



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	26	27	27	27	27	27	27	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	24	24	24	25	26	26	26	26	26	26	34	34
200	24	26	29	31	34	21	23	22	24	26	21	23	22	24	26	26	26	26	26	26	38	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	29	29	31	32	32	32	32	33	33	33	42	42
400	30	34	35	36	36	32	33	34	36	36	32	33	34	36	36	36	36	36	36	36	45	45
500	31	31	34	34	35	34	35	36	37	37	34	34	35	35	37	36	39	38	38	38	45	45
630	33	36	37	38	37	38	38	37	37	38	38	38	40	40	41	41	41	41	41	41	46	46
800	34	37	38	39	38	41	41	43	44	44	41	41	43	44	44	44	44	44	44	44	46	46
1000	35	35	38	38	39	43	42	44	43	43	43	42	44	43	45	44	46	45	45	45	46	47
1250	36	38	39	39	40	43	46	45	45	45	43	46	45	45	45	45	45	45	45	45	48	48
1600	37	38	38	39	43	44	47	45	44	44	44	47	45	45	44	44	44	44	44	44	51	51
2000	38	37	37	37	38	42	41	46	46	42	43	48	48	42	43	43	44	44	44	44	55	54
2500	37	37	41	45	50	43	50	43	43	43	43	50	43	43	46	46	46	46	46	46	61	61
3150	36	40	44	48	52	49	52	49	49	49	49	52	49	49	52	52	52	52	52	52	65	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**