

## **COLTLITE CL**

### **HIGH PERFORMANCE NATURAL LOUVRED VENTILATOR**

#### **THE NEW GENERATION VENTILATOR THE FUTURE IN NATURAL VENTILATION**

Shipton House, Hackney, London.

*Architect: Ingleton Wood*

Colt supplied 39 Coltlite CLS units of varying sizes in clear, blue, red, green, tangerine and yellow colour interlayer coloured glass, with both manual and electric controls.



**COLT**



Image:  
AOV's on a project in London

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Type:  
CLT glazed





### **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:*

**Mlyn Shopping Centre, Slovakia.**

*Type:*

**CLT glazed**



### **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 millimeter 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 glazed**

And now, with the new and improved Coltlite CLT, CLN and CLS, 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 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. The ventilator is CE marked according to EN 14351-1 and has been externally tested, which guarantees its performance as a façade element.

And there is more! Maintenance has never been so simple, now that the 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!



**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. The ventilator is CE marked according to EN 14351-1 which guarantees its performance as a façade element.

**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 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 glazed

**DURABLE**

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

**SAFE IN OPERATION**

Coltlite has an optional anti-finger trapping control system.

**OWN MANUFACTURE**

Coltlite CL is manufactured under strict quality control by Colt. Coltlite is manufactured under the ISO 9000 quality standard. Each unit is given a functional test before despatch.

**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. Our new Coltlite has a bigger ratio of glazed surface to profiles as it has smaller frame face widths.

**DESIGN SERVICE**

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

Image:  
Louisiana Avenue, USA.

Type:  
CLT



Image:  
St. Matthew's Academy, London

Type:  
CLT glazed





## PRODUCT OVERVIEW

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

Image:  
Aboriginal Centre, Sydney.

Type:  
CLS glazed



### COLTLITE GLASS LOUVRED VENTILATOR TYPE CLN

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

For high acoustic and thermal performance.



### COLTLITE GLASS LOUVRED VENTILATOR TYPE CLS

Non-thermally broken extruded aluminium outer frames. Frameless single glazed overlapping louvres with either 8mm, 10 mm or 12 mm thick float, 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. with stainless steel fixings.



