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:
   - Length _____  Thickness _____
   - Width _____  Length _____ Thickness _____

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):

A.  

B.  

C.  

D.  

E.  

F.  

G.  

H.  

I.  

J.  

K.  

L.  

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

Simple Support 2 short sides

Simple Support 2 long sides

Plate Support 4 sides

Cantilever Support

Fixed Support 2 sides

Fixed Support 4 sides (plate support)

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

Point Load simple or fixed support

Uniform Load simple or fixed support

Cantilever with point load

Cantilever with uniform load

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? _____
   A. Continually?
   B. Intermittently?
5.) Will the panel be exposed to chemicals?
   A. If yes, please list:

   _______________________________________________________
   _______________________________________________________

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
- Aluminum Alloy, 3003, Painted
- Reinforced Epoxy
- Reinforced Phenolic
- Reinforced Polyester
- Stainless Steel
- Galvanized Steel
- High Pressure Laminate
- Decorative Thermoplastics
- Plywood
- Other __________________________

(Other aluminum alloys are available for more demanding structural requirements).

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

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