

PROJECT ANNOUNCEMENT

Post Date: 09.08.2020

Submittal Deadline: 09.22.2020

Project Title: TSD Akin Gym Floor and HVAC Repairs

Facility Name: Tennessee School for the Deaf

City: Knoxville

County: Knox

SBC Project No.:

Agency: DEPARTMENT OF EDUCATION

Maximum Allowable Construction Cost (MACC): \$1,179,750.00

Development Manager: Freeman, Doug

Agency Representative: McKeever, Kristen

Project Description:

Replacement of flooring, upgrades to the mechanical system, and all required related work.

Additional information about the project can be found in the project's program document included as a part of this announcement.

Special Design or Submission Requirements:

N/A

Note: All information previously made available to consultants, by the State, and all information supplied by consultants to the State, relating to the subject project, will be made available to any potential respondents. Potential respondents desiring to review these documents can submit a request to STREAMDesigner.Interest@TN.gov.

Anticipated SBC Approval Date: 10.08.2020

Anticipated ESC Designer Selection Date: 10.19.2020

Anticipated Designer NTP Date: 01.25.2021

Anticipated Project Bid Date: 10.27.2021

Programming for

TSD Akin Building Playing Surface & HVAC
Tennessee School for the Deaf

SBC No. 529/000-08-2012

Knoxville, Tennessee

August 22, 2018

General Project Scope

The project scope includes replacement of the HVAC system and gym flooring. This section specifically addresses the replacement of the playing surface in the gymnasium.

Existing Conditions

The gymnasium at the Akin building is approximately 8,600 square feet on the main level and includes retractable bleacher seating, 4 basketball goals (1 full-court and 2 half-court), a climbing wall, and in-floor sleeves for volleyball stanchions. The existing playing surface is a resilient sheet flooring with striping for basketball and volleyball. The gym has five egress doors, two stairways to a mezzanine with one including a wall-mounted stair lift, and access to one athletic storage room.

Project Scope

The gym floor replacement shall consist of new hardwood flooring system in the gym. The new system shall be installed on top of the existing resilient flooring. This will require a transition around the court to account for the two inch thickness of the flooring system.

The transition around the court will be made with a rubber reducer ramp to allow most doors and both stairs to remain as they are. The door to the exterior will be replaced and a new concrete pad will be needed at the outside of the building.

Several other miscellaneous items will need to be included in the scope.

- Bleachers will be removed, temporarily stored, and replaced
- Sleeves for volleyball stanchions will need to be raised
- Basketball goals will need to be raised

The new hardwood floor shall be striped for full-court basketball and volleyball. Striping for the half-court goals at the side can be added at the owner's direction.

Project Recommendations

The recommended product for the gym floor is the Mastercourt System which consists of a 6 mil polyethylene moisture barrier, 1/4" closed cell foam cushioning, two layers of 7/16" OSB sub floor, and a 3/4" x 2 1/4"

maple hardwood flooring - see attached specification. The wall base shall be 3" x 4" vent cove baseboard.

The rubber reducer ramp shall be CourtEdge Reducer by SafePath Products or equal. The ramp shall have a slope no greater than 1" of vertical rise for every 12" of ramp.

A new door and frame shall be installed at the north side of the gym to account for the 2" change in finish floor elevation. A new concrete pad will be added at the exterior and a sidewalk to the nearest hardscape can be added at the Owner's direction. The door shall be supplied with new panic hardware and keyed to match the Owner's existing keying system.

