VACUUM GLAZINGUK

DATA TABLES

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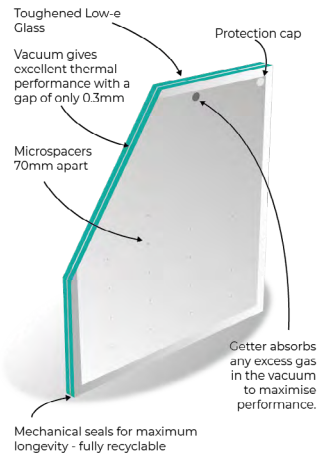
www.vacuumglazing.co.uk

WHAT IS VACUUM GLAZING?

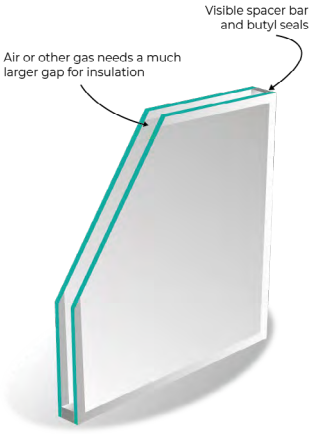
Vacuum Glazing is highly efficient double glazing. Like standard double glazing, it is made with two panes of glass separated by a cavity. However, instead of the usual gas or air-filled cavity, all air is extracted, and the unit is completely sealed.

The effectiveness of the vacuum means that the gap between the two panes can be incredibly narrow – around 0.3mm. This narrow gap makes Vacuum Glazing the perfect choice for heritage windows which emulate single glazing. When incorporated into triple glazing, performance is increased without requiring changes to window profiles.

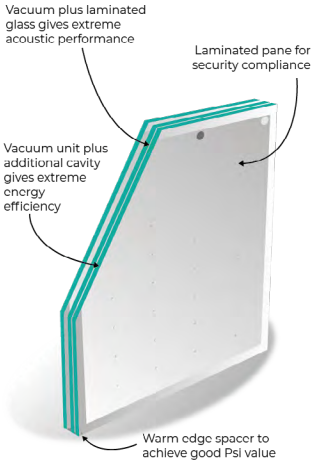
DOUBLE GLAZING



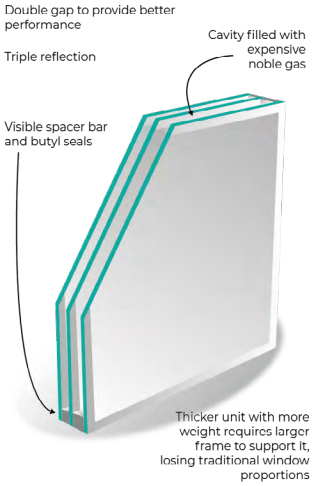
TRIPLE GLAZING



HERITAGE VACUUM GLAZING



OPTIMUM VACUUM GLAZING



VACUUM GLAZING vs TRADITIONAL GLASS

Even compared to Triple Glazing, Vacuum Glazing has:

- ✔ Higher energy efficiency
- ✔ Noise reduction
- ✔ Better light transmission
- ✔ Slimmer profile
- ✔ Longer Service Life

LANDVAC HERITAGE

Perfect for Heritage Restoration Projects and Conservation Areas

LandVac Heritage is specifically designed for heritage and conservation projects, offering a slim profile, center pane U value of 0.4, and standard toughened durability, making it the ideal choice for preserving the authenticity of historical windows while enhancing energy efficiency.

COMPARISON: LandVac Heritage vs Single and Slim Double Glazing

	Single Glazing	Slim Double Glazing	LandVac Heritage Vacuum Glazing
Overall Thickness	4mm	11 - 16mm	8.3mm
U-Value	5.8	1.2 - 1.9	0.4
Acoustic Reduction (RW)	25dB	31dB	39dB
Estimated Lifespan	25+ years	Less than 10 years	25+ years

BASIC LOW-E COATING (SINGLE SILVER COATING S1.10)

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4TL+0.3V+4T	0.4	80%	13%	0.58	0.67	39dB
5TL+0.3V+5T	0.4	79%	13%	0.58	0.67	39dB
6TL+0.3V+6T	0.4	78%	13%	0.58	0.67	39dB

