

TUBELITE[®]

DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

Date: Wednesday 28 November 2018
To: Burns & McDonnell – Kristine Sutherlin
Phone: 816-627-6192
Email: kasutherlin@burnsmcd.com

From: Tubelite

Subject: Product Substitution Request Submittal
Project: Port KC - 1800 Walnut

We propose furnishing the following Tubelite materials in lieu of those specified in sections:

900RW Series Thermal Ribbon Window (2 1/4" profile, 4 1/2", 6" system depths, 1" glazing) in lieu of YKK
<http://tubelite.org/spectool/details.php?location=900RW->

CVW3700 Concealed Casement Vents in lieu of YKK
<http://tubelite.org/spectool/details.php?location=CVW3700->

Enclosed is the product literature: details, installation instructions, product comparisons, specifications, and test reports for the above listed systems materials. If you require more information, please contact us. Thank you for your consideration of Tubelite products for use in your project.

Sincerely,



Katie Click
Marketing Promotions Coordinator I
Katie's Phone: (800) 866-2227

Cc: Doug Urich
Client Development Manager
Phone: 913-265-5471
Email: durich@archonfentech.com

Cc: Doug Dietrich
Architectural Representative
Phone: 515-201-9444
Email: ddietch@tubeliteinc.com



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SUBSTITUTION REQUEST

(Before the Bidding Phase)

Project: Port KC - 1800 Walnut
 Address: 18th and Walnut Kansas City, MO 64108
 Substitution Request Number: 1 From: Tubelite, Inc.
 To: Burns & McDonnell Date: Wednesday 28 November 2018
 A/E Project #: 108557
 Address: 9400 Ward Parkway Kansas City, MO 64114
 Re: PROJECT SUBSTITUTION REQUEST Project For: Division 8


Specification: Aluminum-Framed Entrances and Storefr Description: Window Wall
 Section: 08 41 13 Page: 1 Article/Paragraph: 2.1 Window Wall

Proposed Substitution: 900RW
 Manufacturer: Tubelite Inc. Address: 3056 Walker Ridge NW, Suite G Phone: 800-866-2227
 Trade Name: 900RW Series Thermal Ribbon Window (2 1/4" profile, 4 1/2", 6" system depths, 1" glazing)
 Model No: 900RW
 Differences between proposed substitution and specified product. Please see side-by-side comparison

Point by point comparative data attached. REQUIRED BY A/E attach appropriate Tubelite literature.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted By: Katie Click
 Signed By: 
 Firm: Tubelite, Inc.
 Address: 3056 Walker Ridge Dr. NW, Suite G
Walker, MI 49544
 Telephone: 800-866-2227

A/E REVIEW AND ACTION:

- Substitution approved - Make submittals in accordance with Specification Section 01330.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

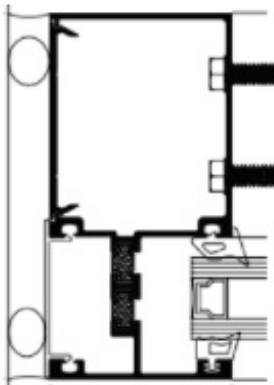
Signed By: _____ Date: _____

Supporting Data Attached: Drawings Product Data Samples (avail.upon request) Tests Reports Comparisons

Side by Side Comparison

900RW Compared to Specified

| | |
|---|--|
| Company Profile Tubelite | Company Profile Specified |
| Product Name 900RW | Product Name Specified |
| Siteline 2-1/4" | Siteline 2-1/4" |
| System depths 4 -1/2" and 6" | System depths 5" |
| Glass Thicknesses 1" | Glass Thicknesses 1" |
| Thermal Break Single or Dual pour and debridge polyurethane | Thermal Break Thermal |
| Condensation Resistance Factor CRF Single pour: 68 CRFf , 70 CRFgDual pour: 72 CRFf , 72 CRFg | Condensation Resistance Factor CRF 78 CRFf |
| U Factor Single pour: 0.32 Dual pour: 0.30 | U Factor .42 |
| Acoustic 1" IGU: STC-31, OITC-25 1- 1/16" IGU: STC-35, OITC-31 1- 1/16" lami IGU: STC-36, OITC-32 | Acoustic Not listed in spec |
| Air Infiltration 0.06 cfm/ft2 @ 6.24psf | Air Infiltration 0.06 cfm/ft2 @ 6.24psf |
| Water static 15psf | Water static 10 psf |
| Water cyclic 15psf | Water cyclic 10 psf |
| Water dynamic 15psf | Water dynamic 10 psf |
| Thermal cycling -20oF to 180oF : 200oF differential | Thermal cycling 180oF |
| Structural L/175 @ 30 psf design - 45 psf overload | Structural L/175 |
| Interstory vertical displacement +/- 1/2" | Interstory vertical displacement Not listed in spec |
| Interstory horizontal displacement +/- 3/8" | Interstory horizontal displacement Not listed in spec |
| Warranty Finish Paint Coatings70% PVDF: 10 [20] years <20 years optional> 50% PVDF: 5 [10] years <10 years optional> Baked Enamel: 5 years Anodized CoatingsClass I: 5 [10] years <10 years optional>Class II: 2 years | Warranty Finish 2 years from date of Substantial Completion |
| Warranty Product 2-year std., up to 10 years | Warranty Product 2 years from date of Substantial Completion |





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SUBSTITUTION REQUEST

(Before the Bidding Phase)

