

# SECTION 10 02 13 RECYCLED POLYVINYL SAFETY FLOORING INSTALLATIONS

## **1. GENERAL**

### **1.01 SUMMARY**

- A. This section includes furnishing all materials, labor, equipment, and related services necessary to supply and install recycled Polyvinyl safety flooring (Eco-Grip) as indicated in the contract documents, and in compliance with applicable codes.

### **1.2 RELATED SECTIONS**

- A. Division 03 Section "Cast in Place Concrete" for general building applications of concrete.
- B. Division 22 Section "Plumbing" for drain, floor sink, floor troughs, cleanouts, and plumbing penetration conditions

### **1.3 INFORMATIONAL SUBMITTALS**

- A. Product Data: Submit manufacturer's product data and installation instructions for Commercial kitchen applications.
- B. Samples: Submit 3 Eco-Grip samples in the color reflected on the finish drawings.
- C. Certification: Submit evidence of contractor qualifications as outlined under 1.05 Quality Assurance. Provide letter from the manufacturer attesting to the installer certification.

### **1.4 CLOSEOUT SUBMITTALS**

- A. Maintenance Data: Provide detailed Eco-Grip maintenance instructions.
- B. Warranties: Provide manufacturer and installation warranties as noted under Section 1.05 Quality Assurance.

### **1.5 QUALITY ASSURANCE**

- A. Contractor will assure compliance with 1.06 Project Conditions to allow for proper installation.
- B. Comply with local governing codes and regulations.
- C. Use Eco-Grip factory trained installers that are certified and recommended by manufacturer.
- D. Manufacturer must provide a limited 10-year product warranty against manufacturing defects. (With continued use of Eco-Grip Floor Cleaner)
- E. Eco-Grip factory trained installer must provide a 1-year installation defect warranty.

## 1.6 PROJECT CONDITIONS

- A. Comply with manufacturer's written instructions for substrate temperature and humidity, ambient temperature and humidity, ventilation, and other conditions affecting the installation of Eco-Grip.
- B. Environmental Limitations: Do not install Eco-Grip flooring until building is enclosed and weatherproof, wet work is complete, and the HVAC system or temporary heating maintains temperature and humidity at normal occupancy levels.
- C. Acclimate Eco-Grip flooring parts for a minimum of 24 hours to the ambient temperature and humidity levels of spaces in which they are to be installed
- D. Verify that concrete substrate conditions provide for slope to drains allowing water flow without assistance to drainage points. ¼" per 1-foot average slope for radius' to 4' from drain center points are required.
- E. Verify that floor drains are set ¼" above with finished concrete surface, and that floor waste/grease sinks and troughs are level and set ¼" above the finished concrete surface to prevent floor drainage to those elements once the ¼" Eco-Grip floor is installed tight to these penetrations.
- F. Slab substrates must be dry and free of curing compounds, sealers, hardeners, and other materials whose presence would interfere with bonding of adhesive.
- G. Verify a clean, dry, and structurally sound surface to accept adhesive, free of cracks, ridges, depression, scales, and foreign deposits of any kind.
- H. Verify that sub-floor concrete surfaces are ready for resilient flooring installation by testing moisture emission rate and alkalinity, in accordance with ASTM F 710; obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
  - a. Reference ASTM F 710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
- I. Do not begin installation of Eco-Grip flooring until all Project Conditions have been met.

## 2. PRODUCTS

### 2.1 APPROVED PRODUCTS

- A. Eco-Grip Safety Flooring as manufactured by Allied Industries International, Inc.
  - 1. Eco-Grip Commercial Flooring. Sheets 5' x 8' in ¼" thickness with color chosen by architect as noted on plans.
  - 2. Eco-Grip Epoxy Flooring Adhesive.
  - 3. Eco-Grip V-Rod, welding rod or SpeedFlex Liquid Welding System.
  - 4. Eco-Grip Polyvinyl Cove Base Cap (high impact Polyvinyl), Stainless Steel Base Cap, or Aluminum Base Cap.
  - 5. Stainless Steel drain rings and transition strips, and #10 stainless screws and lead anchors as required
  - 6. Eco-Grip sealants
  - 7. Other installation materials as required and supplied by Eco-Grip.
- B. Eco-Grip Safety Flooring must meet the following test standards:
  - 1. ASTM G-21 Bacteria & Mildew Resistance Excellent
  - 2. ASTM D-751 Breaking Strength (md) 405lbs

3. ASTM D-751 Breaking Strength (cmd) 723lbs
4. ASTM D-2047 Coefficient of Friction (avg) Dry 1.31
5. ASTM D-695 Compressive Strength @ 20% Deformation 641 psi
6. ASTM D-751 Elongation (md) 76.5%
7. ASTM D-751 Elongation (cmd) 88.5%
8. ASTM E-648 Critical Radiant Flux 1.05W/cm<sup>2</sup> – Type 1 NFPA fire classification
9. ASTM E-648 Burn Distance 12 cm
10. Shore A Hardness 85-90 avg
11. ASTM D-751 Tear Strength (md) 76.5lbs
12. ASTM D-751 Tear Strength (cmd) 84lbs
13. NFSI UWT-101A Coefficient of Friction Standard >.06

### **3. EXECUTION**

#### **3.1 INSTALLATION**

- A. Follow manufacturer recommendations for laying sheets out. All welded joints must be offset with flooring sheets installed in an Ashlar fashion.
- B. Flooring must be cut tight to all penetrations.
- C. Adhere the floor material with Eco-Grip 2-part Epoxy mastic using the manufacturer's recommended trowel notch size (3/32).
- D. Eco-Grip seal cartridge adhesive/sealant should be used to seal base top and cap per the "Base Cap Detail" drawing, around all drains and sinks, and at all floor penetrations and transitions.
- E. Roll floor into adhesive with 100lb roller immediately
- F. Install floor drains in accordance with drawing for "Stainless Collar Floor Drain Detail" drawings. Stainless steel drain rings are to be routed into floor surface and mounted flush with top of flooring. Secure drain rings using stainless steel fasteners and lead anchors that will properly anchor the ring to the substrate.
- D. Install cove base as recommended by manufacturer with proper adhesive and top sealant.
- E. Route out V-grooves between sheets and weld all seams using Eco-Grip 7mm V-shaped welding rod or Eco-Grip SpeedFlex liquid weld system along with specified tools in accordance with Eco-Grip Floorings installation guidelines.
- F. 16-gauge Stainless steel transitions are to be installed at all doorways and transition areas. Use stainless steel fasteners, and lead anchors to secure.
- G. All exposed edges are to be sealed with manufacturer's recommended sealant to assure a watertight seal.

#### **3.2 CLEANING**

- A. Sweep-clean the floor after installation and clear area of scrap materials. The floor can be saturated and then deck brushed, power washed, or power scrubbed (only use the 3M Green Cleaning Pad) to remove construction debris.
- B. Installer must provide two copies of manufacturers cleaning recommendations for contractor and owner use.

**End of Section 10 02 13**