PRO CORE PRO
SURFACES®

INSTALLATION INSTRUCTIONS

PROCORE® PRO 2.0-MM INSTALLATION INSTRUCTIONS

Quick Reference:

Concrete moisture requirement	Confirm vapor retarder is under all on or below-grade concrete subfloors or use a suitable concrete moisture mitigation system. See requirements below.
Flatness tolerance	< 1/8-in. over 6-ft. and 1/16-in. over 1-ft. in all directions. If required, flatten and smooth subfloor using a suitable commercial grade leveling or patching underlayment
Installation temperature	Between 60° F to 80° F (16° C to 27° C). Measure flooring with a non-contact infrared thermometer to confirm.
Optimal service temperature	Between 60° F to 90° F (16° C to 32° C)
Adhesive name	ProCore PRO Adhesive
Adhesive size	1-gallon and 4-gallon pails
Adhesive coverage	175 - 250 sq. ft. per gallon (depending on substrate and trowel angle)
Adhesive trowel type / size	1/16-in. x 1/32-in. x 1/32-in. U-notched trowel (FFA)

General Information & Limitations: Please watch the PROCORE® PRO 2.0-mm Glue Down installation video available at lowes.com. PROCORE® PRO 2.0-mm is a luxury vinyl floor covering designed to be installed in residential indoor applications only. All installations must be performed by a qualified flooring contractor with enough general liability insurance coverage for the project. Avoid prolonged exposure to direct sunlight or other heat sources where temperatures will exceed 90° F (32° C), as damage or deformation may occur. Use non-rubber backed entrance matting at all outdoor entrances, as this will improve air quality and reduce maintenance. If required or concerned, immediately contact the technical department at 1-888-509-3438 or techsupport@novalis-intl.com for assistance. Copies of ASTM documents are available for purchase at www.astm.org.

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 the delivery. Visible damage not reported on the bill of lading is the receiver's responsibility. The floor covering, adhesive and accessories must be stored in dry indoors conditions between 40° F - 90° F (4° C - 32° C). 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-ft. and 1-ft. straight edge or level, two U.S. quarters (coins), tape measure, pencil, speed square, utility knife with blades, chalk-line, adhesive trowel with enough 1/16-in. x 1/32-in. x 1/32-in. U-notched trowel (FFA) replacement blades (1-per 4-gallons), 100 lb. three-section roller, Oscillating Multi-Tool or hand saw (door jambs), non-contact infrared thermometer, and knee pads.

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. 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 handrails where this floor covering is used next to wet or barefoot areas, like showers and baths.

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

Grouting: If the product has a micro-beveled edge, the flooring may be grouted. During installation, leave a consistent gap around all four sides of the tile or plank – the gap should be created using appropriate tile spacers and should be 1/16-in., 1/8-in. or 3/16-in. wide. Remove the spacers just before rolling and grout the joints using a flexible grout specifically made for vinyl floor covering. Follow the product instructions regarding its application and cleaning.

Note: Any grout residue left on the surface will effect product maintenance and is not covered under the warranty.

Mat Bond Evaluations: These are only required if specified or the suitability of the substrate or preparation method is in question. Follow the protocol of the ASTM F3311 Standard Practice for Evaluation of Performance and Compatibility for Resilient Flooring System Components Prior to Installation.

Site Conditions: The installation area must be fully enclosed and weather tight. Protect the adhesive and floor covering from excessive temperature fluctuations. Use permanent or temporary HVAC systems to control the site condition. The temperature must be between 60° F to 80° F (16° C to 27° C) and constant (±5° F) for 48-hours before, during and after the installation. The ambient relative humidity must be between 35% and 65% and 10° F above dew point, with temperatures rising – dew point calculators are available on the internet. Failure to ensure these conditions are met could affect adhesive curing and flooring stability.

Radiant Heated Substrates: When installing floor covering over a substrate that contains a radiant heating system, ensure the radiant heat does not directly contact the floor covering and is set at the correct "in-service" temperature for 48-hours prior, during and after the installation. The radiant heat may be gradually increased or decreased to maintain the correct "in-service" site conditions.

Note: Ensure the temperature of the radiant heating system does not exceed 85°F (29°C).

Flatness: Check all substrates for flatness - all areas should be smooth and flat. The recommended flatness tolerance is < 1/8-in. gap (2 x U.S quarters) underneath a 6-ft. straight level and < 1/16-in. gap (1 x U.S quarter) under a 1-ft. level. Make any necessary and appropriate adjustments to the substrate before installation.

