



PRODUCT INFO | NATURAL VENTILATOR

COLTLITE IN EDUCATION

Coltlite is a natural louvred ventilator that is perfectly suited to educational building types where both product performance and aesthetics need to combine to form the perfect solution.

It provides natural inlet or exhaust air as well as allowing natural daylight entry and can also be used in the event of a fire to provide natural smoke extract.

Depending on project requirements, Coltlite ventilators are available in CLT, CLN, CL3, CLS, CLS45, CLST and CLET versions.

A large glass skylight on a building roof, viewed from a low angle looking up. The skylight is composed of multiple rectangular glass panels held together by a metal frame. The sky is visible through the glass, and the building's structure is partially visible in the background. A white text overlay is positioned on the left side of the image.

COMFORTABLE, SAFE AND EFFECTIVE LEARNING ENVIRONMENTS.

Providing effective indoor ventilation is crucial to creating effective learning environments.

Coltlite natural louvred ventilators can be designed to operate in conjunction with Co2 and temperature sensors that will automatically open and close to adjust system performance and support optimal levels of comfort and concentration for your building's occupants.

COMBINED DAY-TO-DAY AND SMOKE VENTILATION

As well as providing a data-driven and effective natural ventilation solution, Coltlite ventilators also offer an aesthetically-pleasing solution to smoke extraction for escape and rescue routes in the event of an emergency.

UNRIVALED ENERGY-EFFICIENCY

There are currently no Passivhaus-certified AOVs or louvres available in the marketplace, but the Coltlite CL3 is the *best performing louvred ventilator currently available in the UK. Its unrivalled performance can improve a building's chances of achieving Passivhaus certification. Talk to our team for more information.

*Based on insulation and air leakage performance.

COLTLITE VERSIONS

Colt manufactures Coltlite ventilators in **CLT, CLN, CL3, CLS, CLS45, CLST** and **CLET** versions. All the louvred ventilator versions have the following common features:

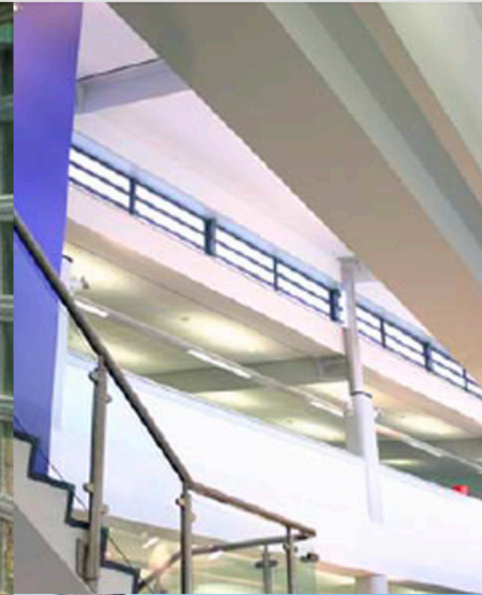
- *Frame depth 47 mm*
- *Visible frame 40 mm*
- *Aluminium profiles in EN AW-6063-T6 grade alloy*
- *Surface finishes anodised according to E6 EV I or powder-coated in RAL colours*
- *All fittings are hidden.*
- *A low-maintenance actuator moves the louvres using a hidden mechanism*
- *All louvred ventilators, except CLS45, are certified as EN 12101-2 smoke ventilators.*

Coltlite is a natural glazed ventilator for installation into the facade which can provide both day-to-day and smoke ventilation. Its form and function make it particularly suited to educational buildings where good U values and low air leakage are required.

