

# Lamcel Ceilings

## PART 1 – GENERAL

### 1.01 RELATED DOCUMENTS

Drawings and general provisions of the contract, including General Conditions, apply to work of this section.

### 1.02 SCOPE

It is acknowledged, that this is a proprietary performance specification. The material herein specified has been carefully chosen due to its inherent performance characteristics.

- A. Visual Flatness
- B. Fire and Smoke Generation ASTM E84 15/15 max
- C. Large Panel Sizes up to 60" x 144"

### 1.04 QUALITY ASSURANCE

A. Manufacturer: Firm with manufacturing and delivery capacity required for project. Shall have successfully completed at least ten projects in the United States of America within the past year, utilizing similar systems and shall be ISO 9001 certified.

Firm must own and operate its' own United States Manufacturing Facilities for all metal components. "Stick Built" systems, consisting of components from a variety of manufacturers, and/or non-United States Manufactured Products will not be considered or accepted.

B. Mock-up (optional): Erect a minimum, 500 square foot mock-up at the project site or other location approved by the architect including all components of the specified system. Mock-up shall be erected and approved prior to the issuance of a purchase order or contract for this section, unless this sequencing is waived by the architect.

C. Manufacturer must have in place a quality system equivalent to the ISO 9001-2000 and must be able to demonstrate compliance.

### 1.05 SUBMITTALS

A. Product Data: Submit manufacturer's standard product specifications, details, drawings, and installation instructions for each component required.

Test data shall include copies of the original system tests, and independent component tests where applicable. Tests shall be as conducted for the complete system of the manufacturer.

B. Submission: Must be within ten (10) working days of the general contract award to avoid project delay. It is acknowledged that the specified systems are long lead-time items. If this schedule not adhered to, architect will designate product to be utilized, and contractor will have no recourse.

C. Samples (optional): Submit three each (3) of each system component. Flat components full sized linear components 12" in length.

D. Shop Drawings: Sub Contractor for work of this section shall submit complete shop drawings, showing components in isometric detail and all complete reflected ceiling plans. All unusual details shall be clearly shown.

### **1.06 SEQUENCING**

A. Substitute Products: Alternate proposals for substitute products will not be accepted unless approved as issued in addenda. Substitute products will not be issued in addenda unless request for substitution and complete and sufficient data are furnished to the architect and owner for review. Samples and data must be received by architect and owner a minimum of ten (10) calendar days prior to issue date of last addenda allowable under current project schedule as determined by architect and owner. *Any additional costs incurred due to requested substitutions will be paid in full by the party requesting substitution.*

B. Contract Execution: Submittals, including mock-up, shall be completed and approved prior to award of subcontract for this section.

C. Manufacturer's Production Schedule: Subcontract for the work of this section shall be awarded to allow sufficient time for manufacturer's standard production schedule. Subcontractor shall submit a written confirmation of production and delivery schedule on Manufacturer's Letterhead within ten (10) days of general contract award.

### **1.07 WARRANTY**

A. General: Submit manufacturer's warranty that the materials furnished will perform as specified.

B. Manufacturer must demonstrate the ability to fully bond the project for its full material value.

C. Panels must be manufactured in the United States of America.

### **2.01 MANUFACTURER**

A.

**Railtech Composites Inc.**

80 Montana Drive  
Plattsburgh, New York  
12903  
514-457-4760  
info@lamcel.com

As represented by:

B. Products: The products herein specified are standard manufactured products of the listed manufacturer. They are totally pre-engineered, and tested as a system. Products comprised of a non pre-engineered system will not be considered or allowed. "Stick Built" systems will not be considered or allowed.

## **2.02 PRODUCT CONSTRUCTION Product Name;**

### **Lamcel Ceilings**

**Facing:** 0.040" tension levelled aluminum

**Perforations:** Panel face and back can be perforated for visual or for acoustics. Lamcel standard perforations are 1/8" diameter round holes. Specify perforation pattern and indicate if non-perforated borders are present.

**Alternate Facings:** Natural wood veneer, stainless steel, bronze, copper, zinc, plastic laminate, fabric, vinyl, wall paper

**Finish:** Coil coated Kynar from the standard palette of stocked colours

**Alternate Finishes:** Spray painted custom Kynar, anodized (clear and colour), #4 brush, #8 mirror, #8 supreme, pre-patina'd

**Protection:** A non-UV resistant peel-off protective coating is included

**Core:** Commercial grade aluminum honeycomb, 3/8" cell size, non-perforated. Larger cell sizes are not permitted

**Adhesive:** Thermosetting structural epoxy adhesive, 100% solids, 0% solvents

**Backer:** 0.025" tension leveled aluminum, epoxy primed or anodized

**Panel Thickness:** 3/8" nominal or engineered to suit

**Panel Edges:** Pan-in-pan, (facing folded over the full panel edge) with a break formed tegular lip or engineered to suit.

Choose from one of the following suspension systems:

**Lamcel Torsion Lok™ Suspension System** – Shall consist of 2" main-tees parallel to one edge of the panels, with cross tees to act as stabilizers. Spring Steel Torsion Springs shall be specifically designed and fabricated to support Lamcel panels along two long edges of panel or where appropriate. Reveals shall be as shown on the plans and Torsion Springs shall be factory attached. Safety Factor shall be 4 to 1.

Or

### **Custom Engineered**

### **Lamcel Panel Specifications**

**Panel Bond Strength:** Panel bond strength, as tested according to ASTM C297 shall be a minimum of 400 psi

**Adhesive Shear Strength:** The adhesive, when tested according to ASTM D1002 shall have a minimum shear strength of 3,200 psi

### **Flammability**

**ASTM E84 Flame Spread:** 0

**ASTM E84 Smoke Developed:** 15

**MEA Number (New York):** MEA 230-02-M (Non-toxic, use without any restrictions)

**Testing:** Manufacturer must have an internal testing program integrated into their QA system to test for these bond and adhesive strengths on a constant basis to test production panels.

### **3.01 GENERAL REQUIREMENTS**

A. Installation by a contractor approved by manufacturer of materials specified who is thoroughly experienced in this type of work.

B. Examine all surfaces and conditions affecting proper installation of this material. Report to general contractor any defects in materials or surfaces to which this material is to be applied. Commencement of work shall indicate acceptance of materials and surfaces as satisfactory.

C. Install panels in accordance with approved shop drawings.

D. Place units symmetrically about centerlines of room or space, or as otherwise indicated. Install joints true and tight fitting. Completed work shall present a straight level plane, with surfaces free from scratches and other imperfections and disfigurements.

### **3.02 INSTALLATION**

A. Perform installation in accordance with approved shop drawings. Install wall mount channels, corner assemblies, frames, and complete grid system plumb and end level to within 1/8" in 10' 0".

B. Field cut openings or notches required in panels, except openings for light, air, or access panels shown on shop drawings.

### **3.03 COMPLETION**

Replace damaged sections, touch up damaged finish. Clean surfaces free from oil, fingerprints, markings and other disfigurements. Remove debris resulting from this work from project site.

### **3.04 GENERAL RESPONSIBILITIES**

Variation from specification: Any variation from any section of this specification, resulting in additional costs to any other contractor, sub-contractor or supplier on this project, shall be the sole financial responsibility of the contractor for the work of this section.

*The specification clearly calls for and intends for the material to be provided as a complete*

*system from the original system manufacturer. This specification clearly indicates the desire to avoid "stick built" systems by any party, contractor, subcontractor or others.*