

COLT

Coltlite CL

High performance natural louvred ventilator



Coltlite is a natural louvred ventilator suitable for natural day to day and smoke control ventilation. It conforms to EN 12101-2 and EN 14351-1 and is CE marked. It can provide inlet and extract ventilation as well as the entry of natural daylight for most kinds of industrial and commercial buildings. It achieves high acoustic, thermal and aerodynamic performance. It is suited for installation into the façade.

COLTLITE:
NATURAL VENTILATION AT ITS BEST
AND IT'S GETTING EVEN BETTER!

Its form and function make it particularly suited to naturally ventilated buildings where good aerodynamic and measured free area ventilation is required while achieving high acoustic, thermal and aerodynamic performance.

Image:
Mlyny Shopping Centre, Slovakia.

Type:
CLT



ARCHITECTS LOVE IT FOR ITS LOOKS AND PERFORMANCE:

They can use the Coltlite ventilator to great effect in designing stunning looking buildings with the knowledge that it will perform exceptionally well as a natural ventilator. It is also highly adaptable: they can have the ventilator configured to an exact millimetre width or height.

CONSULTANTS LOVE IT FOR ITS VERSATILITY:

Besides using it as a façade element, they can use it as a smoke/air damper within a shaft system.

Coltlite is well suited to being both a smoke ventilator and a natural / day-to-day ventilator.

BUILDING MANAGERS LOVE IT FOR ITS FRUGALITY:

Easy to maintain, Coltlite delivers an exceptional thermal and acoustic performance. Low operating costs plus high energy efficiency – what more could they ask for?

Image:
Bilston Leisure Centre, Wolverhampton.

Type:
CLT

And now, with the new and improved Coltlite CLT, CLN, CLS, CLST, CLET and CLS 45, natural ventilation has got even better!

Glass facades with Colt's new Coltlite will look even better; with bigger glazed surfaces now that it can be wider, accommodate heavier louvres, and now that frame face widths (at 40mm) are narrower than before.

The improvements aren't limited to its good looks – its aerodynamic and acoustic performance is better than ever, and it gets top marks in air permeability and resistance to rain.

Its reliability has been proven: all types of Coltlite except the CLS 45 and CLST versions have been exhaustively tested and certified to EN 12101-2:2003 as dual purpose ventilators in accredited third party test laboratories and are CE marked. All ventilator variants have been externally tested to EN 14351-1 and are CE marked, which guarantees their performance as façade elements.

And there is more! Maintenance has never been so simple, now that Coltlite comes with removable covers that provide easy access to the mechanisms.

As if that isn't enough, Coltlite can be installed with a drive motor operated directly with a 0-10 volt control signal – there's no need for additional components.

Good looks, performance, economy: you couldn't ask for more from a natural ventilator!

Front page: Auckland Art Gallery, type CLS 45

HIGH PERFORMANCE

Coltlite has high aerodynamic, acoustic and thermal performance, and has a high resistance to the effects of fire. Full performance data is given later on in this leaflet.

TESTED AND CERTIFIED PERFORMANCE

Coltlite has been exhaustively tested and certified to EN 12101-2:2003 as a dual purpose ventilator in accredited third party test laboratories and is CE marked (except CLS 45 and CLST). All versions of the ventilator are tested and certified according to EN 14351-1 which guarantees their performance as façade elements. Additionally, the Coltlite CLT is tested according to DIN 18032-3 for ball-impacts for sport halls.

HIGH PERFORMANCE IN FIRE

One of the architect's main design considerations is to make sure that any smoke emitted by a fire is evacuated from the building in a controlled fashion. Special arrangements need to be considered, in particular for escape routes such as in stairwells. Coltlite is very suitable for protecting escape routes since it has a high aerodynamic efficiency, opens quickly, has large openings and does not get in the way of people trying to leave the building.

EASY TO INSTALL AND MAINTAIN

Coltlite is delivered fully assembled to site into a structural opening or curtain walling. It must be installed in the vertical. It has a wide range of base profiles to suit most sheeting or glazing applications.

Easy maintenance is afforded by allowing access to mechanisms via removable panels.



FEATURES AND BENEFITS A WIDE RANGE OF APPLICATIONS

Coltlite is classed as a dual purpose ventilator, providing both day to day and smoke control ventilation.

It can also be installed either for low level air inlet or for high level extract. Coltlite is also often used as a termination piece for large ducted or air handling systems. Glass versions allow the entry of natural daylight, and a wide range of infill panels are available.

Options include pneumatic, electronic or manual controls and a wide range of louvre types, accessories and finishes.

Coltlite's versatility allows it to be installed either as a primary or secondary façade element, such as in a winter garden. It is available either single, double or triple breasted.

Image:
Common Ground, Sydney.

Type:
CLS



DURABLE

The frame is manufactured from tough, corrosion resistant aluminium alloy, with stainless steel fixings.

SAFE IN OPERATION

With electric versions there is an optional device to reduce the speed and force of the closing louvres in order to reduce the risk of finger trapping.

OWN MANUFACTURE

Coltlite CL is manufactured under strict quality control by Colt. Coltlite is manufactured under the ISO 9001 quality standard. Each unit is given a functional test before despatch.

