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Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, contained in the *CSI Manual of Practice*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings.

Delete all Specifier Notes when editing this section.

SECTION 02792

POURED-IN-PLACE PLAYGROUND SURFACING

Specifier Notes: This section covers SofSURFACES "SofCRETE®" resilient, poured-in-place, playground safety surfacing. Consult SofSURFACES for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Resilient, poured-in-place, playground safety surfacing.

1.2 RELATED SECTIONS

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

Include the section number and title of the following two Division 2 sections, if they are referenced in this section.

- A. Section 02_____ - _____ : Granular aggregate subsurface.

- B. Section 02_____ - _____ : Asphalt subsurface.
- C. Section 02791 - Playground Surfacing Tiles.
- D. Section 02880 - Play Field Equipment and Structures: Playground equipment.
- E. Section 03300 - Cast-in-Place Concrete: Concrete subsurface.

1.3 REFERENCES

Specifier Notes: List standards referenced in this section, complete with designations and titles. This article does not require compliance with standards, but is merely a listing of those used.

- A. ASTM D 412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension.
- B. ASTM D 624 - Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
- C. ASTM D 2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
- D. ASTM D 2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.
- E. ASTM F 1292 - Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
- F. US Consumer Product Safety Commission (CPSC) Handbook for Playground Safety.

1.4 SUBMITTALS

- A. Comply with Section 01330 - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Samples: Submit manufacturer's samples of poured-in-place playground safety surfacing showing texture, color, and thickness.
- D. Test Reports: Submit certified test reports from qualified independent testing agency indicating results of impact attenuation testing.
- E. Certificate of Compliance: Submit manufacturer's certificate of compliance indicating materials comply with specified requirements.
- F. Manufacturer's Project References:
 1. Submit list of successfully completed projects.
 2. Include project name and location, name of architect, and type and quantity of poured-in-place playground safety surfacing furnished.
- G. Installer's Project References:

1. Submit list of successfully completed projects.
2. Include project name and location, name of architect, and type and quantity of poured-in-place playground safety surfacing installed.

H. Maintenance Instructions: Submit manufacturer's maintenance and cleaning instructions.

I. Warranty: Submit manufacturer's standard warranty.

1.5 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Manufacturer shall meet a minimum of 1 of the following 2 requirements.

1. Continuously engaged in manufacturing of poured-in-place playground safety surfacing of similar type to that specified, with a minimum of 10 years successful experience.
2. Furnished a minimum of 1,000,000 square feet of poured-in-place playground safety surfacing of similar type to that specified.

B. Installer's Qualifications:

1. Successful experience in installation of poured-in-place playground safety surfacing of similar type to that specified, with a minimum of 20 projects completed within last 5 years.
2. Employ persons trained for installation of poured-in-place playground safety surfacing.
3. Approved by manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage:

1. Store materials in accordance with manufacturer's instructions.
2. Store materials in a dry area at a minimum temperature of 50 degrees F (10 degrees C) for a minimum of 72 hours before installation.

C. Handling: Protect materials during handling and installation to prevent damage or contamination.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Material Temperature: Ensure material temperature is a minimum of 50 degrees F (10 degrees C) at time of installation.

B. Air Temperature: Ensure air temperature is a minimum of 40 degrees F (4 degrees C) for a minimum of 24 hours before, during, and a minimum of 72 hours after installation.

1.8 WARRANTY

A. Materials and Workmanship: Poured-in-place playground safety surfacing installation shall be warranted for defects in materials and workmanship for 5 years from date of completed installation.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. SofSURFACES, Inc., 4393 Discovery Line, PO Box 239, Petrolia, Ontario N0N 1R0, Canada. Toll Free (800) 263-2363. Phone (519) 882-8799. Fax (519) 882-2697. Website www.sofsurfaces.com. E-mail alltinfo@sofsurfaces.com.

2.2 POURED-IN-PLACE PLAYGROUND SURFACING

- A. Poured-in-Place Surfacing: "SofCRETE".
1. Series: Premium.
 2. Description: Dual-density, resilient, seamless, poured-in-place, playground safety surfacing.
 3. Compliance: Meet or exceed CPSC guidelines for impact attenuation.
 4. Material: SBR and EPDM rubber shreds and granules mixed with 100 percent solids MDI polyurethane binding agent.
 5. Base Course: Mixture of SBR shredded rubber and MDI polyurethane binding agent.
 - a. Binder to Rubber Ratio: 14 percent.
 - b. Compacted Density: 28 pcf.
 - c. Thickness: Sufficient to meet impact attenuation requirements as determined by designated fall height of playground equipment.
 6. Wear Course: Mixture of EPDM rubber granules and MDI polyurethane binding agent.
 - a. Binder to Rubber Ratio: 23 percent.
 - b. Compacted Density: 50 pcf.

