PRODUCTINFO | NATURAL VENTILATOR

COLTLITE

WHAT THIS UNIT IS USED FOR:

Coltlite is a natural louvred ventilator. It provides natural inlet and exhaust air as well as allowing natural daylight entry and can also be used in the event of fire to provide natural smoke extract.
Colt manufactures Coltlite ventilators in CLT, CLN, CLS, CLS45, CLST and CLET versions.

APPLICATIONS:

Coltlite has a sophisticated design and energy-efficient construction, which makes it particularly well suited for use in municipal and commercial but also industrial buildings.

FEATURES AND BENEFITS:

Coltlite is an aesthetic and aerodynamic ventilator which has a high resistance to heat and which also is designed for optimal acoustic and thermal performance. The factory is certified according to EN ISO 9001 :2008 All ventilators have been tested/classified according to EN 14351-1. Most Coltlites have been tested/classified according to EN 12101-2 as smoke ventilators.

See over for technical details

PERFECTION IN NATURAL VENTILATION

Coltlite SHEV louvred ventilators provide natural ventilation and make use of daylight in commercial buildings, factories and apartments.

In addition, these units can also be used for fire ventilation and smoke extraction for escape and rescue routes in the event of an emergency.
They are designed for vertical installation into external walls made of glass and solid façades as well as into steel or wooden constructions.

"Architects love its visual appeal and performance"

The design comprises thermally broken or non-thermally broken aluminium profiles, with single or double glazing. Alternative infill panels are available depending on the version selected.

HOW LOUVRED VENTILATORS WORK

The louvres are centrally pivoted.
They are rotated by manual, electrical or pneumatic means. An invisible push rod ensures that the louvres move in a synchronised fashion. Depending on the type of drive, the maximum opening angle of the louvres is up to 90°. For Coltlite louvred windows with pneumatic or electric drives, in the EU a risk assessment in accordance with the Machinery Directive 2006/42 EC must be carried out during the course of design and commissioning.
Colt manufactures all major components of the frames and louvres from the specified EN AW-6063-T6 aluminium alloy.
If the customer requests it, Colt will check the technical requirements of the application against the properties of the Coltlite louvred ventilators. Colt can draw on the verified properties of EN 14351-1, the product standard for windows, as well as the certified values of the EN12101-2 standard for natural smoke and heat exhaust ventilators.
The factory is certified according to EN ISO 9001 :2008.

COLTLITE VERSIONS

Colt manufactures Coltlite ventilators in **CLT, CLN, 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.*

