

3-Part Specification: ElastoFloor™ Roll-Pour



SURFACEAMERICA®

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PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes: Poured gymnasium & field house floor surfacing system.

Specifier Note: Revise paragraph below to suit project requirements. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the paragraph below. In the absence of related sections, delete paragraph below.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard. It is a listing of all references used in this section.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
2. ASTM D471 Standard Test Method for Rubber Property-Effect of Liquids.
3. ASTM D575 Standard Test Methods for Rubber Properties in Compression.
4. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

ElastoFloor™ Roll-Pour

A. Description: 4-12mm rubber base layer

2mm Polyurethane wear layer

B. Testing Procedure: Testing was performed according to DIN 18032-2, and ASTM D-412, D-4060, and D-624. Test results based on 7+2mm systems.

C. Performance Requirements:

Ball Rebound DIN 18032 99%

Surface Hardness ASTM D-2240 75+/-5

Wear Resistance ASTM D-4060

(500 g/H18/3000 revolutions) 0.17

Friction DIN 18032-2 0.42

Impact Resistance DIN 18032-2 11Nm

Standard Information DIN 18032-2 0.7mm

Shock Absorption DIN 18032-2 23%

D. Top Layer Properties:

Tensile ASTM D-412 18.4Nmm²

Elongation at Break ASTM D-412 813%

Tear Strength ASTM D-624 37.3N/mm

Inflammability of Top Layer Class 1 – not flammable

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data and installation instructions.

C. Verification Samples: Submit manufacturer's standard verification samples.

D. Quality Assurance/Control Submittals: Submit the following:

1. Certificate of qualifications of the gymnasium & field house flooring installer.

E. Closeout Submittals: Submit the following:

1. Warranty documents specified herein.

Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Qualifications: Utilize an installer having experience with projects of similar scope and complexity.

Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F and a maximum temperature of 100 degrees F. Maintain maximum 50% relative humidity.

Specifier Note: In article below, state physical or environmental limitations or criteria for installation such as weather, temperature, humidity, ventilation or illumination required for proper installation or application.

1.07 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 60degrees F and maximum ambient temperature is 100 degrees F.

1. The building shall be enclosed and weather tight.

2. Permanent heat, light and ventilation shall be installed and operating during and after installation.

3. Moderate room temperature of 65-75 degrees F or more, and humidity no higher than 50% shall be maintained for a week prior to and during installation.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.

1.08 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

Specifier Note: Coordinate subparagraph below with manufacturer's warranty requirements.

1. Warranty Period: 2 years from date of substantial completion.

PART 2 – PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 POURED GYMNASIUM & FIELD HOUSE FLOOR SURFACING SYSTEM

Specifier Note: Retain or delete paragraph below per project requirements and specifier's practice.

A. Manufacturer: Surface America, Inc.

1. Contact: PO Box 157, Williamsville, NY 14231; Telephone: (800) 999-0555, (716) 632-8413; Fax: (716) 632-8324; E-mail: info@surfaceamerica.com; website: <http://www.surfaceamerica.com>.

B. Proprietary Products/Systems: Poured gymnasium & field house floor surfacing system, including the following:

1. ElastoFloor Roll-Pour System:

a. Material: Resilient rubber base, with liquid polyurethane.

b. Surface Color: [Signal Green] [Beige Brown] [Golden Yellow] [Silver Grey] [Beige] [Green] [Sky Blue] [Pale Green] [Grey Beige] [Pastel Blue] [Oxide Red] [Custom Color Match: (Specify color.)].

c. Line Paint Color: [Black] [Blue] [Red] [White] [Green] [Yellow] [Grey] [Orange].

Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

Specifier Note: **Specify** subordinate or secondary items that aid and assist primary products specified above or are necessary for preparation or installation of those items.

2.03 MATERIALS

A. Accessory Materials: Refer to other sections for related materials.

B. Proprietary Products: Provide flooring materials as follows:

Specifier Note: Retain paragraph below applicable to specified system.

