



# PRODUCT BULLETIN 9

## PLASTICS for Safety and Security

### Safety Film...

forms a tough barrier that holds shattered glass in place.

### Acrylic Sheets...

provide excellent burglary protection. child-proof your home—make it safe for little ones!

### Polycarbonate Sheets...

are 250 times more impact-resistant than glass.

### Acrylic Sheets...

**Windows** • Acrylic provides excellent burglary protection when it's used for your windows. It is half the weight of glass and has seventeen times the impact resistance! It also acts as an insulator against temperature and noise. You can buy it with an optional abrasion-resistant coating for greater durability and chemical resistance.

**Display Cases** • The mechanical strength of acrylic can be combined with UV filtering to help protect items in display cases from the destructive fading rays of the sun. It is crystal-clear and is unaffected by the weather or UV rays. It will be as beautiful years from now as it is the day you install it.

**Protection for Art** • Acrylite OP-3 is used in museums to protect valuable artifacts from the fading effects of UV rays. It will work for you too. Use it instead of glass to frame a picture—protects photography or original artwork. Build a UV protected case for that heirloom. TAP can provide you with exactly what you need.

**Child-Proof** • Parents and grandparents—protect your toddler from harm. We can make control covers, stair-rail guards, open-window guards, big screen TV covers, deck and patio rail guards, replace glass tabletops, and much more—with break-resistant acrylic. Tell us what you need and we'll make it for you!

**Bullet-Resistant Glazing** • TAP carries Acrylite BRT (UL listed, 1.25" acrylic). It is lighter in weight and clearer than comparable strength glass. It will not turn yellow or become brittle, even with outdoor exposure.

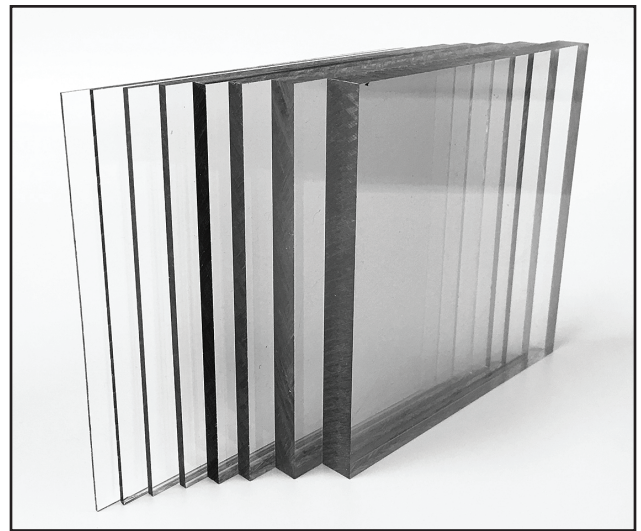
### Polycarbonate Sheets...

**Windows** • Polycarbonate sheets are one-half the weight and 250 times more impact-resistant than glass—making even thin polycarbonate virtually unbreakable. With its UV resistant properties, polycarbonate will provide years of carefree service. For high contact areas, an abrasion-resistant coating is available.

**Machine Guards** • The clarity of polycarbonate combined with its terrific strength make it the perfect material for machine guards. Polycarbonate can be cut, bent, and drilled for easy installation. Its superior impact-resistance and clarity assure maximum worker safety. Give TAP your measurements and we can fabricate it for your installation. We even have Abrasion-Resistant Polycarbonate for the ultimate in wear and safety.

### Window Films...

**Windows** • Clear Safety Window Film bonds to glass to form a tough barrier that holds shattered glass in place, protecting you from deep cuts and scratches. The film also blocks 99% of the sun's damaging UV radiation that causes fading and deterioration and, also, prevents a burglar from making an easy entry into your home.



Safety film can also hold a broken window in place after an earthquake. This will give you time to order a replacement window without having to resort to plywood to block the temporary opening.

A burglar trying to gain entry to your home will find that it takes repeated blows from a hammer or bat to create an opening barely large enough to reach through when safety film is on your window or door. This will deter the vast majority of unwanted entries.

Graffiti protection is another benefit of TAP's Safety Film. Apply it to the exterior of glass to provide a barrier between the graffiti artist and the glass. Film can usually be replaced at a fraction of the cost of buying a new glass window. Besides that, the safety and burglary features of the film are still effective with an exterior application. Film on the outside of a window will probably need to be replaced in about two years because of the effects of the environment—when applied inside the window lasts indefinitely.

Many public establishments are using film on their glass rest room mirrors to protect them from graffiti artists who enjoy etching the glass.