Image:
Louisiana Avenue, Washington DC.

Type:
CLT

AESTHETIC DESIGN

Coltlite uses narrow framework and projects only a small distance into the surrounding space. Narrower face frames also increase the geometrical area for the same size of opening and therefore the aerodynamic efficiency.

Motors can be hidden within the frame or are small in size. We have optimised the ratio of glazed surface to profiles by developing narrow yet strong profiles.

DESIGN SERVICE

We provide a pre-order design service. Please contact us for more information relating to the application, specification, installation or servicing of Coltlite.



PRODUCT OVERVIEW

Please refer to the following pages for the full technical information relating to these products.

Image:
Aboriginal Centre, Sydney.

Type:
CLS



TYPE CLN

Non-thermally broken extruded aluminium outer frames, non-thermally broken louvre frames. Double glazed louvres with 28mm thick clear float, toughened or laminated glass. Overall frame depth 47mm, frame face width 40mm.

For high acoustic and thermal performance.



TYPE CLT

Thermally broken extruded aluminium outer frames and louvre frames. Double glazed louvres with 28mm thick clear float, toughened or laminated glass. Overall frame depth 47mm, frame face width 40mm.

For the highest acoustic and thermal performance.



TYPE CLS

Non-thermally broken extruded aluminium outer frames. Frameless single glazed overlapping louvres with either 8mm, 10 mm or 12 mm thick toughened or laminated glass. Overall frame depth 47mm, frame face width 40mm.

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



TYPE CLS 45

Non-thermally broken extruded aluminium outer frames. Frameless single glazed controllable louvres with either 8mm, 10 mm or 12 mm thick toughened glass. Overall frame depth 47mm, frame face width 40mm.

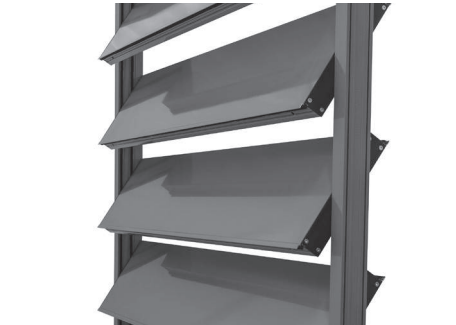
Smooth, flush-glass design with bevel-edged glass louvres and point-fixed louvre brackets without the need for side frames, so a continuous appearance as seen from the outside. Not tested or certified for smoke control ventilation.



TYPE CLST

47mm wide thermally broken extruded aluminium outer frames, frame face width 40mm. 34mm overall width framed stepped-edge double-glazed louvres set into thermally broken frames which are only visible from the inside. Outer louvre glazing is toughened glass, inner is float, laminated or toughened glass.

Completely flat glazed appearance as seen from the outside. Not tested or certified for smoke control ventilation.



TYPE CLET

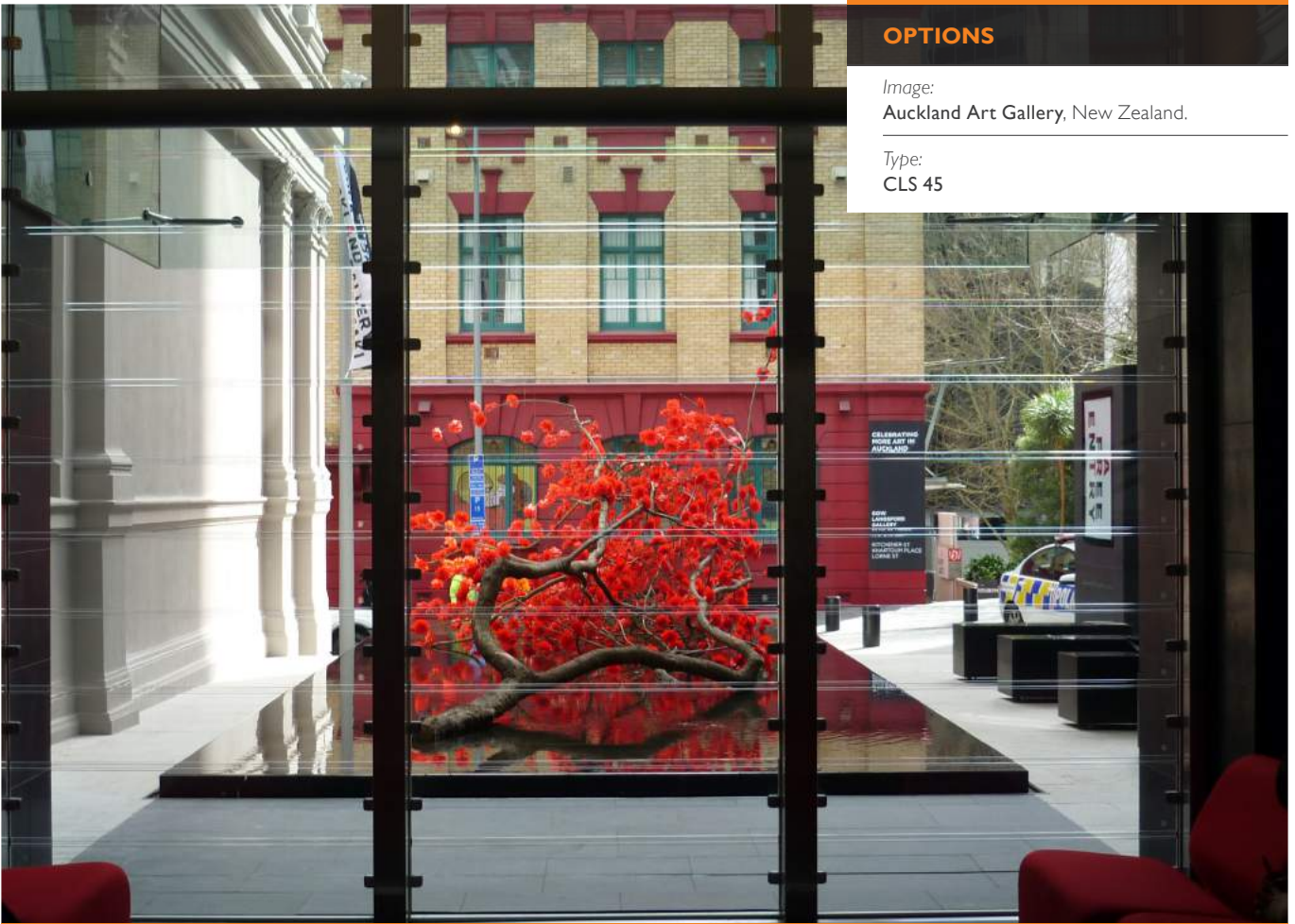
47mm wide thermally broken extruded aluminium outer frames, frame face width 40mm. Frameless controllable louvres with 38 mm deep thermally broken aluminium extrusion with optional additional insulation.

