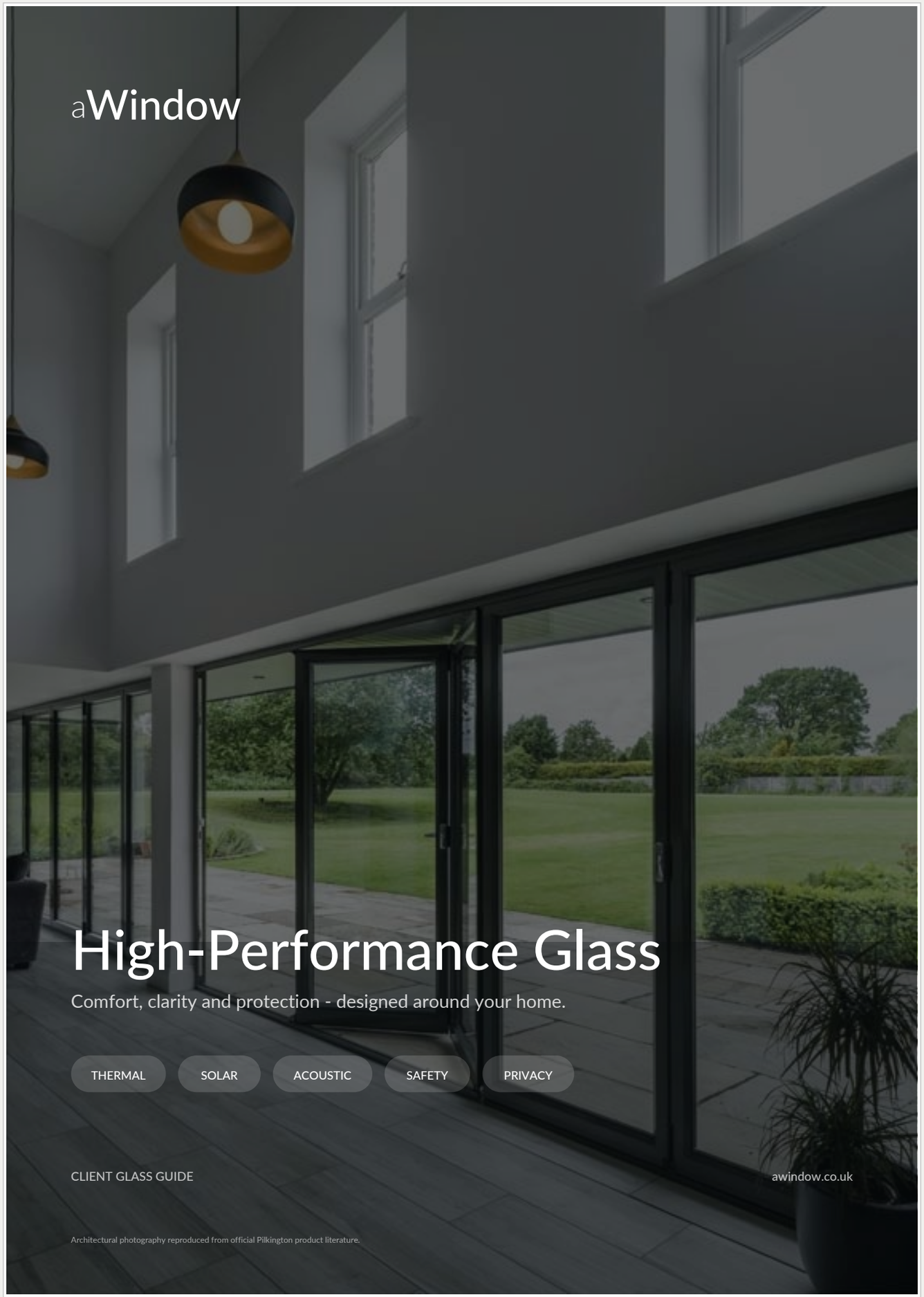

aWindow
High-Performance Glass
Comfort, clarity and protection - designed around your home.
THERMAL
SOLAR
ACOUSTIC
SAFETY
PRIVACY
CLIENT GLASS GUIDE
awindow.co.uk
Architectural photography reproduced from official Pilkington product literature.

The right glass changes how a room feels

Specified as part of the complete window or door - not as an afterthought.



One sealed unit. Several jobs.

The glass build-up determines how much heat is retained, how much solar energy enters, how effectively external noise is reduced, and what level of safety or privacy the finished opening provides.

U	L	S	Q	P
Warmth	Light	Solar	Quiet	Safety

01

Thermal comfort

Low-emissivity coatings reflect room heat back inside, while argon-filled cavities reduce heat transfer through the sealed unit.

