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Your Company Name: _____
Contact: _____
Address: _____
City: _____
State: _____ Zip: _____
Phone: _____ FAX: _____
Email : _____
Today's Date: _____

Subject: Panel Design Questionnaire

Gentlemen:

Thank you for your inquiry regarding sandwich panels. In order for us to help design a panel that best meets your application, it is necessary for us to ask you some basic questions. Please take time to fill the enclosed questionnaire and return it to Plastic Reinforcements as soon as possible. From the information provided, we can assist in designing the most cost effective panel for your requirement.

We are looking forward for your early response and welcome the opportunity to build a future relationship together.

Sincerely,

Plastic Reinforcements Inc.

PRI PANEL DESIGN

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The intended use of this questionnaire is to provide information to help design a sandwich panel that best meets the structural requirements of the intended application within the specific cost range the customer desires.

Please answer these basic questions as best you can. This will assist PRI in helping design the optimum sandwich panel for your application.

I. INTENDED USE OF PANEL

- a. Structural _____
- b. Non-structural _____
- c. Other (Explain) _____

II. COST REQUIREMENTS

- a. Do you have an idea of your price objectives? _____

III. PROGRAM POTENTIAL

- a. What is the program potential in terms of number panels required for this project?

- b. What is the estimated number of units fabricated from those sandwich panels?

IV. PHYSICAL REQUIREMENTS OF PANELS

- a. What is the maximum allowable panel weight? _____
- b. What is the maximum allowable panel thickness? _____
- c. What are your estimated length and width requirements of the sandwich panel? _____
- d. Do you desire the edges of the sandwich panels to have edge closeouts? _____
- e. Do you have other requirements such as holes, inserts, or other areas of localized interior reinforcements?
Yes _____ No _____ (If yes, comment in Section X)

V. SUPPORT REQUIREMENTS

The following questions are asked to define how these panels are to be supported or attached to better define the loading requirements (See attached BEAM CHART.)

- a. Simple support uniform load _____
- b. Both ends fixed uniform load _____
- c. Simple support center load _____
- d. Both ends fixed center load _____
- e. Cantilever uniform load _____
- f. Cantilever Triangular load _____
- g. One end simply supported, one end fixed, uniform load _____

VI. LOAD REQUIREMENTS

- a. What is total load of panel in pounds? _____
- b. Is this a uniform load or localized in a certain area? _____
- c. If the load is localized, is it distributed over _____ square inches?

VII. ENVIRONMENTAL USE

- a. What is the maximum temperature exposure? _____
- b. What is the minimum temperature exposure? _____
- c. Will panels be exposed to moisture? _____

VIII. PANEL CONSTRUCTION

Please indicate what materials you desire for panel construction. A list of facing materials and core materials is provided for your selection.

FACING MATERIAL

- _____ Aluminum alloy _____
- _____ FRP Epoxy
- _____ FRP Phenolic
- _____ Stainless Steel
- _____ Galvanized Steel
- _____ High Pressure Laminate
- _____ Decorative Thermoplastic
- Other _____
- Indicate face Thickness
- top _____
- bottom _____

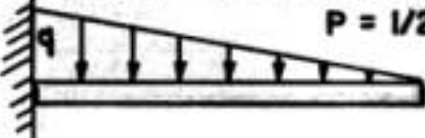
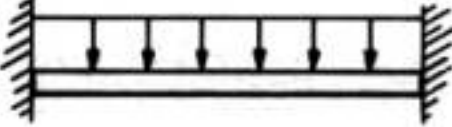
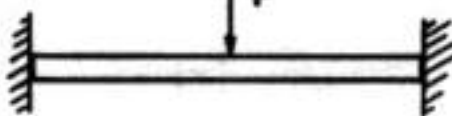
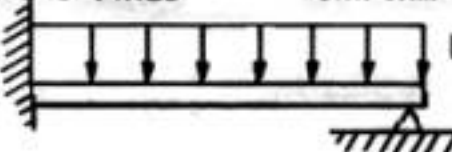
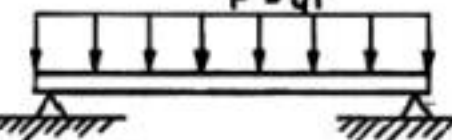
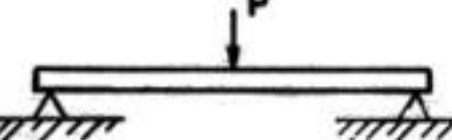
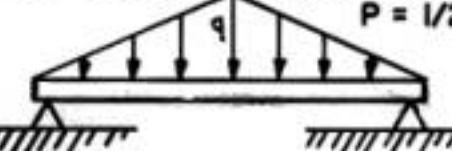
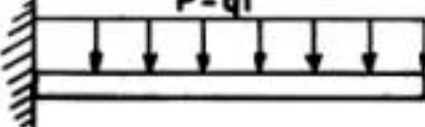

CORE MATERIAL

- _____ Aluminum Honeycomb alloy _____
- _____ Nomex™ Honeycomb
- _____ Fiberglass Honeycomb
- _____ Polyurethane Foam
- _____ Expand PVC Foam
- _____ Endgrain Balsa
- Other _____
- Indicate core thickness _____

IX. PANEL DEFLECTION

- a. Please indicate the maximum panel deflection in inches _____

X. PLEASE MAKE ADDITIONAL COMMENTS

Type Of Beam	MAXIMUM SHEAR FORCE V	MAXIMUM BENDING MOMENT M	BENDING DEFLECTION CONSTANT K_B
CANTILEVER TRIANGULAR LOAD $P = 1/2 ql$ 	P	$\frac{PL}{3}$	$\frac{1}{15}$
BOTH ENDS FIXED UNIFORM LOAD $P = ql$ 	$\frac{P}{2}$	$\frac{PL}{12}$	$\frac{1}{384}$
BOTH ENDS FIXED CENTER LOAD P 	$\frac{P}{2}$	$\frac{PL}{8}$	$\frac{1}{192}$
ONE END SIMPLY SUPPORTED ONE END FIXED UNIFORM LOAD $P = ql$ 	$\frac{5P}{8}$	$\frac{PL}{8}$	$\frac{1}{185}$
SIMPLE SUPPORT UNIFORM LOAD $P = ql$ 	$\frac{P}{2}$	$\frac{PL}{8}$	$\frac{5}{384}$
SIMPLE SUPPORT CENTER LOAD P 	$\frac{P}{2}$	$\frac{PL}{4}$	$\frac{1}{48}$
SIMPLE SUPPORT TRIANGULAR LOAD $P = 1/2 ql$ 	$\frac{P}{2}$	$\frac{PL}{6}$	$\frac{1}{60}$
CANTILEVER UNIFORM LOAD $P = ql$ 	P	$\frac{PL}{2}$	$\frac{1}{8}$
CANTILEVER END LOAD P 	P	PL	$\frac{1}{3}$

P must be determined for a beam of unit width - $b = 1''$