



# Thermoplastic TP Panels



# Plascore Thermoplastic TP Panel

Lightweight Technology for Heavyweight Applications



Replace your heavy structural core with Plascore Thermoplastic TP Panels and achieve equal or better stiffness at a fraction of the weight. Plascore TP Panels can provide equal or higher rigidity at a reduced weight than most traditional materials, such as plywood, foam and tri-laminate plastic.

With a variety of reinforced thermoplastic facings and Plascore PP Honeycomb core densities, a range of performance and costs can be offered to best meet your requirements.

The uniform, non-cosmetic surface finish and durable PP Honeycomb core, makes the TP Panel well suited for many commercial, industrial, interior and exterior applications.

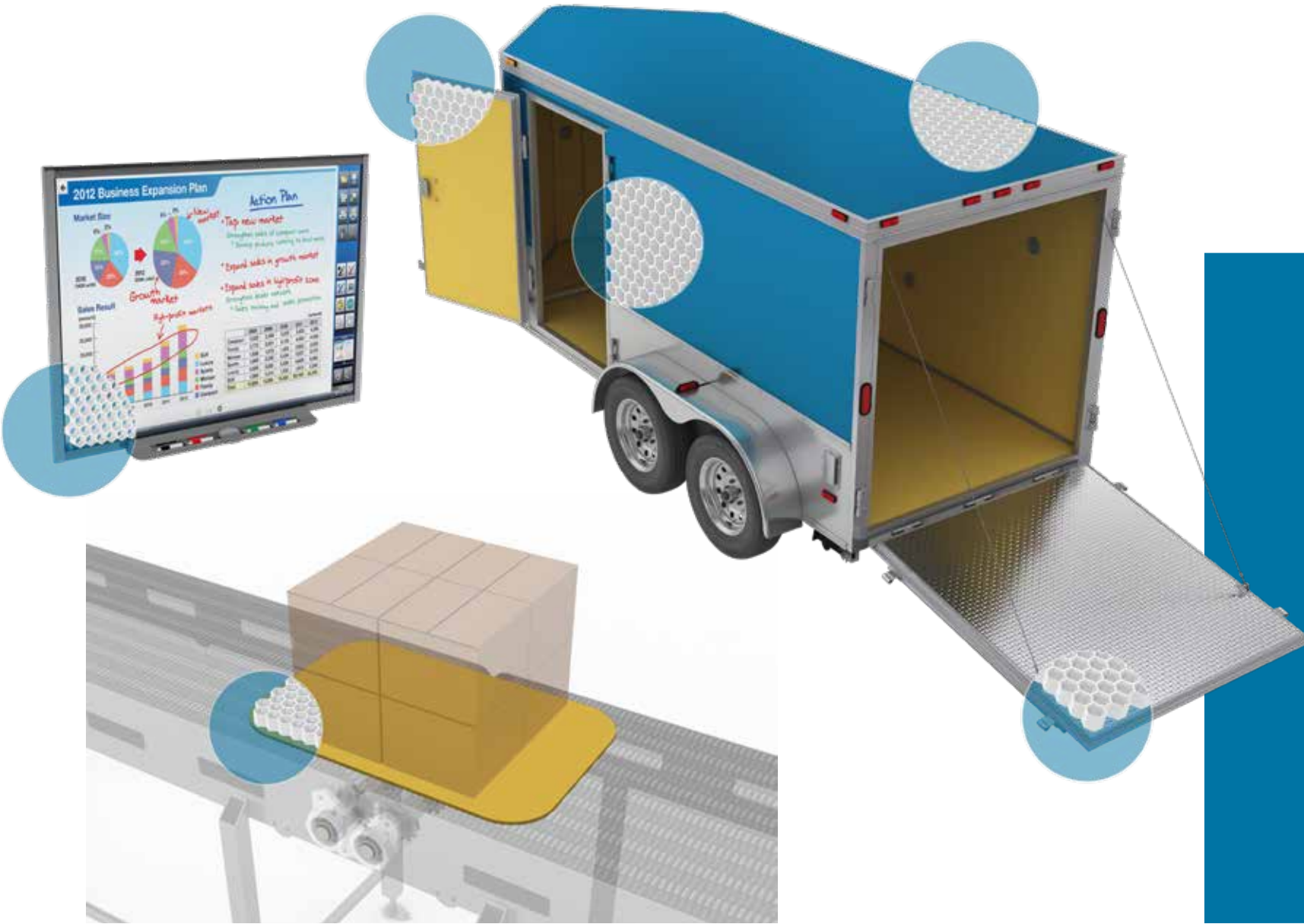
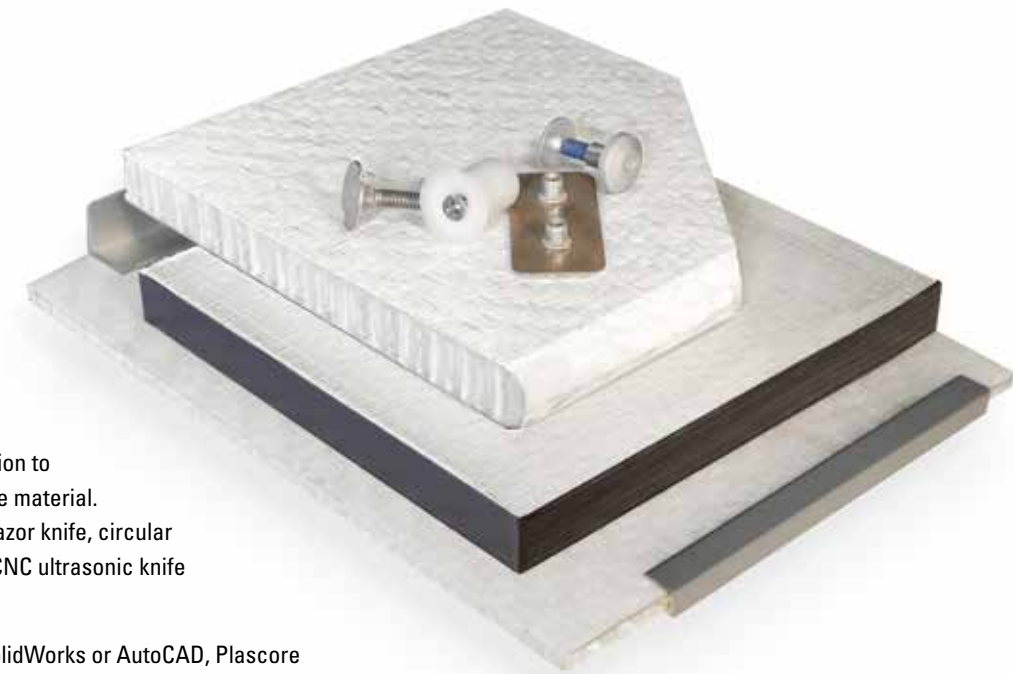
Plascore TP Panels are also offered with film and nonwoven surface overlay options, to enable secondary finishing, such as adhesive bonding, coating and painting or for a more visual appearance.