PREMIUM LOW-E COATING (D80)

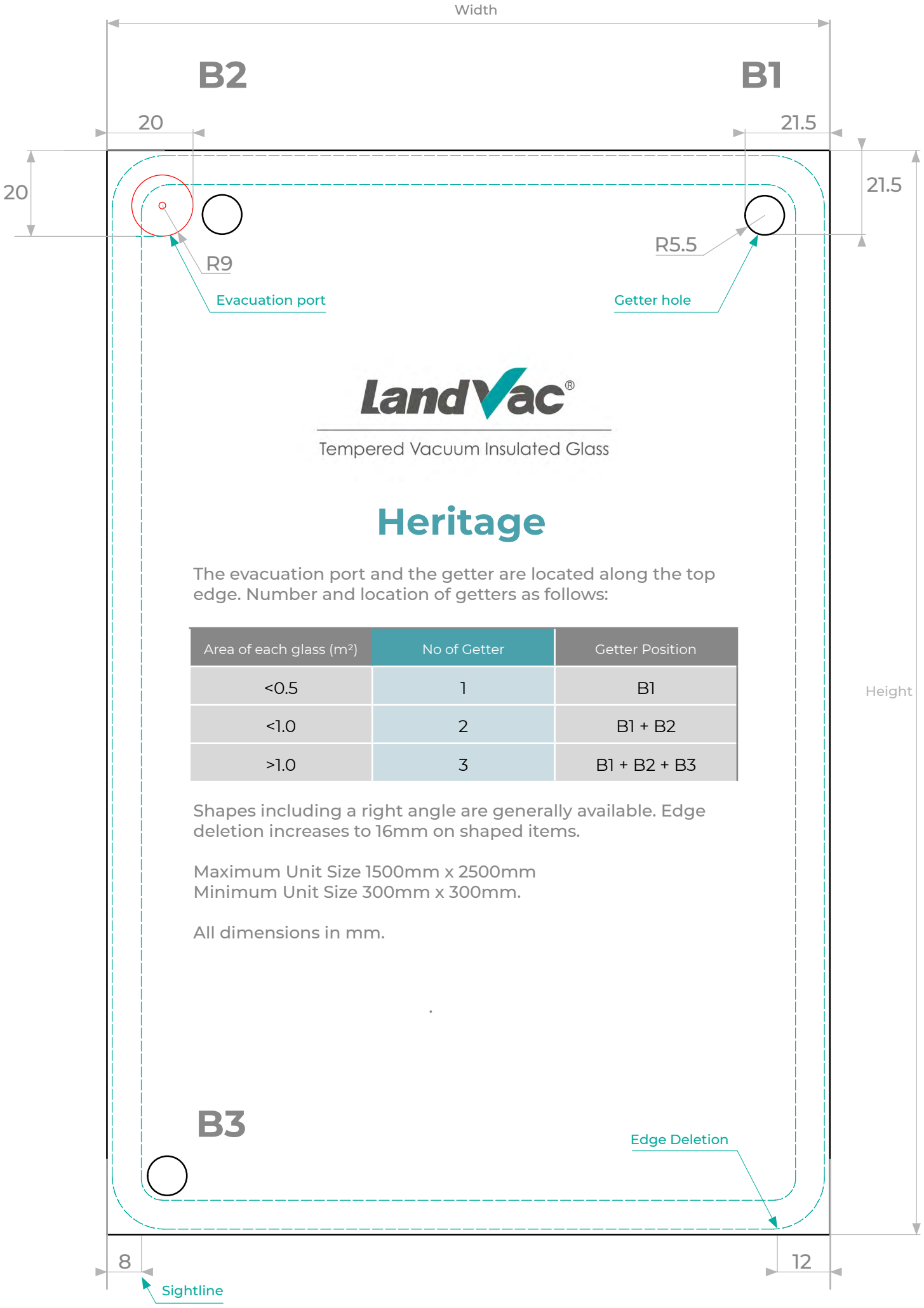
	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4TL+0.3V+4T	0.4	70%	11%	0.40	0.46	39dB
5TL+0.3V+5T	0.4	69%	11%	0.39	0.46	39dB
6TL+0.3V+6T	0.4	68%	11%	0.39	0.46	39dB

