



STA-LOC SYSTEM

If you need an economical hardwood flooring system built for a variety of applications, look no further than a Horner Sta-Loc Channel Floor System.

The Sta-Loc channel system anchors the hard maple flooring directly to a concrete slab. Heavy duty steel clips slide into steel channels, then grab the tongue of one flooring strip and fit it into the groove of the adjacent strip. The hard maple flooring and Horner subflooring components are locked together as a unit and securely fastened to the concrete slab with 3/8" (10mm) diameter flathead anchors to minimize expansion. Sta-Loc is available in 33/32" (26mm) or 25/32" (20mm) thickness.

Sta-Loc flooring is milled and graded in accordance with strict MFMA requirements, and the system features tough steel channels, resilient insulation, and a polyethylene vapor retarder. The steel channel and clip fastener design of the Horner Sta-Loc System makes for a very tight floor, which makes it ideal for large gymnasiums, ballrooms and racquetball, handball and squash courts.

PART 1-GENERAL

1.1 DESCRIPTION

- A. This document specifies a wood strip gymnasium floor system consisting, in general of maple flooring, steel channels, clips, drivepins, resilient underlayment, 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 1/4" (32mm) for 25/32" (20mm) thick flooring.
 - b. 1 1/2" (38mm) 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 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 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 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 of 55°F (13°C) to 75°F (24°C) and a relative humidity range of 35%-50%.

1.4 WARRANTY

- A. Horner Flooring Company hereby warrants the STA-LOC 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 STA-LOC, 33/32" (26mm) by 2 1/4" (57mm) wide or 1 1/2" (38mm) wide, or STA-LOC, 25/32" (20mm) thick by 2 1/4" (57mm) or 1 1/2" (38mm) wide. All flooring shall be 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.
- B. Vapor retarder shall be 6 mil polyethylene.
- C. Horner Resilient "Grooved Board"
 1. Resilient underlayment shall be 1/2" x 2'0" x 8'0" (13mm x 610mm x 244cm) sheets of impregnated fiberboard with factory machined channel grooves 5/16" (8mm) deep x 1 1/8" (29mm) wide, 12" (305mm) o.c.
OPTION: Horner Foam shall be 1/2" x 4'0" 150' (13mm x 122cm x 46m) pre-grooved, multi-cellular, closed cell plastic foam. Density: 2.0 PCF.

- D. Horner STA-LOC Clips and Channels
 - 1. Channels shall be 16 gauge (1.6mm) hot-dipped galvanized steel.
 - 2. Clips shall be 16 or 18 gauge (1.6mm or 1.3mm) steel.
- E. Channel anchors shall be modified steel drivepins or hammer drivepins, 3/8" (10mm) diameter flat head, min. 1½" (38mm) long.
- F. Wall Base shall be 1" x 2" (25mm x 51mm) Horner Maple molding.
OPTION: 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.
- G. 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 entire concrete slab with 6 mil polyethylene, sealing and lapping joints a minimum of 4" (102mm).
- B. Install "Grooved Board" at right angles to long dimension of room (at right angles to the main playing court).
- C. Insert STA-LOC channels in machined grooves with ends staggered in adjacent rows. Offset channel ends with end of "Grooved Board" a minimum of 1' (305mm).
- D. Anchor channels to concrete with power actuated pins 14" (356mm) o.c. with additional pins at ends of channel.
- E. Install flooring at right angles to channels, inserting Horner clips at each channel intersection. Block insides of boards at wall line, and drive flooring up firmly and securely.