For flush design without louvre frames and high wind load. Not tested or certified for smoke control ventilation.

OPTIONS

Image:
Auckland Art Gallery, New Zealand.

Type:
CLS 45



LOUVRES

Glass louvres are manufactured as standard in single and double glazed options. There is the choice of glass with a thickness of between 4 - 8 mm for the double glazed systems, with an overall glass thickness of 28mm or 34mm (only CLST), and glass with a thickness of between 8, 10 and 12 mm for the CLS and CLS 45 single glazed versions.

Louvres can also be provided with insulated aluminium sections. Except for the CLS and CLS 45 versions, glazing seals comprise double weather strips with a polypropylene lip between, and the horizontal glass edges of the louvres are enclosed with aluminium sections which have two overlapping weather seals for excellent air tightness.

FRAMES

CLN has non-thermally broken outer and louvre frames. CLS and CLS 45 have non-thermally broken outer frames and frameless glass louvres.

Both the outer and louvre frames of CLT, CLET and CLST are thermally broken.

CONTROLS

Coltlite is available with pneumatic, manual, 230v ac or 24v dc electric controls for the potential to be connected to a building management system.

With the electric version, Coltlite moves noiselessly to any position, automatically stopping at the fully open and fully closed positions. Alternatively, blades can be stopped in any intermediate position throughout the duration of the open/close cycle. With electric versions there is an optional device to reduce the speed and force of the closing louvres in order to reduce the risk of finger trapping.

MANUAL CONTROLS OPTION

Hand controls consist of a lever handle.

PAINT FINISHES

Coltlite is available either anodized or polyester powder coated to a RAL colour. Thermally broken frames can be coated to different colours inside and out.

Special colours are also available on request.



Image:
The University of Otago, Dunedin, New Zealand

Type:
CLT



SUMMARY TECHNICAL INFORMATION

COLTLITE CLT

Thermally broken extruded aluminium outer frames and louvre frames. Double glazed louvres with 28mm thick clear float, toughened or laminated glass.

300mm - 2000mm

250mm - 3000mm per ventilator

155mm - 355mm
(170mm - 370mm)

Standard: centre pivoted.
Other types on request.

Max. 90°
(depends on the drive selected)

47mm

40mm

Insulated glazing (2- or 3 panes)
or composite infill panels

28mm

4 mm float, 20 mm gap, 4 mm float

Manual, 24v dc or 230v ac electric
or pneumatic

Class 3 - 1.89m³/hm²
or 0.37m³/hm at 50Pa

Class 4A - watertight up to 150 Pa

Class A5

Tested and certified unit and CE marked

Up to max. 1.5 W/m²/K

Up to max. 0.58

Up to max. 41 dB

Tested and certified - this guarantees its
performance as a façade element.

