



MULTIPURPOSE CHANNEL I SYSTEM

Since a number of “older” gymnasium floors are being replaced with “newer”, more shock absorbing, cushioned floors; the Multipurpose Channel I System has been developed to provide a system that can be easily customized to accommodate a wide range of slab depressions, or used as a new floor in any facility.

The Multipurpose Channel I System is basically a sleeper subfloor system with the added feature of a bottom support that can readily be shimmed to fit varying slab depressions and /or shimmed to make up for an irregular slab surface.

PART 1-GENERAL

1.1 DESCRIPTION

- A. This document specifies a wood strip 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 a 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. This system is designed to accommodate any concrete slab depression over:
 - a. 3 3/8" (86mm) with 25/32" (20mm) thick flooring.
 - b. 3 5/8" (92mm) with 33/32" (26mm) thick flooring.This flexibility is accomplished by adjusting the thickness of the sleeper support rail.
 - 2. For a new floor, the depression shall be 3 3/8" (86mm) with 25/32" (20mm) thick flooring.
 - 3. Concrete subfloors shall have an adequate vapor retarder beneath and at the perimeter of the slab.
- C. Supplier Qualifications
 - 1. Supplier of wood flooring shall be Horner Flooring Company.
- D. Installer Qualifications
 - 1. Flooring contractor shall be a firm experienced in installing maple flooring.
- E. 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.
- F. All flooring bundles should be broken and loosely piled to acclimate the flooring to moisture conditions in the building.

1.2 WORKING CONDITIONS

- A. The floor system shall not be delivered or installed until all masonry, plastering, tile work and all overhead mechanical trades are complete and building is enclosed and weathertight.
- B. Permanent heat, light and ventilation shall be installed and operating 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%.

1.3 WARRANTY

- A. Horner Flooring Company hereby warrants the MULTIPURPOSE CHANNEL I SYSTEM flooring materials to be free from manufacturing defects for a period of one year from the date of substantial completion.

PART 2-PRODUCTS

2.1 MATERIALS

- A. Flooring shall be Horner 25/32" (20mm) or 33/32" (26mm) thick x 1½" (38mm) or 2¼" (57mm) wide First, Second and Better, Third and Better or Third Grade, random length or finger jointed continuous tongue and groove and end-matched MFMA Northern Hard Maple, grade marked and stamped as manufactured by Horner Flooring Company.
OPTION: Horner Long Life™ flooring if so specified.
- B. Vapor retarder shall be 6 mil polyethylene.
- C. Substructure Sleeper
 - 1. 1 15/16" x 3" x 8' (49mm x 76mm x 244cm) Multipurpose I Sleepers with special 16 gauge (1.6mm) galvanized wrap around support brackets.
 - 2. For lower slab depressions a 1 5/8" (41mm) version is available and will be referred to as Multipurpose Channel System II.
- D. Subfloor shall be 4' x 8' x 15/32" (122cm x 244cm x 12mm), at either 5/8" (16mm) or ¾" (19mm) rated sheathing, exposure 1, plywood.
- E. Fasteners
 - 1. Flooring fasteners shall be 2" (51mm) barbed cleat or 15 gauge (1.8mm) coated staples.
OPTION: If Horner Long Life™ is specified, use 2" (51mm) 15 gauge (1.8mm) staples only.

2. Subflooring fasteners shall be 6d (51mm) nails or 1 3/4" (45mm) staples.
- F. Wall base shall be 3" x 4" (76mm x 102mm) Vent Cove heavy duty molded, vented vinyl cove base with pre-molded outside corners as supplied by Horner Flooring Company. Specify color: black or brown.
- G. Finish material shall be as specified by architect selected from the latest listing provided by the MFMA and shall be applied according to manufacturer's 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. After slab depression is determined, adjust thickness of bottom portion of the MULTIPURPOSE substructure to accommodate before proceeding with assembly.
- C. Install special substructure sleepers across the short dimension of the room, i.e. perpendicular to the flooring direction. Install 12" (305mm) o.c. with 15/32 (12mm) plywood 14" (356mm) o.c. with 5/8" (16mm) plywood or 16" (406mm) o.c. with 3/4" (19mm) thick plywood, respectively. Begin by cutting starting sleeper in every other row to a length of 4' (122cm) and continue across the flooring allowing 1/4" (6mm) space between the ends of the sleepers. Shim where necessary. Provide a 1 1/2" (38mm) space next to walls or vertical obstructions.
- D. Install plywood of appropriate thickness over the substructure sleepers at a 45° angle providing 1/4" (6mm) space around the perimeter of each sheet, and 2" (51mm) adjacent to walls or vertical obstruction.
- E. Install finish flooring parallel with main playing court by power nailing or stapling approximately 12" (305mm) o.c.
 1. Space Joints between flooring strips to allow for intermediate expansion, as designated by the installer and in accordance with humidity conditions in the region.
 2. Provide 2" (51mm) expansion voids at the perimeter and at all vertical obstructions.