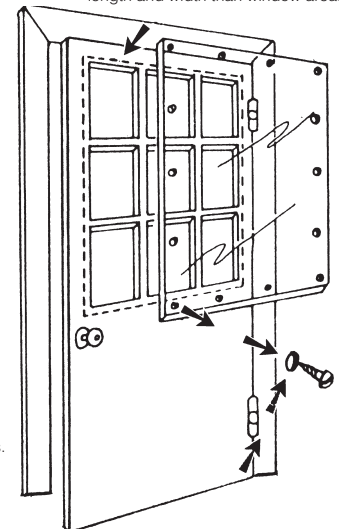
See Product Bulletin 5 for installation instructions.

## How to Install A Safety Window Acrylic or Polycarbonate Glazing

Don't let a burglar gain entry into your home by breaking an accessible glass window and unlock your door from the inside. Cover vulnerable glass openings with acrylic or polycarbonate sheets.

Simply install 1/4" acrylic or 1/8" polycarbonate to the inside of your doors and accessible windows. Ask a TAP salesperson to show you our selection of materials and thicknesses.

Clear acrylic 1/4", cut 2" larger in length and width than window area.



Round-head screws 1 1/2" in length with finishing washers.

## How to Install A Safety Window (continued)

To install plastic on a window up to nine square feet:

1. Measure your window's dimensions and add at least 2" to create a 1" border around the entire window. TAP will cut the piece(s) to your exact dimensions at no extra charge.
2. For a better appearance, you can sand the edges with 220 sandpaper.
3. Leave the protective masking on the plastic to prevent scratching. Draw a border around the sheet 1/2" from the edge. Mark each corner and then make a mark every 8 to 12 inches around the border. See illustration.
4. Drill 3/8" diameter holes on your marks with a drill bit designed for plastic. A TAP salesperson will show you our selection of plastic drill bits. Drill holes oversized to allow for expansion and contraction of the plastic—if you wish, we can drill the holes for you.
5. Hold the plastic up to the window and mark the location of the drilled holes on the door. Drill pilot holes for the screws for easier attachment.
6. Remove the protective masking and clean the plastic with TAP Plastic Cleaner or Billianize and a soft cloth or Lint-Free Wipes. Never use paper towels.
7. Use 1 1/4" or 1 1/2" No. 8 round-head wood screws, with washers, tightening only enough to snug the washer against the plastic. If the screws are too tight, there will be no allowance for expansion and contraction.

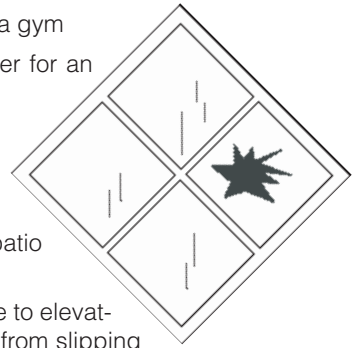
You now have a window which is secure from burglary as well as a room that is safe from shattered glass should the window break. Your window is also better insulated against heat, cold, and noise.

Note: Never cover a bedroom window or any window that would be used as an emergency exit.

## More Safety and Security Ideas

The possibilities are endless. Here are just a few:

- Break-resistant trophy case in a gym
- Impact and UV protective cover for an exterior reader board
- Unbreakable school windows
- Virtually unbreakable patio table tops
- Crystal clear windbreak for a patio or spa
- Attach acrylic or polycarbonate to elevated railings to prevent children from slipping through the rails
- Window film on patio doors can eliminate dangerous flying glass from a child or adult inadvertently walking into the closed door.



These are a few of the safety and security applications for your home or business. Your TAP salesperson can provide you with more product ideas and their applications for your needs.

### Important Tip

To clean plastic sheets properly and without damage, use only TAP recommended plastic cleaners. Use a clean soft cloth or Lint-Free Wipes. Never use a paper towel. Do not use any cleaner that contains abrasives, solvents, ammonia, or undiluted alcohol. Proper cleaning will help protect the beauty of your plastic!

### WARRANTY

TAP Products are manufactured to quality specifications, however they should be tested to determine their suitability for your application. Since we have no control over working conditions or methods, our liability does not exceed the value or replacement of this product. TAP Resin products are guaranteed for six months from date of purchase or nine months from code date on container.

### WARNING

This product contains trace amounts of chemicals known by the state of CA to cause cancer, birth defects, or reproductive harm. Harmful If Swallowed. Call physician.

KEEP OUT OF THE REACH OF CHILDREN.

View all of TAP's how-to videos on plastic, fiberglass, mold-making, window films, and more at:  
[http://www.tapplastics.com/product\\_info/videos](http://www.tapplastics.com/product_info/videos)



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