Concrete Subfloors: All concrete must be clean and free of contaminates. If required, using a moisture-resistant commercial grade leveling or patching compound, following the product instructions. Do not install over any expansion joints or any other moving joints. When required, use a suitable industry-standard expansion joint covering system. Permanently dormant cracks and saw cuts are acceptable to install over, but must be cleaned, removing all dirt and debris, and filled with a moisture-resistant crack filler or repair compound, following the product instructions. Do not install if hydrostatic pressure is visible, present or suspected. If a chemical adhesive remover has been used, contact the technical department.

Concrete Moisture: All concrete slabs must be surface dry at least 28-days old. In addition, all on and below-grade concrete slabs must have a confirmed effective vapor retarder installed directly underneath, that meets the requirements of ASTM E1745 or use a suitable concrete moisture mitigation system. Moisture and pH tests are not usually required.

Concrete Moisture Mitigation System: When appropriate, use a dimensionally stable surface-applied moisture mitigation system that when tested in accordance with "ASTM E96 / E96M Standard Test Methods for Water Vapor Transmission of Materials" (Method B), has a permeability value of ≤ 0.1 grains/ft.^{2}/hour, confirm with the manufacturer before use.

Wood Subfloors: All wooden subfloors and substrates must be dry and in compliance with 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 product instructions.

The subfloor must comply with local building codes, have at least 18-in. of well-ventilated air space below and have a suitable vapor retarder to isolate the subfloor from ground cover and outdoor conditions. Wood subfloors must have a total thickness of at least 1-in. Sleepers must not make direct contact with concrete or earth. If necessary, install an underlayment grade plywood with a minimum thickness of 1/4-in. on the surface. The underlayment must be installed in the opposite direction to the subfloor, following the ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.

Note: Plywood is porous, therefore the seams may telegraph through any flexible resilient flooring, due to the natural expansion and contraction from humidity changes. This is not covered by the product limited warranty.

Gypsum Subfloors: Any finished gypsum substrate must be prepared and installed in accordance with the ASTM F2419 Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring or the 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 also be dry, structurally sound, firmly bonded and free of contaminates.

Unsuitable Substrates: These include, but are not limited to: any floating or loose floor coverings, hardwood, carpet, cushion vinyl, rubber, cork, foam, asphalt tile; any substrate with visible mold, mildew, or fungi and any substrate in wet areas, such as inside showers and saunas; substrates that have been coated with a varnish or oil-based, enamel, paint, primer, primer-sealer or stain-blocker; and substrates made of Masonite™, chipboard, wafer board, fiberboard, particleboard, construction-grade plywood, CDX, OSB (including AdvanTech™), Lauan, cement board or any non-underlayment grade panels must be removed and replaced or covered with an underlayment grade plywood. Do not use pressure-treated or fire-retardant plywood. Do not install directly over adhesive residue. Do not install in recreation vehicles, campers or boats.

Note: Electing to install over any existing floor covering releases the manufacturer from any responsibility regarding the suitability and continued performance of the product, including any resulting effect on the new floor covering, such as indentations and adhesive failure.

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

Acclimation: Depending on the temperature of the floor covering, an extended acclimation period may be required. Check the temperature of the floor covering using a non-contact, infrared thermometer - the floor covering must be at the same temperature as the required site conditions (± 2° F) before installation.

Layout: Follow the design or drawings provided or agreed upon by the designer, architect, or end-user. Measure the width of each end of the area, then calculate and mark your starting line, which should be near the center of the room. Calculate the width of the last row – if it is less than half the width of the floor covering, adjust your starting line by half the width of the flooring. It is recommended that plank end joints be staggered randomly by at least 8 in. to avoid an undesirable "stair stepped" or "H joint" pattern. Tiles are recommended to be installed either in a brick-bond or a 1/3rd off-set pattern.

