



Richmond Plywood Corporation Limited

RICHFLORTM **UNDERLAYMENT INSTALLATION INSTRUCTIONS**

RICHFLOR UNDERLAYMENT

RICHFLOR Underlayment is a premium grade Douglas-Fir intermediary layer of plywood typically installed on top of a subfloor to provide a solid base for the additional installation of hardwood or laminate flooring, carpet, ceramic tile, vinyl, or resilient flooring. RICHFLOR is a specially developed solid-face premium-core underlayment sanded to fine tolerances for a smooth and stable surface.

Preparation:

Work safely when cutting or machining RICHFLOR Underlayment panels and generating wood dust. Wear a dust mask, eye and ear protection, as well as protective clothing, gloves and footwear. Practice good hygiene by regularly washing your hands and face.

RICHFLOR Underlayment panels must be kept dry and must be protected from physical damage and areas of extreme heat or moisture before, during and after installation. Before installing RICHFLOR panels, make sure the wood subfloor and lumber framing are dried and conditioned to the temperature and humidity that will exist during occupancy. Allow RICHFLOR panels to acclimatize by standing them on edge and separating them to permit air circulation for a minimum of 48 hours in the rooms where they will be installed. This is necessary because moisture differentials between the subfloor and underlayment could cause problems with the finished floor.

RICHFLOR Underlayment should only be installed on a dry, clean, level, securely fastened and structurally sound subfloor. Inspect the subfloor surface for evenness, flatness, and squeaks prior to installing RICHFLOR panels. When necessary, sand subfloor edge joints to smooth surfaces, add blocking under the subfloor for flatness between joists, and re-fasten subfloor as necessary to prevent squeaks. Protruding fastener heads must be reset. Ensure the subfloor is thoroughly scraped, swept, vacuumed and free of construction dust and debris.

Crawl spaces must utilize a vapour barrier, have a minimum clearance of 460 mm (18 inches) between the floor and ground level, and be well ventilated to meet building code requirements and prevent excessive variations in moisture content of subfloor and underlayment. Areas close to furnaces and ducts must also be well ventilated and insulated with 50 mm (2 inches) insulation batts between the floor joists. RICHFLOR Underlayment is not suitable for use over concrete floors, plank subfloors, or on applications below grade. Use of RICHFLOR Underlayment over existing resilient flooring and underlayment is not recommended. Application of RICHFLOR Underlayment over existing resilient flooring may reduce or void the warranty.

Laying:

Protect the RICHFLOR Underlayment surface and minimize its exposure to rough handling or damage from impacts, debris, or other heavy traffic by installing panels right before the application of the finish floor covering.

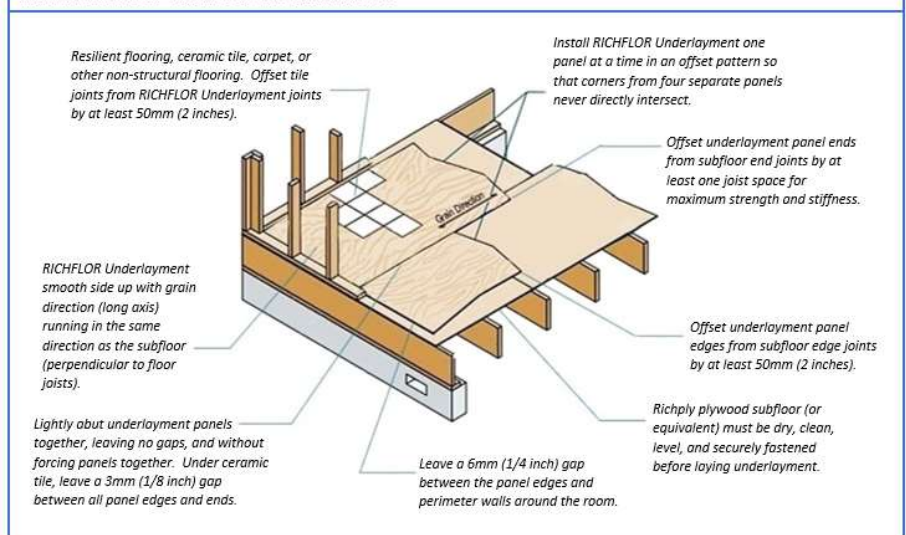
Install RICHFLOR Underlayment smooth side up with the face grain running in the same direction as the subfloor (ie. at right angles or perpendicular to floor joists). Offset underlayment panel ends from subfloor panel end joints by at least one joist space. Offset underlayment panel edges from subfloor edge joints by at least 50mm (2 inches) unless otherwise recommended by the finish flooring manufacturer.

