SECTION 09 64 66 - WOOD ATHLETIC FLOORING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes:

1. Wood athletic flooring.

1.2 COORDINATION

A. Coordinate layout and installation of flooring with existing doors and ramps at each threshold.

B. Coordinate layout and installation of flooring with floor inserts for gymnasium equipment.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for wood athletic flooring.

B. Shop Drawings: For each type of floor assembly, include the following:

1. Plans, sections, and attachment details.
2. Details of flooring transitions.
3. Expansion provisions and trim details.
4. Layout, colors, widths, and dimensions of game lines and markers.
5. Layout of Frontier branding at center court and sidelines.
6. Locations of floor inserts for athletic equipment installed through flooring assembly.

C. Samples: For each exposed product and for each color and texture specified, approximately 12 inches (300 mm) long in size.

1. Include Sample sets showing the full range of normal color and texture variations expected in wood flooring.
2. Include Sample sets showing finishes and game-line and marker paints applied to wood flooring.

1.4 INFORMATIONAL SUBMITTALS

A. Product Test Reports: For each wood athletic flooring system, for tests performed by a qualified testing agency.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For wood athletic flooring and finish systems to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Wood Flooring: Equal to 1 percent of amount installed for each type of wood flooring indicated.
2. Base and Underlayment: Equal to 2 percent of amount installed for base and underlayment.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: A firm or individual that has been approved by MFMA as an accredited Installer according to the MFMA Accreditation Program.

1. Installer responsibilities include installation and field finishing of wood athletic flooring components and accessories, and application of game lines and markers.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver floor assembly materials in unopened cartons or bundles.

B. Protect wood from exposure to moisture.

C. Store wood components in a dry, warm, well-ventilated, weathertight location and in a horizontal position.

1.9 FIELD CONDITIONS

A. Conditioning period begins not less than seven days before wood athletic flooring installation, is continuous through installation, and continues not less than seven days after installation.

1. Environmental Conditioning: Maintain ambient temperature between 65 and 75 deg F (18 and 24 deg C) and relative humidity planned for building occupants, but not less than 30 percent or more than 50 percent, in spaces to receive wood athletic flooring during the conditioning period.
2. Wood Conditioning: Deliver wood components into spaces where they will be installed, no later than beginning of the conditioning period.
   a. Do not install wood athletic flooring until wood components adjust to relative humidity of, and are at same temperature as, spaces where they are to be installed.
   b. Open sealed packages to allow wood components to acclimatize immediately on moving wood components into spaces in which they will be installed.

B. After conditioning period, maintain relative humidity and ambient temperature planned for building occupants.

1.10 WARRANTY

A. Warranty: Gymnasium flooring fully (non-prorated) guaranteed for **5** 2? years from date of Final Acceptance by Frontier Schools against defects in materials and installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Treatment: Stamp Each bundle indicating fire treatment by treatment plant.

2.2 MANUFACTURERS

A. Basis-of-Design Product: Subject to compliance with requirements, provide Connor Sports, Rezilibase RP-11 or comparable product by one of the following:

1. Action Floor Systems, Action Anchortech
2. Robbins, Inc., BioChannel SB
3. TARKETT, Clutch Court Performance

2.3 SYSTEM DESCRIPTION

A. System Type: Anchored resilient.

B. Overall System Height: As indicated on Drawings.

C. Certification: DIN approved.

2.4 FLOORING MATERIALS

A. Random-Length Strip Flooring: Northern hard maple (Acer saccharum), kiln dried, random length, tongue and groove, end and matched.

1. Grade: MFMA-RL Second and Better.
2. Cut: Plain.
3. Thickness: 25/32 inch (20 mm).
4. Face Width: 2-1/2 inches (57 mm) .

2.5 SUBFLOOR MATERIALS

A. Plywood Underlayment: Exposure 1, APA Rated Sheathing , 3/4 inch (12 mm) thick or approved pre-manufactured subfloor panels factory prepared to accept anchor channel, anchor pockets, pad slots or attached pads per manufacturer's requirements

B. Resilient Underlayment: multicellular, closed-cell, flexible polyethylene plastic foam thickness per manufacturer's requirements for the approved system.

C. Resilient Pads: 8/16" X 1" X 48" resilient pads or as required by manufacturer's requirements for approved system. With air voids for resiliency and installed at manufacturer's standard spacing for product designation indicated above.

2.6 FINISHES

A. Gymnasium Floor-Finish System: System of compatible components recommended in writing by flooring manufacturer, and MFMA approved.

