often as possible.

TRANSITIONS TO OTHER SURFACES

Where carpet transitions to other floor coverings, the carpet edges are required to be protected or covered with appropriate transition moldings. The edge of the hard surface flooring should not exceed a maximum of 1/16" (1.5875 mm) higher than the total carpet thickness. Apply a minimum of 1/8" (3.175 mm) bead of seam sealer to the edge of the carpet along the entire transition plane.

WALL BASE

Wall Base is recommended as part of the finished project. When vinyl or rubber wall base is used in a direct glue or double-stick carpet installation, cove base or base-with-toe is recommended.

SEAMING CARPET

With SynSisal®, we do not recommend head seams/cross joins. If a head seam is necessary, always cut precisely following the pattern line using similar techniques as outlined for side seams.

Head seams can also be finished with a decorative transition intended for this purpose. For example, head seams may be used in doorways, when carpet goes from hall areas into adjacent rooms. Ensure that the seam is directly underneath the center of the door when in the closed position. The head seam must be covered with a wood, hard metal, vinyl, or rubber transition.

CUTTING SEAMS PROPERLY

⚠ When cutting seams, be mindful of the quality of material you are working with. Always use sharp blades. Do not use hook blades, as they will cause excessive and unnecessary fraying

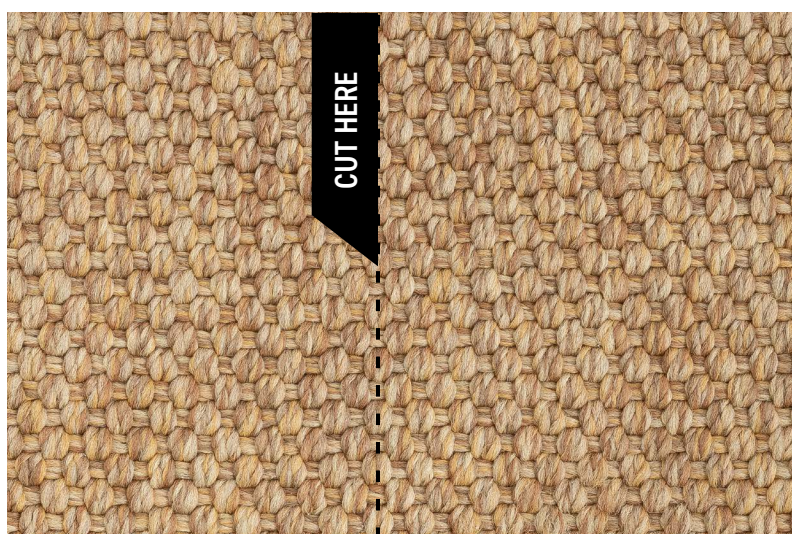


Figure 1: Cut 3rd row in from the center seam.

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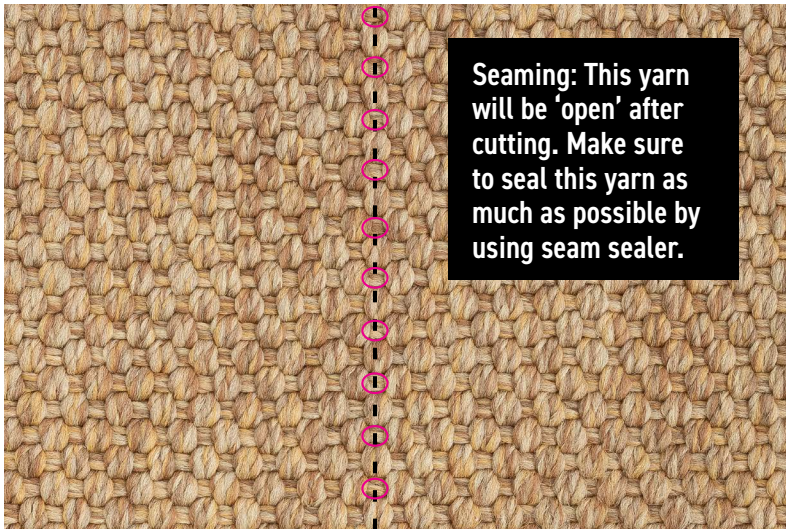


Figure 2: Take care to leave the lower lockstitch on the “good” side of the seam. Score first to open the row. Cut with the outside blade. Seal seams and after the seam is put together, trim with duck-billed shears.

