



DIVISION _____

Specification Section # _____

GRIDLOCK BIOCR-5B WALL SYSTEM

PART 1 GENERAL

Furnish and install the GridLock BioCR-5B Wall System as described in this Section. Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications apply to work in this section.

1.1 RELATED WORK: (NOTE TO SPECIFIER: Include appropriate detail drawings and information pertinent to the specific project.)

1.2 SUBMITTALS

1.2.1 Submit # _____ samples of the materials to be used to show corner and joining details as well as final panel finish.

1.2.2 All parties wishing to have materials considered as equals for this project must submit such materials for evaluation to the design professional at least 10 (ten) days prior to bid date. Bidders not complying with this requirement will be considered non-responsive.

1.3 QUALITY ASSURANCE

1.3.1 Provide Single Source responsibility for the supply of all wall finish materials used in the installation.

1.3.2 A Contractor approved by Manufacturer must perform installation.

1.4 DELIVERY, HANDLING AND STORAGE

1.4.1 Deliver materials packaged so that materials are clearly marked and identifiable showing the following:

- A) Product Name
- B) Manufacturer's Name
- C) Component Designation

1.4.2 Handle Materials by methods to prevent damage

1.4.3 Inspect direct job-site deliveries to assure that quantities are correct and that materials comply with specifications and are not damaged.

1.4.4 Replace, at no cost to owners, materials that are found defective either in manufacture, handling or storage.

1.4.5 Store materials on site at the final installation temperature for at least 24 hours prior to, during, and after installation.

1.5 WARRANTY

1.5.1 Provide a 2-year warranty for materials and installation against any defects in manufacturing and workmanship.

1.6 JOB CONDITIONS

- 1.6.1 A Representative of the Manufacturer shall visit the job-site with the Contractor prior to installation to insure that field conditions are acceptable for installation.
- 1.6.2 For 24 hours before, during the installation, and for 72 hours after the installation, maintain temperature and relative humidity at in-service conditions.

PART 2 PRODUCTS

For the purposes of this specification, GridLock BioCr-5B Wall System by Life Science Products, Inc. (800-638-9874) is used as the standard.

2.1 MATERIALS

- 2.1.1 System Overview: The wall system as specified shall consist of wall panels and components manufactured from synthetic materials having physical properties as specified in Section 2.1.3 below. Panels shall have a gloss finish.
- 2.1.2 Panels: The panels shall be a Composite Fiberglass panel. The face of the panel shall be Class 1 fire rated Halogenated Polyester resins mounted on an aluminum isolation panel. The center of the panel shall be closed cell foam sandwiched on the backside by a second powder coated aluminum panel. The final thickness of the wall panel shall be a nominal 5/8". The panels shall be certified by the Manufacturer as being constructed of all Class 1 fire rated components.
- 2.1.3 The panels shall have the following properties:
 - Components of Class A
 - Flame spread of 25 or less
 - Light reflectance coefficient LR-1, 0.75 or greater
 - Square edge detail
 - Minimum weight of 1.5 lb. per square foot
 - Gloss Finish
- 2.1.4 The panel finish face shall possess the following characteristics:
 - Impact Resistance (kj/m²): 64
 - Thickness of face glass: 1.8 mm
 - Reinforcement (gm/m sq.): 500 W.R. + 450 + 30 tissue
 - Total Weight (kg/m sq.): 2.9
 - Proportion of reinforcement (% by weight): 34
 - Tensile Strength (MPa): 120
 - Compressive Strength (MPa): 220
 - Flexural Strength (MPa): 170
 - Interlaminar Shear (MPa): 22
 - Youngs Modulus (E GPa): 9.0
 - Thermal Conductivity (W/mK): 0.16 at 20 degrees C.
 - Thermal Transmittance (W/m²K): 5.7 at 20 degrees C.
 - Coefficient of linear expansion: 22-40 x 10⁻⁶/K at 20 degrees C.
 - Operating Temperature: - 40 C. to + 50 C.

PART 3 EXECUTION

- 3.0.1 Install metal wall studs at 16" centers in accordance with local applicable zoning and building codes.
- 3.0.2 Apply adhesive of type recommended by Manufacturer to stud surfaces prior to installation of the panel. Follow Manufacturers recommendations for application and "open times" of the adhesive. If panels are to be installed over Gyp products, the gyp surface shall be in paint ready condition. Apply adhesive to the gyp surface and secure panels as described below.
- 3.0.3 Panels are to be mounted against the studs and held in place until perimeter of the panel can be mechanically fastened. Use self-tapping dry wall screws to secure to each stud at the top and bottom of the panel. Vertical edges shall be fastened to the studs at no more than one-foot increments. Do not crimp the panel edge.
- 3.0.4 If necessary, apply pressure to the center of the panel using a weighted lever until adhesive cures.
- 3.0.5 Completely fill the vertical joints between panels with adhesive recommended by manufacturer to a level flush with the panel face.
- 3.0.6 Apply **joint batten** covers at all flat vertical joints using the adhesive recommended by the manufacturer. Sean the edges of the flat batten with calk adhesive.
- 3.0.7 Inside corner moldings shall be a 3 inch radius plastic molding and outside corners moldings shall be 16 gauge, 304 stainless steel corner guards with 1/8" radius and 3-1/2" wings. Corner moldings shall be adhesive mounted.
- 3.0.8 The ceiling and flooring cove base will cover top and bottom screw lines respectively.