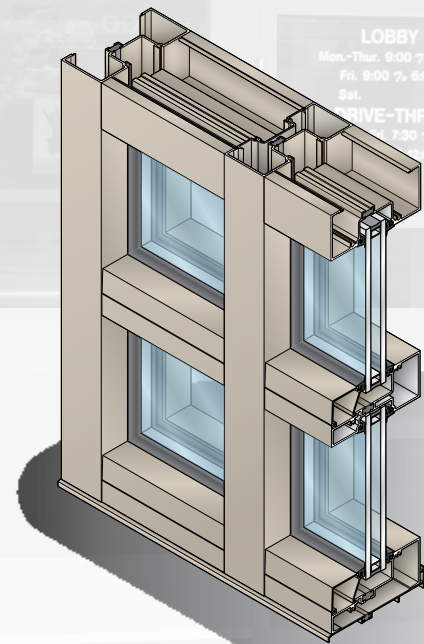


STOREFRONT SYSTEMS

SERIES 451 & IT451 CENTER GLAZE



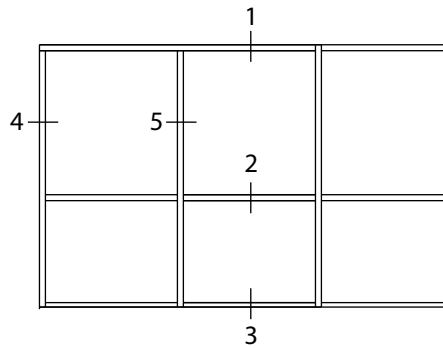
- Series 451 - 2" x 4-1/2"
(50.8 x 114.3 mm) Non-Thermal
- Series IT451 - 2" x 4-1/2"
(50.8 x 114.3 mm) Thermal
- 1" (25 mm) Glazing Infills
- Injection Molded Water Deflectors
- Screw Spline Assembly
- Shear Block Assembly
- Stacking Installation Option
- Full Range of Accessory Components
- Available in Anodized or Painted Finishes



Series IT451 offers improved thermal performance using the Poly-Aluminizer™ and Struct-Link™ Thermal Break Technology. Series 451 and IT451 may be interior or exterior glazed. A top load E.P.D.M. gasket is used to position and weatherseal the glass in the aluminum pocket. Center Glazed Systems are compatible with all United States Aluminum Entrance Doors.

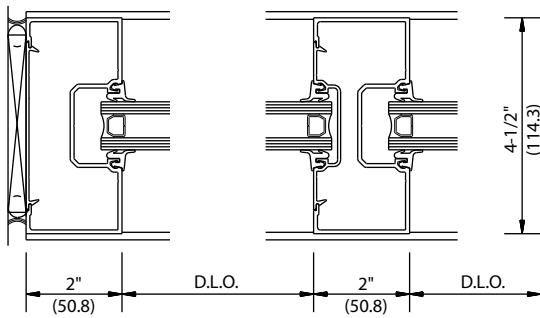
SERIES 451 & IT451 STOREFRONTS TYPICAL DETAILS

For Specifications, Details, and
Testing Data go to **usalum.com**.