DESCRIPTION

VENT OVERALL WIDTH
*Note (1)

VENT OVERALL HEIGHT
*Note (2)

BLADE PITCH
(OR LOUVRE HEIGHT)
*Note (3)

LOUVRE PIVOTS

MAX. LOUVRE
OPENING ANGLE

DEPTH OF FRAME

FACE FRAME WIDTH

INFILL FOR LOUVRE

THICKNESS OF GLASS

STANDARD GLASS

CONTROLS

AIR PERMEABILITY
(EN 12207) *Note (4)

RESISTANCE TO WEATHER
(EN 12208) *Note (4)

RESISTANCE TO WIND
(EN 12210) *Note (4)

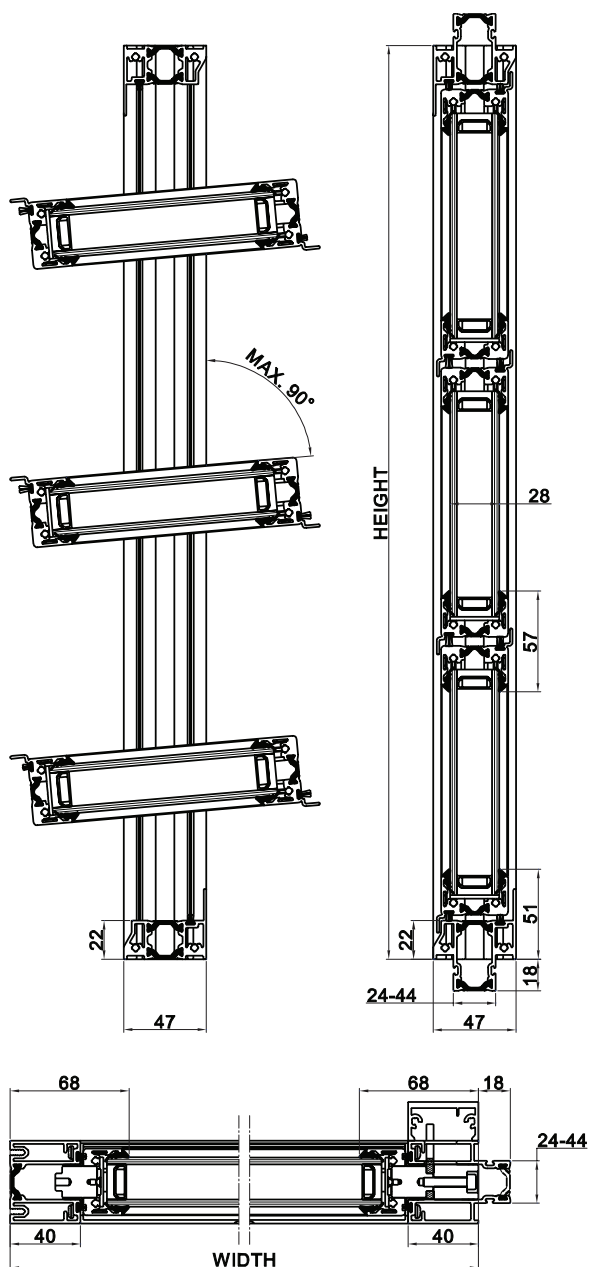
SMOKEVENT (EN12101-2)

UVALUE (EN ISO 10077-1)

CVVALUE (MAXIMUM)

SOUND INSULATION

PERFORMANCE AS
A WINDOW (EN 14351-1)



NOTES

* (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.

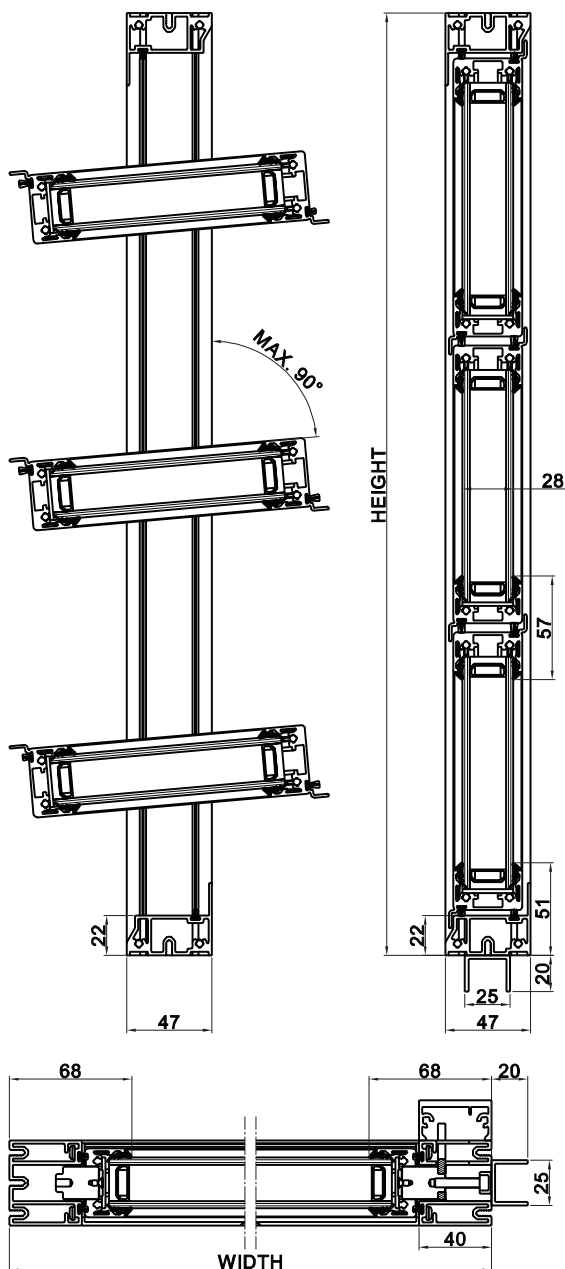
These data are indicative only.

