

# 400SS

## Screw Spline Curtainwall

Tubelite's 400SS thermally broken curtainwall product has been designed to reduce fabrication and installation labor while meeting or exceeding today's stringent energy codes. The 400SS Series has a 2-1/2" face, with system depths from 6" to 10" and optional polyamide pressure plates. This screw spline system can be pre-assembled, pre-sealed (i.e. water dams) and pre-glazed in the shop, or stick fabricated for field glazing.

### Dependable Performance

The expanded thermal break and thick gasketing provide excellent U-Factors and CRF when using high-performance insulated glass. Glass is positioned to the system exterior for enhanced resistance to rainwater. Seven anodized finishes and 20 standard paint colors are available on this framing system to complement any project with warranted protection, as well as street appeal. The 400SS also accepts Tubelite's Operable Windows, Therml=Block® Doors and Maxblock® Sunshades.

**Therml=Block**  
HIGH-PERFORMANCE THERMAL FRAMING



Therml=Block  
Doors & Frames

Bank of North Dakota, Bismarck, ND

ALSO  
USED  
WITH

TU24000 High  
Thermal Performance  
Storefront

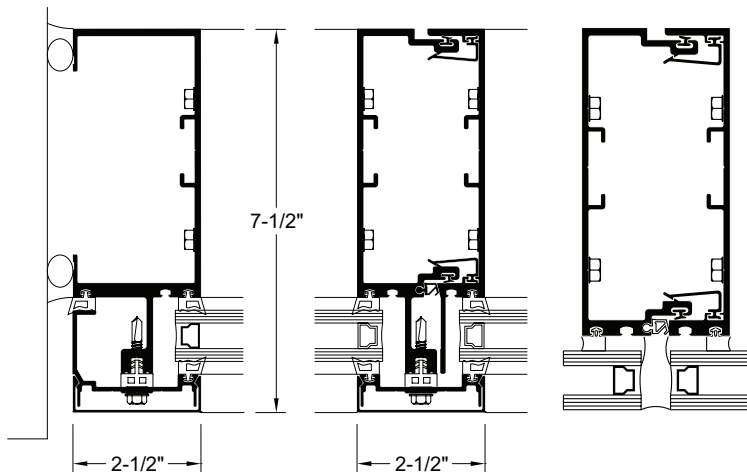
**TUBELITE**<sup>®</sup>  
DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,  
CURTAINWALL AND ENTRANCE SYSTEMS

# 400SS

## Screw Spline Curtainwall

**Thermal-Block**  
HIGH-PERFORMANCE THERMAL FRAMING



### System Features:

- Standard 6" (152.4mm) 7-1/2" and 10" depth systems have a 2-1/2" (63.5mm) sight line
- Outside glazed pressure-plate system available in captured and structural glazed configurations
- Standard infill option 1" (25.4mm), other infills available
- Thermally Broken using a continuous 1/4" EPDM Isolator
- Concealed screw spline fastener joinery creates smooth, monolithic appearance
- Two-piece expansion vertical & horizontal members
- Can be shop-fabricated and shop-glazed for labor savings
- Silicone compatible glazing materials for long-lasting seals
- Captured & SSG inside and outside corners available

### Optional Features:

- Steel reinforcing available
- Optional deep profile and bull nose covers available
- Silicone glazed intermediate verticals & horizontals available
- Polyamide pressure plates available
- Easily integrates with Tubelite's Entrances, Operable Windows, and Maxblock Sunshades.
- Deep and heavy-weight mullions available

### Performance Test Standards

<b>Air Infil/Exfil</b>	ASTM E 283
<b>Water</b>	AAMA 501.1 and ASTM E 331
<b>Structural</b>	ASTM E 330
<b>CRF</b>	AAMA 1503
<b>Acoustical</b>	ASTM E90, ASTM E413
<b>Thermal Cycling</b>	AAMA 501.5
<b>Seismic</b>	501.4

### 400SS Screw Spline Curtainwall

**Application:** Low and mid-rise commercial buildings including retail, office, healthcare, schools, etc

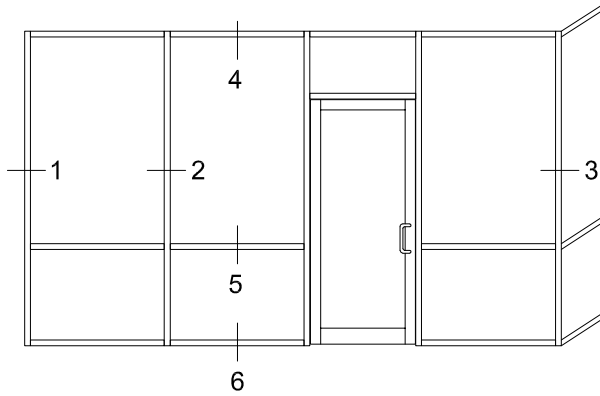
**Description:** 2-1/2" x (6", 7-1/2", and 10") field or shop glazed, screw spline construction curtainwall