Schedule

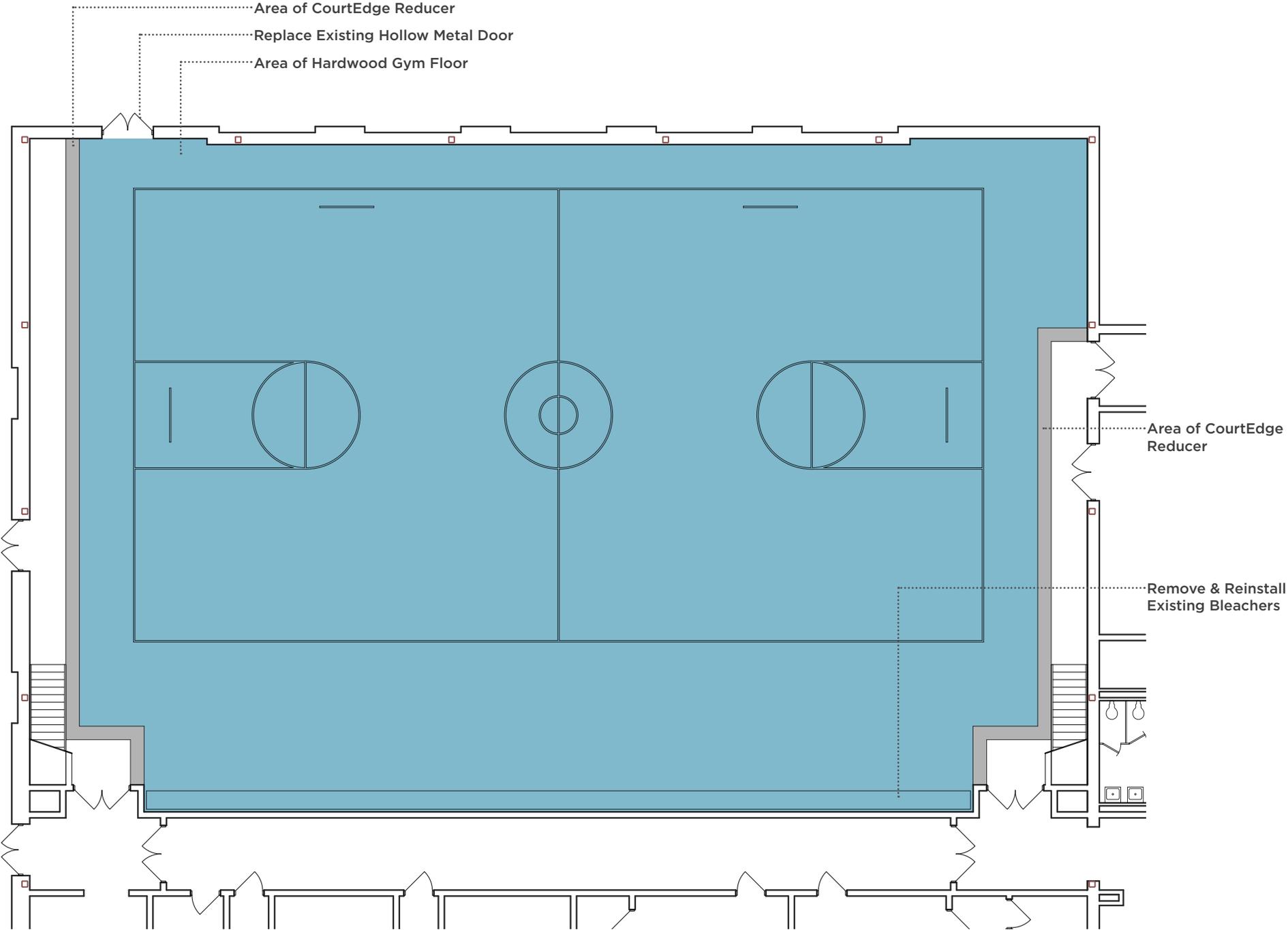
The construction schedule for the installation of the gym floor shall be approximately 8-10 weeks for the miscellaneous demolition/removal of existing items, acclimation of the new wood flooring material, installation of the new flooring system, complete finishing of the flooring system, and final cleaning.

All construction work should be coordinated with HVAC equipment installation to ensure that gym flooring is not impacted by HVAC system replacement/installation.