The ventilator should be designed to resist the design wind loads.



SUMMARY TECHNICAL INFORMATION

COLTLITE CLN



NOTES

*(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 louver weight 20 kg. Aspect ratio of louver height to louver length must be less than 1:10.

*(4) This value depends on the width of the unit, the wind strength and louver 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.

DESCRIPTION

VENT OVERALL WIDTH

*Note (1)

VENT OVERALL HEIGHT

*Note (2)

BLADE PITCH (OR LOUVRE HEIGHT)

*Note (3)

LOUVRE PIVOTS

MAX. LOUVRE OPENING ANGLE

DEPTH OF FRAME

FACE FRAME WIDTH

INFILL FOR LOUVRE

THICKNESS OF GLASS

STANDARD GLASS

CONTROLS

AIR PERMEABILITY (EN 12207) *Note (4)

RESISTANCE TO WEATHER (EN 12208) *Note (4)

RESISTANCE TO WIND (EN 12210) *Note (4)

SMOKEVENT (EN12101-2)

UVALUE (EN ISO 10077-1)

CVVALUE

SOUND INSULATION

PERFORMANCE AS A WINDOW (EN 14351-1)

Non-thermally broken extruded aluminium outer frames, non-thermally broken louver frames. Double glazed louvres with 28mm thick clear float, toughened or laminated glass.

300mm - 2000mm

250mm - 3000mm per ventilator

155mm - 355mm
(170mm - 370mm)

Standard: centre pivoted.
Other types on request.

Max. 90°
(depends on the drive selected)

47mm

40mm

Insulated glazing (2 or 3 panes)
or composite infill panels

28mm

4 mm float, 20 mm gap, 4 mm float

Manual, 24v dc or 230v ac electric
or pneumatic

Class 4 - 0,97m³/hm²
or 0.19m³/hm at 50Pa

Class 5A - watertight up to 200 Pa

Class B5

Tested and certified unit and CE marked

Up to max. 1.9 W/m²/K

Up to max. 0.58

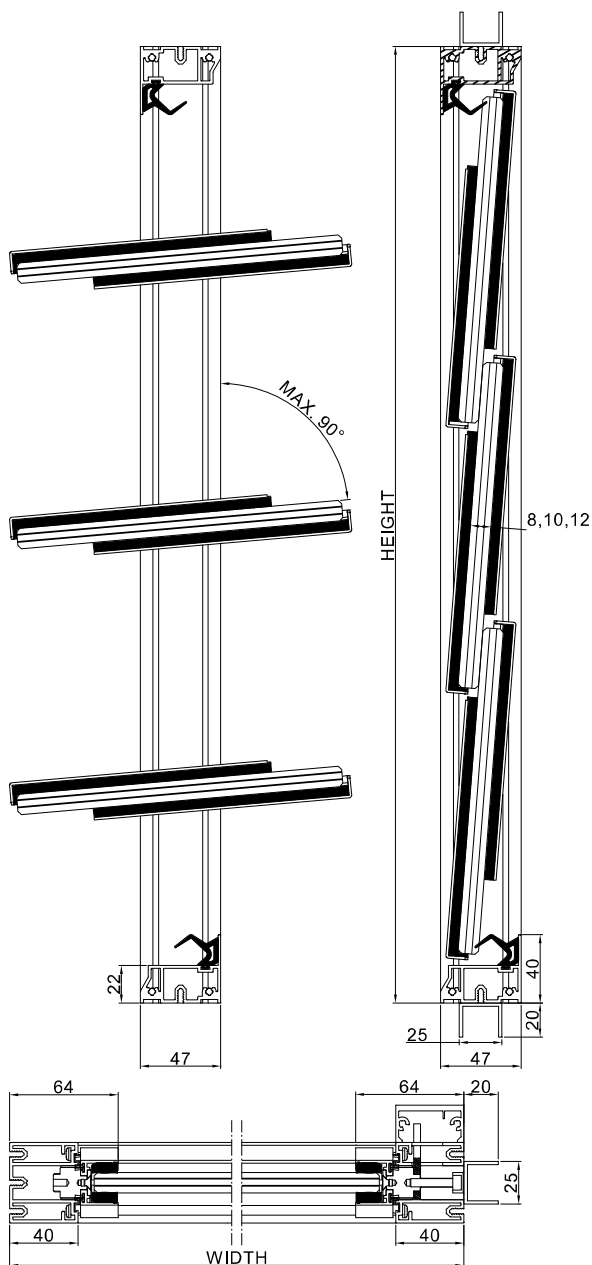
Up to max. 36 dB

Tested and certified - this guarantees its
performance as a façade element.



