TAP Plastics —

Window Film Tips from TAP

- U Use TAP Film-Off to remove old window film. Ask TAP salesperson for information.
- U Apply film to inside of window.
- U Install film when temperatures are between 40° and 85°
- U Schedule your installation time when windows will be shaded.
- U Use nonabrasive cleaners. Ask TAP Salesperson for information.
- U Do not apply to plastic windows.
- U Ask a TAP salesperson about splicing film to cover oversize windows.
- U Do not install film specifically made for flat-glass windows on your auto windows.
- House plants are not harmed by Solar Control Window Film's ultraviolet screening action.
- U Solar Control Window Film adhesives are not sticky like pressure-sensitive films.
- U Ask about Clear Safety Film and special Auto-Tint Film. Ask for Product Bulletin 8 • Auto-Tint Film.
- U Do-It-Yourself and Save!
- U Check our website: www.tapplastics.com
- U Ask about our safety film for invisible safety, security, and graffiti protection.
- U Check out our frosted film for privacy that lets light in.

the fantastic plastic place

TVAR Plastics

			`
q Bellevue WA	12021 NE Northup Way	425 861-0940	
q Cupertino CA	10151 S De Anza Blvd	408 252-8600	
q Dublin CA	7176 Regional Street	925 828-7744	
q El Cerrito CA	10760 San Pablo Avenue	510 525-3508	
q Fremont CA	5160 Mowry Avenue	510 796-3550	
q Mountain View CA	312 Castro Street	650 962-8430	
q Pleasant Hill CA	1478 Contra Costa Blvd	925 798-0420	
q Portland OR	2842 NE Sandy Blvd	503 230-0770	
q Sacramento CA	4538 Auburn Blvd	916 481-7584	
q Sacramento CA	4506 Florin Road	916 429-9551	
q San Francisco CA	154 S. Van Ness Ave	415 864-7360	
q San Jose CA	1212 The Alameda	408 292-8685	
q San Jose CA	1008 Blossom Hill Rd	408 265-6400	
q San Leandro CA	3011 Alvarado Street	510 357-3755	
q San Mateo CA	606 South B Street	650 344-7127	
q San Rafael CA	900 Andersen Drive	415 454-6393	
q Santa Rosa CA	2770 Santa Rosa Avenue	707 544-5772	
q Stockton CA	5757 Pacific Avenue	209 957-2036	
q Tigard OR	15230 SW Sequoia Pkwy	503 620-4960	

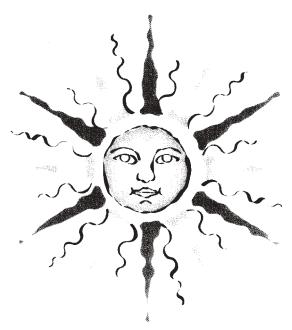
Corporate Office • Dublin CA • 925 829-4889

Printed on recycled paper.

PRODUCT BULLETIN

Do-It-Yourself Application Instructions





Solar Control Window Films

- 3 professional grade film
- 3 cuts harmful ultraviolet radiation
- 3 cuts air conditioning costs
- 3 conserves interior heat in winter
- 3 works with or without storm windows
- 3 adds a touch of beauty
- 3 lessens the danger of broken glass
- 3 reduces glare, adds comfort, lasts for years
- 3 looks and works like expensive tinted glass
- 3 easy do-it-yourself installation

Solar Control Window Film protects furnishings by reflecting the sun's heat and

absorbing almost all of the incidental ultraviolet rays. Furniture, drapes, and carpets fade less and last longer.

TAP Plastics Inc • the fantastic plastic place

Professional Grade Film

TAP Window Film is a professional grade film of higher quality than the pre-packaged lengths sold elsewhere. Choose the window film best suited for your application. Available in widths of 48" and 36" and sold by the linear foot or 100' roll. All our Films have a rugged scratch-resistant coating.

