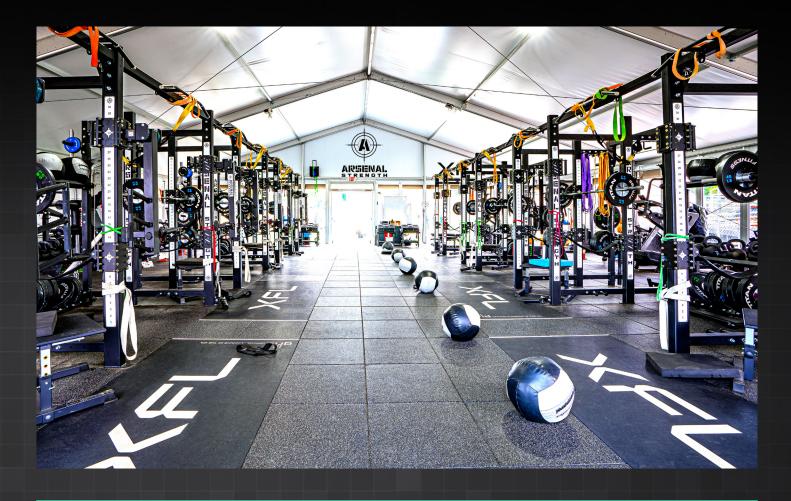
INSTALLATION GUIDE

BULL TILES - DOWEL





WHAT YOU NEED

TOOLS + SUPPLIES

Bull Tiles

Connecting Dowels

Rubber Mallet

2-3 lbs Sledgehammer

Chalk Line

Small 2"x4" Plank

Straight Edge or T-Square

Utility Knife + Extra Blades

Small 2"x4" Plank

Floor Prep As Needed

Furniture Dolly / Cart

RECOMMENDED INSTALL **PROCESS**

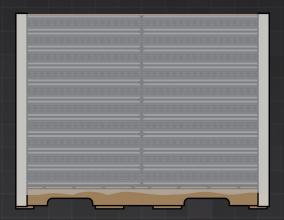
- Room dimensions are verified + plan is created showing locations + dimensions of all room elements to determine space requirements.
- 2. Clean, level + prepare the subfloor so it is free of debris + imperfections.
- 3. Determine your starting point
- 4. Lay out your first rows
- Install the remaining tiles + ramps

DELIVERY + UNLOADING

RECEIVING THE TRUCK

Bull Tiles will be shipped palletized. They will be delivered via a truck with a 53' trailer. Please ensure in advance the receiving area can accommodate a full-sized truck, or if special considerations are required. If you are unable to accept a 53' trailer, please let your Grid project manager know as soon as possible so we can arrange the proper shipment.

- Adhesives + floor prep are always shipped on a pallet to ensure they are not damaged during shipping.
- Use caution when entering the trailer, items may have shifted in transit.



UNLOADING THE TRUCK

YOU MUST INSPECT YOUR SHIPMENT PRIOR TO UNLOADING

Using a forklift or pallet jack, unload the Bull Tiles from the truck. Use caution not to bump the tiles into other objects in the space as you unload them.

If you do not have access to a forklift or pallet jack, let your project manager know so we can coordinate the appropriate truck for shipment.

When you receive your order please follow the instructions below; <u>Grid will not be responsible for damaged</u> items that have a clear delivery receipt from the freight carrier.

- Inspect the shipment for any visible damage to the Bull Tiles. If you find any damages, it must be noted on the delivery paperwork + signed by the driver.
- Count the number of tiles + pallets to verify that you have the correct number as stated on the packing list. Open each box + verify the material has not been damaged. If you are missing any pallets, please notate that on the delivery paperwork.
 The number of tiles on each pallet may vary
- Always accept your shipment even if it is damaged + notate any damage on the freight carrier's delivery receipt, if applicable. List all items that are damaged on the delivery receipt.
- Take photos of any damage + keep a copy of the delivery receipt. Any damaged items + packaging must be kept for the freight company to inspect if needed. Send photos of any damage to your Grid project manager immediately.
- If you are not installing the Bull Tiles immediately + need to store them, do not stack the pallets of tiles. Stacking the pallets can cause permanent damage to the Bull Tiles.

