



ProFormance Systems Cruzar Floor System Specifications
for Permanent or Semi-permanent installations.

PART 1 - GENERAL

Cruzar is a custom installed floating floor system designed for permanent installation in multi-use studios and stages intended for dance, aerobics, martial arts, and other athletics. Cruzar is also designed for acoustic isolation installation. Along with acoustic isolation, Cruzar is primarily designed to provide correct, consistent, and safe suspended flooring. ProFormance Systems also sells and furnishes Marley dance overlays and pre-finished hardwood for inclusion to Cruzar surface. ProFormance Systems Cascade Marley overlay is typically used for all dance disciplines and is adhered to Cruzar surface by specified adhesives or is loose laid. ProFormance Systems Reversible Marley is loose laid. Alternate overlays furnished by ProFormance Systems include hardwoods, softwoods, Medium Density Fiber Board sheathing.

1.1 DESCRIPTION

Furnish 100% suspended, acoustically rated, and fully integrated wood floor system which provides a consistent and progressively resilient surface with controlled cruzar over entirety of installed floor surface.

Cruzar finished height is (4" for hardwood) or (3 ½" for Marley) from existing surface to finish surface for option "B" under the subfloor section .

Cruzar meets DIN 18032 Part 2. Cruzar is designed for appropriate overlay as surface.

1.2 ENVIRONMENTAL REQUIREMENT

1. Alter installation method if direct sunlight contacts floor surface for prolonged time.
2. If applicable, activate hydronic floor heating at least 12 days prior to installation of Floor System.
3. Facility climate shall be controlled by heating and air conditioning systems. Temperature during installation and use shall be 65-75 degrees F and shall not fluctuate by more than 15 degrees. Ambient humidity shall not exceed 40 percent moisture content and be not less than 15 percent moisture content. Cruzar is not recommended for installation above 8,000 foot elevation without appropriate climate control of temperature and humidity levels. Cruzar is not intended for outdoor use.

PART 2 - PRODUCTS

2.1 MANUFACTURER – ProFormance Systems, LLC,
PO Box 940191
Plano, TX 75094
Phone: 888-737-7125
Email: sales@proformancesystems.com

2.2 MATERIALS

A. Sub-Floor

- 1) **Vapor Barrier:** 6mil polyethylene vapor barrier applied to the entire surface of the floor.
- 2) **Bottom Layer:**
 - a) 7/16" 5lb pad is applied to the entire surface area of the floor.
 - b) 3/4" Neoprene pads spaced 16" o/c
- 3) **Floats / Resilient Layer:**
 - a) 3 layers of 1x4 (2 1/4") Southern yellow pine 1x4 arranged in three layers running perpendicular to one another. Clear (or low knot) boards are used to insure durability. This portion of the sub floor also uses construction grade adhesive to eliminate squeaking.
 - b) 2x4 #2 or better staggered ends @16" o/c
- 4) **Surface:**
 - a) 7/16" Oriented Strand Board (OSB) bonded under extreme pressure and heat with water resistant #2 or better glue mixtures. Panel contains no interior or exterior veneers. Panel is precision sanded on top side to assure uniform 7/16" thickness and smoothness of surface. Panel is water resistant. Panel has excellent resistance to warping.
 - b) Double layered 1/2" T&G plywood top layer applied either perpendicular or diagonally.
- 5) **Surface Overlays:** PFS Cruzar floating sub floor surface must be overlaid with appropriate material for intended purpose, including PFS Marley, hardwood, softwood, high-density sheathing, etc. Other overlays include, but are not limited to carpet, hardboard, plank hardwood, and plank softwood. Overlays should be installed in accordance with overlay manufacturer's instructions. PFS Marley overlay is to be adhered to Cruzar surface by appropriate adhesives.
 1. **Hardwood:** All hardwoods are 3/4" solid pre-finished (unless otherwise specified) Finishes vary between 25yr.-50yr. depending on the grade chosen by the client. Hardwoods are pre-finished with an aluminum oxide finish. Further specs depend upon species and grade.
 2. **Marley:** Is a slip resistant surface made from a PVC Composite Material. Weight 3.5 lbs/yd² (1.9 kg/m²). Fire Rating M3 DIN 4102-1 class B1

B. Transition Ramp-Reducer Dimensions

B. Standard Ramp-Reducer: Extra Heavy Duty 5-6" wide x 1/2" high aluminum fluted top threshold. (Unless otherwise specified)