### COLTLITE GLASS LOUVRED VENTILATOR TYPE CLT

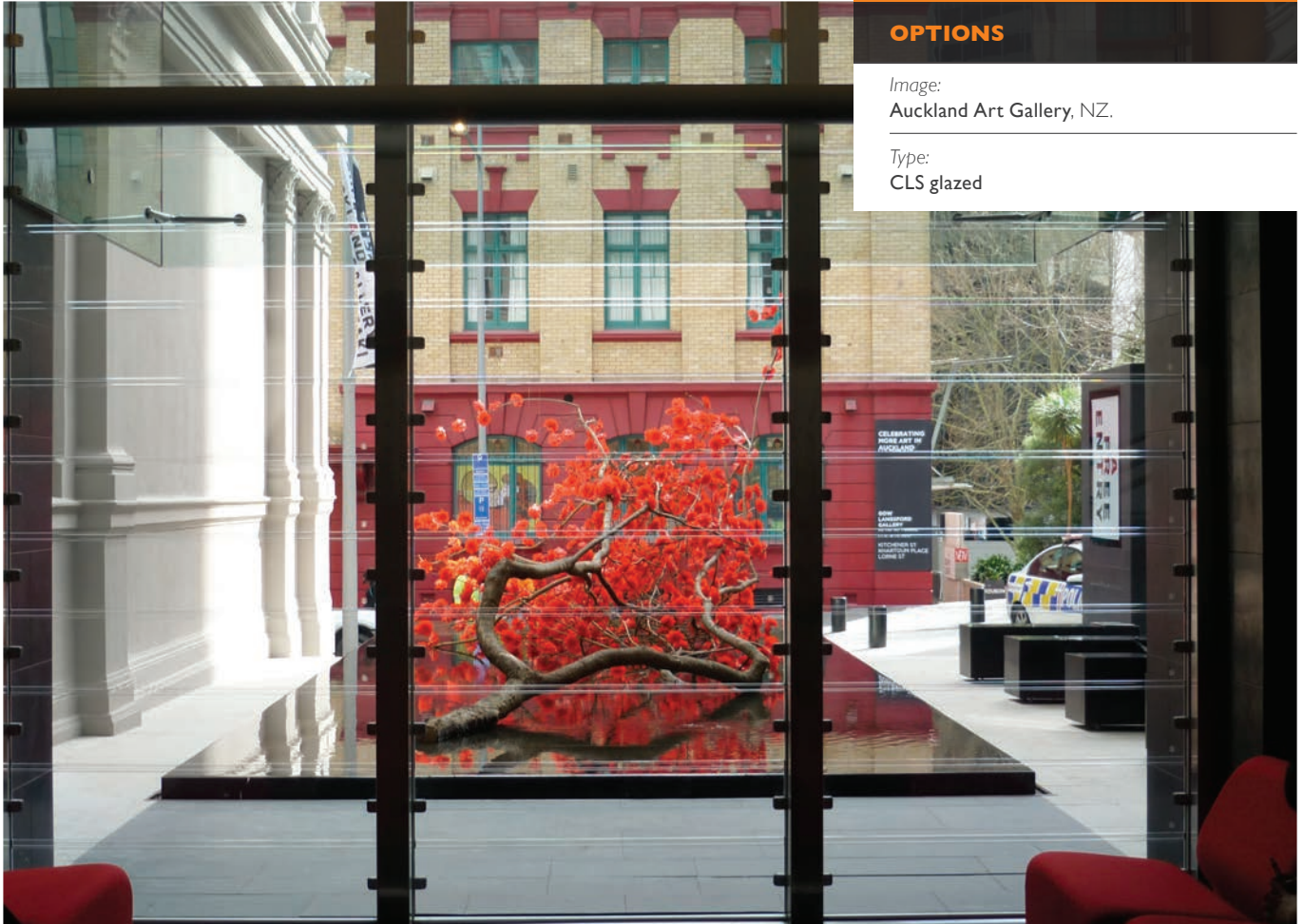
Thermally broken extruded aluminium outer frames and louvre frames. Double glazed louvres with 28mm thick clear toughened glass. Overall frame depth 47mm, frame face width 40mm.

For the highest acoustic and thermal performance.

## OPTIONS

Image:  
Auckland Art Gallery, NZ.

Type:  
CLS glazed



## 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, and glass with a thickness of between 8, 10 and 12 mm for the CLS single glazed version.

Louvres can also be provided with insulated aluminium sections. For all versions except CLS, glazing seals comprise double weather strips with a nylon 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 has non-thermally broken outer frames and frameless glass louvres.

Both the outer and louvre frames of the CLT 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. Coltlite has an optional anti-finger trapping facility.

## MANUAL CONTROLS OPTION

Hand controls consist of a lever handle.

