GALLERY SERIES

Natchez 5.0mm SPC - US

Installation Guide

Installation Instructions

General Information & Limitations: Natchez 5.0-mm SPC US has a rigid core and is designed to be installed indoors only, as a "floating floor" for either residential or light commercial applications. All commercial (including multi-family) installations must be performed by a qualified flooring contractor with enough professional liability insurance coverage (aka Errors and Omissions Insurance) for the project. Do not secure individual planks to the subfloor with mechanical fasteners or adhesives. Do not install cabinets, kitchen islands, or other non-movable objects on top of or through the floor covering. The optimal operating temperature is between 40°F to 90°F, avoid prolonged exposure to direct sunlight or other heat sources where temperatures will exceed 90°F as damage may occur. Copies of ASTM documents are available for purchase at www.astm.org. Do not install this floor covering if two pieces of heavy furniture ≥ 800-lb. are to be used within the same area. If required or concerned for any reason, immediately contact Powerhold at 844-638-4583 or visit powerhold.com for assistance.

Examples of Acceptable Light Commercial Areas:

Specialty Retail Medical	Art galleries, jewelry stores, boutiques/clothing, bookstores, and gift shops
Medical	Doctor offices & waiting rooms, exam rooms, reception areas (areas where hospital beds are excluded) and nursing home common areas.
Multi-Use	Living spaces/apartments/hotel rooms, laundry rooms, storage areas, conference rooms, entrance ways, lobby areas, and light-use exercise rooms (no free weights or aerobics, must use heavy vinyl mats under the equipment).
School / Institution	Meeting & training rooms, offices, common areas, lobbies, storage areas, and reception areas.
Office / Industrial	Banks, offices, reception areas, storage rooms, conference, dining, and training rooms.

Receiving Material & Storage: Confirm the color, style and quantity, and lot numbers. Carefully check all materials for shipping damage. Note any damage on the bill of lading before signing for delivery. Visible damage not reported on the bill of lading is your responsibility. The floor covering, adhesive and accessories must be stored indoors, in dry conditions between 40°F - 90°F. Do not store outside (even in containers) and do not stack pallets.

Recommended Tool List: Appropriate Personal Protective Equipment (PPE) including safety glasses, gloves and suitable dust mask. Appropriate tools to prepare the substrate, Hepa filtered vacuum, 6-foot and 1-foot straight edge or level, two quarters (U.S. coins), tape measure, pencil, speed square, utility knife with blades, 1-lb. (~ 16-oz.) rubber or soft faced dead blow hammer (preferred) or rubber mallet, chalk-line, pull-bar, Oscillating Multi-Tool or hand saw (door jambs), wedge spacers or similar, jigsaw with carbide blades, knee pads. If required a super-glue adhesive for any small cuts.

Warning: All local, state, and federal regulations must be followed; this includes the removal of in-place asbestos (floor covering and adhesive) and any lead-containing material. The Occupational Safety and Health Administration (OSHA) has exposure limits for people exposed to respirable crystalline silica; this requirement must be followed. Do not use solvent or citrus-based adhesive removers. When appropriate, follow the Resilient Floor Covering Institute's (RFCI) Recommended Work Practice for Removal of Existing Floor Covering and Adhesive. Always wear safety glasses and use respiratory protection or other safeguards to avoid inhaling any dust. The label, installation, and maintenance instructions along with the technical data sheet, limited warranty and any appropriate Safety Data Sheet (SDS) of all products must be read, understood, and followed before installation commences. Failure to do so

may result in an uneven installation, premature wear, gapping, broken joints, cupping, buckling of the floor covering, peaked or gapped seams, etc., and voids the warranty. If the substrate or subfloor fails for any reason, then the floor covering limited warranty is void.

Do not leave spills unattended, wipe up promptly, and allow the floor covering to dry before trafficking. Use bathmats and install safety "grab" rails where this floor covering is used next to wet or barefoot areas, like showers and baths.

Documentation: Record (including photographs) and file the site conditions, test results, and any corrective measures taken. It is required to maintain all of this documentation along with the original invoice and any labor receipts throughout the warranty period, as this will be required in the unlikely event of a claim.

Site Conditions: The prepared installation area must be fully enclosed and weather tight. During the installation, any direct sunlight should be blocked using blinds, drapes or similar. The ambient temperature during installation must be > 60°F, with a recommended maximum of 80°F.

Note: When installing at temperatures > 80°F, the size of an expansion gap will increase when the floor covering is cooled.

Flatness: Check all substrates for flatness prior to installation. The maximum acceptable tolerance is a 1/8-inch gap (2 x U.S quarters) over 6-foot and 1/16-inch gap (1 x U.S quarter) over 1-foot. Make any necessary adjustments to the substrate before installation. Dormant cracks saw cuts and grout lines < 1/8-inch wide or deep are acceptable, all others must be cleaned out, removing all dirt and debris, then filled using a suitable commercial grade patching or crack repairing underlayment, follow the product instructions.

