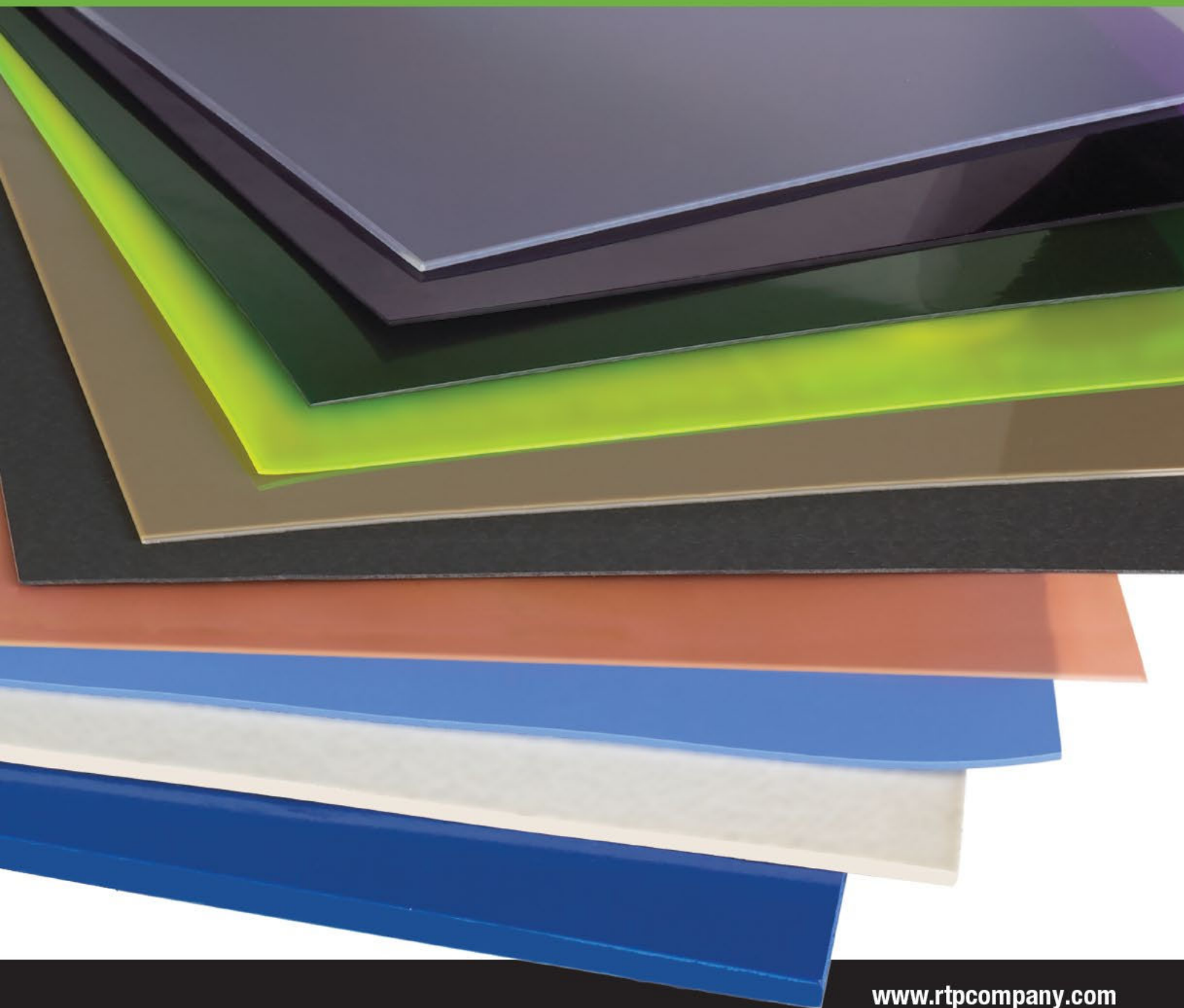




# Engineered Sheet Products

Custom Extruded  
Thermoplastic Sheet



RTP Company is proud to offer Engineered Sheet Products™ (ESP™), your one-stop-shop for custom extruded sheet. Our services and capabilities extend beyond typical sheet extrusion manufacturers, so there is no need to compromise with an off-the-shelf material or sheet size.

