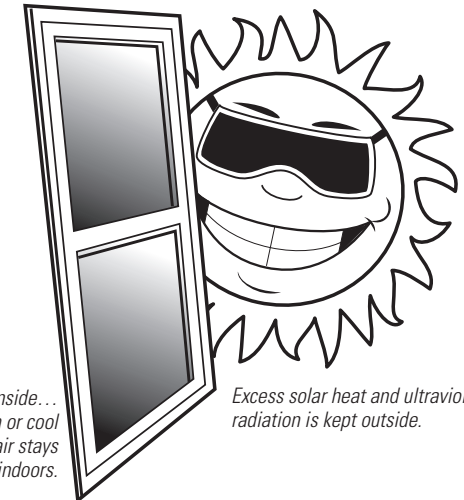


PRODUCT BULLETIN

Do-It-Yourself Application Instructions



Inside... warm or cool air stays indoors.

Excess solar heat and ultraviolet radiation is kept outside.

Window Film Tips from TAP

- * Use **TAP Film-Off** to remove old window film. Ask TAP salesperson for information.
- * Apply film to inside of window.
- * Install film when temperatures are between 40° and 85°.
- * Schedule your installation time when windows will be shaded.
- * Use nonabrasive cleaners. Ask TAP Salesperson for information.
- * Do not apply to plastic windows.
- * Ask a TAP salesperson about splicing film to cover oversize windows.
- * 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.
- * Solar Control Window Film adhesives are not sticky like pressure-sensitive films.
- * Ask about Clear Safety Film and special Auto-Tint Film. Ask for *Product Bulletin 8 • Auto-Tint Film* and *Product Bulletin 9 • Plastics for Safety and Security*.
- * Do-It-Yourself and Save!
- * Check our website: tapplastics.com

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. TAP Films are available 48" wide, R-20 also comes 36" wide. All our Films have a rugged scratch-resistant coating.

Definitions of Film Properties

1. Visible Light Transmission:

how much visible light passes through the film
15% would be like sunglasses
50% is nearly invisible on the window

2. Visible Light Reflectance:

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*)
60% is very shiny, plain glass is 8%
27% is barely noticeable

3. Ultraviolet Transmittance:

percent of 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 <i>Film Applied to Glass</i>	R-20	R-50	Safety	Frosted
% Visible Light Transmission	15	47	89	69
% Reflective Index	60	27	9	20
% Ultraviolet Transmittance (UV)	0-1	0-1	2	2
% Solar Energy (heat) Rejected	79	54	14	28

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 air-conditioning bills. From inside enjoy glare and distortion free views with a uniform private outside appearance.

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

TAP Plastics

- Bellevue WA** 12021 NE Northup Way 425 502-7225
- El Cerrito CA** 10760 San Pablo Avenue 510 778-9057
- Fremont CA** 5160 Mowry Avenue 510 796-3550
- Lynnwood WA** 4232 196th St. SW 425 977-4440
- Mountain View CA** 312 Castro Street 650 962-8430
- Pleasant Hill CA** 1478 Contra Costa Blvd 925 798-0420
- Pleasanton CA** 6010-C Johnson Drive 925 460-8214
- Portland OR** 2842 NE Sandy Blvd 503 230-0770
- Sacramento CA** 4538 Auburn Blvd 916 481-7584
- Sacramento CA** 4506 Florin Road 916 429-9551
- San Francisco CA** 154 S. Van Ness Ave 415 864-7360
- San Jose CA** 1212 The Alameda 408 292-8685
- San Jose CA** 1008 Blossom Hill Rd 408 265-6400
- San Leandro CA** 3011 Alvarado Street 510 357-3755
- San Mateo CA** 606 South B Street 650 344-7127
- San Rafael CA** 900 Andersen Drive 415 454-6393
- Santa Rosa CA** 2770 Santa Rosa Avenue 707 544-5772
- Seattle WA** 710 9th Avenue North 206 389-5900
- Stockton CA** 1859 Pacific Avenue 209 937-9300
- Tigard OR** 15230 SW Sequoia Pkwy 503 620-4960

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TAP Premium Window Films

Solar Control Window Films (R-20 & R-50): These films reflect up to 80% of the heat and block up to 99% of the damaging ultra-violet light. Use R-20 for the ultimate in heat rejection. Use R-50 for a nearly invisible heat and UV block.

Safety Film: This film is invisible on the glass, yet adds 98% UV protection. Use where breaking glass is a safety concern, such as areas where children play. Safety Film also strengthens glass, reducing the chance of break-in. If glass does break, it keeps the glass in the frame, not on the floor. Great for earthquake prone areas. When installed outside, it provides graffiti protection. See Product Bulletin 9 for more details.

Frosted Film: Make the glass look professionally sand-blasted. It adds privacy without blocking the light. Ideal for bathroom windows, office partitions and doors. Also blocks 98% of damaging UV light.

