Applications for Tedlar®

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What is Tedlar®?

Tedlar® is a DuPont registered trademark for a highly versatile polyvinyl fluoride (PVF) film that provides a long-lasting finish to a wide variety of surfaces exposed to harsh environments; while its inert, non-stick properties make it an excellent release film.
Why Tedlar®?

- Interiors
  - Cleanability
  - Chemical/solvent resistant
  - Stain/graffiti resistant
  - Excellent flame & smoke rating
  - Long term protection
  - Endurable style
  - Excellent formability
  - Does not support the growth of Mold and Mildew
  - Heat sealable
  - Ink & print receptive

- Exteriors
  - UV & weather stability
  - Chemical resistance
  - Stain/dirt resistant
  - Temperature stability
  - Colour stability
  - Range of surface gloss
  - Low toxicity & volatiles
  - Bendability
  - Low gas/ vapor permeability
  - Sound transmitting
Tedlar® PVF Applications

Proven applications, globally, for over 50 years

- Building & Construction
- Signage
- Healthcare
- Industrial
- Aerospace & Transportation
- Composite Release
- Photovoltaics
# Tedlar® PVF Films, Dispersions & Polymers: Demonstrated Substrates & Commercial Applications

<table>
<thead>
<tr>
<th>Tedlar® Products, Application Process</th>
<th>Substrates that Tedlar® is Applied to...</th>
<th>Applications / Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tedlar® PVF Films &amp; Adhesives, via Lamination</td>
<td>PET</td>
<td>Solar panel backsheets, automotive brightwork</td>
</tr>
<tr>
<td></td>
<td>Steel</td>
<td>Building roofing, siding, etc.</td>
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<tr>
<td></td>
<td>Aluminum</td>
<td>Building Siding</td>
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<tr>
<td></td>
<td>Poly (vinyl chloride) a.k.a. “Vinyl”</td>
<td>Sports domes, tents, wallpaper, signage &amp; graphics, awnings, automotive trims, passenger rails</td>
</tr>
<tr>
<td></td>
<td>Engineering thermoplastics (ABS, polycarbonate)</td>
<td>Hard signs, touch membranes, thermoformed parts, aerospace, skylights</td>
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<tr>
<td></td>
<td>Aramid (Nomex®, Epoxy and phenolic)</td>
<td>Aerospace panels</td>
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<tr>
<td></td>
<td>Fiberglass reinforced plywood panels (FRP)</td>
<td>Truck bodies</td>
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<tr>
<td></td>
<td>Glass reinforced plastic panels (GRP)</td>
<td>Greenhouses, skylights, building panels, electric utility boxes, radome panels</td>
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<tr>
<td></td>
<td>Scrims</td>
<td>Reinforcement for insulation liners in aerospace</td>
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<td></td>
<td>Foil</td>
<td>PV, pipe jacketing</td>
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<tr>
<td></td>
<td>Urethane &amp; Vinyl</td>
<td>Roofing, aerostats/blimps</td>
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<tr>
<td></td>
<td>Dacron™ &amp; Mylar® PET</td>
<td>Sailcloth protection (marine)</td>
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<td></td>
<td>Bitumen</td>
<td>Low angle roofing</td>
</tr>
<tr>
<td></td>
<td>Tedlar® PVF film</td>
<td>Heat seal to create envelopes for gas sampling, acoustical wraps, insulation bags, (Bridge) cable wraps</td>
</tr>
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<tr>
<th>Tedlar® PVF Dispersions or Polymers, via Coating</th>
<th>PET</th>
<th>Solar panel backsheets, release films, etc.</th>
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<td></td>
<td>PVDF</td>
<td>Chrome-look surfaces (automobiles, rail, appliances)</td>
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<tr>
<td></td>
<td>Steel</td>
<td>Brake fluid tubing, architectural panels</td>
</tr>
<tr>
<td></td>
<td>Fabrics</td>
<td>Architectural fabrics (tents, domes, etc.)</td>
</tr>
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</table>
Building and Construction Applications: Exteriors

Tedlar® protective film helps extend the look and life of your design, even in the most extreme environments. From severe weather to harsh chemicals, Tedlar® protective film provides long-term durability and performance.

Application Areas:

- Curtain walls
- Formed or flat metal building panels
- Roofing
- Siding, trims and accents
- Indoor and outdoor fabrics
- Flexible laminates for air-inflated structures, canopies, awnings and stadium domes
- Highway sound barriers
- Pipe and vessel jacketing
Tedlar® Exterior Installation

Tedlar® on metal lamination installed on roofing & curtain walls

**Building:** Samsan Gymnasium

**Location:** Incheon, South Korea

**Tedlar® surface:** 10,484 m²
Building and Construction Applications: Interiors

Tedlar® protective films do not support mold, mildew growth or bacteria, providing superior surface protection in even the most extreme and high-traffic environments. Additionally, Tedlar® is impervious to harsh chemicals like bleach and easy to clean.

