



MULTISPORT ULTRA SYSTEM

Horner MultiSport Ultra offers an excellent low-profile, economical northern hard maple multi-purpose sport floor. The system is designed to allow for greater participant safety -- the mass and friction/traction properties provide a surface that maximizes playing performance with reduced injury levels. When installed as a new floor, MultiSport Ultra will function well for all sports activities, from basketball to ballet. The system has been designed to meet the current (2001) DIN 18032-Part II performance requirements, and still provide the longevity for which wooden flooring systems have been heralded.

With the use of Horner's SAFE™ Panel System subflooring, MultiSport Ultra has the most advanced cushion design for the selection of specific shock absorption levels -- you can customize the performance of your Horner sport floor through a choice of three shock absorber pad hardnesses and three different load control stabilizer inserts. Shock absorber hardness values range from a relatively soft 50 Durometer, an intermediate 70 Durometer, to a relatively hard 85 Durometer; each hardness imparting distinct characteristics to the flooring system. The cushion level provided by the pyramidal pads can be fine tuned through the selection of stabilizer inserts, available in the same three hardness levels.

PART 1-GENERAL

1.1 DESCRIPTION

- A. This document specifies a wood strip aerobic and gymnasium floor system consisting, in general, of wood subflooring, maple flooring, vapor retarder, sanding, sealers, finishes, game lines and wall base.
- B. The general contractor shall provide a concrete slab, smooth troweled and level to a tolerance of 1/8" (3mm) in 10'0" (3m) radius, subject to the approval of the wood flooring contractor. LABOR AND MATERIALS NECESSARY TO PUT THE CONCRETE SLAB IN ACCEPTABLE CONDITION (HIGH AREAS GROUND DOWN AND LOW AREAS FILLED WITH APPROVED LEVELING COMPOUNDS) SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
 1. Concrete slab depression shall be:
 - a. 1 13/16" (46mm) for use with 7/16" (11mm) SAFE™ pads.
 - b. 2 1/8" (54mm) for use with 3/4" (19mm) SAFE™ pads.
 2. Concrete subfloors shall have an adequate vapor retarder beneath and at the perimeter of the slab.

1.2 QUALITY ASSURANCE

- A. Supplier Qualifications
 1. Supplier of wood flooring shall be Horner Flooring Company.
- B. Installer Qualifications
 1. Flooring contractor shall be a firm experienced in maple flooring systems.
- C. Flooring shall be stored on the premises a minimum of seven (7) days before installation commences, or as required for acclimation. Final determination as to acclimation will be made by the flooring contractor.
- D. All flooring bundles or cartons should be broken and loosely piled to acclimate the flooring to moisture conditions in the building.

1.3 WORKING CONDITIONS

- A. The floor system shall not be delivered or installed until all masonry, plastering, tile work and overhead mechanical trades are completed and building is enclosed and weathertight.
- B. Permanent heat, light and ventilation shall be installed and operative during and after installation, maintaining a temperature range of 55°F (13°C) to 75°F (24°C) and a relative humidity range of 35% to 50%.

1.4 WARRANTY

- A. Horner Flooring Company hereby warrant MULTISPORT ULTRA SYSTEM flooring materials to be free from manufacturing defects for a period of one year from the date of substantial completion of the floor.

PART 2-PRODUCTS

2.1 MATERIALS

- A. Flooring
 1. Flooring shall be Horner MultiSport, 7/16" (11mm) thick First, Second and Better, or Third grade. MultiSport is available in 9 5/8" (245mm) x 19.17" (490mm) units.
 2. Adhesive shall be Bostik Best Adhesive or approved equal.
- B. Subfloor
 1. Subfloor panels shall be 15/32" x 4' x 8' (12mm x 122cm x 244cm) rated sheathing, exposure 1, plywood, or 7/16" x 4' x 8' (11mm x 122cm x 244cm) OSB.
OPTION: Rawl type (R-II) restraint if so specified.
 2. Cushion pads shall be 7/16" (11mm) or 3/4" (19mm) thick pyramidal-shaped Horner SAFE™ pads.
- C. Vapor retarder shall be 6 mil polyethylene.
- D. Wall Base shall be 3" x 4" (76mm x 102mm) Vent Cove heavy duty molded, vented vinyl base with premolded outside corners as supplied by Horner Flooring Company. Specify color: black or brown.

