



Your Dreams, Our Challenge

PERFORMANCES

ACOUSTIC GLASS

Planibel | Stratobel |

Stratophone | Thermobel



THERMOBEL TG — TRIPLE GLAZING

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
4 - 12 - 4 - 12 - 4	18.7	19.0	28.4	41.6	46.7	39.8	33 (-2;-6)	33	31	27	NPD	36	30
6 - 12 - 6 - 12 - 6	18.5	21.9	32.9	40.3	36.7	48.9	35 (-2;-6)	35	33	29	NPD	42	45
6 - 15 - 4 - 15 - 4	15.0	25.2	33.0	43.5	42.2	44.7	36 (-2;-7)	36	34	29	NPD	44	35
8 - 12 - 4 - 12 - 4	20.6	25.1	33.8	44.3	48.0	48.9	37 (-1;-6)	37	36	31	NPD	40	40
8 - 12 - 4 - 12 - 6	22.2	28.8	36.7	44.0	40.1	52.5	39 (-2;-5)	39	37	34	NPD	42	45
10 - 12 - 4 - 12 - 6	24.0	27.5	36.0	41.8	42.9	55.5	40 (-2;-6)	40	38	34	NPD	44	50

THERMOBEL TG STRATOBEL — TRIPLE GLAZING WITH LAMINATED GLASS

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
4 - 12 - 4 - 12 - 33.2	17.7	24.3	33.0	43.7	47.6	47	36 (-1;-6)	36	35	30	1B1 / P2A	39	36
6 - 16 - 4 - 16 - 44.2	18.9	28.8	38.2	45.1	41.6	54.2	39 (-2;-7)	39	37	32	1B1 / P2A	51	46
8 - 16 - 6 - 16 - 44.2	24.9	28.3	37.8	42.3	42.1	56.6	40 (-2;-5)	40	38	35	1B1 / P2A	55	56
44.2 - 12 - 6 - 12 - 44.2	19.6	31.3	39.0	44.9	43.6	56.8	41 (-2;-8)	41	39	33	1B1 / P2A	48	57
8 - 16 - 4 - 16 - 55.2	27.7	31.8	41.2	39.7	39.7	58.2	41 (-2;-4)	41	39	37	1B1 / P2A	55	56
8 - 16 - 6 - 16 - 55.2	23.9	31.1	41.0	49.1	50.5	60.9	43 (-2;-4)	43	41	39	1B1 / P2A	57	61
66.2 - 16 - 6 - 16 - 44.2	27.8	34.3	43.0	42.6	45.7	61.4	44 (-1;-5)	44	43	39	1B1 / P2A	60	67

THERMOBEL TG STRATOPHONE — TRIPLE GLAZING WITH ACOUSTIC LAMINATED GLASS

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
4 - 12 - 4 - 12 - 44.2 st	21.2	25.7	35.4	46.4	49.5	49.5	39 (-2;-7)	39	37	32	1B1 / P2A	41	41
6 - 12 - 4 - 12 - 44.2 st	19.4	30.2	38.6	47.2	45.9	52.2	41 (-2;-8)	41	39	33	1B1 / P2A	43	46
8 - 12 - 4 - 12 - 44.2 st	23.6	31.0	39.9	49.2	51.1	59.5	43 (-3;-7)	43	40	36	1B1 / P2A	45	51
44.2 - 12 - 4 - 12 - 44.2 st	23.9	31.1	41.0	49.1	50.5	60.9	43 (-2;-7)	43	41	36	1B1 / P2A	46	52
8 - 14 - 6 - 14 - 44.2 st	25.7	30.6	42.2	48.7	49.1	56.4	44 (-2;-7)	44	42	37	1B1 / P2A	51	56
8 - 16 - 6 - 16 - 55.2 st	30.3	32.5	43.2	47.9	46.7	56.9	45 (-1;-5)	45	44	40	1B1 / P2A	57	61
44.2 st - 12 - 4 - 12 - 44.2 st	26.9	33.5	42.8	54.8	59.5	62.1	46 (-2;-7)	46	44	39	1B1 / P2A	46	52
10 - 12 - 6 - 12 - 44.2 st	30.0	32.7	41.5	48.4	52.1	62.1	46 (-2;-6)	46	44	40	1B1 / P2A	49	61
44.2 st - 10 - 4 - 10 - 66.2 st	27.4	35.9	44.1	53.0	55.2	63.2	47 (-1;-7)	47	46	40	1B1 / P2A	46	62
10 - 16 - 6 - 16 - 55.2 st	34.3	33.8	46.8	48.8	50.6	63.3	48 (-2;-6)	48	46	42	1B1 / P2A	59	66
88.2 st - 12 - 6 - 12 - 66.2 st	33.2	42.8	49.3	52.5	52.8	61.5	51 (-1;-5)	51	50	46	1B1 / P2A	60	87
1010.2 st - 14 - 8 - 14 - 88.2 st	38.8	44.9	51.9	50.5	55.5	65.8	53 (-1;-4)	53	52	49	1B1 / P2A	74	112

