STA-FAST SYSTEM

For the luxury of a channel floor system with the economy of a nail-down floor, choose the Horner Sta-Fast System. This machine-nailed floor is a low-cost alternative to a traditional channel system.

Instead of a channel, the Sta-Fast floor incorporates a special nailing strip consisting of a hardwood core sandwiched between two metal strips. This system is more stable than a plywood nailing surface, which can contain voids between plys. The flooring is nailed directly into the sandwich strip with barbed cleats, eliminating the need for channel clips.

Low-cost 25/32" x 2¼" (20mm x 57mm) hard maple flooring is recommended, with an optional 25/32" x 1½" (20mm x 38mm) size available for high humidity areas. High traffic areas may require 33/32" (26mm) thick flooring.

PART 1-GENERAL

1.1 DESCRIPTION

A. This document specifies a wood strip gymnasium floor system consisting, in general, of steel channel with wood nailing core, maple flooring, vapor retarder, resilient underlayment, 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. The concrete slab depression shall be:
      a. 1 3/8" (35mm) for 25/32" (20mm) thick flooring.
      b. 1 5/8" (41mm) for 33/32" (26mm) thick flooring.
   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 installing maple flooring.

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 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 all overhead mechanical trades are completed 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%.

1.4 WARRANTY

A. Horner Flooring Company hereby warrants the STA-FAST 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 shall be Horner Maple 25/32" (20mm) or 33/32" (26mm) thick x 2¼" (57mm) or 1½" (38mm) wide First, Second and Better, Third and Better, or Third Grade, 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. Resilient underlayment shall be Horner Grooved Foam, 5/8" x 4' x 150' (16mm x 122cm x 46m) multicellular closed-cell polyethylene plastic foam. Density: 2.0 PCF, with factory channeled grooves 5/16" x 1 1/8" (8mm x 29mm) wide, 12" (305mm) o.c

D. Horner STA-FAST Nailing Strips shall be 3/8" (10mm) thick treated hardwood plywood in a 22 gauge (.85mm) galvanized steel channel.

E. Fasteners
   1. Channel anchors shall be modified steel drivepins or hammer drivepins, 3/8" (10mm) diameter flat head, 2" (51mm) long.

2. Floor fasteners shall be 1¾" (45mm) barbed power cleats.
   OPTION: If Horner Long Life™ is specified, use 2" (51mm) 15 gauge (1.8mm) staples only.

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 materials 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. Install Grooved Foam at right angles to long dimension of room (or at right angles to the main playing court).
C. Insert STA-FAST channels in machined grooves with ends staggered in adjacent rows. Offset channel ends with end of Grooved Foam a minimum of 1' (305mm).
D. Anchor Horner STA-FAST channels to concrete with power actuated pins 14" (356mm) o.c., with additional pins approx. 6" (152mm) from ends of channel.
E. Install finish flooring parallel with main playing court and at right angles to channels by power nailing or stapling.
F. Space joints between flooring strips to allow for intermediate expansion, in accordance with local humidity conditions.
   1. Provide 1½" (38mm) expansion voids at perimeter and all vertical obstructions.

3.3 FLOOR SANDING

A. Machine sand with course, 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

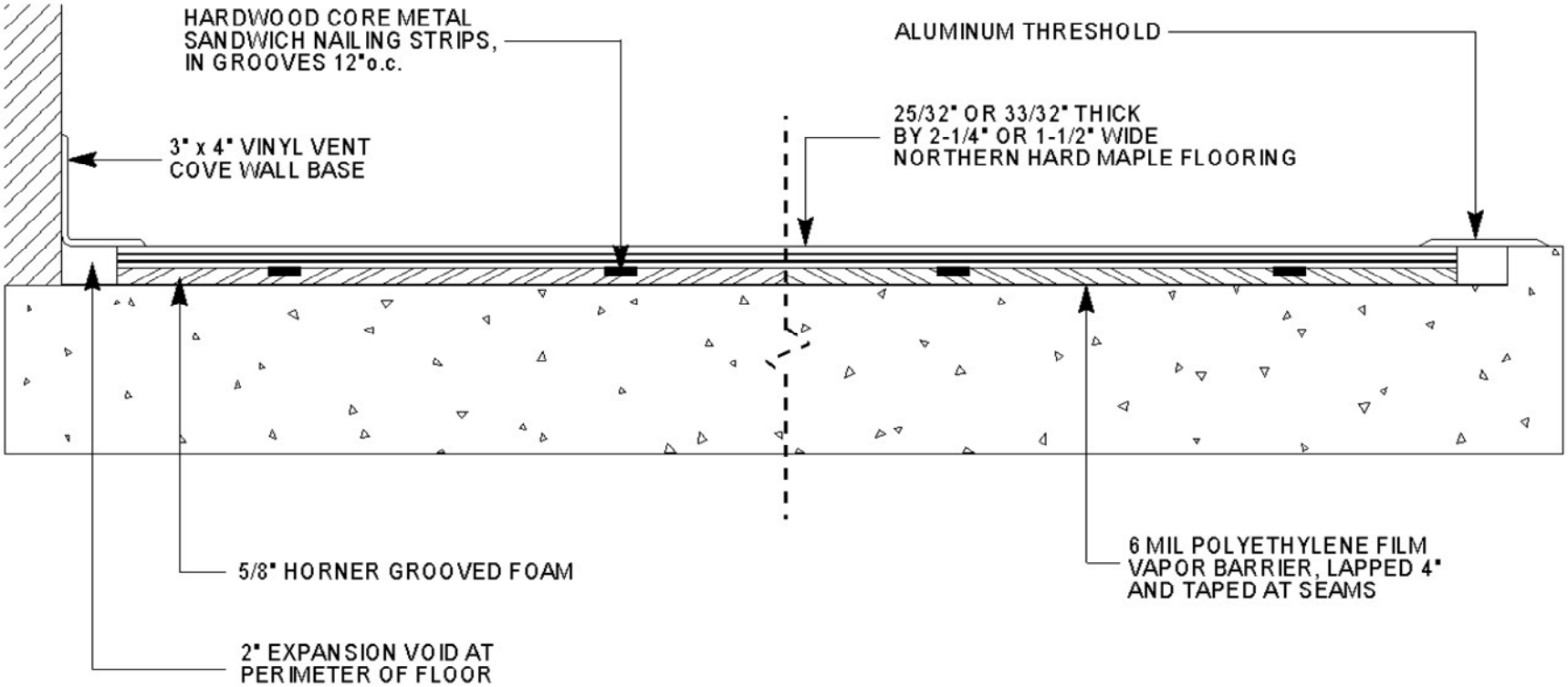
A. Inspect entire area of floor to insure that surface is acceptable for finishing, completely free from sanding dust and perfectly clean.
B. Apply seal and finish per manufacturer's instructions.
   1. Apply two (2) coats of seal and two (2) coats of finish.
C. Buff and clean floor between seal and first coat of finish.
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 Vent Cove base, mitering inside corners and anchoring to walls with base cement or screws and anchors.

