

Montgomery County Public Schools Facilities Guide

DIVISION 9 – FINISHES

SECTION 09550

WOOD FLOORING

PART 1 GENERAL

1.01 GUIDE INCLUDES

- A. High School Main and Second Gymnasiums Flooring
- B. Middle & Elementary Gymnasium & Wrestling/ Dance Auxiliary Gymnasiums Flooring

COORDINATE WITH DIVISION AND BID FORMS FOR ALTERNATES.

- C. Auxiliary Gymnasiums (Wrestling/ Dance) Flooring- Deduct Alternate
- D. Stage (Not Platforms) Flooring
- E. See Section 09650 for Auxiliary Gymnasium (Weight Lifting)

1.02 QUALITY ASSURANCE

- A. Installer: Specialized wood flooring firm with not less than 3 years successful experience in installation of types specified, and acceptable to manufacturer of wood flooring.
- B. General Standard: Comply with recommendations of Maple Flooring Manufacturer's Association.
- C. Manufacturer: Obtain flooring from single manufacturer or source, to ensure match of quality, color, pattern and texture.

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications and instructions for wood or other flooring, including installation, storage, and finishing recommendations.
- B. Samples: Submit 3 sets of range samples of wood flooring, including finish on 75 percent of each sample. Submit samples and colors of resilient sport flooring.
- C. Submit MFMA Recommendation for the correct preparation, finishing and testing of concrete subfloor surfaces to receive wood flooring.
- D. Shop Drawings: Submit drawings showing layout of game lines for approval by Architect.
- E. Submit Material Safety Data Sheets on adhesives to MCPS's Safety & Environmental Health Unit, for approval.
- F. Submit manufacturer's certification that wood flooring and field-applied adhesives installed in building interior meet testing and product requirements of California Department of Health Services *Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers*, including 2004 Addenda.
- G. Submit location of manufacture and harvest of wood flooring materials.
- H. Submit FSC-certification for sustainably harvested wood materials if applicable.
- I. Submit recycled-content data, designating percentages of post-consumer and pre-consumer recycled materials if applicable.
- J. Submit rapidly renewable material content data, if applicable

1.04 DELIVERY AND STORAGE

- A. Moisture Content: At time of delivery, limit average moisture content of wood flooring to 12, with 14 percent max. for any piece.
- B. Protect wood flooring materials from excessive moisture in shipment, storage, and handling. Deliver materials in unopened bundles and store in dry place with adequate air circulation.

1.05 JOB CONDITIONS

- A. Do not proceed with installation of wood flooring until spaces have been enclosed and are at approximate humidity condition planned for occupancy. Condition wood for 5 days prior to start of installation by placing in spaces to receive flooring and maintaining ambient temperature between 65degrees and 70 degrees and relative humidity of 50 percent or lower before, during, and after installation.

1.06 SPECIAL PROJECT WARRANTY

- A. Submit 3-year warranty signed by Manufacturer and Installer, agreeing to repair or replace wood flooring which buckles, shrinks, warps, cracks, or otherwise deteriorates excessively, or which breaks its anchorage or bond with substrate or otherwise fails to perform as required, due to failures of materials and/or workmanship rather than to unusual exposure to moisture or other abusive forces or elements not anticipated for application.
- B. Weight/dance/wrestling floors shall be warranted for a period of 1 year against defects arising due to faulty materials or workmanship.

PART 2 PRODUCTS

2.01 WOOD MATERIALS

- A. Alternate: Wood flooring, shall be FSC-certified as originating from a sustainably harvested forestry operation..
- B. Subject to compliance with requirements, provide wood flooring materials manufactured and harvested within a 500-mile radius of the project site.
- C. Give preference to rapidly renewable agrifiber and/or recycled content wood components
- D. Wood flooring and adhesives shall meet the testing and product requirements of the California Department of Health Services *Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers*, including 2004 Addenda.
 - 1. At minimum, products need to comply with VOC limits specified in LEED-for Schools if alternatives tested to the CA protocol are not available.

