an Armstrong company



# Installation Recommendations

#### **GENERAL INFORMATION**

## A. Use only Hartco current recommended adhesive when installing Hartco® Hartwood® Parquet.

- B. Hartco Wood Flooring can be installed on concrete slabs, existing wood floors, plywood, sheet goods, resilient tile, terrazzo, marble, slate and ceramic tile as long as they are flat, clean, structurally sound, dry and will remain dry.
- C. On new construction, flooring should be installed after all other construction is complete, but prior to wall base trim molding.
- D. When remodeling, remove all wall base trim molding prior to starting installation of the floor tile. If the base trim is not removed, trim out the area with 3/4" quarter round molding after the installation is completed.
- E. If the base trim molding is removed prior to installation, use a sharp cutting blade to separate paint between the wall and the base trim molding.
- F. Satisfactory performance of wood floors is greatly influenced by its environmental conditions. A temperature of 70° F and a relative humidity between 35-50% are ideal. Temperatures of the subfloor, adhesive and flooring should be over 60° F (16° C) during installation.
- G. STORAGE: Store your Hartco Wood Flooring in a dry place. Provide at least a four inch space under and around Hartco parquet boxes stored on on-grade concrete floors and next to outside walls.
- H. EQUIPMENT NEEDED: Band saw or sabre saw, hand saw, chalk line, tape measure and carpenter square. We recommend the use of a Hartco square-notch 3/32" x 3/32" x 3/32" trowel. WARNING: METAL WIRES ARE EMBEDDED IN HARTCO HARTWOOD PARQUET FLOORING AND EXTREME CARE AND CAUTION SHOULD BE USED WHEN CUTTING OR TRIMMING THIS FLOORING TO AVOID THE RISK OF PERSONAL INJURY. DO NOT USE CIRCULAR SAWS. APPROVED SAFETY GOGGLES SHOULD BE WORN AT ALL TIMES.
- Wood swells and expands with any increase in moisture content. A 1/2" expansion space around the entire perimeter and around all fixed objects will allow for normal expansion of the floor.
- J. CAUTION: Urethane chemical topcoats should not be applied over Hartco wood parquet other than the urethane applied during the manufacturing of prefinished Hartco wood parquet. Urethane applied on the job may interfere with the ability of the parquet to perform satisfactorily when normal expansion and contraction of the wood occurs due to changes in moisture content. Adding another finishing material over the existing finishing material that was applied during manufacturing may produce unsatisfactory results. Results obtained by applying any type of finishing material over Hartco wood parquet after leaving the manufacturing facilities are beyond our
- K. HARTCO HARTWOOD PARQUET IS NOT RECOMMENDED FOR BELOW GRADE INSTALLATIONS OR BATHROOMS. THE MOISTURE CONTENT FREQUENTLY ASSOCIATED WITH SUCH LOCATIONS MAY PREVENT SATISFACTORY RESULTS.
- L. Do not tape protective paper or material to the surface of the urethane finish. This may cause the urethane to peel when removing the tape.

## **SUBFLOORS - GENERAL**

- A. When installing over existing floor coverings, make sure that the floor covering is completely secured to the subfloor. No perimeter or loose laid sheet goods are acceptable. When installing over nonurethane sheet goods that are less than one year old, Hartco Vinyl Primer 800 must be applied and cured before installing the flooring. Urethane sheet goods may need the surface abraded so the adhesive will adhere to it
- B. Wood subfloors should be plywood, underlayment grade particle board, OSB board, flake board, etc., or tongue-andgroove boards not over 3 1/4" wide. Any existing squeaks in the subfloor must be eliminated before spreading adhesive. Wood subfloors should not be over 13% moisture content, 8% moisture content is best.
- C. Concrete slabs containing antifreeze chemicals, admixtures, or curing compounds that are hygroscopic are not acceptable.
- D. Hartco Professional Wood Parquet Adhesive should not be spread over any subfloor that has had a sealer applied.
- E. When installing over radiant heated subfloors, the heat source should be turned off until the installation is complete. This prevents pre-cure of the adhesive.

## **CONCRETE SUBFLOORS**

## A. MOISTURE TESTS

- 1. To determine if moisture is present in the slab, use the following methods:
- a. Chip the surface of the concrete at least 1/4" deep, the diameter of a dime, in various areas of the slab, particularly around the perimeter next to the outside walls. Apply two drops of 3% phenolphthalein solution in anhydrous ethyl alcohol into each of the chipped areas. If no color change occurs in the solution, there is not enough moisture to affect the installation. You may proceed. If a slight pinkish or reddish tint appears within 5 minutes, moisture is present and further testing must be done with a moisture meter (see Step b). If a moisture meter is not available, proceed to Step c.
- b. Use a reliable moisture meter, such as the TRAMEX CONCRETE MOISTURE ENCOUNTER METER.
  - Following the manufacturer's instructions, take moisture readings in several locations within the installation area. If in any area the moisture content is greater than 4.5%, excessive moisture is present. Do not install wood directly over the concrete. Instead, get the concrete dry or install a moisture barrier (see step c).
- c. Sheet vinyl may be used as an effective moisture barrier if it can be installed properly. Adhesive bond and moisture test -Use this test, (or the one recommended by the sheet vinyl manufacturer), to determine if the concrete is sufficiently dry as well as to determine the compatibility of the vinyl flooring adhesives to the concrete subfloors. Remove old adhesives, curing agents, dust inhibitors, oil, grease, paint, varnish, and other special surface treatments. Using the vinyl material, install 2-1/2' x 2-1/2' panels in suspected or usual moisture areas throughout the subfloor area. Install the panels with adhesives to be used in the actual sheet vinyl installation. If the panels are securely bonded after a period of 72 hours, it may be concluded that the subfloor surface is dry and sufficiently clean of foreign material for satisfactory installation of the vinyl flooring.

