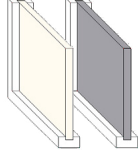
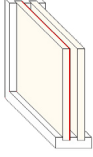
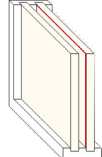
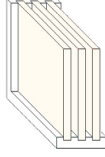
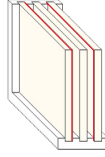


# Film-to-Glass Guide

## Recommendations for Film-to-Glass Combinations

						
Film Type	Single Pane, Clear or Tinted	Double Pane, Clear or Tinted	Double Pane, Low-e on Level #2	Double Pane, Low-e on Level #3	Triple Pane, Clear	Triple Pane, Low-e coating on Level #2 and #5
<b>SUN PROTECTION</b>						
OUTSIDE INSTALLATION	AX PLUS 20	●	●	●	●	●
	AX PLUS 30	●	●	●	●	●
	AX PLUS 50	●	●	●	●	●
	AX PLUS 70	●	●	●	●	▲
	AX PLUS 80	●	●	▲ <sup>1</sup>	●	▲
	AX PLUS ES 15	●	●	●	●	▲
	AX PLUS ES 25	●	●	▲ <sup>1</sup>	●	▲
	AX PLUS ES 40	●	●	■	●	▲
	AX PLUS ES 45	●	●	●	●	▲
	AX PLUS SB 20	●	●	●	●	●
	AX PLUS DS 6	●	●	●	●	●
	AX PLUS DS 15	●	●	●	●	●
	AX DS 8	●	●	●	●	●
	AX DS 20	●	●	●	●	●
INSIDE INSTALLATION	101	●	●	●	▲ <sup>2</sup>	■
	102	●	●	●	●	■
	Silber 50	●	●	●	●	■
	109	●	●	●	●	▲
	2041	●	●	●	●	●
	TI 165	●	●	▲ <sup>1</sup>	▲ <sup>2</sup>	■
	301	▲	■	■	■	■
	SB 165	●	●	●	▲ <sup>2</sup>	■
	SB 175	●	●	●	▲ <sup>2</sup>	■
	LX 70	●	●	●	●	■
	LX 80	●	●	●	●	■
	LX 40	●	●	●	▲ <sup>2</sup>	■
	XH-22	●	●	●	▲ <sup>2</sup>	■
	XH-45	●	●	●	▲ <sup>2</sup>	■
	XH-50	●	●	●	●	■
	XH-63	●	●	●	●	▲
	XH-76	●	●	●	●	▲
	XE 50, XE 70	●	●	▲	■	■
	True Vue 5	●	●	●	▲ <sup>2</sup>	■
	True Vue 15	●	●	●	▲ <sup>2</sup>	■
True Vue 30	●	●	●	▲ <sup>2</sup>	■	
True Vue 40	●	●	●	●	■	
<b>SAFETY</b>						
4011, AX PLUS 4011, 7011, 8011, 8012, 8014, 701, 702	●	●	●	●	●	●
LX-70 safety	●	●	●	●	●	■
410, 8111, 8112	●	●	●	▲ <sup>2</sup>	■	■
<b>DECORATIVE</b>						
Clear Frost	●	●	●	●	●	●
150	●	▲	●	▲ <sup>2</sup>	●	■
160 Lexan	●	●	●	●	●	▲
170	▲	■	■	■	■	■
Iced Haze (+)	●	●	●	●	●	●
Pearly Haze (+)	●	●	●	●	●	▲

On this glazing system, you will achieve better solar heat protection with an exterior film.

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You can find the technical data sheets at the following link: [www.bruxsafol.de/en/sun-protection/data-sheets-sun-protection-films](http://www.bruxsafol.de/en/sun-protection/data-sheets-sun-protection-films)

● = Low Risk ▲ = Caution — Submit Checklist! ■ = Tempered Glazing Only

# Film-to-Glass Guide

## Recommendations for Film-to-Glass Combinations

### Film-to-Glass Application Disclaimers

There is a high risk of glass breakage for applications with any of the following conditions:

1. Textured, wired or skylight glass.
2. Any glass with more than one window film applied.
3. Quadruple pane insulated glass (IG) units.
4. Glass with paint, lettering, vinyl graphics or other ornamentation.
5. Any single pane with partial film installation. Film must be installed edge to edge.
6. Damaged, chipped, cracked or scratched glass.
7. Glass with concrete framing.
8. Glass with metal framing that has no gaskets or seals.
9. Glass with framing sealant or gaskets that are no longer resilient.
10. Broken glass or insulated glass (IG) unit/s with seal failure prior to film installation.
11. Any building that has a history of glass breakage and/or seal failure problems.
12. Any film applied to spandrel glass.
13. Glass surfaces with drop shadows.

### Film-to-Glass Application

This document provides guidance for the most common glass types, not all applications are covered.

There is no risk of glass breakage when installing film on single or double glazing built out of tempered glass.

Film should not be installed on arched, plastic or polycarbonate glazing. Installation should only be done on real glass.

If you are not sure about a specific film-to-glass application or your situation has a caution, please contact the BRUXSAFOL team.

### Low-E Caution (LEC)

The following scenarios outline the necessary parameters when installing a Low-E Caution (LEC) film to an insulated glass (IG) unit. The Low-E Caution (LEC) indicates possible glass breakage and insulated glass (IG) unit seal failure, due to an increased risk when a LEC film is installed on a double pane, insulated glass (IG) unit with a Low-E coating.

#1 ▲<sup>1</sup>  
Any exterior LEC window film installed on a double pane insulated glass unit has a low risk of glass breakage if the low-e coating is on surface #2 and the Solar Heat Gain Coefficient (SHGC) is 0.58 (Shading Coefficient, SC 0.67) or greater.

#2 ▲<sup>2</sup>  
Any interior LEC window film installed on a double pane insulated glass unit has a low risk of glass breakage if the low-e coating is on surface #3 and the Solar Heat Gain Coefficient (SHGC) is 0.61 (Shading Coefficient, SC 0.70) or less.

Side View of Dual Pane Insulated Glass (IG) Unit