SOLAR CONTROL COATING

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4TL+0.3V+4T	0.4	53%	17%	0.33	0.38	39dB

HERITAGE LAMINATE

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4T+0.3V +4TL(S1.10) +0.76P+3T	0.4	68%	15%	0.55	0.63	40dB
4T+0.3V +4TL(D80) +0.76P+3T	0.4	58%	13%	0.38	0.42	40dB
4T+0.3V +4TL (XDTB0159) +0.76P+3T	0.4	43%	19%	0.32	0.34	40dB



LandVac®

Tempered Vacuum Insulated Glass

Heritage

The evacuation port and the getter are located along the top edge. Number and location of getters as follows:

Area of each glass (m^2)	No of Getter	Getter Position
<0.5	1	B1
<1.0	2	B1 + B2
>1.0	3	B1 + B2 + B3

Shapes including a right angle are generally available. Edge deletion increases to 16mm on shaped items.

Maximum Unit Size 1500mm x 2500mm
Minimum Unit Size 300mm x 300mm.

All dimensions in mm.

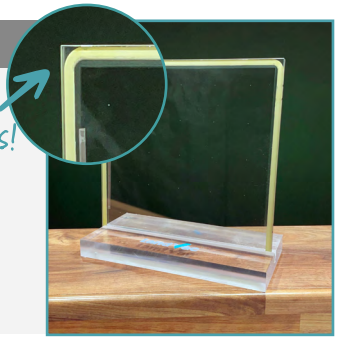
LANDVAC ENHANCE

For reglazing existing windows and doors in conservation applications

LandVac Enhance is ideal for heritage refurbishments, especially when retaining original window frames, offering a plugless vacuum glazing solution with a slim profile, a center pane U value of 0.4, and standard toughened durability.

WHY CHOOSE ENHANCE FOR WINDOW RESTORATION?

- ✓ Lowest sightlines of any toughened vacuum Unit
- ✓ Toughened as standard, with laminate options
- ✓ 8x fewer microspacers than leading competitor
- ✓ Superior U-value and acoustic rating than any other applicable solution on the market
- ✓ Neat and resilient metallic edge seal for longevity and performance



COMPARISON: LandVac Enhance vs Single and Slim Double Glazing

	Single Glazing	Slim Double Glazing	LandVac Enhance Vacuum Glazing
Overall Thickness	4mm	11 - 16mm	8.3mm
U-Value	5.8	1.2 - 1.9	0.4
Acoustic Reduction (RW)	25dB	31dB	39dB
Estimated Lifespan	25+ years	Less than 10 years	25+ years

BASIC LOW-E COATING (SINGLE SILVER COATING S1.10)

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4TL+0.3V+4T	0.4	80%	13%	0.58	0.67	39dB
5TL+0.3V+5T	0.4	79%	13%	0.58	0.67	39dB
6TL+0.3V+6T	0.4	78%	13%	0.58	0.67	39dB

PREMIUM LOW-E COATING (D80)

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4TL+0.3V+4T	0.4	70%	11%	0.40	0.46	39dB
5TL+0.3V+5T	0.4	69%	11%	0.39	0.46	39dB
6TL+0.3V+6T	0.4	68%	11%	0.39	0.46	39dB

SOLAR CONTROL COATING

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4TL+0.3V+4T	0.4	53%	17%	0.33	0.38	39dB

ENHANCE LAMINATE PLUGLESS

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4T+0.3V +4TL(S1.10) +0.76P+3T	0.4	68%	15%	0.55	0.63	40dB
4T+0.3V +4TL(D80) +0.76P+3T	0.4	58%	13%	0.38	0.42	40dB
4T+0.3V +4TL (XDTB0159) +0.76P+3T	0.4	43%	19%	0.32	0.34	40dB

Width

Height

LandVac®

Tempered Vacuum Insulated Glass

Enhance

No evacuation port, no circular getter.

Getter line is 3mm thick - length is determined by the unit size. In tall, narrow units it may extend along a horizontal and vertical side.

