



## Pilkington Optiphon™

	dB sound reduction index by octave band – Hz						R <sub>w</sub> (C:C <sub>tr</sub> )	R <sub>w</sub>	R <sub>w</sub> +C	R <sub>w</sub> +C <sub>tr</sub>
	125	250	500	1000	2000	4000				

### Configuration single glazing

6.8 mm Pilkington <b>Optiphon™</b>	21	26	31	35	37	38	35(-1;-3)	35	34	32
8.8 mm Pilkington <b>Optiphon™</b>	24	28	34	38	37	43	37(-1;-4)	37	36	33
10.8 mm Pilkington <b>Optiphon™</b>	28	31	36	38	39	47	38(-1;-2)	38	37	36
12.8 mm Pilkington <b>Optiphon™</b>	30	32	37	39	41	51	39(-0;-2)	39	39	37
16.8 mm Pilkington <b>Optiphon™</b>	29	34	37	39	46	55	40(-0;-2)	40	40	38

### Configuration Insulating Glass Unit (IGU), thickness in mm

6 / 6 to 20 mm / 6.8 Pilkington <b>Optiphon™</b>	23	24	34	42	43	52	38(-2;-5)	38	36	33
6 / 6 to 20 mm / 8.8 Pilkington <b>Optiphon™</b>	24	26	40	48	46	54	41(-3;-7)	41	38	34
6 / 6 to 20 mm / 10.8 Pilkington <b>Optiphon™</b>	23	28	41	47	45	55	42(-3;-7)	42	39	35
6 / 6 to 20 mm / 12.8 Pilkington <b>Optiphon™</b>	20	29	43	47	46	49	42(-3;-8)	42	39	34
8.8 Pilkington <b>Optiphon™</b> / 6 to 20 mm / 12.8 Pilkington <b>Optiphon™</b>	26	36	46	50	52	63	47(-2;-7)	47	45	40
16.8 Pilkington <b>Optiphon™</b> / 6 to 20 mm / 16.8 Pilkington <b>Optiphon™</b>	29	40	45	47	54	68	48(-2;-6)	48	46	42

The above IGUs with Pilkington **K Glass™** on one pane and a 16 mm 90 % Argon-filled cavity achieve a U value of 1.5 W/m<sup>2</sup> K

Further information on solar and thermal performance is available on the Pilkington website using the Spectrum program: [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

Impact classification EN12600 Class 1(B)1 for all above Pilkington **Optiphon™** products

R<sub>w</sub>(C:C<sub>tr</sub>) are in accordance with EN717-1

### Non Pilkington Optiphon™ glass products. Figures from BS EN 12354

	dB sound reduction index by octave band – Hz						R <sub>w</sub> (C:C <sub>tr</sub> )	R <sub>w</sub>	R <sub>w</sub> +C	R <sub>w</sub> +C <sub>tr</sub>
	125	250	500	1000	2000	4000				

### Configuration single glazing

4 mm Float Glass	17	20	26	32	33	26	29(-2;-3)	29	27	26
6 mm Float Glass	18	23	30	35	27	32	31(-2;-3)	31	29	28
8 mm Float Glass	20	24	29	34	29	37	32(-2;-3)	32	30	29
10 mm Float Glass	23	26	32	31	32	39	33(-2;-3)	33	31	30
12 mm Float Glass	27	29	31	32	38	47	34(-0;-2)	34	34	32

### Configuration Insulating Glass Unit (IGU), Float glass, thickness in mm

4 / 6 to 20 mm / 4	21	17	25	35	37	31	29(-1;-4)	29	28	25
6 / 6 to 20 mm / 6	20	18	28	38	34	38	31(-1;-4)	31	30	27
6 / 6 to 20 mm / 4	21	20	26	38	37	39	32(-2;-4)	32	30	28
10 / 6 to 20 mm / 4	24	21	32	37	42	43	35(-2;-5)	35	33	30
10 / 6 to 20 mm / 6	24	24	32	37	37	44	35(-1;-3)	35	34	32

Note that these are conservative figures and cover all products by European glass manufacturers.

R<sub>w</sub> = Weighted sound reduction. This scale allows for the response of the human ear and could be used for determining a suitable product to reduce noise such as voices.

C = An adjustment to the R<sub>w</sub> scale that could be used for selecting a product to reduce noise from music, radio, tv, high speed traffic and other medium to high frequencies.

C<sub>tr</sub> = An adjustment to the R<sub>w</sub> scale that could be used for selecting a product to reduce noise from urban road traffic, disco music and other noises with a large component of low frequencies.

Note that a 3 dB difference is barely discernable, 5 dB is clearly discernable and 10 dB is a doubling or halving of the noise.



CE marking confirms that a product complies with its relevant harmonised European Norm.  
The CE marking label for each product, including declared values, can be found at [www.pilkington.com/CE](http://www.pilkington.com/CE)



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