

# Engineered Sheet Products

Custom Extruded Sheet

Engineered Sheet Products™ (ESP™), a division of RTP Company, is your one-stop-shop for custom extruded sheet. Utilizing the expertise and resources of RTP Company, 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"

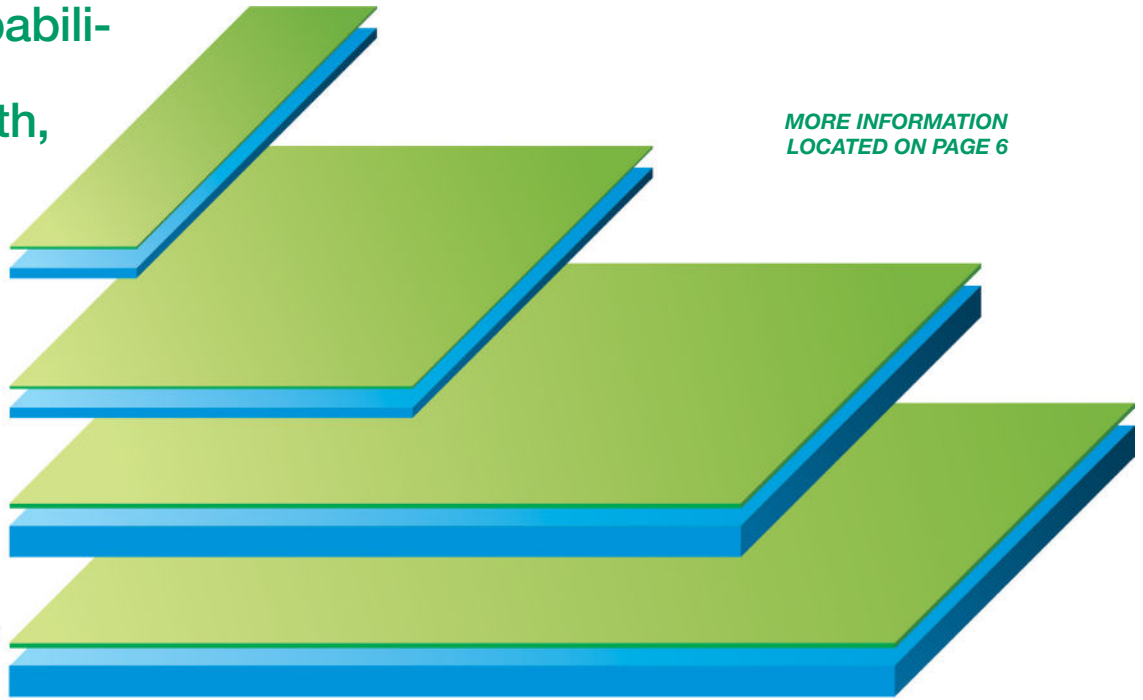
### LARGE Line

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