TAP Plastics • the fantastic plastic place

Visit or shop online: tapplastics.com

Instructions • How to Install-Film-Yourself

Installation Materials Needed

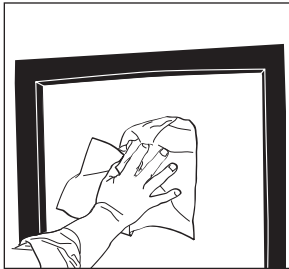
- ✓ Spray Bottle
- ✓ Straight-Edge
- ✓ Snap-Off Knife
- ✓ Lint-Free Towels
- ✓ Masking Tape
- ✓ A Sponge
- ✓ Smoothee Squeegee
- ✓ 5-Way Tool/Trim Guide
- ✓ Window Scraper (for cleaning window)
- ✓ Solution of Water and Clear Mild Liquid Soap, such as, Johnson's Baby Shampoo

Important • Read Before Applying Film

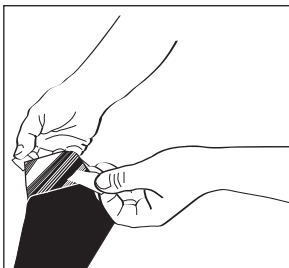
Do not confuse front side of film with the adhesive side. The adhesive side is covered by the protective liner. Even though the R-20 and R-50 adhesive side is not sticky, it must not be allowed to touch anything before application. Dust or lint on the adhesive side will be permanently trapped between the film and the glass, detracting from the appearance of finished window.

1 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!**

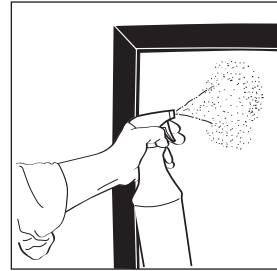
Remove all traces of paint, varnish, stubborn dirt, or any foreign matter. Spray the window with a liquid soap solution (**soap solution: 1 tsp of clear liquid shampoo, i.e. Johnson's Baby Shampoo, per qt of water**). Scrape entire wet window surface with the Window Scraper to remove foreign debris. 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.



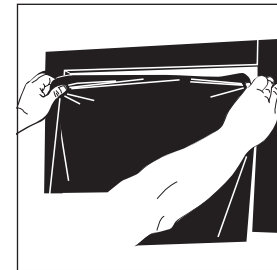
2 Remove Protective Liner from film by attaching a 2" or 3" piece of masking tape on the front and back side of one of the corners. Leave 1" of tape extended past film. Pull the tapes away from each other to separate the liner from film.



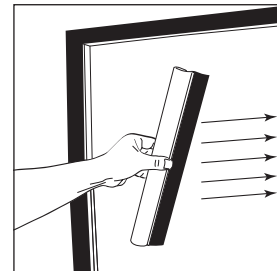
3 Spray Soap Solution generously over entire window surface. Avoid spraying the edge of the glass as this can wash trapped dirt onto the glass. Next spray adhesive side of film with the soap solution (*the side exposed by removal of liner*).



4 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.

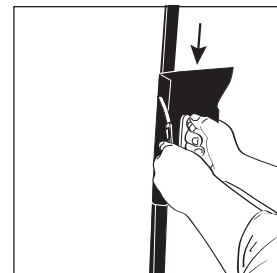


5 Use the Squeegee to apply film to the window, working from the center of the film to the outer edges with short gentle strokes. Carefully work out wrinkles and bubbles with the squeegee. Do not squeegee all the way to the edge yet. Leave about 1" all the way around.

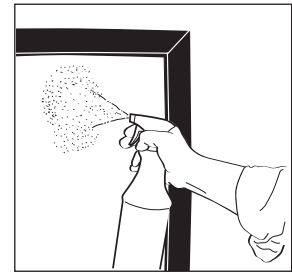


BE CAREFUL NOT TO CREASE or WRINKLE FILM.

6 Trim Excess Film use the 5-way tool to trim the film as follows: place the tool on the window and slide it into the corner, pushing the film down against the edge of the window. Place the snap off knife against the 5-way tool on the glass side. Slide the knife halfway down the tool, cutting the film as you go, then move the knife and tool down the edge of the window together. This will trim the film in a straight line and leave a 1/16" gap between the film and the window frame. Repeat for the other edges.



7 Spray Film and firmly squeegee surface to remove excess water between film and glass. This time squeegee all the way to the edges. Using paper towels blot edges of film completely dry.



8 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, which can take up to 30 days depending on sun exposure.

A slight haze may occur overnight in some instances, but will disappear in 10-30 days as the film dries depending on sun exposure.

Recommended Applications

TAP window films are approved for use on single or dual pane windows. Apply to interior side of window.

Note: Window film should never be applied to chipped or cracked glass. A common cause of stress-related breakage is preexisting chips on the edges of glass. Even though these chips cannot be seen beneath the window frame, they weaken the glass pane.

TAP Window Films are professional grade films. They are made to not fade or bubble for the life of your window when installed properly. They are not the same as the do-it-yourself films in auto parts and home center stores.

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.

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.