Allied Products, LLC
Distinctive Flooring & Athletic Surfaces

Action ProAir AR **Section 09 64 00**
EN/DIN Certified **Wood Athletic Flooring**
Anchored Laminated Wide Body Sleeper Floor System

SYSTEM SUMMARY

This anchored resilient system combines laminated sleepers and sheathing to provide a system with dimensional stability, strength, and great ball response. The Action ProAir AR floor system combines AirTech natural rubber pads, anchored resilient laminated sleepers, sheathing, and Allied's maple flooring. Action ProAir AR Floor System is an excellent choice for gymnasium projects.

Contact Allied Products, LLC at www.alliedproductsllc.com or (800)864-1272 for specific project conditions or modifications of this specification.

PART 1 – GENERAL

1.01 DESCRIPTION

A. Related Sections: Cast-in-Place Concrete
1. The general contractor shall provide a level slab, steel troweled to a tolerance of 1/8" (3mm) in a 10'0" (3m) radius and subject to the approval of the wood floor contractor.
2. Moisture barriers must be adequate for conditions.
3. MFMA does not acknowledge the use of FF/FL numbers to measure levelness/flatness tolerances in gymnasium concrete slabs.
4. Concrete shall not use river gravel or pea gravel and have an average of 3500 psi. compressive strength. Concrete must be cured for 60 days before installation can begin.
5. The concrete slab shall be depressed: 2-1/2" (64mm) for 25/32" (20mm) flooring.

1.02 QUALITY ASSURANCE

A. All system component parts must be supplied by Allied Products, LLC.
B. Manufacturer shall be a MFMA Mill Member, an established firm experienced in the field and have been in business a minimum of ten (10) years; as supplied by Allied Products, LLC or an approved equal.
C. Manufacturer shall be solvent with no bankruptcy proceedings the previous seven (7) years.
D. The flooring contractor must be approved by Allied Products, LLC.
E. Flooring system shall be independently tested to meet or exceed the athletic performance requirements of EN 14904 (2006) and all six DIN 18032 Part 2 criteria. Independent testing laboratory shall have Scientific Body Membership in the International Association of Sports Surface Sciences (ISSS).
F. Carbon Evaluation must be inclusive and based on all corporate facilities; offices and mills.
G. The manufacturer and flooring shall be independently verified by the guidelines of the ISO 14064-1:2006 World Resource Institutes Greenhouse Gas Protocol, Scope 1, 2 and 3.
H. The manufacturer and flooring shall be independently verified by the guidelines of the ISO 14040:2006 and ISO 14044:2006 Life Cycle Assessment (LCA), confirming a negative carbon footprint.
I. The manufacturer and flooring shall be registered in the Collaborative for High Performance Schools (CHPS) Product Database .

J. Flooring system shall be independently verified to meet or exceed the SCORES criteria for environmental design and athletic performance: Sustainable Construction of Renewable Engineered Surfaces.

1.03 SUBMITTALS

A. Manufacturers product data: Submit **ProAir AR** specification sheets.
B. Samples: Submit one (1) sample of **ProAir AR**, if requested by architect.
C. Maintenance literature: Submit one (1) copy of manufactures maintenance instructions.

1.04 WORKING CONDITIONS

A. Flooring materials must be allowed to acclimate to building conditions on the job site in a dry, well-ventilated area, not in contact with masonry, and shall be installed at a moisture content not to exceed 8% except in areas of constant high humidity where the moisture content of the flooring shall not exceed 10%.
B. The wood flooring shall not be installed until all masonry, plastering, tile, marble and terrazzo work is completed, and overhead mechanical trades and painters have finished in wood floor area. The building must be reasonably dry; all openings must be closed in; permanent heating and air conditioning installed and operating.
C. The concrete slab shall be dry, free of foreign materials, and turned over to the wood flooring contractor broom clean. Moderate room temperature of 65 degrees (18 C) or more shall be maintained a week preceding and throughout the duration of the work. Humidity conditions within the building shall approximate humidity conditions which will prevail when the building is occupied. Care should be taken to maintain humidity within the range of 35% to 50%.

1.05 WARRANTY

A. Allied Products, LLC. warrants the material it ships to be free from defects in materials and workmanship for a period of one year and the flooring installer warrants the installation of the flooring to be free of defects in materials and workmanship for a period of one year. The exclusive remedy under this warranty shall be replacement of defective material supplied by Allied Products, LLC. or correction of defective installation by the flooring installer. All implied warranties of merchantability or fitness for intended use are limited to the period of this warranty. This warranty excludes consequential damages.
B. This warranty does not cover damage caused by fire, winds, floods, chemicals, or other abuse, or by failure of other contractors to adhere to specifications, or neglect of reasonable precaution to provide adequate ventilation during hot and humid weather. This warranty also excludes damage due to excessive dryness or excessive moisture from humidity, spillage, migration through the slab or wall or any other source. This warranty also excludes damage to floors due to ordinary wear and tear, faulty construction of the building, (other than the flooring installation), separation of the concrete slab underlying the floor, settlement of the walls, or use of water on the floor.
C. During the warranty period, the floor cannot be coated without the permission of the floor contractor.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Flooring

1. Flooring shall be Northern Hard Maple standard strip flooring, 25/32" x 2-1/4" (20mm x 57mm) or 1-1/2" (38mm), TGEM, MFMA grade marked & stamped as supplied by Allied Products, LLC.
2. Grades available are MFMA 1st, 2nd&Btr. 3rd&Btr. and 3rd grade.
3. Long Length Strip Flooring by Allied Products, LLC (optional).
4. FSC Certified lumber (optional).
5. Expansion Ridge Technology (ERT), 1/64” milled expansion spacer (optional).

