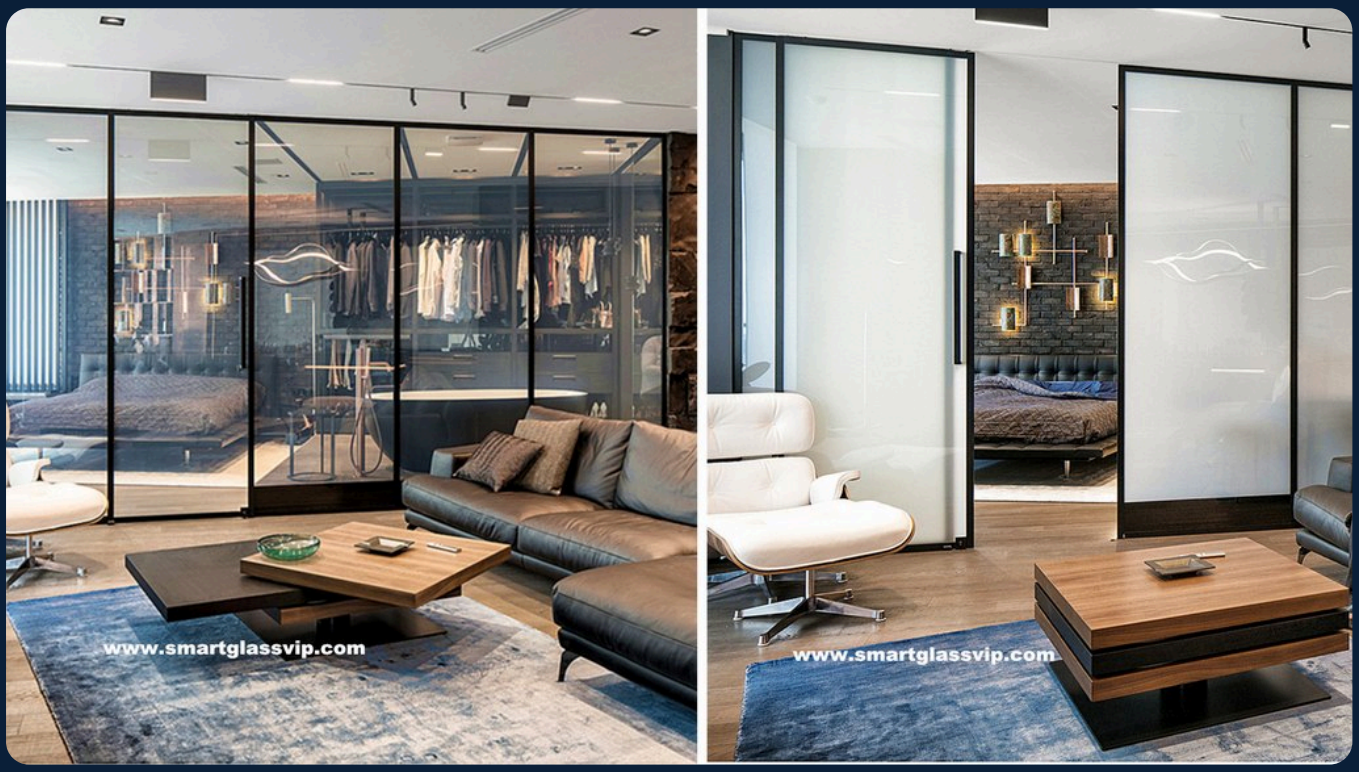
Switchable privacy, on demand

Smart film, laminated smart glass, blackout film and complete windows and doors. One factory, every format.



Powered: clear glass

Unpowered: frosted for privacy

02 Which product do I need
03 The range at a glance
04 Film grades
05 Sheet or roll
06 Laminated smart glass
07 Smart windows and doors
08 DLC blackout film
09 Power and control
10 Accessories
11 How to order

Products and specifications only. Send us your sizes and destination and we will quote.

Which product do I need?

Read the sentences on the right. The one that describes your job is your product. Everything else in this catalogue is detail behind that choice.

