

# > YCW 750 CV

Thermally Broken Concealed Vent for Curtain Wall

#### SYSTEM DESCRIPTION:

The YCW 750 Concealed Vent enables designers to provide ventilation to the building at the curtain wall area without introducing the additional large site line of traditional windows. Maintains standard curtain wall sightline, visible only when in open position. The head and sill members of the vents are integral to the horizontal members of the curtain wall, and the jambs are a mere 5/8" wide at the exterior. The vents are project out and thermally broken by YKK AP's MegaTherm® technology for improved energy efficiency and occupant comfort. This thermal break also provides a dual interior/exterior finish option for greater design flexibility and integration with YKK AP curtain wall systems.

#### **OPTIONS & FEATURES:**

- Available configuration: Project Out
- AAMA/WDMA HC-60 rated
- Accepts 1" insulating glass
- YKK AP MegaTherm® thermal break
- Separate interior/exterior finish options
- Standard heavy-duty hardware





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#### 1.01 SUMMARY

- A. Section Includes: Operable Aluminum Window Systems
  - 1. YKK AP Series YCW 750 Concealed Vent System.
- B. Related Sections:
  - 1. Sealants: Refer to Division 7 Joint Treatment Section for sealant requirements.
  - 2. Glass and Glazing: Refer to Division 8 Glass and Glazing Section for glass and glazing requirements.

#### 1.02 SYSTEM PERFORMANCE DESCRIPTION

- A. All test unit sizes and configurations shall conform to the minimum sizes in accordance with AAMA/WDMA/I.S.2-97, with a performance class of HC, performance grade 60. Windows shall also comply with the following specific performance requirements
  - 1. Air Infiltration: Completed window systems shall have 0.12 CFM/FT<sup>2</sup> (1.85 m<sup>3</sup>/h·m<sup>2</sup>) maximum allowable infiltration when tested in accordance with ASTM E 283-91 at differential static pressure of 6.24 PSF (299 Pa).
  - 2. Water Infiltration: No uncontrolled water on indoor face of any component when tested in accordance with ASTM E 331-93 at a static pressure of 15 PSF (718 Pa).
  - 3. Uniform Load Structural Test: Provide aluminum window systems that comply with AAMA/WDMA 101/I.S.2-97, voluntary specifications for aluminum and polyvinylchloride (PVC) prime windows and glass doors, guidelines for HC rated product.
  - 4. Thermal Movement: Provide for thermal movement caused by 180 degrees F. (82.2 degrees C.) surface temperature, without causing buckling stresses on glass, joint seal failure, undue stress on structural elements, damaging loads on fasteners, reduction of performance, or detrimental effects.

Note: Performance based on lab testing and will vary by configuration and glass type; contact YKK AP engineering for job specific analysis at higher performance levels.

#### 2.01 MANUFACTURERS

- A. Acceptable Manufacturers: YKK AP America Inc.
  - 1. Window System: YKK AP YCW 750 Concealed Vent System.
- B. Vent System:
  - 1. AAMA Designation: HC-60.
  - 2. Description: The vents shall be extruded aluminum; head and sill members of the vents shall be integral to the horizontal members of the curtain wall and the verticals shall have a minimal sightline when viewed from the exterior; Vents shall be flush with frame and have coped corner construction; Factory-assembled.
  - 3. Thermal barrier shall consist of 6/6 nylon polymide glass fiber reinforced pressure extruded bars. Systems employing non-structural thermal barriers are not acceptable.
  - 4. Configuration: The vents shall be Project Out Ventilator.
  - 5. Glazing: Silicone spacer and structural silicone sealant; 1" insulated units; interior urethane foam spacer and structural silicone sealant.

#### 2.02 MATERIALS

A. Extrusions: ASTM B 221 (ASTM B 221M), 6063-T5 Aluminum Alloy.

#### 2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
  - 1. Hardware: Standard concealed stainless steel 4 bar hinges; white bronze multilock handles and strikes, pull handles and keepers.
  - 2. Fasteners: All fasteners to be AISI 300 series (except self-drilling which are to be AISI 400 Series) stainless steel.
  - 3. Sealant: Non-skinning type, AAMA 803.3
  - 4. Glazing: Setting blocks, edge blocks, and spacers in accordance with ASTM C 864, shore durometer hardness as recommended by manufacturer; glazing gaskets in accordance with ASTM C 864.

#### 2.06 FINISHES

- A. Anodic Coating: Electrolytic color coating followed by an organic seal applied in accordance with the requirements of AAMA 612-02.
- B. High Performance Organic Coating Finish: Type Factory applied two-coat 70% Kynar resin by Arkema or 70% Hylar resin by Solvay Solexis, fluoropolymer based coating system, Polyvinylidene Fluoride (PVF-2), applied in accordance with YKK AP procedures and meeting AAMA 2605 specifications.

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