

## CT451

ON TIME. ON SPEC. ON COST.

### Features

- 2" x 4½" Center Glazed Storefront
- Thermally Broken Design for Enhanced Performance
- Outside or Inside Glazed Versions Available
- #14 Hex Head Fasteners to Reduce Labor
- Optional Head/Jamb Members to Lower Material & Installation Costs
- High Performance Sill Flashing

### Performance Data

#### AIR

ASTM E283: Air Infiltration shall not exceed 0.01 cfm/ft<sup>2</sup> when tested at 6.24psf

#### WATER

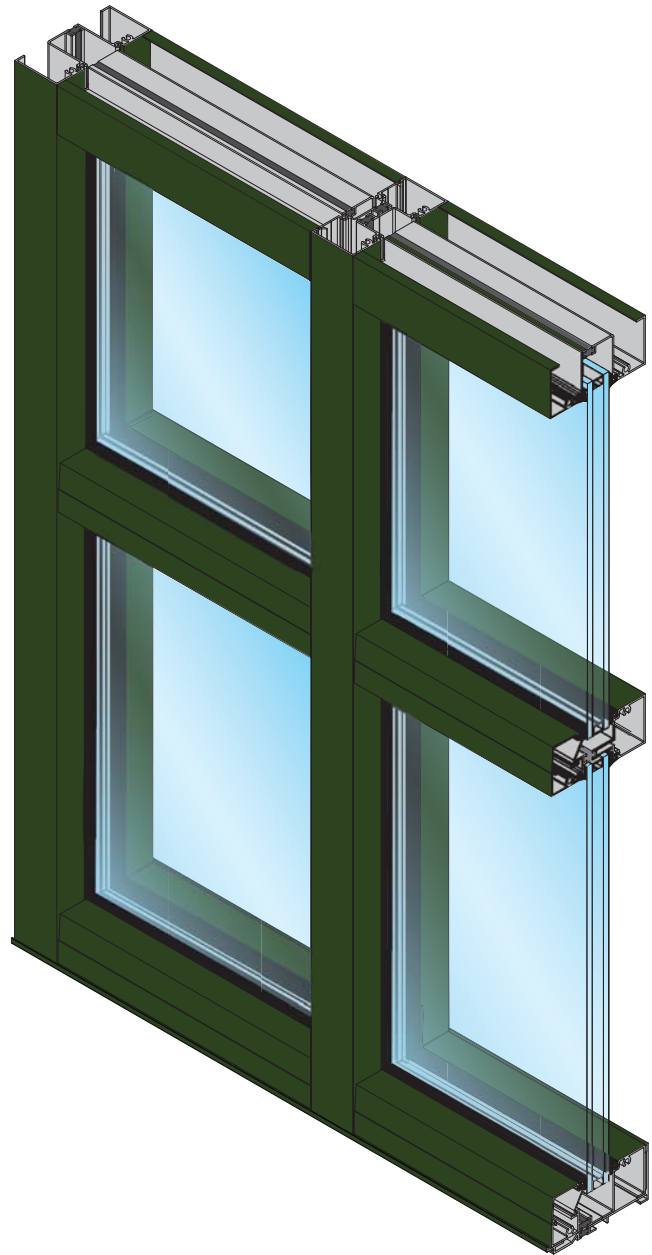
ASTM E331: No Uncontrolled Water when tested at 15psf. (Exterior Glazed)

#### STRUCTURAL

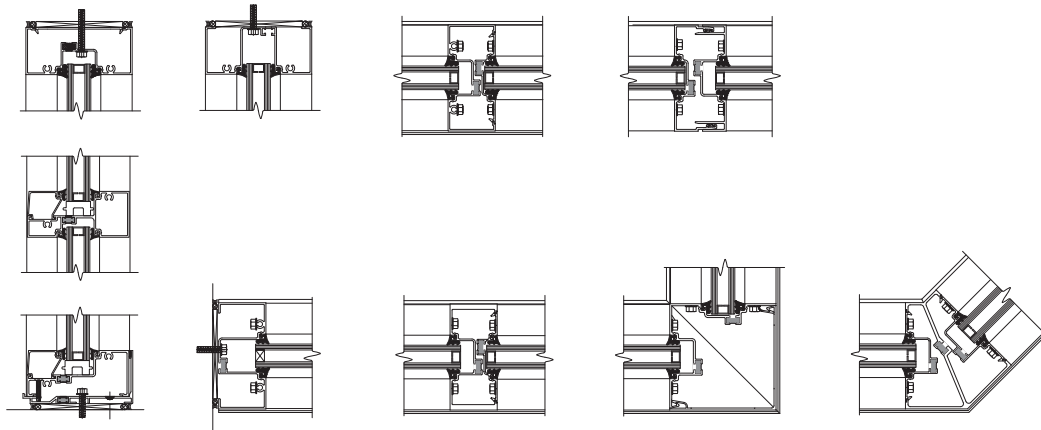
ASTM E330: Maximum Allowable Deflection of L/175 or ¾" Maximum at 35psf