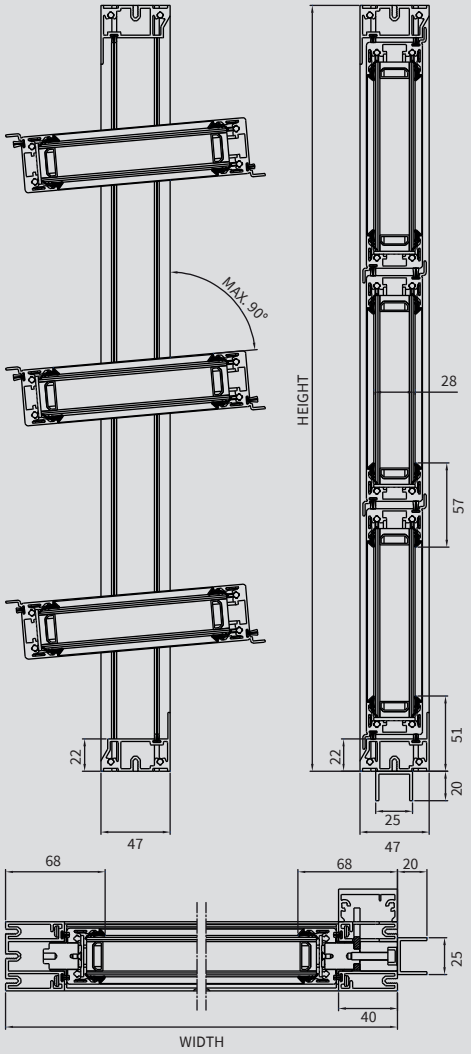
NON-THERMALLY BROKEN COLTLITE LOUVRED VENTILATORS

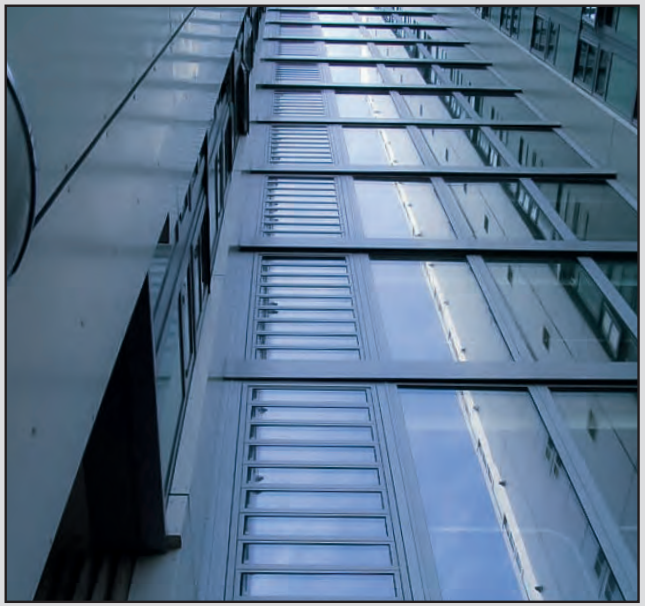
TYPE CLN

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

THERMALLY BROKEN COLTLITE LOUVRED VENTILATORS

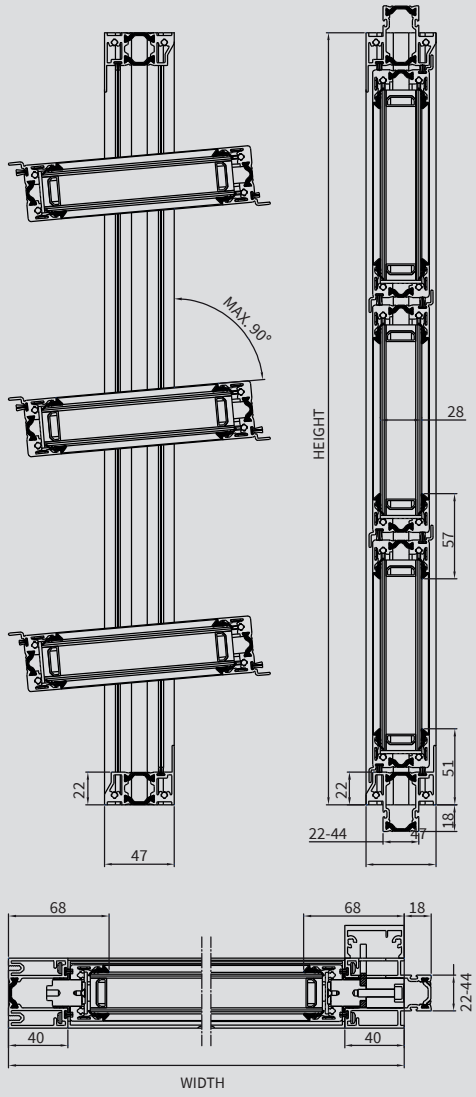
TYPE CLT

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.