Begin by setting the first full RICHFLOR panel starting in one corner of the room. A space of 6mm (1/4 inch) must be left between the panel edges and the perimeter walls around the room to allow for expansion. **DO NOT** use any adhesive beneath RICHFLOR Underlayment.

RICHFLOR Underlayment panels should be laid and installed one panel at a time in an offset pattern so that the corners from four separate panels never directly intersect. Hand cut edges should be positioned at the exterior edge next to the walls leaving factory edges to go together at the seams in the field of the floor. When cutting panels, sharp carbide-tipped saw blades are recommended for clean cuts.

For installation under hardwood floors, engineered flooring, carpet, vinyl and other resilient flooring, RICHFLOR Underlayment panel edges and ends must be abutted to light contact, leaving no gaps, and without forcing panels together.

Figure 1
INSTALLATION OF RICHFLOR UNDERLAYMENT

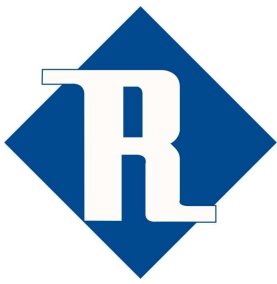


Richmond Plywood Corporation Limited

13911 Vulcan Way, Richmond, B.C., Canada V6V 1K7

Tel: 604-278-5710 Fax: 604-278-2617 email: sales@richply.com

Quality Plywood Since 1956



Richmond Plywood Corporation Limited

RICHFLOR™ **UNDERLAYMENT INSTALLATION INSTRUCTIONS**

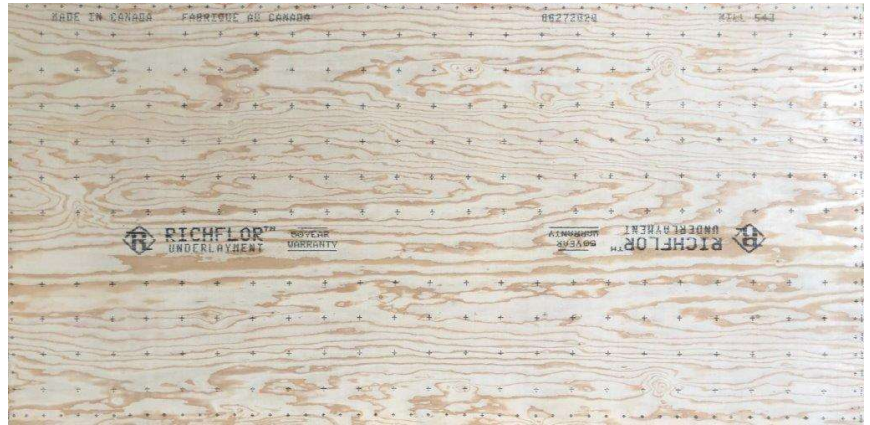
For installation under ceramic tile, leave a 3mm (1/8 inch) expansion gap between RICHFLOR Underlayment panel edges and ends. Once fastened, fill the seams following the manufacturers' instructions and allowing sufficient time to cure and dry completely. Follow the floor covering manufacturers' procedures and recommendation for a suitable seam filler compatible with plywood. Sand all joints with a belt or floor sander until level and smooth then remove all dust and debris prior to installing the ceramic tile. You may leave an expansion gap without seam filler when RICHFLOR Underlayment is used under hardwood floors, engineered flooring, or carpet and pad.

