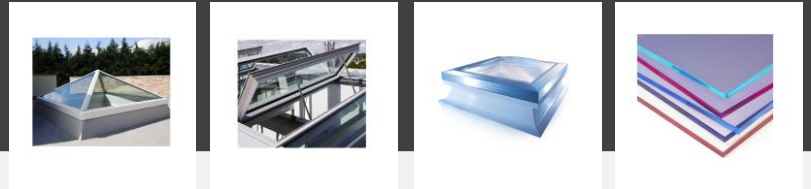


COXDOME Brakel[®] Optima

SHEV application   

Manufacturer	Brakel (www.brakel.com)
Type	Williaam Cox louvered ventilator, type Brakel [®] Optima
Description	thermally separated natural louvered ventilator, suitable for ventilation purposes and smoke & heat ventilation
Operation	single action pneumatic cylinder + CO ₂ fire function (PB) / double action pneumatic cylinder + CO ₂ fire function (P2B) / single action failsafe pneumatic cylinder (PBFS) / 24Vdc spindle motor (M24)
Base	thermally separated insulated aluminium thermally separated uninsulated aluminium
Louvers	thermally separated aluminium with 25mm insulated aluminium flap U = 0.94 W/m ² K / thermally insulated with insulated glass 4-15-3.3.2, 25 mm thick U = 1.10 W/m ² K / thermally insulated with 6 wall polycarbonate - 25mm thick - clear / opal U = 1.50 W/m ² K
Flanges	thermally separated for glazing installation F2 flange thickness (28) mm / uninsulated flange for preformed upstand (width 120mm F5) / uninsulated flange for application of roof felt (F4) / thermally separated insulated flange for special installations (see drawing)
Clear opening (w x l)	*** x *** mm (identical)
Flange sizes (w x l)	*** x *** mm (identical)
Installation angle	0-30° and 90°
Installation	installation in glazing / on preformed upstands / roof felt application
Protection	enamel finish with 1 polyester layer powder coating, layer thickness 60 mu, in standard RAL colour (group 1) / anodised
U value	Depending on type and size from 0.99 to 1.40 W/m ² K
Air-tightness	EN 1026: 600 Pa, EN 12207: class 4
Air leakage	0.3 m ³ /hrs/m ² at 50 Pa
Water tightness	EN 1027: 1050 Pa, EN 12208: class E1050
Resistance to varying wind load	EN 12211: 800 Pa (= P2) deviation < 1/300, strength 2400 Pa EN 12210: class 4
Reaction to fire	EN 13501-1 +A1:2009, B-s2,d0
Test	EN 12101-2
Acoustic values	Brakel [®] Optima with insulated aluminium flap Rw = 26 dB Brakel [®] Optima with 6 wall polycarbonate Rw = 21 dB Brakel [®] Optima with glass flap 4-15-3.3.2 Rw = 31 dB





COXDOME Brakel[®] Optima

SHEV application  

Manufacturer	Brakel (www.brakel.com)
Type	Williaam Cox louvered ventilator, type Brakel [®] Optima
Description	thermally separated natural louvered ventilator, suitable for ventilation purposes
Operation	single action pneumatic cylinder (P) / double action cylinder (P2) / 24Vdc spindle motor (M24) / 24Vdc spindle motor + transformer / rectifier (M230)
Base	thermally separated insulated aluminium thermally separated uninsulated aluminium
Louvers	thermally separated aluminium with 25mm insulated aluminium flap $U = 0.94 \text{ W/m}^2\text{K}$ / thermally insulated with insulated glass 4-15-3.3.2, 25mm thick $U = 1.10 \text{ W/m}^2\text{K}$ / thermally separated with 6 wall polycarbonate - 25mm thick - clear / opal $U = 1.50 \text{ W/m}^2\text{K}$
Flanges	thermally separated for glazing installation F2 flange thickness (28) mm / uninsulated flange for preformed upstand (width 120mm F5) / uninsulated flange for application of roof felt (F4) / thermally separated insulated flange for special installations
Clear opening (w x l)	*** x *** mm (identical)
Flange sizes (w x l)	*** x *** mm (identical)
Installation angle	0-90°
Installation	installation in facade construction / glazing installation / on preformed upstands / roof felt application
Protection	enamel finish with 1 polyester layer powder coating, layer thickness 60 μm , in standard RAL colour (group 1) / anodised
U value	Depending on type and size from 1.0 to 1.4 $\text{W/m}^2\text{K}$
Air-tightness	EN 1026: 600 Pa, EN 12207: class 4
Air leakage	0.3 $\text{m}^3/\text{hrs}/\text{m}^2$ at 50 Pa
Water tightness	EN 1027: 1050 Pa, EN 12208: class E1050
Resistance to varying wind load	EN 12211: 800 Pa (= P2) deviation < 1/300, strength 2400 Pa EN 12210: class 4
Acoustic values	Brakel [®] Optima with insulated aluminium flap $R_w = 26 \text{ dB}$ Brakel [®] Optima with 6 wall polycarbonate $R_w = 21 \text{ dB}$ Brakel [®] Optima with glass flap 4-15-3.3.2 $R_w = 31 \text{ dB}$