Use R-20 Silver Film for:

- Greatest energy efficiency
- · Minimum solar transmittance
- Reflective silver appearance
- · Maximum daytime privacy
- · Can use on most styles and sizes of windows

Use R-30B Bronze Film for:

- Warm bronze look matches anodized bronze window frames
- Lessens reflective appearance of window
- Greater interior visibility with a pleasant glaredistortion free view

Use R-30G Grey Film for:

- · Modern architectural look
- · Lessens silver reflective appearance of window
- · Better light side to dark side visibility

Use N-1035 Film for:

- · Aesthetically the best with maximum visibility
- Elimination of the mirrored look which is generally associated with reflective films
- Excellent performance in humid or corrosive atmospheres
- Natural Color Visibility...colors appear in their realistic hues through the window

Because we have no control over working conditions or methods, products should be tested to establish suitability for your individual application. Our liability is limited to the price of this product.

Home or Business...

Solar Control Window Film is the best choice because it creates an inviting and safe atmosphere at home and in your office. It reflects the sun's heat and absorbs almost all of the incident ultraviolet rays.

Definitions for Solar Engineering Parameters

1. Approximate Glare Reduction:

medium reduction at 65% heavy reduction at 82%

2. Reflective Index:

amount of visible light reflected by the film—a measure of how shiny the film appears from the outside (reduces the glare that causes eyestrain)

3. Ultraviolet Transmittance:

percent of solar ultraviolet light to pass through a glazing system (rays that fade drapes, carpets, and furniture)

4. Total Solar Energy (heat) Rejected:

percent of solar energy rejected by a glazing system

Typical Solar Properties Film Applied to Glass	R-20 *	R-30 B	R-30 G	N-1035
% Approximate Glare Reduction	85	81	78	65
% Reflective Index	60	12	13	19
% Ultraviolet Transmittance (UV)		0-1	0-1	0-1
% Solar Energy (heat) Rejected	79	63	62	52
* Recommended for double-pane windows				

Windows Do All The Work

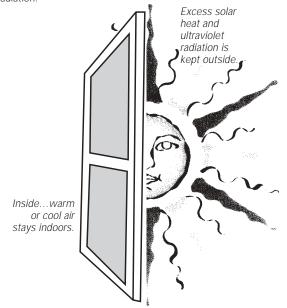
Save Energy! Add efficiency to Solar Control Window Film's list of assets. It reflects up to 80% of the sun's heat and makes a significant reduction in your summertime energy costs. Reduces high energy bills of winter, too.

Keep drapes open and enjoy your view while reducing airconditioning bills. From inside enjoy glare and distortion free views with a uniform private outside appearance.

Solar Control Window Film helps hold broken glass in its place and reduces splintering. Reduce the likelihood of injury by applying Window Film to glass surfaces.

LLumar Solar Control Window Film Professional Grade Film

Ultraviolet radiation passes through regular glass windows almost without change. Fabrics fade then deteriorate. **Solar Control Window Film** blocks, filters, and absorbs harmful radiation.



Solar Control Window Film reduces the heat flow by as much as 70% to 80%. Imagine the difference **Window Film** can make ...imagine how much more comfortable you can be.

Solar Control Window Films *provide comfort*, making any room comfortable all year long. It screens out heat and ultraviolet rays while allowing glare-controlled sunlight to pass through windows.

Treat your installed window films to *Glass-Tint Cleaner Preservative*, which not only cleans your film, but also creates an antistatic, scratch-resistant surface. Ask your TAP Salesperson about this product.

Before Installing Window Film -

Remove drapery materials or shades that may interfere with installation. Clean window frames and sills thoroughly. Coat loose window putty or flaking paint with clear fingernail polish to keep loose particles from falling into work area. Allow nail polish to dry.

Instructions • How to Install-Film-Yourself

Installation Materials Needed

- 3 Spray Bottle
- 3 Straight-Edge
- 3 Snap-Off Knife
- 3 WypAlls Lint-Free Towels
- 3 Masking Tape
- 3 A Sponge
- 3 Smoothee Squeegee
- 3 Window Scraper (for cleaning window)
- 3 Solution of Water and Clear Mild Liquid Soap, such as, Johnson's Baby Shampoo
- 3 5-Way Tool/Trim Guide

Important • Read Before Applying Film –

Do not confuse front side of film with the adhesive side. The adhesive side is covered by the protective liner. Even though the adhesive side is not sticky, it must not be allowed to touch anything before application. Dust or lint on the adhesive side will be permanently trapped between the film and the glass, detracting from the appearance of finished window.