## ENGINEERING AND MANUFACTURING SUPPORT

Plascore sales engineers can assist you in transitioning from your existing core material and process to TP panels.

We can show you how to make the transition to Plascore TP Panels from your existing core material. Plascore TP Panels are easily cut with a razor knife, circular saw, band saw, wire saw, CNC water jet, CNC ultrasonic knife and steel rule die punching processes.

From your drawing files in CATIA, IGES, SolidWorks or AutoCAD, Plascore manufacturing engineers can develop and deliver value-added panels that decrease your manufacturing costs, while making the end product lighter, stiffer, stronger.



## Reinforce Your Structure With The Rigidity of Laminated Plywood And The Weight of PP Honeycomb.

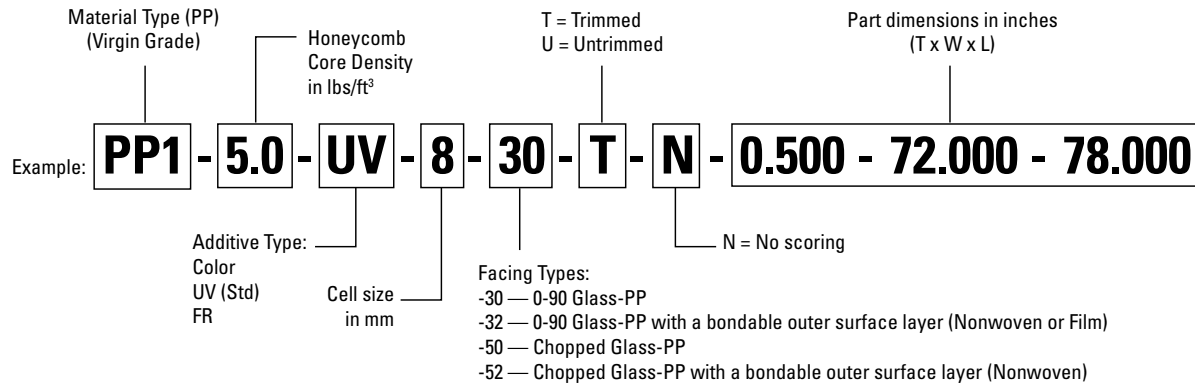
- Lightweight
- Easy to Use
- Structural
- Moisture and Chemical Resistance
- UV Resistance
- Thermoformable
- Recyclable
- Economical
- Vibration and Acoustical Dampening

Panel Type	Relative Weight	Relative Rigidity
3/8" T CDX Plywood*	1.00	1.00
10mm T PP Tri-Laminate Board**	0.55	0.10
1/2" T Plascore PP -30 (.02" T facings)**	0.42	0.80
1/2" T Plascore PP -30 (.03" T facings)**	0.55	1.15

\* Per published data  
 \*\* Actual data obtained through testing per ASTM C393 Flexural Beam Testing

# Thermoplastic (TP) Panel is specified as follows:

Material - Density - Additive - Cell Size - Type



## - 30 TP Panel

Standard with 0.02" T; 0-90 Glass PP facing both sides. Options for 0.02" to 0.06" T facings are available.



## - 32 TP Panel

Use a base -30 Panel with bondable outer layer. White, Black, or Clear film and nonwoven polyester.



## - 50 TP Panel

Standard with 0.03" T; Chopped Glass and PP facing both sides. Options for 0.02" to 0.06" T facings available.



## - 52 TP Panel

Use a base -50 Panel with a nonwoven Polyester bondable outer layer.

## Typical TP Panel Mechanical Properties

PRODUCT ID	FACING TYPE	CORE TYPE	THICKNESS (INCHES)	WEIGHT (LBS/FT <sup>2</sup> )	COMPRESSION <sup>3</sup> STRENGTH (PSI)	FLEXURAL RIGIDITY <sup>4</sup> (EI/INCH-WIDTH)
PP1-5.0-UV-8-30	.02" T <sup>1</sup> 0-90 GLASS-PP	PP HONEYCOMB 5 PCF <sup>2</sup>	0.25	0.36	275	1,100
			0.50	0.46	275	4,400
			0.75	0.56	275	10,000
			1.0	0.67	275	17,000
PP1-5.0-UV-8-50	.03" T <sup>1</sup> CHOPPED GLASS-PP	PP HONEYCOMB 5 PCF <sup>2</sup>	0.5	0.5	275	2,850
			0.75	0.6	275	6,500
			1.0	0.7	275	11,000

<sup>1</sup> Other facing thicknesses and weights available

<sup>2</sup> Other PP Honeycomb densities available

<sup>3</sup> Per ASTM C365 (Stablized)

<sup>4</sup> Per ASTM C393 (4 pt 1/4 pt, 20" span)



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