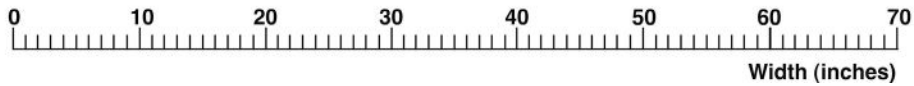
### TRANSPARENT Line

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

○ = 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

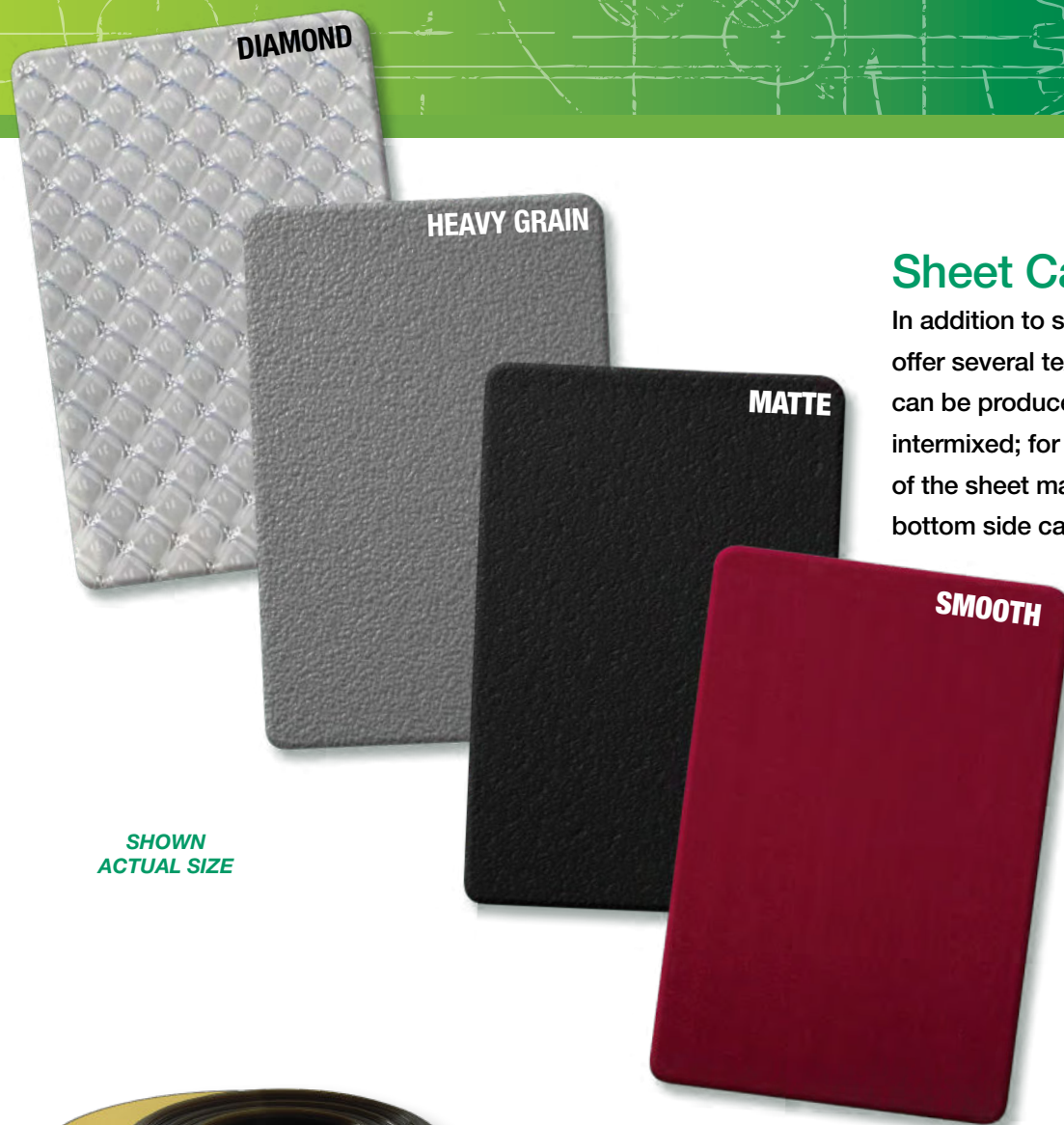
For proof-of-concept requests, we can provide sample sheets or injection molded plaques, which provide similar properties to the extruded sheet samples.