B. Subfloor

1. Vapor barrier shall be 6-mil polyethylene.
2. Action ProAir laminated sleepers 7/8" x 3-7/8" x 8', (23mm x 99mm x 2.4m) and AirTech natural rubber pads (AirTech II+ 7/16” (11mm), AirTech III 5/8” (16mm) or AirTech IV 3/4" (19mm) as required by project, attached 12” (300mm) on-center as supplied by Allied Products, LLC.
3. Resilient sleeper anchors shall be ¼” x 2-1/2” (6mm x 64mm) long collared drive pins or longer to reflect the thickness of concrete filler if leveling was required and anti-friction sleeves.
4. Panels shall be 15/32" x 4' x 8' (12mm x 1.2M x 2.4m) exposure 1, rated sheathing, minimum APA span rating of 32/16.

C. Fasteners

1. Subfloor fasteners shall be 1" (25mm) coated staples.
2. Flooring fasteners shall be 1-3/4" (38mm) cleats, or 15-gauge coated staples.

D. Wall Base

1. Wall base shall be 3" x 4" (76mm x 102mm) vented cove base with pre-molded corners (specify black or brown), as supplied by Allied Products, LLC.

E. Protective Floor Cover (optional)

1. Action AirRide cover system with patented air blower system. System includes Phthalate-free, seamless 10’-0” wide, 20.5-ounce vinyl covers and A-frame rack.

PART 3 - EXECUTION

3.01 INSPECTION

A. Inspect concrete slab for proper tolerance and dryness reporting any discrepancies in writing to the general contractor.

B. All work to put the concrete slab in acceptable condition shall be the responsibility of the general contractor.

C. Slab shall be broom cleaned by the general contractor.

3.02 INSTALLATION

A. Cover concrete slab with polyethylene lapping edges 6” (150mm) and seal with adhesive or 2” (50mm) duct tape.

B. Place the Action ProAir AR laminated sleepers end-to-end in a brick pattern at right angles to the intended direction of the finished flooring, end joints staggered a minimum of 24" (600mm). The sleepers shall be spaced 16" (400mm) on-center (optional 12" (300mm) on-center). The resilient sleeper shall be attached to the concrete slab with anchors installed thru the anti-friction sleeves in the pre-drilled anchoring pockets. Allow 2" (50mm) voids at perimeter and vertical obstructions.

C. Place the sheathing in a brick pattern over sleepers with the long dimension of the sheet at a 90-degree angle to the direction of finish flooring, 1/4" (6mm) spacing on all edges and breaking joints 4' (1.2m). No sheathing joint shall fall on a sleeper joint. Attach with 1" (25mm) fasteners minimum of 12" (300mm) on-centers on each sleeper. Allow 2" (50mm) expansion void at perimeter and all vertical obstructions.

D. Machine nail strip flooring through subfloor at each sleeper crossing. End joints must be properly driven up. Provide adequate expansion at regular intervals across the floor during installation as dictated by the average humidity conditions of the area according to the recommendations of the local Allied Products, LLC. flooring contractor. Allow 2" (50mm) expansion voids at perimeter and all vertical obstructions.

3.03 FLOOR SANDING

A. Use coarse, medium and fine grade sandpaper.

B. After sanding, buff entire floor using 100-grit screen or equal grit sandpaper, with a heavy-duty buffing machine.

C. Vacuum or tack floor before first coat of finish.

D. Floor shall present a smooth surface without drum stop marks, gouges, streaks or shiners.

3.04 FINISHING

A. Inspect entire area of floor to ensure that the surface is acceptable for finishing, completely free of sanding dust and perfectly clean.

B. Apply seal and finish per manufacturer's instructions.

C. Buff and vacuum or tack between each coat after it dries.

D. Apply game lines accurately after the seal coat, after buffing and vacuuming. Lay out 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 the architect. Game line paint shall be compatible with finish.

3.05 BASE INSTALLATION

A. Affix rubber base to wall with recommended adhesive or screws. Miter all corners carefully. Use premolded outside corners. Install aluminum thresholds as required, anchoring firmly in concrete floor beyond limits of wood flooring.

3.06 CLEAN UP

A. Clean up all unused materials and debris and remove from premises, properly dispose of all waste materials.

3.07 MAINTENANCE

A. Upon completion of floor installation, the owners, attendants or individuals in charge and responsible for the upkeep of the building are to see that the care and maintenance instructions of the MFMA are followed. Failure to do so may void warranty.