



## The Arpeggio

### SECTION 09642 – WOOD RESILIENT FLOORING

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

###### **A. Related work specified under other sections.**

###### **1. CONCRETE SUBFLOORS - SECTION 03\_ \_ \_**

- a. Slab depression is:
  - 2-1/8" for 25/32" flooring (3/8" pad)
  - 2-3/8" for 33/32" flooring (3/8" pad)
  - 2-3/8" for 25/32" flooring (5/8" pad)
  - 2-5/8" for 33/32" flooring (5/8" pad)
- b. The general contractor shall furnish and install the concrete sub-floor depressing the slab sufficiently to accommodate the floor system. The slab shall be steel troweled and finished smooth to a tolerance of 1/8" in any 10' radius by the general contractor. High spots shall be ground level, and low spots filled in with approved leveling compound by the general contractor to the full approval of the installer (Flooring Contractor).

###### **2. MEMBRANE WATERPROOFING - SECTION 07\_ \_ \_**

- a. General contractor, using suitable type membrane, shall adequately waterproof beneath the slab and at the perimeter walls and on earth side of below grade walls, concrete sub-floors on or below grade.

##### 1.3 QUALITY ASSURANCE

###### **A. Manufacturer**

1. Manufacturers of resilient flooring components shall be firms specializing in manufacturing products specified in this section.
2. Manufacturer of flooring and sub-floor components must be ISO 9001:2000 Certified to assure quality control of materials provided.
3. Basis of design shall be "The Arpeggio" sports floor system as provided by Tacinelli Sports Floor Systems, [www.bestsportsfloors.com](http://www.bestsportsfloors.com) . **888-404-WOOD**
4. Materials other than those listed must be approved 10 days prior by written addendum. Materials from non-approved manufacturers will not be accepted.

###### **B. Installer (Flooring Contractor)**

1. The complete installation of the flooring system, as described in the scope of these specifications, shall be carried out by Tacinelli Sports Floor Systems (Flooring Contractor), and the work shall be performed in accordance with most recent installation instructions of the manufacturer and or the NWFA (National Wood Flooring Association).
2. Installer (Flooring Contractor) shall be liable for all matters related to installation for the lifetime of the floor. This warranty starts only after the floor has been substantially installed and completed and the receipt of final payment.

##### 1.4 SUBMITTALS

**A. Specification** - Submit sales, specification and MSDS sheets for specified system and finish

**B. Sample** - Submit one sample of specified system, if requested by architect.

- C. Maintenance/ Literature** - Upon completion of floor installation, send to owner, attendants or individuals in charge and responsible for the upkeep of the building an "Important Document" binder. Include a copy of specifications, warranty, moisture readings of products and maintenance guide.

### **1.5 WORKING CONDITIONS**

- A.** The wood flooring specified herein shall not be installed until all masonry, painting, plaster, tile, marble and terrazzo work is completed, and overhead mechanical trades and painters have finished in the wood floor areas. The building shall be enclosed and weather tight.
- B.** The concrete sub-floor shall be determined dry by industry standard testing procedures, free of foreign materials and turned over to the installer (Flooring Contractor) broom clean. Moderate room temperature of 65 degrees or more shall be maintained a week preceding and throughout the duration of the work. Humidity conditions within the building shall approximate the humidity conditions that will prevail when the building is occupied.
- C.** Permanent heat, light and ventilation shall be installed and operating during and after installation, maintaining a range of temperature and humidity compatible with the expected low and high moisture content of the flooring. The flooring contractor based on the facility's mechanical controls and/or geographical location determines the wood moisture content range.
- D.** Flooring must be stored in a dry, well-ventilated area, not in contact with masonry, to acclimate to building conditions and shall be installed at moisture content compatible with the normally expected environmental range of temperature and relative humidity achieved while the facility is occupied.
- E.** General Contractor shall lock floor area after floor is finished to allow proper curing time. If general contractor or owner requires use of gym after proper curing time, he shall protect the floor by covering with non-marring Kraft paper or red rosin paper with taped joints until acceptance by owner of complete gymnasium floor. 1/8" Masonite should be used to extend bleachers or if any heavy equipment or work must be used or performed after final completion
- F.** Working conditions as described above shall be followed. Variations and substitutions shall be submitted for approval to the architect who shall advise Tacinelli of the same.

### **1.6 HUMIDITY CONTROL**

- A.** Since all wood flooring will expand and contract as relative humidity varies, it is important to minimize extremes between low and high. Hardwood flooring is manufactured at moisture content most compatible with a 35%-50% relative humidity range. Geographical regions and available mechanicals determine the typical range of temperature and humidity for each facility. Maintaining a 15% fluctuation between highest and lowest average indoor relative humidity provides limited shrinkage and growth. Facility managers should make use of available HVAC systems to prevent excessive tightening and shrinkage of flooring.