Face Width:	Overall Depths:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor**:	CRF <sub>(F)</sub> :	Acoustic:
2-1/2"	6", 7-1/2" & 10"	1" std (1/4" to 1-5/16")	0.06 CFM/Ft.2 @ 6.24 PSF	15 PSF – Static 15 PSF – Dynamic	40 PSF – Design 60 PSF – Overload	0.38 - Aluminum PP 0.33 - Thermal PP	68 – Aluminum PP 79 – Thermal PP	STC 32 OITC 27

\*\* U-Factor per NFRC 100. Refer to the U-Value table at: [www.tubeliteinc.com/products/curtainwall/400ss-screw-spline-curtainwall/](http://www.tubeliteinc.com/products/curtainwall/400ss-screw-spline-curtainwall/)

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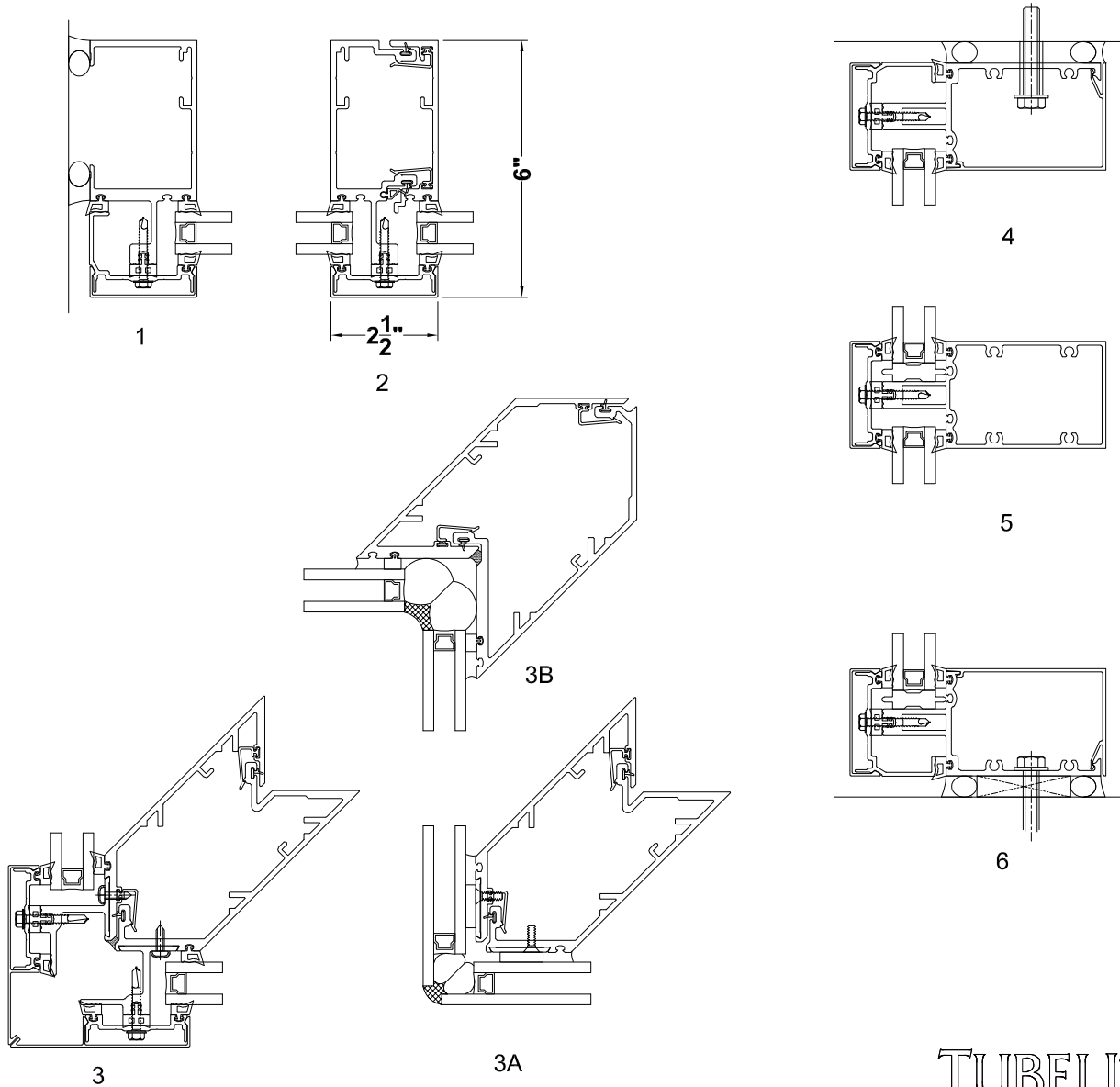
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Tubelite reserves the right to change system configuration without prior notice when deemed necessary for product improvements.