Cost

Gym Floor	7,850 sf	\$16/sf	\$135,000
Hollow Metal Door	1 ea	\$2,000	\$2,000
Other Misc. Work	1 ls	\$5,000	\$5,000
Subtotal			\$142,000
General Conditions, Overhead and Profit	20%		\$28,400
Subtotal			\$170,400
Contingency	10%		\$17,040
Subtotal			\$187,080
Escalation to 2020	3%/year		\$11,400
Total			\$198,680

TSD AKIN GYM PLAYING SURFACE & HVAC





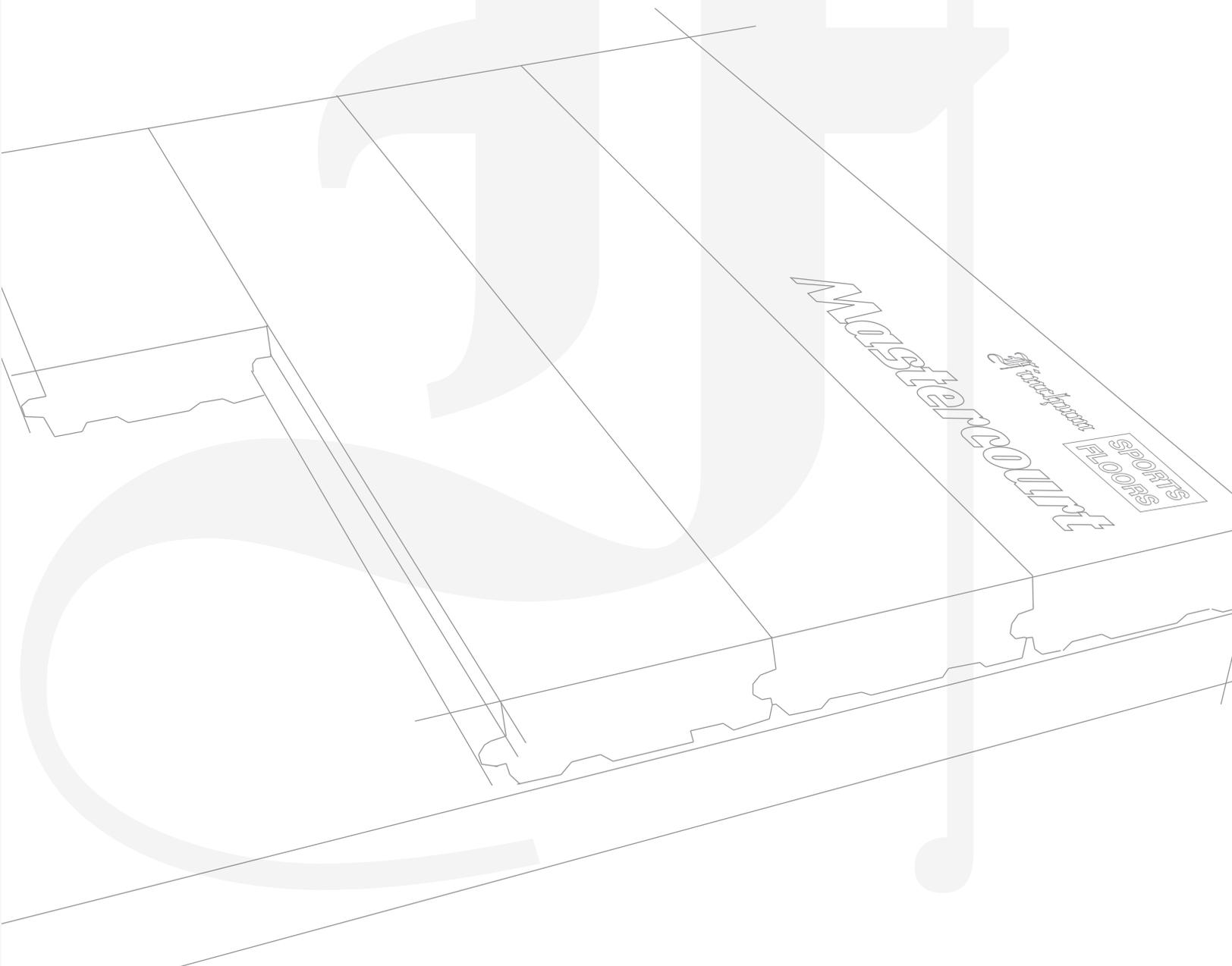
LEWIS GROUP
ARCHITECTS

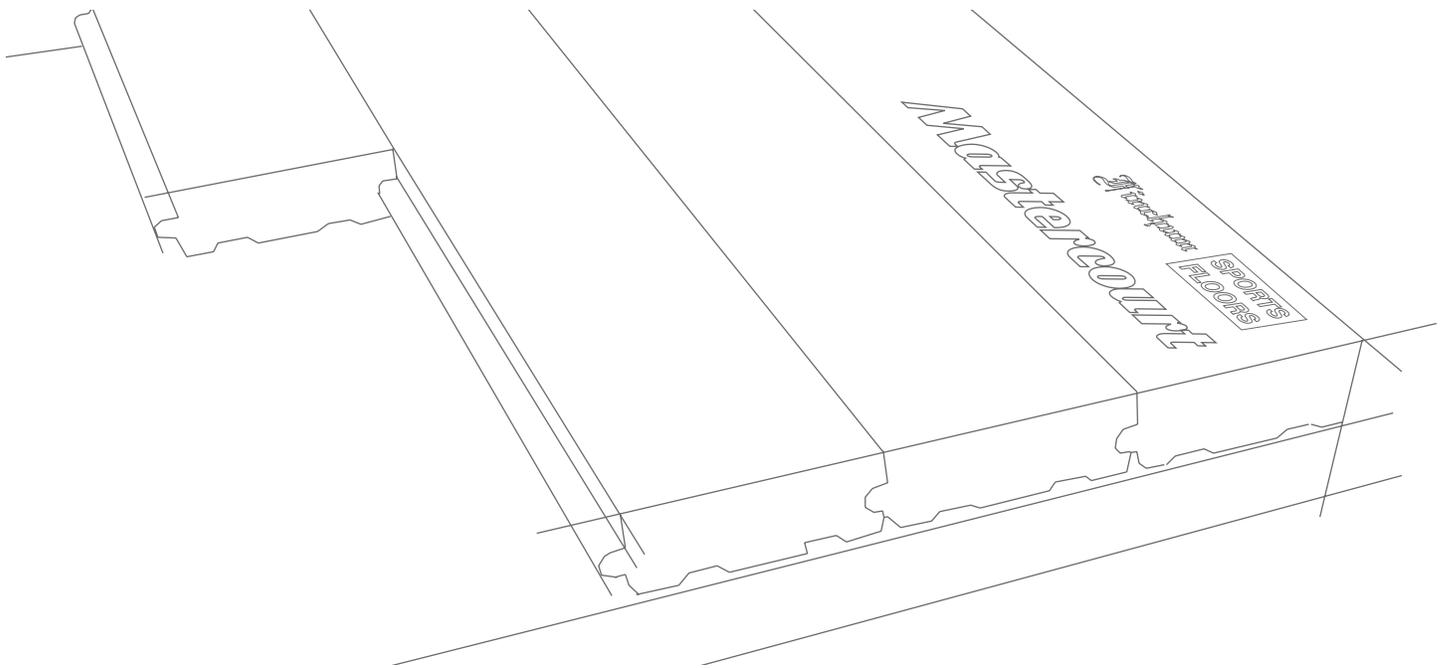
Finchum

**SPORTS
FLOORS**

Mastercourt System

Sports Floor Specifications





SECTION 09560 WOOD FLOORING

Part I - GENERAL

1.1 DESCRIPTION

- A. Applicable provisions of "General and Special Conditions" shall govern work under this section.
- B. This contractor shall provide all labor, materials, tools, and services to furnish, deliver, and install a complete wood floor system from the surface vaporproofing of the slab, when required, through the sanding and finishing, plus the installation of perimeter base moldings, thresholds and stripe painting.

1.2 QUALITY ASSURANCE

- A. Supplier Qualifications
 - 1. Supplier shall be Somereset Wood Products, Inc., or approved equal.
- B. Installer Qualifications
 - 1. Flooring Contractor shall be Finchum Sports Floors, 2816 Boyd's Creek Highway, Sevierville TN. 37876
 - 2. Flooring contractor shall have attended and received a passing grade from the National Wood Flooring Association Installation School or a certified member of a manufacturer's installation school.
 - 3. Flooring Contractor shall have a minimum of 15 years of experience in the sports floor construction.

