

**PROTECT-ALL® Commercial Flooring - 09666**  
Commercial Kitchen & Wet Area Specifications

(July, 2011)

**1. GENERAL**

**1.1 SUMMARY**

- A. Provide and install commercial resilient vinyl flooring per manufacturer's installation requirements and recommendations.

**1.2 SUBMITTALS**

- A. **Product Data:** Submit manufacturer's product data and installation instructions for watertight application.
- B. **Samples:** Submit representative sample of each material specified, indicating visual characteristics and finish.

**1.3 QUALITY ASSURANCE**

- A. Contractor will assure compliance with 2.3 Job Conditions to allow for proper installation.
- B. Comply with local governing codes and regulations.
- C. Use PROTECT-ALL factory trained installers that are approved or recommended by manufacturer.
- D. Manufacturer provides a limited 10 year product warranty against manufacturing defects. Warranty does not in any way cover installation-related issues.

**2. PRODUCTS**

**2.1 PRE-APPROVED PRODUCTS**

- A. PROTECT-ALL Commercial Flooring as manufactured by Oscoda Plastics®, Inc.
  - 1. PROTECT-ALL Commercial Flooring. Sheets 5' x 5' or 5' x 8' in ¼" thickness with color chosen from manufacturer's samples in matte finish.
  - 2. PROTECT-ALL Flooring Adhesives.
  - 3. PROTECT-ALL Fusion Base System with a minimum height of 6".
    - 3a. PROTECT-ALL Fusion Rod for Fusion base system.
  - 4. PROTECT-ALL V-Rod Welding Rod and Radius Welding Rod.
  - 5. PROTECT-ALL Aluminum/Stainless Steel Cove Base Cap.
  - 6. Stainless Steel drain rings and transition strips as provided by Oscoda Plastics.
    - 6a. Oscoda Plastics stainless steel fasteners and anchors for drain rings and transition strips
  - 7. Oscoda Plastics sealants and adhesives.
  - 8. Other installation materials as required and supplied by Oscoda Plastics, Inc.

**2.2 PRE-APPROVAL OF SUBSTITUTE MATERIALS, SYSTEMS or INSTALLERS**

- A. Submit to the architect for approval any product or system not specified or listed as pre-approved herein and in compliance with instructions to bidder's request for substitutions.
- B. Provide manufacturer documentation to support results of 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

RESILIENT SHEET FLOORING

09666 - 1

7/2011

4. ASTM D-2047 Coefficient of Friction (avg) Dry.88
  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 80-85 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
- C. Manufacturer installation instructions for watertight applications along with required accessories.
- D. Experience of installer pertaining to heat-welding PROTECT-ALL Commercial Flooring and list of factory trained installers.
- E. Provide representative samples of product depicting color and finished surface of installed flooring material. Include range samples, if variation of finish is anticipated.
- F. Provide a mock-up showing cove base, corner, and drain details with welding example.
- G. Provide documentation attesting to the successful use of product in wet areas.
- H. Provide copy of manufacturer's 10-year product warranty.

### 2.3 VERIFICATION OF JOB CONDITIONS

#### A. Proper substrate

1. Assure that the substrate material is suitable for installation of flooring as indicated by manufacturer. Approved substrates include: marine-grade wood, cement board, and concrete (non-gypsum based only), properly cleaned and prepared per manufacturers guidelines.
  - 1a. PROTECT-ALL is not to be installed over any existing finish, such as quarry tile, any paint, or any type of tile.
  - 1b. PROTECT-ALL should not be installed in an “operating environment,” meaning an environment that is not prepared to close entirely for the duration of the installation.
2. Slab substrates must be dry and free of curing compounds, sealers, hardeners, and other materials whose presence would interfere with bonding of adhesive. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by floor covering manufacturer.
3. Verify a clean, dry, and structurally sound surface to accept adhesive, free of cracks, ridges, depression, scales, and foreign deposits of any kind.
4. Use only cementitious patching and filling compounds (3500 PSI). Consult manufacturer for details. (ACI 302.2R-06 ch. 9.5)
5. Assure that the levelness (F<sub>L</sub> 15), and flatness (F<sub>F</sub>20 5/16 in 10 Ft.) of surface is in compliance with manufacturer's guidelines.
6. Verify that sub-floor surfaces (concrete, marine-grade plywood, cement board) 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. Reference ASTM F 710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
7. The following standards apply:
  - ASTM E 1745-97 – Standard Specification for Water Vapor Retarders
  - ASTM E 1643 – Standard Practice for Installation of Water Vapor Retarders used in contact with Earth or Granular Fill Under Concrete Slabs