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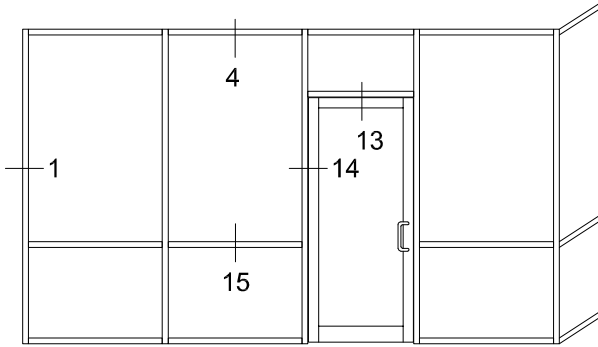
Standard Field Glazed Details  
1/4 scale



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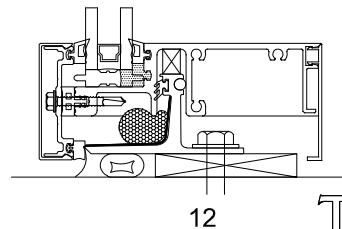
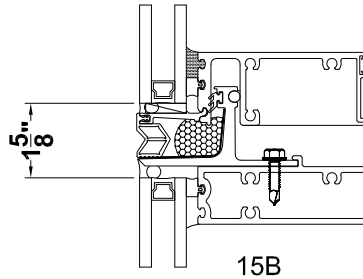
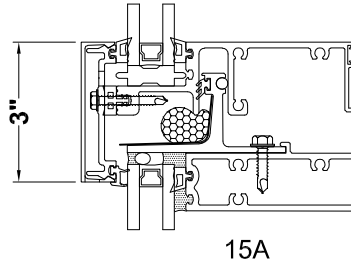
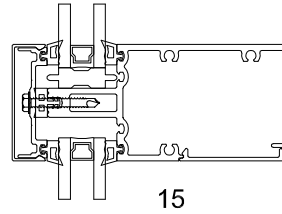
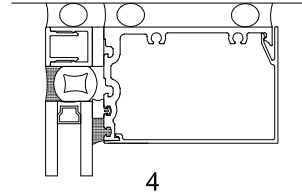
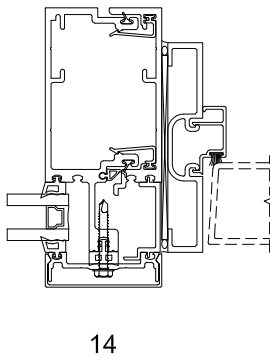
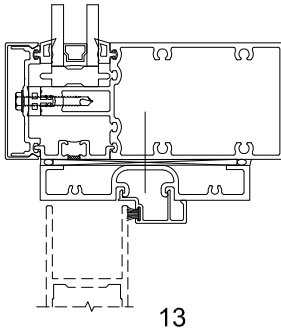
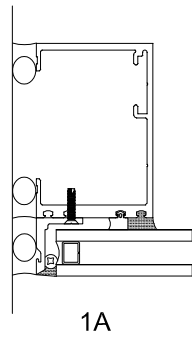
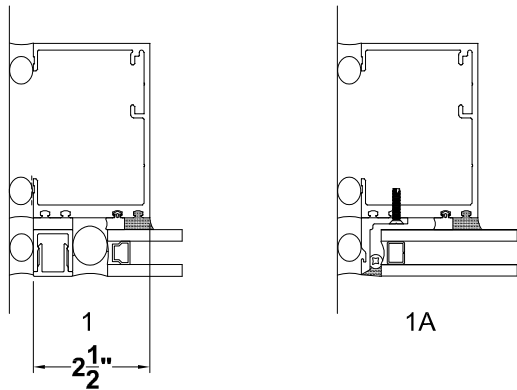
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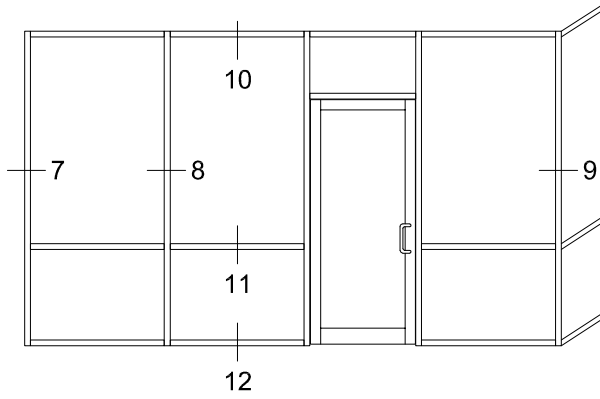
Optional Field Glazed Details  
1/4 scale