## PAINT FINISHES

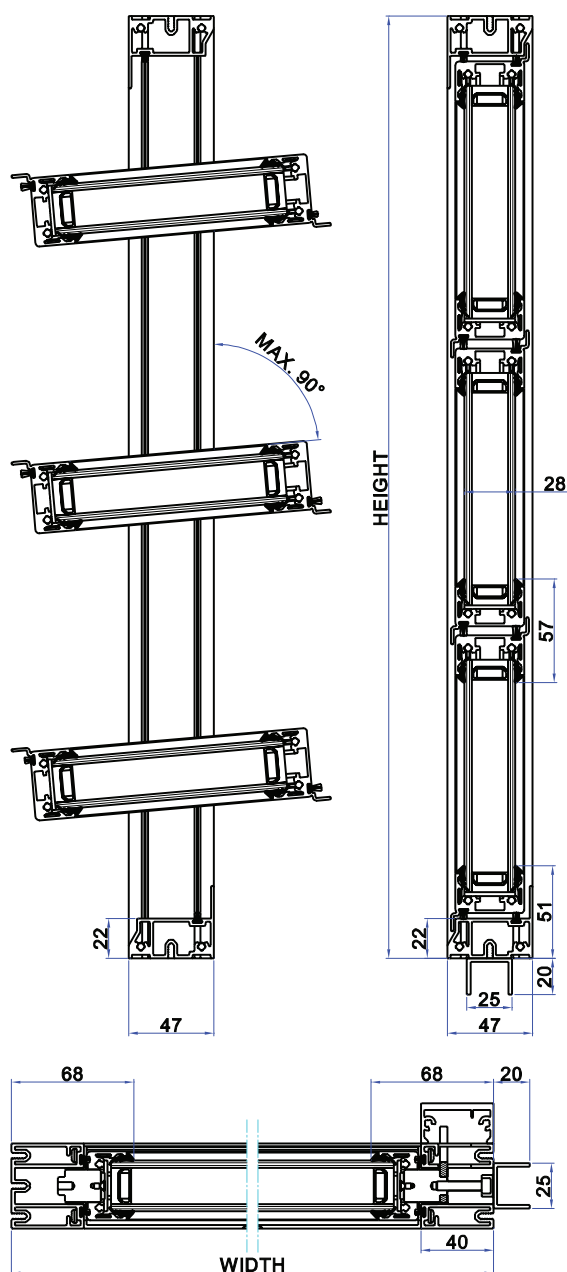
Coltlite is available anodized or polyester powder coated to a RAL colour. Thermally broken frames can be coated to different colours inside and out.

Special colours are also available on request.



Image:  
The University of Otago, Dunedin.

Type:  
CLT glazed



## 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.

These data are indicative only.

The ventilator should be designed to resist the design wind loads. Colt can guarantee the structural stability for a bank of ventilators with an area up to 6m<sup>2</sup> assuming a design wind load of 1500 Pa. Above this, a structural engineering calculation will be required.

Units up to 1.5m high may be supplied to a special order subject to technical approval by Colt.



## 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)

### RESISTANCE TO WEATHER (EN 12208)

### RESISTANCE TO WIND (1) (EN 12210)

### SMOKEVENT (EN12101-2)

### UVALUE (EN ISO 10077-1)

### CVVALUE

### SOUND INSULATION

## SUMMARY

## TECHNICAL INFORMATION

### COLTLITE CLN

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

300mm - 2000mm

300mm - 3000mm per ventilator

150mm - 350mm

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 - 0,97m<sup>3</sup>/hm<sup>2</sup>  
or 0.19m<sup>3</sup>/hm at 50Pa

Class 5A - watertight up to 200 Pa

Depends on the width of the unit,  
the wind strength and louver height.

