DESIGN STANDARDS FOR: WOOD FLOORING FOR GYMS & MULTI-PURPOSE

PART 1 - GENERAL

1.01 Intent:

To provide a high performance resilient maple wood sports floor system with a consistent ball bounce, good shock absorbing qualities and no dead spots for gymnasiums and multi-purpose rooms.

1.02 References:

MFMA "Grading Rules for Hard Maple"
MFMA "Maple Performance Characteristic Guide"
MFMA "Athletic Flooring Sealer and Finish Specifications and Conformance List- 22"
German DIN Standards 18032, part 2
Parks standards for Gym floor markings

1.03 Performance Standards:

A. To be a "DIN Certified" wood sports floor system with the attributes listed below:

1. Shock absorption - 53% minimum to no more than 65%. Concrete equals 0 %.
2. Ball bounce - 98% minimum.
3. Deflection - vertical deformations @ point of impact - minimum 0.091" or 2.3 mm.
4. Deflective Indentation- @ 20" or 500mm from point of impact- 15% maximum.
5. Friction - 0.5 - 0.7 mm range.
6. Rolling load - 337.6 lbs or 1500n.

1.04 Warranty:

A. Provide the manufacturer's standard warranty.

PART 2 - PRODUCTS

2.01 Acceptable Manufacturers:

A. The following manufacturers are acceptable IF flooring systems meet the above performance standards:

1. Robbins Sports Surfaces, Greater Seattle Floors, 5517 6th Ave South, Seattle Washington 98108, 206-763-7004, twells@gsfloors.com.
2. Connor Sports Flooring Corporation, Doug Grove, 4721 E. Carmen St, Phoenix, AZ, 85044, 800-383-0156, dgrove@connerfloor.com.
3. Superior Floor Company, Inc, 901 E Thomas St, Wausau, Wisconsin, 54403, 715-842-5358.
4. Action Floor Systems, LLC, 800-746-3512, <info@actionfloors.com.
5. Horner- Western Hardwoods, Inc, Dick Ferry, 206-367-3717, 512 NE 165th St, Seattle, Wa. 98155.

2.02 Materials:

A. Flooring shall be MFMA- RL or FJ second and better Northern Hard Maple, edge grain, 25/32" thick by 1½" or 2¼" wide, T & G and EM, grade marked and produced by an MFMA member manufacturer. Flooring shall be treated with Woodlife F preservative.

B. Sub-floor system shall meet the performance standards listed in 1.02 above.

C. Finish system:

1. Provide two coats of sealer (Group 1) and a minimum of three coats of finish (Group 3) high solids modified polyurethane gymnasium floor finish system, complying with the latest MFMA tested and certified products.
2. Finish shall have a minimum of 50% solids content. Use the Hilyard 450 finishing system. Sand and clean between each coat.
3. Install game lines after the second coat of sealer, sanded. Provide painted game lines per Parks Standard Details for layout and colors. Hillyard game line paint shall be used unless otherwise directed by the Engineer.
4. All sanding to be done per the MFMA and coatings manufacturer's requirements and recommendations. Pay careful attention to the heating and humidity requirements prior to, during, and after the delivery of wood flooring and during and after the install and finishing of the wood.

D. Vapor barrier (not retarder) system shall be sealed at all penetrations and laps.

E. Wall base – unpainted galvanized steel or clear anodized aluminum, shall be 3" x 4" x ¼" or 3" x 6" x 1/4" angle. Space angle 3/8" away from wall to allow for air circulation under the flooring. Shop form all outside corners. Inside corners shall be mitered. Wall base shall be easily removable for floor repair and refinishing using metal wall inserts and counter sunk flat head fasteners at up to our feet maximum spacing. Use metal washers as spacers for the 3/8" space.

PART 3 - EXECUTION (*Not Used)*

END OF SECTION