

CUSTOM SURFACE PROTECTION

Most products encounter environmental challenges between the time it is produced and when it arrives in the customer's hands. Dust, humidity, scratches, and other hazards can all negatively affect a product's performance and appearance. To combat these issues, custom surface protection products help items retain their like-new appearance.

TPC Converting Solutions is a trusted source of packaging. supplies and equipment, with over half a century of experience in the packaging industry. Our capabilities include everything from protective duct film to polysheeting to floor protection and more. We can help you develop an effective custom surface protection film that meets your needs. In this eBook, we will discuss everything you need to know about surface protection films, including their benefits, material options, automated solutions, and much more.



WHAT IS SURFACE PROTECTION FILM?

A surface protection film is a thin, protective plastic layer that is applied to a product's surface to shield it from environmental hazards. Dents, dust, and scratches are common issues that can occur during product storage, transportation, and installation. Surface protection films prevent these difficulties and maintain the item's pristine quality and appearance. They also reduce costs associated with replacements, rework, and repairs.

Many industries rely on surface protection solutions to ensure customers receive the best possible quality product. The most common applications for surface protection films include:





AUTOMOBILES

To protect Class A surfaces, like door trim, painted and metal exteriors, and plastic interior surfaces.

APPLIANCES

Stainless steel and other materials require added protection during shipping and installation. Large and small household appliances of all kinds benefit from protective films, ensuring customers receive these products scratch-free.





ELECTRONICS

Electronic devices can collect dust easily and are sensitive to scratches. Computers, smartphones, gaming devices, and other electronics benefit from added surface protection.

BUILDING/CONSTRUCTION MATERIALS

Surface protection films safeguard doors, windows, countertops, and flooring during construction and renovation projects, keeping them in pristine condition.





TYPES OF SURFACE PROTECTION MATERIALS

At TPC Converting, we develop custom surface protection films for many unique applications. To meet these diverse needs, we offer a range of films and adhesive materials.

FILMS

Surface protection films are completely customizable and include a variety of materials, thicknesses, and color options. The surface protection films we offer include low-density polyethylene, COEX, polyolefin, and polyvinyl chloride.



LOW-DENSITY POLYETHYLENE FILM

Commonly referred to as LDPE, this material is known for its lightweight nature and flexibility. It is highly durable and resistant to impacts and punctures. LDPE is a popular choice for surface protection film applications, particularly with consumer goods. It offers several significant benefits, including high clarity, reduced cost, and easy processing.

COEX

COEX is a multi-layer film. It is produced by extruding two or more layers of various materials together to create a composite film with unique properties. Depending on the materials used, COEX can have enhanced durability, strength, and barrier properties.





POLYVINYL CHLORIDE

Widely known as PVC, polyvinyl chloride is a highly durable and strong plastic material. It is resistant to weathering and chemicals and is often used as a protective film to cover metal forms.

POLYOLEFIN

Also referred to as PO, polyolefin is a plastic film that is widely used to protect acrylic glass, painted metal surfaces, and similar surfaces. It is durable, lightweight, and easy to apply.



ADHESIVES

After selecting a protective film material, the next step in developing a custom surface protection film is to identify the most suitable type of adhesive to apply the film to your product. We work with numerous types of adhesives, including water-based, solvent-based, and rubber-based options.



WATER-BASED

Water-based adhesives are environmentally friendly and water-soluble. They also have the added benefit of quick and easy removal.

SOLVENT-BASED

If your protection film needs to be resistant to aging, a solvent-based option will perform the best. Solvent-based adhesives come off conveniently for the end-user and are produced using organic solvents and acrylic acids.





RUBBER-BASED

Rubber-based adhesives offer excellent cohesion and leave little residue upon removal. Both natural and synthetic rubber options are available and perform very well in protective film applications.

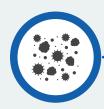
ADHESIVE-LESS

For applications that require no adhesive material transfer onto a product's surface, our adhesive-less option is an excellent solution. It works by embedding an adhesive compound directly into the polyethylene-based coextrusion. The result is a low tack level and zero adhesive transfer.



BENEFITS OF USING SURFACE PROTECTION FILM

No matter what your industry is, using surface protection films delivers many benefits:



PROTECTS AGAINST DIRT AND HUMIDITY:

Films prevent the buildup of unwanted dust, moisture, and debris.



PROTECTS AGAINST ABRASION:

Protection films serve as a barrier against physical damage and helps maintain surface quality and appearance.



RESISTS HOT AND COLD TEMPERATURES:

Protection films are engineered to withstand extreme temperatures and protect sensitive surfaces from temperature fluctuations.





CHEMICAL RESISTANCE:

Exposure to chemicals and other foreign substances can easily damage certain surfaces. Protection films act as an effective barrier, enhancing a product's chemical resistance.



UV RESISTANCE:

UV light can discolor unprotected surfaces. Our films prevent fading and other UV-related surface damage.

CUSTOM BRANDING

When developing a custom surface protection film from TPC, you also have the option of incorporating custom branding onto your film. This is a highly effective way of boosting brand awareness and conveying key information to consumers.

As a cost-effective advertising method, custom surface protection films can contain:



AUTOMATION OF CUSTOM SURFACE PROTECTION FILM

In addition to developing surface protection films, TPC also offers automated film application equipment. Our protective film applicator increases your throughput while reducing manual labor. It also ensures wyour film is applied evenly and securely to each product's surface and maintains precision when cutting your film to the correct size and shape. Our protection film automation equipment comes with HMI touchscreens for easy programming and can accommodate complete or partial product coverage.

HOW TPC CONVERTING CAN HELP

We offer a diverse range of solutions for packaging applications, including products for cutting, laminating, wrapping, and labeling. We develop custom films with virtually any type of branding information or graphics. In addition, our custom automation equipment allows you to streamline your packaging operations and reduce labor costs while increasing accuracy and productivity.



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CUSTOM SURFACE PROTECTION FROM TPC CONVERTING

To benefit from added protection during warehousing and transportation, your products need effective custom surface protection. TPC Converting can help you develop an attractive and effective solution, working alongside you to create an effective protection tape or choose automation equipment for your needs. To learn more, **contact our team** today.

ABOUT TPC CONVERTING

For over 50 years, TPC Converting has fulfilled the packaging needs of a diverse range of industry clients. Our services are custom-tailored to each client while offering quick turnaround and cost-efficiency. Plus, our team leverages a strong supplier network to quickly obtain the highest quality materials, no matter how specialized your application.

CONTACT US

RESOURCE LIBRARY

CONTACT

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