

Film to Glass Application Chart February 2015



Follow Hanita's Film to Glass Application Chart to avoid risk of thermal glass breakage. The FTG is to be used as a guide only, and more accurate information can be provided by our technical team at: WF-Tech@hanitacoatings.com

IMPORTANT: This chart refers to annealed glass.
See terms and conditions overleaf

Compatible

* Tinted glazing recommendations are based upon simulations done on 45% LT tinted glass. Film can be applied on darker tinted glass if glass is fully tempered or based on written approval from Hanita technical support.

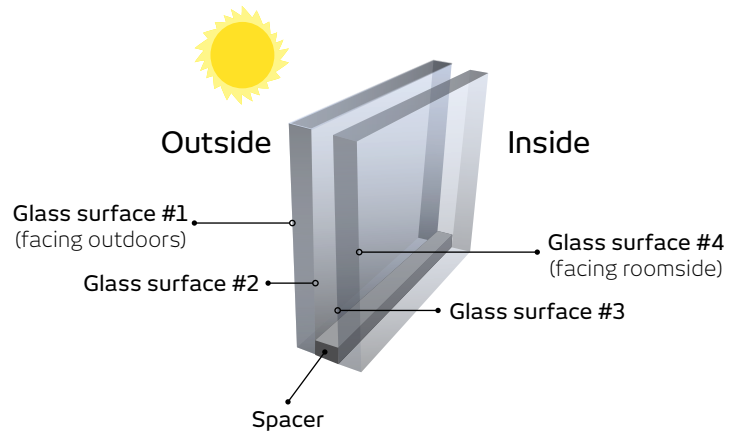
Conditional Compatibility

Film can be applied if VLT is lighter than 45% or if glass is fully tempered.

Tempered / heat strengthened

Film can be applied only if the glass is tempered, and not annealed (for IGU requirement for both panels).

Incompatible



Interior		Single Pane		IG Unit		Clear IG Unit - Low E	
		Clear	Tinted*	Clear	Tinted*	On #3	High Performance On #2
Silver	20 (4,9,12 Mil)	█	█	█	●	█	█
	20 Low-E	█	█	█	●	▲	█
	35 Low-E	█	█	█	●	█	█
	35	█	█	█	●	█	█
	50	█	█	█	█	█	█
Solar Bronze	20	█	█	█	●	▲	█
	35	█	█	█	●	█	█
PerLite (previously branded as Cold Steel)	20	█	█	▲	●	▲	▲
	35 (6,10 Mil)	█	█	█	█	▲	█
	50 (6,10 Mil)	█	█	█	█	▲	█
	70 (6 Mil)	█	█	█	█	▲	█
Natura	07	█	▲	▲	▲	▲	▲
	15	█	▲	▲	▲	▲	█
	28	█	●	█	●	▲	█
OptiTune	05	█	█	█	●	▲	█
	15	█	█	█	●	█	█
	22 (5 Mil)	█	█	█	●	▲	█
	30	█	█	█	●	▲	█
	40	█	█	█	█	▲	█
Titan Duo	05	█	█	█	●	▲	█
	15	█	█	█	█	█	█
Argent (sealed)	65	█	█	█	█	█	█
e-Lite ¹	45	█	█	█	█	▲	█
	70 (8 Mil)	█	█	█	█	█	█
Clear	(4,7,8,11,12,15 Mil)	█	█	█	█	█	█
	UV Filter	█	█	█	█	█	█
Matte	(2,5,12 Mil)	█	█	█	█	█	█
	Silver Matte 20	█	█	█	●	█	█
Specialty	White Out	█	█	█	●	▲	▲
	Black Out	▲	▲	×	×	×	×

1. Must be sealed if within 10 miles / 16km of the sea. Use neutral sealing agent Dow Corning 791 or 795, Max 5000 by GE or equivalent neutral silicone seal agent. No edge sealing required on such location in case of fixed/stationary/immovable windows that are not exposed to environment.

