

## SOLYX® Bird Safety films DETERS BIRDS FROM FLYING INTO GLASS!

### SX-BSFV Vertical Pattern

### SX-BSFH Horizontal Pattern

### SX-BSFT Trellis Pattern



**VERTICAL**



**HORIZONTAL**



**TRELLIS**

#### GENERAL DISCRIPTION

Decorative Films, LLC, SOLYX® Bird Safety Distraction film is recommended for application to existing exterior glass, outside surface. SOLYX® Bird Safety film is made of durable, crystal clear, outside weatherable, scratch resistant polyester film. This film is manufactured with a removable type adhesive, and is applied using the same tools and techniques for applying window film. This film has an expected Outdoor life of 7 years. The adhesive is a clean removable adhesive system.

**SOLYX® SX-BSFH, SX-BSFV, SX-BSFT, Bird Safety films** are made of durable optically clear outside weatherable 4 mil Polyester film. The film is 100% UV stabilized and will remain crystal clear.

The Vertical Distraction SX-BSFV pattern direction runs down the length of the roll and the SX-BSFH has a horizontal pattern across the width of the roll

Color: Film: – Crystal clear.

Pattern: – Non Reflective Grey Frost lines

Size: Films are available in rolls: 95ft and up to 60" or 72" wide.

#### 1. Provides Glass Breakage Safety:

Made with 4mil, heavy-duty polyester bonded by strong adhesives, this film provides a clear and invisible – yet powerful – barrier that helps hold glass in place in the event of an impact or earthquake. While this barrier helps protect against the damaging effects of flying shattered glass, it also makes it much more difficult for an intruder to smash through the windows quickly.

#### 2. No need to replace existing glass

3. Is easily removed and replaced - clean removable after 7 years.

4. The patterns do not distract from interior viewing

5. Will not alter viewing from outside into retail storefronts

6. **SOLYX** Bird Safety Film blocks 98% of harmful UV rays

7. Leed: Innovations in Operations & Upgrades - Credits 1: Innovation in Upgrades, Operations, and Maintenance - 1 point  
Intent - Provide the opportunity for LEED points for additional environmental benefits beyond those in other LEED Rating System areas - The 99% UV Protection provided helps protect occupants and furnishings from harmful and damaging UV rays. Many window films are recognized by the Skin Cancer Foundation as effective for protection against skin cancer



## SOLYX® Bird Safety films

### SX-BSFV Vertical Pattern, SX-BSFH Horizontal, SX-BSFT Trellis

**Weathering testing** was completed May 25, 2016 on the Bird Safety Films and we are extremely pleased with the results. As a result we can now give a 5 year warranty for the bird safety films. The expected lifecycle cost can be based on a minimum of 7 years.

The QUV testing of the UV lines has completed 3000 hours.

There is no color shift observed and the safety line pattern bond is good.

The 3000 hrs. Representing 5-6 yrs. outdoors.

The QUV cycle was 8 hrs. @ 70°C and 4 hrs. Condensation @ 40°C using UVA 340 bulbs.

#### SOLAR AND PHYSICAL PROPERTIES

Performance results	(3mm)	(6mm)	(3mm+3mm)
Solar energy			
% Transmittance	78	73	66
% Absorptance	14	19	21
% Reflectance	8	8	13
Visible light			
% Transmittance	89	88	81
% Reflectance exterior	10	9	16
% Reflectance interior	10	9	16
Emissivity	.90	.90	.90
Winter U-Factor (BTU hr/ft <sup>2</sup> °F)	1.04	1.02	.48
Shading coefficient	.95	.90	.83
Solar heat gain coefficient	.82	.78	.72
Solar selectivity index – luminous efficacy (VLT/SC)	.94	.97	.97
Light to solar heat gain factor (VLT/SHGC)	1.08	1.12	1.12
% Ultraviolet light blocked @ 300 to 380 nm	>99	>99	>99
% Total solar energy rejected	18	22	28
% Summer solar heat gain reduction	4	4	5
% Glare reduction	1	1	1

#### Physical properties nominal

Gauge	4.0 mil (100 micron)
Peel strength	>2,500 g/in (985g/cm)
Tensile strength	30,000 lbs/in <sup>2</sup> (2,110 kg/cm <sup>2</sup> )
Break strength	120 lbs/in (22 kg/cm)
ASTM D4830 puncture test	70 lbs (32 kg)

## SOLYX® Bird Safety films

### **SX-BSFV Vertical Pattern, SX-BSFH Horizontal, SX-BSFT Trellis**

#### **SOLYX Outside weatherable Bird Safety Film. (BSF)**

It is important to take proper care of your investment. The BSF has a protecting surface known as the "hard coat" that deters scratching and maintains the durability of the BSF. Proper care and maintenance of the hard coat is vital to the longevity of this product. This bulletin will guide you through the care and maintenance "do's" and "don'ts"

One of the keys to the longevity of BSF is good regular maintenance. Without regular maintenance, dirt can build-up and require the use of harmful chemicals that may damage the surface of the BSF over a long period of time during the cleaning process. It is best to avoid chemicals like MEK, acetone, lacquer thinner, paint thinners, or ammonia based products for cleaning. These products may break down the hard coat resulting in flaking, hazing, or even cracking. Over the counter glass and surface cleaners are easily identified as not containing ammonia or being non-abrasive. A mild soap diluted with water is best used as a cleaning agent.

#### **Residential**

When cleaning the BSF surface, always remove as much abrasive dirt as possible without touching the surface. Ideally this would involve thoroughly flushing the surface with water. Dirt particles that rest on the BSF surface may cause scratches if not removed. Using a soft rubber squeegee, Spray the surface with soapy water and make overlapping passes to avoid streaking

Follow up with a dry, cotton or microfiber towel wiping all edges dry (Figure 2). If a towel is used to wipe the entire window, be certain the towel is dry and free from dirt prior to wiping the film surface.

**Figure 2**



#### **Commercial**

A professional cleaning service may not be familiar with the precautions needed to care for the BSF properly.

It is important to inform them that you have had window film installed and precautions should be taken to protect your investment.

Cleaning companies generally use microfiber or sheepskin type pads for scrubbing, but it should be known not to use bristle brushes, steel wool, or abrasive scrub pads, since these may scratch the surface of the BSF.

When cleaning a large number of windows, professional window cleaners tend to squeegee in an "S" pattern to maintain a faster pace. If they use stainless steel squeegees, we recommend that they use plastic end clips to prevent the squeegee metal corners from gouging the film surface

#### **Prior to wiping clean.**

Some stubborn marks may need to soak to soften or be rubbed with your hand to loosen from the BSF. If needed, the surface may be lightly scrubbed using a sheepskin or microfiber type pad with a mild soap



By following these simple instructions, you will enjoy the benefits of your BSF installation for many years to come.