1. Sealer and Finish-Coat Formulation: Water based 2 coat primer and 2 coat finish formulated for gloss finish indicated and multicoat application.
2. Game-Line and Marker Paint: Industrial enamel compatible with finish coats and recommended in writing by manufacturers of finish coats, and paint for this use.

2.7 ACCESSORIES

A. Vapor Retarder: ASTM D4397, polyethylene sheet not less than 6 mils (0.15 mm) thick.

B. Resilient Wall Base (Gymnasium): Molded, vented, rubber cove base; 4 by 3 by 48 inches (100 by 75 by 1200 mm); with premolded outside corners. Wall base height to be trimmed to fit below existing wall pads which will remain in place.

1. Color: Black.

C. Thresholds: As shown on drawings

D. Fasteners: Type and size recommended by manufacturer, but not less than those recommended by MFMA for application indicated.

E. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by wood athletic flooring manufacturer.

F. Adhesives: Manufacturer's standard for application indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, installation tolerances, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. Concrete Slabs: Verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to manufacturer's written instructions.

1. Moisture Testing: Perform tests so that each test area does not exceed 200 sq. ft. (18.6 sq. m), and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
   a. Relative Humidity Test: Using in situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 85 percent relative humidity level measurement
   b. Perform additional moisture tests recommended by manufacturer. Proceed with installation only after substrates pass testing.

3.2 PREPARATION

A. Concrete Slabs:

1. Grind high spots and fill low spots on concrete substrates to produce a maximum 1/8-inch (3-mm) deviation in any direction when checked with a 10-foot (3-m) straight edge, 1/4-inch maximum overall variation within room area.

2. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.

B. Broom and vacuum clean substrates to be covered immediately before product installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

A. Comply with wood athletic flooring manufacturer's written instructions, but not less than written recommendations of MFMA applicable to flooring type indicated.

B. Pattern: Lay flooring parallel with long dimension of space to be floored unless otherwise indicated.

C. Expansion Spaces: Provide as indicated, but not less than that required by manufacturer's written instructions and MFMA's written recommendations at walls and other obstructions, and at interruptions and terminations of flooring.

1. Cover expansion spaces with base molding, trim, and saddles, as indicated on Drawings.

D. Vapor Retarder: Cover entire slab area beneath wood flooring. Install with joints lapped a minimum of 6 inches (150 mm) and sealed.

E. Subfloor (Gymnasium)

1. Install resilient pads per manufacturer's recommendations.
2. Install subfloor panels perpendicular to the intended finish flooring direction. All joints shall be staggered 4' and spaced ¼" (6mm) apart.
3. Install solid blocking at doorways, and below portable goals.
4. Install the upper subfloor diagonal to the lower subfloor panels staggering joints 4' and spacing .25" apart. Secure these panels using adhesive and 1" staples placed 6" on center at panel perimeter and 12" on center throughout interior.

F. Maple Flooring

1. Machine nail maple finish flooring 10" to 12" on center. with end joints properly driven up and proper spacing provided for humidity conditions in specific regions. Consult your local Robbins "Certified" contractor. Provide 2" (50mm) expansion voids at the perimeter and at all vertical obstructions. Expansion rows will be evenly distributed with each row of flooring, with each space not exceeding 16M" (0.4mm).

G. Installation Tolerances: 1/8 inch in 10 feet (3 mm in 3 m) of variance from level.

3.4 SANDING AND FINISHING

A. Allow installed flooring to acclimate to ambient conditions before sanding.

B. Follow applicable recommendations in MFMA's "Industry Recommendations for Sanding, Sealing, Court Lining, Finishing, and Resurfacing of Maple Gym Floors."

C. Machine sand with coarse, medium, and fine grades of sandpaper to achieve a level, smooth, uniform surface without gouges, undulations, ridges or cups. Remove sanding dust by tack or vacuum.

D. Inspect entire area of floor to insure the floor presents a smooth surface without drum stop marks, gouges, streaks or shiners.

E. Vacuum and/or tack floor before first coat of seal.

F. Floor should be clean and completely free of dirt and sanding dust.

G. Finish: Apply seal and finish coats of finish system according to finish manufacturer's written instructions. Provide no fewer than three coats total and no fewer than two finish coats.