2. Projects larger than 500 sqm / 5500 sqft need prior written approval from Hanita Coatings.

Film to Glass Application Chart February 2015

IMPORTANT: This chart refers to annealed glass. See terms and conditions below

■ Compatible
 ● Conditional Compatibility
 ▲ Tempered / heat strengthened
 ✕ Incompatible

Exterior*		Single Pane		IG Unit		Clear IG Unit - Low E		IG Unit - Low E
		Clear	Tinted	Clear	Tinted	On #3	High Performance On #2	Solar coated glass #2 + High Performance LowE #3
Silver	20 Xtra (5 Mil) / XTRM 20	■	■	■	■	■	■	■
	35 Xtra / XTRM 35	■	■	■	■	■	■	■
	50 Xtra	■	■	■	■	■	■	■
Titan	07 Xtra / XTRM 07	■	■	■	■	■	■	■
	20 Xtra / XTRM 20	■	■	■	■	■	■	■
	35 Xtra / XTRM 35	■	■	■	■	■	■	▲
Solar Bronze	20 Xtra	■	■	■	■	■	■	■
	35 Xtra	■	■	■	■	■	■	■
OptiLite	75 Xtra	■	●	■	▲	■	▲	▲
e-Lite	45 Xtra	■	■	■	■	■	■	▲
	70 Xtra	■	■	■	■	■	■	■
Silver Matte	20 Xtra	■	■	■	■	■	■	■
Clear	Xtra (4,7 Mil)	■	■	■	■	■	■	■
Anti Graffiti	Universal (4,6 Mil)	■	■	■	■	■	■	■
SkyLite	S20X	■	■	■	■	■	■	■

* All exterior films require sealing! Use neutral sealing agent Dow Corning 791 or 795, Max 5000 by GE or approved equivalent neutral silicone seal agent for exterior applications.

Important Restrictions and Limitations on Installation:

- It is the installer's responsibility to ensure that the film chosen is compatible with the glazing system.
- All film types can be applied to tempered glass, except BlackOut and WhiteOut – see chart for limitations.
- Pane size: for glass with an edge dimension over 11.5ft/3.5m, and/or the surface of double pane glass has more than 40sqft / 3.7sqm surface area- use only on tempered glass.
- Pane thickness: clear glass > 9.5mm (3/8"), tinted glass > 6mm (1/4") - use only on tempered glass.
- FTG table refers to altitude up to 1640ft/500m. Above this altitude please consult with Hanita's technical support team. Altitude > 7000ft / 2310m - installation requires prior written approval from Hanita.**
- All laminated glass - installation requires prior written approval from Hanita.
- Interior of skylights - installation requires prior written approval from Hanita. These installations require sealing on all 4 edges.

Warranty Is Invalid if:

- Dealer's installation practices do not conform to Hanita's published installation policies and procedures.
- Two or more films are applied to the same glass surface.
- Automotive film is applied to flat glass constructions.
- The filmed windows are triple or more pane construction, textured, wire film glass, or an IG unit inclusive of a suspended film.
- Film is applied to any glass on which there is paint, lettering, signs, stickers or other permanent or temporary ornamentation.
- Filmed glass has prior damage, is chipped, has cracked edges, has holes in it, or light is visible between the frame and the glass.
- Film is applied to non glass substrates (unless specifically specified, ie PolyZone).
- Film is only partially applied to glass.
- Pane is shaded by exterior overhangs, extensions, columns, pillars etc.
- Glass is architecturally odd-shaped, and larger than 1.8sqm / 20sqft.
- Damage is caused by acts of nature (accidents, floods, fire, explosion etc).
- SolarZoneXTRM films are installed by **non**-XTRM-certified installers.

NM-WF-ee-Cor-Fil-FTG-En-HC-15.1

solarzone@hanitaenergy.com | www.hanitaenergy.com
 US: www.hanitatek.com | AU: www.hanitapacific.com.au | DE: www.hanita-europa.de
Hanita Coatings RCA Ltd | Kibbutz Hanita, 2288500, Israel | T: +972 4 985 9919
 solar@hanitacoatings.com | www.hanitacoatings.com