Your job
pick one

Glass is already up
Privacy for existing windows or partitions.
Self-adhesive film

You laminate your own glass
A glass factory with an autoclave or EVA line.
Non-adhesive film

You want finished panels
New build, or the old glass has to come out.
Laminated smart glass

It has to go dark, not frosted
Bedrooms, cinema, projection walls.
DLC blackout film

You want stripes, colour or motion
Bands, coloured glass, animated graphics.
Blinds, colour and animated film

Clear with no power
Must fail safe to transparent.
PNLC reverse film

You want the whole opening
Frame, glass and film in one unit.
Smart windows and doors

Everything we make

Six product families. Each card says what it is and when to pick it. Details start on the page shown.



Self-adhesive film

Sticks onto glass you already have. Cut to size, leads fitted, p.04 and p.05.

Pick it if the glass stays in place.



Non-adhesive film

No glue layer. Goes inside a laminated build. Sheet or roll, p.05.

Pick it if you run a glass line.



Laminated smart glass

Finished panels, 5+5 to 12+12 mm, made to your sizes, p.06.

Pick it if you want panels, not film.

0.5%

DLC blackout film

Goes near black with no power. Dark tint when powered, p.08.

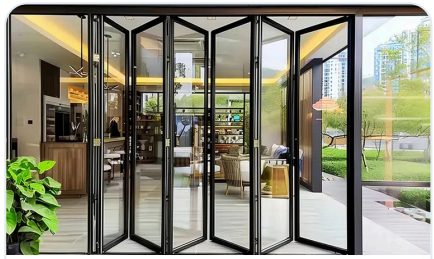
Pick it if frosted is not dark enough.



Blinds, colour, animated

Banded, coloured or moving graphics. Design-led glass, p.04.

Pick it if the glass is a feature.



Windows and doors

Frame, glass and film delivered as one unit, p.07.

Pick it if the opening is new.

> **Not sure which one?** Send a photo of the glass and tell us what the room is used for. We will name the product for you.

TIMING

Film ships in 1–3 days

Cut sheets and rolls leave the factory in one to three working days.

TIMING

Glass takes 2–4 weeks

Laminated panels need production time. Shipping is quoted separately.

BEFORE YOU COMMIT

Samples available

Test the film on your own glass before placing a full order.

Same switch, different clarity

Every grade below turns frosted when off and clear when on. The difference is how the glass looks when it is clear.



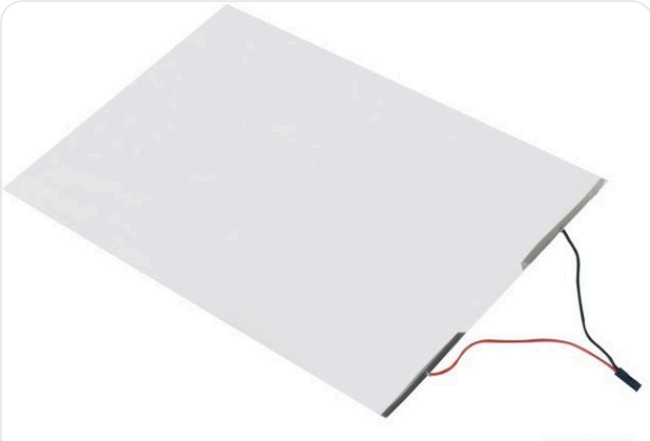
The same film, powered (left) and unpowered (right). Nothing is added to the glass, the film itself changes.

GRADE	LIGHT ON / OFF	MAX WIDTH	PICK IT FOR
Regular Clear 84%	84–85% / 4%	1800 mm	Offices, meeting rooms, partitions, hotel and home interiors. The default.
Super Clear 89%	88–89% / 3.8%	1800 mm	Showrooms and retail where the clear state is on display.
Ultra Clear 92%	91–92% / 3.8%	1800 mm	Where clear has to look like plain glass.
High Temperature	83–84% / 3.8%	1500 mm	Outdoor and direct sun. Skylights, facades, conservatories.
Grey	39.6% / 2%	1500 mm	Smoked look and glare reduction.
Colour, six colours	on request	1500 mm	Coloured glass as a design element.
Blinds	89% base	1800 mm	Banded pattern. Reads as a blind, no fabric to clean.
Animated	89% base	1800 mm	Logos and moving graphics. Own power supply.
Vehicle	self-adhesive	1500 mm	Cars, vans, coaches. Film only, cannot be laminated.

