

## Installation Instructions

### Storage and Handling

- ▶ Always store Halex Composite Flooring Underlayment panels flat on a minimum of 5 bunks or skids in dimensions of 2" x 4" x 48", spaced evenly at least every 16", with spacers between panels in a dry, covered, and level area.

### Jobsite Preparation and Conditions

- ▶ Subfloor must be of wood construction; code approved, 5/8" minimum thickness, tongue and groove, and dried to the moisture conditions that will be found in the structure during occupancy. Subfloor moisture content must not exceed 12%.
- ▶ Immediately before installation acclimatize panels to the room's temperature and humidity expected during occupancy, which may take as long as 48 hours. Lay panels on a flat surface and separate individual panels with lath (stickers) for proper air circulation
- ▶ Subfloor surface must be properly secured, free of protruding fasteners, dry, and level. It is essential to repair uneven joints and variations in panel thickness. Sand any uneven joints if necessary.
- ▶ Subfloor surface must be free of surface debris and foreign matter. Sweep and vacuum the entire surface of the subfloor to accomplish this.

### Crawl Spaces

- ▶ Crawl spaces must have a minimum 18" clearance, between the ground and floor joists, with proper crossventilation. The ground within the crawl space must be covered with a minimum 6 mil polyethylene vapor barrier or equivalent. Do not apply Halex Composite Flooring Underlayment panels over concrete or below grade.

### Layout

- ▶ Halex Composite Flooring Underlayment panels must be installed in a direction perpendicular to the subfloor panels that are supported by joists spaced no more than 19.2" oncenter.

- ▶ Begin by laying panels in one corner of the room. Arrange panels so that four panel corners do not meet at one point.
- ▶ Dry-fit the room, without any fasteners applied. Avoid pieces less than 24" except where necessary for floor fixtures.
- ▶ Use full panels when possible for best results; lightly butt factory edge to factory edge, with custom cut edges at the perimeter where possible.
- ▶ Allow for a 3/8" gap along the perimeter of the room and fixtures.
- ▶ Panel joints should be offset at least 8" from subfloor joints, so panel edge is not directly above subfloor edge.

### Materials

- ▶ Select galvanized or clear coated staples with a minimum of 18 gauge shank, 1/4" crown (maximum 3/8" crown.) The length of staple should be no longer than the combined thickness of the sub-floor and underlayment.
- ▶ Staples should not protrude through subfloor if possible and should be countersunk just below the panel's surface, but no more than 1/8" below the surface.

### Fastening

- ▶ The correct fastening of Halex Composite Flooring Underlayment is critical.
- ▶ After dry-fitting the room, begin fastening the first panel you fitted, making sure to maintain 3/8" spacing from the wall and fixtures and ensure panel edges are lightly butted.
- ▶ Fasten panels starting from one side and working to the other so that panel is completely flat. It is critical to follow the nailing grid as a guide with fasteners spaced 3" on the perimeter and 6" in the field of the panel. Do not tack corners. Failure to follow these guidelines will void any implied warranty.
- ▶ Always hold the panels down securely, in firm contact with the subfloor while fastening.

- ▶ Fasten one panel at a time, individually and completely, before installing the next panel.

### Finishing

- ▶ After installing panels, lightly sand all joints for a smooth and level floor. For best results use a belt sander and medium grit sandpaper running at a 45-degree angle to the joints to prevent cupping.
- ▶ If minor irregularities exist (e.g. gouges, chips, voids, or openings between panels) fill with a non-shrinking cementitious patching compound intended for the purpose. Do not fill normal edge joints. Follow the patching compound manufacturer's application instructions. Smooth and level the filler once it is completely dry. After the sanding is complete the entire surface must be swept and vacuumed.
- ▶ Pure vinyl products will necessitate a perfect installation. To achieve maximum smoothness sand off the nailing grid marks on the panels' edge with a fine grit sandpaper.

### Installing New Floorcovering

- ▶ Floorcovering should be installed immediately after the installation of panels to avoid damage or environmental influences. Prolonged exposure to foot traffic will impact the performance of the panels.
- ▶ Follow the floorcovering manufacturer's instructions carefully before installing the floorcovering.
- ▶ Use only adhesives recommended by the floorcovering manufacturer for use over wood underlayment.
- ▶ It is essential to follow the adhesive manufacture's recommended spread rate and trowel size.

**Optimum performance of Halex Composite Flooring Underlayment and any implied warranty is dependent on correct handling and installation procedures.**

## Installation Instructions

### For Ceramic Flooring

# HALEX

The following plywood underlayment instructions have been specifically prepared for the installation of Halex Plywood Underlayment panels. Strict adherence to these instructions and the instructions of the vinyl flooring manufacturer and adhesive manufacturer will produce a strong, sound, level floor that complies with the terms of the Halex Lifetime Warranty. When installed according to these instructions, Halex plywood underlayment panels will not contribute to seam telegraphing through the surface of the vinyl flooring, or contribute to staining or discoloration of vinyl flooring.

### Preparing the Subfloor

Before installing Halex plywood underlayment, be sure the floor joists and subfloor are structurally sound. We recommend a minimum 5/8" exterior grade plywood subfloor with joist spacing not to exceed 16" on center. The floor must meet or exceed a L/360 rating. Homes with crawl spaces must have a vapor barrier to prevent moisture from entering into the joist and subfloor. Be sure subfloor is clean and free of debris. Any uneven subfloor joints should be sanded so the joints are even.

### Acclimating the Plywood Underlayment

Acclimate the plywood underlayment panels 24 hours in the area the panels will be installed and 48 hours in extreme conditions. Separate and store panels vertically to allow air passage on all sides. Acclimation may not be necessary if storage temperature and humidity level is similar to the job site conditions.

### Laying out the Plywood Underlayment

Lay the plywood underlayment panels out perpendicular to the floor joist off setting the joist at least 12" from the subfloor joints. Do not allow four corners to meet at the point. Leave a 1/8" gap between all plywood underlayment panels and between the panels and the walls. Place factory cut edges together and hand cut edges against wall.

### Fastening the Underlayment

No thin set is required between the Halex plywood underlayment and the subfloor. No joint taping is required. Fasten the plywood underlayment panels securely to a structurally sound, smooth, clean and dry subfloor using:

- Staples: galvanized or polymer coated 18 gauge chisel point staples with minimum 1/4" crown
- Galvanized ring shank flooring nails: 12 gauge, minimum 3/16" diameter head
- Galvanized flat head wood screws

Fasteners should be long enough to penetrate through the plywood underlayment and at least 80-95% of the subfloor, but not protrude through the bottom. Fasten one plywood underlayment panel at a time, starting from one side and working to the other. Do not tack the corners first. If using staples or nails, fasten on every fastener mark (4" on center in the field and 2" on center along all edges. Fasten edges 3/8"-1/2" from the edge. Fasteners should be set flush so they do not protrude above the plywood underlayment.

### Setting Tile

Before setting tile be sure that the plywood underlayment surface is clean and free of dirt, dust, oily film and foreign matter. Use EGP latex-portland cement mortar complying with ANSI A118.11 to set the tile and use grout complying with ANSI A118.6, A118.7 or A118.3.