

Installation Instruction – Luxury Vinyl Tile Glue Down

This is only a guideline for reference when installing products under the brand of SAHARA TILE by FERMA.

A. General Information:

- Luxury vinyl tile under the brand name of SAHARA TILE by FERMA is designed to be floated or glued for its installation. Glue down luxury vinyl tile is one type of vinyl product which is constructed with a limestone composite base and ceramic finish. It provides toughness and flexibility to resist breaking from normal subfloor deflection, expansion and contraction. This feature permits fast, easy installation using a pressure sensitive adhesive over a wide variety of sub-floor surfaces without extensive preparation.
- The installation could be done with or without grout.
- Although the glue down luxury vinyl tile could be applied a wide variety of sub-floor, it is still recommended that the flooring should be acclimated for approximately 48 hours in the area where the floor will be installed. The flooring should be installed in climate-controlled, indoor locations between 68F-72F and relative humidity of 35% -55% year round.
- The jobsite should be cleaned and cleared of other trade apparatus that may damage an installation.
- All sub-floor must be done before installation. A correct preparation of the sub-floor is a major part of a successful installation. It is required that sub-floor system is free of deflection. Sub-floor variations should not exceed 1/8" in 6' (3.18 mm in 1.8 m). All high spots must be sanded or ground smooth. Fill in low spots, cracks, and depressions. Roughness or unevenness of the sub-floor may telegraph through the new flooring, resulting in an unsightly surface and excessive wear on high spots.
- The installation of the tile must be conducted after kitchen cabinet or counter is installed. No flooring should be installed underneath any kitchen cabinet or counter. Otherwise, it will be treated as improper installation.
- The flooring could be installed over existing resilient floor coverings, wood flooring, and ceramic tile (grout joints must be leveled). Do not install the

flooring over carpet. Remove all carpet before proceeding with installation and examine the sub-floor underneath. Make any repairs to the sub-floor if necessary prior to installation.

- The flooring is not recommended to be installed over a radiant heat system.
- Some types of nails, such as common steel nails, cement coated or some resin-or rosin-coated nails, may cause a discoloration of the flooring. Use only non-staining fasteners with underlayment panels. The procedure of gluing and screwing underlayment panels is not recommended. Solvent-based construction adhesives are known to stain the flooring. All responsibility for discoloration problems caused by fastener staining or the use of construction adhesive rests with the underlayment installer.
- All sub-floors should be checked for excessive moisture, as to not promote mold or mildew conditions under installed product. Warranty does not include coverage for damage from mold, mildew, discoloring of product from excessive alkaline, flooding, and, or other excessive water issues.
- The flooring use is for indoor enclosed installations only, and it is not recommended, and has no warranty for outdoor use.
- Never install the flooring in high humidity areas where the floor is usually wet (steam rooms, bathrooms, saunas).

B. Wood Sub-floor Preparation:

- All wood floor must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of a crawl space must be covered with a suitable vapor barrier. Wood sub-floor directly on concrete or installed over sleeper construction are not satisfactory for the installation.
- All wood and wood composition panels are suitable for use under the flooring providing that they are smooth, flat, structurally sound and free of defection, which include plywood, particleboard, oriented strand board (OSB), flake board, and wafer board. If the surface of the wood sub-floor is not smooth, a 1/4" or thicker underlayment panel should be installed over the sub-floor.

C. Concrete Sub-floor Preparation:

- Concrete sub-floor must be dry, smooth and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard and dense, and free from powder or flaking. New

concrete slabs must be thoroughly dry (at least six weeks) and completely cured.

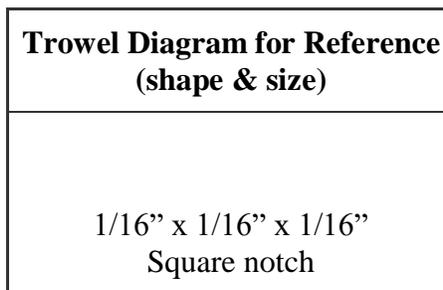
- It is an installer's responsibility to determine whether the concrete is dry enough for installation. In general, Moisture vapor emissions should not exceed 5 lbs./1000 ft.²/24 hrs. when the concrete is tested with the calcium chloride kit.
- Holes, grooves, expansion joints and other depressions must be filled, and troweled smooth and feathered even with the surrounding surface.
- Concrete sub-floor with a radiant heating system is not satisfactory for installation.

D. Installation over Existing Floor Coverings:

The flooring could also be installed over most glued down or nailed down existing hard surface floors, provided that the existing floors surface can be made smooth and solid. The flooring cannot be installed over any existing type floating floors.

E. Application of Adhesive and Joint Sealer:

- It is recommended that DriTac Eco-5500 or FERMA DT-ECO-5500 could be used as the adhesive applied for the installation. It is an eco-friendly pressure sensitive flooring adhesive designed for luxury vinyl tile. This adhesive is formulated to be extremely versatile, allowing installation by using the wet-lay or flash-off method.
- The recommended trowel notch size, 1/16" wide, 1/16" deep, 1/16" apart. It is approximately 200 SQFT /Gallon spread rate.



- Spread the adhesive over one-half of the subfloor and a few inches beyond the center chalk line.
- Allow the adhesive to dry completely to a tack before installation. Normal dry to tack time is about 45 to 60 minutes; longer in cool or humid conditions. The adhesive will turn from light blue to clear when tacky dry and will not transfer to the finger when firmly touched. Do not use fans to accelerate adhesive

drying time. Fan drying can cause the top surface of the adhesive to dry prematurely, trapping residual moisture in and preventing the adhesive from fully curing.

