



SUNsational SOLUTIONS

Making Ordinary Glass Extraordinary

The following are washing and maintenance instructions for your window film.

DO NOT WASH UNTIL THIRTY(30) DAYS AFTER INSTALLATION

This will ensure proper cure of the adhesive and edge seal used to bond the film to the glass surface. Use only a clean soft cloth or high quality paper towel for drying the glass. Some paper towels are coarse enough to scratch the film. Recycled paper towels do not qualify as high quality paper towels. **DO NOT USE BRISTLE BRUSHES OR ANY OTHER MATERIAL WHICH MIGHT SCRATCH THE SURFACE OF THE WINDOW.** Repeated use of improper cleaning implements and/or solutions will damage the polished look of the film. The film should be washed using only a solutions of one (1) ounce of non-abrasive hand-washing liquid soap to each quart of tap water or a vinegar and water solution. **CAUTION! DO NOT USE AMMONIA OR ANY PRODUCTS CONTAINING AMMONIA TO CLEAN THE GLASS.**

GUIDELINES

DO NOT USE ANY ADHESIVE TAPES, LABELS, SUCTION CUPS, OR SIGNAGE ON SURFACES TO WHICH THE FILM HAS BEEN APPLIED

Under reasonable weather conditions, film will dry flat, with no blisters, within 30 days, when viewed under normal viewing conditions. Normal viewing conditions are viewing treated windows from a distance of 8' from the room side, at angles of up to 45 degrees, looking at a clear or uniformly overcast sky. Since a particle-free application is possible only under sterile condition's, there may be small amounts of dust or grit caught between the film and glass (Please refer to the IWFA visual quality standards guide).

Please be advised that there may be small amounts of water left behind, particularly with the thicker films. This may give the film a cloudy and distorted look; this is normal. Within 30-90 days this water will dry out. Colder and/or cloudy weather conditions can lengthen the dry out time. However, in the event that you see larger blisters (larger than a quarter) forming within 24 hours after the installation, please call us immediately. These are air pockets or water blisters that are caused by tension on the film and need to be pushed down immediately.

I have reviewed each installed window pane carefully and I approve the final installation as acceptable.

Signature: _____

Date: _____

SUNsational Solutions
210-940-8468 San Antonio
512-246-8468 Austin

Visual Quality Standard for Applied Window Film

As adopted by the IWFA May 15, 1999*

1. Installed film on flat glass surfaces is not expected to have the same level of visual quality as glass. The following criteria apply to the installed film only and not to any defect inherent in the glass.
2. Installed film has a discrete time for full adhesion to be effected since installation utilizes a detergent solution in the water to float the film onto the glass: the excess water is squeegeed out, but inevitably residual water will remain between the film and glass. The time to achieve full adhesion is often referred to as "the adhesive cure time". Adhesion will be increasing from a lower value during this time. Visual and adhesive cure time is related to thickness of the film and various metallic coating on the film. Typical visual cure times may be extended or shortened according to climatic conditions.
3. Inspection for optical quality can be made before full visual cure is attained. Table 1 provides a guide for typical visual cure times. It should be noted that effects during cure, such as water bubbles, water distortion, and water haze are not to be regarded as defects.
4. The glass with applied film shall be viewed at right angles to the glass from the room side, at a distance of not less than 6 feet (2 meters). Viewing shall be carried out in natural daylight, not in direct sunlight, and shall assess the normal vision area with the exception of a 2 inch (50mm) wide band around the perimeter of the unit.
5. The installation shall be deemed acceptable if all of the following are unobtrusive (effects during visual cure should be disregarded): Dirt Particles, Hair and Fibers, Adhesive Gels, Fingerprints, Air Bubbles, Water Haze, Scores and Scratches, Film Distortion, Creases, Edge Lift, Nicks and Tears.
Inspection may be made within 1 day of installation. Obtrusiveness of blemishes shall be judged by looking through the film installation under lighting conditions described in 4.
6. The 2 inch (50mm) wide band around the perimeter shall be assessed by a similar procedure to that in 3 and 4, but a small number of particles is considered acceptable where poor frame condition mitigates against the high quality standards normally achieved.
7. Edge gaps will normally be 1/32-1/16 inch (1-4mm). This allows for the water used in the installation to be squeegeed out. This ensures that film edges are not raised up by contact with the frame margin. Contact with the frame margin could lead to peeling of the film.
8. For thicker safety films the edge gaps will normally be 1/32-1/16 inch (1-4mm), with 1/32-1/8 inch (1-5mm) being acceptable for films of ≥ 7 mil (175 μ). Combination solar control safety films will also fall within this standard.
An edge gap of up to 1/16 inch (2mm) is recommended, especially for darker (tinted, metallized, tinted/metallized, and sputtered) films, to minimize the light line around the edge of the installed film.
9. Splicing of films is necessary when larger panels of glass are treated, where both length and width of the glass exceed the maximum width of film. The splice line itself should not be viewed as a defect. This line should be straight and should be parallel to one edge of the frame margin. The two pieces of film may be butt jointed. The maximum gap at any point in the splice line should be 1/64 inch (1mm). Film may be overlapped, spliced or butt jointed.
10. Certain films with special high performance coating may have lengthened cure times. Consult the manufacturer for cure times of these films.

Table 1 - Typical Cure Times

Film thickness in mils	Film thickness in microns(μ)	Typical Cure Time (days)
Up to 4	Up to 100	30
4 to 8	100 to 200	60
8 to 12	200 to 300	100
Over 12 but not more than 17	Over 300 but not more than 425	140