

Rw

Rw stands for The Weighted Sound Reduction Index. It is a number used to rate the effectiveness of a soundproofing system or material. It is the most common measure, and it weighs a 'basket' of frequencies while incorporating human ear correction. This is our default measure for all enquiries unless stated otherwise.

Ctr

Ctr is an adjustment factor that accounts for low-frequency noise such as road traffic or music.

C

This measure provides a simple average across a range of frequencies typical to everyday living, such as TV, talking and children playing.

thicknesses will perform better acoustically.

- The decibel scale is logarithmic, so an increase in the Rw of 10db, will equate to a 50% reduction in the audible level of sound.
- The difference of 1 decibel is not discernible while 3 decibels is on the limit of human perception. A difference of 5 decibels is noticeable.
- The cavity is generally irrelevant to the Rw regarding human perception but does affect U-Value so, must be considered.

When assessing the level of audible sound reduction in glass, the Rw number is stated, followed by a reduction figure for the Ctr and C values, giving a spectrum of sound in each place.

Construction	Rw	C	Ctr	Notes
4mm float // 4mm float	31	29	26	Standard unit.
6mm float // 6mm float	31	30	27	Heavier 6mm version.
6.8mm laminate // 4mm float	33	32	28	Addition of standard 6.8mm laminate.
6.8mm acoustic lam // 4mm float	36	34	30	Addition of acoustic 6.8mm laminate.
6.8mm acoustic lam // 6mm float	40	38	34	Acoustic laminate and heavier glass.
10mm float // 4mm float	38	36	32	Non-laminate improved acoustic values.
10mm float // 6mm float	40	38	35	Heavy and different thicknesses.
10mm float // 8.8mm laminate	40	39	36	Heavy and laminate.
10 mm float // 8.8mm acoustic lam	42	41	38	Heavy and acoustic laminate.
12.8mm ac lam // 8.8mm ac lam	48	45	41	Heavy specialist laminates.
4mm float single glazed	29	27	26	Similar performance as 4mm DGU.