2.02 HIGH SCHOOL MAIN AND SECOND GYMNASIUMS FLOORING

- A. Materials:
 - 1. 33/32 inch Thickness - Northern Hard Maple
 - 2. 2-1/4 inch width x 1'-3" to 8'-0" in lengths
 - 3. Second or better grade, edge grain cut
 - 4. 6 mil polyethylene vapor barrier
 - 5. 3/8 inch x 2-1/4 inch x 3 inch resilient pads @ 12 inches o.c.
 - 6. 2 inch x 3 inch pine sleepers @ 12 inches o.c. lower subfloor
 - 7. 4 feet x 8 feet x 1/2 inch CDX plywood upper subfloor
 - 8. 3 inch x 4 inch vented rubber base
- B. Manufacturers and Systems:
 - 1. Action Floor System - Action Cush II Plus
 - 2. AGA (Connor) - Duracushion III
 - 3. Horner - Thrust-A-Cushion
 - 4. Robbins - Permacushion III
 - 5. Aacer - Super Cush II
 - 6. Harrison

2.03 MIDDLE & ELEMENTARY GYMNASIUMS (WRESTLING/DANCE AUXILIARY GYMNASIUMS) FLOORING

- A. Materials:
 - 1. 25/32inch Thickness - Northern Hard Maple
 - 2. 2-1/4 inch width x 1'-3" to 8'-0" lengths

3. Second or better grade, edge grain cut
 4. 6 mil polyethylene vapor barrier
 5. 3/8 inch x 2-1/4 inch x 3 inch resilient pads @ 12 inches o.c.
 6. 2 inch x 3 inch pine sleepers @ 12 inches o.c.
 7. 3 inch x 4 inch vented rubber base
- B. Manufacturers and Systems:
1. Action Floor Systems, Inc. - Action Cush II
 2. AGA Corporation - Duracushion II
 3. Horner - Thrust-A-Cushion less 1/2 inch plywood subfloor
 4. Robbins - Permacushion II
 5. Aacer - Super Cush
 6. Harrison

COORDINATE WITH DIVISION. FIND BID FORM FOR ALTERNATES

2.04 WRESTLING/DANCE AUXILIARY GYMNASIUM (DEDUCT ALTERNATE) FLOORING AND AUXILIARY GYMNASIUMS (WRESTLING/ DANCE)

- A. Materials:
1. 6 mil polyethylene vapor barrier
 2. 3/8 inch AirTech rubber cushion pads, spaced at 1'-0" on center each way
 3. 2-layers of 1/2 inch x 4 feet x 8 feet CDX plywood subfloor
 4. 5/16 inch x 12-1/4 inches x 75 inch panels - Second grade or better
 5. 3-1/2 inch x 2-1/2 inch vented rubber base
- B. Manufacturer and System:
1. Sport Flex Air by Wood Flex Corp.

2.05 STAGE (NOT PLATFORMS) FLOORING

- A. Materials:
1. Thickness 1 inch (3/4 inch actual) Southern Pine tongue & groove
 2. Width 4 inch (3-1/8 inch actual) at standard random length
 3. Grade B & B, cut edge grain
 4. 2 x 3 sleepers, 12 inches o.c.
 5. 6 mil polyethylene vapor barrier
 6. 3 inch x 4 inch vented rubber base
- B. Manufacturers and Systems:
1. Same as for gymnasium floors.

PART 3 EXECUTION

3.01 INSPECTION

- A. Installer must examine substrates on which flooring will be installed. Conditions detrimental to proper completion shall be submitted in writing to Contractor and Architect and problems corrected prior to commencing work. Substrate shall be sufficiently level to achieve a finished floor tolerance of 1/8 inch per 10 feet in each direction.

3.02 INSTALLATION

- A. Comply with flooring manufacturers' instructions and recommendations but not less than recommended by MFMA.
- B. Sanding in accordance with manufacturers instructions and recommendations. Floor shall present a smooth surface without drum stop marks, gouges, streaks or shiners.
- C. Apply 2 coats of manufacturers recommended sealer (wood floors) and 2 coats of urethane finish as recommended by the manufacturer.

- D. Game Lines – Paint game lines on top of sealer coats and finish with two clear coats of urethane. Use standard deck enamel in multiple colors as shown on Drawings.
- E. Install wood flooring and finish in a manner consistent with Division 1 Indoor Air Quality Management requirements.

3.03 PROTECTION

- A. Institute procedures required for protection of finished flooring during remainder of construction period. Any damaged surfaces shall be satisfactorily repaired before inspected and accepted by the Architect and Owner.

3.04 WASTE MANAGEMENT

- A. Recycle clean (uncoated, untreated) waste wood flooring materials in accordance with Section 01524, Construction Waste Management requirements.

END OF SECTION