Contact ACTION FLOOR SYSTEMS, LLC. at www.actionfloors.com or (800)746-3512 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 floor contractor. High spots shall be ground down and low spots shall be filled with an approved leveling compound by the general contractor to the tolerance specified above.
2. Action does not acknowledge the use of FF/FL numbers to measure levelness/flatness tolerances in concrete slabs.
3. Concrete shall not use river gravel or pea gravel and have an average of 3500 psi. compressive strength after 28 days. Concrete must be cured for 60 days before installation can begin.
4. The concrete slab shall be depressed: 8mm (0.314 in).
5. No curing agents or sealers are to be applied to the concrete surface.

B. Related Sections: Membrane Waterproofing
1. Concrete slabs on or below grade shall be adequately waterproofed beneath the slab and at the perimeter walls and on earth side of below grade walls by general contractor using suitable type membrane.

C. Related Sections: Thresholds

1.02 QUALITY ASSURANCE

A. Manufacturer Qualifications
1. Basis of design shall be **Action Synchro 6+2** as provided by Action Floor Systems, LLC. All system component parts must be supplied by Action Floor Systems, LLC.
2. Manufacturer shall be 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.
3. Floor system manufacturer shall be solvent with no bankruptcy proceedings the previous seven (7) years.
4. Carbon Evaluation must be inclusive and based on all corporate facilities; offices and mills.
5. Floor system supplier shall be independently verified by the guidelines of the ISO 14064-1:2006 World Resource Institutes Greenhouse Gas Protocol, Scope 1, 2 and 3.
6. Floor system supplier 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.
7. 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.

B. Floor Contractor/Installer requirements
1. The flooring contractor must be approved by Action Floor Systems, LLC.

TECHNICAL INFORMATION

Force Reduction (CEN/TC 217 N375, DIN 18032)	22%
Energy Restitution (EN/TC 217)	52%
Ball Rebound (EN 12235, DIN 18032)	99%

1.03 SUBMITTALS

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

1.04 WORKING CONDITIONS

A. The 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 floor

area. The building must be reasonably dry; all openings must be closed in; permanent heating and air conditioning installed and operating.

B. The concrete subfloor shall be determined dry by industry standard testing procedures, free of foreign materials and turned over to the 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 the humidity conditions that will prevail when the building is occupied.
C. Permanent heat, light and ventilation shall be installed and operating during and after installation, maintaining a range of temperature and humidity compatible with the expected low and high moisture content of the flooring.
D. Flooring material must be stored in a dry, well-ventilated area, not in contact with masonry, conditions and shall be installed with the normally expected environmental range of temperature and relative humidity achieved while the facility is occupied.
E. General Contractor shall lock floor area after floor is completed to allow proper cure time. If general contractor or owner requires use of gym after proper cure time, they shall provide written acceptance by owner of completion of gymnasium floor.

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 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 Action Floor Systems, 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 unapproved cleaners or sealers on the floor.

PART 2 – PRODUCTS

2.01 MATERIALS

A. All polyurethane components shall be supplied by Action Floor Systems, LLC.
B. SYNCHRO BASE MAT ADHESIVE 200, two-component polyurethane, shall bond rubber base mat to concrete, asphalt, or wood.
C. SYNCHRO BASE MAT
    1. Base mat shall be prefabricated rubber mat made of all recycled rubber granules bound with MDI polyurethane and a constant thickness. The base mat shall have a density of 45-lbs. / cubic foot minimum.
    2. Standard base mat thickness shall be 6mm.
D. SYNCHRO POUR FILLER 300, two-component, thixotropic polyurethane compound.
E. SYNCHRO WEAR LAYER 400 two-component, self-leveling polyurethane compound applied monolithically over the base mat to a 2mm thickness.
F. SYNCHRO COLOR COAT 500 two-component polyurethane. Colors to be selected from manufacturer's standard color chart.
G. Game line paint (GLP) shall be two-component polyurethane. Colors to be selected from manufacturer's standard color chart.
H. Optional base (specify or delete). Vinyl wall base; 4" high, select from standard colors.

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. Concrete shall be clean and free of sealers; dirt, oil, paint, and any material that, in the opinion of the flooring installer, will adversely affect the Action Synchro material bonding to the concrete or the overall installation (refer to 1.03 Working Conditions).
B. Mix the two-component polyurethane adhesive and apply directly to the concrete sub floor at the specified rate with the specified notched trowel.
C. Immediately unroll pre-relaxed mat into freshly applied adhesive.
D. Roll base mat with heavy flat roller.
E. Thoroughly mix two-component pour filler. Apply two coats of pour filler to rubber base mat with a flat steel trowel. Allow each coat to cure before proceeding to the next application. After second coat has cured, inspect base mat for ridges and voids. Sand down ridges, and fill voids as needed.
F. Thoroughly mix two-component wear layer coat. Apply mixed material using recommended notched trowel, or notched squeegee to a thickness of 2mm. Materials must be applied continuously to create a seamless surface. Allow wear layer to cure before proceeding to next step. Repair any imperfections in the finished surface. Clean floor with a vacuum, broom, or dry dust mop. Tack clean prior to proceeding.
G. Thoroughly mix two-component polyurethane color coat. Apply color coat material with a high solvent resistant paint roller at the specified rate, or by airless spray application. Allow color coat to cure before applying game lines.
H. Using the highest quality masking tape, tape the floor. Thoroughly mix the two-component game line paint, and paint between the tape. Remove all tape prior to the paint curing.
I. If wall base is specified, install vinyl base to walls by using the proper adhesive.

3.03 CLEAN UP

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

3.04 MAINTENANCE

A. New floor initial maintenance.
   1. IMPORTANT: Allow new floor or newly recoated floor to cure at least 96 hours.
   2. Sweep floor thoroughly. Do not use sweeping compounds.
   3. Mix Action Floor Systems, LLC approved cleaner with clean water to achieve desired water-to-cleaner ratio.
   4. Using a new mop, damp mop the entire floor with cleaner/water mix.
   5. Allow solution to dry on floor prior to use.

B. 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 are followed. Failure to do so may void warranty.

Rev 6/2017