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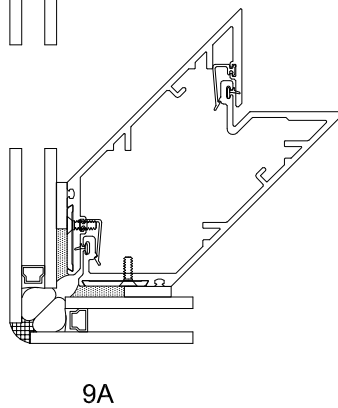
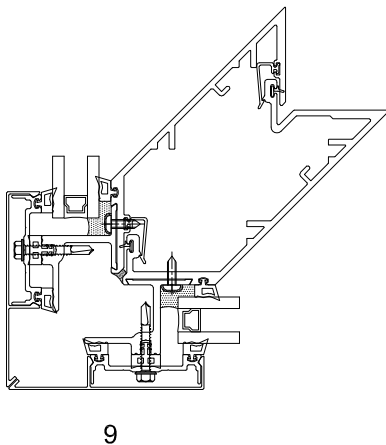
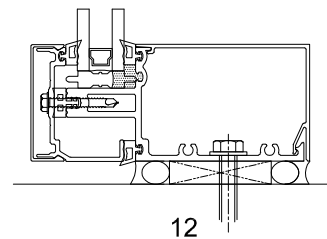
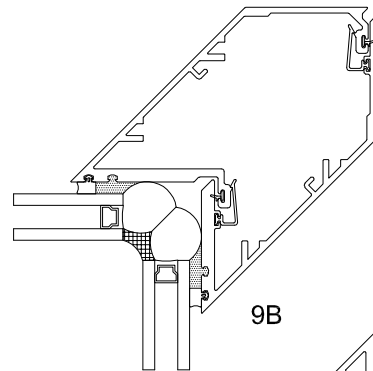
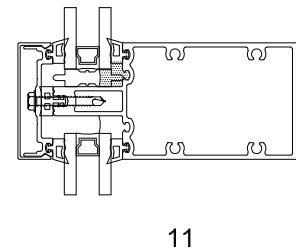
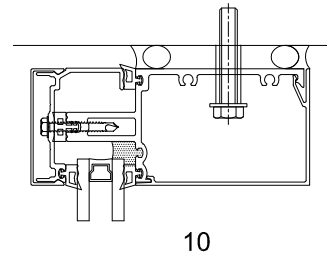
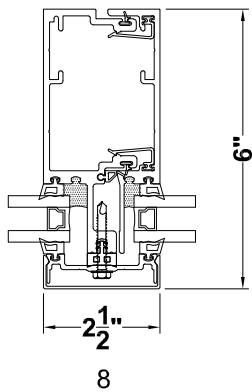
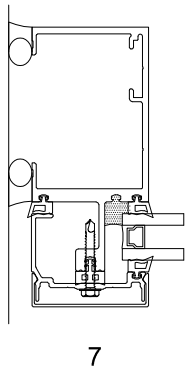
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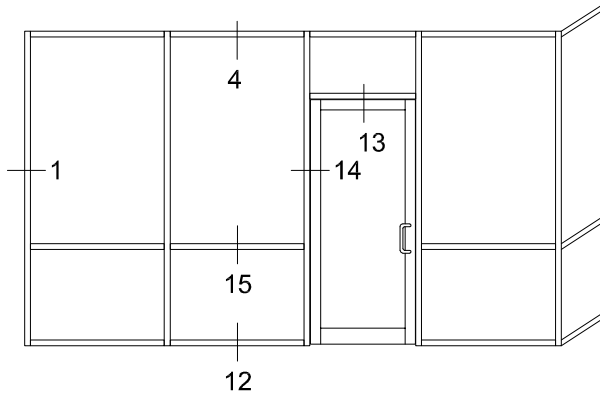
Standard Shop Glazed Details  
1/4 scale