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

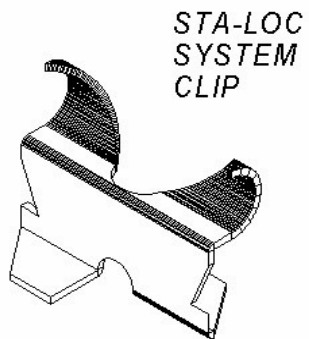
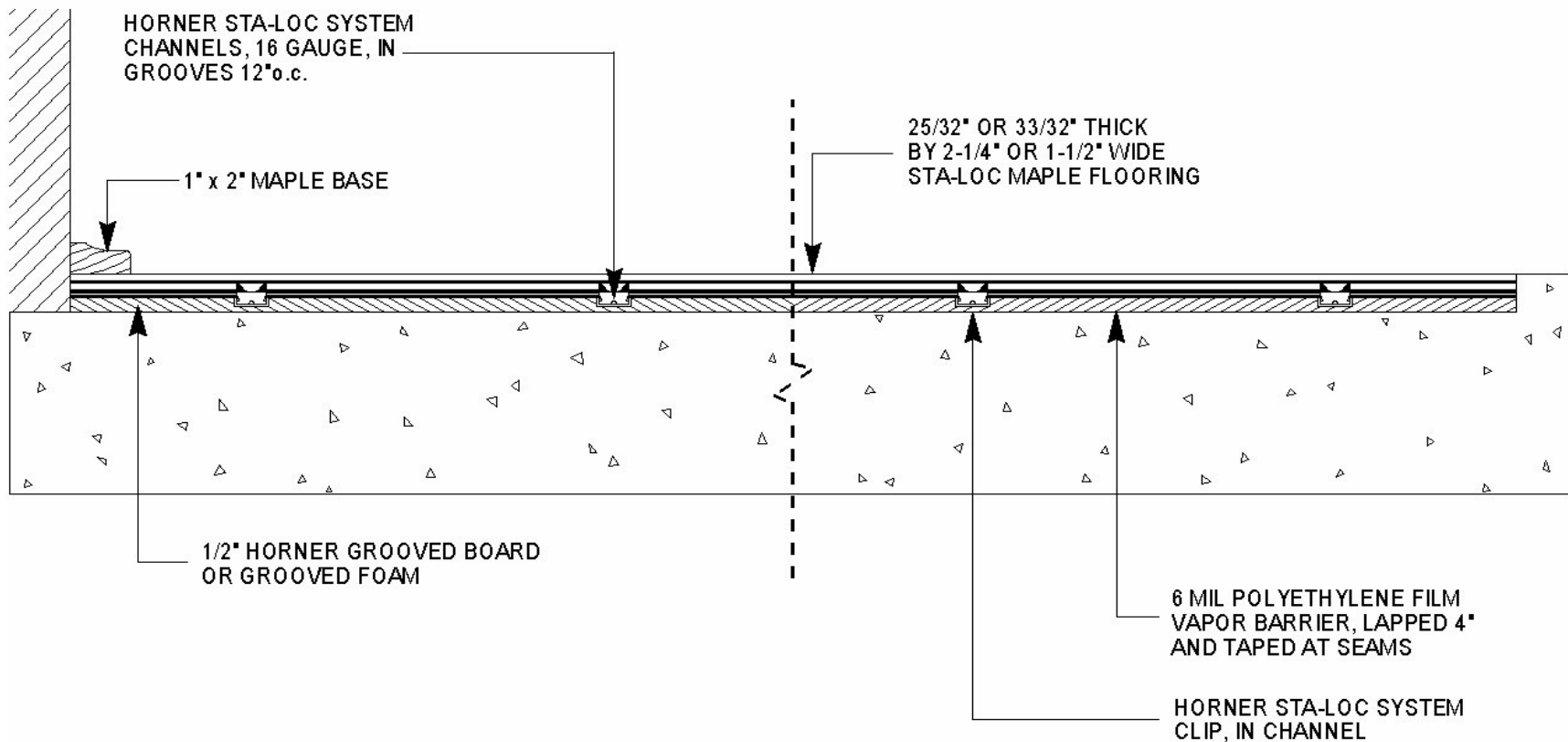
- A. Inspect entire area of floor to insure that surface is acceptable for finishing, completely free from sanding dust and perfectly clean.
- B. Apply seal and finish per manufacturer's instructions.
 - 1. Apply two (2) coats of seal and two (2) coats of finish.
- C. Buff and clean floor between each 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 perimeter molding at wall. Miter all joints at 45° angle and double nail corners carefully. Nail securely into blocking or last board.
OPTION: Install Vent Cove base, mitering inside corners, and anchoring to walls with base cement or screws and anchors.