	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

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

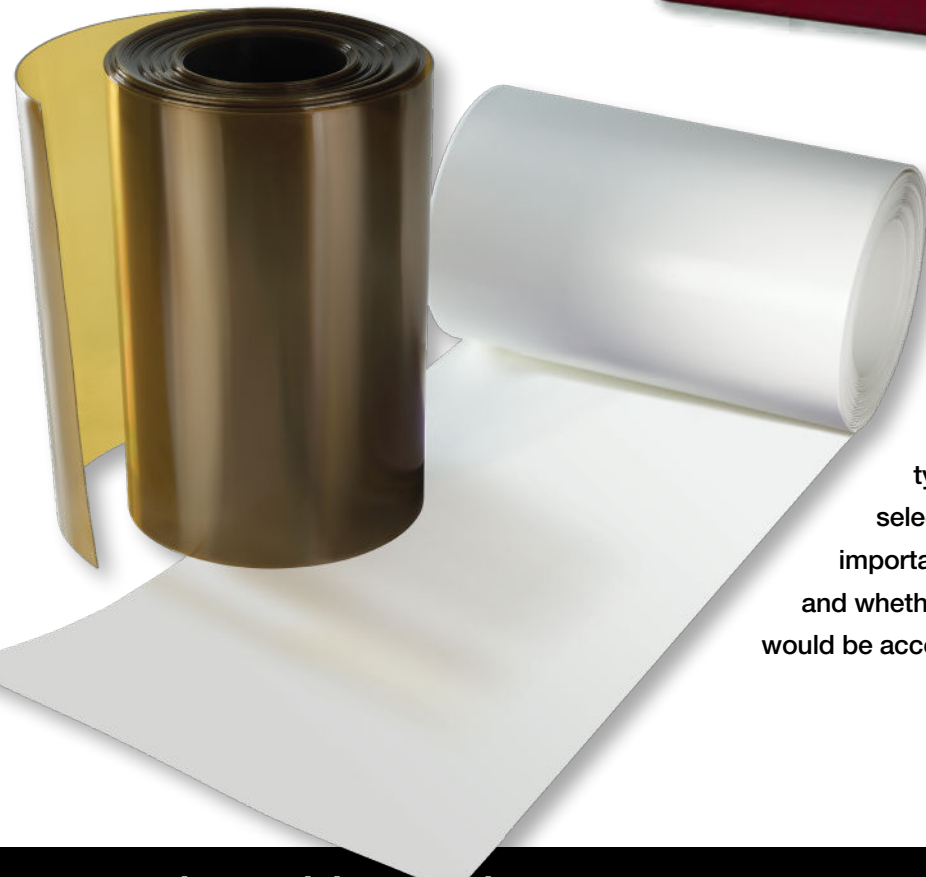




SHOWN  
ACTUAL SIZE

## 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.

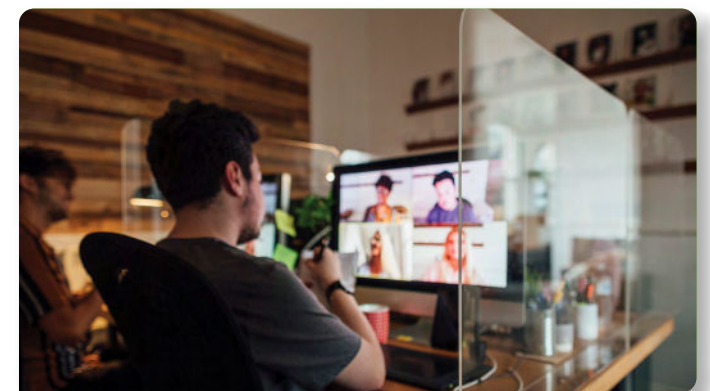
## A Closer Look at ESP's Transparent Line

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.



A division of RTP Company



**Engineered Sheet Products™** is committed to providing you with made-to-order thermoplastic sheet products. We will optimize a higher yield than other standard, off-the-shelf sheet options.

Please contact your local Sales Engineer by calling **+1-800-432-2386**, email [esp@rtppcompany.com](mailto:esp@rtppcompany.com), or visit [www.engineeredsheetproducts.com](http://www.engineeredsheetproducts.com).

Need help with a material selection? Our parent company, RTP Company, provides custom engineered thermoplastics in a wide range of technologies which are designed to meet even your most challenging application requirements.

*Don't compromise with an off-the-shelf material or sheet size! We can provide the exact sheet material you need.*

## RTP COMPANY

RTP Company is an independent, privately owned thermoplastics compounder with global manufacturing, engineering support and sales representation. We are committed to providing you with the best solutions, customization, and service to fit your needs.

## ESP™ (ENGINEERED SHEET PRODUCTS™)

ESP™ manufactures engineered cut sheet, produced by the extrusion of custom materials in a variety of sheet sizes and thicknesses, or by a casting process for lightweight optical sheet made with high optical quality, chemical and abrasion resistance, and thermal stability.

## HUEFORIA

As the Colour Development Team of RTP Company, Hueforia brings together our color experts, technicians, resources and a shared color database to serve designers, marketing professionals, and OEMs.

## WIMAN CORPORATION®

A wholly-owned subsidiary of RTP Company, Wiman Corporation produces polymer film from a variety of resins that can be customized with additives to provide specific properties.

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