

Nydree Flooring recommends the use of Air Thrust® Cushioning Pads made by Action® Floor Systems, LLC for use with sporting floor systems. These systems are designed to dampen bounce and are typically used for multipurpose rooms, gym/sports clubs, dance/aerobic and community/recreation centers. The 100% natural rubber cushioning pads used in this system are 1 5/8" (41mm) wide x 3" (76mm) long and vary in thickness. Airtech II pads are typically used and are 7/16" (11mm) thick. Other rubber cushioning pads that can be used are 5/8" (16mm) thick or 3/4" (19mm) rubber pads. The cushioning pads have stapling lips at each end. The pads can be ordered through Action Floor Systems customer service at 800.746.3512.

### Typical Cushioned Sports Floor System

#### **Subfloor Preparation**

- Verify that the substrate is flat to plus/minus 1/8" in 10 ft. (3mm per 3m).
- Concrete slabs shall be depressed the thickness of the 2 sheets of plywood plus the thickness of the Airtech cushioning pad (7/16", 5/8" or 3/4"), plus the thickness of the Nydree Flooring and MRA1585 adhesive. (1/2" for Nydree 0.430" thick flooring)
- Moisture Retarder will be 8 mil polyethylene film.
- Permanent HVAC must be in operation (2 weeks minimum), and permanent lighting must be provided prior to flooring installation. Job site temperature should be 60°-90°F (15°-32°C). The ideal relative humidity for Nydree Flooring installations is between 30 and 55%, prior, during and after installation is completed.
- Concrete must be visibly dry and less than 8 lbs./1000 sq.ft./24 hrs. using the Calcium Chloride Test method (ASTM F1869) or less than 85% insitu relative humidity (ASTM F2170).

#### **Installation**

1. Sweep concrete slab clear and cover the concrete slab with 8 mil polyethylene film, overlapping the edges 6" (152mm) and seal with adhesive or 2" (51mm) duct tape.
2. The 7/16" Airtech II cushioning pads are attached to the underside of the first layer of 15/32" (11mm) APA-CDX, exposure 1, rated plywood 12" (305mm) on center and 6" (152mm) from the edges of the plywood on all sides (32 pads per 4' x 8' sheet / 1.2mx2.4m). DuoFast 3/8" Crown, 1/2" leg, 22 gauge (Part #3116-C) staples are recommended.
3. Place the first layer of plywood containing the cushioning pads in a brick pattern parallel to the intended direction of the finished flooring. Allow a 1/4" (6.4mm) expansion between panels at sides and ends and a 2" (51mm) expansion joint at walls and vertical obstructions.
4. Attach the second layer of plywood (without pads) in a brick pattern at a 45° or right angle to the first layer. Use 1" (25.4mm) screws or 16-gauge coated staples 12" (305mm) on center (32 fasteners per sheet). Allow a 1/4" (6.4mm) expansion space between panels at sides and ends and a 2" (51mm) expansion space at walls and vertical obstructions. No joint in the second layer of plywood shall overlap with a joint in the first layer of plywood.
5. Lay Nydree flooring according to the MRA1585 glue down instructions onto the 2<sup>nd</sup> layer of plywood in the same grain direction as the first layer of plywood.
6. Install vent cove base over perimeter voids and metal thresholds at doorways.