Northampton school for boys



University of Leeds



St. Matthews Academy



University of Plymouth

University of London

THERMALLY BROKEN COLTLITE LOUVRED VENTILATORS

TYPE CLT

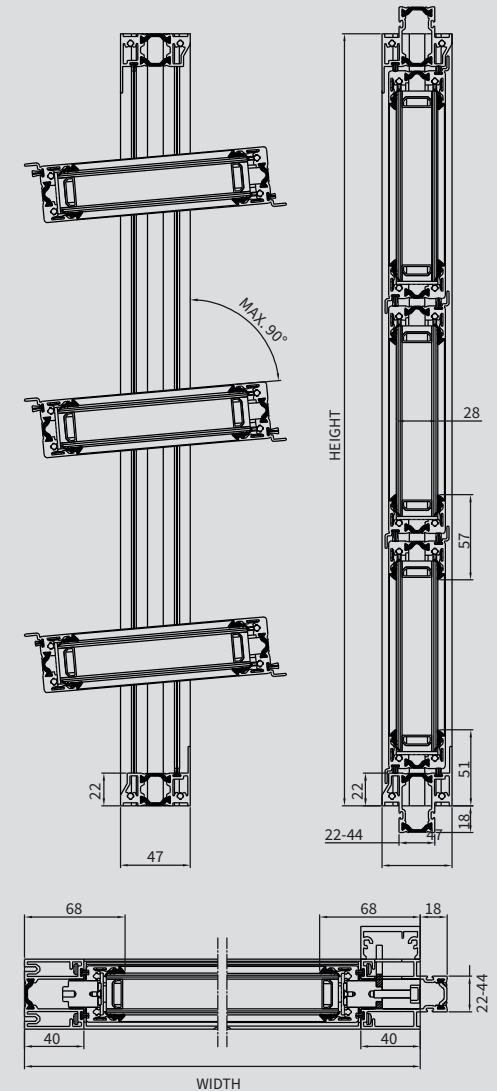
Coltlite CLT is a thermally broken louvred ventilator.

The double glazed louvres, with 28mm thick standard glass, are set all-round into insulated aluminium profiles.

Setting the standard for ventilators with the highest acoustic and thermal requirements.



TECHNICAL DATA	COLTLITE CLT
MATERIAL	Thermally broken louvred ventilator made from thermally broken aluminium profiles. Double glazed louvres with 28mm thick standard glass.
WIDTH	300mm - 2000mm
HEIGHT	250mm - arbitrary
HEIGHT OF LOUVRES	170mm - 370mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE INFILL	Insulating glass, composite panels
CONTROLS	Manual, electric, pneumatic



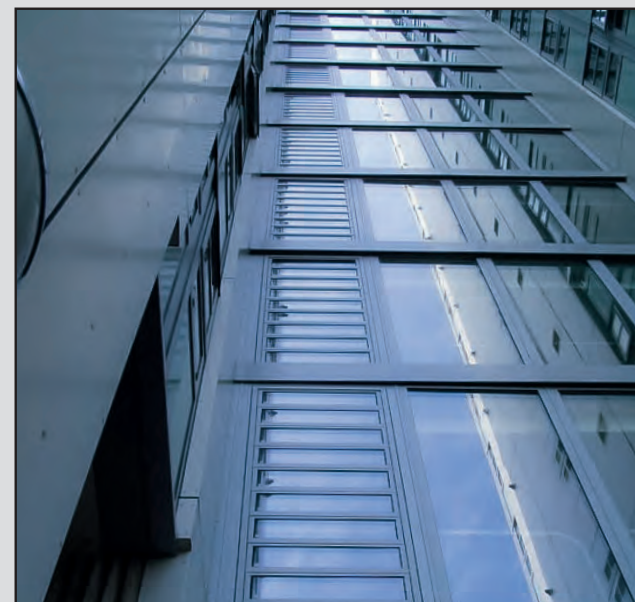
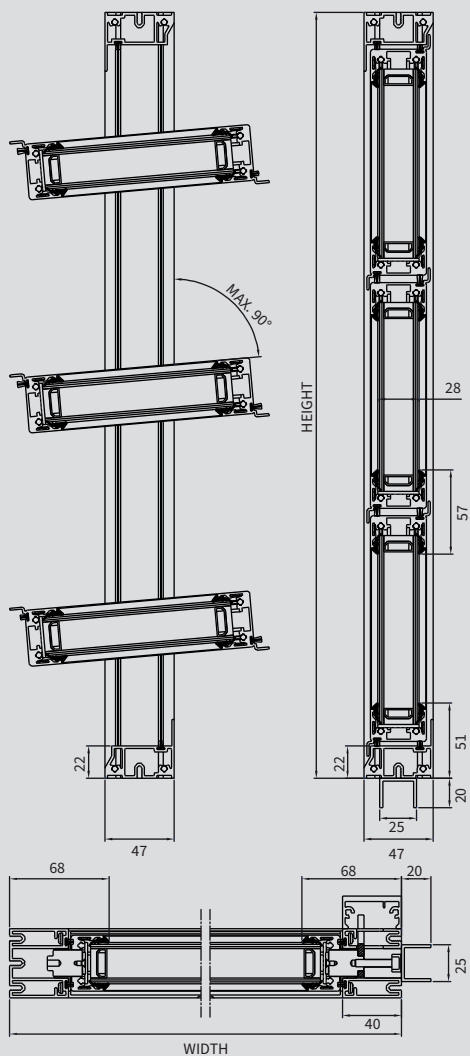
NON-THERMALLY BROKEN COLTLITE LOUVRED VENTILATORS

