

PART 1 GENERAL

1.1 SECTION INCLUDES

- .1 Fluid applied epoxy flooring.

1.2 RELATED SECTIONS

- .1 Section 03300 – Cast-in-Place Concrete: concrete substrate.
- .2 Section 09900 – Paint and Coatings.

1.3 REFERENCES

- .1 ASTM D570 - Water Absorption of Plastics.
- .2 ASTM D638 - Tensile Properties of Plastics.
- .3 ASTM D695 - Compressive Properties of Rigid Plastics.
- .4 ASTM D905 - Strength Properties of Adhesive Bonds in Shear by Compression Loading.

1.4 SUBMITTALS

- .1 Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns and colours available.
- .2 Samples: Submit two samples, 300x300 mm in size illustrating colour and pattern for each floor material for each colour specified.

1.5 QUALIFICATIONS

- .1 Applicator: Company specializing in performing the work of this section with minimum Five years documented experience and approved by manufacturer.

1.6 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for flame/smoke rating.

1.7 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store, protect and handle products to site.
- .2 Store resin materials in a dry, secure area.
- .3 Maintain minimum temperature of 13 degrees C .
- .4 Store materials for three days prior to installation in area of installation to achieve temperature stability.

1.8 ENVIRONMENTAL REQUIREMENTS

- .1 Maintain ambient temperature required by manufacturer three days prior to, during, and 24 hours after installation of materials.

1.9 WARRANTY

- .1 Provide three year warranty.
- .2 Warranty: Include coverage against flooring delamination from substrate, degradation of surface finish, and spalling.

1.10 MAINTENANCE DATA

- .1 Maintenance Data: Include maintenance procedures, recommended maintenance materials, procedures for stain removal, repairing surface, and suggested schedule for cleaning.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- .1 Stonehard Ltd.: Product - Stoneblend GSI.
- .2 Other acceptable manufacturers:
 - .1 Neogard
 - .2 General Polymers.
 - .3 Duochem

2.2 MATERIALS

- .1 Matrix: Epoxy, two component, thermosetting, with coloured quartz silica aggregate.
- .2 Grout Coat: Epoxy, two component, clear uv resistant sealer.
- .3 Finish Coating: Two component non-reflective aliphatic polyurethane coating. Stoneseal GS6.

2.3 ACCESSORIES

- .1 Divider Strips: mm thick, height to match flooring thickness, zinc.
- .2 Subfloor Filler: type recommended by flooring material manufacturer.
- .3 Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.

2.4 COLOURS

- .1 Matrix: (EF-1) Stoneblend GSI Sand Stone.

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Verify that surfaces are smooth and flat with maximum variation of 6 mm in 3 m, and are ready to receive work.

- .2 Verify concrete floors have cured a minimum 28 days, are dry to a maximum moisture content of 7 percent, and exhibit negative alkalinity, carbonization, or dusting.
- .3 Verify floor and lower wall surfaces are free of substances that may impair adhesion of new adhesive and finish materials.

3.2 PREPARATION

- .1 Remove sub-floor ridges and bumps. Fill low spots, cracks, joints, holes, and other defects with sub-floor filler.
- .2 Apply, trowel, and float filler to achieve smooth, flat, hard surface. Grind irregularities above the surface level. Prohibit traffic until filler is cured.
- .3 Vacuum clean substrate.
- .4 Apply primer to surfaces.

3.3 INSTALLATION - STRIPS

- .1 Accurately saw cut substrate to install divider strips.
- .2 Install strips straight and level to locations indicated.
- .3 Install terminating cap strip at top of base; attach securely to wall substrate.

3.4 INSTALLATION - FLOORING

- .1 Apply in accordance with manufacturer's instructions.
- .2 Apply to a minimum thickness of 4 mm.
- .3 Finish to smooth, slip resistant level surface.
- .4 Fillet and cove at vertical surfaces up wall 150 mm.

3.5 PROTECTION OF FINISHED WORK

- .1 Prohibit traffic on floor finish for 48 hours after installation.
- .2 Barricade area to protect flooring until cured.

END OF SECTION