### **SPECIFICATIONS**

## **PART ONE: GENERAL**

### 1.01 DESCRIPTION

- A. This document specifies the replacement of a wood gymnasium floor system, consisting in general, of removal of the existing wood floor and installation of new maple wood flooring, including: vapor retarder, sanding, sealers, finishes, game lines and wall base over the existing wood subfloor. The new floor will include the existing gym floor only and does not include the stage or inside the two storage rooms in the corners of the gym.
- **B.** The MFMA (Maple Floor Manufacturing Association) Mill Accredited Installation Company shall provide all tools and services to remove the existing wood flooring, make any necessary repairs to the existing wood subfloor, install a complete wood floor system on the existing wood subfloor, install vapor retarder, new maple flooring, sanding and finishing, plus the installation of perimeter moldings.

### **Reference Standards**

Use current editions unless indicated otherwise.

- 1.01.1 Maple Flooring Manufacturers Association (MFMA) guide specifications for Sport Floor applications.
- 1.01.2 MFMA wood flooring grading rules
- 1.01.3 MFMA Humidity and Environmental recommendations
- 1.03.4 MFMA- sealers and finishes guidelines.

# 1.02 QUALITY ASSURANCE

- A. The wood flooring shall be MFG- Action Floors or approved equal, MFMA-RL (random Length) maple.
- B. The flooring contractor shall be an MFMA Mill Accredited Installation Company, with MFMA Accredited Installer(s), on site for the duration of the wood floor installation.

# 1.03 DELIVERY, STORAGE AND HANDLING

- A. Flooring shall be delivered to the premises, unwrapped and acclimated for at least 5 days before installation, depending on local climate at the time.
- B. All pallets of flooring bundles shall be opened and spread out to acclimate the flooring to environmental conditions in the building.

## 1.04 JOB CONDITIONS

A. The Maple Flooring Manufacturers Association (MFMA) recommends maintaining indoor relative humidity between 35 percent and 50 percent, and air temperatures between 55 degrees and 75 degrees year-round. A 15 percent fluctuation in indoor relative humidity will not adversely affect the maple.

- B. The MFMA Mill Accredited Installation Company\* shall warrant the floor installation and shall furnish a flooring materials warranty from the flooring manufacturer. Minimum 1 year on materials.
- C. The Installation contractor shall provide a 3 year written warranty for their installation workmanship.

# **PART 2 - PRODUCTS**

## 2.01 MATERIAL

- A. Vapor Retarder
  - 1. Asphalt construction paper (Kraft Paper).
- B. Subfloor
  - 1. Verify the subfloor is good condition. If any sub floor is found to be damaged or in need of repair inform the Project Manager. Check for sags or low spots.
- C. Maple Flooring Manufacturers Association (MFMA) Wood Flooring
  - 1. Flooring shall be MFMA-RL Northern Hard Maple, 25/32" x 2-1/4" wide; First Grade; T&G (Tongue & Groove) and EM (End Matched); grade marked and stamped as produced by an MFMA member manufacturer.
  - 2. Provide sample of maple floor with finish applied prior to ordering the materials.
  - 3. Deliver maple flooring to job site in original, unopened packages, bundles or pallets. Protect materials against dampness during shipment and after delivery.
- D. Source Limitations:
  - 1. Obtain each material required for any one type and color from a single source to minimize variations in appearance and quality.
- E. Fasteners
  - 1. Flooring fasteners shall be 2" (50mm) cleats, unless otherwise specified by MFMA flooring manufacturer.
- F. Wall Base
  - 1. Wall base shall be 3" x 4" (76mm x 102mm) vented cove base with pre-molded outside corners (color black), MFG- Johnsonite from Action Floor Systems, LLC or approved equal.
- G. Finishing Materials
  - 1. Finish materials shall be Mfg- Bona, selected from the most recent listing of MFMA tested and certified products approved by MFMA flooring manufacturer and shall be applied according to finish manufacturer's instructions.
- H. Game Lines
  - 1. Game line paint(s) shall be Mfg- Bona recommended by the finishing materials manufacturer and must be compatible with the finish.
- I. Perimeter
  - 1. Wall base shall be 4" x 3" vented rubber cove base.

