Declaration of Thermal Performance for Windows & Doors

Date of Issue 02/09/2026

Name, Address, and Email contact of Manufacturer / Supplier

Lidar Windows and Doors Canterbury

909 Halswell Junction Road, Islington, Christchurch 8042

info@lidarcanterbury.co.nz

Project / Site Details - including Address

I Shepherd Homes: Lot 61 Arbor Green, 115 Solihull Drive, Rolleston

Quote number: 228

Consent No. BC260549 **Climate Zone** Five

I / We declare that the following,

☒ 1) Glazed windows & doors, **or**

☒ 2) Opaque doors, **or**

☐ 3) Skylights.

supplied by us to this Project / Site, achieve a **Construction R-value** as stated below,

Construction R-value = **R** 0.50 m^2.K/W

*(**Note** – The Construction R-value shall be no less than the value specified within the Consent listed above.)*

This R-value has been determined using one of the following methods,

☒ 1) Selected from Table E.1.1.1, **or**

☐ 2) Derived using a WEERS calculator, **or**

☐ 3) Calculated in accordance with H1/ ____

(Confirm H1/AS2, VM1, or VM2)

(Supporting documentation for methods will be supplied on request.)

Name Tony Greenlow Signature Tony Greenlow

Window & Glass Association Membership No. 1402

Copy of Table E.1.1.1 from H1/AS1, Fifth Edition, Amendment 1…

TABLE E.1.1.1: Construction R-values (R_{Window}) of selected generic vertical windows and doors

Paragraph E.1.1.1 a)

Type of glazing	U_g [1]	Spacer type [2]	Example IGU [3], [4] (informative)	R_{window} (m^2·K/W) for different frames			
				Aluminium frame	Thermally broken aluminium frame	uPVC frame	Timber frame
Double pane	2.63	Aluminium	Glass: Clear/Clear Gas: Air	R0.26	R0.32	R0.40	R0.44
	1.90	Aluminium	Glass: Low E_2/Clear Gas: Argon	R0.30	R0.39	R0.50	R0.56
	1.60	Thermally improved	Glass: Low E_2/Clear Gas: Argon	R0.33	R0.42	R0.56	R0.63
	1.30	Thermally improved	Glass: Low E_3/Clear Gas: Argon	R0.35	R0.46	R0.63	R0.71
	1.10	Thermally improved	Glass: Low E_4/Clear Gas: Argon	R0.37	R0.50	R0.69	R0.77
	0.90	Thermally improved	Glass: Low E_4/Clear Gas: Krypton	R0.40	R0.54	R0.76	R0.85
Triple pane	1.89	Thermally improved	Glass: Clear/Clear/Clear Gas: Air		R0.38	R0.50	R0.56
	1.20	Thermally improved	Glass: Low E_2/Clear/Clear Gas: Argon		R0.48	R0.66	R0.74
	1.00	Thermally improved	Glass: Low E_3/Clear/Clear Gas: Argon		R0.52	R0.73	R0.81
	0.70	Thermally improved	Glass: Low E_3/Low E_3/ Clear Gas: Argon		R0.59	R0.86	R0.95
	0.60	Thermally improved	Glass: Low E_4/Low E_4/ Clear Gas: Argon		R0.62	R0.91	R1.01

Notes:

(1) Thermal transmittance of the glazing determined using BS EN 673. Where the U_g-value of the proposed glazing is different from the values included in the table, R_{window} shall be determined based on the nearest U_g-value in the table that is greater than the U_g-value of the proposed glazing.

(2) 'Thermally improved' refers to a spacer that meets the definition of thermally improved spacer in ISO 10077-1 Annex G.

(3) The examples provided are informative descriptions only of the *insulated glazing unit (IGU)* types that might be used to deliver the nominated U_g-values. When using this table, R_{window} shall be determined based on U_g, spacer type and frame type.

(4) The properties of each of the glass panes within the *IGU* are provided and separated by '/'. 'Clear' refers to clear float glass. 'Low E_1', 'Low E_2', 'Low E_3' and 'Low E_4' refer to glass with low emissivity coatings at different performance levels.

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