1.3 SUBMITTALS

- A. Manufacturers product data.
 - 1. Submit five product specifications.
- B. Samples
 - 1. Submit one sample of floor system
- C. Maintenance literature
 - 1. Submit three copies of maintenance requirements.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery of materials
 - 1. Materials shall not be delivered or installed until all masonry, painting, plastering, and tile work are completed. All overhead work which includes installation of mechanical work lighting, backstops, score boards, etc. must be installed prior to flooring installation. Building shall be enclosed and weathertight. Permanent heat shall be installed and operating during and after installation, maintaining a temperature range of 55 to 78 degrees and a relative humidity of between 35 to 50%.

1.5 GUARANTEE

- A. The suppliers guarantee shall not cover damage caused in whole or in part by casualty, ordinary wear and tear, abuse, use for which material is not designed, faulty construction of the building, settlement of the building walls, failure of the other contractors to adhere to specifications, separation of the concrete slab and excessive moisture from humidity, spillage, migration through the slab or wall, or any other source.
- B. Manufacturer shall warrant the flooring materials to be free from the manufacturing defects for a period of one year from the date of substantial completion. The Flooring Contractor shall warrant the installation to be free from defects for the same period.

PART 2 PRODUCTS & EXECUTION

2.1 MATERIALS AND INSTALLATION

- A. Moisture Protection
 - 1. One layer of six mil polyethylene as a moisture proofing.
 - 2. One layer of 1/4" closed cell foam cushioning
- B. Sub floor
 - 1. Sub floor shall be two layers of 7/16" X 4' X 8' OSB.
- C. FLOORING
 - 1. Finished flooring shall be 3/4" X 2-1/4" X various lengths second and better, or number one common maple hardwood flooring.
- D. Baseboard
 - 1. Baseboard shall be 3" X 4" black vent cove baseboard attached at perimeter walls.

Part 3- EXECUTION

3.1 INSPECTION

- A. Inspect concrete sub floors for proper tolerance and dryness, and report any discrepancies to the construction manager in writing.
- B. Sub floor shall be broom cleaned by general contractor.

3.2 INSTALLATION

- 1. Cover concrete slab with one layer of six mil polyethylene as a moisture proofing.
- 2. Cover concrete slab with one layer of 1/4" closed cell foam.
- 3. Sub floor sheathing shall be stapled top layer to bottom layer to bottom 12" O.C. with 1/2" spacing between each layer and 2" at perimeter walls.
- 4. Cover subfloor sheathing with one layer of #15 roofing felt.
- 5. Machine nail hardwood flooring to subfloor sheathing in accordance with NWFA standards.

3.3 FLOOR SANDING

- A. Machine sand with coarse, medium and fine paper to a smooth, even, uniform surface.
- B. Remove all sanding dust from entire surface by tack or vacuum.