SUMMARY TECHNICAL INFORMATION

COLTLITE CLS



DESCRIPTION

VENT OVERALL WIDTH

*Note (1)

VENT OVERALL HEIGHT

*Note (2)

BLADE PITCH (OR LOUVRE HEIGHT)

*Note (3)

LOUVRE PIVOTS

MAX. LOUVRE OPENING ANGLE

DEPTH OF FRAME

FACE FRAME WIDTH

INFILL FOR LOUVRE

THICKNESS OF GLASS

GLASS TYPES

CONTROLS

AIR PERMEABILITY (EN 12207) *Note (4)

RESISTANCE TO WEATHER (EN 12208) *Note (4)

RESISTANCE TO WIND (EN 12210) *Note (4)

SMOKEVENT (EN 12101-2)

U VALUE (EN ISO 10077-1)

CV VALUE

SOUND INSULATION

PERFORMANCE AS A WINDOW (EN 14351-1)

Non-thermally broken extruded aluminium outer frames. Frameless single glazed overlapping louvres with either 8mm, 10 mm or 12 mm thick toughened or laminated glass.

300mm - 1800mm

250mm - 3000mm per ventilator

155mm - 355mm
(200mm - 390 mm)

Standard: centre pivoted.
Other types on request.

Max. 90°
(depends on the drive selected)

47mm

40mm

Single glazing

8, 10 or 12mm

Toughened, Heat toughened or laminated (from float, toughened - laminated or toughened) with polished edge

Manual, 24v dc or 230v ac electric or pneumatic

Class 1 - 19,5m³/hm²
or 3,9m³/hm at 50Pa

Class 2A - watertight up to 50 Pa

Class A5

Tested and certified unit and CE marked

Up to max. 5.8 W/m²/K

Up to max. 0.65

Up to max. 27 dB

Tested and certified - this guarantees its performance as a façade element.

NOTES

* (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.



SUMMARY
TECHNICAL INFORMATION

COLTLITE CLS 45

Non-thermally broken extruded aluminium outer frames. Frameless single glazed controllable louvres, closing flush, with either 8mm, 10 mm or 12 mm thick toughened bevelled glass.

300mm - 1600mm

250mm - 3000mm per ventilator

168mm - 355mm
(180mm - 367mm)

Standard: centre pivoted.
Other types on request.

Max. 90°
(depends on the drive selected)

47mm

40mm

Single glazing

8, 10 or 12mm

Toughened with beveled polished edge

Manual, 24v dc or 230v ac electric

Class 2

Class 2A

Class B4

Not tested

Not tested

Not tested

Not tested

Tested and certified - this guarantees its performance as a façade element.

DESCRIPTION

VENT OVERALL WIDTH
*Note (1)

VENT OVERALL HEIGHT
*Note (2)

BLADE PITCH
(OR LOUVRE HEIGHT)

LOUVRE PIVOTS

MAX. LOUVRE
OPENING ANGLE

DEPTH OF FRAME

FACE FRAME WIDTH

INFILL FOR LOUVRE

THICKNESS OF GLASS

GLASS TYPES

CONTROLS

AIR PERMEABILITY
(EN 12207) *Note (4)

RESISTANCE TO WEATHER
(EN 12208) *Note (4)

RESISTANCE TO WIND
(EN 12210) *Note (4)

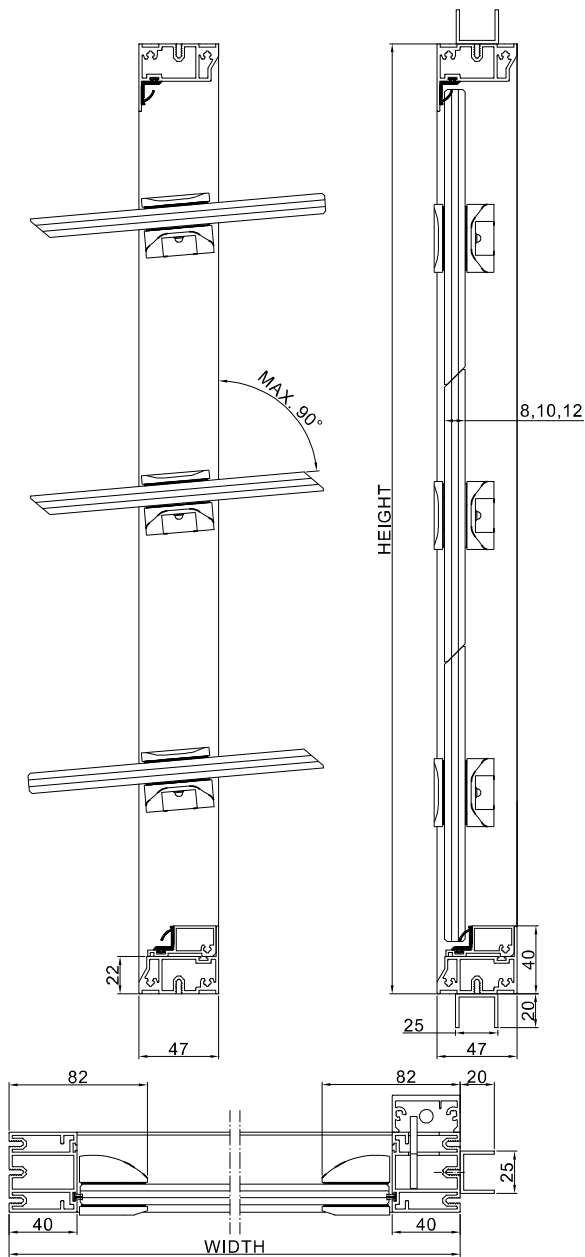
SMOKEVENT (EN12101-2)

UVALUE (EN ISO 10077-1)

CVVALUE (MAXIMUM)

SOUND INSULATION

PERFORMANCE AS
A WINDOW (EN 14351-1)



NOTES

* (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 louver weight 20 kg. Aspect ratio of louver height to louver length must be less than 1:10.

