

## SECTION 09641

### CUSHIONED WOOD FLOORING ASSEMBLIES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To
  - 1. Furnish and install hardwood floors complete with base, thresholds, and other items specified as described in Contract Documents.
  - 2. Prepare and finish hardwood flooring system as described in Contract Documents.
- B. Products Installed But Not Supplied Under This Section
  - 1. Volleyball Floor Plates.
- C. Related Sections
  - 1. Section 03313 - Installation of volleyball anchor sleeve
  - 2. Section 11491 - Furnishing of volleyball floor anchors

##### 1.2 SUBMITTALS

- A. [Product Data](#)
  - 1. Manufacturer's literature or cut sheet for flooring system and for finish system
  - 2. Maintenance instructions
- B. [Quality Assurance / Control](#) - Manufacturer's installation verification requirements and schedule.

##### 1.3 QUALITY ASSURANCE

- A. [Pre-Installation Conference](#)
  - 1. Schedule conference for two weeks before flooring installation.
  - 2. Review Flooring Manufacturer's installation conditions verification procedure and requirements.

##### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver wood materials to Project until interior painting and tilework is completed and before pre-installation conference.
- B. Store wood materials on premises in area with environmental conditions as specified below to allow acclimation to moisture content which will prevail under environmental conditions under which the building will be operated. Unpackage wood materials and pile loosely to allow uniform acclimation.

##### 1.5 PROJECT CONDITIONS

- A. Project Environmental Conditions - Conditions inside the building shall be brought to levels to be normal at occupancy of building. Maintain these conditions from the time the flooring material is delivered to site to time Certificate of Substantial Completion is signed. Conditions include normal levels of humidity, heating, and air conditioning.

##### 1.6 WARRANTY

- A. Flooring Company's two year written guarantee covering labor and materials. Follow Manufacturer's verification procedures of installation conditions necessary for issuance of warranty.

## PART 2 PRODUCTS

### 2.1 COMPONENTS

- A. Vapor Retarder
  - 1. 6 mil carbonized polyethylene
  - 2. PVC tape or adhesive
- B. Resilient Pads - 2-1/4 inches wide by 3 inches long by 3/8 inch thick PVC pads with slots or air cells.
- C. Plywood - Four-ply minimum, APA graded and stamped, 1/2 inch CDX plywood.
- D. Finish Flooring
  - 1. Hardwood - Northern Hard Maple, No. 2 and better grade MFMA trademarked and grade marked. 25/32 inch by 2-1/4 inch minimum, MFMA-RL or MFMA-FJ, with specially milled ends.
  - 2. Fasteners - Power-driven, 2 inch long barbed cleats or coated staples recommended by Flooring Manufacturer.
- E. Base - 2-1/2 inches by 2-1/2 inches by 1/8 inch aluminum angle in clear anodized finish.
- F. Threshold Plate - 5 inches wide by 1/4 inch thick aluminum, fluted on top, slightly tapered both edges in finish selected by Architect.
- G. Finish
  - 1. Sealer - As recommended by Top Coat Manufacturer.
  - 2. Top Coats -
    - a. High gloss, high solids, oil modified urethane meeting VOC requirements of jurisdictions for pollution control.
    - b. [Approved Manufacturers](#) -
      - 1) Magee Industries
      - 2) Hillyard Industries
  - 3. Game Lines -
    - a. Colors -
      - 1) Basketball - Black
      - 2) Volleyball - White
    - b. Paint manufacturer as recommended by Floor Finish Manufacturer.

### 2.2 VMR MANUFACTURERS

- A. Duracushion by Connor Sports Flooring Corp, Phoenix, AZ Doug Grove (800) 383-0156 or (480) 961-8094 FAX 480-961-8095 [dgrove@connorfloor.com](mailto:dgrove@connorfloor.com)
- B. Permacushion by Robbins Sports Surfaces, Birmingham, AL Tommy Ellison (877) 780-9283 or (205) 871-1283 FAX 205-871-1533 [tellison@robbinsfloor.com](mailto:tellison@robbinsfloor.com)

## PART 3 EXECUTION

### 3.1 VMR INSTALLERS

- A. Connor
  - 1. Mt Heights Hardwood Flooring Co.
  - 2. E.B. Eames Flooring Co.
- B. Robbins
  - 1. Croft/Beck 801 973-6969
  - 2.