# **PART 3 – EXECUTION**

# 3.01 INSPECTION

A. Installer shall remove existing wood flooring and provide proper surface to install new flooring.

- B. Inspect existing wood subfloor for damage and report any discrepancies in writing to the Project Manager for correction.
- C. The wood subfloor shall be thoroughly cleaned of all debris, wood chips, nails, dirt and sawdust.

## 3.02 INSTALLATION

- A. Close off space to foot traffic during installation.
- B. Acclimation: The new Maple flooring will be staged on site for minimum 5 days depending on local weather to acclimatize.
- C. Install asphalt construction paper (39" wide roll Kraft paper) vapor barrier with 3" overlap at seams over the existing wood subfloor.
- D. All work shall be performed by skilled installers of the trade, with a minimum of 1 MFMA certified installer on site at all times during installation and finishing and shall be of the highest quality.
- E. Maintain a minimum temperature in the space receiving the new flooring of 55 deg F and maximum 75 Deg F when material s first arrives on site and thereon after.
- F. Install maple flooring parallel with main playing court by nailing approximately 12" O.C. or as specified by the flooring manufacturer.
- G. Stagger end joints minimum 10"- 12".
- H. Blind nail flooring to subfloor with power driver at approx. 12" OC.
- I. For a blended appearance select pieces randomly from several boxes.
- J. Provide 2" expansion voids at the perimeter and at all vertical obstructions and walls.
- K. Install metal thresholds at the two exterior doors and attach to adjacent rigid floor surface. Where thresholds cover an expansion, space ensure they are fastened to the substrate and not the wood floor to allow flooring to move under the threshold.

## 3.03 FINISHING

## A. Sanding

- 1. Machine sand with coarse, medium and fine paper to a smooth, even and uniform surface void of any scratches, drum stop marks or gouges.
- 2. Remove sanding dust from entire surface by tack or vacuum. Use vacuums on sanders to minimize dust inside the building.
- 3. Clean adjacent surfaces if heavy dust accumulates (Stage, Bleachers)

# B. Finishing

- 1. Inspect entire area of floor to ensure that surface is acceptable for finishing, completely free from sanding dust.
- 2. Apply seal and finish, using MFG- Bona a MFMA recommended product or approved equal including one coat of MFA MFG- Bona Super Sport DTS sealer, then 1 coat of MFG- Bona Super Sport Drive, next install the court lines with MFG- Bona court lines paint and then 3 coats of MFG- Bona Sport HD according to the Manufactures recommendations with proper wait times between coasts and humidity.
- 3. Paint game lines as shown on drawings, between seal coats and first coat of finish. Game line paint shall be compatible with finish.
- 4. Basketball- use 4" dark blue lines at perimeter and 2" dark blue for interior lines using the Standard High School layout measurements in feet and inches.

- 5. Volleyball- install one volleyball court inside the basketball court matching the existing layout using 2" red line paint, High school standard layout in feet and inches (Standard English Measurements).
- 6. Pickleball court lines: include three courts perpendicular to the basketball court with 1" medium tan lines using standard pickleball layout in feet and inches.
- 7. Fencing sport- include 12 fencing boxes at the perimeter to match the existing layout with 1" medium tan lines.
- 8. On lines that intersect with other colors- the wider line will be dominant, with a smaller 3/8" line of the opposing color on one edge or at court dimensions.
- A. Install 4" x 3"vented rubber cove base. Affix rubber base to wall with recommended adhesive.
  Miter all corners carefully. Use pre-molded outside corners.
  Miter inside corners and use pre molded outside corners on cove base.
- B. Replace the 2 metal thresholds on the 2 exterior double doors with new aluminum thresholds. Install aluminum thresholds as required, anchoring firmly in concrete floor beyond limits of wood flooring.
- C. Install transition strip at the entries (front entry, double doors on each side of the stage, at the 2 double closet doors.

## 3.04 ADDITIONAL ITEMS

- 1. Replace the rubber pads on the outside of the edge on the two basketball backstops.
- 2. Install safety pads on the walls behind the 2 back stops, approximate size 10' wide x 4ft tall, with the bottom at 2 feet off the floor. Mounted with lag screws and washers through grommets into a solid structural member.
- 3. Replace the 2 basketball nets with new, nylon heavy duty nets.

## 3.05 CLEAN UP and COMPLETION

- A. Clean up all unused materials and debris and remove from premises, properly dispose of all waste materials.
- B. Protect installed work from damage prior to final inspection.