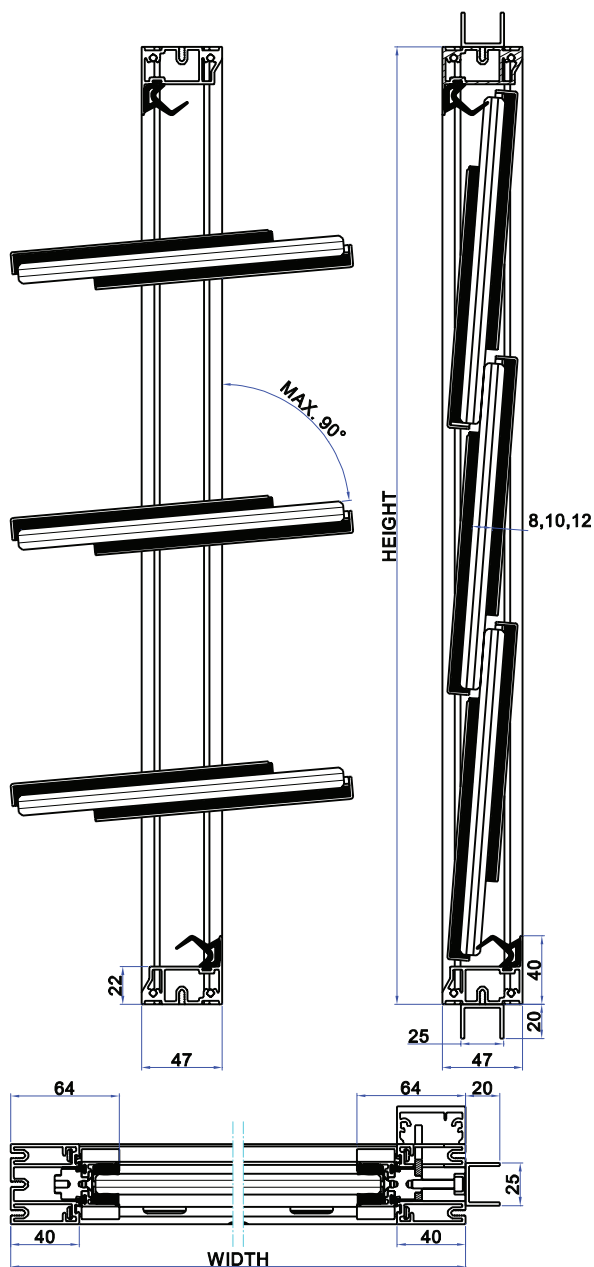
Tested and certified unit

Up to max. 1.9 W/m<sup>2</sup>/K

Up to max. 0.58

Up to max. 36 dB





## 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.

These data are indicative only.

The ventilator should be designed to resist the design wind loads. Colt can guarantee the structural stability for a bank of ventilators with an area up to 6m<sup>2</sup> assuming a design wind load of 1500 Pa. Above this, a structural engineering calculation will be required.

Units up to 1.5m high may be supplied to a special order subject to technical approval by Colt.



## 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)

### RESISTANCE TO WEATHER (EN 12208)

### RESISTANCE TO WIND (1) (EN 12210)

### SMOKEVENT (EN 12101-2)

### UVALUE (EN ISO 10077-1)

### CVVALUE

### SOUND INSULATION

## SUMMARY TECHNICAL INFORMATION

### COLTLITE CLS

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

300mm - 1800mm

300mm - 3000mm per ventilator

150mm - 390mm

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)

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

Class I - 19,5m<sup>3</sup>/hm<sup>2</sup>  
or 3,9m<sup>3</sup>/hm at 50Pa

Class 2A - watertight up to 100 Pa

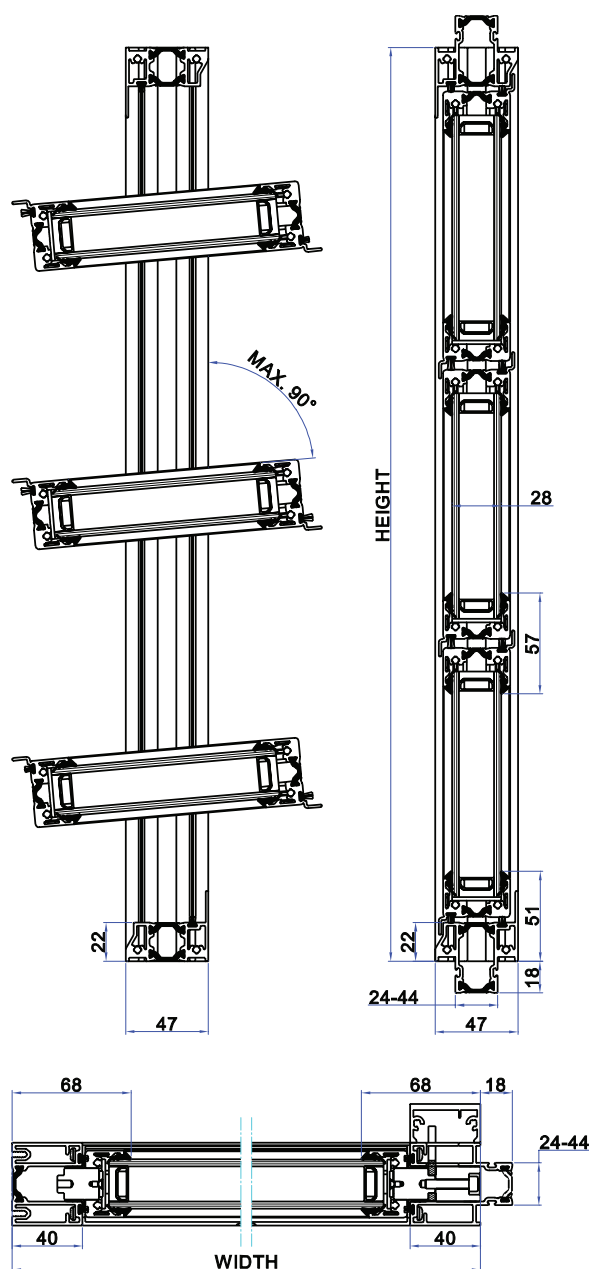
Depends on the width of the unit,  
the wind strength and louver height.

