

PART 1 – GENERAL**1.1 SCOPE**

- A. The furnishing of a completely integrated modular sports floor system, including all locking components, softwood sleepers, subfloor sheeting, tongue and groove connectors, hard maple flooring, sanding, finishes, game lines and wall base. Delivered floor system will have all flooring attached and surface sanded, finished with game lines and graphics completed.

1.2 DESCRIPTION

- A. Related work specified under other sections.
1. CONCRETE SUBFLOORS - SECTION 03_ _ _
 - a. Slab depression: 3 1/4" for 25/32" flooring and 7/16" Rezill pads
 - b. The general contractor shall furnish and install the concrete subfloors 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).
 - c. *Anchoring (**specify or delete**): For QuickLock RF with optional sleeper anchors, the concrete slab aggregate shall be 3/4 "screen crushed limestone or similar type material (no river gravel or pea gravel), free of curing agents. Concrete shall develop an average of 3,500 PSI compression after 28 days.*
 2. MEMBRANE WATERPROOFING - SECTION 07_ _ _
 - a. Concrete subfloors on or below grade shall be adequately waterproofed beneath the slab and at the perimeter walls and on earth side of below grade walls by general contractor using suitable type membrane.
 3. THRESHOLDS - SECTION 08_ _ _
 4. GAME STANDARD INSERTS - SECTION 11_ _ _

1.3 REFERENCES

- A. MFMA - Maple Flooring Manufacturers Association
B. APA – American Plywood Association

1.4 QUALITY ASSURANCE

- A. MANUFACTURER
1. Complete and full construction of the portable sports floor system including attachment of fasteners, subfloor components, flooring, sanding, sealing, game lines and finish shall be completed by Connor Sports Flooring.
 2. Manufacturer of flooring and subfloor components must be ISO 9001:2008 Certified to assure quality control of materials provided.
 3. Manufacturer of gymnasium floor system and hardwood flooring surface shall be verified as a "Zero Waste" company confirmed through SWCA third-party auditing.
 4. Basis of design shall be "QuickLock RF" sports floor system as provided by **Connor Sports Flooring, www.connorfloor.com, (800-833-7144)**.
 5. Materials other than those listed must be approved 10 days prior by written addendum. Materials from non-approved manufacturers will not be accepted.
- B. INSTALLATION: Manufacturer shall provide a factory representative for entire floor installation to instruct/supervise installation crew on proper assembly of floor.

1.5 SUBMITTALS

- A. Submit Connor QuickLock RF specification sheets as required.
B. Submit one sample of floor system, if required.
C. Submit complete shop drawings detailing floor size, panel layout, basketball backstop locations and all game lines and graphics. Game line and graphic colors shall be specified by PMS number.
D. Submit Maintenance Literature - Upon completion of floor installation, send to owner or individuals in charge and responsible for upkeep of flooring complete care and maintenance instructions.

1.6 SITE, DELIVERY AND STORAGE CONDITIONS

- A. Care shall be taken by general contractor upon delivery of floor system to prevent any possible contact with moisture.
- B. System shall be stored indoors upon delivery in a dry, protected area with environmental conditions (temperature and humidity) compatible to conditions in assembly area.
- C. Floor system shall not be assembled while subjected to surrounding conditions including masonry, plaster, tile, marble and terrazzo or any overhead trades, including mechanical, athletic equipment, lighting or sound.
- D. Permanent heat, light and ventilation shall be completely installed and operating at least two weeks prior, during and continuously after delivery and/or installation. Acceptable temperature range of 60 degrees to 80 degrees shall be provided. .

1.7 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.

1.8 WARRANTY

- A. Connor Sports Flooring Representation and Warranty - Connor warrants that the floor system supplied will be free from manufacturing defects for a period of one year. 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 floor system supplied by Connor.
- B. 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 or site preparation, settlement of the building walls or faulty or unprofessional assembly disassembly storage and care of the floor system. Connor shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling or use of the floor system 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 election, to the repayment of, or crediting buyers 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 Connor in writing within 30 days from the date buyer discoverer, or should have discovered, any claimed breach.

