

GUIDE SPECIFICATIONS - ROBBINS PULASTIC-2000®

Part 1 - GENERAL

1.01 DESCRIPTION

A. Scope

1. The complete installation of ROBBINS PULASTIC polyurethane surfacing over polyurethane/rubber granulate base, by Robbins, Inc. of Cincinnati, Ohio, including adhesives, base mat, polyurethane sealer, polyurethane resin, surface finish, and game lines.

B. Related work specified under other sections: (A cross reference should be incorporated in these sections)

1. Substrate Buildup:

- a. Asphalt for outdoor or indoor installations
- b. Concrete for indoor installations...Section 03300

2. Slab Depression

a. Depression shall be thickness equal to total thickness of base mat (4, 7 or 9 mm) and polyurethane layers (2 mm).

3. Slab Tolerance

- a. Slab tolerance is (+/-) 1/8" in radius of 10'. Surface steel troweled.
- b. NO CURING AGENTS OR SEALERS ARE TO BE APPLIED TO THE CONCRETE SLAB.

4. Membrane waterproofing and damp-proofing...Section 07100

a. Concrete subfloors on or below grade shall be adequately waterproofed beneath and at the perimeter of the slab and on the earth side of below-grade walls.

5. Thresholds: Metal...Section 08700

6. Game standard inserts...Section 11500

1.02 QUALITY ASSURANCE

A. Supplier Qualifications

1. Supplier shall be an established firm experienced in field: Robbins, Inc., or an approved equal.

B. Installer Qualifications

1. Flooring contractor shall be experienced in the flooring field and approved by supplier.
2. Flooring contractor shall be factory-approved and have completed at least three projects of similar magnitude and complexity.
3. Submit three copies of supplier's recommendations for correct preparation, finishing and testing of concrete subfloor surface to receive granulated base mat and polyurethane floor system.

1.03 SUBMITTALS

A. Supplier's Product Data: Submit three (3) copies

B. Samples: Submit one (1) sample of ROBBINS PULASTIC

C. Maintenance Literature: Submit three (3) copies of ROBBINS PULASTIC maintenance instructions.

1.04 DELIVERY AND STORAGE

A. Delivery of Materials

1. Material shall not be delivered or installed until all masonry, painting, plastering, tile work, marble and terrazzo work are completed, and all overhead mechanical work, lighting, backstops, scoreboards are installed. Room temperature shall be at least 55 degrees Fahrenheit and moisture

content of concrete slab of 4% or less.

2. Area where materials are to be stored should be maintained at 55 degrees Fahrenheit and under 50% relative humidity by the General Contractor.

1.05 JOB CONDITIONS

A. Schedule of Installation

1. Do not install floor system until concrete has been cured sixty (60) days, and the conditions in Paragraphs 1.01 and 1.04 are obtained.
2. Environmental temperatures must average a minimum of 65 degrees Fahrenheit for one full week preceding, throughout, and 72 hours following application.
3. After ROBBINS PULASTIC sports surface is installed and gamelines are painted, area is to be kept locked by General Contractor to allow curing time for the paint and finish system(s). No other trades are to be allowed on floor until it is accepted in writing by owner or owner's authorized agent.

1.06 GUARANTEE

A. Guarantee shall not cover damage caused in whole or in part by casualty, ordinary wear and tear, abuse, use for which material is not designed, faulty construction of the building, settlement of the building walls, failure of the other contractors to adhere to specifications, separation of the concrete slab and excessive dryness or excessive moisture from humidity, spillage, mechanical failure, migration through the slab or wall, or any other source.

B. Robbins, Inc. hereby warrants ROBBINS PULASTIC to be free from manufacturing defects for a period of one (1) year. This warranty is in lieu of all other warranties, expressed or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose, and of any other obligations on the part of Robbins, Inc. In the event of breach of any warranty, the liability of Robbins shall be limited to repairing or replacing ROBBINS PULASTIC material as supplied by Robbins, Inc., and proved to be defective in manufacture, and shall not include any other damages, either direct or consequential.

PART 2 - PRODUCTS

2.01 MATERIALS

NOTE: USE OF ANY NON-APPROVED COMPONENT SUBSTITUTIONS SHALL VOID WARRANTY.