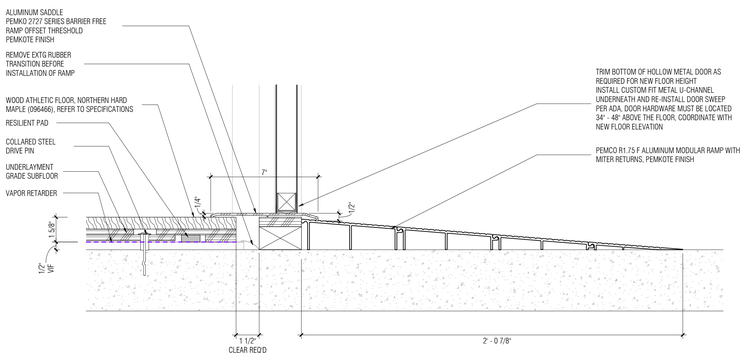
1. Buff and vacuum and/or tack between each coat after it dries.
2. Game-Line and Marker Paint: Apply game lines accurately after the buffing and vacuuming the coated surfaces. Layout in accordance with drawings. For game lines, use current rules of association having jurisdiction. Lines shall be straight with sharp edges in colors selected by architect.
   a. Where game lines cross, break minor game line at intersection; do not overlap lines.

3.5 PROTECTION

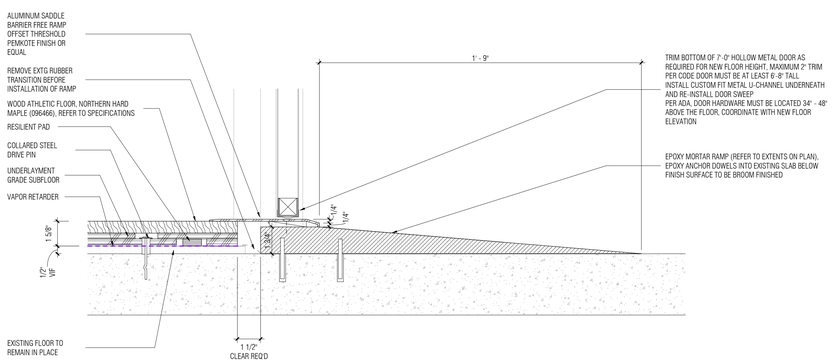
A. Protect wood athletic flooring during remainder of construction period to allow finish to cure and to ensure that flooring and finish are without damage or deterioration at time of Substantial Completion.

1. Do not cover flooring after finishing until finish reaches full cure and not before seven days after applying last finish coat.
2. Do not move heavy and sharp objects directly over flooring. Protect fully cured floor finishes and surfaces with plywood or hardboard panels to prevent damage from storing or moving objects over flooring.

END OF SECTION 09 64 66



K1 SECTION DETAIL - DOOR THRESHOLD, TYP - OPTION 2
3" = 1'-0" RE: /



A1 SECTION DETAIL - DOOR THRESHOLD, TYP - OPTION 1
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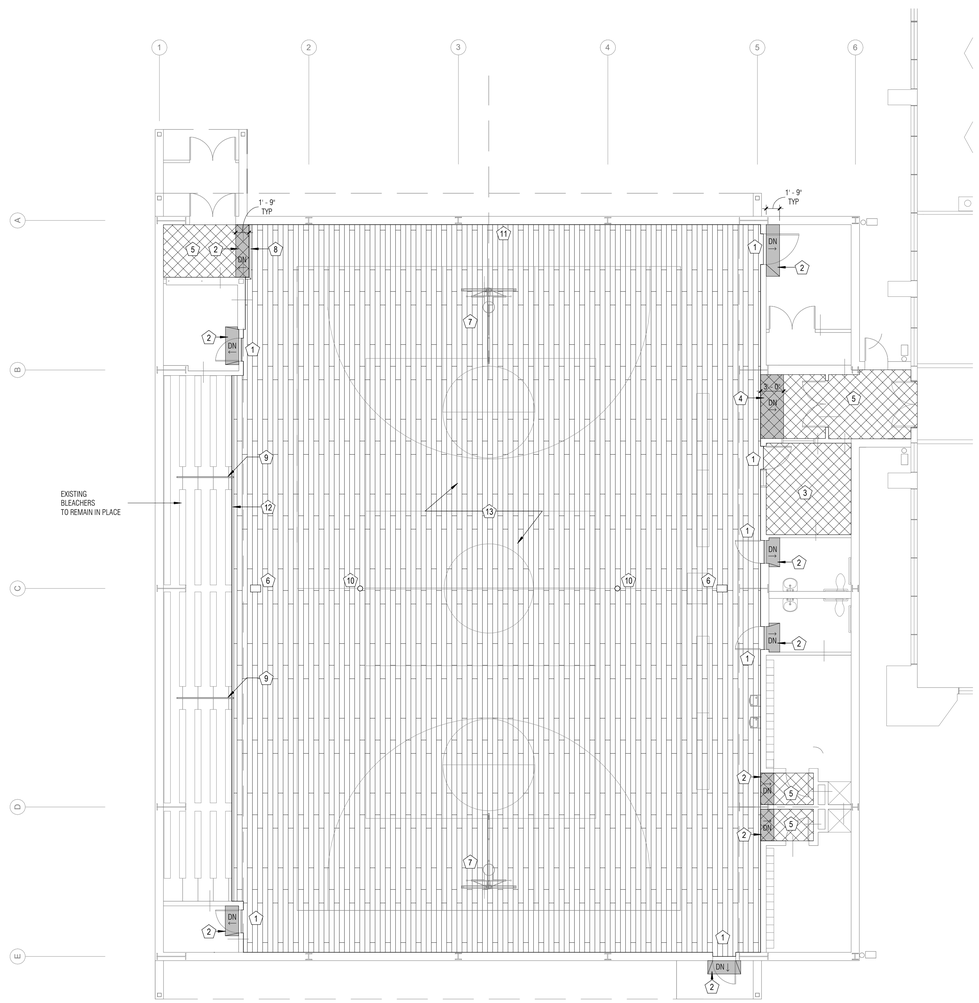

