

Sample Specifications for Rosco Subfloor System –

Section 09646 – Performance Floor Assemblies (Also Dance Floor Assemblies)

PART 1 – GENERAL

1.1 GENERAL

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SUMMARY

- A. This Section includes the following:

- 1. Dance Flooring System

- B. Related Sections include the following:

- 1. Section 03000 – Concrete and Cement Finish: Concrete sub-floor construction and tolerances
 - 2. Section 06200 – Carpentry
 - 3. Division 09 Sections “Resilient Base and Accessories” for resilient wall base and accessories installed with Dance Floor

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer’s detailed technical product information, application instructions and recommended procedures.
- B. Samples: Provide 12-inch square samples for each type of finish flooring indicating color and texture of flooring
- C. Maintenance Literature: Submit sufficient copies of floor manufacturer’s maintenance instructions, including the proper cleaning and finishing.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Installer shall have at least three years experience in installing similar dance floor systems and shall be approved by the manufacturer.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect wood from exposure to moisture. Do not deliver wood components until after concrete, masonry, plaster, ceramic tile, and similar wet work is complete and dry.
- C. Store wood components in a dry, warm, well-ventilated, weathertight location and in a horizontal position.

1.6 PROJECT CONDITIONS

- A. The flooring system shall not be delivered and installed until all masonry, plastering, tile work, and all overhead mechanical and electrical trades are completed and building is enclosed and weather tight.
- B. Permanent heat, light, and ventilation shall be installed and operating during and after installation, maintaining a temperature range of 55 – 75 degrees F (13 – 24 degrees C), and a relative humidity range of 35 percent to 60 percent
- C. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- D. Once the installation is complete, do not operate mechanized lifts or other machinery in excess of the manufacturer's absolute limits for loading capacity of the finished floor assembly.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Product: Rosco Laboratories, Inc. 52 Harbor View Avenue, Stamford, CT 06902 Email: floors@rosco.com; Web: www.rosco.com/us/products/floor.asp

2.2 RELOCATABLE INSTALLATION OF ROSCO SUBFLOOR SYSTEM SPRUNG FLOOR ASSEMBLY WITH VINYL FINISH FLOOR

- A. Vapor Barrier: Polyethylene sheet as specified below.

- B. Subfloor: Rosco Laboratories Inc. Subfloor System temporarily installed consisting of the following:
1. Rosco Subfloor System Panels consisting of:
 - a. 1" thick closed cell foam pads
 - b. ½" Medium Density Fiberboard Sleeper Layer
 - c. ½" Medium Density Fiberboard Top Surface Layer
 - d. Panels are glued in the factory with wood composite glue and minimum adequate clamping force (1872 psf minimum uniformly applied for at least 30 minutes).
 - e. Panels are edge rounded with 1/16" roundovers on all exposed edges.
 - f. Panels are joined with extended wavelock tabs and corresponding recesses in the sleeper layer.
 - g. All Medium Density Fiberboard to be homogenous domestically sourced hardwood based and domestically manufactured.
 - h. All materials to be warehoused within prescribed humidity requirements of the manufacturer.
 - i. All panel batches are to be checked against caliper standards for length and width and edge swelling standards.
 2. The edge of the subfloor is finished with Rosco Subfloor System Perimeter consisting of:
 - a. 2 layers ½" Medium Density Fiberboard Support Layers
 - b. ½" Medium Density Fiberboard Sleeper Layer with inset threaded insert
 - c. ½" removable Medium Density Fiberboard Perimeter Caps.
 - d. ¼" – 20 x 1 ¼" zinc plated steel flat head machine screws to join to the Top Surface layer to the Sleeper layer
 - e. Sleeper and Support layers are glued in the factory with wood composite glue and adequate clamping force (1872 psf minimum uniformly applied for at least 30 minutes).
 - f. Perimeter Caps and Sleepers are edge rounded with 1/16" roundovers on all exposed edges.
 - g. Perimeter are joined to panels with extended wavelock tabs and corresponding recesses in the sleeper layer.
 - h. All Medium Density Fiberboard to be homogenous domestically sourced hardwood based and domestically manufactured.
 - i. All materials to be warehoused within prescribed humidity requirements of the manufacturer.
 3. As needed, ADA Compliant Rosco Subfloor System ramps are to be installed and attached to the sleeper layer of the perimeter.
 4. Subfloor to be kept back from all walls by ½"
 5. Subfloor Performance must comply with ESTA E1-26 (2006) performance standards.