TYPE CLN

Coltlite CLN is non-thermally broken.

The double glazed louvres, with 28mm thick standard glass, are set all-round into aluminium profiles

The louvred ventilator providing high airtightness and meeting exacting requirements.



TECHNICAL DATA	COLTLITE CLN
MATERIAL	Non-thermally broken louvred ventilator made of aluminium profiles. Double glazed louvres with 28mm thick standard glass.
WIDTH	300mm - 2000mm
HEIGHT	250mm - arbitrary
HEIGHT OF LOUVRES	170mm - 370mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE INFILL	Insulating glass, composite panels
CONTROLS	Manual, electric, pneumatic

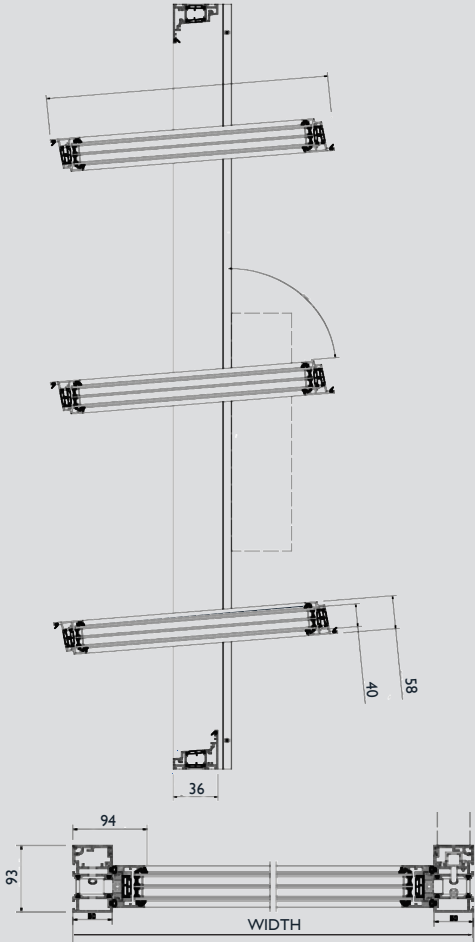
DOUBLE OR TRIPLE GLAZED COLTLITE VENTILATOR

TYPE CL3

The Coltlite CL3 is used for day-to-day ventilation and smoke extraction. It has been certified to EN 12101-2 and tested to EN 14351-1.

It can be used to provide natural ventilation and allow the entry of daylight into offices, factories and other commercial buildings such as shopping centres. In addition the ventilator can also be used for fire ventilation and for smoke extraction from escape and rescue routes. The Coltlite CL3 is designed for vertical installation into exterior glass walls and glass, steel or wood façades.

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TECHNICAL DATA	COLTLITE CL3
MATERIAL	Insulated (double or triple) glazing with composite panels.
WIDTH	350mm - 2500mm
HEIGHT	323 mm - 3000mm
HEIGHT OF LOUVRES	279 mm - 500mm
OPENING ANGLE	Max. 85° (this depends on the drive selected)
DEPTH OF FRAME	93 mm
LOUVRE INFILL	40mm
CONTROLS	Manual, electric, pneumatic