Fastening:

RICHFLOR Underlayment panels should be laid and fastened one panel at a time. Use ring-grooved or screw-shank flooring nails which have higher withdrawal resistance, or narrow (1/4 inch) crown chisel point staples, to fasten RICHFLOR Underlayment to the wood subfloor. To prevent splintering, ensure staples are applied parallel to the grain. Choose a fastener length approximately equal to the total thickness of the underlayment and subfloor; the length of the selected fastener should not be so long that it breaks through the bottom side of the subfloor. **DO NOT** fasten through the underlayment and subfloor into the supporting joists. In remodeling jobs, fasteners used must be long enough to penetrate the previous flooring and into the subfloor by 15.5mm (5/8 inch).

A factory applied nail guide is available on RICHFLOR Underlayment that helps simplify installation by identifying fastener positioning to ensure a properly secured floor.

Begin by fastening the first RICHFLOR Underlayment panel starting at one corner and progressing along the long edge every 50mm (2 inches) positioned 12.5mm (1/2 inch) from the edge of the panel. **DO NOT** tack panels down by the four corners first. Be sure to leave a 6mm (1/4 inch) expansion gap between the panel and the wall. Stand and apply foot pressure on panels when fastening to ensure flush contact between RICHFLOR Underlayment and the structural subfloor. Any crackling or popping noises indicates debris may be caught underneath the panel. If this occurs, the panel should be removed and replaced, and the subfloor should be cleaned and prepared again. **DO NOT** overdrive or underdrive the fasteners. Ensure fasteners are driven so that the fastener heads are flush with, or just slightly below the panel surface.



After fastening the long edge, return to the starting corner and fasten the short edge every 50mm (2 inches) positioned 12.5mm (1/2 inch) from the edge of the panel. Then, from the starting corner, fasten the diagonal every 100mm (4 inches) to the opposite corner. Finally, from the starting corner, fasten the rest of the field of the panel every 100mm (4 inches) working in a diagonal direction across the surface of the panel.

Installing Floor Covering:

Preparation of RICHFLOR Underlayment for floor covering application must be done as recommended or instructed by the floor covering manufacturer. Thoroughly check the entire surface and seam lines for smoothness. Fill any surface voids, dents, gaps, gouges, and chipped edges with a patching compound approved by the floor covering manufacturer. Allow the patching compound to fully cure prior to sanding. Sand all uneven surfaces and panel joints to level using an electric belt sander or a commercial floor sander first with 80-100 grit sandpaper and finishing with 120 grit sandpaper. Seam lines should be sanded at a 45-degree angle being careful not to over sand. Ensure all fasteners are set and correct any irregularities.

Follow the floor covering manufacturers' specifications, directions, and instructions for application of adhesives or setting materials that are compatible for use over wood floors. To minimize exposure of RICHFLOR Underlayment to moisture from water-based adhesives, choose premium-quality flooring adhesives with higher solids content and reduced water content. Shiny, thin, no-wax floor coverings are highly susceptible to telegraphing even the smallest irregularity in the floor surface. RICHFLOR Underlayment should not be covered with a resilient covering less than 1.6mm (1/16 inch) in thickness. Thicker, and some "loose-laid" floor covering products are better suited to mask most of these imperfections.

If RICHFLOR Underlayment has been installed with an expansion gap for ceramic tile, follow the floor covering manufacturers' directions for the selection and application of a suitable seam filler compatible with plywood and allow sufficient time to cure and dry completely prior to sanding. Seam filler should be sanded to flush with the plywood edges and not feathered. Ensure the underlayment is thoroughly swept, vacuumed and free of construction dust, debris, and contaminants. For ceramic tile, the subfloor and underlayment assembly must combine for a minimum total thickness of 27mm (1-1/16 inch) for residential applications and 28.5mm (1-1/8 inch) for light commercial applications. Tile joints should be offset at least 50mm (2 inches) from RICHFLOR Underlayment joints.

All traffic should be kept off the new floor for a minimum of 24 hours. Use only floor manufacturer's instructions for cleaning and waxing.



Richmond Plywood Corporation Limited

13911 Vulcan Way, Richmond, B.C., Canada V6V 1K7

Tel: 604-278-5710 Fax: 604-278-2617 email: sales@richply.com

Quality Plywood Since 1956