

**DIVISION**

**Specification Section #** **GRIDLOCK BIO/CR-7 Wall Panel System**

**PART 1 GENERAL**

Furnish and install the Bio/CR-7 Wall System designed for Science and Technology applications 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. **RELATED WORK:** (NOTE TO SPECIFIER: Include appropriate detail drawings and information pertinent to the specific project.)

# SUBMITTALS

* + 1. Submit # samples of the materials to be used to show corner and joining details as well as final panel finish.
		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.

# QUALITY ASSURANCE

* + 1. Provide Single Source responsibility for the supply of all wall finish materials used in the installation.
		2. A Contractor approved by Manufacturer must perform installation.

# DELIVERY, HANDLING AND STORAGE

* + 1. Deliver materials packaged so that materials are clearly marked and identifiable showing the following:
			1. Product Name
			2. Manufacturer’s Name
			3. Component Designation
		2. Handle Materials by methods to prevent damage
		3. Inspect direct job-site deliveries to assure that quantities are correct and that materials comply with specifications and are not damaged.
		4. Replace, at no cost to owners, materials that are found defective either in manufacture, handling or storage.
		5. Store materials on site at the final installation temperature for at least 24 hours prior to, during, and after installation.

# WARRANTY

* + 1. Provide a limited 10 year warranty for materials and installation against any defects in manufacturing and workmanship when installed by LSP approved contractor and using LSP approve joint compound to complete the wall system. Otherwise, panels themselves have a 2 year warranty against any defects and workmanship.

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# JOB CONDITIONS

* + 1. A Representative of the Manufacturer shall visit the job-site with the Contractor prior to installation to insure that field conditions including but not limited to hacked blocks are corrected or are acceptable for installation.
		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 Bio/CR-7 Wall System by Life Science Products, Inc. (800-638-9874) is used as the standard.

# MATERIALS

* + 1. System Overview: The wall system as specified shall consist of composite wall panels manufactured from materials having physical properties as specified in Section 2.1.3 below. Panels shall have a consistent extra smooth semi-gloss finish with 100% solids urethane seam sealant.
		2. Panels: The panels used in this system shall be Bio/CR-7 composite wall panel and shall be

3.0 mm thick. The face of panels shall be smooth. The panel surface finish shall be glossy and the panel must be ASTM E 84 Class A for smoke and flame spread. The panel will be supplied in standard 48” wide and available in 8’, 9’, 10’, and 12' height. The vertical edge shall be square edge design. The panel vertical seam shall be sealed with a 100% solids urethane sealant to match the surface of the panel.

* + 1. The panels shall have the following properties: Finish**:**

Fire Rating: **Class 1 ASTM E 84 for flame spread of 25 or less**

Light Reflectance**: LR-1, 0.75 or greater** Maximum Weight**: 1.0 lbs. per square foot** Finish: **Smooth Polyester Thermoset Resin**

Standard Sizes**: 4’ X 8’, 4’ X 9’, 4’ x 10’ and 4' x 12'**

Panel thickness**: 3 mm**

Color**: White**

Finish: **Gloss**

Physical Properties:

**Hardness:** ASTM D2583 - 50 Barcol **Compressive Strength:** ASTM D695 - 10,152 psi **Flexural Strength:** ASTM D790 - 13.3 x 103 psi **Flexural Modulus:** ASTM D790 - 14.0 x 105 psi

**Coefficient of Linear Expansion:** ASTM D696 - 1.4 (E-05) **Tensile Modulus of Elasticity:** ASTM D638 - 7.7 x 195 psi **Tensile Strength:** ASTM D638 - 6.3 x 103 psi

**Taber Abrasion Resistance:** Taber Test (CS-17 Wheels, 1,000g.wt, 25 cycles) 0.04%

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***PART 3 EXECUTION***

* + 1. Apply adhesive of type recommended by Manufacturer to the entire back of the panel, all the way to edges, prior to applying the panel to the substrate. Follow Manufacturers recommendations for application and “open times” of the adhesive.
		2. Panels are designed to be mounted directly onto the substrate. Put the panels in place against the substrate approximately ½ inch above the floor and leaving a gauged 1/8” vertical seam between the panels. Press and roll the panel against the substrate to assure proper contact between the panel and the substrate.
		3. If necessary, apply extended pressure to the panel using a weighted lever until adhesive cures.
		4. Once the adhesive has cured, mask the vertical edges of the panel with masking tape as recommended by the manufacturer to keep the panel face clean. Fill the exposed 1/8” seam with the recommended urethane sealant and strike the seam flush. Remove masking before sealant sets.
		5. Step 3.0.4 may have to be repeated twice.
		6. Fill all inside corners with the recommended Bio/CR sealant and finish with a ½” radius being sure to mask adjacent surfaces.
		7. Treat all outside corners with 16 gauge stainless steel corner guards having a #4 brush

finish, 3 inch crimped wings and a 1/8” corner radius. The corner guards will be adhesive mount.