GLASS PARTITION — MADE OUT OF 2 SINGLE GLASS SHEETS (PLANIBEL AND/OR STRATOBEL-STRATOPHONE) ⁽²⁾

	Transmission loss function of sound frequencies ⁽²⁾						Acoustics Indexes ⁽²⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
6 / 60 mm air / 6	No estimation						39 (-3;-4)	39	36	35	NPD	72	30
6 / 60 mm air / 44.2							43 (-2;-4)	43	41	39	1B1 / P2A	74	36
6 / 60 mm air / 44.2 st							45 (-1;-3)	45	44	42	1B1 / P2A	74	36

⁽¹⁾ These sound reduction values correspond to glazings of 1,23m by 1,48m according to EN ISO 717-1 & EN ISO 10140 which are tested in laboratory conditions.
The accuracy of the given indexes is not better than +/- 1dB. In-situ performances may vary according to the effective glazing dimensions, frame system, noise sources, etc.

⁽²⁾ The acoustic insulation of a partition is not only dependant of the glass, but also function of the size and the quality of the frame, the air tightness of the partition, the gap between the 2 glass sheets, the eventual ventilation in this gap and the separation between the 2 glass sheets (no sound transmission inside the structure), ... Therefore, AGC provides only an ESTIMATION for this structure. To know the effective acoustic insulation of the partition, the frame produces has to perform a test.

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
6 mm	19.5	23.4	29.5	35.5	27.6	31.6	31 (-2;-3)	31	29	28	NPD	6	15
8 mm	22.1	25.1	32.2	35.6	28.7	35.9	32 (-1;-2)	32	31	30	NPD	8	20

STRATOBEL — LAMINATED GLASS

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
44.2	25.8	26.4	32.6	36.8	33.8	38.2	35 (-1;-3)	35	34	32	1B1 / P2A	9	21
66.2	28.3	31.4	35.3	33.7	38.7	49.9	37 (-1;-3)	36	35	33	1B1 / P2A	13	31

STRATOPHONE — ACOUSTIC LAMINATED GLASS

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
33.2 st	25.5	28.4	32.0	37.1	39.2	41.1	36 (0;-3)	36	36	33	1B1 / P2A	7	16
44.2 st	26.6	29.9	34.1	38.1	39.2	42.0	37 (0;-2)	37	37	35	1B1 / P2A	9	21
55.2 st	29.3	31.5	35.0	39.6	40.3	47.4	39 (-1;-3)	39	38	36	1B1 / P2A	11	26
66.2 st	29.1	32.7	37.7	40.3	40.2	47.9	40 (-1;-3)	40	39	37	1B1 / P2A	13	31
88.2 st	33.2	35.3	37.4	39.1	44.5	53.8	41 (-1;-2)	41	40	39	1B1 / P2A	17	41

THERMOBEL — DOUBLE GLAZING

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
4 - 16 - 4	20.5	16.8	25.7	36.4	41.4	36.5	30 (-1;-4)	30	29	26	NPD	24	20
6 - 15 - 6	21.5	21.4	31.0	38.7	30.8	39.2	32 (-1;-3)	32	31	29	NPD	27	30
6 - 15 - 4	22.0	23.5	31.8	43.1	41.9	43.4	36 (-1;-5)	36	35	31	NPD	25	25
8 - 16 - 4	23.2	24.6	31.9	41.1	43.6	44.1	37 (-2;-5)	37	35	32	NPD	28	30
10 - 15 - 6	22.0	28.7	36.4	40.7	39.1	49.6	38 (-1;-4)	38	37	34	NPD	31	40