02

Solar balance

Selective coatings can admit generous daylight while limiting solar heat gain - especially useful for large, exposed elevations.

03

Purpose-led design

Acoustic, safety and privacy requirements are combined with thermal performance where the frame system and unit thickness permit.

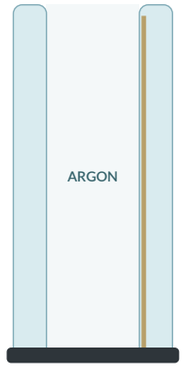
A WINDOW SURVEY LOOKS AT orientation • opening size • frame capacity • room use • safety location • noise exposure

Double or triple glazing

The best solution is the one the frame, opening and building actually need.

Energy-efficient double glazing

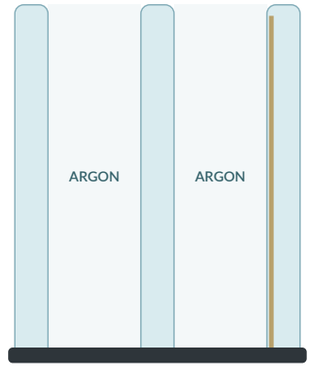
Low-E glass + argon cavity + warm-edge spacer



Warm-edge spacer and sealed perimeter

High-performance triple glazing

Two cavities + additional insulated pane



Warm-edge spacer and sealed perimeter

1.0
W/m²K Ug
Typical low-E double-glazed example

0.5
W/m²K Ug
Selected triple-glazed examples

2 / 3
Panes
Chosen to suit the complete system

What matters in practice

Double glazing
A strong all-round choice for most modern window and door systems. It keeps unit weight and thickness controlled while delivering excellent thermal performance.

Triple glazing
Can reduce centre-pane heat loss further, but adds weight, depth and hardware load. It is offered only where the selected frame system and opening size are suitable.

IMPORTANT

Ug is the centre-pane value of the glass unit. The complete window U-value also includes the frame, spacer, glass dimensions and edge effects. Final project performance is confirmed against the chosen system.

Manufacturer examples: Guardian SunGuard / ClimaGuard and Pilkington Optitherm S1 Plus. Values vary with glass build-up.

More daylight. Less unwanted heat.

A high-selectivity coating can control overheating without making the glass look heavily tinted.



70 / 35 SOLAR-CONTROL CATEGORY

Balanced for large glazing

Guardian SunGuard SN 70/35 and Pilkington Suncool 70/35 are separate coated products in the same broad performance category: high natural light with substantially reduced solar gain.

70%
Light
Guardian example

35%
g-value
Guardian example

71%
Light
Pilkington example

63%
Heat rejected
Pilkington example

Where solar control earns its place

Large sliders and bifolds

Reduces peak heat gain across wide glazed openings.

South, east and west elevations

Helps control rooms exposed to stronger direct sun.

Roof glazing and extensions

Useful where high-level glass can otherwise amplify summer heat.

Bright interiors

Maintains a high level of visible light and a neutral-to-blue-neutral appearance.

Example figures: Guardian SN 70/35 double IGU - light transmission 70%, g-value 35%, Ug 1.0 W/m²K. Pilkington Suncool 70/35 brochure - light transmission 71%, solar heat rejection 63%, UV blocking 89%, Ug 1.0 W/m²K.

Acoustic laminated glass

A quieter interior starts with the correct glass build-up and airtight installation.

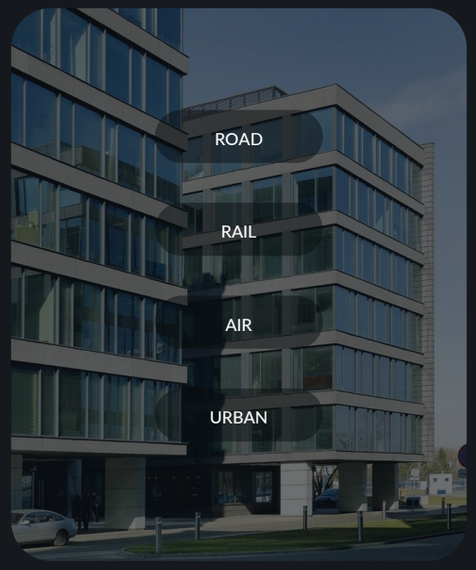
Sound-reduction interlayers

Guardian LamiGlass Acoustic and Pilkington Optiphon use specialist sound-reduction PVB interlayers. Pane thicknesses, asymmetry and cavity widths are then selected to reduce the character of external noise while maintaining excellent thermal performance.

