

# Sports Floor Specifications

## NitroPanel Portable Floor System®



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**Action NitroPanel®**  
**Portable Floor System**

**Section 09 64 00**  
**Wood Athletic Flooring**

**SYSTEM SUMMARY**

This portable floor system when assembled provides a high performance sports floor surface. Comprised of locking components, high strength laminated sleepers, plywood subfloor sheathing, tongue and groove assembly, Action Floor Systems northern hard maple flooring, and finishing including; sanding, striping, and coating. Panels shall be portable and interlocking and provide for easy assembly and disassembly.

Contact ACTION FLOORING SYSTEMS at [www.actionfloors.com](http://www.actionfloors.com) or (800)746-3512 for specific project conditions or modifications of this specification.

**PART 1 – GENERAL**

**1.01 REFERENCES**

- A. MFMA (Maple Flooring Manufactures Association).
- B. FIBA (The International Basketball Federation).

**1.02 QUALITY ASSURANCE**

- A. All system component parts must be supplied by Action Floor Systems, 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; Action Floor Systems, 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 Action Floor Systems, LLC.
- E. Carbon Evaluation must be inclusive and based on all corporate facilities; offices and mills.
- F. 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.
- G. 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.
- H. The manufacturer and flooring shall be registered in the Collaborative for High Performance Schools (CHPS) Product Database.
- I. 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 **Action's NitroPanel** specification sheets.
- B. Samples: Submit one (1) sample of the **NitroPanel** if requested by architect.
- C. Maintenance literature: Submit one (1) copy of manufactures maintenance instructions.

#### 1.04 DELIVERY AND STORAGE

- A. The portable floor system shall be stored indoors in a protected dry area with temperature and relative humidity conditions that approximate the conditions of the assembled area. The portable floor system shall be protected at **all times** from contact with moisture and excessive relative humidity.
- B. Permanent heating and ventilation shall be installed and operating, a moderate room temperature shall be maintained prior, during, and after delivery and/or installation.
- C. The concrete slab shall be dry, free of foreign materials and ready for installation. Moderate room temperature of 65 degrees (18 C) or more shall be maintained a week preceding and throughout the duration of the installation. 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%.
- D. The storage area should maintain a temperature of 60 to 80 degrees F (16 to 27 degrees C), with a relative humidity of 35 to 50%. The storage room must be well ventilated and dry with a temperature and relative humidity approximating the installed conditions.

#### 1.05 WARRANTY

- A. Action Floor Systems, LLC. warrants the material it ships to be free from defects in materials and workmanship for a period of one year. The exclusive remedy under this warranty shall be replacement or repair of defective material supplied by Action Floor Systems, LLC. 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 or faulty assembly, disassembly, storage, and improper care of the floor system.
- 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 flooring, 2nd&Btr. LL, ERT, 25/32" x 2-1/4" (20mm x 57mm), MFMA grade marked & stamped as manufactured by Action Floor Systems, LLC, or 25/32" x 1-1/2" (20mm x 38mm) (optional).
- 2. Grades available are MFMA 1<sup>st</sup> and 3<sup>rd</sup> grade.
- 3. FSC Certified lumber (Optional).

##### B. Subfloor

- 1. Subfloor shall be 1/2" (12mm) 4ply, C-D face exposure 1, rated plywood, OSB (oriented strand board) is not allowed.

C. Sleepers

1. High strength laminated 1-3/8" x 1-3/8" (35mm x 35mm) sleepers, LSL or SPF sleepers are not allowed.

D. Resilient Pads (Optional)

1. ProAction Nitro natural rubber pads factory attached and spaced with Nitro pad guards, pads available; 7/16" (11mm) or 3/4" (19mm) pads.

E. Panel Attachments

1. Machine fasten maple flooring strips through the plywood subfloor into each high strength laminated sleeper.
2. Panels incorporate a continuous HDP tongue and groove assembly, tapered tongue and groove with adjacent panels providing integral alignment and prevent vertical movement between panels.
3. NitroPanel inner panel connections shall not be visible when the floor system is assembled. Nitro pins shall be included for panel assembly of the floor system in the factory located holes of the overlapping steel assembly brackets.

F. Fasteners

1. Flooring fasteners shall be 2" (50mm) cleats, or 15-gauge coated staples.

G. Floor System

1. Floor system shall consist of 203 full (4' x 8' (1.2m x 2.4m)) panels and 14 half (4' x 4' (1.2m x 1.2m)) panels for a court size of 60' x 112' (18.2m x 34.1m).
2. Finished court dimension can be modified in 4' (1.2m) increments for width and length, overall court: \_\_\_\_\_ x \_\_\_\_\_(Optional).

H. Storage Carts

1. Heavy duty storage carts with casters shall be supplied for each row (15) of panels (Optional).

## 2.02 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.

## 2.03 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. Game line paint shall be compatible with finish.
- E. Gameline colors, markings and, graphics shall be provided by the owner or architect to Action.

## **PART 3 - EXECUTION**

### **3.01 INSPECTION**

- A. Inspect concrete slab for proper tolerance and dryness reporting any discrepancies in writing to the customer.
- B. All work to put the concrete slab in acceptable condition shall be the responsibility of the customer.
- C. Area of installation shall be dry, clean, and ready for installation. Subfloor shall have a tolerance of 1/8" (3mm) in 10' (3m).

### **3.02 ASSEMBLY**

- A. Begin with row A as the starting point. With panel A1 in position, place panel A2 and insert Nitro Pin. Swing panel A2 into position. Align panels using a string line to ensure proper installation. Continue assembly of remaining rows following the number panels sequence, securing the panels together with Nitro pins.

**CAUTION:** Use assembly blocks only for alignment of panels. Do not strike panel edges directly as damage may occur.

### **3.03 DISASSEMBLY**

- A. Dry mop entire floor prior to disassembly.
- B. Disassemble in opposite order. Remove Nitro pins and swing each panel clear of following panel edges.
- C. Stack full rows together in reverse sequence, with the Nitro panels stacked face to face with a protective sheet between faces.

### **3.05 CLEAN UP**

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

### **3.06 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.

#### NOTICE:

IT IS THE POLICY OF ACTION FLOOR SYSTEMS, LLC. TO CONTINUOUSLY UPDATE AND IMPROVE OUR PRODUCT LINES. THEREFORE, WE RESERVE THE RIGHT TO CHANGE, MODIFY OR DISCONTINUE SYSTEMS, SPECIFICATIONS AND ACCESSORIES OF ALL PRODUCTS AT ANY TIME WITHOUT ANY NOTICE OR OBLIGATION TO ANY PURCHASERS.