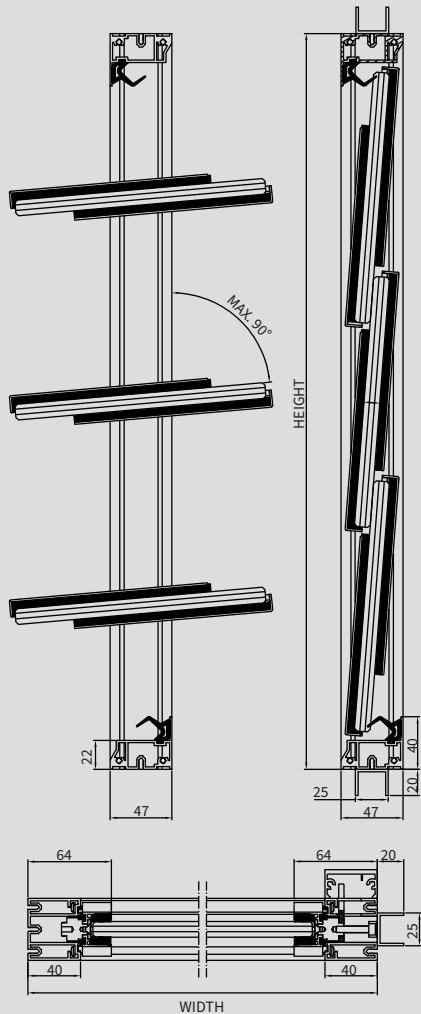
SINGLE GLAZED COLTLITE VENTILATOR

Type CLS

Coltlite CLS is non-thermally broken.

The louvres comprise 8mm, 10mm or 12mm thick single glazing, which is fixed on the sides into non-insulated aluminium profiles. All visible glass edges are polished. The louvre overlaps provide a louvred glazed appearance.

For the highest aerodynamic performance where thermal insulation is not a key requirement.



TECHNICAL DATA	COLTLITE CLS
MATERIAL	Non-thermally broken louvred ventilator. Sides of the louvres fixed into non-insulated aluminium profiles.
WIDTH	300 mm - 1800 mm
HEIGHT	250 mm - arbitrary
HEIGHT OF LOUVRES	200 mm - 390 mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE INFILL	Single glass (8, 10 or 12mm thick), polished edges
CONTROLS	Manual, electric, pneumatic

COLTLITE LOUVRED VENTILATOR WITH SINGLE GLAZING WITH A 45° MITRE CUT

TYPE CLS45

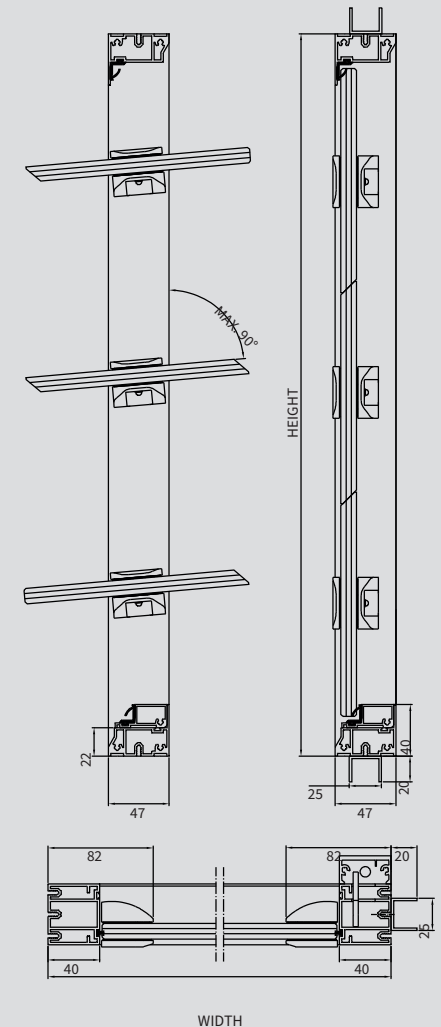
The Coltlite CLS45 is non-thermally broken louvred ventilator.

The glass louvres close on their long sides with a 45° mitred edge, so that they are flush with each other when closed and the entire façade looks like a single glass surface. The silver-coloured aluminium point brackets hold the glass, which makes it unnecessary to surround the individual louvres with frame profiles

The first choice for architects whose aim it is to create an aesthetic façade.