C. Finish Floor:

1. Vinyl: Rosco Laboratories: "Dance Floor" vinyl flooring, 1.3 mm thickness, loose laid on subfloor with cloth gaffer's tape to join adjacent rolls.

D. Base: Vented cove as specified below.

E. Total thickness of Subfloor and finish floor: 2 1/8"

2.3 SEMI-PERMANENT INSTALLATION OF ROSCO SUBFLOOR SYSTEM
SPRUNG FLOOR ASSEMBLY WITH VINYL FINISH FLOOR

C. Vapor Barrier: Polyethylene sheet as specified below.

D. Subfloor: Rosco Laboratories Inc. Subfloor System semi-permanently installed consisting of the following:

1. Rosco Subfloor System Panels consisting of:
 - a. 1" thick closed cell foam pads
 - b. 1/2" Medium Density Fiberboard Sleeper Layer
 - c. 1/2" Medium Density Fiberboard Top Surface Layer
 - d. Panels are glued in the factory with wood composite glue and minimum adequate clamping force (1872 psf minimum uniformly applied for at least 30 minutes).
 - e. Panels are edge routed with 1/16" roundovers on all exposed edges.
 - f. Panels are joined with extended wavelock tabs and corresponding recesses in the sleeper layer.
 - g. All Medium Density Fiberboard to be homogenous domestically sourced hardwood based and domestically manufactured.
 - h. All materials to be warehoused within prescribed humidity requirements of the manufacturer.
 - i. All panel batches are to be checked against caliper standards for length and width and edge swelling standards.
2. The edge of the subfloor is finished on site with Rosco Subfloor System Customizing Panels consisting of:
 - a. 1" thick closed cell foam pads
 - b. 1/2" Medium Density Fiberboard Sleeper Layer
 - c. 1/2" Medium Density Fiberboard Top Surface.
 - d. Customizing Panels are edge routed with 1/16" roundovers on all exposed edges.
 - e. Customizing Panels are joined to Subfloor panels with extended wavelock tabs and corresponding recesses.

- f. All Medium Density Fiberboard to be homogenous domestically sourced hardwood based and domestically manufactured.
 - g. All materials to be warehoused within prescribed humidity requirements of the manufacturer.
 - h. Customizing Panels are cut on site at installation to fit to 4" from all walls.
 - i. At wall, 2" x 4" domestically sourced fir blocking to be laid on the flat and secured to the supporting slab floor with powder actuated pins or other appropriate hardware.
 - j. Top surface of Customizing Panel to be cut on site to fit and secured to sleeper layer, blocking and Subfloor panels with coarse threaded wood screws on 6" centers.
- 3. As needed, ADA Compliant Rosco Subfloor System ramps are to be installed on 1 1/2" high-site installed blocking.
 - 4. Subfloor to be kept back from all walls by 1/2"
 - 5. Subfloor Performance must comply with ESTA E1-26 (2006) performance standards.

C. Finish Floor:

- 1. Vinyl: Rosco Laboratories: "Dance Floor" vinyl flooring, 1.3 mm thickness, anchored to subfloor with double sided tape and all joints chemically welded with tetrahydrofuran sealer.

D. Base: Vented cove as specified below.

F. Total thickness of Subfloor and finish floor: 2 1/8"

2.5 ACCESSORIES

A. Vapor Retarder: ASTM D 4397, polyethylene sheet not less than 6 mils thick.

B. Resilient Wall Base: Molded, vented, rubber or vinyl cove base; 4 by 3 by 48 inches; with premolded outside corners.

- 1. Color: As selected by Architect

C. Thresholds: As specified in Division 8 Section "Door Hardware"

D. Fasteners: Type and size recommend by manufacturer, but not less than those recommended by MFMA for application indicated.

E. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by dance floor manufacturer

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas and conditions, with Installer present, for compliance with requirements for maximum moisture content, installation tolerances, and other conditions affecting performance of dance-floor assemblies and performance floor assemblies.
1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with installation of dance floor assemblies.
 2. Proceed with installation only after unsatisfactory conditions have been corrected
- B. Concrete Slabs: Verify that concrete slabs comply with requirements in Division 3 Section “Cast-in-Place Concrete” and prepare according to ASTM F 710 to provide surface level to 1/8 inch in 10 feet
1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 2. Moisture Testing: Perform tests recommended by the manufacturer and as follows. Proceed with installation only after substrates pass testing.
 - a) Perform anhydrous calcium chloride test, ASTM F1869, as follows:
 - 1) Perform tests so that each test area does not exceed 200 square feet and perform not less than 2 tests in each installation area and with test areas evenly spaced in installation areas.
 - 2) Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3.5 lbs of water per 1000 square feet in 24 hours.
 - b) Perform relative humidity test using in situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
 - c) Concrete sub floors shall have an adequate moisture barrier beneath and at the perimeter of the slab.

3.2 PREPARATION

- A. Grind high spots and fill low spots on concrete substrates to remove ridges, irregularities and roughness substrates with a maximum 1/8 inch deviation in any direction when checked with a 10 foot straight edge.
 - 1. Use trowelable leveling and patching compounds, according to manufacturers written instructions, to fill cracks, holes, and depressions in substrates.
- B. Remove substrate coatings including but not limited to paint, soap, wax, oil, grease, silicone, solvents, adhesives, adhesive removers, alkaline salts, laitance, dust, mold, mildew, curing compounds, sealers, hardeners, and other contaminants.
 - 1. Shot blasting, grinding, honing, scraping, brushing, vacuuming, and other means or combination of methods may be required.
- C. Broom and vacuum clean substrates to be covered immediately before product installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

- A. General: Install in accordance with manufacturer's recommendations
 - 1. Install flooring only after all finishing operations, including painting, have been completed and permanent heating system is operating. Moisture content of substrates, building air temperature and relative humidity must be within limits recommended by flooring manufacturer.
- B. Cover substrate with vapor retarding membrane, overlap seams 6 inches and tape. Extend membrane approximately 6 inches up the walls
- C. Subfloor Assembly for semi-permanent installation: Install subfloor assembly in accordance with manufacturer's written instructions, and as follows.
 - 1. Install Rosco Subfloor Panels keeping the assembly centered in the room in both directions.
 - 2. Cut Customizing panels to fit between the wall and installed Subfloor Panels, keeping the Customizing Panels back from the wall by 4".

3. Install perimeter blocking using powder actuated fasteners on 16 to 24 inch centers to a minimum imbed depth of 1 inch. Make sure perimeter is level and shim as necessary.
4. Secure top layer of Customizing panels to sleepers layer, adjacent Panels and perimeter blocking with coarse threaded wood screws on 6" staggered centers.
5. Sand joints as needed.

D. Vinyl Finish Floor Installation.

1. Finish flooring shall be unrolled and stored on the premises for at least 24 hours before installation commences, or as required for acclimation. The flooring installer will make final determination of acclimation period.
2. Vinyl finish flooring shall be installed in accordance with manufacturers recommended instructions and procedures.

E. Vented Cove Base Installation.

1. Install Vented Cove Base per manufacturer's recommended procedures

3.4 CLEANING AND PROTECTION

A. Vinyl Flooring: Protect dance floor assemblies during remainder of construction period to allow sealer to cure and to ensure that flooring and finish are without damage or deterioration at time of Substantial Completion

1. Immediately after vinyl dance floor installation, remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by dance floor manufacturer
2. Do not cover floors until seam sealer reaches full cure, and not before two days after finishing installation.
3. Do not move heavy and sharp objects directly over dance floors.
4. Protect installed dance floors to comply with CRI 104, Section 16, "Protection of Indoor Installations."

B. Remove all unused materials and debris, and leave premises in clean and orderly condition, ready for final inspection.

END OF SECTION 09646