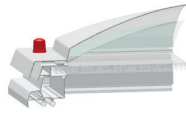
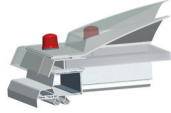
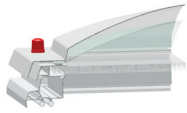




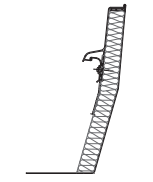
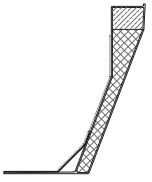
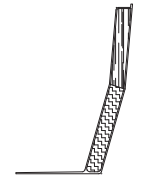
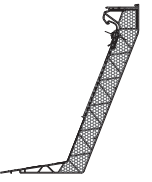
Dome rooflights

TOP-90 PLUS

VELUX®

Commercial

Dome rooflight – top	STANDARD	HEATSTOP	BLACKTOP	SUPER-TOP	HAILSTOP	
Dome rooflight:		Info upon request	Info upon request			
Glazing material:	PMMA outer skin + PMMA inner skin (high quality, UV-resistant plastic) + 16 mm PC multiwall sheet	-	-	PC outer skin + PMMA inner skins (high impact polycarbonate + high quality, UV-resistant plastic) + 16 mm PC multiwall sheet	PC outer skin + PC inner skin (high impact resistant polycarbonate) + 16 mm PC multiwall sheet	
Glazing:	opal / clear / clear	-	-	clear / opal / clear	opal / kclear / clear	
Resistance to upward loads. Wind load performance (Upwards Load - UL): according to DIN EN 1873: 2006-03 (5.4.1) (Reference data for order size 120 x 120 cm)	1000	-	-	1000	1000	
Resistance to downward loads. Snow load performance (Downwards Load - DL): according to DIN EN 1873: 2006-03 (5.4.2) (Reference data for order size 120 x 120 cm)	1500	-	-	1500	1500	
U-Value U_t W/(m ² K): according to EN 1873:2014 (specification independent of size) DIN EN 1873: 2014 (5.9.1)	1,1	-	-	1,1	1,1	
Sound insulation value [dB]: according to EN 1873: 2006-03 (5.10)	28	-	-	28	28	
Photometric values: A) Light transmission: TL [%] (τD65) B) g-value (thermal transmittance) DIN EN 1873: 2014 (5.1) *) Data according to manufacturer for Outer shell Note: technical values depend on shell thickness	A	46	-	-	NPD	NPD
	B	47	-	-	NPD	NPD
Meltability: according to DIN 18230-1 (without specific proof)	✓	-	-	✓	✓	
Fall-through safety: according to GS-BAU 18: 2020-05 (Valid for 1 year after manufacture)	✓	-	-	✓	✓	
Fall-through safety: according to DIN 18008-5 (unlimited valid for real glass products)	✗	-	-	✗	✗	
Hail protection according to VKF classification: (according to VKF test regulations no. 10)	✗	-	-	✓	✓	

Dome rooflight – upstand	ISO-THERM-AK	Metall-AK-TE	Metall-RAK	GFK-AK	GFK-RAK	PVC-AK
Upstand:						
Material:	1-layer steel upstand with PVC cover-frame for thermal insulation freedom from thermal bridges	1-layer steel upstand with alu cover-frame	1-layer steel upstand with alu cover-frame	2-layer GRP upstand, laminated all round, with reinforced upstand top	2-layer GRP upstand, laminated all round, with reinforced upstand top	2-layer PVC upstand, closed profile with a multi-chamber system at 30 mm profile thickness
Insulation:	60 mm side insulation made of mineral wool (A1) for increased thermal insulation	30 mm side insulation made of mineral wool (A1) for normal thermal insulation	30 mm side insulation made of mineral wool (A1) for normal thermal insulation	30 mm side insulation for normal thermal insulation	30 mm side insulation for normal thermal insulation	30 mm side insulation for normal thermal insulation
Recommended use:	Heated buildings or building areas with increased energy efficiency requirements	Low or normally heated buildings or parts of buildings	Low or normally heated buildings or parts of buildings	Low or normally heated buildings or parts of buildings	Low or normally heated buildings or parts of buildings	Low or normally heated buildings or parts of buildings
Function:	Fixed or vented Dome Rooflights and SHEV-Units	Fixed or vented Dome Rooflights and SHEV-Units	Aerodynamic optimised geometry for SHEV-Units	Fixed or vented Dome Rooflights and SHEV-Units	Fixed or vented Dome Rooflights and SHEV-Units	Aerodynamic optimised geometry for SHEV-Units
U-value U _{up} W/(m ² K): according to EN 1873:2014 (Specification for 30 cm upstand height) DIN EN 1873: 2014 (5.9.1)	0,77	1,81	1,89	1,36	1,36	1,25

Complete dome rooflight product	TOP-90-PLUS + ISO-THERM-AK	TOP-90-PLUS + Metall-AK-TE	TOP-90-PLUS + Metall-RAK	TOP-90-PLUS + GFK-AK	TOP-90-PLUS + GFK-RAK	TOP-90-PLUS + PVC-AK
Total U-value U _{rc} W/(m ² K): according to EN 1873:2014 (Reference information for order size 120 x 120 cm for 30 cm upstand height) DIN EN 1873: 2014 (5.9.1)	1,02	1,53	1,51	1,30	1,32	1,25
Sound insulation value [dB]: according to EN 1873: 2006-03 (5.10)	24 (-1;-4)	22	22	22	22	22
Reaction to fire: according to EN 1873: 2006-03 (5.5) Classification according to EN 13501-1	B-s1, d0	B-s1, d0	E	E	E	B-s2, d0