TECHNICAL DATA	COLTLITE CLS45
MATERIAL	Non-thermally broken louvred ventilator. Frameless single glazing with 8, 10 or 12mm thick standard glass.
WIDTH	300mm - 1600mm
HEIGHT	250 mm - arbitrary
HEIGHT OF LOUVRES	180 mm - 367 mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE INFILL	Single glass (8, 10 or 12mm thick), polished edges
CONTROLS	Manual or electric



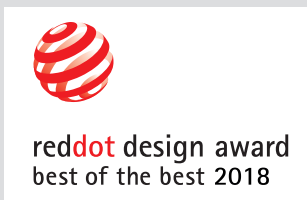
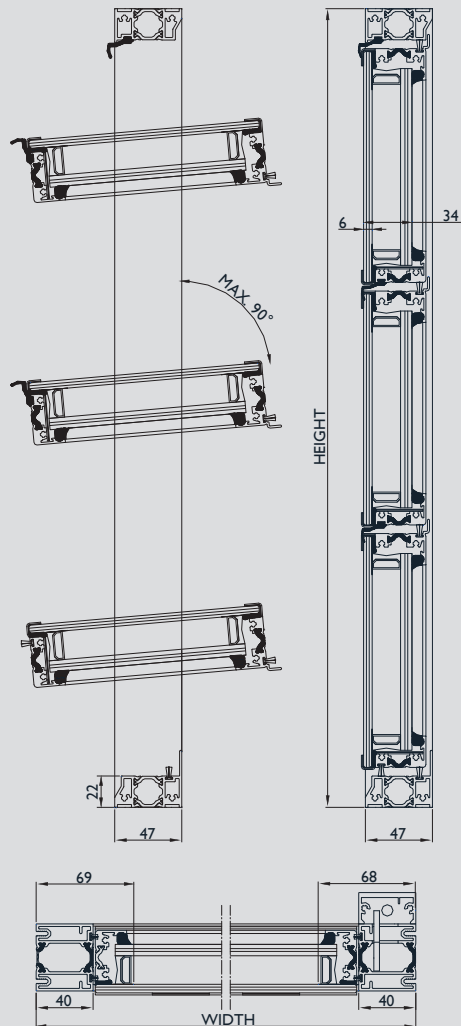
**GERMAN
DESIGN
AWARD
WINNER
2019**

THERMALLY BROKEN COLTLITE LOUVRED VENTILATORS

TYPE CLST

Coltlite CLST louvred ventilators have an all-glass appearance from the outside, and are suitable for natural day-to-day ventilation. The frame has a depth of 47 mm with concealed fittings. The external louvres are flush without visible louvre profiles, suitable for vertical installation.

A symbiosis of functionality and design.



TECHNICAL DATA	COLTLITE CLST
MATERIAL	Thermally broken louvred ventilator. A flat glazed appearance when viewed from the outside.
WIDTH	300 mm - 1600 mm
HEIGHT	250 mm - arbitrary
HEIGHT OF LOUVRES	210 mm - 359 mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE INFILL	Double insulated glazing with step and polished edges
CONTROLS	Manual or electric

THERMALLY-BROKEN COLTLITE LOUVRED VENTILATORS

TYPE CLET

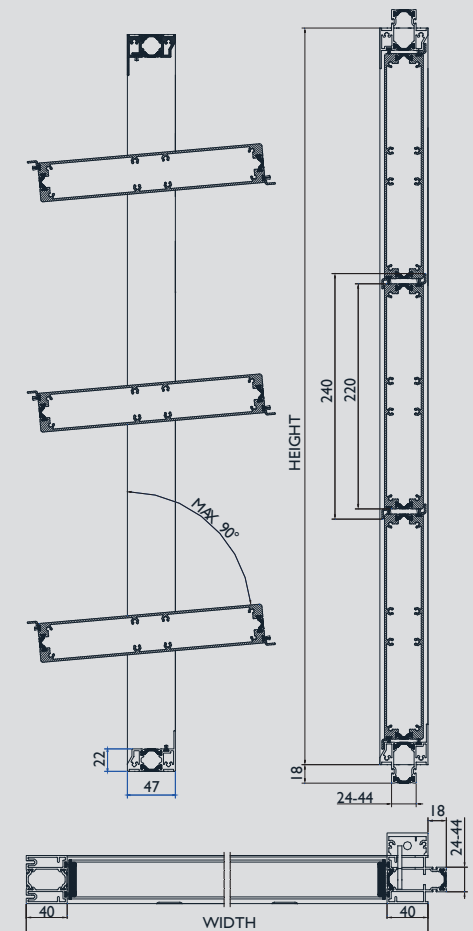
The Coltlite CLET louvred ventilator consisting of thermally-broken aluminium profiles, anodised or powder-coated in the RAL colour of your choice.