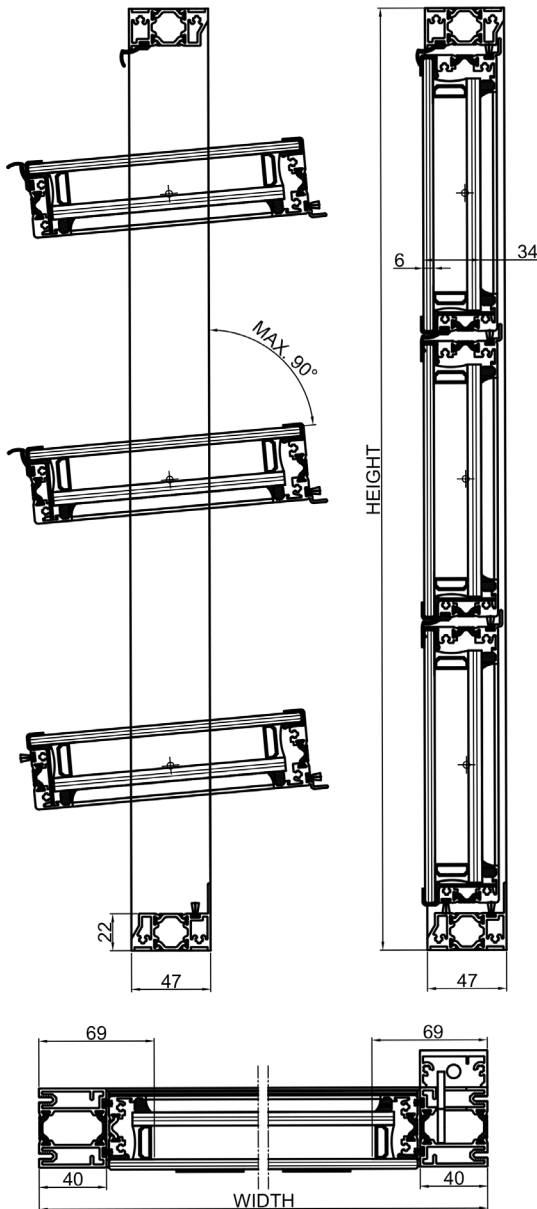
* (4) This value depends on the width of the unit, the wind strength and louver height. The value shown is based on the characteristics of a specific typical sample.

These data are indicative only.
The ventilator should be designed to resist the design wind loads.



SUMMARY
TECHNICAL INFORMATION

COLTLITE CLST



DESCRIPTION

Thermally broken extruded aluminium outer frames. Completely flat glazed appearance as seen from the outside. 34mm overall width framed stepped-edge double-glazed louvres set into thermally broken frames which are only visible from the inside.

VENT OVERALL WIDTH
*Note (1)

300mm - 1600mm

VENT OVERALL HEIGHT
*Note (2)

250mm - 3000mm per ventilator

BLADE PITCH
(OR LOUVRE HEIGHT)
*Note (3)

206mm - 355mm
(210mm - 359mm)

LOUVRE PIVOTS

Standard: centre pivoted.
Other types on request.

MAX. LOUVRE
OPENING ANGLE

Max. 90°
(depends on the drive selected)

DEPTH OF FRAME

47mm

FACE FRAME WIDTH

40mm

INFILL FOR LOUVRE

Insulated glazing (double-pane stepped glass)

THICKNESS OF GLASS

34mm

GLASS TYPES

Toughened outside with polished edge;
float, laminated or toughened glass inside

CONTROLS

Manual, 24v dc or 230v ac electric or pneumatic

AIR PERMEABILITY
(EN 12207) *Note (4)

Class 3

RESISTANCE TO WEATHER
(EN 12208) *Note (4)

Class 3A

RESISTANCE TO WIND (1)
(EN 12210) *Note (4)

Class B3

SMOKEVENT (EN12101-2)

Not tested

U VALUE (EN ISO 10077-1)

≥ 1.8

CV VALUE (MAXIMUM)

Not tested

SOUND INSULATION

Not tested

NOTES

* (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.



SUMMARY TECHNICAL INFORMATION

COLTLITE CLET

Thermally broken extruded aluminium outer frames and louvre blades. Fixed louvre height without louvre frame