SELECTED TESTED GLASS CONFIGURATIONS

up to Rw 52 dB

Glass-unit rating, not a whole-window guarantee.



Asymmetry

Different pane thicknesses can improve performance.

Acoustic PVB

A specialist interlayer helps damp glass vibration.

Seals

Airtight frames and installation are essential.

Ventilation

Open vents can reduce the achieved result.

Manufacturer references: Guardian LamiGlass Acoustic and Pilkington Optiphon technical literature. Actual performance depends on the complete tested construction.

Glass designed to fail safely

The correct safety specification depends on location, size, height, use and the required post-breakage behaviour.



Toughened

Heat-treated for increased strength. When it breaks, it fragments into smaller pieces rather than large sharp shards.

Common in doors, low-level glazing and other critical locations.

Laminated

Two or more sheets bonded by an interlayer. Broken glass remains attached, helping resist fall-through, injury and intrusion.

Product examples: Guardian LamiGlass and Pilkington Optilam.

Toughened laminated

Combines heat-treated panes with laminated construction where both strength and glass retention are required.

Specified only where structurally and technically appropriate.

Safety is not a single glass type

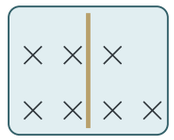
A sealed unit may combine a toughened outer pane, a laminated inner pane, a low-E coating and an acoustic interlayer. The final build-up is selected as one complete specification, not by stacking unrelated options.



Toughened



Laminated



Toughened laminated

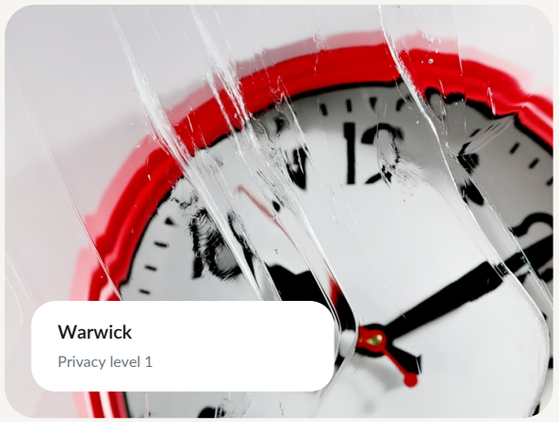
Safety glass selection must comply with the applicable project requirements and standards. Final specification is confirmed during survey and manufacture.

Privacy, without losing daylight

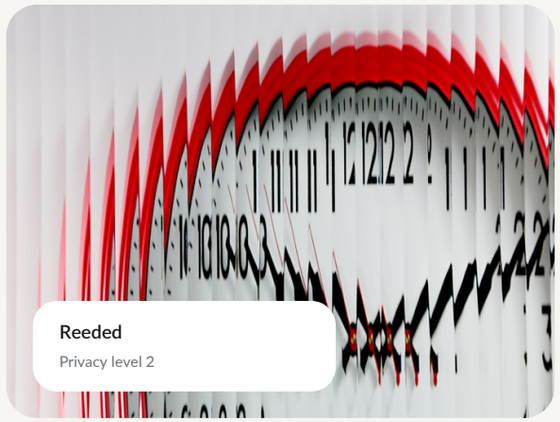
Patterned and etched glass can soften views while preserving brightness and character.

Five levels of obscuration

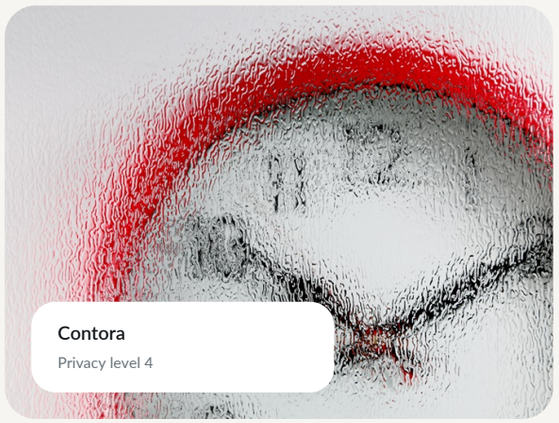
Pilkington groups its textured patterns from Level 1 - least obscuration - to Level 5 - greatest obscuration. The real sense of privacy also changes with viewing distance, daylight, internal lighting and the selected pattern.