4. FINISHING

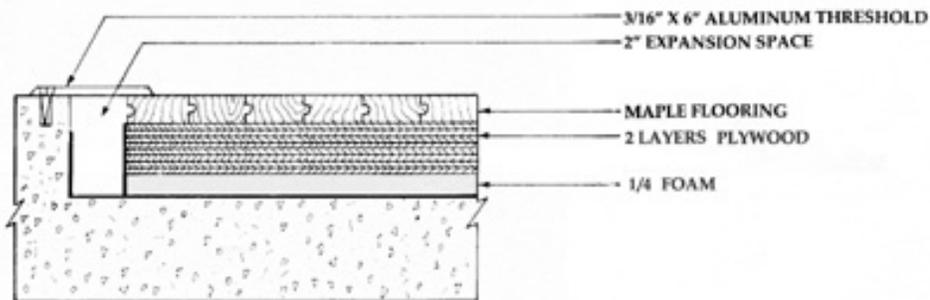
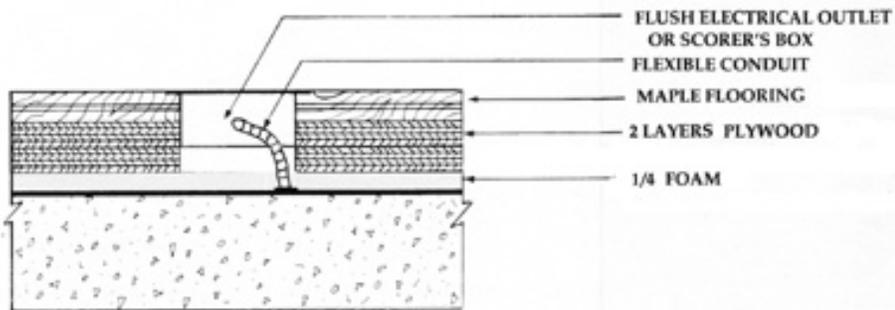
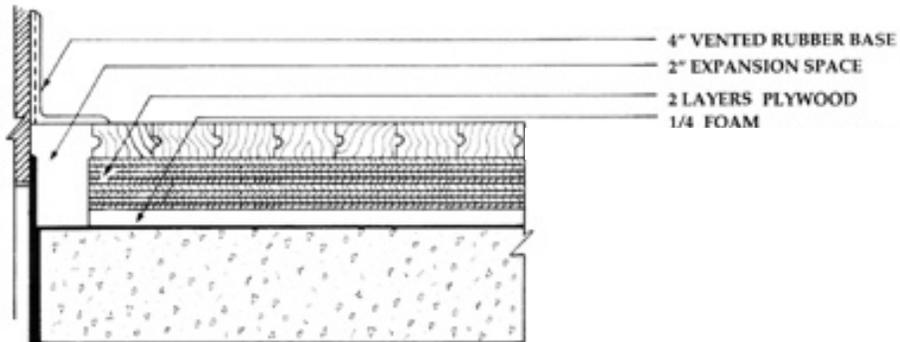
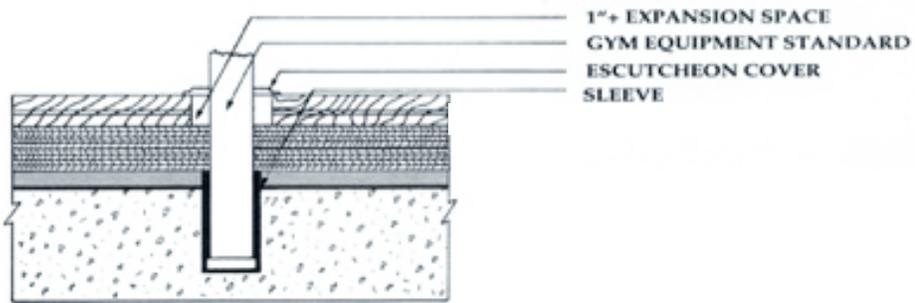
- A. After removing all sanding dust from surface and cracks of floor, Inspect entire area of the floor to insure that surface is acceptable for finishing and completely free from sanding dust and free of drum stop marks, gouges, streaks, and shiners.
- B. Apply two coats of Gym Seal and two coats of Gym Finish, Buff and clean floor between each coat. Paint game lines between seal and first coat of finish. Game line paint shall be compatible with finish.

5. BASE INSTALLATION

- A. Affix base to wall with recommended fastening method. Miter all inside and outside corners carefully. Install aluminum thresholds as required, anchoring firmly in concrete floor beyond limits of wood flooring.

6. MAINTENANCE

- A. Upon completion of floor installation, the owner, attendants, or individuals in charge and responsible for the upkeep of the building and are to see that the areas in which the wood floors are installed are adequately ventilated with natural or mechanical air circulation at all times (heat, if necessary, during high humidity periods.) Mechanical equipment shall maintain temperature and humidity ranges spelled out in working conditions.



USE OF A POWER SCRUBBER ON A MAPLE FLOOR

The Maple Flooring Manufacturers Association, as well as Finchum Sports Floors, does not recommend the use of automated power scrubbing equipment for general, daily, or weekly maintenance procedures for your maple floor. The use of power scrubbing equipment may void warranties administered by Finchum Sports Floors. Before incorporating general maintenance procedures for your gym floor, we ask that you contact us for information regarding the subject.

The use of automated power scrubbing equipment for general, daily, or weekly maintenance procedures may lead to specific side effects listed below.

