



ACOUSTIC PERFORMANCE

Windell use a combination of Pilkington Optilam™ and Dorma Universal Patch fittings for Interior Glazing

Pilkington Optilam™ Phon (mm)	Sound Reduction R _w (C, C _{tr}) (dB)	Light			Solar Heat				U value (W/m²K)	
		Transmittance	Reflectance (ext)	Reflectance (int)	Direct Transmittance	Reflectance	Absorptance	Total Transmittance	Air-filled	Argon-filled
Pilkington Optilam™ Phon (Single Glazing)										
6.8	35 (-1; -3)	89	8	8	73	7	20	79	N/A	N/A
8.8	37 (-1; -4)	88	8	8	69	7	24	76	N/A	N/A
10.8	38 (-1; -2)	87	8	8	67	7	26	74	N/A	N/A
12.8	39 (0; -2)	86	8	8	65	6	29	72	N/A	N/A
16.8	40 (0; -2)	85	8	8	60	6	34	69	N/A	N/A
Pilkington Insulight™ Phon incorporating Pilkington K Glass™										
6/16/6.8*	38 (-2; -6)	74	17	15	53	14	33	68	1.7	1.5
6.8/16/6.8*	39 (-2; -6)	73	17	15	52	13	35	65	1.7	1.5
8.8/16/6*	39 (-2; -6)	73	16	15	50	12	38	62	1.7	1.5
10.8/16/6*	41 (-2; -6)	72	16	15	48	12	40	60	1.7	1.5
12.8/16/6*	41 (-1; -5)	72	16	15	47	11	42	58	1.7	1.5
16.8/16/6.8*	48 (-2; -6)	67	16	14	37	10	53	53	1.6	1.5

Thirdoctaveband Centre Frequency (Hz)	Sound Insulation (dB) for Glass Thickness (mm)																					
	Pilkington Optilam™ Phon (Single Glazing)										Pilkington Insulight™ Phon incorporating Pilkington K Glass™											
	6.8		8.8		10.8		12.8		16.8		6/16/6.8*		6.8/16/6.8*		8.8/16/6*		10.8/16/6*		12.8/16/6*		16.8/16/6.8*	
100	20		23		29		30		28		22		22		25		26		27		25	
125	21	21	22	24	27	28	28	30	30	29	24	23	24	23	23	24	24	25	25	26	34	29
160	23		26		28		31		32		24		24		24		25		26		34	
200	24		26		29		31		34		21		23		22		24		26		38	
250	27	26	29	28	32	31	33	32	34	34	25	24	27	26	27	25	30	28	30	29	41	40
315	28		32		33		34		36		29		29		31		32		33		42	
400	30		34		35		36		36		32		33		34		36		36		45	
500	31	31	34	34	35	36	36	37	37	37	34	34	35	35	37	36	39	38	38	38	45	45
630	33		36		37		38		37		38		38		40		41		41		46	
800	34		37		38		39		38		41		41		43		44		44		46	
1000	35	35	38	38	39	38	39	39	38	39	43	42	44	43	45	44	46	45	45	45	46	47
1250	36		38		39		39		40		43		46		45		45		45		48	
1600	37		38		38		39		43		44		47		45		44		45		51	
2000	38	37	37	37	38	39	42	41	46	46	42	43	48	48	42	43	43	44	44	45	55	54
2500	37		37		41		45		50		43		50		43		46		46		61	
3150	36		40		44		48		52		49		52		49		52		52		65	
4000	38	38	44	43	48	47	51	51	57	55	54	52	58	55	56	53	58	56	60	56	71	68
R _w (C, C _{tr})	35 (-1, -3)		37 (-1, -4)		38 (-1, -2)		39 (0, -2)		40 (0, -2)		38 (-2, -6)		39 (-2, -6)		39 (-2, -6)		41 (-2, -6)		41 (-1, -5)		48 (-2, -6)	

Tested by: **Pilkington**