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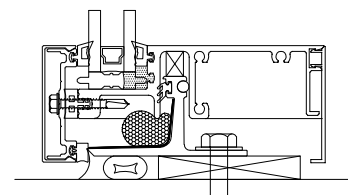
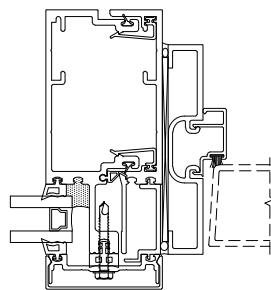
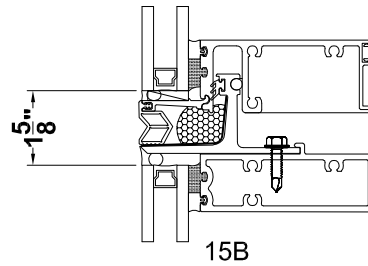
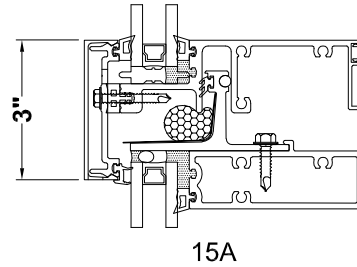
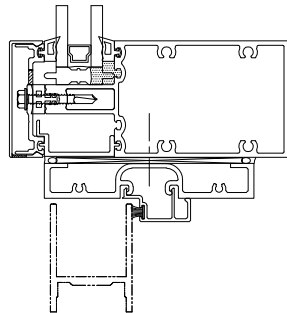
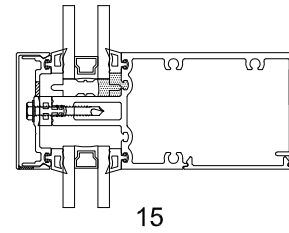
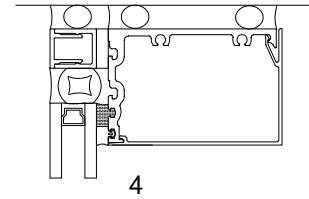
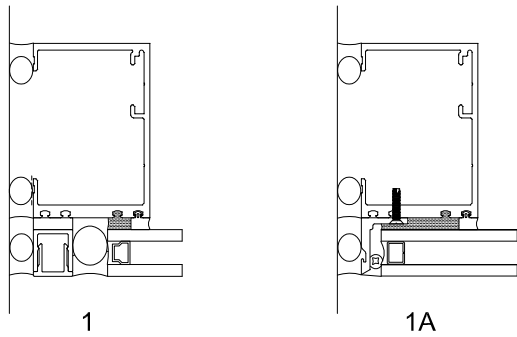


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Optional Shop Glazed Details