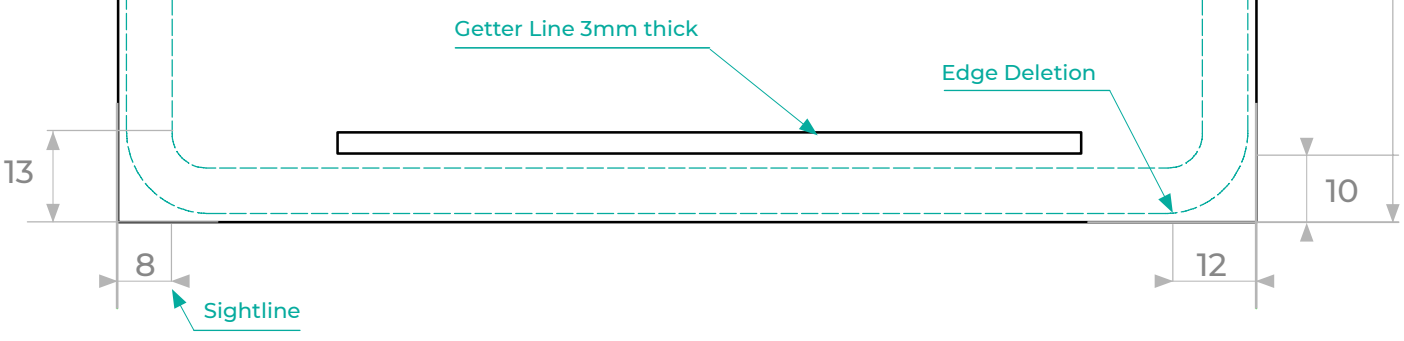
Area of each glass (m^2)	Length of Getter (mm)	Number of Getters (pcs)
Area≤0.1	100	1
0.1<Area≤0.3	200	1
0.3<Area≤0.5	400	1
0.5<Area≤0.8	400	2
0.8<Area≤1.2	400	3

Maximum Unit Size 1450mm x 2480mm. For larger units consider LandVac Heritage.

Minimum Unit Size 190mm x 230mm.

Shapes are widely available.
Edge deletion increases to 16mm on shaped items.

All dimensions in mm.