THERMOBEL STRATOBEL — DOUBLE GLAZING WITH LAMINATED GLASS

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
4 - 16 - 44.2	22.0	23.2	33.6	43.3	48.6	50.6	37 (-2;-6)	37	35	31	1B1 / P2A	29	31
44.2 - 16 - 33.2	23.7	26.4	37.7	43.3	41.9	53.7	39 (-1;-5)	39	38	34	1B1 / P2A	32	37
6 - 15 - 55.2	23.5	28.6	36.5	43.2	39.6	47.4	39 (-1;-4)	39	38	35	1B1 / P2A	32	41
44.2 - 14 - 44.6	26.6	27.0	38.8	43.0	43.1	60.8	40 (-1;-5)	40	39	35	1B1 / P5A	33	43
8 - 15 - 55.2	26.1	32.3	39.5	41.0	40.2	53.6	41 (-2;-4)	41	39	37	1B1 / P2A	34	46
66.2 - 15 - 44.2	26.5	33.6	39.7	41.3	44.6	60.8	42 (-2;-5)	42	40	37	1B1 / P2A	37	52
88.2 - 16 - 55.2	30.5	35.5	41.3	40.1	46.9	62.0	43 (-1;-4)	43	42	39	1B1 / P2A	44	67

THERMOBEL STRATOPHONE — DOUBLE GLAZING WITH ACOUSTIC LAMINATED GLASS

	Transmission loss function of sound frequencies ⁽¹⁾						Acoustics Indexes ⁽¹⁾				Norms	Total Thickness	Weight
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw (C;Ctr)	Rw	Rw+C	Rw+Ctr	Impact / Break-in		
	dB						dB				EN 12600 EN 356	mm	kg/m²
4 - 15 - 44.2 st	25.0	26.0	33.4	44.1	46.0	49.1	39 (-2;-5)	39	37	34	1B1 / P2A	28	31
6 - 16 - 44.2 st	23.2	28.6	38.7	48.7	48.2	53.4	41 (-2;-6)	41	39	35	1B1 / P2A	31	36
8 - 16 - 44.2 st	24.5	29.9	39.6	47.4	48.4	55.4	42 (-2;-6)	42	40	36	1B1 / P2A	33	41
6 - 15 - 66.2 st	27.2	30.7	39.3	44.7	44.8	54.6	42 (-1;-5)	42	41	37	1B1 / P2A	34	46
8 - 15 - 66.2 st	28.2	33.3	40.9	42.8	43.8	56.2	43 (-2;-5)	43	41	38	1B1 / P2A	36	51
44.2 st - 15 - 44.2 st	27.3	31.5	42.2	53.0	56.3	59.7	45 (-2;-7)	45	43	38	1B1 / P2A	33	42
10 - 16 - 44.2 st	26.2	33.2	42.7	46.7	50.9	57.9	45 (-2;-6)	45	43	39	1B1 / P2A	35	46
10 - 16 - 55.2 st	28.8	34.1	45.8	46.2	49.3	61.1	46 (-2;-6)	46	44	40	1B1 / P2A	37	51
55.2 st - 15 - 55.2 st	27.9	34.2	45.1	51.7	52.3	59.4	47 (-2;-7)	47	45	40	1B1 / P2A	37	52
66.2 st - 16 - 44.2 st	27.6	38.0	45.8	54.1	56.0	63.1	49 (-3;-8)	49	46	41	1B1 / P2A	38	52
66.2 st - 16 - 66.2 st	30.4	39.3	46.7	53.9	54.0	65.1	50 (-2;-7)	50	48	43	1B1 / P2A	42	62
88.2 st - 15 - 66.2 st	35.6	42.8	46.7	52	52.0	65.1	51 (-1;-4)	51	50	47	1B1 / P2A	45	72
88.2 st - 16 - 66.2 st	35.9	43.6	47.8	51.6	55.1	68.5	52 (-1;-5)	52	51	47	1B1 / P2A	46	72

⁽¹⁾ These sound reduction values correspond to glazings of 1,23m by 1,48m according to EN ISO 717-1 & EN ISO 10140 which are tested in laboratory conditions.
The accuracy of the given indexes is not better than +/- 1dB. In-situ performances may vary according to the effective glazing dimensions, frame system, noise sources, etc.