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

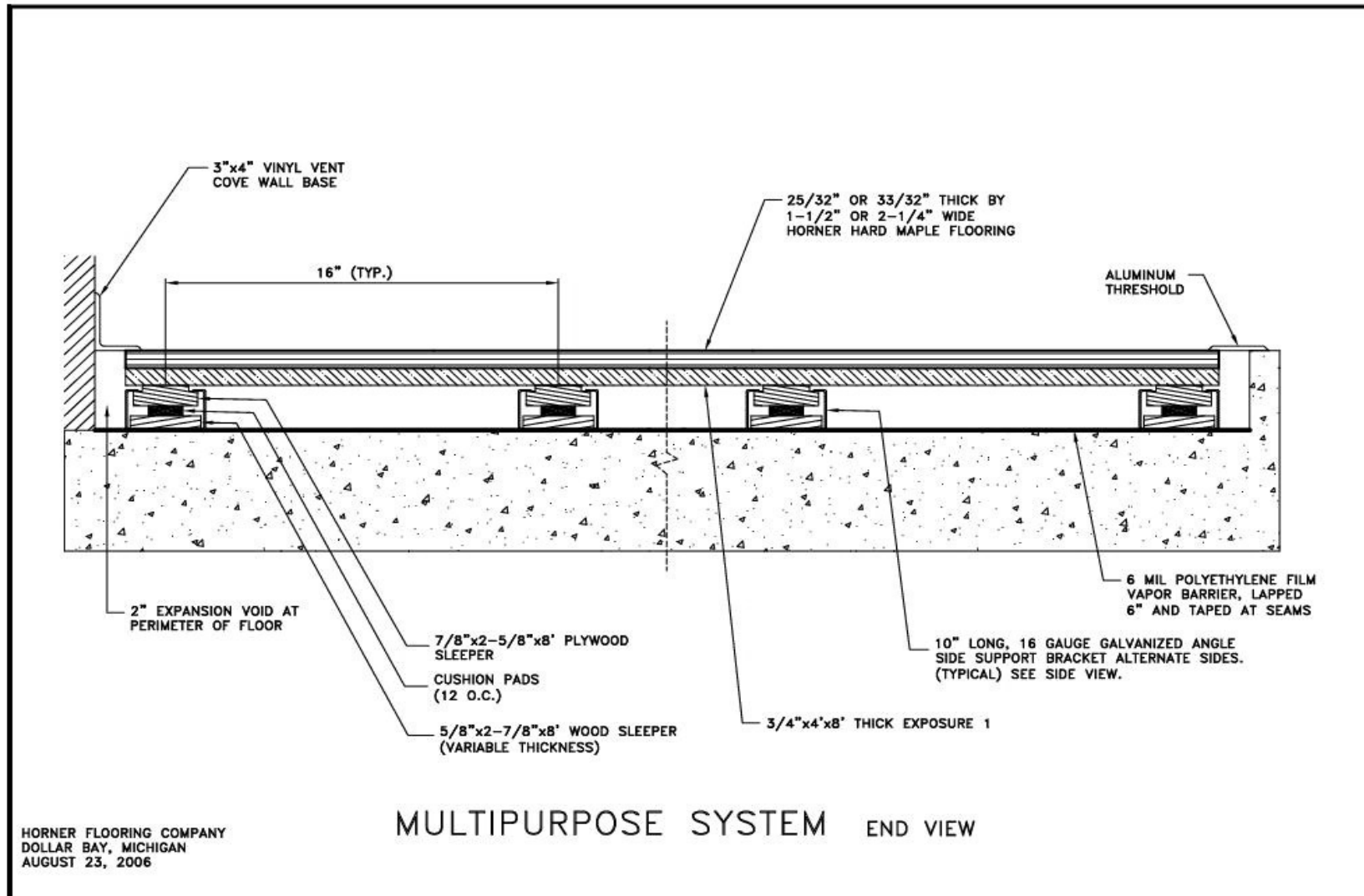
- A. Inspect entire area of floor to insure that surface is acceptable for finishing, completely free from sanding dust and perfectly clean.
- B. Apply seal and finish per manufacturer's instructions.
- C. Apply two (2) coats of seal and two (2) coats of finish.
- D. Buff and clean floor between each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

3.5 BASE INSTALLATION

- A. Install Vent Cove base, mitring inside corners, and anchoring to walls with base cement or screws and anchors.

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.



Slab Depression		
Flooring	25/32" (20mm)	33/32" (26mm)
At Least	3-3/8" (86mm)	3-5/8" (92mm)
New Floor	3-3/8" (86mm)	

