

SECTION 09561

HARDWOOD STRIP FLOORING SYSTEM

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Hardwood strip flooring system including necessary accessories for gymnasiums, stages, gymnastics/dance, and little theaters at new construction and retrofit projects.
- B. Related Sections:
 - 1. 03300 - Cast-In-Place Concrete.
 - 2. 06100 - Carpentry.
 - 3. 07210 - Vapor/Radon Barrier.

1.02 SYSTEM DESCRIPTION

NOTE TO SPECIFIER: The following paragraph is intended for new construction. For retrofit conditions, modify to suit project requirements.

- A. Recess the concrete floor slab the depth of the wood flooring system to provide a level floor plane at access points.

1.03 SUBMITTALS

- A. Product Data: Manufacturer's literature including installation instructions, approved equipment plates, and maintenance procedures (Maple Flooring Manufacturers Association care cards) before starting work.
- B. Shop Drawings: Show dimensions, paint striping, game and gymnastic apparatus floor plates, sizes of fabricated stainless steel expansion joint covers, transitions, ramps, hardwood strip flooring system, and any other special installation details or data required to indicate compliance with requirements of this specification.
- C. Samples:
 - 1. Submit a minimum 24" x 24" sample panel of total flooring system proposed, including floor paint striping and final finish application.
 - 2. Color Selection: Provide accurate color charts for

- selection of game lines and school logo.
3. Approved sample will be retained by A/E for comparison with completed installation.

D. Quality Control Submittals: Certification requirements as specified.

1.04 QUALITY ASSURANCE

A. Certification:

1. Provide certification from flooring manufacturer that installer is accepted by manufacturer for procedures required by installation.
2. Provide certification from flooring manufacturer attesting to the fact that materials furnished meet the Maple Flooring Manufacturers Association (MFMA) guide specifications and requirements specified in this section for grade, quality, dryness, and treatment.

1.05 WARRANTY

A. Furnish written warranty signed by both flooring manufacturer and installer covering materials and quality of work for entire "flooring system".

1.06 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver materials until HVAC system has been operating for a period of at least 3 days (72 hours) at the designated storage area and maintaining 68 to 77 degrees F. and a constant 55 ± 2 percent relative humidity. Painting and other wet work shall be completed.

1. Store materials on raised skids or pallets according to manufacturer's directions.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Hardwood Strip Flooring System:

1. AacerCush I by Aacer Flooring, Springfield, MA.
2. Action Cush II by Action Floor System, Inc., Mercer, WI.
3. Rezill-Cush/Duracushion II by Connor-AGA Inc., Amasa, MI.

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4. Permacushion Sleeper System by Robbins, Inc., Cincinnati, OH.
5. Sportcushion II by Sherman Lumber Co, Sherman Station ME.

B. Vinyl Composition Tile (VCT) For Ramps:

1. Standard Excelon by Armstrong, Lancaster, PA.
2. Flex-thru by Flextile, Toronto, Ontario.
3. Essentials by Mannington, Salem, NJ.
4. Basic Structures by Tarkett, Parsippany, NJ.

C. Perimeter Base: Johnson Rubber Co., Johnsonite Ventcove, or accepted equivalent.

2.02 MATERIALS

A. Flooring System:

1. Provide vapor/radon barrier, pads, sleepers, fasteners, hardwood flooring, perimeter base, and finishing and gameline paint.
 - a. Hardwood Flooring: 33/32" thickness x 1-1/2" or 2-1/4" width, second or better grade, tongue and groove (T&G) and end match (EM), Northern Hard Maple Flooring, and grade marked according to MFMA Standards.
 - b. Pads:
 - 1) Gymnasium: 3/8" thickness.
 - 2) Stages, gymnastics/dance, and little theaters: 5/8" thickness.
2. Floor Finishing Materials: Water-based sealers and finishes by Basic Coatings or accepted equivalent.
3. Gameline Paint: As recommended by floor finishing materials manufacturer, compatible with floor finish.

B. Stainless Steel Expansion Joint Covers: Fabricated from Type 302 or 304 stainless steel with mill finish in size and shape as shown.