LANDVAC OPTIMUM

High performing glazing for future build projects

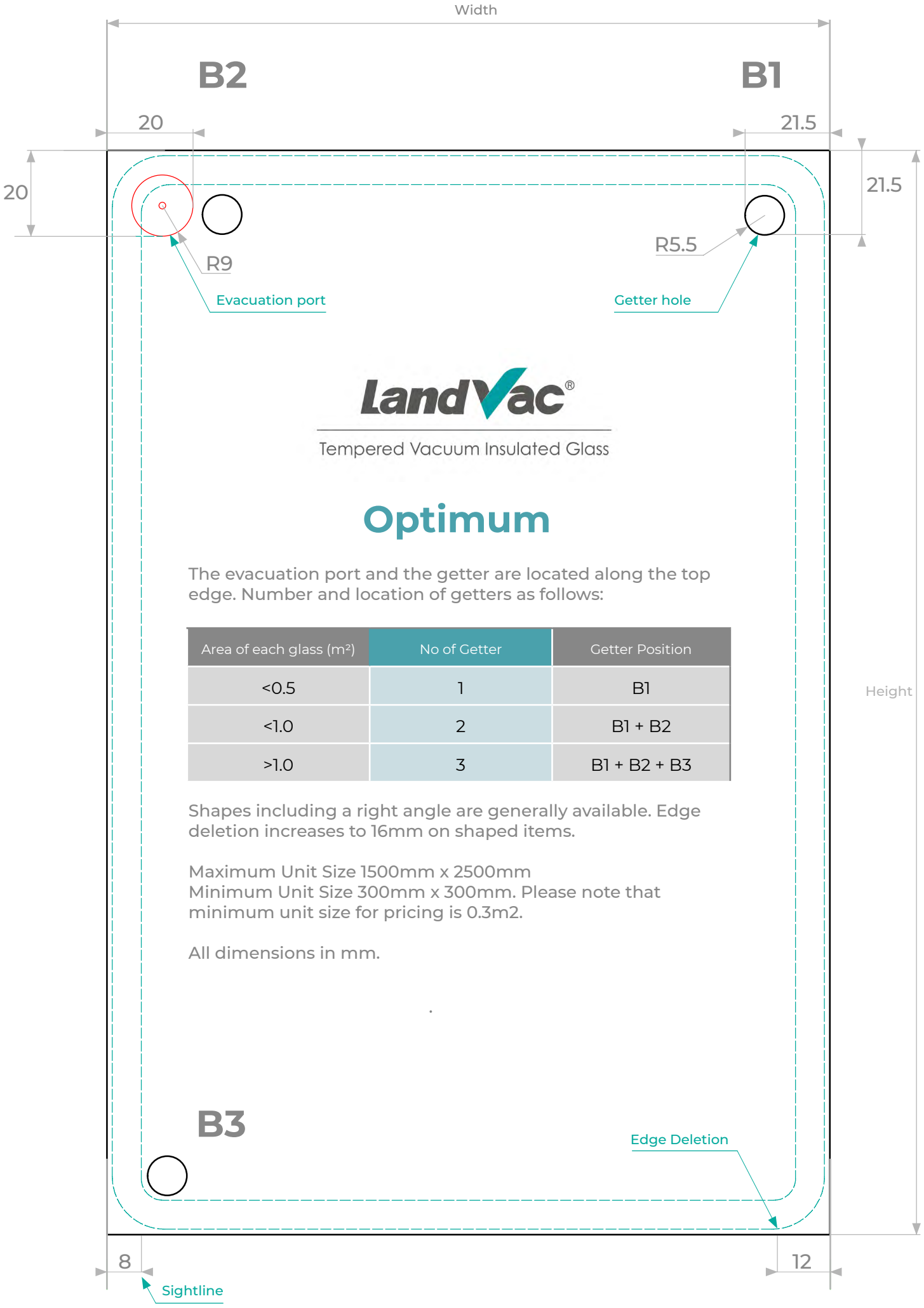
LandVac Optimum is best suited for contemporary new construction projects, providing cutting-edge technology with a slim profile, exceptional energy efficiency (center pane U value of 0.4), and standard toughened durability, making it the top choice for architects pushing the boundaries of modern design.

COMPARISON: LandVac Optimum vs Traditional Double and Triple Glazing

	Double Glazing	Triple Glazing	LandVac Optimum Vacuum Glazing
Overall Thickness	28mm	38 - 48mm	25.1mm
U-Value	1.0 - 1.9	0.7 - 1.0	0.4
Acoustic Reduction (RW)	~31dB	~35dB	41dB
Estimated Lifespan	10 - 25 years	10 - 25 years	10 - 25 years

LANDVAC OPTIMUM (Hybrid)

	U-Value (W/m^2K)	Visible Light		SHGC (g-value)	Shading Coefficient	Weighted Sound Reduction Index
		Transmittance	Outdoor Reflectivity			
4T+0.3V+4TL (S1.10) + 9Ar + 3 + 0.76P + 3	0.4	72%	18%	0.59	0.68	41dB
4T+0.3V+4TL (D80) + 9Ar + 3 + 0.76P + 3	0.4	63%	19%	0.46	0.53	41dB
4TL (S1.10) + 0.3V+4TL (S1.10) + 9Ar + 3 + 0.76P + 3	0.4	70%	15%	0.48	0.55	41dB
4TL (D80) + 0.3V+4TL (D80) + 9Ar + 3 + 0.76P + 3	0.4	54%	16%	0.32	0.37	41dB



LandVac®

Tempered Vacuum Insulated Glass

Optimum

The evacuation port and the getter are located along the top edge. Number and location of getters as follows:

Area of each glass (m²)	No of Getter	Getter Position
<0.5	1	B1
<1.0	2	B1 + B2
>1.0	3	B1 + B2 + B3

Shapes including a right angle are generally available. Edge deletion increases to 16mm on shaped items.

Maximum Unit Size 1500mm x 2500mm
Minimum Unit Size 300mm x 300mm. Please note that minimum unit size for pricing is 0.3m2.

All dimensions in mm.