

SteelBuilt Curtainwall® System

The SteelBuilt Curtainwall® System can use as a back mullion almost any type of custom steel member. This allows architects and designers to use larger areas of glass, smaller frame profiles and greater free spans than are possible with traditional aluminum curtain wall assemblies. The design flexibility allows curtain walls to be incorporated into a nearly limitless range of building types, designs, and performance requirements.



BIM 3D Model Available

FEATURES

- Three times the wind load capacity of a standard aluminum curtain wall
- Three times the modulus of elasticity of aluminum, allowing for smaller profiles
- Greater material strength than aluminum
- Superior thermal performance and reduced thermal expansion than aluminum
- Significantly larger spans of glazing than traditional aluminum systems
- Water-tight curtain wall framing joints with no visible weld bead
- Easy installation similar to typical pressure plate curtain wall
- Low maintenance system
- For interior or exterior use
- Finish painted at the factory to match desired color scheme

OPTIONAL FEATURES

- Structural silicone is available in 2- or 4-sided applications for a smooth monolithic appearance (see SteelBuilt Curtainwall® SSG System data sheet)
- Stainless steel cover caps

TESTING

Frame tests performed in accordance with:

AAMA 501.1

ASTM E283
Air Performance

ASTM E330
Structural Performance

ASTM E331
Static Water Penetration



THERMAL TRANSMITTANCE¹ (btu/hr + ft² + °F)

GLASS U-FACTOR ²	OVERALL U-FACTOR	
	STAINLESS STEEL COVER CAP	ALUMINUM COVER CAP
0.48	0.51	0.51
0.44	0.49	0.49
0.30	0.35	0.36
0.247	0.31	0.32
0.123	0.19	0.20

1. U-Factors are determined in accordance with NFRC 100. Approximate values only, actual values will vary depending on specific product configuration per project requirements.

2. Glass properties are based on center of glass values and are obtained from your glass supplier.

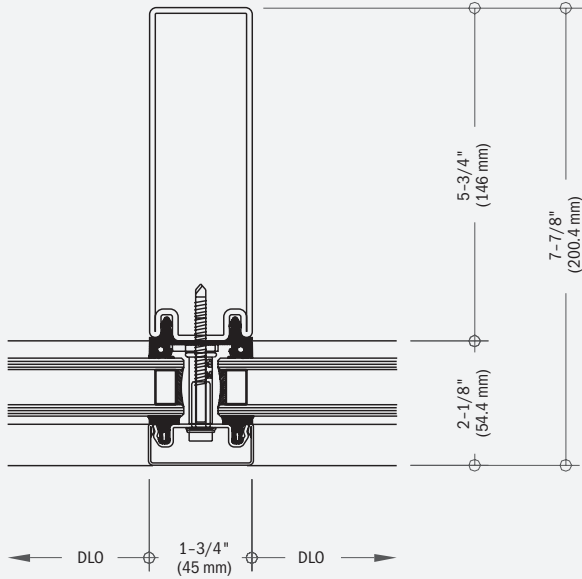
STEELBUILT CURTAINWALL® VS. TYPICAL ALUMINUM CURTAIN WALL

Givens: Design Wind Load: 30 psf Module/Vertical to Vertical Spacing: 5'-0" Rectangular Verticals: Captured			
	ALUMINUM CURTAIN WALL	STEELBUILT CURTAINWALL® SYSTEMS	STEELBUILT CURTAINWALL INFINITY™ SYSTEM
SPAN	12'-6"	14'-0"	21'-5"
FACE WIDTH	2-1/2"	2-3/8"	2-3/8"
MULLION DEPTH	5"	5-3/8"	5"
OVERALL SYSTEM DEPTH	7-1/2"	7-3/8"	7-1/2"
DURABILITY	Prone to denting, scratching and deterioration	Long term resistance to denting, scratching and deterioration	Long term resistance to denting, scratching and deterioration
MODULUS OF ELASTICITY	1/3 that of steel. Does not support large lites	3x greater than aluminum to support larger glass lites	3x greater than aluminum to support larger glass lites
ADVANTAGES/DISADVANTAGES	<ul style="list-style-type: none"> - Cannot support large glass lites without reinforcing - Not as durable as steel 	<ul style="list-style-type: none"> + Greater modulus of elasticity to support larger glass lites + Less reinforcement required (if any) + Durability 	<ul style="list-style-type: none"> + Greater modulus of elasticity to support larger glass lites + Less reinforcement required (if any) + Durability

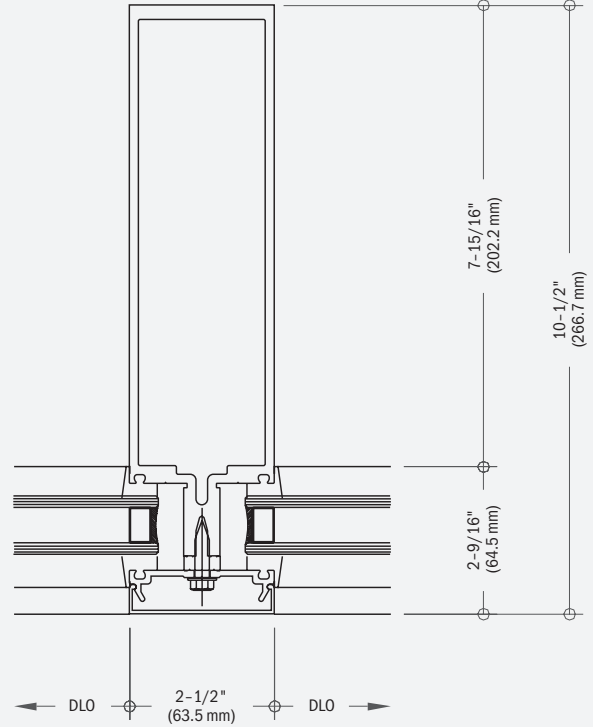
PERIMETER FRAMING SYSTEM

MULLION SECTION STEELBUILT CURTAINWALL SYSTEM

ADVANTAGE STEEL



MULLION SECTION TYPICAL ALUMINUM CURTAIN WALL SYSTEM



CURTAIN WALL ILLUSTRATION DESIGN CRITERIA

OVERALL HEIGHT:	20' (no intermediate anchor)
OVERALL WIDTH:	9' 1" - 13/16"
GLASS PANEL SIZE:	36" x 79-7/16"
DESIGN PRESSURE:	25 PSF
DEFLECTION:	L/240+1/4" L/175 < 13'6" L/240+1/4" > 13'6"