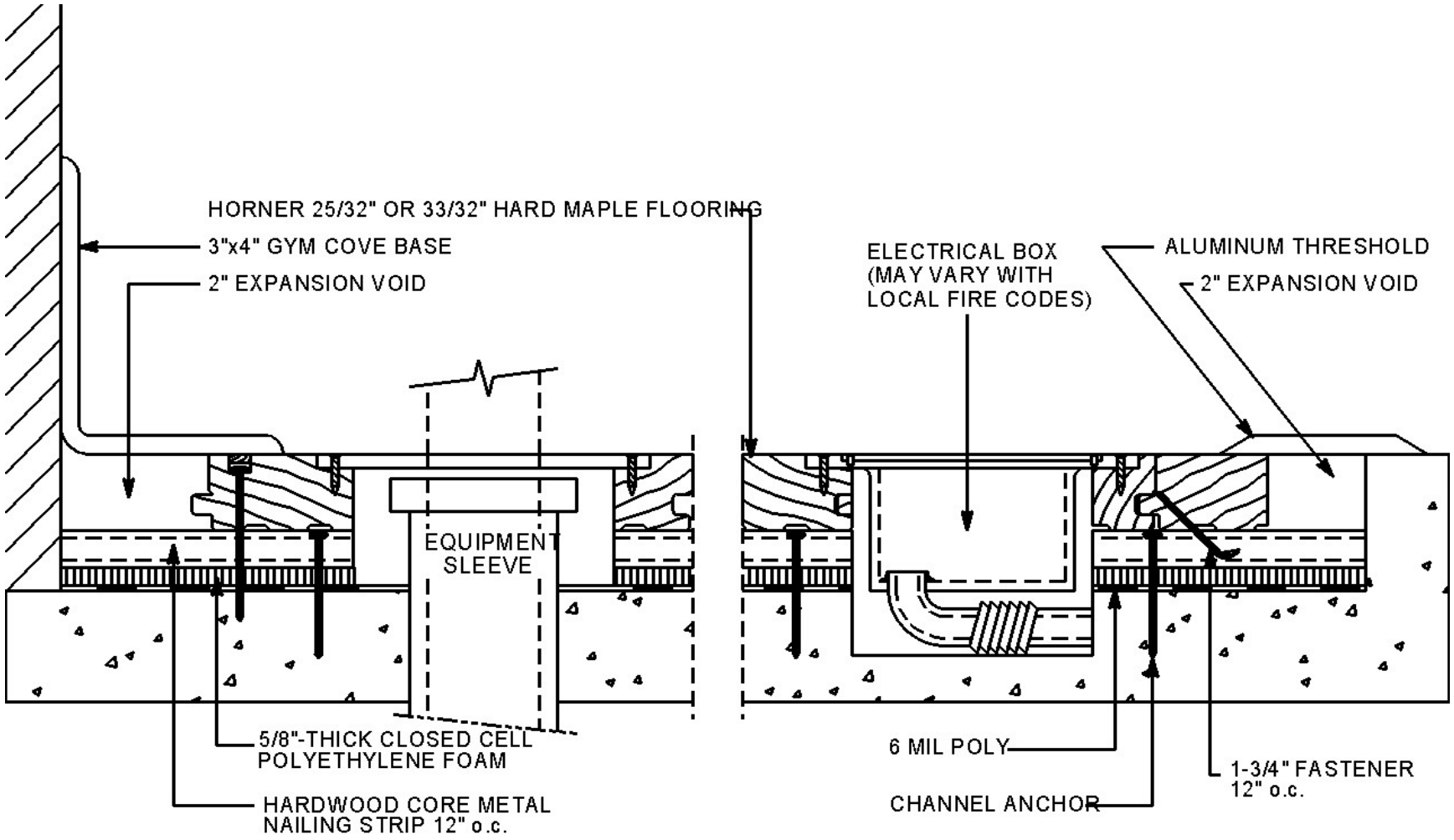
3.6 MAINTENANCE

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 instruction of the Horner or MFMA Care Card are followed.



Slab Depression	
25/32” Flooring (20mm)	33/32” Flooring (26mm)
1-3/8” (35mm)	1-5/8” (41mm)

STA-FAST SYSTEM



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