



# Custom Design and Fabrication

Need a lightweight composite sandwich panel?

Call a Plascore sales engineer today.

In addition to our line of Plascore Board, Plascore services include custom manufacturing. Plascore offers design, test and prototyping assistance to build you a composite sandwich structure.

Plascore custom panel structures deliver:

- High strength to weight benefits
- Built in and added fasteners, latches, connectors and more
- Custom surface finishes
- Exceptional quality

Plascore offers many manufacturing capabilities that can provide a unique sandwich panel solution for your application.

- CNC Machining
- Cold and Hot Laminating
- Welding
- Finished Edges
- Adhesive Bonding and Assembly
- Powder Coating
- Forming
- Destructive and Non-Destructive Testing

Please include your parameters on this Panel Design Questionnaire and contact us for a quotation.





**I. Customer Information**

Company \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Website \_\_\_\_\_

What is your project timing? \_\_\_\_\_

**II. Design Objectives**

1.) Please indicate the intended use for this panel

- Decorative
- Structural
- Non-Structural
- Other (Specify) \_\_\_\_\_

2.) What is your price objective? \$ \_\_\_\_\_

3.) How many panels do you need? \_\_\_\_\_

4.) Explain application: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5.) Is a part drawing available? \_\_\_\_\_

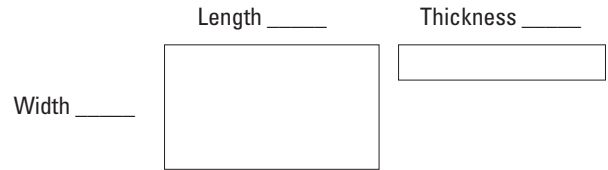
6.) What is the current material being used? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**III. Physical Characteristics**

1.) Please indicate panel dimensions:



2.) What is maximum allowable panel thickness? \_\_\_\_\_ in.

3.) What is minimum allowable panel thickness? \_\_\_\_\_ in.

4.) What is maximum allowable total panel weight? \_\_\_\_\_ lbs.

5.) What is minimum allowable total panel weight? \_\_\_\_\_ lbs.

6.) Please indicate panel type

- Plain, flat panel, (no edging, no frame)
- Flat panel, decorative edging
- Flat panel, framed
- Contoured panel

7.) Are there any visual requirements? \_\_\_\_\_

8.) What type of surface finish is required?

- Plain mill finish
- Painted
- Peel ply
- Other \_\_\_\_\_

9.) Do you have requirements for:

- Cut-outs How many? \_\_\_\_\_ (*enclose sketch*)
- Holes How many? \_\_\_\_\_
- Treaded inserts How many? \_\_\_\_\_ What size? \_\_\_\_\_
- Localized panel interior reinforcements

10.) Desired panel dimensions:

The desired tolerance for length and width is: \_\_\_\_\_

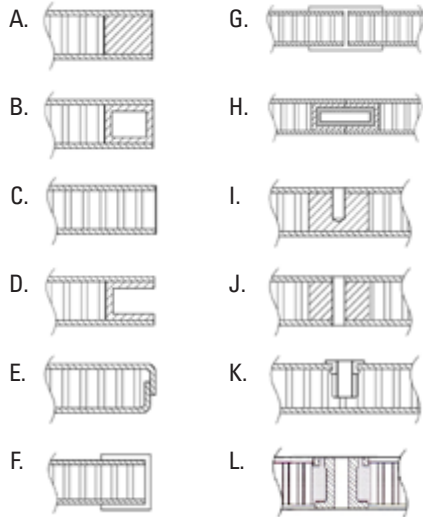
The desired tolerance for panel flatness is: \_\_\_\_\_