40mm thick visible width of the frames, operation of the louvres via a maintenance-free drive with concealed mechanisms and concealed movement. Louvres consist of flush thermally separated aluminium profiles with a U value of up to 1.7 W/m²K.

The virtually flush-finish louvred ventilator for industry.



TECHNICAL DATA	COLTLITE CLET
MATERIAL	Thermally broken louvred ventilator.
WIDTH	300mm - 2000mm
HEIGHT	270 mm - arbitrary
HEIGHT OF LOUVRES	240 mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE INFILL	Aluminium, optionally with PUR/PIR or mineral wool infill
CONTROLS	Manual, electric, pneumatic



ACTUATOR TYPES

A Coltlite ventilator can be manually adjusted to any position between 0° and 85° using a hand lever or crank handle. This allows high aerodynamic coefficients to be achieved. In addition to a pneumatic drive, over 20 different electric drives are available. Electronically controlled drives are available to minimise the risk of body parts being pinched.

Colt is a leader in this area with its "slow" drive variants, which are fast enough in the event of a fire, but slow enough to largely prevent trapping of body parts.

In addition to various spring return motors, which open the units in the event of fire without any power supply, a specially certified drive can also be used for outdoor applications.

Most actuator types have housings with a powder coating colour to match the colour of the frames.



LOUVRE INFILL PANELS

As standard, there are single or double glazed louvres available. Glass thicknesses between 4 and 8mm are available for double glazed louvres with a total thickness of 28mm or 34mm (Coltlite CLST only) and glass thicknesses of 8mm, 10mm and 12mm for the Coltlite CLS and CLS45 single glazed versions.

Optionally, insulated aluminium louvres or polycarbonate multi-wall sheets can also be used.

PAINT FINISHES

All frame profiles and aluminium louvres can be anodised to E6 EV1. This finish is light coloured matt silver. The profiles themselves (frames and louvres) can be polyester powder finished to a standard RAL colour.

Metallic and special colours are available on request.

Where profiles are thermally broken, two colours may be provided. This means that the inner and outer profiles are different colours.



ADDITIONAL OPTIONS

A Coltlite louvred ventilator can now be equipped with one or two magnetic limit switches, which signals to the building management system either that the unit is closed or the unit is open.

The switch includes a contact and magnets that are installed onto the units.

Alternatively, mechanical limit switches can be installed onto the frame.

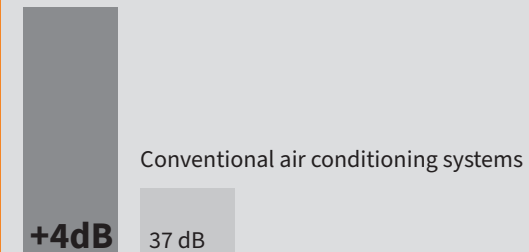
Coltlite louvred ventilators are also certified to EN 12101-2 as smoke and heat ventilators if they are fitted with bird and insect screens.

KEY FEATURES

Sound attenuation value

Coltlite CLT

41 dB*



* depending on the variant selected

For most applications, we can

guarantee anti-finger trapping protection

Excellent energy efficiency

The special design of Coltlite makes it particularly energy-efficient.