- ASTM E 96-00 – Standard Test Method for Water Vapor Transmission of Materials
- ACI 302.1R-04 – Guide for Floor and Concrete Slab Construction
- ACI 302.2R-06 – Guide for Concrete Slabs That Receive Moisture-Sensitive Flooring Materials
- ASTM F710-08 – Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
- ASTM F 1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

B. For wood sub-floors verify the following:

1. Underlayment over sub-floor complies with requirements specified in Division 6 “Rough Carpentry”, as well as NWFA Installation Guidelines, Section 11, ch. 3-4.
2. Underlayment surface is free of surface irregularities and substances that have potential to interfere with adhesive bond, show through surface or stain floor coverings. Reference ASTM F1482 Standard Practice for Installing and Preparation of Panel Type Underlayments to Receive Resilient Flooring.

C. Environmental Conditions

1. The contractor and installer of product is responsible for providing and maintaining a proper installation environment.
2. Installation area must be enclosed and watertight with all walls, wall finishes, doors, and floor penetrations in place.
3. Proper temperature acclimation of flooring material is required prior to installation. Minimum of 36 hours.
4. Assure confinement of space during installation and curing of adhesives to prevent other trades from damaging the product or compromising the adhesion.
5. Maintain a constant temperature during the installation and throughout the curing of adhesives.
6. Provide a secure area to store materials for installation.
7. Building must be completely enclosed and watertight. HVAC system must be on at least 7 days prior to installation beginning, keeping the interior temperature at 70°. This temperature should be maintained during the installation, and an additional 8 days after completion.
  - 7a. PROTECT-ALL cannot have any foot traffic or rolling load traffic until flooring adhesive has fully cured, 7 – 8 days.

D. Proper Drain and Other Floor Penetration Elevations.

1. All drains to be installed level and with proper slope, no more than the thickness of the PROTECT-ALL MATERIAL (¼" above surface of sub floor).
2. When “dishing” of drain area is specified, the “dish” should not be less than 12" in diameter and more than 1" in depth.
3. All other penetrations should be installed no more than the thickness of the PROTECT-ALL (¼" above surface) and provide accommodation for proper sealing.
4. Penetrations not terminating at floor surface must be a minimum of 6" above the surface of floor and be installed in such a way as to not interfere with the installation of the flooring or the base material, and allow adequate space for sealant to be applied to the entire perimeter, and finished off with manufacturer specified detail.

### **3. EXECUTION**

#### **3.1 INSTALLATION**

- A. Follow manufacturer recommendations for laying sheets out.
- B. Flooring must be cut tight to all penetrations.
- C. Adhere the floor material using manufacturer’s recommended adhesive for the particular

## **RESILIENT SHEET FLOORING**

09666 - 3

7/2011

- substrate type, job conditions, and in compliance with spread rate and proper trowel size.
- D. Roll floor into adhesive with 100lb roller immediately and again within an hours time, as per manufacturer directions.
  - E. Install stainless steel drain rings around all drains and other surface penetrations. 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.
  - F. Install cove base as recommended by manufacturer with proper adhesive and top sealant. Heat-weld all seams.
  - G. Install cove base cap fastening to wall a minimum of 8" on-center using stainless steel fasteners.
  - H. Heat-weld all field material seams using manufacturer's welding rod, proper tools, and installation methods as approved by manufacturer.
  - I. Stainless steel transitions as provided by the manufacturer must be used in doorways and transition areas. Use stainless steel fasteners, and lead anchors to secure.
  - J. 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 to remove construction debris. Installer must provide two copies of manufacturers cleaning recommendations for contractor and owner use.

### 4.0 CONTACT INFORMATION

Oscoda Plastics  
5585 N. Huron Ave.  
P.O. Box 189  
Oscoda, MI 48750  
800-544-9538 Phone  
989-739-1494 Fax  
sales@oscodaplastics.com  
www.protect-allflooring.com

**End of Section 09666**