Project: Port KC - 1800 Walnut
 Address: 18th and Walnut Kansas City, MO 64108
 Substitution Request Number: 2 From: Tubelite, Inc.
 To: Burns & McDonnell Date: Wednesday 28 November 2018
 A/E Project #: 108557
 Address: 9400 Ward Parkway Kansas City, MO 64114
 Re: PROJECT SUBSTITUTION REQUEST Project For: Division 8

Specification: Aluminum-Framed Entrances and Storefr Description: Operable Window
 Section: 08 41 13 Page: 2 Article/Paragraph: 2.2 Operable Window

Proposed Substitution: CVW3700
 Manufacturer: Tubelite Inc. Address: 3056 Walker Ridge NW, Suite G Phone: 800-866-2227
 Trade Name: CVW3700 Concealed Casement Vents
 Model No: CVW3700
 Differences between proposed substitution and specified product. Please see side-by-side comparison

Point by point comparative data attached. REQUIRED BY A/E attach appropriate Tubelite literature.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted By: Katie Click
 Signed By: *Katie Click*
 Firm: Tubelite, Inc.
 Address: 3056 Walker Ridge Dr. NW, Suite G
Walker, MI 49544
 Telephone: 800-866-2227

A/E REVIEW AND ACTION:

- Substitution approved - Make submittals in accordance with Specification Section 01330.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- Substitution rejected - Use specified materials.
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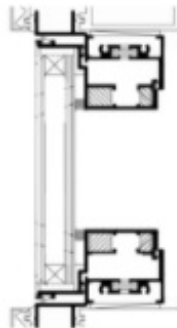
Signed By: _____ Date: _____

Supporting Data Attached: Drawings Product Data Samples (avail.upon request) Tests Reports Comparisons

Side by Side Comparison

CVW3700 Compared to Specified

| | |
|---|--|
| Company Profile Tubelite | Company Profile Specified |
| Product Name CVW3700 (concealed project-out awnings) | Product Name Specified |
| Siteline N/A - Zero | Siteline N/A |
| System Depth 3 1/2" | System Depth Not listed in spec |
| Thermal Yes, Poured & De-bridged Polyurethane | Thermal Thermal |
| Construction Mitered, 2 corner keys, lanced stake & silicone | Construction Not listed in spec |
| AAMA Certification CLASS CW-PG75(61X38)-AP | AAMA Certification Not listed in spec |
| Life Cycle Testing 2500 Cycles | Life Cycle Testing Not listed in spec |
| Glass Thickness 1" Insulated | Glass Thickness Not listed in spec |
| Condensation Resistance Factor CRF 51 CRFf , 64 CRFg | Condensation Resistance Factor CRF Not listed in spec |
| U Factor U = 0.48 | U Factor Not listed in spec |
| Acoustic N/A | Acoustic Not listed in spec |
| Air Infiltration 0.10 cfm/ft2 @ 6.24psf | Air Infiltration Not listed in spec |
| Air Exfiltration not tested | Air Exfiltration Not listed in spec |
| Water static 12 psf | Water static 10 psf |
| Water cyclic 12 psf | Water cyclic 10 psf |
| Forced Entry Grade 10 | Forced Entry Not listed in spec |
| Florida Approval Non Impact FL15420 | Florida Approval Non Impact Not listed in spec |
| Structural 75 psf - design 105.3 psf - overload | Structural Not listed in spec |
| Warranty Finish Paint Coatings 70% PVDF: 10 [20] years <20 years optional> 50% PVDF: 5 [10] years <10 years optional> Baked Enamel: 5 years Anodized Coatings Class I: 5 [10] years <10 years optional> Class II: 2 years | Warranty Finish 2 years from date of Substantial Completion |
| Warranty Product 2-year std., up to 10 years | Warranty Product 2 years from date of Substantial Completion |



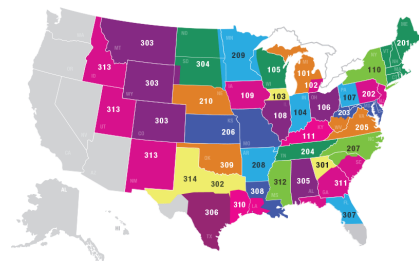
Our Mission

We will meet or exceed the needs of architects, contract glazing companies, general contractors and building owners by consistently providing high-quality pre-engineered storefront, entrance and curtainwall systems on-time, complete and undamaged.

- In business since 1945.
www.tubeliteinc.com/history
- Tubelite is among the top four architectural aluminum manufacturers in the United States.
- Headquartered in Walker, MI with extrusion facilities in Reed City, MI. Tubelite has three extrusions presses ensuring projects are on-time and complete.
- We extrude all of our own products. 70% recycled content is available
- All aluminum finishes are applied by our sister company, Linetec.
www.linetec.com
- Tubelite is part of Apogee Enterprises, a NASDAQ publicly traded company. Other Apogee companies include Viracon Glass, Wausau Windows, Custom Window, Alumicor (Canada) and Linetec.
www.apog.com



- All Tubelite details (CAD and BIM), product specifications, installation instructions and test reports are available online.
www.tubeliteinc.com/sce_techdata.html
- Tubelite is represented by a national network of glazing contractors and professional salespeople.
www.tubeliteinc.com/sce_sales.html



- Tubelite has approximately 300 employees who perform functions in: extruding, door fabrication, shipping, engineering, architectural support, new product development, testing, quality control, estimating, customer service and sales.
- Tubelite maintains the best lead times in the industry.
- Tubelite provides weekly deliveries to our customers on our own trucks. On time, complete and damage free.



www.tubeliteinc.com/wp-content/uploads/2014/04/Tubelite_DFG.pdf