

September, 2009

Section 09 77 00

## **Graph** Wall Cladding System

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Scope: Section includes, but is not limited to, architectural wall cladding system including trims, terminations, miscellaneous metal and subframes, clips, fasteners and other devices for secure anchorage of panels to conventional drywall or other substrate provided for this purpose.
- B. Related Sections:
  - 1. Section 09 20 00 Plaster and Gypsum Board
  - 2. Section 05 50 00 Metal Fabrications

#### **1.2 SUBMITTALS**

- A. Shop Drawings: Submit complete shop drawings indicating quantities, finishes, dimensions and attachment relationships.
- B. Product Data: Submit manufacturers product data, specifications and installation instructions.
- C. Samples: Submit color and finish samples to determine range of texture and consistency of color and finish expected in the finished work. Standard sample size shall be 3" x 3".

#### **1.3 QUALITY ASSURANCE**

- A. Manufacturer shall have a minimum of five years experience in manufacturing architectural materials.

#### **1.4 DELIVERY, STORAGE AND HANDLING**

- A. Deliver components in clearly marked containers and packages suitable for shipment of specified products so as to prevent finish damage in transit.

- B. Store components only in secured ambient environment (*humidity min. 25% - max 55%, temperature not to exceed 80 degrees*). Store in dry locations that will avoid damage from job-site traffic, moisture, stacking or other job-site contamination. Do not stack panels directly on floor. *Do not subject panels to moisture.*
- C. Handle components to avoid racking, twisting, denting or scratching of finished surfaces.

## 1.5 WARRANTY

- A. Provide manufacturers' warranty against defects in material and workmanship for a period of one year.

## Part 2 - Products

### 2.1 MANUFACTURER

- A. Basis of design is: **Graph**
  - Fry Reglet Corporation
  - 1377 Stonefield Court
  - Alpharetta, GA 30004
  - Phone 800-237-9773
  - Fax 770-521-9034
  - [www.fryreglet.com](http://www.fryreglet.com)

### 2.2 MATERIALS

- A. Framing: All framing components to be fabricated from extruded 6063 T5 aluminum.

Finishes: **\*\*Standard anodized finish Architectural 200R1 medium etch (AA-M32c10A21), clear color\*\*.**

**\*\* Factory powder paint\*\***

- B. Infill panels: Base substrates:

¾" FR medium density fiberboard (MDF), 48# density, minimum internal bond strength of 120# PSI. Class A.

¾" FR particleboard, 47-50 # density, internal bond strength of 80# PSI. Class A.

SELECT PANEL TYPE AND FINISH FROM THE FOLLOWING:

**\*\*Wood veneer\*\***: Architectural grade quarter cut veneer (.035" thick) applied to the substrate via cold press with balancing backer sheet. Select from the following veneers:

- \*\* Cherry \*\*
- \*\* Red Oak \*\*
- \*\* Maple \*\*
- \*\* Walnut \*\*
- \*\* Bamboo \*\*
- \*\* Custom veneer as specified \*\*

**\*\*Main Steel Polished finish\*\***: Stainless steel: Type 304. Select from the following finishes:

- \*\* Brushed \*\*
- \*\* Abstract \*\*
- \*\* Strands \*\*
- \*\* Maze \*\*
- \*\* Beads \*\*
- \*\* Rose \*\*
- \*\* Unity \*\*
- \*\* Custom finish as specified \*\*

**\*\*Flat Metal Finish\*\*** Steel: Commercial grade galvanealed steel. Select from the following finishes:

- \*\* Enamel \*\*
- \*\* Powder Paint \*\*
- \*\* Custom finish as specified \*\*

Aluminum: Type 3003 H14 alloy. Select from the following finishes:

- \*\* Satin \*\*
- \*\* Clear anodized \*\*
- \*\* Enamel \*\*
- \*\* Powder Paint \*\*
- \*\* Custom finish as specified \*\*

