

# Reliance™-TC—thermal composite curtain wall system by Oldcastle BuildingEnvelope®

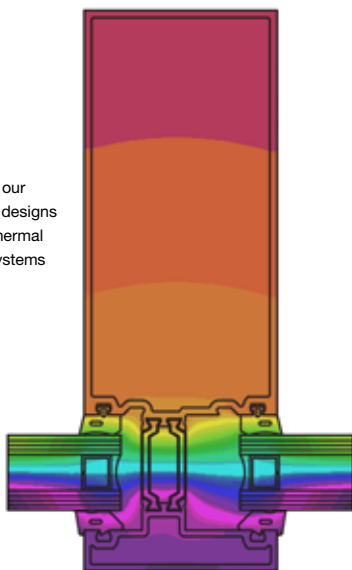
Energy efficiency has become a critical part of the design process in modern construction. In keeping with our commitment to the environment we have further enhanced the Reliance™-TC Composite Curtain Wall System. This product is designed to meet higher levels of thermal performance with a traditional glazed curtain wall system.



## Benefits

The Reliance™-TC curtain walls utilize multiple assembly and glazing options to meet a wider range of performance requirements. Reliance™-TC Type I Curtain Wall utilizes a composite vertical and standard Reliance™ horizontals. Reliance™-TC Type II features thermal composite members for all verticals and horizontals with pressure plate assembly. You may also add a FRP pressure plate to horizontals and/or verticals to maximize U-factors and Condensation Resistance Factor (CRF). The product is available in 7-1/4" and 6" depths with an aluminum pressure plate or 7-1/2" or 6-1/4" using the FRP pressure plate. Two-color capability is still available with all vertical and horizontal sections. As with Reliance™ Curtain Wall, Reliance™-TC offers optional depths and profiles, with the ability to adapt entrance doors and operable windows.

We analyze our curtain wall designs using 3-D thermal modeling systems



## Features

- Overall system dimensions: 2-1/2" x 6", 2-1/2" x 6-1/4", 2-1/2" x 7-1/4" and 2-1/2" x 7-1/2"
- Utilizes standard Reliance™ Curtain Wall profiles and components
- Thermally broken utilizing 27 mm and 30 mm thermal struts and an EPDM isolator
- Optional FRP pressure plate
- Accommodates standard and thermal doors
- Accommodates ZS-30 projected and casement vents



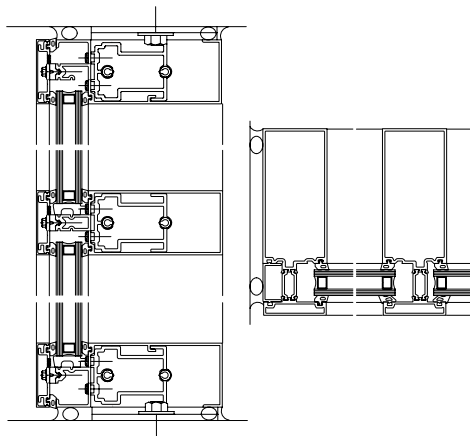
**Oldcastle BuildingEnvelope®**

*Engineering your creativity™*

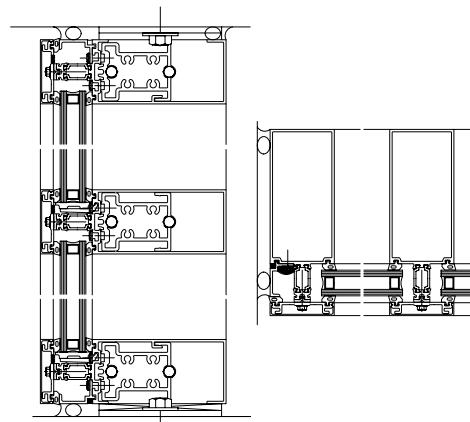
Reliance™-TC thermal composite curtain wall system

## Details

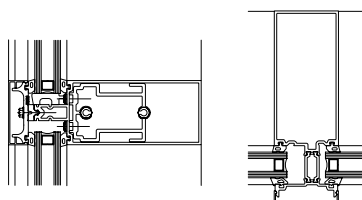
Reliance™ -TC Type I



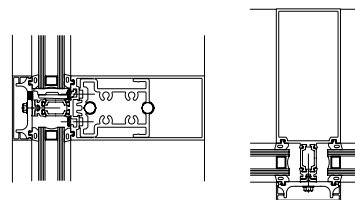
Reliance™ -TC Type II



Optional FRP Pressure Plate



Optional FRP Pressure Plate



## Performance

- Air Infiltration: <.06 CFM/SQ FT @ 6.24 PSF per ASTM E283
- Static Water: 15 PSF per ATSM E331
- Dynamic Water: 88 MPH per AAMA 501.1-05
- Deflection Load: 40 PSF per ASTM E330
- Structural Load: 60 PSF per ASTM E330
- STC: 28 with standard 1" insulating glass, 34 with double laminated 1" insulating glass
- Thermal Performance per AAMA 1503 for Clear 1" Insulating Glass with FRP Pressure Plate
  - U-Factor = 0.52
  - CRF Frame = 79
- Thermal Performance per AAMA 1503 for 1" Insulating Glass with Sunglass #2 surface, 90% argon and Technoform warm edge spacer utilizing FRP Pressure Plate
  - U-Factor = 0.30
  - CRF Frame = 82
- NFRC Tested and Certified
- Thermal Performance Characteristics per AAMA 507
- NFRC Component Modeling Approach Program certified