Concrete Subfloors: The prepared substrate must be without contaminates and be structurally sound. If required, smooth using a suitable, moisture resistant commercial grade leveling or patching underlayment, following the product instructions. Do not install over any expansion or moving joints as subfloor movement may cause an installation failure. When required, use a suitable industry-standard expansion joint assembly system. Do not install if hydrostatic pressure exists, or if a chemical adhesive remover has been used, contact the technical department.

For all on and below grade concrete slabs, test and confirm the surface is absorbent (porous) following the protocol of “ASTM F3191 Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring. The water droplets placed on the substrate must be absorbed for it to be considered absorbent. If required, make it porous by mechanical methods like diamond grinding, DiamaBrush, bead blasting or similar.

Concrete Moisture: For all on and below grade concrete slabs or if < 1-year old use a ≥ 6-mil thick polyethene (PE) sheet like Blue Hawk Premium Flooring Underlayment, or similar (available from home improvement stores). It must be installed over the entire area and extend at least 2-inches up the walls. All seams must be overlapped and sealed following the product instructions. Other types of moisture mitigation systems are available and may be acceptable. The liability and warranty for any products performance remains with its manufacturer.

Wood Subfloors: All wooden subfloors and substrates must be and remain dry according to the moisture content percent (MC-%) for your region. Regional values are freely available by searching “moisture map of wood” images. Test using a non-destructive electronic moisture meter, following the instructions. They must also be without contaminants, with a minimum total thickness of 1-inch. If required, use suitably thick underlayment grade plywood. The subfloor must be rigid, meet federal, state and local building codes, have at least 18-inches of well-ventilated air space below. Sleepers must not be directly in contact with concrete or earth, and a suitable vapor barrier must cover the ground beneath the subfloor.

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The subfloor must meet the local building code, be rigid, free from movement, and have at least 18-inches of well-ventilated air space below. Sleepers must not be directly in contact with concrete or earth, and a suitable vapor retarder must cover the ground beneath the subfloor. It must be without contaminants and be at least 1-inch thick. If required, install an underlayment grade plywood with a minimum thickness of 1/4-inch on the surface. The underlayment must be installed in the opposite direction to the subfloor, following "ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring".

Gypsum Subfloors: Any finished gypsum substrate must be prepared and installed in accordance with "ASTM F2419 Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring" or "ASTM F2471 Standard Practice for Installation of Thick Poured Lightweight Cellular Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring". The substrate must be and remain dry according to the manufacturer, be structurally sound and firmly bonded and without contaminates.

Unsuitable Substrates: These include but are not limited to; any floating or unfixed floor coverings, hardwood, carpet, cushion vinyl, rubber, cork, foam, asphalt tile, any additional acoustic underlayment. Do not install directly over any adhesive or adhesive residue of any kind. Any substrate with mold, mildew, or fungi or in wet areas like inside showers, saunas, or solariums. Do not install directly over radiant heated substrates. Do not install in any exterior application including recreation vehicles, campers or boats.

Notes: Existing hardwood floor coverings exposed to moisture will swell resulting in a failure if overlaid with a vinyl floor covering that restricts it's drying, typically this occurs when installed on or below grade. Some hardwood floor covering may also discolor vinyl floor covering which is excluded from the limited warranty coverage. Electing to install over any existing floor covering, assumes full responsibility for the suitability and continued performance of that product, including any resulting effect on the new floor covering like indentations and damaged locking mechanisms.

Other Subfloors/Substrates: These may be acceptable; however, they must be and remain dry, without contaminates and be structurally sound.

Expansion Gap: If the length or width is ≤ 50-foot, an expansion gap of at least 1/4-inch around the entire perimeter is required at the correct installation temperature. If the overall length or width is between 50 – 85-foot, then the gap must be increased to ≥ 1/2-inch around the entire perimeter. A maximum of 85-foot in length or width must not be exceeded. If required, use a suitable trim molding covering the edges by 1/8-inch and allowing a 1/2-inch expansion gap.

For three-season rooms, a gap of at least 1/2-inch around the entire perimeter is required. In addition, the area must be separated from all other rooms using a suitable trim molding. The maximum of 30-foot in length or width must not be exceeded.

Note: Areas with heavy furniture ≥ 800-lb. that are not located near the center of the room must double the required expansion gap as the weight may restrict the natural expansion and contraction.

General Preparation: It is recommended to remove the wall-base before the installation or to use a 1/4-round molding (fixed to the wall or wall-base only) to cover the required expansion gap and at least 1/8-inch of the floor covering. Undercut the door jambs back to the studs and if left > 1-inch of the wall base using an Oscillating Multi-Tool or hand saw, the height must be the thickness of the floor covering plus 1/64-inch. This allows the floor covering to expand and contract freely, out of sight, with temperature fluctuations. Steel door jambs should be patterned scribed, leaving the required expansion gap. Use a color-coordinated 100% silicone to fill the void. Clean the entire area to be installed (Hepa filtered vacuum). Before beginning, check and make sure the lot numbers on the packaging match and mix the floor covering from several boxes to ensure a random appearance. During the installation, inspect for visible defects, including any damage, gloss, color or shade variations, dirt and debris in the locking mechanism (remove using a soft brush), as installing it assumes full responsibility. If you have any concerns, do not install, immediately contact Powerhold.

