

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. Scope
The complete installation of synthetic sports surfacing system including striping.
- B. Related work specified under other sections.
 - 1. CONCRETE MOISTURE VAPOR EMISSION AND pH TESTING SECTION 01450
 - a. Moisture vapor emission and pH of concrete shall be tested. Concrete substrates must comply with limitations of moisture and alkalinity, with in-situ Relative Humidity (RH) per ASTM F2170 not to exceed 90% or 8lbs/1,000ft² per 24 hours (3.6 kg / 93 m²) per 24 hours as verified using Calcium Chloride test ASTM F 1869-04, and substrate pH readings between 7.0–9.0.
 - 2. CONCRETE SUBFLOORS SECTION 03____
 - a. The general contractor shall furnish and install the concrete subfloors, depressing the slab sufficiently to accommodate the floor system.
 - b. The slab shall be steel troweled and finished smooth, not polished or burnished, to a tolerance of 1/8" in any 10' radius. Floor flatness and floor levelness (FF and FL) numbers are not recognized. High spots shall be ground level and low spots filled with approved leveling compound.
 - c. **No concrete curing, hardening or sealing agents shall be applied or mixed with the concrete subfloor.**
 - 3. MEMBRANE WATERPROOFING SECTION 07____
 - a. Concrete subfloors on or below grade shall be installed over a suitable moisture retardant membrane. Water vapor membrane shall comply with ASTM E 1745-97 (2004).
 - 4. GAME STANDARD INSERTS SECTION 11____

1.2 QUALITY ASSURANCE:

- A. Manufacturer: shall be RPM®
- B. INSTALLER:
 - 1. The complete installation of the flooring system, as described in these specifications, shall be carried out by an experienced installer (Flooring Contractor), and the work shall be performed in accordance with current RPM installation instructions.
 - 2. Installer (Flooring Contractor) shall be liable for all matters related to the installation for a period of one year after the floor has been installed and completed.

1.3 DELIVERY, STORAGE AND HANDLING:

- A. Materials must be delivered in RPM's original, unopened and undamaged packaging with identification labels intact. Material shall not be delivered until all related work is finished and/or proper storage facilities can be guaranteed.
- B. Store the material protected from exposure to harmful weather conditions on a clean, dry, flat surface protected from possible damage. Store sports flooring rolls vertical.
Do not stack rolls of material or store horizontally.
- C. Storage conditions shall be 60°F to 80°F.

1.4 SITE CONDITIONS:

- A. Synthetic materials specified herein shall not be installed until all masonry, painting, plaster, tile, marble and terrazzo etc. work is completed, and overhead mechanical trades and painters have finished in the synthetic floor areas. The building shall be enclosed and weather tight.
- B. Permanent heat, light and ventilation shall be installed and operating during and after installation. Subfloors shall be clean, dry and free from dirt, dust, oil, grease, paint, alkali, concrete curing agents, hardening and parting compounds, old adhesive residue or other foreign materials. Moderate room temperature between 65°F and 80°F, and relative humidity under 50% shall be maintained for one week prior to, during, and for 72 hours after installation.
- C. The installation areas shall be closed to all traffic and activity for a period to be specified by the flooring contractor.
 - 1. Concrete substrates must comply with limitations of moisture and alkalinity, with in-situ Relative Humidity (RH) per ASTM F2170 not to exceed 90% or 8lbs/1,000ft² per 24 hours (3.6 kg / 93 m²) per 24 hours as verified using Calcium Chloride test ASTM F 1869-04, and substrate pH readings between 7.0–9.0.
- D. Environmental Limitations.
 - 1. Comply with RPM's requirements.
 - 2. Adhere to all SDS requirements for materials employed in the work. Protect all persons from exposure to hazardous materials at all times.
- E. After synthetic floors are installed and the game lines painted, the area is to be kept locked by the general contractor to allow curing time for the flooring system. No other trades or personnel are allowed on the floor until the owner has accepted it.

1.5 WARRANTY:

- A. RPM provides a limited warranty of one (1) year on the materials it has supplied. This warranty is expressly limited to the flooring materials (goods) supplied by RPM. This

warranty does not cover floor damage caused (wholly or in part) by fire, winds, floods, moisture migration or water vapor transmission through the substrate, failure of vapor barrier, other unfavorable atmospheric conditions or chemical action, nor does it apply to damage caused by normal wear, misuse, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation, faulty or unsuitable subsurface or site preparation, settlement of the building walls or faulty or unprofessional installation of RPM flooring systems. The presence of moisture between the sport flooring and subfloor shall be considered proof of subfloor failure or faulty design or construction.

- B. RPM shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling or use of the materials (goods) 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 buyer 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 RPM in writing within 30 days from the date buyer discovered, or should have discovered, any claimed breach.

PART 2 – PRODUCTS

2.1 MATERIALS:

- A. RPM React™ - Prefabricated sport surface 3 MM, 4.5 MM, and 6 MM with wood print & color design as supplied by RPM. The maple design shall be protected by a clear layer of pure PVC (Polyvinyl Chloride) and top coated with a factory applied polyurethane finish. Intermediate layers of calendared PVC and fiberglass provide balance and stability. The foam force reduction layer is a high-density closed cell PVC foam, and is applied in one continuous manufacturing process. Laminated or adhered foam layers will not be allowed. Flooring will contain anti-fungal treatment.
- B. Vinyl welding thread – Matching vinyl supplied by RPM.
 - 5mm diameter
 - Method of installation – heat welder
 - 100% PVC designed to melt at the same temperature as the PVC coating on the flooring
- C. Adhesive – One-component acrylic supplied by RPM.
 - 1. Optional adhesive – Two-component epoxy supplied by RPM.
- D. Game Line Paint – Two-component polyurethane supplied by RPM. Select from six (6) standard colors (white, black, red, yellow, green, and blue). Primer required.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Inspect concrete slab for proper tolerance and dryness. Test moisture vapor transmission of concrete flooring by means of an in-situ RH test or by means of a Calcium Chloride Test. A minimum number of three (3) tests shall be performed and strictly adhered to per ASTM F2170 for in situ probes or ASTM F-1869 for Calcium Chloride tests. Maximum vapor level of 90% RH or 8 lbs/1000 sf (3.6 kg/93 m²). Report any discrepancies to the general contractor.
- B. Concrete slab shall be broom cleaned by general contractor.
- C. Verify with general contractor and by visual inspection that no curing compounds and/or sealers have been applied to the concrete.
- D. Installer (Flooring Contractor) shall document all working conditions provided in General Specifications prior to commencement of installation.

3.2 INSTALLATION:

- A. Prep concrete to receive flooring material per the installation instructions.
- B. Unroll flooring and allow it to relax.
- C. Apply acrylic adhesive directly to concrete with notched trowel per RPM's instructions. Total flooring surface must be fully adhered.
- D. Install flooring into applied adhesive.
- E. Roll sport surface with a 100 lb segmented roller to remove entrapped air.
- F. Join side and end seams by hot welding. Router seams to receive vinyl welding thread. Use vinyl welding thread as supplied by RPM. Refer to installation instructions for complete preparation and installation recommendations.
- G. Game Lines
 - 1. Use only high quality masking tape approved by RPM.
 - 2. Follow installation instructions for preparation and application of game line paint.
 - 3. Provide game lines as indicated on drawings.
- H. Wall Base (**Optional**) – Install vinyl base anchored to walls with base cement.
- I. Remove all excess and waste materials from the work area. Dispose of empty containers in accordance with federal and local statutes.

END OF SECTION 09624