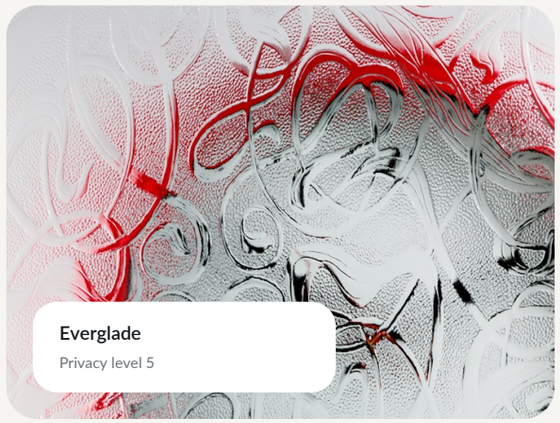
Warwick
Privacy level 1



Reeded
Privacy level 2



Contora
Privacy level 4



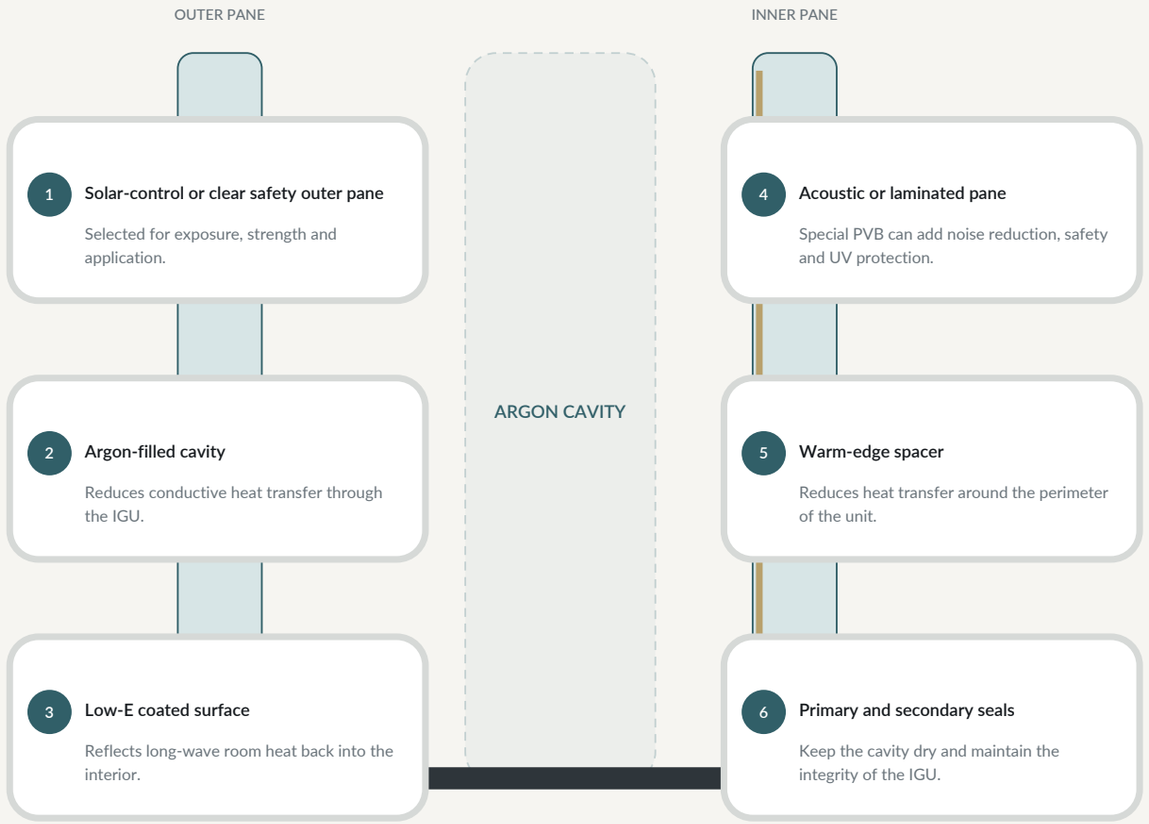
Everglade
Privacy level 5

ALSO AVAILABLE Premium etched, opal and decorative options for bathrooms, entrance doors and internal screens.

Pattern imagery and privacy classifications reproduced from Pilkington official decorative-glass literature.

Inside the glass unit

The performance comes from the complete assembly - panes, coatings, cavities, spacer and perimeter seals.



Not every coating, laminate, pane thickness and cavity can be combined in every system. aWindow confirms the practical build-up after survey, structural review and supplier verification.

08 / SPECIFICATION

A considered glass specification

Every insulated glass unit is configured around performance, appearance and safety requirements.

U

Low-E coatings

Help reduce heat loss and improve thermal insulation.

S

Solar-control coatings

Help limit overheating while preserving useful daylight.

Q

Acoustic interlayers

Help reduce external noise in more exposed settings.

P

Toughened or laminated safety glass

Specified where impact safety, retention or overhead protection is required.