- Panels can be considered "securely bonded" if removal of the panels require enough force to delaminate the vinyl.
- If the Adhesive Bond and Moisture Test, as described in step c, is a failure (the sheet vinyl will not stay), DO NOT INSTALL Hartco Hartwood Parquet.
- If excessive moisture is not detected as a result of tests described in 1a and 1b, nor anticipated in wetter seasons, proceed to installation Step 1 - Preparation, below.
- 4. If moisture was detected, but the adhesive bond and moisture test proves the vinyl installation will be successful, install the sheet vinyl as recommended by the sheet vinyl manufacturer. Continue with Step B. Sheet Vinyl Installation, below.

# **B. SHEET VINYL INSTALLATION**

- If new sheet goods are to be installed as a moisture barrier, DO NOT use a urethane product for it may not produce satisfactory results.
- 2. When excessive moisture is detected, but step A2 above produces a secure bond, vinyl sheet goods should be installed as a moisture barrier prior to installing Hartco Hartwood Parquet. Vinyl sheet goods can be identified in the following manner: Apply a few drops of iodine solution (USP) on the surface. Allow the iodine solution to remain on the surface for about 30 seconds, then wipe it off with a damp cloth. If the iodine does not stain the surface, the sheet goods can be used.
- If the moisture in the slab is not too high for proper use of vinyl, install the sheet vinyl in accordance with the sheet vinyl manufacturer's specifications. Loose laid or perimeter type installations of sheet goods are not acceptable.
- Test the sheet vinyl adhesive to be sure it is cured before installing the wood flooring over the vinyl.
- Apply Hartco Vinyl Primer 800 according to the directions on the container immediately after installing the sheet vinyl flooring.

## STEP NO. 1 PREPARATION OF DOOR JAMBS AND SUBFLOORS

- A. All door trim and door jamb moldings should be undercut 3/8" above the subfloor. Place a tile against the door frame as a depth guide if a hand saw is used.
- B. Remove paint, plaster, sealer, primers, or other foreign materials such as wax, dirt, etc., that would interfere with good adhesive bond with the subfloor.
- C. Thoroughly broom sweep the room and then vacuum the entire area.
- D. SUBFLOORS SHOULD BE FLAT TO WITH-IN 3/16" IN 10 FEET OR 1/8" IN 6 FEET. FILL LOW SPOTS WITH PATCHING OR LEVELING COMPOUND. HIGH SPOTS SHOULD BE GROUND LEVEL. LATEX LIQUID AND POWDER LEVELING COMPOUND CAN BE USED UP TO 1/8" IN THICKNESS. LEVELING OR PATCHING COMPOUNDS USED IN AREAS THICKER THAN 1/8" NEED TO HAVE A COMPRESSIVE STRENGTH OF AT LEAST 4000 PSI. PATCHING COMPOUNDS MUST THOROUGHLY DRY BEFORE INSTALLING ON THEM.

## STEP NO 2. LINING OFF THE AREA

- A. Establish a chalk line parallel to and 24 1/2" away from the starting wall opposite the entrance doorway. THE 1/2" IS FOR EXPANSION SPACE.
- B. Snap a second chalk line 90° to the first chalk line, 24 1/2" away from the right angle wall (see diagram No.1). THE 1/2" IS FOR EXPANSION SPACE.

#### STEP NO. 3 SPREADING HARTCO PROFESSIONAL WOOD PARQUET ADHESIVE

- A. It is important that Hartco Professional Wood Parquet Adhesive is spread to develop a proper bond between the subfloor and the floor tile
- B. Use the Hartco trowel specified in GENERAL INFORMATION (H).
- C. Hold the trowel at a 45° angle to the floor when spreading the adhesive. This is the best angle to obtain a spread of 70 sq. ft. per gallon with a 3/32" x 3/32" x 3/32" trowel.
- D. After both chalk lines (at 90° to each other and 24-1/2" from the wall) have been snapped, start spreading the adhesive in the 24-1/2" wide area next to the starting wall.
- E. When not in use, keep the adhesive container tightly closed to prevent evaporation. Evaporation could cause difficulty in spreading the adhesive.
- F. Proper ventilation within the room must be provided by opening the windows and doors. An electric fan is helpful.
- G. Continue spreading the adhesive along the entire length of the starting wall. Be careful not to spread adhesive beyond the 24-1/2" chalk line.