#### THERMAL

U-Value shall not exceed 0.43 BTU when tested in accordance with NFRC 102-2010



### System Details



Trulite Glass & Aluminum Solutions is proud to be your True Single Source Supplier of all your needs from Specification Sections: 08400, 08700, 08800 and 08900. Complete System Details are Available on [www.trulite.com](http://www.trulite.com).

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## 1.01 SUMMARY

- A. Section Includes: Aluminum Storefront systems
  - 1. Trulite Series CT451.
- B. Related Sections:
  - 1. Glass and Glazing: Refer to Division 8 Glass and Glazing Section for glass and glazing requirements.
  - 2. Sealants: Refer to Division 7 Joint Treatment Section for sealant requirements.
  - 3. Single Source Requirement: All products listed below shall be by the same manufacturer.
    - a. Section 08 41 13 Aluminum Framed Entrance Door.
    - b. Section 08 44 13 Glazed Aluminum Curtain Walls.

## 1.02 SYSTEM PERFORMANCE DESCRIPTION

- A. Performance Requirements: Provide aluminum storefront systems that comply with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with test methods indicated.
  - 1. Air Infiltration shall be tested in accordance with ASTM E 283 at static pressure of 6.24psf (299 Pa). Infiltration shall not exceed the following 0.01 CFM/FT<sup>2</sup> of total frame area.
  - 2. Water Infiltration: No uncontrolled water when tested in accordance with ASTM E 331 at test pressure differential of: 15 PSF (718 Pa), (or when required, field tested in accordance with AAMA 503). Sill members must be designed to permit proper sealant of fasteners that penetrate the sill flashing; "blind seals" not permitted.
  - 3. Structural: Uniform Load Test in Accordance with ASTM E 330 at a static test pressure of +/- 35psf.
  - 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.
  - 5. Thermal Performance: Thermal transmittance shall not exceed 0.43 BTU/HR/FT<sup>2</sup>/°F when tested in accordance with NFRC 102-2010

## 1.06 WARRANTY

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
  - 1. Warranty Period: Manufacturer's two (2) year standard warranty commencing on the date of shipment by Trulite Glass & Aluminum Solutions, LLC.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: Trulite Glass & Aluminum Solutions
  - 1. Trulite CT451 Storefront System
- B. Storefront Framing System
  - 1. Description: Insulating Glass to be "flush glazed" and located in the center of the framing system. The glass may be glazed from the exterior, or the interior of the building to best meet project requirements. The framing system shall be assembled with #14 hex head fasteners to ensure the integrity of each joint; all screws to be concealed. Provide a continuous thermal barrier of high density polyurethane poured into a mechanically prepared cavity and then debridged to isolate the interior surface from the exterior.
  - 2. Components: Manufacturer's standard extruded aluminum expansion mullions, 90 & 135 degree corner posts, three way corner post, entrance door framing, and indicated shapes.

### 2.02 MATERIALS

- A. Extrusions: ASTM B 221 (ASTM B 221M), 6063-T6 Aluminum Alloy.

### 2.06 FINISHES

- A. Anodized Finishing in accordance with the requirements of AAMA 611.
  - 1. Architectural Class II, etched, medium matte, clear anodic coating, 0.4 mil minimum thickness.
  - 2. Architectural Class I, etched, medium matte, black, dark bronze, medium bronze, colored anodic coating, 0.7 mil minimum thickness.
- B. High Performance Organic Coating in accordance with either AAMA 2604 or AAMA 2605
  - 1. Finish coat of 50% (AAMA 2604) or 70% (AAMA 2605) minimum fluorocarbon resin fused to primed surfaces at temperature recommended by manufacturer, 1.0 mil minimum dry film thickness. Color to be selected by architect.