We work in many different engineered resin systems and offer a wide range of thermoplastic technologies. Contact us with your material requirements and our engineers will select an extrusion grade compound that is optimized to your specifications and positions your program for success!



### RTP Company at a Glance

RTP Company is committed to providing you with solutions, customization, and service for all of your thermoplastic needs. We offer a wide range of technologies available in pellet, sheet, and film that are designed to meet even your most challenging application requirements.

[www.rtpcompany.com](http://www.rtpcompany.com)



## Production Capabilities: Thickness, Width, and Length

### LAB Line

Thickness: 0.020" to 0.080"  
Widths: 8" to 10"

### MEDIUM Line

Thickness: 0.020" to 0.080"  
Widths: 10" to 32"

### LARGE Line

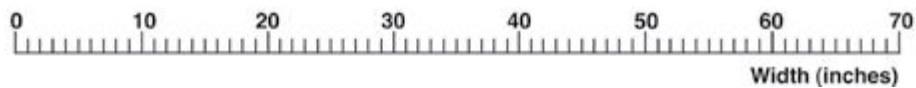
Thickness: 0.030" to 0.250"  
Widths: 28" to 58"

### TRANSPARENT Line

Thickness: 0.030" to 0.250"  
Widths: 24" to 70"

MORE INFORMATION  
LOCATED ON PAGE 6

WE CAN PRODUCE  
ANY SHIPPABLE LENGTH.



*Our customers include global manufacturers and OEMs in industries such as: Electrical products, Electronics, Automotive, Medical, Appliances, Industrial, Aerospace, and much more.*



**ELECTRICAL & ELECTRONICS**



**AUTOMOTIVE**



**MEDICAL**



**APPLIANCES**



**INDUSTRIAL**



**AEROSPACE**



*From specific, high-tech compounds to unfilled resins, we work with most thermoplastic resin systems and hundreds of modifiers to provide the right solution for you.*

## Resin Portfolio

Our compounding expertise and access to a diverse resin portfolio allows us to provide you with top quality thermoplastic sheet.

ESP Series	BASE POLYMER	ABBREVIATION	Structural	Conductive	Flame Retardant	Wear Resistant	Color
01	Polypropylene	PP	●	●	●	●	●
02E	Amorphous Nylon	PA	●	●	●	●	●
03	Polycarbonate	PC	●	●	●	●	●
04	Polystyrene	PS	●	●	●	●	●
06	Acrylonitrile Butadiene Styrene	ABS	●	●	●	●	●
07	Polyethylene	PE	●	●	●	●	●
08	Acetal	POM	●	●		●	●
09	Polysulfone	PSU	■	●	●	●	●
14	Polyethersulfone	PES	■	●	○	●	●
18	Acrylic	PMMA	●	●		●	●
21	Polyetherimide	PEI	■	●	○	●	●
22	Polyetheretherketone	PEEK	■	●	○	●	●
25	Polycarbonate/ABS Alloy	PC/ABS	●	●	●	●	●
28	Thermoplastic Polyolefin Elastomer	TPE	●	●	●	●	●

■ = High Temperature Resins    ○ = Inherently Flame Retardant

## ***Color Solutions***

We can color match virtually any hue or chroma; in addition, we can add functional technologies (such as light diffusion or UV protection) or special effects (such as glow-in-the dark, edge glow, speckled, and wood effects). Whether you select from our standard palette or choose a custom formulation, our experienced colorists deliver consistent color, every time.



## ***Conductive Solutions***

We have a broad range of Conductive options, from PermaStat® antistatic, conductive carbon black, to EMI/RFI shielding and thermally conductive compounds. Depending on your application needs, we have a solution for you.

## ***Flame Retardant Solutions***

Our Flame Retardant compounds include halogen-free and halogenated options that meet flammability performance specifications, allowing you to obtain regulatory compliance such as UL, transportation, building and construction, and global standards.



## ***Structural Solutions***

Our Structural solutions provide targeted improvements of mechanical and physical properties to meet application requirements – even in the most challenging environments. Our portfolio spans from cost-sensitive commodities like Polypropylene to the highest performing compounds including PEEK. Structural performance can be predicted and tailored to meet your specific end-use requirements by using appropriate fillers, reinforcements, and additive technologies.