A. Robbins Pulastic

1. Adhesive
 - a. Pulastic Taclly Adhesive: A two-component polyurethane
2. Base Mat (Resilient):
 - a. Granulated rubber mat containing polyurethane binder shall be of (4, 7 or 9 mm) thickness.
3. Base Mat Sealer
 - a. Pulastic EG-Sealer: A two-component polyurethane sealer
4. Polyurethane Resin
 - a. Pulastic-2000 Resin: A pigmented two-component polyurethane
5. Coating
 - a. Pulastic 3-PU-221 Coating: A pigmented two-component polyurethane surface paint
6. Game Line Paint
 - a. Pulastic PU-Line Paints: A pigmented two-component polyurethane paint

B. Technical Information

- *Surface hardness (DIN 53505)...76 Shore A
- *Compression modulus by D.S.F...8 kgf/cm²/mm
- *Rebound resilience (DIN 53512)...29%
- *Coefficient of friction by Leroux
 - Dry...0.71
 - Wet...0.27
- *Ball rebound...1.29
- *Wear resistance (Taber H18)
 - 500 cycles...1.7% vol.
 - 1000 cycles...1.9% vol.
- *Compression set (DIN 53517)...1.9%
- *Impact resistance by OGI...2 Kgm/cm²
- *Resistance to rolling loads (DIN 18032)
 - 100 kilogram load...no damage
- *Tensile Strength (DIN 53571)...6.5 N/mm²
- *Elongation at break (DIN 53571)...140%
- *Water absorption
 - Top layer...2%
 - Resilient rubber pad...20.8%
- *Inflammability of Top Layer (DIN 51960)...Inflammable
- *Heat resistance...0.089 m² K/W

PART 3 - EXECUTION

3.01 INSPECTION

- A. Inspect concrete (or asphalt / or wooded) substrate for dryness, proper tolerance, and possible contamination, (see Part 1-Sec 1.01 and Sec 1.04) and report any discrepancies to General Contractor in writing.
- B. All work required to put concrete (or other) substrate in acceptable condition shall be the responsibility of the General Contractor.
- C. Substrate shall be broom cleaned by the General Contractor.
- D. Installer shall perform tests for moisture and adhesion prior to application and report adverse conditions to the general contractor in writing.

3.02 INSTALLATION

A. ROBBINS PULASTIC

1. Mix two-component Taclly Adhesive according to supplier's directions and spread adhesive using ROBBINS PULASTIC notched trowel.
2. Unroll polyurethane/rubber granulated base mat into freshly applied adhesive. Seams shall be in virtual contact with absence of compression fit. Roll surface of base mat with a medium-size roller.
3. Mix two-component EG-Sealer according to supplier's directions and spread sealer over base mat using a straight trowel. Allow to cure minimum 12 hours before proceeding.
4. Mix two-component ROBBINS PULASTIC-2000 pigmented polyurethane resin and spread over EG-Sealer coat using a straight trowel. Allow to cure minimum 12 hours before proceeding.
5. Mix two-component ROBBINS PULASTIC-2000 pigmented polyurethane resin and apply at proper thickness in accordance with supplier's instructions. Allow to cure minimum 12 hours before proceeding.

6. Mix two-component ROBBINS PULASTIC 3-PU-221 polyurethane finish coating and apply using ROBBINS PULASTIC lambswool roller. Allow minimum 48 hours curing time before proceeding.

B. Game Lines

1. Mix two-component ROBBINS PULASTIC PU-Line striping paint in accordance with supplier's instructions.
2. Line painting should be in accordance with supplier's directions.
3. Color of game lines shall be chosen from ROBBINS PULASTIC PU-Line standard colors.
4. Consult architectural drawings for game line locations and chosen colors.

C. Perimeter Molding (Optional): Install a rubber base, anchored to the walls with standard base cement.

D. Clean up all unused materials and debris and remove from the premises. Dispose of empty containers in accordance with federal and local statutes.

3.03 PROTECTION

A. Cure Time

1. No traffic or other trades shall be allowed on the surface for a period of one week following completion to allow for complete and proper cure of the finish.

B. Other Trades

1. It shall be the responsibility of the general contractor to protect the surface from damage by other trades before acceptance by the owner or the owner's authorized agent.

C. Safety

1. No smoking, open flames or sparks from electrical equipment or any other source shall be permitted during the installation process, or in areas where materials are stored.