If you find that any items have been damaged in transit + you signed the delivery receipt as damaged materials, contact your Grid project manager at [469] 482-9800 within 24 hours of receiving the shipment.

BEFORE INSTALLATION

SUBFLOOR PREPARATION

All subfloors must be dry, clean, smooth, + structurally sound. The surface must be free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing compounds, old adhesive, + any other foreign material, which could affect the installation + adhesive bond to the substrate. Subfloor contamination or markings that bleed through the flooring material causing discoloration or staining are excluded from the Grid Limited Warranty. All substrate contaminants must be mechanically removed prior to the installation of the flooring material.

Fill all depressions, cracks, + other surface irregularities with a high quality portland cement based underlayment patching compound such as Ardex Feather Finish XF.

Expansion joints in the concrete are designed to allow for expansion + contraction of the concrete. If a floor covering is installed over an expansion joint, it will likely fail in that area. Use expansion joint covers designed for resilient flooring.

BEFORE YOU START

Grid flooring + adhesives must be site conditioned at room temperature for at least 24 hours prior to installation. Room temperature must be maintained between 65°F - 85°F + the ambient relative humidity must be between 40% - 60%. We strongly recommend the permanent HVAC system be fully operating prior to install.

Always allow the patching materials to dry thoroughly + install according to the manufacturer's instructions. Excessive moisture trapped in patching material may cause bonding problems or a bubbling reaction with the adhesive.

Grid does not recommend installing over existing resilient floors. All existing flooring + adhesives must be mechanically removed prior to installing the new flooring material – **Do not use chemical adhesive removers or solvents**.

CONCRETE TESTING

Concrete shall have a minimum compressive strength of 3000 psi. New concrete slabs should cure for a minimum of 28 days before installation. Maximum moisture vapor emission of the concrete must not exceed 5-1/2 lbs. / 1,000 sq. ft. in a 24-hour period, as measured by the calcium chloride moisture emission test conducted in accordance to ASTM F1869. Alternatively, if the RH method is used, the maximum RH should not exceed 85% RH tested in accordance with ASTM 2710. If the emissions exceed limitations, the installation should not proceed until the problem has been corrected.

PH testing must also be conducted on all concrete floors. If the pH is greater than 9, it must be properly neutralized prior to the installation.

ADHESIVE TESTING



Adhesive bond tests should be conducted in several locations throughout the area. Glue down 3' x 3' test pieces of the flooring with the recommended adhesive + trowel. Allow to set for 72 hours before attempting to remove. A sufficient amount of force should be required to remove the flooring +, when removed, there should be adhesive residue on the subfloor + on the back of the test pieces.

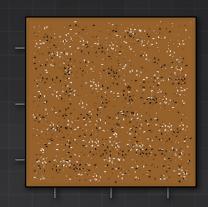
INSTALLATION

PRE-INSTALL THE DOWELS

Before you begin installing the tiles, you will need to prepare them for installation. Remove the plastic wrapping from the pallet to expose the sides of the Bull tiles.

Install the provided plastic dowel in two adjacent sides of the tiles. Insert each dowel about half way into the tile by hand. Use a rubber mallet to set dowels into tight holes.

Install dowels in at least enough tiles to install the first rows as shown below.



DETERMINE YOUR LAYOUT

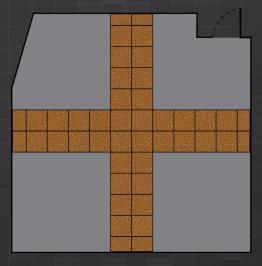
Determine a starting point for the first row of tiles that best fits the space. We recommend you start from the center of the room and work outwards to ensure a symmetrical installation.