How to choose: privacy only, 84% is enough. Glass is a design feature, go up one grade. The price step between grades is small next to the cost of getting the look wrong.

Sheet or roll

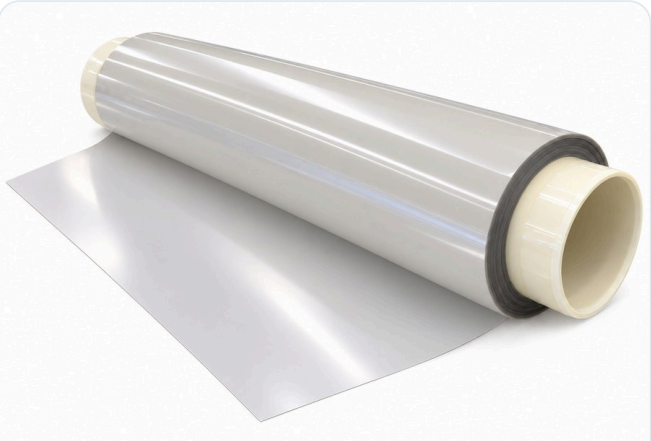
One difference decides it: whether the busbar is already fitted. Film with no electrode cannot be switched on.



SHEET

Arrives ready to install

Cut to your sizes, busbar and leads already fitted. Unroll, apply, connect, test. This is what most first orders should be.



ROLL

Semi-finished material

You cut it and make the busbar. Cheaper per square metre, but only once you own the busbar process and the tools on page 10.

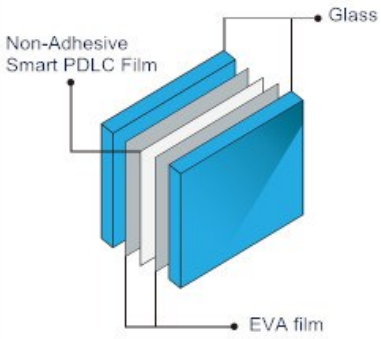
	SHEET	ROLL
State	Finished	Semi-finished
Busbar	Fitted by us	You make it
Leads	Attached	You solder them
Best for	Install and test quickly	Glass factories and installers

SHEET	Unroll	→	Apply to glass	→	Connect leads	→	Switch on
ROLL	Cut to size	→	Make the busbar	→	Solder the leads	→	Switch on

New to this? Take sheet. A sharp blade cuts roll film fine, so the only real barrier is the busbar. Move to roll when the volume justifies it.

Laminated smart glass

The film sits inside two sheets of glass. It arrives as a finished panel and installs like any other glass. Nothing is applied on site.



Glass, non-adhesive PDLC film, EVA interlayer, glass.

BUILD	WHERE IT GOES
5+5 mm	Offices, meeting rooms, interior doors
6+6 mm	Full-height partitions, wide openings
8+8 mm	High-traffic areas, larger spans
10+10 mm	Exterior-adjacent glazing, feature walls
12+12 mm	Demanding spans and acoustic needs

Glass: White Glass as standard, Super White (low-iron) at a small step.
Film inside: Regular Clear 84% unless you specify. 89%, 92%, High Temperature, Grey, colour and DLC all available.
Timing: about two to four weeks for production, then shipping separately.

Film or glass? Existing glass in good condition, film is cheaper and needs no frame work. New openings, or glass being replaced anyway, take the panel.

SIZES

Made to your openings

Produced to the sizes you give us, measured on the visible glass area. Each size confirmed before production.

LEADS

One edge, agreed first

The leads exit at one edge. Tell us which edge suits the wiring and we set it in production.