1/4 scale



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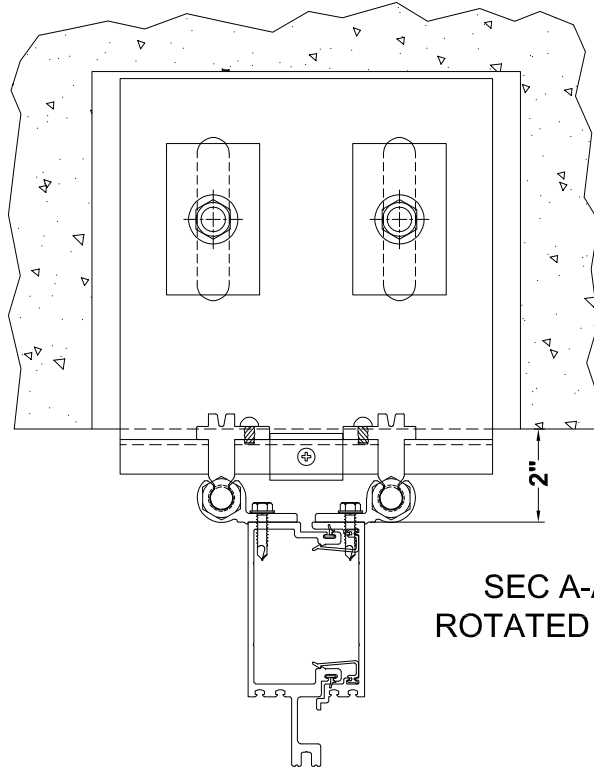
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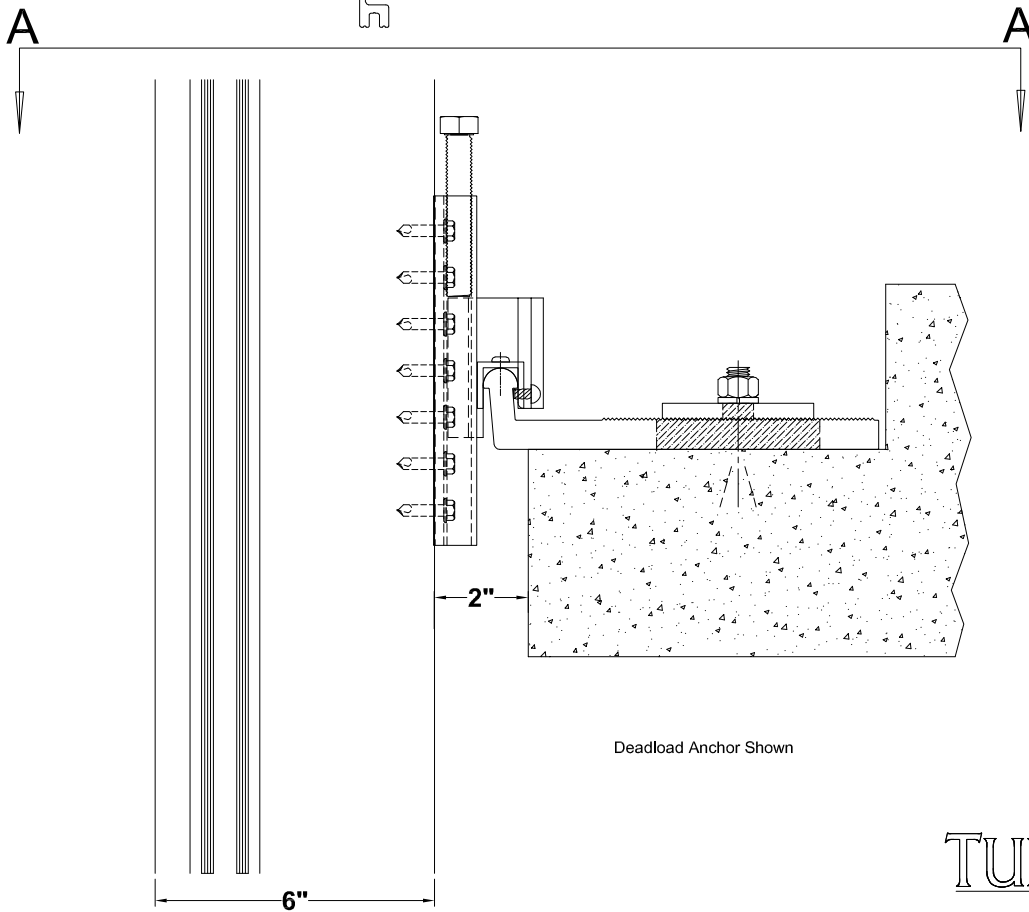
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Optional Anchoring Details  
1/4 scale



SEC A-A  
ROTATED 90deg



Deadload Anchor Shown

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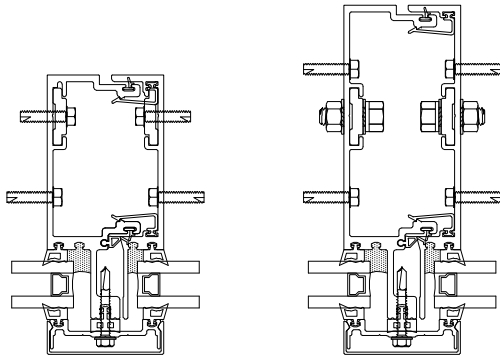
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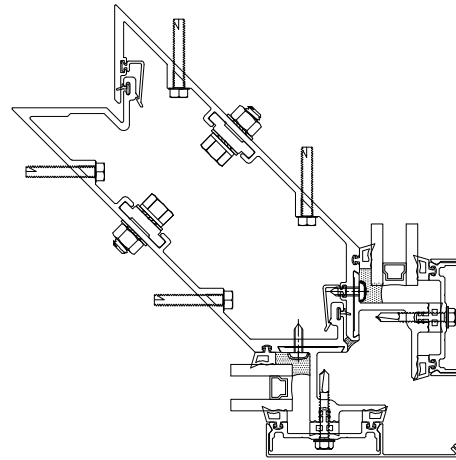
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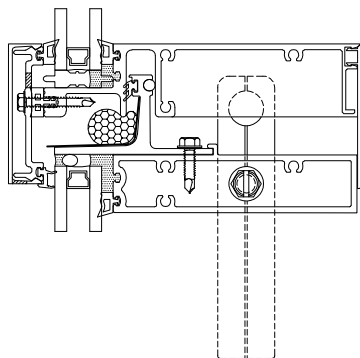
Shop Glazed Lifting Details  
1/4 scale