Assume that the walls in your space are not square or straight. Using a chalk line, mark a straight line across the floor to act as your center line. Measure the length of the chalk line + make a small mark in the center of the line. Snap a second chalk line across this new mark perpendicular (90° angle) to your first line. This will form the starting point for your install.

INSTALLING FIRST ROWS

Begin laying out the Bull Tiles along the chalk line. The assembly of a Bull Tile flooring system is a two-person job, with one person holding the previously installed tile in place + the second installing the next tile in the row.

- Place the first tile at the intersection of the chalk lines with one doweled side facing the chalk line and the second facing the direction you will install the first row
- Connect the next tile in the row by connecting the dowel in the first tile into the empty holes on the second tile. Use small 2-3 lbs sledgehammer + a small 2"x4" plank to connect tile tiles together. Apply pressure to the first tile while installing the second one.
- Continue this process until the row has been completed from wall to wall. Trim the end tiles to fit with a straight edge + a utility knife, using caution to keep the cut as straight as possible. Cut edges should always be oriented towards the wall.



- After completing the first row, install a row perpendicular to the first tile, again going until you reach the walls. Follow the same dowel orientation as the first row.
- After installing the first two rows of tiles, install the two adjacent rows along the other edge of the chalk line. The first side of these tiles will connect as all tiles have previously. To connect the second side of the tile, lift the edge of the two tiles and guide each dowel into place by hand.

Make sure your first rows are straight + aligned with your chalk lines. Any curve in the first rows will cause issues later in the install.

TIPS + TRICKS

- Eliminate any gaps between tiles by knocking them together with a small sledgehammer + a small 2"x4" plank as you work thorough the space.
- Bull Tiles have a manufacturing tolerance of +/- 1/8". Throughout the installation you may have to hand select tiles to ensure the seams align throughout the install.
- Each Bull Tile will have a grain direction. Align the grain direction of all tiles when installing them for a uniform appearance.

INSTALLING THE REMAINING TILES

Once you have the first two four rows installed, you can install the rest of the space. Working one row at a time, install the tiles as described on the previous page. Orient your dowels however is needed to ensure all four sides of the installed tiles have dowels connecting them. Use as many dowels as possible when installing the edge pieces. Ensure at least one dowel is installed on each short side of end tiles.

As you work through the installation, you will have to pre-install more dowels in the Bull Tiles. Only install dowels into as many tiles as you need for the installation area excluding the edges.

Any tiles that are on the edge of the installation area + not contained by a wall will need to be adhered to the floor. This can be accomplished with either Grid Sport Bond adhesive for long term installations, or Double-sided flooring tape for short-term installations.

TROWEL GUIDE 1/16" x 1/16" x 1/16" Square-Notch

INSTALLING RAMPS

Cut your Grid Bull Tile Reducer to size with a sharp utility knife. If the reducers will turn around a corner, cut the edges of the two corner pieces at a 45° angle for a clean junction.

Just as with the edge tiles, the Bull Tile Reducers will need to be adhered to the floor with either Grid Sport Bond adhesive or double-sided flooring tape.

POST INSTALLATION

TRAFFIC LIMITATIONS

If adhesive is used during the installation, minimize foot traffic for 24 hours after you complete the installation. Foot traffic + rolling loads can cause permanent indentations in the uncured adhesive. Foot traffic immediately after install can leave permanent imprints in the flooring.

Check the label on your adhesive to verify the cure time.

If no adhesive is used, there are no time related traffic limitations with Bull Tiles. Since Bull Tiles are a rubber product, you should minimize heavy rolling loads. Construction equipment or other heavy loads such as pallet jacks + lifts can cause lasting indentations or other damage to rubber flooring.



APPLY FLOOR PROTECTION

After the adhesive is cured, apply flooring protection to the Bull Tiles for the duration of construction. Construction dust + small debris may be difficult to remove without a floor scrubbing system.