**SECTION 09775**

**Vertical Surfacing Panel System**

***Part 1: General***

**1.01 Related Documents**

**A.** Conditions of the Contract and portions of Division One of this Project Manual apply to this Section as though repeated herein.

**1.02 Summary**

**A.** Section Includes

Edit the following subparagraphs as the scope of the Project requires.

1. [ ]  Gagecast® Panels and/or Sheets

 [ ]  GageMetal® Panels and/or Sheets

2. [ ]  Extruded Trim.

3. [ ]  Installation Accessories.

4. [ ]  All labor and material for a complete and acceptable installation.

**1.03 References**

Edit the following subparagraphs as the scope of the Project requires.

**A.** Standards.

1. Aluminum Trim: ASTM B 209.

2. Medium Density Fiberboard Substrate: ANSI A208.2.

3. Particle Board Substrate: ANSI A208.1.

4. Adhesive Composition: ASTM C916 Type II, NFPA 90A/90B.

5. Adhesive Surface Burning Characteristics: ASTM E84.

6. Topcoat Pencil Hardness: ASTM 3363.

7. Topcoat Crockmeter Scratch: SAE J861.

8. Topcoat Taber Abrasion: ASTM D 4060.

**1.04 Submittals**

Typically the following paragraph and related subparagraphs are not required for System “A” (i.e. adhesive application method).

**A.** Shop Drawings

1. Include the following:

a. Dimensioned lay-out all of the panels.

b. Dimensioned lay-out of all of the trim.

c. Dimensioned lay-out of all of the mounting accessories.

**B.** Product Data

Edit the following subparagraphs as the scope of the Project requires.

**Specification Guidelines 09775-2**

1. Descriptive Literature: Fully describing the cast panel and accessories that include the following.

a. Metal Particles.

b. Top Coat.

c. Substrate.

d. Extruded Trim.

e. Installation Accessories.

f. Maintenance Instructions.

2. Installation Instructions.

3. Adhesive Material Safety Data Sheets.

**C.** Samples

Edit the following subparagraph as the scope of the Project requires.

1. [ ]  Provide three [5 inch square samples of each Gagecast® panel and/or sheet]

[ ]  Provide three [6 inch square samples of each GageMetal® sheet and/or panel]
with respective substrate, edge detail, pattern and background material and color reflecting anticipated color range of finished product.

Edit the following subparagraph as the scope of the Project requires.

2. [ ]  Provide three 6 inch long samples of each extruded trim type, material and color reflecting anticipated color range of finished product.

**D.** Closeout Submittals

Edit the following subparagraph as the scope of the Project requires.

1. Maintenance Instructions relative to [ ]  [panel topcoat] and/or
[ ]  [extruded trim finish coat].

**1.05 Quality Assurance**

**A.** Mock-Ups

Edit the following subparagraph as the scope of the Project requires.

1. Installed in location as directed by the Architect. Demonstrate the proposed range of aesthetic effects and workmanship. Installed panel with extruded trim may be left in place as part of the finished installation if accepted. Obtain Architect’s approval before proceeding with remaining work.

Edit Subparagraph “B. 1.” As scope of Project requires.

**B.** Pre-Installation Meetings

1. Go through installation procedure with factory trained personnel at the job site. [ ]  Applicator, [ ]  Contractor, and/or [ ]  Architect to attend.

**1.06 Delivery, Storage and Handling**

**A.** Packing, Shipping, Handling and Unloading

1. Protect from excessive moisture.

Edit the following subparagraph as the scope of the Project requires.

2. Deliver in unopened packaging clearly marked as to panel, extruded trim and accessory included. For panels, extruded trim indicate type, size, color and pattern.

**Specification Guidelines 09775-3**

3. Do not deliver until all wet work is complete and cured.

4. Leave protective cover sheet film in place until final installation.

**B.** Acceptance at Site

1. Immediately inspect upon delivery.

2. Verify that packaging is not damaged and that all materials have been received and are correct and undamaged.

**3. Place in climate controlled warehouse prior to delivery to site.**

**C.** Storage and Protection

1. Store products in an area where finished space **ambient temperature** occurs for at least 48 hours prior to installation.

2. Protect panel edges from damage.

**3. Store panel/sheet containers flat.**

**1.07 Project/Site Conditions**

**A.** Existing Conditions

1. Field verify substrate dimensions and readiness for installation. Adjust installation process accordingly.

**1.08 Maintenance**

**A.** Extra Materials

1. Maintenance Stock: Produced from same lot number as remaining product for panels, trim reveals, etc.

Edit the following subparagraph as the scope of the Project requires.

2. Panels: 1 full size panel for every       [insert number based upon scope of Project and Owner’s storage space availability] full size panels of each different color and pattern.

Edit the following subparagraph as the scope of the Project requires.

3. Trim: 1 full length extruded trim piece for every       [insert number based upon scope of Project and Owner’s storage space availability] full length piece of each different color and configuration.

Edit the following subparagraph as the scope of the Project requires.

4. Installation Bar and Mounting Brackets: 1 complete set for every       [insert number based upon scope of Project and Owner’s storage space availability] complete sets.

***Part 2: Products***

Strike the following Article and subsequent paragraph if a performance specification is required.

**2.01 Manufacturer**

**A.** The Gage Corporation, 777 S. Black River Street, Suite 2, Sparta, Wisconsin 54656; (800) 786-4263.

**Specification Guidelines 09775-4**

The following two articles 2.02 and 2.03 describe the two options of Gage Vertical Surfacing (GVS).