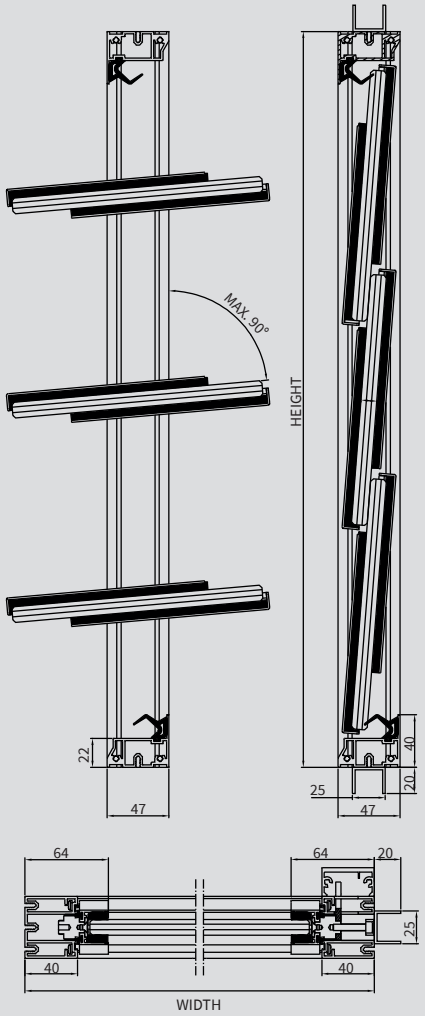
TECHNICAL DATA	**COLTLITE CLT**
MATERIAL	Thermally broken louvred ventilator made from thermally broken aluminium profiles. Double glazed louvres with 28mm thick standard glass.
WIDTH	300mm - 2000mm
HEIGHT	250mm - arbitrary
HEIGHT OF LOUVRES	170mm - 370mm
OPENING ANGLE	Max. 90° (this depends on the drive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



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

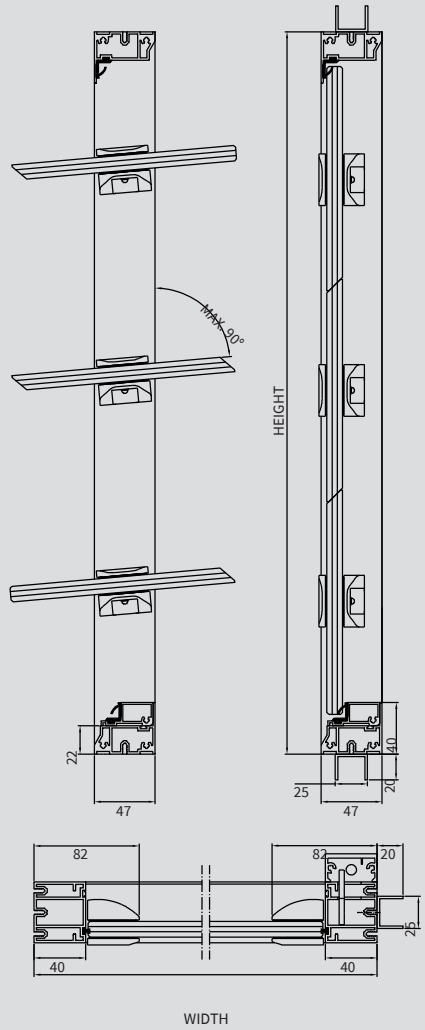
TYPE CLS45

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

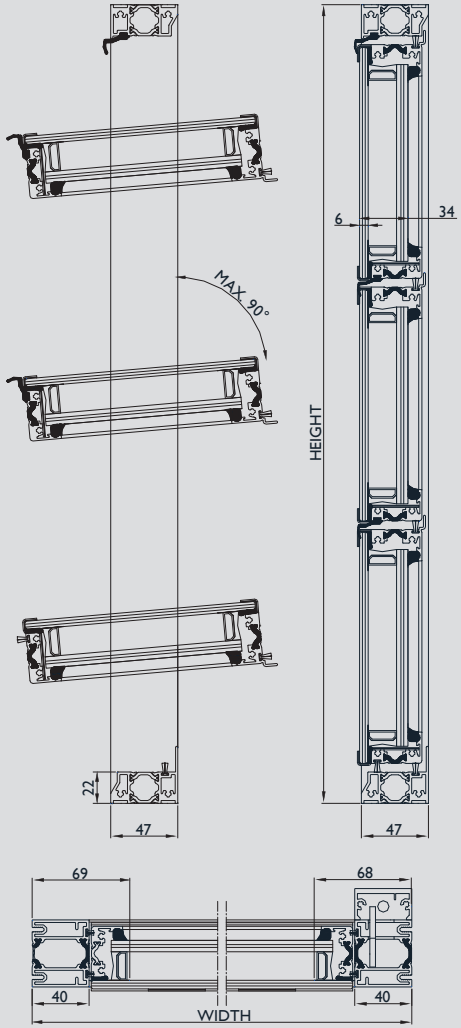


GERMAN DESIGN AWARD WINNER 2019

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.