The desired tolerance for thickness is: \_\_\_\_\_

The desired tolerance for flatness is: \_\_\_\_\_



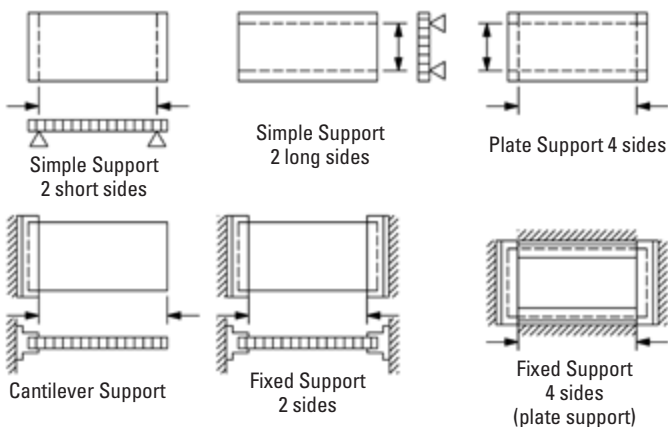
11.) Panel edge and insert design concepts, circle all that apply and indicate a material type (i.e. metal, wood, plastic):



**IV. Support Configuration**

- 1.) Please indicate how the panel will be supported by:
  - A. Selecting the most appropriate sketch from figure 2
  - B. Completing the dimensional information on that sketch
- 2.) If you have a different support configuration please provide sketch.

Figure 2

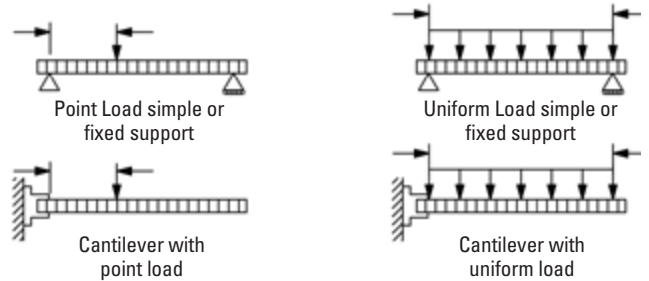


**V. Loading Characteristics**

- 1.) What is the total load on panel? \_\_\_\_\_ lbs.
- 2.) Please indicate type of load on the appropriate sketch in figure 3
- 3.) If point load condition, please indicate

A. Point load is distributed over local area of \_\_\_\_\_ sq. ft.

Figure 3



B. Point load is located at (use x,y coordinates from figure 4)

C. If more than one location, please list or indicate all locations

Figure 4



4.) What is the maximum allowable panel deflection? \_\_\_\_\_ in.

**VI. End Use Environment**

- 1.) What is maximum temperature exposure? \_\_\_\_\_
- 2.) What is minimum temperature exposure? \_\_\_\_\_
- 3.) Is temperature constant? \_\_\_\_\_ How does it vary? \_\_\_\_\_
- 4.) Will the panel be exposed to moisture? \_\_\_\_\_
  - Continually?
  - Intermittently?
- 5.) Will the panel be exposed to chemicals?
  - A. If yes, please list:

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**VII. Certification**

- 1.) Any quality testing/certification required? Specification # \_\_\_\_\_
- 2.) Any prototypes required? \_\_\_\_\_



## VIII. Panel Composite Options

### Core Materials:

- Plascore PC Honeycomb Core
- Plascore Aluminum Honeycomb Core
- Plascore Nomex Honeycomb Core
- Plascore PP Honeycomb Core
- Foam Core Type \_\_\_\_\_

### Facing Materials:

- Aluminum Alloy, 3003 Mill finish (Other aluminum alloys are available for more demanding structural requirements).
- Aluminum Alloy, 3003, Painted
- Reinforced Epoxy
- Reinforced Phenolic
- Reinforced Polyester
- Stainless Steel
- Galvanized Steel
- High Pressure Laminate
- Decorative Thermoplastics
- Plywood
- Other \_\_\_\_\_

Plascore, Inc., employs a quality management system that is AS/EN/JISQ 9100 and ISO 9001:2008 certified.

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