

This specification includes smoke and natural ventilation products for commercial buildings manufactured by Moffitt Corporation, as licensed by Colt Group. Before including this specification in your Project Manual, delete ventilator types and options not required for your project. For more information, please visit our website [www.moffittcorp.com](http://www.moffittcorp.com) or call 904-241-9944.

SECTION 077800  
NATURAL VENTILATORS  
*MOFFITT COLTITE CLT AS LICENSED BY COLT GROUP*

**PART 1 - GENERAL**

1.1 SUMMARY

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
  - 1) Natural louvered ventilators, wall-mounted with single-pane glass and non-thermally-broken aluminum frame.
- B. Related Work: The following items are not included in this Section and are specified under the designated Sections:
  - 1) Division 23 - HEATING, VENTILATING AND AIR CONDITIONING for louvers and ventilators that are a part of mechanical equipment.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data.
- B. Shop Drawings: Submit shop drawings including plans, elevations, sections, details, and attachment to adjacent Work.
- C. Warranty: Submit executed copy of manufacturer's standard warranty.

1.3 QUALITY ASSURANCE

- A. Manufacturer: A minimum of 5 years experience manufacturing similar products.
- B. Installer: A minimum of 2 years experience installing similar products.

1.4 PROJECT CONDITIONS

- A. Field Measurements: For custom sized units, verify openings by field measurements before fabrication and indicate measurements on Shop Drawings.
  - 1) Established Dimensions: Where field measurements cannot be made without delaying the Work, establish opening dimensions and proceed with fabricating louvers without field measurements. Coordinate construction to ensure that actual opening dimensions correspond to established dimensions.

1.5 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty against defects in materials in workmanship.

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## PART 2 - PRODUCTS

### 2.1 MANUFACTURER

- A. Basis-of-Design Manufacturer: Moffitt Corporation, 1351 13<sup>th</sup> Avenue South, Suite 130 Jacksonville Beach, FL 32250. Tel: 904-241-9944. Fax: 904-246-8333. www.moffittcorp.com.

### 2.2 VENTILATORS

- A. Natural Louvered Ventilators, Wall-Mounted with Double-Pane Glass and Thermally-Broken Aluminum Frame: Moffitt Coltlite CLT by Moffitt Corporation, licensed by Colt Group.
- 1) Description: Thermally broken extruded aluminum outer frame, frame width 40mm, with framed louvers set into thermally broken frames.
  - 2) Dimensions / Size Range: From (300mm) to (2000mm) in width, and from (250mm) to (3000mm) in height as one module.
  - 3) Frame: Thermally broken, (47mm) deep. Glazing seals comprise double weather strips with a nylon lip between, and the horizontal glass edges of the louvers are enclosed with aluminum sections which have two overlapping weather seals for excellent air-tightness.
  - 4) Louver Infill / Glazing: [(28mm) overall clear toughened, float or laminated double glass.] [ (28mm) overall insulated infill panel, 1.5mm aluminum outside/ 25mm insulation/ 1.5mm aluminum inside.]
  - 5) Louver Dimensions: Louver height from (150mm) to (350mm); blade pitch from (155mm) to (355mm) (depending on overall size of complete unit) with central pivot point; blade frame to be a maximum of (49mm) between glass surfaces; visible width of horizontal louver frame (44mm) when looking from the outside.
  - 6) Aluminum Finish: [Polyester powder paint to a RAL color, standard 110 mu, 2-layer, with a gloss of 70%+/-10% (Semi-gloss) painted to D2525 AAMA2604.] or [Anodized, standard 20 mu.]
  - 7) Mounting: [Fixing to curtain wall using (24mm) to (44mm) thermally broken glazing frame adaptor.] [Fixing to structural opening using either through frame or strap fixings.]
  - 8) Controls: [24 volt DC motor.]
  - 9) Motor: Frame mounted unpainted stainless steel motor cover (hidden behind side frame profile) positioned at top or bottom on either side of frame as applicable.
  - 10) Optional Control: Optional device to reduce the speed and force of closing louvers, to reduce the risk of finger squeezing (electric versions only).
  - 11) Smoke Ventilator: If used as a smoke ventilator, activation is by responding to an external release signal.
  - 12) Performance: The following performance attributes follow tests to EN 12101-2:2003 (standard for smoke and heat exhaust ventilators) and EN 14351-1:2006 (standard for windows and doors). The exact performance attribute will depend on the chosen size, controls, and louver type.

- a. Reliability: RE 1000 (10,000 cycles).
- b. Wind Load Class: Varies with size and options, up to WL 3000.
- c. Snow Load Class: SL 0.
- d. High Temperature Class: B 300.
- e. Low Temperature Class: T(00) to T(-15).
- f. Materials Resistance to Fire: E (to EN 13501-1).
- g. U-Value: Up to max 1.46 W/m<sup>2</sup>K.
- h. Aerodynamic Coefficient: Up to 0.58.
- i. Air Permeability: Class 3 to EN 12207 - 1.89m<sup>3</sup>/hm<sup>2</sup> or 0.37m<sup>3</sup>/hm at 50Pa.
- j. Watertightness: Class 4A to EN 12208 - Watertight at static pressure of up to and including 150Pa.
- k. Sound Insulation (R'w): Up to 41dB/.
- l. Compliance: Tested to and in compliance with EN 12101-2 and CE marked.

### 2.3 FABRICATION, GENERAL

- A. Assemble units in factory to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- B. Fabricate frames to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints. Include anchors and accessories required for complete assembly.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and openings for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION.

- A. Install products in strict accordance with manufacturer's instructions and approved submittals. Locate units level, plumb, and in proper alignment with adjacent work. Use concealed anchorages where possible.
  - 1) Form closely fitted joints with connections accurately located and secured.
  - 2) Provide perimeter reveals of uniform width for sealants and joint fillers.
  - 3) Test operable units for proper function and adjust until proper operation is achieved.
  - 4) Repair finishes damaged by cutting, welding, soldering, and grinding.
  - 5) Restore finishes so no evidence remains of corrective work.

### 3.3 ADJUSTING AND CLEANING

- A. Clean exposed surfaces using methods acceptable to the manufacturer which will not damage finish.

END OF SECTION