ICONIC AWARDS 2018
INNOVATIVE ARCHITECTURE
winner

reddot design award
best of the best 2018

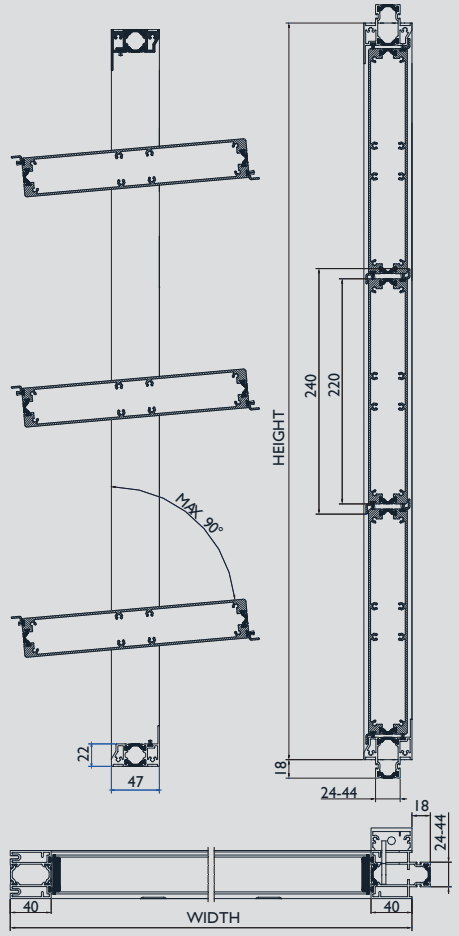
TECHNICAL DATA	**COLTLITE CLST**
MATERIAL	Thermally broken louvred ventilator. A flat glazed appearance when viewed from the outside.
WIDTH	300 mm - 1600 mm
HEIGHT	250 mm - arbitrary
HEIGHT OF LOUVRES	210 mm - 359 mm
OPENING ANGLE	Max. 90° (this depends on the drive selected)
DEPTH OF FRAME	47 mm
LOUVRE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

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

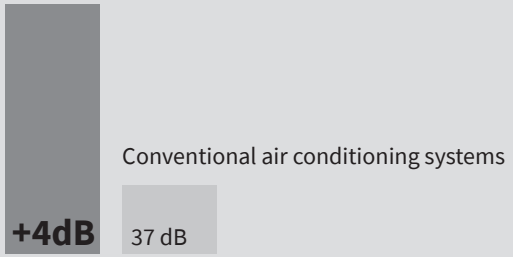
A Coltlite louvred ventilator can now be equipped with one or two magnetic limit switches, which signals to the building management system either that the unit is closed or the unit is open.
The switch includes a contact and magnets that are installed onto the units.

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, 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*

	LOUVRE FRAMES	VENT WIDTH [1]	VENT HEIGHT [2]	LOUVRE HEIGHT [3]	OPENING ANGLE [4]	DEPTH OF FRAME	LOUVRE INFILL TYPES	GLASS OR LOUVRE THICKNESSES	GLASS TYPES	ALTERNATIVE INFILL TYPES	CONTROLS	AIR PERMEABILITY (EN 12207)	RESISTANCE TO RAIN (EN 12208)	RESISTANCE TO WIND (EN12210)	SHEV (EN12101-2)	U VALUE (EN ISO 10077-1)	C_v VALUE	SOUND INSULATION
 **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	Tested to EN 1026 and classified to EN 14351-1 Windows and doors product standard, performance characteristics)	Class 5A	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. 1.9 W/m²/K	Up to max. 0.58	Not tested
 **COLTLITE CLT**	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		Class 4A		A tested and certified product	up to max. 1.5 W/m²/K	Up to max. 0.58	up max. 41 dB
 **COLTLITE CLS**	Side glass holder profiles	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/m²/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/m²/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/m²/K	up to max. 0.58	Not tested
 **COLTLITE CLET**	AL profile, 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/m²/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.

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