**\*\*Profiled Metal finish\*\***: 20 gage Galvanealed steel panels with folded edges and welded corners.  
Select from the following profiles:

- \*\* Wedge \*\*
- \*\* Bias \*\*
- \*\* Diagonal Peak \*\*
- \*\* Diagonal Valley \*\*
- \*\* Dimple \*\*

Select from the following finishes:

- \*\* Enamel \*\*
- \*\* Powder Paint \*\*
- \*\* Custom finish as specified \*\*

**\*\*Digital lithographic image\*\***: 3/4" MDF coated with a receptor and performance coating that is capable of receiving an image through heat transfer and crosslinking dyes into the finish. Coating is a polyester epoxy acrylate finish that is suitable as a performance coating for vertical surfaces in building applications.

**\*\*Glass\*\***: 1/4" thick, backcoated, *tempered* glass panels with polished edges  
Clips factory applied directly to back of panels

**\*\* Veritas \*\* solid polymer**: Glycol modified engineered polyester resin, 1/4" thick, opaque panels.

Select from the following:

- \*\* Botanical \*\*
- \*\* Moss \*\*
- \*\* Bamboo \*\*
- \*\* Fluted \*\*
- \*\* Milkglass Weave \*\*
- \*\* Mirror Weave \*\*
- \*\* Custom design as specified \*\*

**\*\* Trespa \*\* solid composite panels**: 3/8" thick solid phenolic panels. Select from the following:

- \*\* Copper Red \*\*
- \*\* Aluminum Gray \*\*
- \*\* Oxidation \*\*
- \*\* Wenge \*\*
- \*\* Italian Walnut \*\*
- \*\* Graphite Grey \*\*
- \*\* Custom as specified \*\*

## 2.4 FABRICATION

- A. Aluminum framing components to be factory mitered and welded to form subassemblies including 2-way, 3-way and 4- way intersections, inside and outside corners and custom intersections as detailed in manufacturer's shop drawings. Wall cladding system shall be capable of providing either a fineline joint, or a 1/4 " reveal joint, with an anodized aluminum exposed element bordering each panel horizontally, vertically or in both directions in accordance with Architectural drawings. All other details, including base, head, corners, intersections etc. shall be fabricated in accordance with the Architectural drawings.
- B. Infill panels shall be installed in a non-progressive manner and must be point accessible. Panels shall be affixed to framework with co-extruded clips having an independent lab certification pullout loading of 10 pounds per inch of attachment.

## PART 3 - EXECUTION

### 3.1 PREPARATION:

- A. Examine job-site conditions to verify that walls to receive cladding are dry, flat and rigid. Recommended stud spacing 16" or 24" o.c. Framing must conform to ML/SFA 540 specification:
  - 1. Vertical alignment (plumbness) of walls shall be within 1/960<sup>th</sup> (1/8" in 10 feet) of the span
  - 2. Horizontal alignment (levelness) of walls shall be within 1/960<sup>th</sup> (1/8" in 10 feet) of their respective heights.
  - 3. Squareness of walls shall be not more than 1/8" out of square within the length of that wall.
- B. Climate control: Material must be stored, installed and maintained only in secured ambient environment (*humidity min. 25% - max 55%, temperature not to exceed 80 degrees*)
- C. Verify dimensions of wall panels prior to installation to assure compatibility with job-site conditions.

### 3.2 INSTALLATION

- A. Install grid components in accord with manufacturer's installation instructions and approved shop drawings. Grid components must be plumb, true and level as described in 3.1.A.
- B. All panels with a wood substrate must be allowed to acclimate to the project environmental conditions prior to installation. *Refer to Graph Wood Panel Acclimatization Instructions for complete information.*
- C. Wall panels shall be erected plumb, level, square, true to line, securely anchored and in proper alignment and relationship to work of other trades.

### 3.3 CLEANING AND PROTECTION

- A. Visually inspect all exposed surfaces for scratches or blemishes. Protection of wall panels from damage by other trades after installation shall be the responsibility of the General Contractor.

END OF SECTION