### **1.7 MATERIALS WARRANTY**

- A.** Tacinelli warrants that the materials it has supplied, above and beyond the first five (5) percent (as per industry standards), will be free from manufacturing defects for a period of "Lifetime". The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied in operation of law or otherwise, including, but not limited to, any implied warranties of merchantability or fitness. This warranty is expressly limited to the flooring materials (goods) supplied by Tacinelli. This warranty does not cover floor damage caused (wholly or in part) by fire, winds, floods, moisture, other unfavorable atmospheric conditions or chemical action, nor does it apply to damage caused by ordinary wear, misuse, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation, faulty or unsuitable subsurface or site preparation, settlement of the building walls.
- B.** Tacinelli shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling or use of the materials (goods) or from any other cause relating thereto, and their liability hereunder in any case is expressly limited to

the replacement of materials (goods) not complying with this agreement, or at their elections, to the repayment of, or crediting buyer with, an amount equal to the purchase price of such materials (goods), whether such claims are for breach of warranty or negligence. Any claim shall be deemed waived by buyer unless submitted to Tacinelli in writing within 30 days from the date buyer discovered, or should have discovered, any claimed breach.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

**A. Vapor Barrier** - 6-mil polyethylene.

**B. Resilient Pads**

1. Johnsonite pads, 3/8" X 2-1/4" X 3".
2. Optional thickness, 5/8" X 2-1/4" X 3".

**C. Sub-floor** –

1. 2 layers of 15/32" APA rated Douglas fir plywood sheathing, Exposure 1.
2. 15 lb HWD flooring paper or 15 lb felt paper

**D. Flooring** -

1. 25/32" X 2-1/4", Second & Better Grade, Northern Hard Maple Flooring, TGEM from a flooring manufacturer meeting the standards of either the MFMA or NWFA
2. Optional sizes and grades (specify above or delete) -
  - a. Sizes – 25/32" X 1-1/2", 33/32" X 1-1/2", 33/32" X 2-1/4"
  - b. Grades – First Grade, Third Grade

**E Fasteners**

1. Flooring Fasteners - 2" barbed cleats or coated staples.
2. Sub-floor Fasteners - 1" Screws or staples. PL-400 or equivalent

**F. Finish Materials** - Bona-Kemi Super Sport Water Bourne Gymnasium Finish System, VOC compliant and Green Certified

**G. Game Lines** - Game line paint shall be compatible with finish.

**H. Wall Base** - 3" X 4", heavy duty, molded, vented cove base with pre-molded outside corners.

## **PART 3 - EXECUTION**

### **3.1 EXECUTION**

- A. Inspect concrete slab for proper tolerance and dryness. Report any discrepancies to general contractor and architect in writing.
- B. Concrete slab shall be broom cleaned by general contractor.
- C. Installer (Flooring Contractor) shall document all working conditions provided in General specifications prior to commencement of installation.

### **3.2 INSTALLATION**

**A. Sub-floor**

1. Cover concrete with polyethylene and lapping joints a minimum of 6".
2. Install lower layer of sub-floor perpendicular to finish maple flooring, spacing all edges 1/8" to 1/4" and stagger joints, on average, 4'. Provide 1-1/2" expansion voids at perimeter and at all vertical obstructions on any width wider than 40'. Minimum of 3/4" required for smaller installations. The underside of first layer shall have resilient pads attached, with staples, 12" on center (32 per sheet) and 6" from edges on all sides.
3. The second layer of sub-floor shall be laid at a 45-degree angle over the first layer, spacing all edges 1/8" to 1/4" and staggering joints, on average, 4'. Provide 1-1/2" expansion voids at perimeter and at all vertical obstructions on anything wider than 40'. Minimum 3/4" required for smaller installations. Attach second layer of sub-floor with PL-400 or equivalent laid 12" on center and staple fasteners 8 – 10" on center.
4. Roll out 15 lb HWD flooring paper or 15 lb felt paper.

## **B. Maple Flooring**

1. Install maple flooring by power nailing or stapling approximately 8 – 10” on center with end joints properly driven up.
2. If required, provide expansion joints between flooring strips at certain intervals across the floor to allow for intermediate expansion in accordance with local humidity conditions and moisture content of the flooring material. DO NOT put expansion joints across the floor if humidity control equipment is being used. Flooring materials must acclimate to the controlled environment 2 weeks prior to installation, for proper performance under those conditions. Any variation of these requirements need Architect approval or sign off from General Contractor or facility.
3. Provided 1-1/2” expansion voids at perimeter and at all vertical obstructions for all installation over 40’. Minimum of 3/4 “is required for smaller installations.

## **3.3 FINISHING**

### **A. Maple Flooring**

1. Machine sand with coarse, medium, and fine paper to a smooth, even and uniform surface. Final sanding shall be made with a buffer.
2. Remove sanding dust from entire surface by tack or vacuum.
3. Inspect entire area of floor to insure that surface is acceptable for finishing, clean and completely free from sanding dust.
4. Apply one (1) coat of approved seal by Bona Kemi and three (3) coats of approved finish per manufacture’s instructions.
5. Games Lines: Apply game lines as indicated on drawings, between seal and first coat of finish and 2<sup>nd</sup> coat of finish.

## **3.4 BASE INSTALLATION**

- A. Install vent cove base to walls with base cement or screws. Use pre-molded outside corners and mitered inside corners.

## **3.5 CLEANING**

- A. Remove excess and waste materials from the area of work. Place in dumpsters provided by General Contractor or facility.

**END OF SECTION 09642**