C. Trim work

1) **Primed MDF Base –**

Thickness	12mm - 15mm
Density	31 lbs
Internal Bond	87 psi
Molding Rupture	4,000 psi
Molding Elasticity	280,000 psi
Water Absorption (24hrs)	40%
Thickness Swell (24hrs)	10%
Moisture Content	8%
Face	168 lbs

Edge

135 lbs

2) **Vented cove base by Johnsonite**

Size: 4" (10.16 cm) high by 5/16" (7.94 mm) thick coved profile with a 3" (7.62 cm) long by 3/8" (9.53 mm) thick toe. Back surface grooved with vertical semi-circular (5/32" radius) vents (15 vents per 4 ft. length). Length: 4' (1.22 m)

PART 3 - EXECUTION

3.1 SITE PREPARATION

A. Concrete Sub floor

Allow at least 31 days for new concrete to cure. Surface concrete shall be dry and free of grease, oil, or contaminating agents. Eliminate cracks, nails, and other protrusions. Vacuum and damp mop concrete sub floor no less than 5 hours prior to installation. Concrete Sub floor shall be smooth, on same elevation, and exhibit no greater deviation in elevation than 3/8" over a 10 ft. radius. If sub floor requires leveling with compound, use only latex based leveling compound applied at least 1/4" thick having point load capability of no less than 250 lbs per square foot static load. 6 mil or thicker plastic sheeting is to be used as moisture barrier. Assess moisture content of slab prior to installation based on PFS spec.

Below are the recommended maximum levels of moisture based on average conditions only. Installation conditions may vary; therefore, manufacturer accepts no liability for the following data:

cement / smooth	2.0 per cent
cement coating w/ pumice	3.0 per cent
cement/bitumen	2.0 per cent
anhydrite coating	0.5 per cent
plaster coating	0.7 per cent
magnetite coating	5.0 per cent

If sub floor contains excessive alkaline salts, or moisture content of sub floor is beyond limits specified, sub floor must be sealed accordingly to achieve a continually dry sub floor surface, free of contaminants.

B. Wood Sub floor

Surface of wood sub floor shall be dry and free of dust, oil, grease, and cracks. Eliminate nails, splinters and other protrusions. Sub floor shall be smooth, on same elevation, and exhibit no greater deviation in elevation than 1/2" over a 10 ft. radius. Use hardboard, plywood, or OSB to level sub floor if necessary. Moisture content shall not exceed 7-10 per cent. Must be structurally sound with point loading capability of no less than 250 lbs per square foot. Built-up wood flooring shall have beams or sleepers on at least 16" centers, surfaced by no less than 1-1/2" of composite sheeting such as plywood, plycore, OSB, or other sheeting products appropriate for conditions. Evidence of shift or instability in existing wood sub floor, including but not limited to separation of floor boards, excessive or inconsistent spaces between wood sub-floor and walls, buckling or warpage, requires upgrading or replacement of sub-floor prior to installation of

Cruzar.

C. Steel Sub floor

Surface of steel sub floor shall be dry and free of dust, oil, and grease. Eliminate burrs, slag, cracks, and any protrusions prior to installation. Sub floor shall be smooth, on same elevation, and exhibit no greater deviation in elevation than 1/2" over a 10ft. radius. Must be structurally sound with point loading capacity of no less than 250 lbs. per square foot.

D. Ballet Barres - Remove existing floor-mounted ballet barres prior to installation of Cruzar System. Sub floor located under ballet barres will be reinforced. Re-install ballet barres onto modified sub floor.

3.2 INSTALLATION

PFS Cruzar System shall be considered finish material. All trowel trades, painting, wall-mounted barres and mirrors, wall and overhead electrical, lighting, and sprinkler systems shall be completed and operational. No overhead work of any type shall be conducted following installation of PFS Floor System. After installation, protect floor from foot traffic, ladders, carts, tool boxes, etc.

3.3 MAINTENANCE AND STORAGE

A. Pianos or other moveable equipment used on PFS Floor Systems shall be fitted with neoprene or polyurethane tired casters at least 4" in diameter with a tread width of 2". Using hardboard or other protective material to create pathway, move pianos or heavy equipment to different locations on the PFS Floor weekly. For permanently located pianos or heavy equipment (including but not limited to, risers, telescoping seating, and desks), contact PFS for information about special modification options.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.