## ***Thermoplastic Elastomer (TPE) Solutions***

We provide Thermoplastic Elastomer solutions, ranging from off-the-shelf resins to complex custom compounds. Whether your application requires a soft, tactile feel or tough, durable performance, our TPE products can be formulated to include a variety of other desirable properties.



## ***Wear and Friction Resistant Solutions***

Our Wear and Friction Resistant solutions provide optimal performance of mating parts and materials in motion. We can solve many wear and friction issues such as abrasion, noise, vibration, sliding, external lubrication, scratches, marring, or withstanding extreme conditions.

Once a compound has been selected, we'll discuss your sheet sizing requirements. Whether you need thick-gauged sheets for thermoforming, thin-gauged sheets for die-cutting, or anything between, we'll help you optimize a high-yield.

## Production Capabilities

ESP has multiple extrusion machines to provide various sheet sizes, including thicknesses from 0.020" to 0.250" and widths from 10" to 70".

	Available Thicknesses	Available Widths	Available Lengths	Available Textures	Minimum Order Quantity
<b>MEDIUM Line</b>	0.020" to 0.080"	10" to 32"	Any shippable length, including rolls	<ul style="list-style-type: none"> <li>• Smooth</li> <li>• Matte</li> </ul>	660 lbs.
<b>LARGE Line</b>	0.030" to 0.250"	28" to 58"	Any shippable length, including rolls	<ul style="list-style-type: none"> <li>• Smooth</li> <li>• Matte</li> <li>• Heavy grain</li> </ul>	1,320 lbs.
<b>TRANSPARENT Line</b>	0.030" to 0.250"	24" to 70"	Any shippable length, including rolls	<ul style="list-style-type: none"> <li>• Smooth</li> <li>• Diamond</li> </ul>	1,320 lbs.

## Proof-of-Concept Capabilities

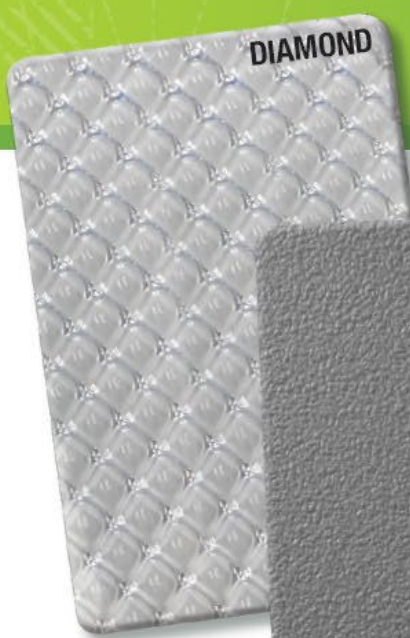
For proof-of-concept requests, we can provide sample sheets or injection molded plaques, which provide similar properties to the extruded sheet samples.

	Available Thicknesses	Available Widths	Available Lengths	Available Textures	Minimum Order Quantity
<b>LAB Line</b>	0.020" to 0.080"	8" to 10"	Any shippable length, including rolls	<ul style="list-style-type: none"> <li>• Smooth</li> <li>• Matte</li> </ul>	50 lbs.
<b>TRANSPARENT Line</b>	0.030" 0.060" 0.090" 0.125" 0.156" 0.187" 0.250"	10"	10"	<ul style="list-style-type: none"> <li>• Smooth</li> </ul>	N/A
<b>Injection Molding Capabilities</b>	0.040" 0.060" 0.080" 0.090" 0.125" 0.160" 0.250"	6"	Variable (ranges from 5" to 12" depending on thickness)	<ul style="list-style-type: none"> <li>• Smooth</li> <li>• Matte</li> </ul>	20 lbs.

## Sheet Weight Calculation

$$\text{Length (in.)} \times \text{Width (in.)} \times \text{Thickness (in.)} \times \text{specific gravity} / 27.68 = \text{lbs./sheet}$$





SHOWN  
ACTUAL SIZE

## Sheet Capabilities

In addition to sheet size options, we offer several texture options, which can be produced on both sides, or intermixed; for example, the top side of the sheet may be smooth and the bottom side can be matte, or vice versa.