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

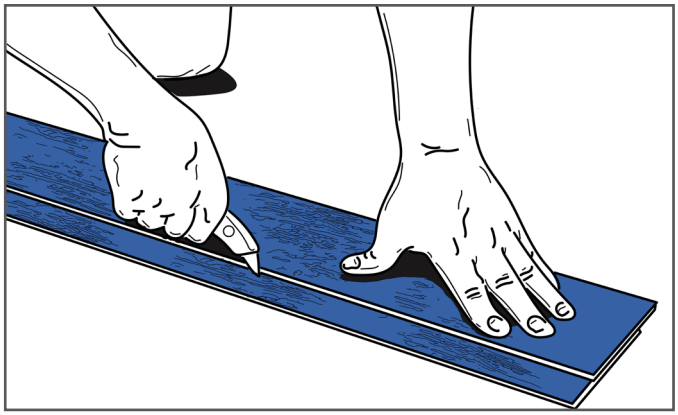

Figure 1 - Score Plank

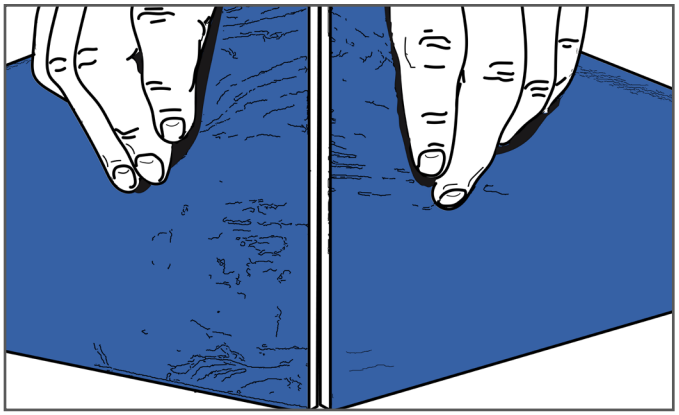

Figure 2 - Snap Plank After Scoring

Adhesive & Coverage: Coverage for the ProCore PRO adhesive is 175 - 250 sq. ft. per gallon, depending upon the substrate and trowel angle. The ProCorePRO adhesive is available in 1-gallon or 4-gallon units from lowes.com. Replace trowels every 4 gallons to ensure even coverage - do not re-notch trowels.

Adhesive Application: Only apply as much adhesive as can be covered within the working-time (4-hours). Apply the adhesive slowly and evenly to the substrate at a ~45° angle using the specified trowel notch. Avoid skips, puddles or sharp trowel turns. Allow 15-30 minutes of open time for the adhesive, depending on conditions. The adhesive should be dry to the touch - do not install the flooring into wet adhesive. After each area of flooring is completed (< 1-hour), roll it slowly, first width then length, using a 100 lb. three-section roller.

Installation: Mix floor covering from several boxes to ensure a consistently random appearance. Make sure the arrows on the back are all pointing in the same direction. During the installation, inspect each piece for visible defects, including damage, gloss, color, or shade variations. Do not install any floor covering with visible defects or damage, as removal, subfloor repair and replacement labor costs will not be covered.

After the appropriate adhesive open time has been reached, install the floor covering, including perimeter cuts. Follow the layout and starting line, keeping all joints snug without compressing the material. Periodically check to ensure the starting row is straight - the acceptable straightness tolerance is within 1/16-in. for lengths over 20-ft. or 1/32 in. for lengths under 20-ft. After the first installation section is completed, roll the entire area slowly, across the width then length, using a 100 lb. three-section roller. Failure to roll correctly may result in bond failure. Repeat this process for the remainder of the installation. Immediately remove all adhesive from the surface using a clean damp cloth. If the adhesive has dried, use a small amount of 70% Isopropyl alcohol and a clean cloth to remove it.

Protection: If required, protect the clean floor covering from other trades or heavy loads using ½-in. plywood or similar and tape all seams. For light traffic, use Ram board or similar and tape all seams. For furniture, use only polyurethane, silicon or felt glides (replaced > 3-times a year), keeping them clean and grit-free – all glides should be ≥ 1-in.^{2}, especially on heavy furniture. Use chair mats underneath rolling chairs or soft "W-type" wheels. Use non-rubber-backed entrance matting at all outdoor entrances, as this will improve air quality and reduce maintenance. Do not drag heavy or sharp objects directly across the surface - use hard surface "sliders" (available at Lowes). For areas that may be subjected to standing water on the surface, such as bathrooms with a bath or shower, the perimeter of the installation must be properly sealed using a 100% silicon caulk to prevent water from getting beneath the flooring. To avoid excessive fading or discoloration from direct sunlight exposure, use appropriate window treatments, an effective UV/IR film or Low-E glass windows. Take photographs and have any required documentation signed and filed following completion.