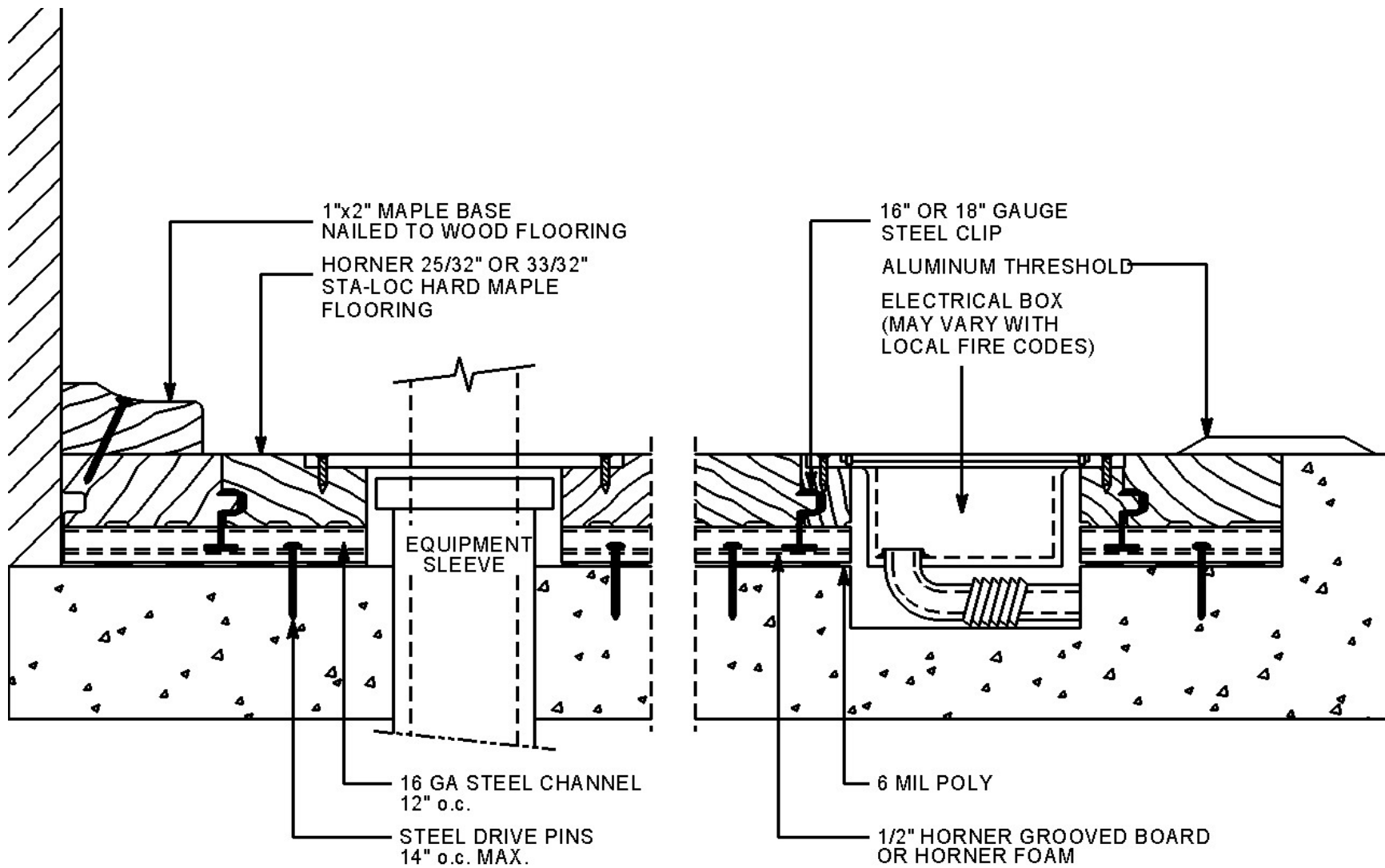
3.6 MAINTENANCE

- A. Upon completion of floor installation, the owners, 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	
25/32" (20mm) Flooring	33/32" (26mm) Flooring
1 1/4" (32mm)	1 1/2" (38mm)

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