A16 GYM FLOOR PLAN
1/8" = 1'-0" RE: /

SHEET NOTES

NOTE #	COMMENT
1	HOLLOW METAL DOOR TO BE CUT DOWN AT THE BOTTOM AS REQ'D TO COORDINATE WITH NEW FLOOR THICKNESS. REMOVE DOOR SWEEP AND RE-INSTALL AFTER TRIMMING. TOUCH UP DOOR PAINT AND FRAME AS REQ'D. REFER TO DETAIL FOR ADDITIONAL INFORMATION
2	RAMP THRESHOLD, 1:12 MAX SLOPE, REFER TO DETAIL
3	1 1/2" GYPCRETE TOPPING WITH EPOXY FLOOR COATING SYSTEM. BASIS OF DESIGN IS DANCER, TREADWELL COLOR+, WHICH IS A WATER-BASED SOLID COLOR, 3-LAYER SYSTEM WITH A URETHAN TOPCOAT DESIGNED FOR FOOT TRAFFIC. COLOR TO BE SELECTED FROM MANUFACUTER'S FULL RANGE. REMOVE AND REINSTALL EXISTING WALL BASE
4	EPOXY MORTAR SLOPED WALKWAY TRANSITION FROM WOOD ATHLETIC FLOOR TO EXISTING CONCRETE
5	EPOXY FLOOR COATING SYSTEM. BASIS OF DESIGN IS DANCER, TREADWELL COLOR+, WHICH IS A WATER-BASED SOLID COLOR, 3-LAYER SYSTEM WITH A URETHAN TOPCOAT DESIGNED FOR FOOT TRAFFIC. COLOR TO BE SELECTED FROM MANUFACUTER'S FULL RANGE. REMOVE AND REINSTALL EXISTING WALL BASE
6	FLOOR BOX TO BE MODIFIED TO COMPLY WITH NEW FLOOR ELEVATION
7	BASKETBALL NET TO BE RAISED TO COMPLY WITH NEW FLOOR ELEVATION
8	ALUMINUM THRESHOLD TO COVER EXPANSION SPACE OF WOOD ATHLETIC FLOORING, MITER CORNER
9	REMOUNT HANDRAIL AS REQ'D TO COMPLY WITH ADA. HANDRAIL MUST BE PLACE BETWEEN 34-38" ABOVE THE SURFACE
10	EXISTING EQUIPMENT SLEEVE TO BE MODIFIED FOR NEW FLOOR ELEVATION. RE-INSTALL FLOOR PLATE TO BE FLUSH WITH WOOD FLOOR
11	ENTIRE PERIMETER OF NEW WALL BASE AT WOOD ATHLETIC FLOOR TO BE TRIMMED TO FIT BELOW EXISTING WALL PADS, TYPICAL
12	INSTALL ALUMINUM THRESHOLD FLUSH TO ENTIRE LENGTH OF BLEACHERS TO COVER EXPANSION SPACE OF WOOD ATHLETIC FLOORING
13	WOOD ATHLETIC FLOORING - REFER TO SHEET SPECIFICATIONS

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Frontier STEM High School Gym Flooring Renovation Project

6455 East Commerce Ave.
Kansas City, MO 64120 Project No: 14018.21

RFP

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FLOOR PLAN

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