PRIMARY – SIDE ONE

If possible, given the layout, cut in approx. 1-2 inches (2.54 cm to 5 cm) from the factory edge using a top cutter or straight edge from the top to ensure a clean-cut seam. Follow the warp row of the weave to avoid fraying and loosening of the weave. Seal edge immediately using a Premium Quality Edge Sealer. NOTE: Cutting must be made exactly along the pile-warp surface yarn.

SECONDARY – SIDE TWO

Following the same method as above, cut both sides of the seam with the outside blade, leaving the lockstitch on the seam side to ensure the integrity of the seam.

Note: The strength of the seam is more important than keeping the pattern match or weave repeat during the seam. The nature of backed and flatwoven carpet is such that a perfect pattern match will be less achievable with longer lengths of seams. This cannot be entirely avoided and, as with any backed textile, a complete pattern match cannot be guaranteed. **

**Due to anomalies in the manufacturing process, or unavoidable job site situations, it may become necessary to trace cut the secondary side to primary side across the warp yarns to achieve a tight-fitting seam. THIS SHOULD ONLY BE DONE IF IT BECOMES IMPOSSIBLE TO PLACE THE CUT EDGES TIGHTLY TOGETHER. If this becomes necessary, you must seal seams with ample seam sealer followed by a pinwheel or “porcupine” roller, to facilitate the blending of the face yarns with the seam sealer.

SEAM SEALING AND EDGE SEALING

Always use a premium quality edge sealer on every cut edge, including seams, perimeters, and openings. Edge sealer should be applied in sufficient quantity to seal all edges and secure face yarns. The sealer should cover the thickness of the primary and secondary backing with minimal contamination of the face yarns.

Recommended:

- Weldwood Original Contact Cement (red can)
- Taylor Touchdown 700 Tackless Contact Cement (non-clear)
- Parabond M-250 Brush Grade Contact Adhesive

* Failure to properly seal all edges may result in edge fraying, delamination, pile loss, seam separation, and trip hazards.

ADHESIVE USE AND SPECIFICATIONS

The use of premium quality adhesives is required to ensure a quality result. Follow instructions on the manufacturer's label with regards to spread rate and proper open time for the adhesive to tack up. Remember, 100% adhesive coverage is required for 100% adhesive transfer.

Recommended:

- Parabond – Signature Series 4099
- Bostik XXL Goldstix
- TEC - TEC704 Premium Fast Grab Adhesive

CUSHION TO FLOOR

*Always refer to cushion manufacturer for product specific instructions.

The use of pressure-sensitive adhesive applied with a 1/16" or 1.5875mm (width) x 1/32" or 0.79375mm (depth) x 1/32" or 0.79375mm (spacing) U-notched trowel is suggested for attaching cushion to the floor. Make sure to observe the proper curing time (as indicated by the adhesive manufacturer's instructions) to allow the adhesive to "tack-up" sufficiently prior to laying in the cushion. Failure to allow for adequate adhesive setup may permanently bond the cushion to the floor, making removal unnecessarily difficult.

CARPET TO CUSHION

As recommended above, only a premium-quality, multi-purpose adhesive must be used to attach the carpet to the cushion. Adhesive should be applied in sufficient amounts as to fill any recesses created by the carpet backing. A minimum U-notched trowel size of 1/8" or 3.175mm (width) x 1/8" or 3.175mm (depth) x 1/16" or 1.5875mm spacing is required. The effective spread rate should be between 5 and 8 square yards per gallon (22.65 m² and 36.24m² per liter) . Follow all instructions on the manufacturers label with regards

to spread rate and proper open time. The adhesive should cover the underlayment completely including tightly to perimeter walls to prevent excess curling. 100% adhesive transfer is required for a proper installation.