C. Plywood (For Ramps):

1. Standard, For Paint Use: Comply with requirements for "Softwood Plywood/Construction and Industrial" PS 1, US Department of Commerce, exterior grade only.
2. Concealed: Exterior grade, C-D plugged.

- D. Ramp Finish: Vinyl composition tile (VCT) with a coefficient of friction of 0.6 or greater.
- E. Perimeter Base: 3 inches x 4 inches heavy duty ventilating type, molded rubber cove base. Do not use pre-molded inside/outside corner bases.
 - 1. Color as selected by A/E.
- F. Game and Gymnastic Apparatus Floor Plates: Require submittal and integration into floor system.

PART 3 EXECUTION

3.01 PREPARATION

- A. Concrete shall be smooth and level, with maximum surface variations not exceeding 1/8" in a 10 foot radius. Grind down ridges and other irregularities. Fill cracks, holes, and depressions with latex cement underlayment as recommended by the flooring manufacturer.
- B. Protect adjacent surfaces and finishes from damage during either preparation or installation procedures recommended by installer and acceptable to A/E.
- C. Provide temporary barricades during installation to prevent damage to surface by occupants of areas next to work area.
- D. Curing: After floors have been finished and sealed, keep entire work area locked during required finish curing time.
 - 1. If, after required curing time, either the Board requires immediate access to gymnasium, protect the new floor surfaces either with non-fibered kraft paper or red rosin paper with taped joints.
 - 2. Remove protective paper immediately before acceptance inspection.
- E. Fire Prevention: Smoking or open flame will not be allowed in work area during application of finish materials.
 - 1. Take precautions necessary to minimize the possibility of electric sparks from outlets, electric motors and the like in area during finishing time.

3.02 INSTALLATION

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- A. Install new flooring system and accessories according to flooring system manufacturer's directions with installation areas maintained at temperature and humidity conditions, as specified, until acceptance by the Board. Locate game and gymnastic apparatus floor plates as shown on drawings.
- B. Comply with flooring manufacturer's instructions and recommendations, but not less than recommended by MFMA as applicable to type of flooring required.
- C. Expansion Space:
 - 1. Provide expansion space at walls and other obstructions and terminations of flooring minimum 1-1/2", unless otherwise indicated on Drawings.
 - 2. Unless fully concealed by trim, fill expansion space with flush cork expansion strip.
- D. Finishing:
 - 1. Stage, Gymnastics/dance, and Little Theater:
 - a. Apply 2 coats of sealer and 3 coats of flat finish according to finish system manufacturer's recommendations and free of bubbles, blemishes, and foreign materials.
 - 2. Gymnasium:
 - a. Apply 2 coats of sealer and 3 coats of gloss finish according to finish system manufacturer's recommendations and free of bubbles, blemishes, and foreign materials.

NOTE TO SPECIFIER: Edit to address the specific logo and game lines required. Verify Drawings indicate the layout for logo and game lines. If this section applies only to the little theater then omit the following item.

- b. Game Lines:
 - 1) Apply game lines accurately between sealer and finish coats after buffing and vacuuming.
 - 2) Line priority, from highest to lowest, shall be:

- a) Black for competition basketball.
 - b) White for volleyball.
 - c) Red for badminton.
 - d) Blue for practice basketball.
- 3) Lay out game lines according to the National Federation of State High School Associations or as shown on Drawings.
 - 4) Lines shall be blemish free and uniform in color.
- c. School Logo: Provide logo with an area not to exceed 315 square feet of nine different colors as submitted by A/E.
- E. Perimeter Base and Stainless Steel Expansion Joint Covers:
 - 1. Install according to flooring system manufacturer's directions.
 - 2. Secure expansion metals firmly to concrete subfloor.
 - F. Rubber Base: Install according to rubber base manufacturer's directions.

3.03 ADJUSTING AND CLEANING

- A. Trash Removal: Do not allow trash or scrap materials to accumulate in work areas. Perform prompt and timely removal of such matter or materials.

END OF SECTION