Clean Window thoroughly A meticulously clean window and working area are the main ingredients of success when installing window film. This first step cannot be stressed enough—make sure



the window is very clean! Remove all traces of paint, varnish, stubborn dirt, or any foreign matter. Spray the window with a liquid soap solution (see Step 3 for soap solution formula). Scrape entire wet window surface with the Window Scraper to remove foreign debris. Use the soap solution again, scrub the window with a sponge, and squeegee window clean. MEASURE your window and cut film approximately 1" to 2" wider and 1" to 2" longer than window.

Remove Protective
Liner from film by
attaching a 2" or 3"
piece of masking tape on the
front and back side of one of
the corners. Leave 1" of tape
extended past film. Pull the



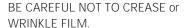
tapes away from each other to separate the liner from film.

Spray Soap Solution
generously over entire
window surface (soap
solution: 1 tsp of clear liquid
shampoo, i.e. Johnson's Baby
Shampoo, per qt of water). Next
spray adhesive side of film with
the soap solution (the side
exposed by removal of liner). To minimize dust on the
film, spray the adhesive side as you remove the liner.

Apply Film In Place with the adhesive side on the window. The soap solution acts as a lubricant to allow positioning of film. GENEROUSLY spray "room-side" surface of film to lubricate before squeegeeing.



Use the Squeegee to apply film to the window, working from the center of the film to the outer edges with short gentle strokes. Carefully work out wrinkles and bubbles with the squeegee.





Trim Excess Film from edges, using the Snap-Off Knife and the Straight-Edge (5-way tool). Leave a neat ¹ne" to ¹ne" space between film and window frame. The film should not touch the window frame.



Spray Film and firmly squeegee surface to remove excess water between film and glass. Using paper towels blot edges of film completely dry.



Clean Finished Window with a non-ammoniated window cleaner (your soap-solution is ideal). When you clean the window, be careful not to disturb the film's adhesion to the glass—it will not bond completely until it is dry (it will take several days).

A slight *haze* may occur overnight in some instances, but will disappear in 10-30 days as the film dries. Some films require a full 30 days to dry.

Recommended Applications

East, Southeast, South, Southwest, and West exposures with maximum daytime temperatures of 109° or 119°.

		– max temp	R-20	R-30G	R-30B N	I-1035 -	ı
Single Pane	Clear 1/8" to 1/4"	109°	Χ	Х	X	Х	
		119°	Χ	Χ	Х	Χ	п'
	Tinted 1/8"	109°	Χ	Χ	Х	Χ	Te
		119°	Χ	T	Т	Χ	mg ×
	Tinted 1/4"	109°	Χ	Х	Х	Χ	X = Ap Tempered
		119°	Χ	T	T	Χ	ed≱
Double Pane	Clear 1/8"	109°	Χ	Т	T	Χ	oprove Glass
		119°	Χ	Т	Т	Χ	Approved Glass F
	Clear 3/16"	109°	Χ	Т	Т	Χ	Re
		119°	Х	Т	Т	Χ	l gu
	Tinted 1/8"	109°	Х	Т	Т	Х	d Required
		119°	Χ	T	T	Χ	٥

The recommendations contained in this table relate to the potential for glass breakage from application of a window film due to internal thermal stress only! No attempt has been made to consider the effects of internal or external shading devices; improper mounting of the glass, frame, or window film; or any other variable associated with the potential for breakage of a window system. Therefore all potential sources for stress-related breakage should be addressed on an individual basis before application of any window film to any window. In locations, where maximum summer temperatures are lower, a greater range of film selections are available.

NOTE: A common cause of stress-related breakage is due to preexisting unseen chips, which are hidden by the frame, on the edge of the glass. When film is applied, these chips may cause the glass to weaken and crack. Never apply film to windows with visible chips.