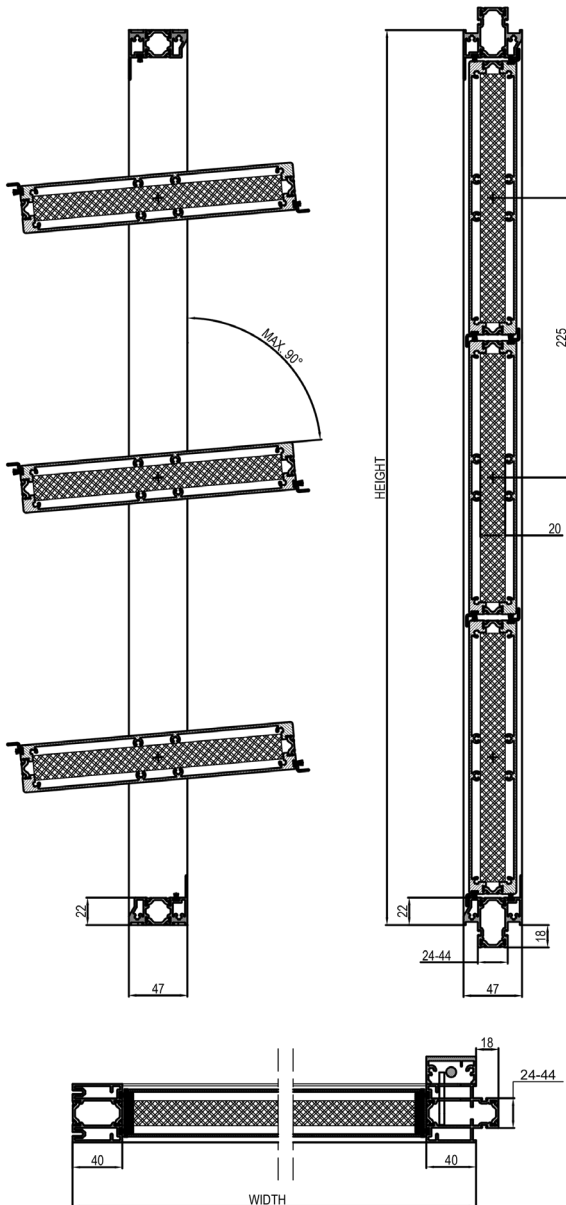


Diagram shows optional insulation

NOTES

*(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) This value depends on the width of the unit, the wind strength and louvre height. The value shown is based on the characteristics of the maximum width of the Coltlite.

DESCRIPTION	
VENT OVERALL WIDTH *Note (1)	300mm -2000mm
VENT OVERALL HEIGHT *Note (2)	270mm / 4320mm (grid dimension)
BLADE PITCH (OR LOUVRE HEIGHT)	225 mm (240mm overall height)
LOUVRE PIVOTS	Centre pivoted
MAX. LOUVRE OPENING ANGLE	Max. 90° (depends on the drive selected)
DEPTH OF FRAME	47mm
FACE FRAME WIDTH	40mm
INFILL FOR LOUVRE	Thermally broken aluminium extrusion with optional additional insulation
THICKNESS OF LOUVRE	38mm (43mm overall dimension)
CONTROLS	Manual, 24v dc or 230v ac electric or pneumatic
AIR PERMEABILITY (EN 12207) *Note (3)	Class 2
RESISTANCE TO WEATHER (EN 12208) *Note (3)	Class 4A
RESISTANCE TO WIND (1) (EN 12210) *Note (3)	Class C5
SMOKEVENT (EN12101-2)	Tested and certified unit and CE marked
U VALUE (EN ISO 10077-1)	Up to max. 1.98 W/m ² /K
CV VALUE (MAXIMUM)	Up to max. 0.58
SOUND INSULATION	Not tested
PERFORMANCE AS WINDOW (EN 14351-1)	Tested and certified - this guarantees its performance as a façade element.

**COLTLITE:
PROJECTS**

Image:
Derby College

Type:
CLT



Image:
Holiday Inn, Leiden, Holland.

Type:
CLT



Image:
University of Herfordshire, Hatfield.

Type:
CLT



Image:
AOV's on a project in London.

Type:
CLT



Image:
Shipton House, Hackney, London.

Type:
CLS



Image:
St. Matthew's Academy, London.

Type:
CLT

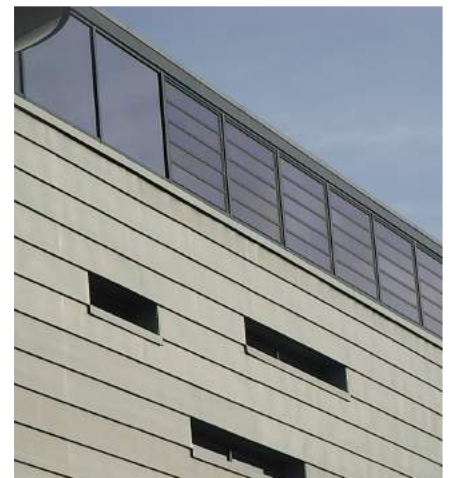


Image:
Nottingham University, Gracie Building.

Type:
CLT

**COLTLITE:
PROJECTS**

Image:
Newmarket Station, Auckland, New Zealand.

Type:
CLS



Image:
Waurun Ponds Library, Geelong, Australia.

Type:
CLT



Image:
Southmead Hospital, Bristol.

Type:
CLT



Image:
TAFE NSW College, Australia.

Type:
CLT



Image:
Vendespace, France.

Type:
CLT



Image:
Internos Hoogezand, Holland.

Type:
CLT



Image:
Möbel Markt Sconto, Germany.

Type:
CLT

COLTLITE:
PROJECTS

Image:
Hôpital Robert Schuman Metz, France.

Type:
CLT