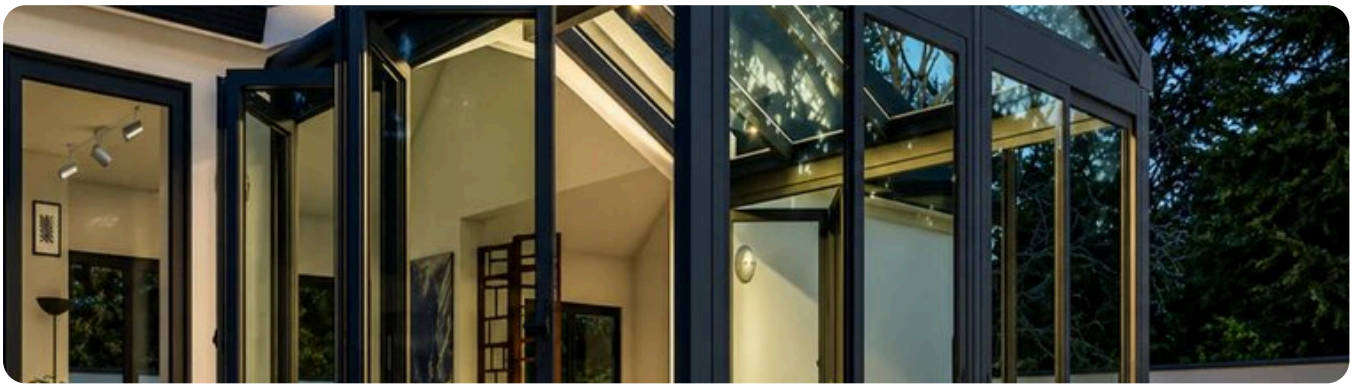
PACKING

Export packed

Panels are crated for sea or air freight. Packing is included, freight is quoted separately.

Smart windows and doors

The whole opening, not just the glass. Frame, switchable glass and power supply delivered as one unit, installed like any other window or door.



Sunroom and gazebo glazing: frames, glass and film ordered as one system.



Powered: clear



Unpowered: frosted

Why buy the system

Frame, glass and film are specified together, so the wiring route and the power supply are settled before it ships. One delivery, one point of responsibility.

What we need

Opening sizes, frame colour, glass build and the switching you want. A drawing or a photo of the opening is enough to start.

OPENINGS	FRAMES	GLASS	GLASS TYPE
Bi-fold, sliding, tilt and turn, fixed, frameless	Powder-coated aluminium, colour to spec	5+5 to 12+12 mm laminated	White or Super White
FILM	**SWITCHING**	**SUPPLY**	**TIMING**
84%, 89%, 92% or DLC	Remote, wall switch or app	Frame, glass and film as one unit	Quoted per project

Already have frames? Then film or laminated glass is the better fit, pages 04 to 06. The system route is for openings being made or replaced.

DLC blackout film

Dye-doped liquid crystal. It does not go frosted, it goes dark. This is the film for rooms that have to be properly dark.

0.5%
LIGHT THROUGH, POWER OFF

Black, not frosted

Frosted glass still passes light and you can read a silhouette against it. DLC drops to 0.5% transmission, so a lit room behind it stays hidden. Power it and it clears to a dark tint at 23%.

0.5%	23%	99%	5 W	1500 mm
LIGHT, OFF	LIGHT, ON	UV BLOCKED	PER M²	MAX WIDTH

USE IT FOR

Rooms that must go dark

Bedrooms, hotel rooms, home cinema, projection walls, meeting rooms where frosted still leaks light.

ALSO

Curved and shaped glass

Flexible PET base, so it goes onto bent and non-rectangular panels where rigid systems will not.

SPEC

65 V, 0.47 mm

−30 to 95 °C working range, 100,000 hours, switching in 30 ms on and 200 ms off.

Two limits, before you specify it. Powered, it transmits about 23%, so it reads as a dark tint, not clear glass. Off, it goes to 0.5%, near total blackout, not a see-through dark film. Need 80%+ clarity, use Ultra Clear 92%. Need dark but see-through, DLC is not it.