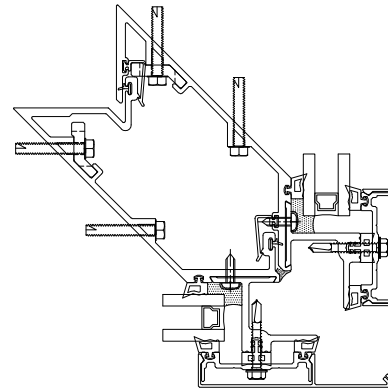
Lifting Lug at Vertical



Lifting Lug at Corners



Lifting Lug at Expansion Horizontal



Lifting Lug at Corners

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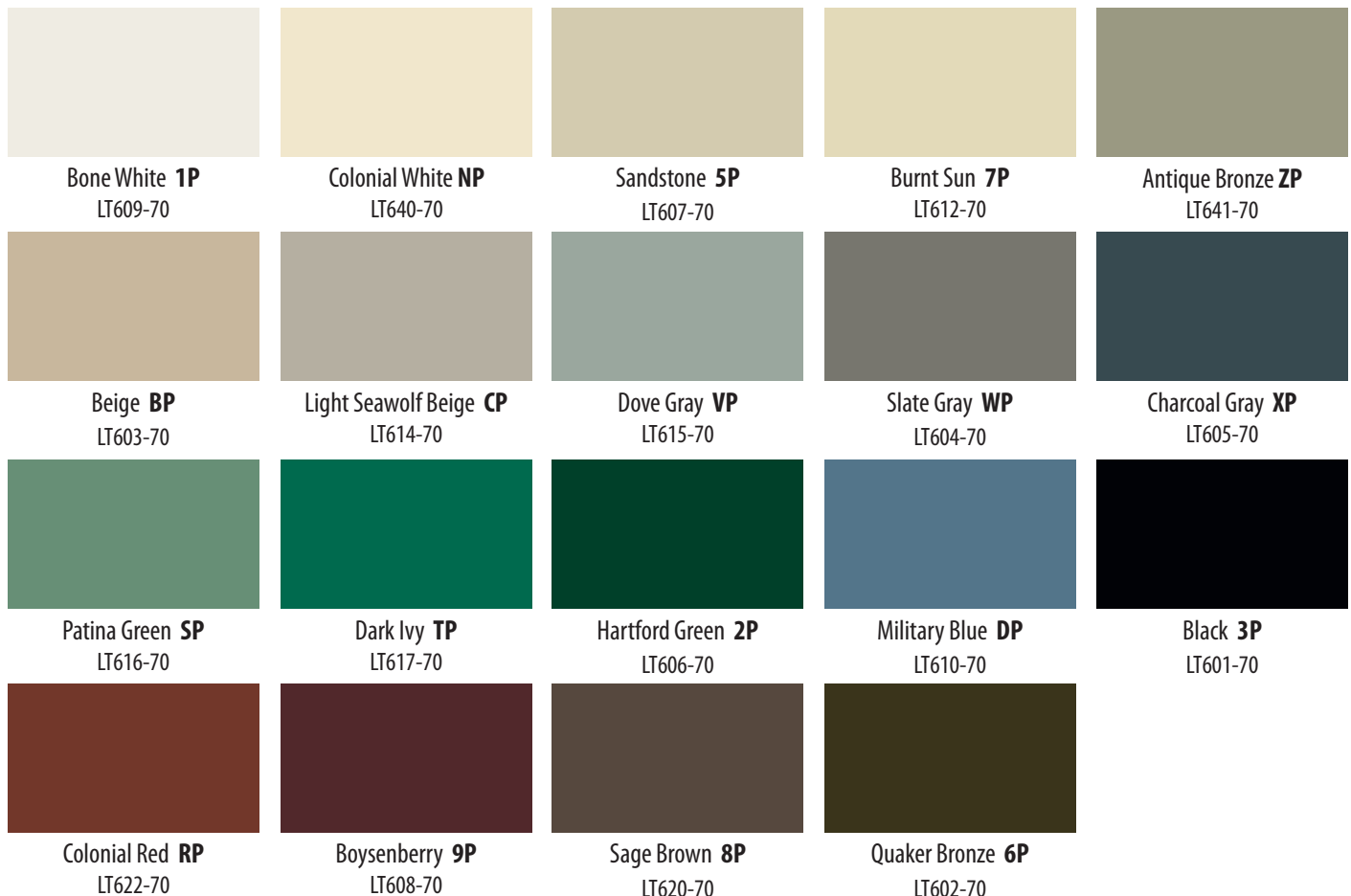
LEADERS IN ECO-EFFICIENT STOREFRONT,  
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We offer an option for recycled aluminum on selected extruded products with an industry leading content of post-consumer and pre-consumer material.