- The installation should be done within 12 hours after adhesive turns clear.
- Lay tile spacers 1/16" to 1/4" to allow for grouted installation. Do not use tile spacers if installing without grout.
- Wet adhesive could be removed with a damp cloth, and it could be removed with mineral spirits or a safe solvent. Hands and tools may be cleaned with waterless hand cleanser available at hardware or auto supply stores.
- Joint Sealer is designed to keep surface water and dirt from penetrating un-grouted tile joints. Do not use joint sealer on walls, other vertical surfaces . Apply joint sealer to the tile joints only.

F. Layout of the Room:

- Plan the layout of the room before installation so that the tile joints fall 6" away from sub-floor joints.
- Use the most prominent wall in the room to find the center point of the room.
- Divide the room into 4 equal quadrants by making 2 perpendicular lines on the sub-floor intersecting at the center points.
- Leave 1/8" gap between the tile and vertical surface (wall and cabinets). Cover the gap after the tile is installed with wall base or other moldings.
- Start from the center point determined the distance between the last full tile, and the perimeter walls and cabinets. A balanced layout will result in boarder tile no less than half a tile.

G. Installation-without Grouting:

- Installation could be conducted without or with grout.
- Start in one quadrant and begin installation where the guidelines intersect.
- Install the tile along the chalk lines using tile spacers to maintain desired joint grout width. If installing without grout, do not use tile spacers.
- Press the tile firmly into the adhesive. Do not slide the tile into place.
- Cut and fit boarder tile at the perimeter of the room.

H. Installation-with Grouting:

- Start in one quadrant and begin installation where the guidelines intersect.
- Install the tile along the chalk lines using tile spacers to maintain desired joint grout width. If installing without grout, do not use tile spacers.
- Press the tile firmly into the adhesive. Do not slide the tile into place.
- Cut and fit boarder tile at the perimeter of the room.
- Remove tile spacers for grouted installation.
- Roll entire floor with 100 lb roller prior to using grout, either diagonally across tile joint in both direction, and using a hand roller in confined area.
- Grouting may be done immediately or on the following day.
- Ensure that all tile edges are firmly seated in the adhesive before starting grouting.
- Follow the application instructions as specified on the grout container, and work small section of the floor at a time.
- Use a hard epoxy grout float to apply the grout.
- Do not spread grout over the entire surface of the tile. Apply the grout and pack it down in the immediate area of the open joints
- Hold float in almost vertical position and strike off excess grout, pulling the float diagonally across the joints.
- Two buckets and sponge may be needed to loosen the grout on the face of the tile
- Use one bucket of water to wipe excess grout off the tile as it is installed, which will prevent the grout from drying to the tile
- The other bucket is for the final removal of residues and smoothing the joints
- It is normal to have a grout haze remaining after initial cleaning up once the grouted joints have completely dried.
- Traffic should be kept off the installation at least 24 hours until the grout has been completely dried.
- Replace wall base and trim molding.

I. Installation-Warning:

- Do not wash or scrub the new flooring for at least 5 days after installation.
- Do not use solvents or grout haze removers.
- Tile may be walked on lightly immediately only if it is installed without grouting. No heavy tolling traffic for additional 72 hours after installation.
- Use pieces of hardboard or underlayment panels to protect the tile when moving furniture or appliance back into the room.
- Do not use mats with latex or rubber backing due to a possibility to cause discoloration of the tile.
- Do not use vacuum that use a beater bar or turn beater bar off.
- Do not use electric brooms with hard plastic bottoms with no padding.
- Do not use abrasive scrubbing tools.

J. Repair:

If a plank becomes damaged, it could be replaced.

If the tile is installed with grout:

- Use a heat gun to warm the grout along one edge of the tile. The grout will soften when heated.
- Place a straight edge over the center of the grout line and cut the grout with a sharp utility knife.
- Remove as much of the grout as possible using care to avoid cutting into the edge of the adjacent tile. Repeat this process on all four sides of the damaged tile.
- Next, heat the tile a few inches in from the corner. While the tile is warm, drive a putty knife or screwdriver into the heated area with a hammer.
- Then, pry upward to release the tile from the adhesive. Continue lifting the tile as you heat it until it is completely removed.
- To install the new tile, re-apply the adhesive over the exposed subfloor using the flat side of a trowel.
- it is not necessary to remove the old adhesive.

- Allow the adhesive to dry completely to a tack and then reinstall the new tile using spacers to maintain the grout line width.
- Roll the tile with a 100-pound, three-section roller.
- Re-grout the tile with Grout following label instructions. Allow grout to dry for 24 hours and remove any remaining grout haze.
- Use a utility knife and carefully cut through the joint sealer using care to avoid cutting into the adjacent tiles.
- Follow the same procedure for Grouted Floors to remove the tile and re-adhere the replacement tile.

If the tile is installed without grout:

- Use a utility knife and carefully cut through the joint sealer using care to avoid cutting into the adjacent tiles.
- Follow the same procedure for grouted tile to remove the tile and re-adhere the replacement tile.
- Re-apply joint sealer along all four sides of the tile to seal the joints.

K. Further Information:

FERMA FLOORING is a member of National Wood Flooring Association (NWFA). For more technical information about the installation, please also refer to other associated instructions by NWFA which may be applied to installation of luxury vinyl flooring as follow:

<http://fermaflooring.com/wp-content/uploads/2017/01/NWFA-Installation-Guidelines.pdf>