	STANDARD PDLC	DLC BLACKOUT	PNLC REVERSE
No power	Frosted	Near black, 0.5%	Clear
Powered	Clear, 84–92%	Dark tint, 23%	Frosted
Use	Offices, partitions	Bedrooms, cinema	Doors that must fail clear

What makes it switch

One supply per zone, sized to the film area it drives. Every standard transformer ships with a remote.

SUPPLY	COVERS	TYPICAL JOB
30 W	4 m²	Samples, one small pane
50 W	7 m²	One or two windows
100 W	14 m²	A room or a small partition set
200 W	28 m²	Several zones on one supply
300 W	46 m²	Whole floor
500 W	on request	Large projects, sized to layout



Transformer, 30 to 500 W



Remote, included

CONTROL OPTIONS

Remote control	With every transformer. On, off, dimming on supported units.
Wall switch	Physical switch wired to the dry-contact terminals. Optional, added when you ask.
 **Battery controller**	For samples and demos where there is no mains nearby. Takes standard cells.
App and voice module	Phone and voice control on 2.4 GHz Wi-Fi. No wall switch, no handheld remote included.
Multi-channel controller	For Blinds, where every band is its own zone. 9, 30 and 64 channel versions.

Sizing: match the supply to the total film area it feeds, with a margin, one per zone. Tell us the zone layout and we will pick the units.

What you actually need

Two lists. The first is for anyone installing film. The second only applies if you make your own busbars. Items without a photo are small tools we do not photograph individually.

FOR EVERY INSTALLATION

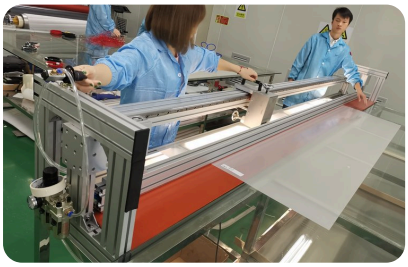
 **Electrode wire, red and black**	Runs from the film busbar to the supply. Ultra-thin and high-temperature rated, so it hides behind trims.
Squeegee	Applies the film and pushes out air. Included with the order, not sold separately.
Lint-free cloths	Clean glass and film before application. Dust left behind is permanent.
Neutral-cure silicone	Seals the film edge. Neutral cure only, acid-cure silicone attacks the film.
Traceless and high-temp tape	Holds the edge while you work, and protects the electrode area.

ONLY IF YOU MAKE YOUR OWN BUSBARS

 **Silver conductive paste**	Bonds copper foil to the electrode. Shipped separately, restricted for air freight.
Busbar cutting blade and mould	Cuts the electrode strip cleanly and gives the paste a straight edge. A blunt blade is the usual cause of a dead zone.
Copper foil, 5 mm and 10 mm	The conductive strip. 5 mm for most work, 10 mm for wide busbars on large zones.
Tin and soldering iron	Solders the lead to the foil so the joint survives handling.

ONLY FOR LAMINATING

EVA film, 0.6 mm and 0.76 mm	The interlayer that bonds non-adhesive film into the glass. Not used with self-adhesive film.



Cutting and busbar work in our workshop.



Automatic cutter: only worth it at steady volume.

Not included: door wire protection, source it locally to match your frame.

Cutting machine: not needed to start. A sharp blade cuts roll film cleanly. The automatic cutter pays for itself once you are cutting every week.

How to get a quote

Four steps. With the sizes and the destination we can price it, and the quote is itemised line by line.

1
Name the product
Film, glass, DLC, blinds, animated or a whole opening.

2
Give the sizes
Width and height per opening, and how many of each.

3
Add the address
City and postcode is enough to price delivery.

4
Get the quote
Product, supplies, wires, accessories and freight, listed.

SEND THIS

In your first message

- Width × height of each pane
- Quantity per size
- Film, glass or a whole opening
- Interior, exterior or vehicle
- Delivery city and postcode
- Remote, wall switch or app

GOOD TO KNOW

Before you order

- No minimum order on film
- Samples available before you commit
- Production and shipping quoted separately
- Sheets arrive with the busbar fitted
- Rolls do not, budget for page 10
- Prices depend on grade, quantity and format

Switchable smart glass, switchable PDLC film, intelligent privacy glass manufacturer and wholesale supplier
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