- E. Finish materials shall be as specified by architect selected from the latest listing provided by the MFMA, and shall be applied according to manufacturers instructions.

PART 3-EXECUTION

3.1 INSPECTION

- A. Inspect concrete slab for proper tolerance and dryness and report any discrepancies to the general contractor for correction.
- B. The concrete slab shall be cleaned of all debris so flooring contractor will have adequate access to work surface.
- C. All work required to put the concrete slab in an acceptable condition shall be the responsibility of the general contractor.

3.2 INSTALLATION

- A. Cover concrete with 6 mil polyethylene, sealing and lapping joints a minimum of 4" (102mm).
- B. Subfloor
 - 1. Attach 32 Horner SAFE™ pads to the underside of each bottom sheet of 15/32" (12mm) plywood or 7/16" (11mm) OSB, 12" (305mm) o.c. and 6" (153mm) in from all perimeter edges with a stapler.
 - 2. Install padded bottom layer of 4' x 8' (122cm x 244cm) sheets at a 45° angle across the long dimension of the finish floor, leaving a minimum 1/4" (6mm) expansion space between adjoining sheets.
 - 3. Install top layer of 4' x 8' (122cm x 244cm) sheets at a 90° angle to the first layer, again leaving a minimum 1/4" (6mm) expansion space between adjoining sheets. Stagger sheets and joints such that no joint in the upper layer falls over a joint in the lower layer.
OPTION: increase spacing and drill for R-II restraint installation if so specified.
- C. Parquet Preparation
 - 1. Locate starting point either by centering off a door, a special focal point in the area, or center of area itself.
 - 2. Adjust center lines so they are perpendicular (90°) to each other. This can be most easily accomplished by measuring along one line three (3) feet (91cm) (or a multiple of three feet) and striking on the line itself. Measure four (4) feet (122cm) (or multiples thereof) along the second line and strike a mark. A line connecting these two (2) points should measure exactly five (5) feet (152cm) (or multiple selected). Adjust lines to form a 3-4-5 triangle -- this assures the 90° relationship. After lines are squared, drop chalk lines every thirty-three (33) inches (838mm).
- D. Layout
 - 1. Use Bostik Best Adhesive over subfloor.
 - 2. Install MultiSport units within the grid formed by the chalk lines. Units should be installed with hairline expansion spacing around the perimeter of each unit when installed in an alternating square manner. When installing in a unidirectional or parallel pattern it is only necessary to include the hairline spacing along the sides of each unit, as maple does not shrink or swell appreciably in the grain direction.
 - 3. Best wetting is obtained when product is installed immediately into adhesive. If more tack is needed, the freshly troweled adhesive can be allowed to remain open for up to one hour before installing MultiSport units. This will assist in keeping the units from sliding.
 - 4. A minimum expansion space of 1½" (38mm) should be allowed around the perimeter and all vertical obstructions.
 - 5. MultiSport should be rolled with a 150 pound (68kg) floor roller within 24 hours after installation.

3.3 FLOOR SANDING

- A. Machine sand with coarse, medium and fine paper to a smooth, even and uniform surface.
- B. Remove sanding dust from entire surface by tack or vacuum.
- C. Refer to MFMA sanding and finishing guide for procedures.