TROWEL SPECIFICATION AND COVERAGE GUIDE

As a guide for planning when installing carpet on concrete, the acceptable industry standard according to [CRI-104](#) for a typical commercial carpet is to use a 1/8" x 1/8" x 1/16" V-shaped trowel. Proper troweling will result in an expected spread rate of approx. 8-10 yd² per gallon or 32-40 yd² per 4-gallon pail. Regardless, you must follow the adhesive manufacturer's specific instructions.

The adhesive should cover the subfloor completely and spread tightly to perimeter walls to prevent excess curling. Applying adhesive properly means a full 100% transfer of adhesive to the carpet backing once set into place and rolled. The only way to achieve 100% transfer of adhesive to carpet is to ensure that 100% of the subfloor is covered with adhesive.

Only apply as much adhesive as can be covered within the working time allowed. The application rates and Open Times specified in the supplier's guide must be followed to prevent insufficient bonding. For all recommendations, please read the adhesive supplier instructions.

Once the adhesive has been uniformly applied and the "tack time" (depending on the climatic conditions in the room and properties of the floor) observed, the carpet can be placed on the glue. In seamed areas butt the two edges of the pre-cut lengths together while ensuring that the carpet is not under strain.

We recommend folding back the carpet along the seams, i.e., to allow each seam to be laid precisely in position and glued. Please make sure not to shift the individual lengths of carpet.

When finished adhering the carpet, roll the full area of carpet with no less than 75 and no more than 100 lb. roller. Be sure to remove all trapped air bubbles.

For the best result, the carpet should not be trimmed around the walls immediately after installation, but wait 24 hours to let it dry, which allows for possible shrinkage to occur. Apply Wall Base after all walls have been trimmed in net to the wall.

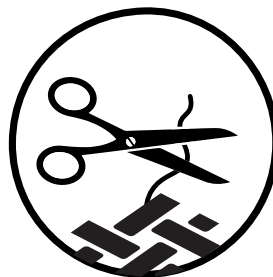
FINAL FINISHING

The entire installation area should be left clean and tidy, clear of tools and waste. The carpet should be carefully inspected to ensure it is totally flat and free from air bubbles. Loose fibers should be removed and, if required, sharp napping scissors should be used.

DO NOT PULL LOOSE YARNS BUT RATHER, CLIP THEM AT THE BASE TO PREVENT RAVELING



DO NOT PULL ✗



PLEASE CUT ✓

GENERAL AFTERCARE – POST INSTALLATION

CURING ADHESIVES

It is recommended that pedestrian traffic be restricted to necessary installation personnel only for a minimum of 24-48 hours to allow adhesives to cure properly. Premature traffic will cause installation failure. Restrict carpet exposure to water from cleaning or other sources for a minimum of 30 days. Room temperature should not fall below 50°F (10°C).

DO NOT COVER COMPLETED AREAS WITH PLASTIC FILM.

The newly installed carpet should be protected against damage and contamination from foot traffic and construction debris. If protection of the area is necessary, be sure to use a breathable cover, such as drop cloths, to allow moisture from the adhesive to escape. If a nonbreathable material, like plastic film, is used, trapped moisture may cause installation failure. Take care not to use products that may cause a slipping or tripping hazard. Plywood, Masonite, pressboard, or some other hardboard may be used, especially if exposed to rolling traffic.

Like most textile floorcoverings, flatwoven carpets can be damaged by sharp edges, heavy objects, and any other mechanical disruptions. Therefore, do not push furniture over the carpet as this will cause permanent damage from tearing or friction burns. Furniture sleds made to distribute weight or rolling dollies may be used, but no sooner than 24 hours after installation is complete unless hardboards are employed to protect the carpeted surface

** The manufacturer does not accept any liability for damage resulting from non-observance of these installation guidelines. Claims for compensation are, therefore, not possible. The information given in these installation guidelines are of a general nature only and comply with commonly used, industry recognized methods and techniques.*