Acoustic Table: 02 2021

Common Double Glazed units 'Standard Glazing'						U-Values		
width	Rw	RW+Ctr	outer pane	cavity inner pane		W/m2.K	W/m2.K with P1	
28mm	33db	28db	4mm clear	20mm Ar	4mm PT+	1.2	1.1	
28mm	33db	28db	6mm clear	16mm	6mm PT+	1.2	1.0	
28.8mm	34db	29db	6.8mm clear	18mm Ar	4mm PT+	1.2	1.0	
28.8mm	37db	31db	6.8mm clear	16mm Ar	6mm PT+	1.2	1.0	
28mm	35db	30db	6mm clear	18mm Ar	4mm PT+	1.2	1.1	
26.8mm	36db	30db	6.8mm acoustic	16mm Ar	4mm PT+	1.2	1.0	
28.8mm	38db	32db	6.8mm acoustic	18mm Ar	4mm PT+	1.2	1.0	
28.8mm	39db	33db	6.8mm acoustic	16mm Ar	6mm PT+	1.2	1.0	

Higher performing and other options						U-Values		
width	Rw	RW+Ctr	outer pane	cavity	inner pane	W/m2.K	W/m2.K with P1	
28mm	37db	34db	10mm clear	12mm Ar	6mm PT+	1.3	1.2	
27.6mm	39db	33db	6.8mm acoustic	14mm Ar	6.8mm PT+	1.2	1.1	
28.8mm	39db	33db	6.8mm Clear	12mm Ar	10mm PT+	1.3	1.2	
27.6mm	40db	34db	8.8mm acoustic	12mm Ar	6.8mm PT+	1.3	1.2	
27.6mm	40db	35db	8.8mm Clear	10mm Ar	8.8mm acoustic PT+	1.5 n/a		
28.8mm	41db	35db	8.8mm acoustic	14mm Ar	6mm PT+	1.3	1.1	
28.8mm	41db	35db	6.8mm acoustic	12mm Ar	10mm PT+	1.3	1.2	
27.6mm	41db	35db	6.8mm acoustic	12mm Ar	8.8mm acoustic PT+ 1.3		n/a	
27.6mm	42db	36db	8.8mm acoustic	10mm Ar	8.8mm acoustic PT+	1.5	n/a	
35.6mm	43db	37db	6.8mm acoustic	20mm Ar	8.8mm acoustic PT+	1.2	n/a	
36.8mm	45db	39db	10.8mm acoustic	16mm Ar	10mm PT+	1.2	n/a	
35.6mm	47db	39db	10.8mm acoustic	16mmAr	8.8mm acoustic PT+	1.2	n/a	
35.6mm	47db	40db	12.8mm acoustic	14mm Ar	8.8mm acoustic PT+ 1.2		n/a	
44.3mm	50db	42db	13.5mm acoustic	22mm Ar	Ar 8.8mm acoustic PT+ 1.2		n/a	
43.6mm	50db	42db	12.8mm acoustic	22mm Ar	8.8mm acoustic PT+ 1.2		n/a	
51.6mm	54db	49db	14.8mm acoustic	24mm Ar	12.8mm acoustic PT+	1.2	n/a	

Notes

The higher the number, the better the noise reduction, db = decibels.

Rw is the average reduction across the frequency range of the human ear.

Rw + Ctr is the frequency range specific to road noise

Double glazing options are better than triple glazing.

Triple glazing may be needed for better U-Values - W/m2.K

Glass selection used is the most cost effective and readily available.

Unit width based on most common glazing bead options for for UK market.

14.8mm & 6.8mm PT+ acoustic are made to order.

Other options can be calculated on request.

Data sheets available on request and from www.regencyglass.co.uk

PT+ = Planitherm Total+ Ar = Argon gas filled P1 = Planitherm One Kr = Krypton gas filled

Acoustic = acoustic laminated glass

Highlighted blue are the standard glazing options as a benchmark.

1.1W/m2.K with Krypton

1.1W/m2.K with Krypton



the difference is clear

Common Triple Glazing							U-Values			
width	Rw	RW+Ctr	outer pane	1st cavity	middle pane	2nd Cavity	inner pane	W/m2.K	W/m2.K P1	W/m2.K P1 + Kr
28mm	27db	24db	4mm clear	8mm Ar	4mm T PT+	8mm Ar	4mm PT+	1.0	0.9	
44mm	32db	27db	4mm clear	16mm Ar	4mm T PT+	16mm Ar	4mm PT+	0.6	0.5	0.4
36mm	32db	27db	4mm clear	12mm Ar	4mm T PT+	12mm Ar	4mm PT+	0.8	0.7	0.4
36.8mm	34db	29db	6.8mm clear	10mm Ar	4mm T PT+	12mm Ar	4mm PT+	0.8	0.7	0.5
28.8mm	35db	31db	6.8mm acoustic	8mm Ar	4mm T PT+	6mm Ar	4mm PT+	1.1	1.0	0.7
28.8mm	35db	31db	4mm clear	6mm Ar	4mm T PT+	8mm Ar	6.8mm acoustic PT+	1.1	n/a	
43.6mm	44db	37db	6.8mm acoustic	10mm Ar	6mm T PT+	10mm Ar	10.8mm acoustic	1.2	n/a	
43.6mm	45db	39db	10.8mm acoustic	10mm Ar	4mm T PT+	10mm Ar	8.8mm acoustic PT+	0.9	n/a	
43.6mm	45db	40db	6.8mm acoustic	12mm Ar	6mm T PT+	10mm Ar	8.8mm acoustic PT+	0.8	n/a	

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