Coltlite CLS, CLT, CLN, CL3, CLST and CLET versions have been tested and are certified to **EN 12101-2** by TÜV

Tested and CE marked to

EN 14351-1 doors and windows certification

90° opening angle








Coltlite is custom made

Manufactured individually according to your design specifications and usage requirements

Resistance to wind (EN 12210)

CLASS C5

* depending on the variant selected

	LOUVER FRAMES	VENT WIDTH ¹	VENT HEIGHT ²	LOUVER HEIGHT ³	OPENING ANGLE ⁴	DEPTH OF FRAME	LOUVER INFILL TYPES	GLASS OR LOUVER THICKNESSES	GLASS TYPES	ALTERNATIVE INFILL TYPES	CONTROLS	AIR PERMEABILITY (EN 12207)	RESISTANCE TO RAIN (EN 12208)	RESISTANCE TO WIND (EN 12210)	SHV (EN 12101-2)	U VALUE (EN ISO 10077-1)	C _v VALUE	SOUND INSULATION ⁵		
	COLTLITE CLIT	Al profiles, thermally broken	300mm - 2000mm	250mm - arbitrary	170mm - 370mm	Max. 90°	47mm	Insulated glazing composite panels	28mm	Float glass, toughened glass, partially heat-strengthened glass, laminated safety glass	Composite panels	Manual, electric, pneumatic	Tested to EN 1026 and classified to EN 14351-1 (Windows and doors product standard, performance characteristics)	Class 4A	Classification value depends on the unit size, tested to EN 12211 in combination with air permeability tests	A tested and certified product	Up to max. 1.5 W/m ² /K	Up to max. 0.58	Up to max. 41 dB	
	COLTLITE CLN	Al profiles, not thermally broken	300mm - 2000mm	250mm - arbitrary	170mm - 370mm	Max. 90°	47mm	Insulated glazing composite panels	28mm	Float glass, toughened glass, partially heat-strengthened glass, laminated safety glass	Composite panels	Manual, electric, pneumatic				Class 5A	A tested and certified product	Up to max. 1.9 W/m ² /K	Up to max. 0.58	Not tested
	COLTLITE CL3	Al profiles, thermally broken	350mm - 2500mm	323mm - 3000mm	279mm - 500mm	Max 85°	93mm	Insulated glazing composite panels	40mm	Single toughened safety glass	-	Manual or electric				Class 7A* (depending on dimensions)	A tested and certified product	Up to max. 1 W/m ² /K	Up to max. 0.59	Up to max. 45 dB
	COLTLITE CLS	Side glass holder profile	300mm - 1800mm	250mm - arbitrary	200mm - 390mm	Max. 90°	47mm	Single glass edges polished	8 / 10 / 12mm	Float glass, toughened glass, partially heat-strengthened glass, laminated safety glass	-	Manual, electric, pneumatic				Class 2A	A tested and certified product	Up to max. 5.8 W/m ² /K	Up to max. 0.65	Up to max. 27 dB
	COLTLITE CLS45	Frameless	300mm - 1600mm	250mm - arbitrary	180mm - 367mm	Max. 90°	47mm	Single glass edges polished	8 / 10 / 12mm	Single toughened safety glass	-	Manual or electric				Class 2A	Not tested	Up to max. 5.8 W/m ² /K	Not tested	Not tested
	COLTLITE CLST	Al profiles, thermally broken	300mm - 1600mm	250mm - arbitrary	210mm - 359mm	Max. 90°	47mm	Insulated double stepped glass	34mm	Outer - 6mm single toughened safety glass. Inner - float, toughened safety glass, laminated safety glass	-	Manual or electric				Class 3A	A tested and certified product	Up to max. 1.8 W/m ² /K	Up to max. 0.58	Not tested
	COLTLITE CLET	Al profiles, thermally broken	300mm - 2000mm	250mm - arbitrary	240mm	Max. 90°	47mm	Optional PUR/PIR or mineral wool	38mm	-	-	Manual, electric, pneumatic				Class 4A	A tested and certified product	Up to max. 1.9 W/m ² /K	Up to max. 0.58	Not tested

¹ Outer frame dimensions. For throat dimensions subtract 80mm.

² Ventilators over a certain width and height are separated for ease of transportation and handling.

³ Maximum louvre weight 20 kg. Aspect ratio of louvre height to louvre length must be less than 1:10.

⁴ This value depends on the width of the unit, the wind strength and louvre height.

The value shown is based on the characteristics of a specific typical sample. These data are indicative only. The ventilator should be designed to resist the design wind loads.

⁵ Value dependent on the dimensions and type of infill.