Tedlar® protective film can easily be applied to a range of surfaces, providing the flexibility to design your way, and the surface performance to keep it that way.

Typical Applications Include:

- Tedlar™ Wallcoverings
- Wall paneling
- Acoustical and ceiling panels
- Flooring
- Doors and window frames
- Furniture
- Healthcare applications
- HVAC
Tedlar™ Wallcoverings & Wall Paneling: Installations
Commercial Passenger Aircraft Applications

Tedlar® has protected the interiors of aircraft since 1964 and continues to be an industry standard today.

Tedlar® was specified in commercial aircrafts due to its high standards of nonflammability. It is certified by FAA and EASA with excellent fire resistance properties.

Tedlar® continues to be used because of its durability. Aircraft interiors see thousands of passengers over years and stay looking clean year after year.

**Interiors**
- Sidewalls
- Stow bins
- Window shades
- Ceiling panels
- Partitions
- Monuments
- Galley
- Lavatories
- Closets

**Secondary Structures**
- Landing gear bay
- Insulation Blankets
- Cargo protection
- Labeling
- Composite release
- Composite protection
Passenger Rail Applications

Similar to aircraft, passenger rail sees similar traffic flow of customers through the doors daily.

The overall durability, stain resistance, and cleanability make Tedlar® ideal for many different areas inside and outside a rail car.

Tedlar® has great thermoformability making it ideal for manufacturing interior sidewalls.

Tedlar® is resistant to mold and mildew.

Application Areas:

- Sidewalls
- Doors
- Ceiling panels
- Lavatories
- Closets
- Even HVAC
- Seats casing and backsides
- Partitions
- Galleys
- Graphics and signage
- Interior insulation
Graphic Signage Applications

Tedlar® Graphic Film (TGP) Film

Is the ideal surfacing material for graffiti resistance and protection against fading and corrosion.

Why Tedlar® TGP Film?

- Weather/UV resistant up to 10 years
- Outstanding graffiti resistance
- Long-term protection of brand message
- Impervious to harsh chemicals and atmospheric pollution
Other Applications

Gas Sample Bags:
Resistance to gas permeation along with chemical inertness to maintain sample integrity

Composite Release:
High-performance release for various compounds including fiber-reinforced polymer (C/FRP)

Transfer Printing:
Excellent printability and release from rubber and metal
**Tedlar® PVF Film Applications Circa 1963**

<table>
<thead>
<tr>
<th>Weatherproof Sign</th>
<th>Insulation Jacket</th>
<th>Metal Building</th>
<th>Prefinished aluminum</th>
<th>Fiberglass Panels</th>
<th>Plywood Siding</th>
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<tr>
<td>Face is DuPont Tedlar film</td>
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**WEATHERPROOF SIGN**

Face is DuPont Tedlar film

The surface of the company's final product, a sign and marker, has a DuPont polyvinyl fluoride film that withstands weathering. This sign, serving as a long-lasting weathering label, is available in black or white. It is weather resistant and flexible over a temperature range of -50°F to 250°F.

**INSULATION JACKET**

Surface is Tedlar film

A jacket is surfaced with Tedlar film. The material, weather resistant, has a high temperature rating, making it suitable for prolonged exposure to high temperatures.

**METAL BUILDING**

Surface is Tedlar film

A metal building is surfaced with Tedlar film. The film is durable and resistant to weathering and chemicals.

**PREFINISHED ALUMINUM**

Surface is Tedlar film

Prefinished aluminum is surfaced with Tedlar film. The film provides weather resistance and durability, suitable for exterior applications.

**FIBERGLASS PANELS**

Surface is Tedlar film

Fiberglass panels are surfaced with Tedlar film. The film offers protection against weathering and chemicals.

**PLYWOOD SIDING**

Surface is Tedlar film

Plywood siding is surfaced with Tedlar film. The film protects the underlying wood, providing weather resistance.

**ROOF MATERIAL**

Surface is Tedlar film

A roof material is surfaced with Tedlar film. The film offers durability and weather resistance, suitable for roof applications.

**Weather Resistant Tape**

Based upon DuPont Tedlar PVF film

Weather resistant tape is V-9177, consisting of Tedlar polyvinyl fluoride film and a pressure-sensitive adhesive, offering protection against weathering and chemicals.

**Cellulose Insulation**

Surface is Tedlar film

Cellulose insulation is surfaced with Tedlar film. The film provides weather resistance and durability.

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**Industrial Equipment News**

*Original Source of Tedlar Film Applications from Historical Data*
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