## Interested in rolls?

ESP offers rolls with a 3" or 6" core. Thicknesses up to 0.080" can typically be rolled, depending on the selected material. When ordering, it is important to consider the weight of the roll and whether splicing or marked imperfections would be acceptable.

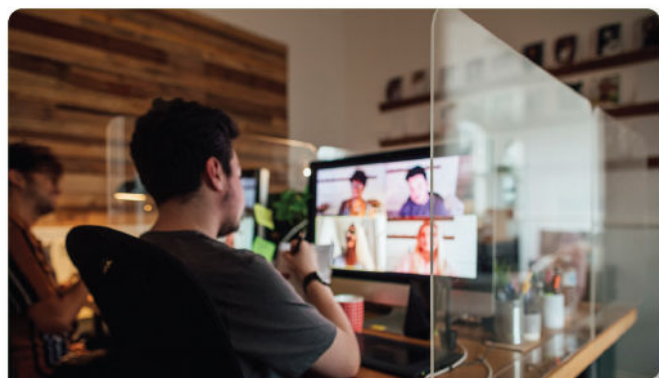
## A Closer Look at ESP's Transparent Line

ESP manufactures transparent sheets that are ideal for applications such as commercial lighting and sneeze guards.



## Commercial Lighting

Commercial lighting applications that must withstand harsh outdoor climates benefit from our UL Listed transparent sheet, available in smooth or diamond texture, with optional UV resistance properties.



## Sneeze Guards

Our transparent sheet materials are perfect for sneeze guards and barriers used in offices and retail space. These sheets have a smooth texture and are laminated on one or both sides to protect them during transport and cutting processes. UV resistance is also available. We offer competitive lead times and can provide sheets in widths up to 70" in any shippable length.

*Don't compromise  
with an off-the-shelf  
material or sheet size!*

*We can provide the  
exact sheet material  
you need.*





Your Global Compounder of  
Custom Engineered Thermoplastics

## RTP COMPANY THERMOPLASTIC TECHNOLOGIES



### COLOR

We offer precolored resins, UniColor®, Masterbatches (including Color Conduit), and cube blends for plastic parts ranging from automotive to rocket components and medical devices to toothbrush handles. Our Hueforia color experts provide color selection advice and precise custom color matching services.



### CONDUCTIVE

We offer compounds for electrostatic discharge (ESD) protection, thermal management, EMI shielding, or PernaStat® permanent anti-static protection. Available in particulate and all polymeric-based materials, these compounds can be colored as well.



### FLAME RETARDANT

Whether you are developing a new product or need to reformulate due to ever-changing regulations, we can custom engineer a flame retardant material with the exact properties you require.



### HIGH TEMPERATURE

We formulate our high temperature compounds precisely to retain their performance properties, provide better dimensional stability, and offer excellent electrical characteristics in continuous-use high temperatures.



### LONG GLASS FIBER

As pioneers in developing a proprietary pultrusion process, we've perfected the manufacturing of our Long Glass Fiber (LGF) Compounds. These pellets encapsulate long fibers for superior strength, stiffness and impact resistance, making them ideal for metal replacement.



### STRUCTURAL

Our reinforced Structural Compounds are formulated to increase strength and stiffness, and provide resistance to impact, creep, and/or fatigue. These materials can be customized to meet cost and performance targets.



### TPE

Our thermoplastic elastomers provide rubber-like performance with the processing benefits of thermoplastic resin. Our portfolio ranges from standard, in-stock resins to custom compounds designed to meet your specifications.



### TPO

For stiff, lightweight, and impact resistant material, our Thermoplastic Polyolefins are your solution, providing excellent low temperature ductility, as well as UV- and scratch/mar-resistance.



### WEAR RESISTANT

Our wear resistant thermoplastic compounds can incorporate internal lubricants to reduce wear and friction, thereby lengthening the service life of your application and reducing your processing costs.



### ENGINEERED SHEET

We're your one-stop-shop for thermoplastic sheet. We can offer you a unique material, designed with these technologies and extruded to meet your exact sizing requirements.



### FILM – WIMAN

Through our sister company, Wiman Corporation, we can provide you with polymer film in a variety of resins, and customized with additives to provide specific properties.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as a suggestion for investigation for use, based upon RTP Company or other customer experience.

RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe on any patents.

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