Possible effects to maple floor boards:

- Shaling
- Splintering
- Excessive shrinkage and expansion
- Splitting of individual pieces of wood
- Raised or Uneven sides
- Cupping

Possible effects to the floor finish and paint:

- Premature/excessive finish wear
- chipping and peeling of paint and finish
- Swirl marks in the finish
- Dull finish appearance

For More Information on how to upkeep your gym floor please call our office and someone will assist you in an effective way to clean and maintain your gym floor.

TAPE ON A MAPLE FLOOR

MFMA and Finchum Sports Floors does not recommend the use of masking, theatrical, construction, electrical, duct, adhesive or any other kind of tape to mark temporary court boundaries on the surface of a finished maple floor. It is likely that the tape, when removed, will peel away layers of the floor's surface finish. Most tapes promoted for temporary markings have a different coefficient of friction than finishes applied to the maple playing surface, and can impact a person's ability to start, stop and pivot. Removing the surface paint/finish and exposing the maple can result in additional chipping and peeling of the remaining paint/finish in adjacent areas.

SOLID PAINTED AREAS ON MAPLE GYM FLOORS

Maple flooring is a hygroscopic material that expands and contracts due to the influences of moisture, temperature and humidity changes. The application of sealers, finishes and paints on the surface of an installed maple floor can only slow down the rate of vapor transfer between the maple flooring and its environment - such applications cannot stop the dimensional changes inherent in this natural product.

When maple flooring is installed, sanded, sealed, painted and finished during the summer months, the maple moisture content is usually at its highest annual level in most regions of the United States. With the onset of winter comes dryer air and lower ambient air temperatures. Such environmental changes typically cause individual flooring strips to contract. With such movement, flooring strips that are painted a solid color (basketball keys, sidelines, and logoed areas) tend to exhibit more noticeable shrinkage due to the visual contrast between the solid colors and the cracks that develop between individual flooring strips. In some cases, the surface finish has been known to peel at the edges of individual painted flooring strips if the amount of shrinkage exceeds the elasticity of the paint or the finish. This is a direct result of the wood adjusting to a new environmental set point.

FINISH PEEL/CHIPPING

Finish peeling and/or chipping, in a very moderate form, occasionally occurs in new maple installations that experience large swings in humidity levels. This condition most often develops over painted areas of the maple surface.

MFMA, or Finchum Sports Floors, has no written policy or specification regarding the appearance or frequency of finish peeling and/or chipping in MFMA flooring installations. Finish peeling and/or chipping can be a result of expansion/contraction of the flooring system due to seasonal moisture level changes, which causes fractures in the finish in painted areas as maple flooring adjusts to drier indoor conditions during the heating season.

The "elastic" properties of many surface finishes are commonly restricted by application over less "elastic" game line paints. During the first heating season, a new maple floor will typically contract more than in subsequent years under the same environmental conditions. USDA performance data confirms this physical characteristic with all hardwood species.

Assuming drier than average conditions exist in a facility during the first heating season, above-average shrinkage may result in some paint fracture over maple joints and subsequent peeling or chipping of surface finish in these areas, regardless of the application methods used with the floor sealer, game marking paint and finish. With the use of tape or decals, floor finish may experience similar conditions.

Maple flooring adjusts to its environment over its lifetime. Typically, the most expansion/contraction is experienced in the first 18-24 months of a floor life. The Maple Flooring Manufacturers, as does Finchum Sports Floors, recommends maintaining indoor relative humidities between 35 percent and 50 percent, and air temperatures between 55 degrees and 75 degrees year-round.

By limiting wide swings in atmospheric conditions inside the facility, flooring owners and facility managers can reduce the expansion and contraction of the flooring system. If flooring materials are properly acclimated, a 15 percent fluctuation in indoor relative humidity will not adversely affect the maple. Excessive and/or expansion may occur with indoor relative humidity variation in excess of 15 percent.

In buildings where air conditioning or humidification/dehumidification equipment is not available, many facility managers make use of circulation or venting fans. Other facilities have vent windows or corridor doors available to open as needed to improve air circulation.

Facilities without adequate HVAC equipment to regulate the indoor atmosphere, or those facilities that are "closed up" with no ventilation for long periods of time (summer breaks) are more likely to develop flooring problems directly related to environment. Floor finish peeling and/or chipping as a result of expansion/contraction cycles can be minimized by carefully monitoring and adjusting the indoor environment in the facility, particularly during the first year after installation.

