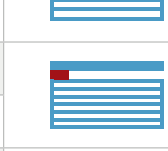
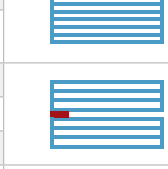
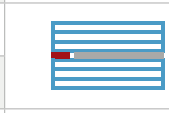
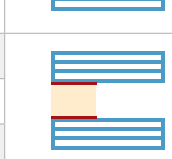
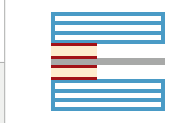
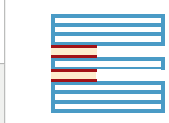
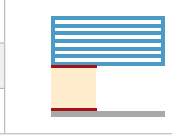
Vario Norm, Vario Therm and Vario Therm-S

Technical information – Glazing

VELUX® Commercial

Vario Norm and Vario Therm barrel vault

Glazing Type	Construction	Thick-ness	Thermal trans-mittance	Thermal trans-mittance	Light trans-mission	Solar energy trans-mittance	Sound reduction index	Perform-ances
Description		[mm]	U_g-value (vertical)	$U_{rc,ref300}$ a/b/c**	τ_v	g-value	Rw	
			W/(m²K)	W/(m²K)	%	%	dB	
PC 10/4 clear *		10	2,50	–	68	66	17	–
PC 10/4 opal *			2,50	–	56	58	17	
PC 10/4 IR-control *			2,50	–	NPD	NPD	17	
PC 16/7 clear		16	1,80	1,89 / 1,76 / 1,56	55	54	20	–
PC 16/7 opal			1,80	1,89 / 1,76 / 1,56	40	45	20	
PC 16/7 IR-control			1,80	1,89 / 1,76 / 1,56	NPD	NPD	20	
PC 20/7 clear		20	1,50	1,67 / 1,60 / 1,40	64	77	21	–
PC 20/7 opal			1,50	1,67 / 1,60 / 1,40	54	55	21	
PC 16/7 clear + PC 3 clear		22	1,58	1,64 / 1,57 / 1,38	NPD	NPD	NPD	Hail protection: HW 5
PC 16/7 opal + PC 3 clear			1,58	1,64 / 1,57 / 1,38	NPD	NPD	NPD	
PC 10/4 clear + PC 10/4 clear		22	1,50	1,56 / 1,51 / 1,33	NPD	NPD	NPD	–
PC 10/4 opal + PC 10/4 clear			1,50	1,56 / 1,51 / 1,33	NPD	NPD	NPD	
PC 10/4 opal + PC 10/4 opal			1,50	1,56 / 1,51 / 1,33	NPD	NPD	NPD	
PC 10/4 opal + GRP + PC 10/4 clear		22	1,54	1,59 / 1,54 / 1,35	NPD	NPD	NPD	Hard roofing: B_{ROOF} (t1)
PC 10/4 opal + GRP + PC 10/4 opal			1,54	1,59 / 1,54 / 1,35	NPD	NPD	NPD	
PC 10/4 clear + non-woven fabric + PC 10/4 clear		22	NPD	NPD	25	25	NPD	Hard roofing: B_{ROOF} (t1)
PC 10/4 opal + non-woven fabric + PC 10/4 clear			NPD	NPD	22	19	NPD	
PC 10/4 opal + non-woven fabric + PC 10/4 opal			NPD	NPD	20	15	NPD	
PC 10/4 clear + PC 10/4 clear DI		32	1,31	1,40 / 1,40 / 1,21	NPD	NPD	NPD	–
PC 10/4 opal + PC 10/4 clear DI			1,31	1,40 / 1,40 / 1,21	NPD	NPD	NPD	
PC 10/4 opal + PC 10/4 opal DI			1,31	1,40 / 1,40 / 1,21	NPD	NPD	NPD	
PC 10/4 clear + GRP + PC 10/4 clear DI		32	1,20	1,29 / 1,31 / 1,12	NPD	NPD	NPD	Hard roofing: B_{ROOF} (t1)
PC 10/4 opal + GRP + PC 10/4 clear DI			1,20	1,29 / 1,31 / 1,12	NPD	NPD	NPD	
PC 10/4 clear + PC 4/2 clear + PC 10/4 clear DI		32	1,16	1,26 / 1,29 / 1,10	NPD	NPD	NPD	–
PC 10/4 opal + PC 4/2 clear + PC 10/4 clear DI			1,16	1,26 / 1,29 / 1,10	NPD	NPD	NPD	
PC 16/7 clear + GRP DI		32	1,39	1,48 / 1,45 / 1,26	47	NPD	NPD	Hard roofing: B_{ROOF} (t1)
PC 16/7 opal + GRP DI			1,39	1,48 / 1,45 / 1,26	34	NPD	NPD	
PC 16/7 IR-control + GRP DI			1,39	1,48 / 1,45 / 1,26	NPD	NPD	NPD	

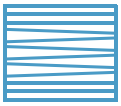
* Only for Vario Norm

** Calculated according to EAD 220089-00-0401 for Vario Therm 2-field reference size 2 m x 5 m. Project specific calculations can be made on request.
a) U_{rc}-value of the rooflight construction. A_{rc} = 13,31 m² (1/6 rise) / 12,43 m² (1/10 rise)
b) U_{rc}-value of the rooflight construction (with 300 mm high kerb with 100 mm thickness). A_{rc} = 17,07 m² (1/6 rise) / 16,18 m² (1/10 rise)
c) U_{rc}-value of the rooflight construction (with 300 mm high kerb with 100 mm thickness + kerb connection profile). A_{rc} = 17,07 m² (1/6 rise) / 16,18 m² (1/10 rise)

NPD = No Performance Determined

PC = Polycarbonate | GRP = Glass-reinforced plastic | DI = Distance Insulation foam tape | **Non woven fabric** | **Foam tape**

Vario Therm-S mono pitch and dual pitch

Glazing Type	Construction	Thick-ness	Thermal trans-mittance	Thermal trans-mittance	Light trans-mission	Solar energy trans-mittance	Sound reduction index	Perfor-mances
Description		[mm]	U_g-value	U_{rc} ***	τ_v	g-value	Rw	
			W/(m²K)	W/(m²K)	%	%	dB	
PC 16/7 clear		16	1,80	NPD	55	54	20	–
PC 16/7 opal			1,80	NPD	40	45	20	
PC 16/7 IR-control			1,80	NPD	NPD	NPD	20	
PC HX25 clear		25	1,3	NPD	46	51	NPD	–
PC HX25 opal			1,3	NPD	38	48	NPD	
PC HX32 clear		32	1,1	NPD	45	51	NPD	–
PC HX32 opal			1,1	NPD	36	48	NPD	

*** Project specific calculations can be made on request.
NPD = No Performance Determined

PC = Polycarbonate | GRP = Glass-reinforced plastic | DI = Distance Insulation foam tape | **Non woven fabric** | **Foam tape**