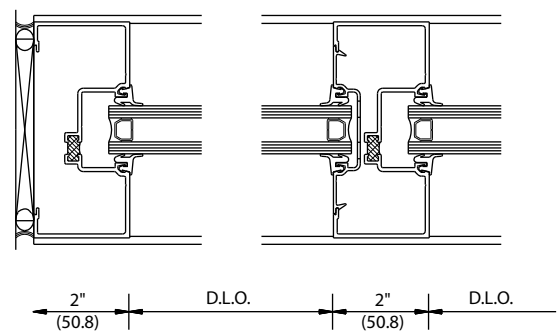
Series 451

Series IT451



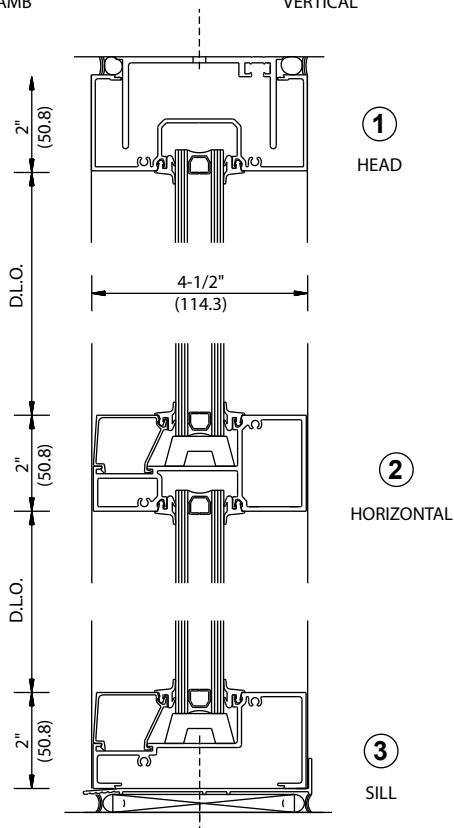
④
JAMB

⑤
VERTICAL



④
JAMB

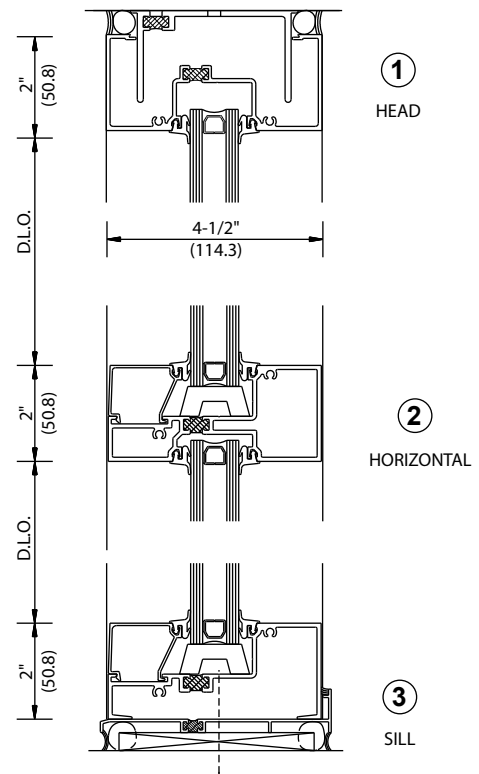
⑤
VERTICAL



①
HEAD

②
HORIZONTAL

③
SILL



①
HEAD

②
HORIZONTAL

③
SILL

NOT TO SCALE

**Interdisciplinary Science Building
Webster University
Cannon Design Project No. 004561.01**

Project: Webster ISB Interior Substitution Request Number: 1
From: Dan Ward
To: Devin Gates Date: October 27, 2016
Re: Interior Contract For: _____

Specification Title: Aluminum Frames Description: EGS-1 thru EGS-4 Framing Systems
Section: 081216 Page: 2 Article/Paragraph: 2.1 Manufacturers

Proposed Substitution: Products
Trade Name: Aluminum and Glass
Model No.: 487 Series Framing / 450 & 451 Series Storefronts
Manufacturer: CR Laurence (487 Series) / US Aluminum (Storefronts)
Address: 270 Riverside Parkway, Suite A
Austell, GA 30168
Phone: 800-955-9551 Manufacturer Web Page: www.crlaurence.com

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

Savings to Owner for accepting substitution: None (\$ 0)

Proposed substitution changes Contract Time: ☒ No ☐ Yes [Add] [Deduct] _____ days.

The Undersigned Bidding General Contractor/Construction Manager Certifies:

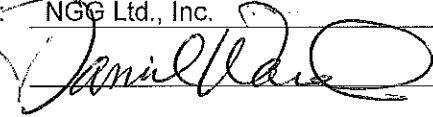
- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified products.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- 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.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

**Interdisciplinary Science Building
Webster University
Cannon Design Project No. 004561.01**

- The following supporting data is attached to this request and verifies the above statements:

- ☒ Drawings
- ☒ Product Data
- ☐ Samples
- ☐ Tests
- ☒ Reports
- ☐ Other (explain) _____

Submitted by: NGG Ltd., Inc.

Signed by: 

Contractor: Paric Corporation

Address: 77 West Port Plaza

Maryland Heights, MO 63146

Phone: 636/561-9586 : Email ddgates@paric.com

Review and Action

- ☐ Substitution approved – Make submittals in accordance with the Specifications.
- ☒ Substitution approved as noted – Make submittals in accordance with the Specifications.
- ☐ Substitution rejected – Use specified materials.
- ☐ Substitution received too late – Use specified materials.

Comments: confirm that custom color finish is available as specified. Color will be white to match Sherwin Williams SW 7004 Snowbound

Signed by: Lynn Grossman

Date: 12.03.16

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

PROJECT NAME	
ADDRESS	
NUMBER	
OWNER	
ARCHITECT / ENGINEER	
SUBMITTED BY	
CONTRACTOR / CM SUBMITTAL NO.	CANNON DESIGN SUBMITTAL NO.
DRAWING / DETAIL REFERENCE	SPECIFICATION SECTION / PARAGRAPH
MANUFACTURER / SUPPLIER	ITEM / PRODUCT ID
REQUIRED DATE	PRIORITY
	CRITICAL

ITEM BEING SUBMITTED (check only one)

- | | | |
|---|--|--|
| ☐ Shop Drawings | ☐ Certification / Qualifications | ☐ Coordination Drawing |
| ☐ Samples (____ copies) | ☐ Record Documents | ☐ Calculations |
| ☐ LEED Submittal | ☐ Product Data | ☐ Schedules |
| ☐ Other _____ | ☐ O&M Manuals | |

ITEM BEING SUBMITTED FOR (check only one)

- ☐ Action ☐ Information Only ☐ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION (SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)



PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:

Devin D. Gates

REVIEWED BY	DATE
-------------	------

To be completed by Reviewer

CANNON DESIGN SUBMITTAL NUMBER
RECEIVED DATE
☐ A. No Exceptions Taken No further review of submittal is required.
☐ B. Make Corrections Noted Incorporate corrections in work; resubmission is not required.
☐ C. Revise and Resubmit Revise as noted, and resubmit for review.
☐ D. Rejected Submittal is not in compliance with Contract Documents; provide new submittal.
☐ E. For Record / Information Only Submittal was reviewed for Record / Information purposes only.
☐ F. Not Required for Review Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS

☐ See attached sheet(s) for additional comments

Limited submittal only: See approved substitution request at end of submittal.

Provide finish samples.

Finish:
IGS-1, IGS-2, IGS-3, IGS-4: Color finish to match Sherwin-Williams SW 7004 - Snowbound. (a white)

Where indicated, finish to match exterior Curtainwall EGS1

Provide medium stile doors where noted - confirm that these are consistent with hardware specified.

REVIEWED BY	DATE
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77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0346

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 11/28/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Aluminum Framing Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☒ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	SENT VIA:	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☒ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		081216-006	1		11/28/2016	Aluminum Framing Product Data	Submitted

NOTES:

CC:

Signed: _____
Devin Gates