### 3.2 EXAMINATION

- A. Follow Flooring Manufacturer's prescribed inspection procedure for determining acceptability of installation conditions, including environmental conditions in building during and after installation, moisture content of slab, levelness of slab, etc.

### 3.3 INSTALLATION

- A. Do not install wood flooring until interior 'wet type' systems are dried out and overhead trades have completed work in wood floor areas.
- B. Vapor Retarder - Lap joints 6 inches and completely seal.
- C. Cushioned Panels
  1. Place 32 resilient pads on under-side of first layer of plywood 6 inches in from edges of plywood and 12 inches on center each way. Lay plywood parallel to short dimension of room with 1/4 inch spacing at joints.
  2. Place second layer of plywood on a diagonal with first layer, with 1/4 inch joints, and secure by screwing, nailing, or stapling, as acceptable to Flooring Manufacturer, at 12 inches on center.
  3. Allow 1-1/2 inches expansion at walls and permanent obstructions.
- D. Volleyball Floor Plates - Install in accordance with Plate Manufacturer's instructions and as detailed.
- E. Laying And Power Nailing of Finish Flooring
  1. Lay flooring parallel to long dimension of room.
  2. Tightly drive end joints and properly fit side joints to meet requirements dictated by Manufacturer to meet humidity requirements.
  3. Machine nail.
- F. Aluminum Base
  1. Firmly attach only to wall with panhead, cadmium plated, self-tapping screws and plastic anchors at 24 inches on center. Length of screws shall be sufficient to embed in substrate one inch minimum
  1. Firmly attach only to wall with panhead, cadmium plated, wood screws at spacing to match framing members. Length of screws shall be sufficient to embed in substrate 1-1/2 inches minimum
  1. Firmly attach only to wall with panhead, cadmium plated, self-tapping screws at spacing to match framing members. Length of screws shall be sufficient to embed in substrate 1/2 inch minimum
  2. Place screws approximately one inch down from top of base.
  3. Attach one 3/16 inch by 1/2 inch by one inch masonite spacer to base immediately above each screw hole with contact cement.
  4. Tighten screws to bring base into gentle contact with floor. Do not interfere with free movement of floor.
  5. Miter corner joints and grind toe of base on outside corners to 1/2 inch radius.
  6. Leave in true alignment with 3/16 inch space between wall and base.
- G. Aluminum Threshold
  1. Neatly and substantially anchor aluminum threshold plates located across expansion gaps at door and other floor surface openings with permanent type rust proof anchors.
  2. Do not fasten to wood floor.
- H. Expansion Provisions
  1. Allow 2 inch gap between flooring and walls for expansion at perimeters.
  2. Do not lag fixtures, equipment, plates, outlet boxes, or other items through subfloor to floor unless adequate provision is made for expansion.

- I. Sanding Order
  - 1. Make sure floor is free of moisture.
  - 2. Sweep floors clean.
  - 3. Sand with heavy, power driven type sander. Use dust accumulator on machine.
  - 4. Sand with No. 36 or No. 40 grit sandpaper if boards are of uneven heights. Sand on diagonal if required to level boards.
  - 5. Make sure floor is sanded level before sanding with medium grit, 50 or 60 grit, sandpaper. Perform this sanding and subsequent sanding passes in direction of grain of floor.
  - 6. Sand edges with No. 60 or 80 grit spinner paper.
  - 7. Sand entire floor with No. 80 or 100 grit sandpaper.
  - 8. Disk and entire floor with No. 100 disk paper.
  - 9. Scrape and hand-sand corners and other areas not reached by machine.
  
- J. Finishing
  - 1. Allow for adequate ventilation to insure proper curing.
  - 2. Apply one coat of sealer at rate recommended by Finish Manufacturer.
  - 3. Apply game lines.
  - 4. Apply two top coats of finish minimum with ample time between coats for material to properly dry before applying additional coats. Coverage per gallon shall be at rate or number of coats recommended by Finish Manufacturer to provide 4 mil total finish system thickness.

### **3.4 PROTECTION**

- A. Keep floor free of traffic for 72 hours minimum after application of final coat. Protect floor finish until Substantial Completion.

END OF SECTION