1. ElastoFloor Roll-Pour System:

a. ElastoFloor primer coating – if required

b. Rubber underlayment – recycled, prefabricated

a. Seal layer

b. Resin layer - self leveling, 100% 2-component polyurethane

- c. Finish layer - ElastoFloor pigmented polyurethane coating
- d. Game markings - ElastoFloor 2-component polyurethane line paints

PART 3: EXECUTION

Specifier Note: Revise article below to suit project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

B. Comply with the instructions and recommendations of the gymnasium & field house flooring manufacturer.

Specifier Note: Specify actions to physically determine that conditions are acceptable to receive primary products of the section.

3.02 EXAMINATION

A. Site Verification of Conditions: Verify that substrate conditions are suitable for installation of the gymnasium flooring system.

B. Do not proceed with installation until unsuitable conditions are corrected.

Specifier Note: Specify actions required to physically prepare the surface, area or site or to incorporate the primary products of the section.

3.03 PREPARATION

A. Surface Preparation: Ensure that the substrate is level or uniformly sloped since surface variations may be telegraphed through to the flooring surface.

B. Prepare substrate to provide a medium, dense finish with level tolerance of (+) or (-) 1/8" (3.2 mm) in any 10' (3 m) radius.

C. Do not install flooring until all masonry, painting, plaster, tile, marble and terrazzo work is completed, and overhead mechanical trades and painters have finished in the areas to receive the flooring.

1. Do not begin flooring installation until all subcontract work that would cause damage, dirt, dust or interruption of normal installation pace is completed.

D. Sub-floors shall be clean, dry, and free from dirt, dust, oil, grease, paint, alkali, concrete curing agents, hardening and parting compounds, old adhesive residue or other foreign materials.

E. The installation area shall be closed to all traffic and activity for a period to be determined by the flooring contractor.

Specifier Note: Coordinate article below with manufacturer's recommended installation requirements. Retain paragraph applicable to specified system.

3.04 INSTALLATION

SITE CONDITIONS

Building must be closed in, permanent lighting and HVAC must function. Room must be conditioned prior to and during installation of systems. Relative humidity must not exceed 60% during installation.

All backboards and overhead work must be completed. All in ground sleeve must be set and level with final playing surface. No other trades will be allowed in the work area. Stored materials must be protected and kept at a minimum of 40 F and a maximum of 100 F.

SUBSTRATE

Apply no sealers or curing compounds to the concrete.

The slab shall meet a tolerance of 1/8" in 10'. Concrete shall cure a minimum of 60 days and test for moisture content of less than 5%. The concrete shall be free of all bond breakers, such as paint, joint compound, etc. The final slab shall be clean, level, and dry. If substrate does not meet specified tolerances, high spots shall be ground down smooth and low spots leveled with approved materials. Consult with manufacturer.

INSTALLATION

- Primer – If required, apply 1-part polyurethane primer to substrate at the rate of 400-500 SF per gallon.
- Rubber underlayment – Mix and apply, with proper notched trowel, 2-part polyurethane adhesive at the rate of .15 lbs. per SF. Install prefabricated rubber underlayment into fresh adhesive, cut and fit as necessary, do not compress seams, roll mat with 80-100 LB linoleum roller to ensure transference of adhesive, repeat as necessary.
- Seal Layer – Mix and apply 2-part non-sag polyurethane, with flat trowel at the rate of .13 lbs. per SF, to seal pores in rubber underlayment.
- Top resin layer – Mix and apply 2-part polyurethane elastomer, with Swedish knife, in a wet-to-wet fashion, at the rate of .55 lbs. per SF, to achieve typical 2mm thickness.
- Finish – Mix and roll apply 2-part pigmented polyurethane coatings to resin layer, at the rate of .03 lbs. per SF.
- Game line markings – Measure, lay out, mask, mix and apply 2-part marking compounds, and apply game lines, as required.

CURE TIME

Do not allow foot traffic or other trades on completed floor system for a period of one week, or as per manufacturers recommendations.

3.05 PROTECTION

A. Protect the installed flooring surface from damage resulting from subsequent construction activity on the site.