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Layout: Follow the design or drawings provided or agreed upon by the designer, architect, or end-user. For all planks, the joint layout should be in a random (not stepped) with ≥ 8-inches of end-seam separation and being at least 8-inches in length is recommended. Tiles must be installed in a brick-bond pattern.

Cutting: To cut the floor covering, measure and mark the surface with a pencil, then carefully score the surface a few times on your mark, using a sharp utility knife along the side of a speed square. Snap it downwards and complete by cutting the backing from underneath. For complicated cuts like around door jambs, it is recommended to use a jigsaw with a carbide blade following the product safety instructions.

Installation: Clean the entire area to be installed twice using a Hepa filtered vacuum. Determine which is the best wall to start at, typically this would be the longest (straight) side wall (with a doorway). Measure the width of the room, allowing for two expansion gaps, calculate the width of your last row. If it is less than half the width of the floor covering, or if a balanced design is required, then reduce the width of the first row, accordingly.

First Row (slide): At the left corner of your starting wall, position your first tile or plank flush with the walls. Use the side and end without the extended locking mechanism against the walls. Place wedge spacers as you go between the floor covering and wall to maintain the required expansion gap around the entire perimeter. Connect the second piece by laying it flat on the substrate (where the second row would be), lining up the “end” locking mechanism. Then, while keeping the joint perfectly in line, slide the locking mechanism together. Continue with this method and complete the first row, including the last piece. Keeping the installation straight is critical, so check the first row using a chalk line or similar, if needed, adjust and firm up the row by adding more wedge spacers. The acceptable tolerance is within 1/16-inch > 20-foot in length or 1/32 < 20-foot. Complete the following rows starting with a cut piece, perhaps the waste from a previous row. Installing the side joints before the end joints as instructed under “Side Joints” and “End Joints”.

Side Joints (angle-angle): Again, starting at the left corner, place the side without the extended locking mechanism into the side of the previously installed row at an angle of about 25°. Make sure the joint is seated properly, then slide the plank or tile into position. The end joint must line up perfectly. Lay the tile or plank flat and complete the end joint as detailed below.

End Joints (drop-lock): Always check the correct alignment of the end joint and adjust if necessary. To lock the joint, lightly tap on the high side, working from one end to the other using a 1-lb. (~ 16-oz.) soft faced dead blow hammer or rubber mallet. Keep the striking head flat with the floor covering tap until perfectly flush. If the locking mechanism does not line up properly, then check and adjust the straightness as necessary.

ProTips: Do not hit the locking mechanism directly with any hammer, tapping block or pull bar (except the last row), as doing so will damage the locking mechanism and may result in peaking, gapping or broken joints. Only if required, use an ~ 6-inch piece of scrap floor covering locked into the joint and lightly tap it to close any joints.

If you need to install small cuts of floor covering that are < 3-inches in length or width, place a thin bead of super-glue on the previously installed extended locking mechanism, just before installing. This will make sure they remain locked together during use. Do not get the adhesive on the surface, the coverage will be about 30-foot per oz.

After the first five or six rows are completed, turn yourself around and continue installing, working from on top. The benefit is you are now “pulling” the side joints together, rather than “pushing” them, making it even easier.

If you need to disengage the end joints for any reason, first unlock the side joints by lifting the outside edge of the row to about 25° and disconnect the row. Make sure all pieces are lying flat and are properly engaged (tap to engage if required), then simply slide them apart. If they are angled or pulled upwards, the joint will break.

Completion: If used the plastic sheet needs to be trimmed off flush with the surface of the floor covering. Install the wall-base or molding without compression (to allow movement), fix them into the wall or wall-base only (not through the floor covering.

Protection: If required, protect the clean floor covering from other trades or heavy loads using 1/2-inch plywood or similar and tape all seams. For light traffic use Ram board or similar and tape all seams. Use only non-pigmented

hard plastic, nylon, or felt glides (replaced > 3-times a year), keeping them clean and grit-free. They should be ≥ 1-inch^2 on all slidable furniture. Use chair mats underneath castor chairs or soft “W-type” wheels. Use non-rubber backed entrance matting at all outdoor entrances; this will improve air quality and reduce maintenance. Do not move heavy or sharp objects directly across the surface, use hard surface "Sliders" (available at home improvement stores). For areas that may be subjected to standing water on the surface, like along-side baths or showers, the edges must be properly sealed using a 100% silicon to prevent water getting beneath the flooring. Take photographs and have any required documentation signed and filed.