**2.02 GC 100 Series Single Component Composite Cast Panel and Sheet Materials**

**A.** Manufactured panels and or sheets to be Gagecast® type with the following features.

**B.** Panel and/or Sheet Cast Surface:

1. Metal Particles.

a. Panel/Sheet Design:       <**Insert Design Number**>.

b. Background Finish:       <**Insert Color and/or Metal Particle Description**>.

c. Pattern Finish:       <**Insert Metal Description**>.

d. Metal Particles Percent Solids:       65 to 80 percent.

Select the desired sheen and edit accordingly. If more than one sheen for separate panels is required, identify location by sheen type on the drawings.

2. Topcoat: [ ]  Gloss [ ]  Satin

The following is an option. Consult with the factory for metal type and finish.

3. Provide edge banding.       <**Insert Description**>.

**C.** Panel Casting Sheet.

1. Material:       <**Insert Description**>.

2. Thickness:       <**Insert Description**>.

**2.03 GageMetal Sheet and Panel Materials**

GageMetal® Designs are available in System “A”, System “Z”, and System “E” installation methods.

1. Manufactured Sheets and/or Panels to be GageMetal®

[ ]  [0.025 aluminum] and/or

[ ]  16 [ ]  18 [ ]  20 gage stainless steel, with the following features.

1. Design:       <**Insert Design Number**>.

Use the following paragraph if System “Z”, and/or “E” installation method is required.

**B.** Substrate: 3/8 inch medium density fiberboard.

**C.** Pattern: [ ]  Selective [ ]  Overall mechanical finish per design.

**D.** UV Durable Topcoat (aluminum only): 0.2 mil thickness.

1. Crockmeter Scratch: SAE J 861, moderate scratch.

2. Pencil Hardness: ASTM D-3363, 4H.

3. Taber Abrasion: ASTM D-4060, 6.2 mg or less.

**2.04 Equipment**

**A.** Installation Tools: As required by manufacturer’s printed installation instructions.

**Specification Guidelines 09775-5**

**2.05 Components**

Select one or more of the following as the scope of the Project requires.

**A.** **[ ]** Extrusions: 0.100 inch extruded aluminum for extrusion base, .060 inch extruded aluminum for extrusion legs and splines, ASTM B209, 6063/T5 alloy, 0.4MIL clear anodized finish, of configurations as shown on the drawings.

1. Fasteners: Of material, size and spacing as recommended by the manufacturer.

**B.** **[ ]** “Z” Bar Mounting Bars: 0.187 inch extruded aluminum, ASTM B209, 6063/T5 alloy.

1. Fasteners: Of material, size and spacing as recommended by the manufacturer.

**2.06 Accessories**

Use either of the two options. Consult with the factory as to other acceptable contact adhesives.

**A.** **[ ]** Adhesive: Foster Products, a Division of H. B. Fuller, Inc., “Quick-Tack™ 85-60” water base, asbestos free, low VOC cream adhesive; (800) 338-2975.

1. Burning Characteristics.

a. Flame Spread: 0.

b. Smoke Development: 0.

**B.** **[ ]** Adhesive: Any standard solvent-based contact cement.

1. Adhesive shall be of the type as recommended by industry standards for end use application.

***Part 3: Execution***

**3.01 Examination**

**A.** Site Verification of Conditions.

1. Examine substrates with installer present.

2. Verify compliance with requirements for installation tolerances and other conditions affecting final installation.

3. Proceed only after all defects have been corrected.

**3.02 Installation**

**A.** Acclimatize panels and trim within installation area 48 hours prior to installation.

**B.** Install panels at locations indicated with vertical surfaces and edges plumb, horizontal edges level and in alignment with other panels. Scribe panels to fit adjacent work.

Select one or more of the following subparagraphs as the scope of the Project requires.

1. [ ]  Adhesive Application (System “A”): Refer to manufacturer’s printed installation instructions.

2. [ ]  Z-bar Application (System “Z”): Refer to manufacturer’s printed installation instructions. Z bars are furnished in 8 foot lengths and can be factory punched as noted in subparagraph “2. b.” below.

Fasteners shall engage studs. Coordinate panel size selection with stud spacing. The use of a continuous layer of 1/2 inch plywood over the studs before the application of the wall substrate surface will allow for more flexibility in panel size selection.

**Specification Guidelines 09775-6**

a. Verify stud spacing and coordinate accordingly to ensure engagement of fasteners into studs.

b. Z bars to be factory punched at 8 inches on center with 0.173 inch diameter holes.

The following is a factory provided option.

c. Factory to provide #8 pan head screws; 1/2 inch lengths for attaching z bars to back of panel, 1-1/2 inch lengths for attaching z bars to wall surface.

3. Extrusion Application (System “E”): Refer to manufacturer’s printed installation instructions.

If joint intersections are required to be non-interrupted, consult with the factory.

a. Joint Configuration: Hairline butt joints with recess intersection interrupted.

The following is a highly recommended additional cost option.

b. Main Runners and Perimeter Trim: Factory notched at intersections.

Fasteners shall engage studs. Coordinate panel size selection with stud spacing. The use of a continuous layer of 1/2 inch plywood over the studs before the application of the wall surface will allow for more flexibility in panel size selection.

c. Verify stud spacing and coordinate accordingly to ensure engagement of fasteners into studs.

**C.** Variation From Plumb: Plus or minus 1/8 inch.

**D.** Variation of Joints From Hairline: Less than 1/8 inch.

**3.03 Cleaning**

**A.** Clean panels, in accord with manufacturer’s printed instructions. Contractor to replace panels at no additional cost that cannot be properly cleaned to the satisfaction of the Architect.

**3.04 Protection**

**A.** Protect installation until final completion of the Project. Contractor to replace damaged components at no additional cost in a manner approved by the Architect.

**END OF SECTION 09775**