## Anodized Finishes



## Standard Painted Colors – 70% PVDF



NOTE: Colors shown are not exact and are intended for planning purposes. For actual job, Tubelite® will supply Linetec color chips.

### Finish Color Guide Chart

Depend on Tubelite® for detailed information on the performance, integrity, and weatherability of anodized finishes, and for specifications on the color retention, erosion resistance, and gloss retention of painted finishes.

Finish Colors					
	AAMA Code	Code Performance	Content	Applicable Warranty	Tubelite® Colors Available
ANODIZED	611	Anodized aluminum provides and maintains a superior level of performance in terms of film integrity, exterior weatherability, and general appearance for many years.	Two-step electrolytic anodizing process	Standard Linetec 5yr. warranty applies on Class I anodize	<b>Standard Finishes:</b> Clear - Class II ..... C2 Dark Bronze - Class I ..... DB  <b>Special Finishes:</b> Clear - Class I ..... C1 Light Champagne - Class I ..... LC Champagne - Class I ..... CH Light Bronze - Class I ..... LB Medium Bronze - Class I ..... MB Extra Dark Bronze - Class I ..... EB Black - Class I ..... BL Copper - Class I ..... CA Bordeaux - Class I ..... BD
				Standard Tubelite 2yr. warranty applies on Class II anodize	
PAINTED	2605	Co 10 yrs – Fade = 5 Delta E Ch 10 yrs – Chalk = 8 Gl 10 yrs – 50% retention Er 10 yrs – 10% loss SS 4,000 hrs Hu 4,000 hrs	70% PVDF	10-Yr Linetec Warranty ✓	<b>Standard Finishes:</b> Bone White ..... 1P Colonial White ..... NP Sandstone ..... 5P Burnt Sun ..... 7P Antique Bronze ..... ZP Beige ..... BP Light Sea Wolf Beige ..... CP Boysenberry ..... 9P Dove Gray ..... VP Slate Gray ..... WP  Charcoal Gray ..... XP Patina Green ..... SP Dark Ivy ..... TP Hartford Green ..... 2P Military Blue ..... DP Colonial Red ..... RP Sage Brown ..... 8P Quaker Bronze ..... 6P Black ..... 3P
					<b>Custom Finishes:</b> Nearly unlimited in-house blendable and order-out paints include 2, 3 and 4-coat finish types
					<b>Custom Finishes:</b> Nearly unlimited in-house blendable shades
	2604	Co 5 yrs – Fade = 5 Delta E Ch 5 yrs – Chalk = 8 Gl 5 yrs – 30% retention Er 5 yrs – 10% loss SS 3,000 hrs Hu 3,000 hrs	50% PVDF	5-Yr Linetec Warranty ✓	<b>Custom Finishes:</b> Nearly unlimited in-house blendable shades
	2603		Baked Enamel	1-Yr Linetec Warranty (Adhesion only)	<b>Custom Finishes:</b> Nearly unlimited in-house blendable shades

**KEY** Co = Color Retention  
 Ch = Chalk Resistance  
 Gl = Gloss Retention  
 Er = Erosion Resistance

SS = Salt Spray  
 Hu = Humidity  
 = Tubelite Standard Color Palette

**NOTE** Class I = Minimum 0.7 mil thickness  
 Class II = Minimum 0.4 mil thickness  
 ✓ = Extended Warranty Available (Contact Tubelite Inc.)

### Eco-Friendly Finishes

Beyond being compliant, Tubelite's sister company Linetec captures and destroys the Volatile Organic Compounds (VOCs) present in solvent-borne paints during the finishing process. 100% of the solvents are captured from the painting operations, and destroyed with a \$2 million "oxidizer", which burns the VOC's at 1500 degree heat, converting them to harmless water vapor. In doing so, our liquid-paints are just as VOC-free to the environment as powder or waterborne paints.

At Linetec's anodize operations, the process does not use heavy metals or toxins and is environmentally friendly. Anodized aluminum is 100% recyclable and uses simple water-based chemistry that can be treated easily and releases no harmful by-products. Linetec's voluntary commitment to a clean and healthy environment goes well beyond industry standards or regulatory requirements.