

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 cushioning pads that can be used are 5/8" (16mm) thick Airtech III or 3/4" (19mm) Airtech IV 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 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.