#### STEP NO. 4 INSTALLING HARTCO HARTWOOD PARQUET

A. Immediately lay the floor tiles on the newly spread adhesive. DO NOT lay the floor tiles on dry adhesive. (Always lay the floor tiles on wet adhesive.) If the adhesive becomes too dry, scrape up the old adhesive and spread more adhesive. Installing on wet adhesive eliminates rolling the floor with a heavy roller.

**IMPÓRTANT:** Stand or kneel on the <u>subfloor</u> during the installation. DO NOT stand, kneel, or press on the <u>floor tiles</u> during installation.

B. PROPER PLACEMENT OF THE FIRST FLOOR TILE IS THE KEY TO THE ENTIRE INSTALLATION. Carefully place a 12"x12" Hartco Hartwood Parquet at the intersection of the two chalk lines (see diagram No. 2). Line up the tile so the edges of the tile top

- surface are aligned directly on both chalk lines. Do not use the edge of the tongue for aligning the tile on the chalk lines.
- C. Lay the second floor tile ahead of the first tile to fit 1/2" from the starting wall. Gently lock in the tongue and groove between the first and second floor tiles (see diagram No. 3).
- D. Re-check to be sure both floor tiles are properly lined up with the chalk line. This is to assure a square starting wall area (see diagram No. 3).
- E. Now continue laying the balance of the 12" x 12" floor tiles along the starting wall area (see diagram No. 3). Put each floor tile in place and gently push the floor tiles together to interlock the tongue and groove. Align each floor tile squarely.
- F. Do not push or shove the floor tiles too strenuously as this could cause the first and second floor tiles to move. Simply realign them and proceed with the installation.
- G. Avoid hammering or forcing the floor tiles together as this will destroy the built-in expansion spaces and may even destroy the squareness of the floor tile.
- H. After laying the floor tiles across the first 24- 1/2" starting area, trim the last floor tiles as needed to obtain the proper 1/2" expansion space next to the walls. Use a small band saw or sabre saw for final trimming. Firmly secure each floor tile when cutting with a sabre saw.

## STEP NO. 5 COMPLETING THE INSTALLATION

- A. When the starting area has been completed, including cutting to the wall, proceed to the second laying area.
- B. The second laying area is quite simple as you now have sufficient floor tiles installed to resist floor tile movement.
- C. Again, cut the last floor tiles to allow a 1/2" expansion space from the end wall.
- D. Proceed by laying areas 3-4-5, etc., repeating the installation procedure of the starting area. Trim out each laying area before proceeding to the next area.
- E. Maintain the 1/2" expansion space around the perimeter of the room and around all fixed objects.
- F. Avoid pressing heavily or stepping on the recently laid floor tile as this may destroy the ridging of the adhesive and positioning of the tile.
- G. Allow a minimum of 24 hours drying time before moving furniture or walking on your newly laid Hartco Hartwood Parquet Floor.
- H. If adhesive has gotten on the top surface of the installed floor, we recommend the removal with Hartco Wipe Clean applied with a cloth. Hartco Wipe Clean can also be used to clean tools.

 CAUTION: Do not cover the new installation with a protective covering for at least two weeks. This may prevent drying of the adhesive.

# **HARTCO MOLDINGS**

- A. Reducer Strip a teardrop shaped molding 5/16" thick x 2" wide x 90"- 96" long. Used around fireplaces, doorways, as a room divider, or as a transition between Hartco Parquet and adjacent floor coverings that are less thick. Fasten down with adhesive or double faced tape.
- B. Threshold a molding undercut 5/16" thick x 2" wide x 90"- 96" long. Used against sliding door tracks, fireplaces, carpet, ceramic tile, or existing thresholds to allow for expansion space and to provide a smooth transition in height difference. Fasten to subfloor with adhesive and/or nails through the heel. Pre-drill nail holes to prevent splitting
- C. Stair Nosing a molding undercut 5/16" thick x 2 3/4" wide x 90"- 96" long. Used to trim stair landings, elevated floor perimeters, and stair steps. Fasten down firmly with adhesive and nails or screws. Pre-drill nail holes to prevent splitting.
- D. Quarter Round a molding 3/4" thick x 3/4" wide x 90"- 96" long. Used to cover expansion space next to baseboards, case goods, and stair steps. Pre-drill and nail to the vertical surface, not into the floor.
- E. Base a molding 4" high x 5/8" thick x 90"-96" long. Used when a high base (4") is desired. Used to cover expansion space between the floor and the wall. Pre-drill and nail into the wall, not the floor.
- F. T- Molding a molding 5/16" thick x 2" wide x 90"- 96" long. Used as a transition piece from one flooring to another or to gain expansion spaces. Fasten at the heel in the center of the molding.

As with all hardwood flooring, it is important to property clean and maintain this parquet flooring in order to prevent substances, including but not limited to water, food, and grease from making the flooring slippery.

The above suggested recommendations for the installation of Hartco Hartwood Parquet are predicated on tests believed to be reliable; however, since each application and use is beyond our control, we do not guarantee the results to be obtained.



