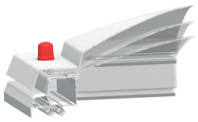
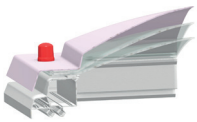
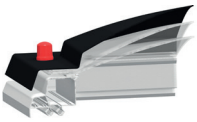
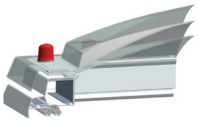
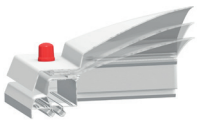
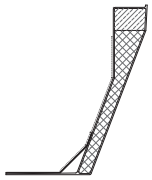
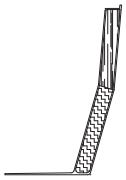
Dome rooflights

TOP-90, 3-skins

VELUX® Commercial

Dome rooflight –top		STANDARD	HEATSTOP	BLACKTOP	SUPER-TOP	HAILSTOP
Dome rooflight:						
Glazing material:		**PMMA outer skin + PMMA inner skins** (high quality, UV-resistant plastic)	**Reflective PMMA outer skin** (to reduce heat gain). **+ PMMA inner skins** (high quality, UV-resistant plastic)	**Black coloured PMMA outer skin** (to avoid light penetration) **+ PMMA inner skins** (high quality, UV-resistant plastic)	**PC outer skin + PMMA inner skins** (high impact polycarbonate + high quality, UV-resistant plastic)	**PC outer skin + PC inner skins** (high impact resistant polycarbonate)
Glazing:		opal / clear / clear	Heatstop / clear / clear	black / clear / clear	clear / opal / clear	opal / clear / 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	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	1500	1500
U-Value Ut W/(m²K): according to EN 1873:2014 (specification independent of size) DIN EN 1873: 2014 (5.9.1)		2	2	2	2	2
Sound insulation value [dB]: according to EN 1873: 2006-03 (5.10)		22	22	22	22	22
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	75	50	0 *	NPD	46
	B	69	32	25 *	NPD	47
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 Uup W/(m²K): 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-90-3S + ISO-THERM-AK	TOP-90-3S + Metall-AK-TE	TOP-90-3S + Metall-RAK	TOP-90-3S + GFK-AK	TOP-90-3S + GFK-RAK	TOP-90-3S + PVC-AK
Total U-value Urc W/(m²K): 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)	1,39	1,93	1,87	1,67	1,68	1,64
Sound insulation value [dB]: according to EN 1873: 2006-03 (5.10)	22	22	22	22	22	22
Reaction to fire: according to EN 1873: 2006-03 (5.5) Classification according to EN 13501-1	E	E	E	E	E	E