3.4 FINISHING

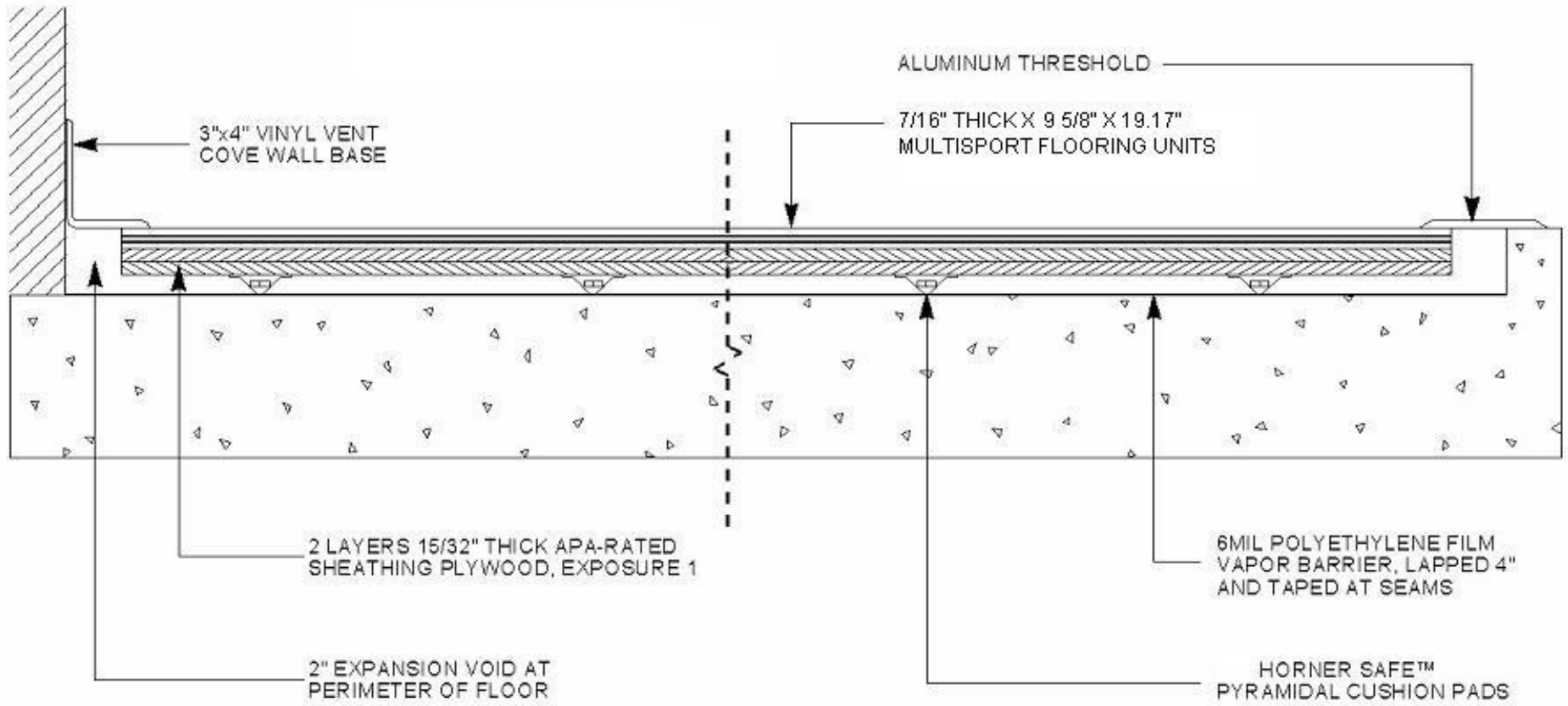
- A. Inspect entire area of floor to insure that surface is acceptable for finishing. completely free from sanding dust and perfectly clean.
- B. Apply seal and finish per manufacturer's instructions.
 - 1. Apply two (2) coats of seal and two (2) coats of finish.
- C. Buff and clean floor between each coat.
- D. Paint game lines as shown on drawings, between seal and first coat of finish.
- E. Game line paint shall be compatible with finish.

3.5 BASE INSTALLATION

- A. Install maple or vinyl Vent Cove base along the perimeter walls. Mitre all inside corners and maple outside corners; use premolded outside corners with vinyl base. Attach vinyl cove base to walls.

3.6 MAINTENANCE

- A. Upon completion of floor installation, the owner, attendants or individuals in charge and responsible for the upkeep of the building are to see that the care and maintenance instructions of the Horner or MFMA Care Card are followed.



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