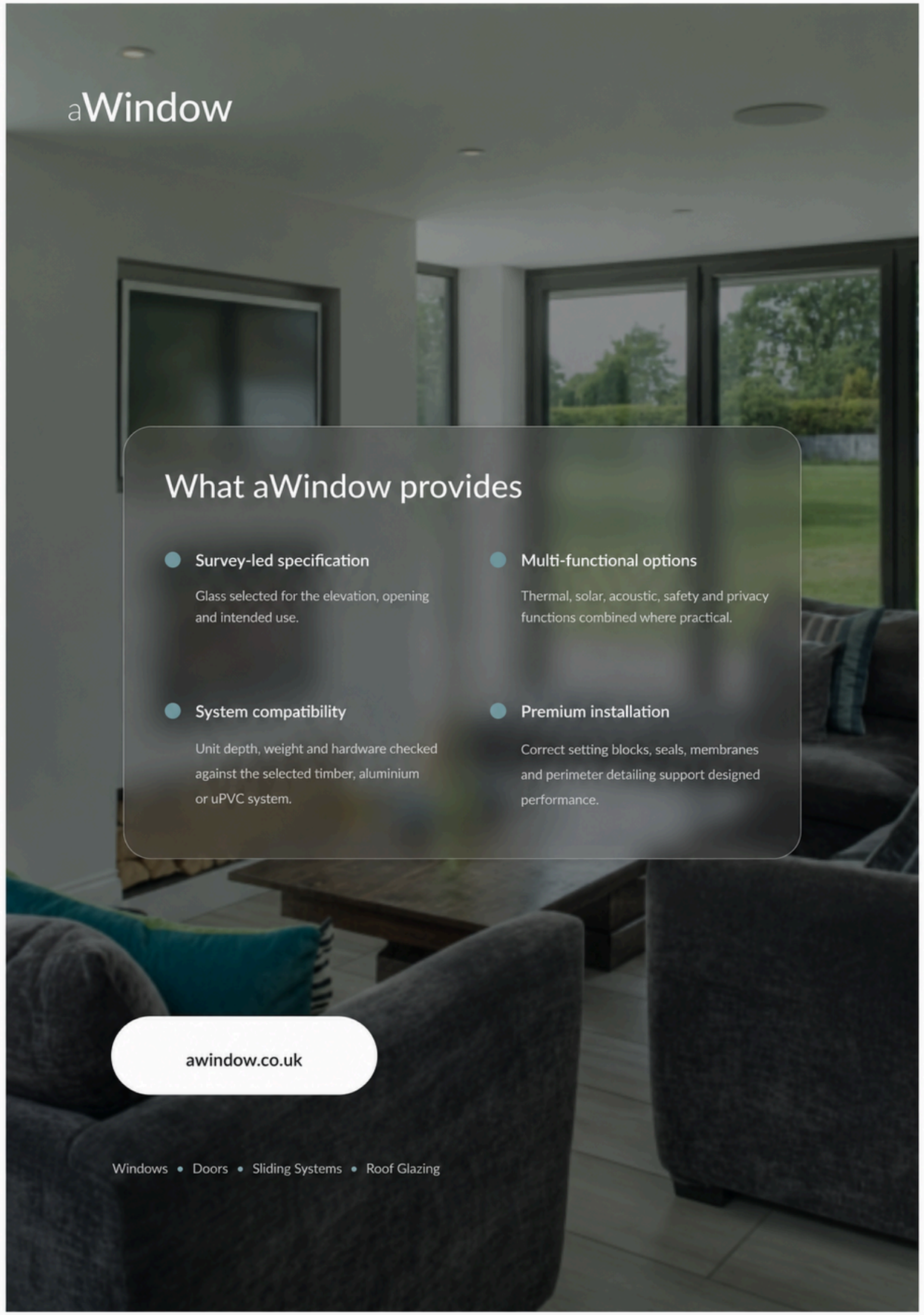
O

Obscure finishes and warm-edge spacers

Support privacy, reduce perimeter heat loss and refine the finished unit.

FINAL SPECIFICATION

The system, sealed-unit build-up, dimensions, weight and project requirements are checked together before manufacture.


aWindow
What aWindow provides
Survey-led specification
Glass selected for the elevation, opening and intended use.
Multi-functional options
Thermal, solar, acoustic, safety and privacy functions combined where practical.
System compatibility
Unit depth, weight and hardware checked against the selected timber, aluminium or uPVC system.
Premium installation
Correct setting blocks, seals, membranes and perimeter detailing support designed performance.
awindow.co.uk
Windows • Doors • Sliding Systems • Roof Glazing