Specifier Notes: Specify thickness of wear course.

- c. Thickness: [3/8 inch] [1/2 inch].

Specifier Notes: Specify total thickness of poured-in-place playground safety surfacing. Consult SofSURFACES for assistance in determining required thickness based on fall height requirements.

7. Total Thickness: [1.50 inches] [2.00 inches] [2.50 inches] [3.00 inches] [3.50 inches] [4.00 inches].

Specifier Notes: Specify colors for poured-in-place playground safety surfacing. Colors can be applied as one solid color or any combination of standard colors. It is recommended a minimum of 10 percent black be included in any blend. Consult SofSURFACES for availability of custom colors and for additional information.

8. Colors: [Light Green] [Dark Green] [Teal] [Blue] [Terra Cotta] [Purple] [Yellow] [Beige] [Brown] [Light Grey] [Dark Grey] [_____] [As indicated on the Drawings].
 - a. Granules on wear layer shall have full color through cross section.

B. Test Results:

1. Impact Attenuation, ASTM F 1292:
 - a. Gmax: Less than 200.
 - b. Head Injury Criteria (HIC): Less than 1,000.
 2. Minimum Standard Coefficient of Friction, ASTM D 2047:
 - a. Dry: 0.8.
 - b. Wet: 0.6.
 3. Tensile Strength, ASTM D 412: 80 psi.

4. Tear Strength, ASTM D 624: 140 psi.
5. Flammability, Burning Pill, ASTM D 2859: Pass.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive poured-in-place playground safety surfacing. Notify Architect if areas are not acceptable. Do not begin installation until unacceptable conditions have been corrected.

3.2 PREPARATION

- A. Prepare subsurface in accordance with manufacturer's instructions to ensure proper support and drainage for poured-in-place playground safety surfacing.

Specifier Notes: Specify subsurface of granular aggregate, concrete, or asphalt.

Due to the porosity of the SofCRETE poured-in-place playground safety surfacing, it is important that a proper subsurface drainage system be constructed.

Include the following sentence when a granular aggregate subsurface is required. Include the section number of the Division 2 section specifying the granular aggregate subsurface preparation.

- B. Granular Aggregate Subsurface: Compacted, granular aggregate subsurface shall be as specified in Section 02_____ .

Specifier Notes: Include the following paragraph when a concrete subsurface is required.

- C. Concrete Subsurface:
 1. Concrete subsurface shall be as specified in Section 03300.
 2. Apply light broom finish.
 3. Ensure concrete is sound with no cracks or loose material.
 4. Ensure concrete is a minimum of 28 days old.
 5. Test concrete for moisture in accordance with manufacturer's instructions to ensure it has sufficiently cured and is dry.
 6. Power wash existing concrete in accordance with manufacturer's instructions.

Specifier Notes: Include the following paragraph when an asphalt subsurface is required.

- D. Asphalt Subsurface:
 1. Asphalt subsurface shall be as specified in Section 02_____ .
 2. Ensure asphalt is sound with no cracks or loose material.
 3. Ensure asphalt is a minimum of 28 days old.
 4. Test asphalt for moisture in accordance with manufacturer's instructions to ensure it has sufficiently cured and is dry.
 5. Power wash existing asphalt in accordance with manufacturer's instructions.
- E. Variations in Elevation: Repair variations in elevation of completed subsurface greater than plus or minus 1/4 inch over 10 feet in any direction.

3.3 INSTALLATION

- A. Install poured-in-place playground safety surfacing in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Ensure prepared subsurface is dry and clean.
- C. Install edges in accordance with manufacturer's instructions and as indicated on the Drawings.

Specifier Notes: Installations over 1,500 square feet may contain a cold seam. Consult SofSURFACES for additional information.

- D. Install cold seams in areas containing graphics and as indicated on the Drawings.

3.4 CLEANING

- A. Clean poured-in-place playground safety surfacing in accordance with manufacturer's instructions.

3.5 PROTECTION

Specifier Notes: Estimated time to obtain 80 percent cure will range from 6 to 48 hours depending on temperature and humidity. Consult SofSURFACES for additional information.

- A. Do not allow foot traffic on poured-in-place playground safety surfacing until a minimum of 80 percent cure is obtained.
- B. Protect completed playground safety surfacing from damage during construction.

END OF SECTION