For More Information on how to upkeep your gym floor please call our office and someone will assist you in an effective way to clean and maintain your gym floor.

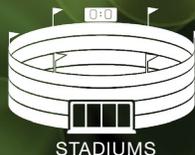


www.SafePathProducts.com | 1-800-497-2003
21 Valley Court, Chico CA, 95973

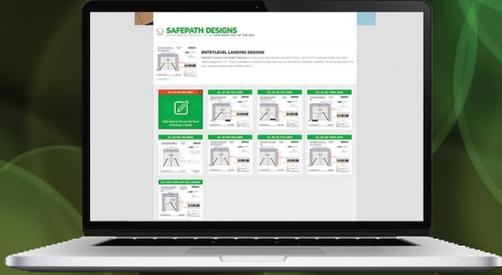


CourtEdge™ Reducers

CourtEdge™ Reducer Site Applications



REQUEST YOUR QUOTE ONLINE!
www.SafePathProducts.com/designs



-
- The background of the advertisement is a photograph of a large indoor sports facility, likely a gymnasium. The floor is highly reflective, showing the ceiling lights and the basketball hoop. A row of black folding chairs is lined up against the wall in the distance. A thick green diagonal line runs across the image from the top left towards the bottom right. In the bottom left corner, there is a dark, textured mat that appears to be the product being advertised.
- ▲ Slip resistant, durable & safe
 - ▲ Pre-assembled & dry-fitted prior to shipping
 - ▲ Easily & quickly installed
 - ▲ No load weight limitations
 - ▲ Available in six colors with our exclusive StoneCap™ coating
 - ▲ 100% recycled rubber, made in the USA
 - ▲ Assures access code compliance
 - ▲ Interior & exterior applications

CourtEdge™

REDUCERS

PROBLEM:

New sport floors are often placed on top of existing floors, or a more robust floor is installed, creating vertical barriers. This gymnasium had a new basketball court installed which created a 2-1/2" rise around the whole court, which made it non-compliant, not to mention dangerous.

SOLUTION:

SafePath's Reducer 1200's (2-1/2" high) were wrapped around the court, eliminating the barrier, creating a gradual rise and making it ADA compliant and ready to use!

"The world's largest selection of recycled rubber transitions; each project is hand crafted and custom cut to fit."

CourtEdge™ Reducer Applications



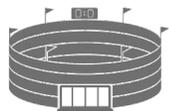
SCHOOLS & PARKS

Reducers surround a synthetic turf installed on top of an asphalt playground to create a football field.



GYMNASIUMS

Reducers are used in doorways and to surround new and old flooring for compliance and accessibility.



STADIUMS

Reducers are used to surround the fields, at doorways and other areas removing vertical barriers.

CourtEdge™ REDUCERS

REDUCER 200

$1/2" \times 3 1/4" \times 32"$
No Pattern



REDUCER 300

$3/4" \times 6 1/2" \times 32"$
No Pattern



REDUCER 400

$7/8" \times 8" \times 32"$
No Pattern



REDUCER 500

$1" \times 9 3/4" \times 36"$
Brick Pattern



REDUCER 600

$1 1/4" \times 14" \times 36"$
Brick Pattern



REDUCER 700

$1 1/2" \times 17 3/4" \times 36"$
Brick Pattern



REDUCER 800

$1 3/4" \times 22" \times 36"$
Brick Pattern



REDUCER 850

$2" \times 23" \times 46 3/4"$
Brick Pattern



REDUCER 900

$2" \times 23 1/4" \times 29 1/2"$
Diamond Pattern



REDUCER 1000

$2 1/4" \times 26 1/4" \times 29 1/2"$
Diamond Pattern



REDUCER 1200

$2 1/2" \times 29 3/4" \times 29 1/2"$
Diamond Pattern



REDUCER 1300

$1 1/2" \times 29 1/2" \times 29"$
No Pattern



GRIP PATTERNS VARY BY SIZE

No Pattern

Brick Pattern

Diamond Pattern



www.SafePathProducts.com
1-800-497-2003