

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 or call 904-241-9944.

SECTION 077239
OPERABLE ROOF VENTS
MOFFITT FIRELIGHT DUO 3 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.

PART 2 - PRODUCTS

2.1 MANUFACTURER

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

2.2 OPERABLE ROOF VENTS

- A. Operable roof vents, roof-mounted with double Leaf and thermally-broken aluminum frame: Moffitt Firelight Duo as licensed by Colt Group.
- 1) Description: Natural double leaf roof ventilator, suitable for natural day to day ventilation and smoke control, for high aerodynamic, acoustic and thermal performance. Tested to and in compliance with EN 12101-2.
 - 2) Dimensions / Size Range: From (1000mm) to (2500mm) in width in (1mm) increments (to 2000mm with bracket control option) and from (1000mm) to (3000mm) in length in (1mm) increments.
 - 3) Panels: (25mm translucent polycarbonate)(25mm clear polycarbonate)(25mm opaque polycarbonate)(28,30,32mm insulated laminated safety glass)(25mm insulated aluminum panel)(49dBA special noise reduction panel)
 - 4) Baffle: Optional wind baffles on two sides to improve aerodynamic performance.
 - 5) Materials: Components of the base and flap are manufactured from EN AW 6060-T66 aluminum alloy. The frames of both the base and flap are thermally broken.
 - 6) Aluminum Finish: [Mill finish, standard.] [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: Roof curb mount. Roof curb must provide 5 degree installation angle from horizontal.
 - 8) Controls: 24V DC linear drive electric (for smoke and day to day ventilation).
 - 9) Controls, General: For electric versions, only double-action locking option available. Bracket controls (for smaller vents and/or those installed into glazing). Control channel controls (for larger vents and/or heavier lids or need to keep actuator lengths short).
 - 10) Smoke Ventilator: If used as a smoke ventilator, activation is either by local thermal fuse which opens the unit at a pre-selected temperature, or by responding to an external release signal.
 - 11) Performance:
 - a. Reliability Class: Re 1000 / 10,000.
 - b. Wind Load: Class from 1500 to 8977 N/m².
 - c. Snow Load: Class from 0 to 6947 N/m².
 - 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: From 1.99 to 0.52 W/m²K.
 - h. Aerodynamic Coefficient: Up to 0.68 (assumes the largest size ventilator has a 500mm conical upstand and a wind baffle is fitted).
 - i. Sound Insulation: Up to 32 dB.(up to 49DBA for special noise reduction panel)

- j. Compliance: Tested to and in compliance with EN 12101-2 and CE marked. An impact test has been carried out on the Firelight Duo in accordance to GSBau18. We achieved 300 Joule with the polycarbonate and glass version and 1200 Joule with the insulated aluminum version.

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 unit's 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