PART 2 - PRODUCTS**2.1 MATERIALS**

- A. Vapor Barrier - 6-mil polyethylene.
- B. Flooring - 25/32" X 2-1/4", Second & Better Grade, Northern Hard Maple Flooring, TGEM, MFMA Grade marked and stamped as manufactured by Connor Sports Flooring, Amasa, MI. Flooring shall be laid in a straight parallel pattern.
 - 1. *Optional grade (specify or delete) First Grade*
- C. Floor system size - Floor size shall be as specified in bidding documents and consist of 4' X 7' standard panels and custom fabricated end and side panels to create the required size.
- D. Subfloor - 7/32" 3-ply APA rated plywood sheeting.
- E. Sleepers – 1 1/2" X 3 1/2" Fir, Pine or Spruce softwood sleeper. Sleepers shall be at 10 1/2" on center and drilled for optional anchoring system.
 - 1. *Optional sleeper anchor pin – (specify or delete) 2-1/2", collared, steel drive pins.*

- F. Resilient Pads - Connor 1-3/4" X 1-3/4" X 7/16" Rezill R4 SmartPad.
- G. Panel Hardware and Connectors
 - 1. Panels shall have continuous 1/4" X 3/4" hardwood tongues on 4 sides for alignment.
 - 2. Anchoring plates - 1/8" X 1 1/4" X 5" fabricated steel pre-drilled for anchor screws.
 - 3. Inner panel connectors shall not be visible after floor system assembly.
- H. Floor Sanding and Finishing
 - 1. Flooring shall be sanded with course, medium, and fine paper to a smooth, even and uniform surface.
 - 2. Sanding dust shall be removed from floor tack or vacuum.
 - 3. Floor shall be inspected to insure surface is acceptable for finishing, free from sanding dust, perfectly clean.
 - 4. Apply two (2) coats of MFMA approved heavy-duty gymnasium seal.
 - 5. Apply two (2) coats of MFMA approved heavy-duty gymnasium finish.
 - 6. Buff and clean floor between coats.
- I. Game Lines and Marking - Game Lines and Markings shall be applied between seal and first coat of finish. Paint shall be compatible to gymnasium floor finish. All lines and marking shall be provided as specified and approved by owner. Color of game lines and markings shall match color chips provided to and approved by owner.
- J. Wall base - 3" X 4", heavy duty, molded, vented cove base with pre-molded outside corners.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Concrete Substrate - The general contractor shall provide a broom clean concrete subfloor to a flatness tolerance of 1/8" in any 10' radius. The concrete shall be dry to industry standards prior to placement of QuickLock RF system.

3.2 INSTALLATION AND ASSEMBLY

- A. Cover concrete with poly, sealing and lapping joints a minimum of 6".
- B. **NOTE:** Take care to prevent damage to panel side edges when un-stacking panels. Do not drop panel from stack
- C. Identify designated row letters and panel numbers as posted on side edge of panels.
- D. Prior to installing panels attach resilient pads with adhesive along sleepers at 12" on center.
- E. Start with Row A as indicated in approved drawings. Install Row A in numbered order. Fasten steel end connectors as required. Provide 1 1/2" expansion void at start and end of row..
 - 1. *Optional Anchors (**specify or delete**) - Secure sleepers to concrete with steel anchors inserted into anchor pockets provided. Maintain proper anchor penetration with Connor installation tools and procedures.*
- F. Begin Row B with starting edge of Panel B1 aligned evenly with starting edge of Panel A1. Align Panel B1 tightly to Panel A1 and fasten with steel plates where required to lock Panel B1 to Row A. Align Panel B2 tightly to end of Panel B1 and to side edge of Row A to allow steel plates to be fastened. Continue installation of Row B in numbered order.
- G. Continue assembly of remaining rows with same positioning and fastening method. Provide 1 1/2" expansion void at perimeter of floor.
- H. **IMPORTANT:** Do not strike hardware or flooring edges when tapping panels into position. This will damage floor panels.

3.3 BASE INSTALLATION

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

3.4 CLEANING

- A. Remove excess and waste materials from the area of work.