Tested and certified unit

Up to max. 5.8 W/m<sup>2</sup>/K

Up to max. 0.65

Up to max. 27 dB



## 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.

These data are indicative only.

The ventilator should be designed to resist the design wind loads. Colt can guarantee the structural stability for a bank of ventilators with an area up to 6m<sup>2</sup> assuming a design wind load of 1500 Pa. Above this, a structural engineering calculation will be required.

Units up to 1.5m high may be supplied to a special order subject to technical approval by Colt.



## SUMMARY TECHNICAL INFORMATION

### COLTLITE CLT

#### DESCRIPTION

Thermally broken extruded aluminium outer frames and louver frames. Double glazed louvres with 28mm thick clear toughened glass.

#### VENT OVERALL WIDTH

\*Note (1)

300mm - 2000mm

#### VENT OVERALL HEIGHT

\*Note (2)

300mm - 3000mm per ventilator

#### BLADE PITCH (OR LOUVRE HEIGHT)

\*Note (3)

150mm - 350mm

#### 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 (2- or 3 panes)  
or composite infill panels

#### THICKNESS OF GLASS

28mm

#### STANDARD GLASS

4 mm float, 20 mm gap, 4 mm float

#### CONTROLS

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

#### AIR PERMEABILITY (EN 12207):

Class 3 - 1.89m<sup>3</sup>/hm<sup>2</sup>  
or 0.37m<sup>3</sup>/hm at 50Pa

#### RESISTANCE TO WEATHER (EN 12208)

Class 4A - watertight up to 150 Pa

#### RESISTANCE TO WIND (1) (EN 12210)

Depends on the width of the unit,  
the wind strength and louver height.

#### SMOKEVENT (EN12101-2)

Tested and certified unit

#### U VALUE (EN ISO 10077-1)

Up to max. 1.5 W/m<sup>2</sup>/K

#### CV VALUE (MAXIMUM)

Up to max. 0.58

#### SOUND INSULATION

Up to max. 41 dB



**COLTLITE:**  
PROJECTS

*Image:*  
Newmarket Station, Auckland.

*Type:*  
CLS glazed



*Image:*  
Waurm Ponds Library, Geelong.

*Type:*  
CLT glazed



*Image:*  
Southmead Hospital, Bristol.

*Type:*  
CLT glazed



*Image:*  
Nottingham University, Gracie Building.

*Type:*  
CLT glazed



*Image:*  
Vendespace, France.

*Type:*  
CLT insulated



*Image:*  
Internos Hoogezand, Holland.

*Type:*  
CLT glazed



*Image:*  
Möbel Markt Sconto, Germany.

*Type:*  
CLT insulated

**COLTLITE:**  
PROJECTS

*Image:*  
Hôpital Robert Schuman Metz, France.

*Type:*  
CLT glazed



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