

	PROJECT: 4040 HS Impact - Product Evaluation	BY: JAR DATE: 08/23/2023
	PROJECT NO.: Q4674.04-122-34	CKD: TAD SHEET: 1 OF 5

Product Evaluation

4040 Horizontal Sliding Window (XO) – Impact

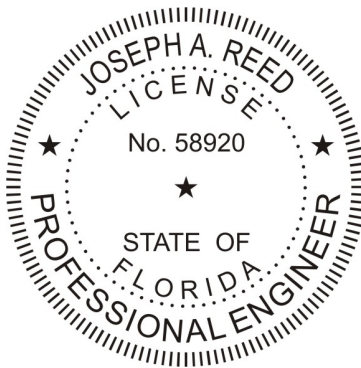
Project Q4674.04-122-34

Rendered to:

ST. CLOUD WINDOW
390 Industrial Boulevard
Sauk Rapids, Minnesota 56379

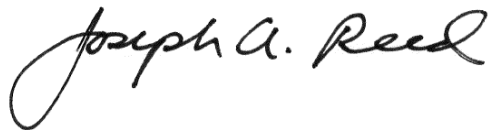
Prepared by:

Joseph A. Reed, P.E.
Tanya A. Dolby, P.E.



Architectural Testing, Inc.
130 Derry Court
York, Pennsylvania 17406
(717) 764-7700
FL COA 29274

August 23, 2023



Joseph A. Reed, P.E.
Senior Project Engineer
FL PE 58920
2023.08.29 16:13:32 -04'00'



Digitally Signed by: Tanya Dolby

Tanya A. Dolby, P.E.
Manager – Engineering Service

This item has been digitally signed and sealed by Joseph A. Reed, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

	PROJECT: 4040 HS Impact – Product Evaluation	BY: JAR DATE: 08/23/2023
	PROJECT NO.: Q4674.04-122-34	CKD: TAD SHEET: 2 OF 5

Subject: 4040 Horizontal Sliding Window (XO) – Impact
St. Cloud Window
390 Industrial Boulevard
Sauk Rapids, Minnesota 56379

Scope: Product Evaluation per Chapter 61G20-3.005(1)(d) Florida Administrative Code, Evaluation report from a Florida Registered Architect or a Licensed Florida Professional Engineer.

Building Code Compliance: This product has demonstrated compliance with the Florida Building Code, Building, 8th Edition (2023):
§1609.1.2 Protection of openings
§1709.5 Exterior window and door assemblies
§2404 Wind, Snow, Seismic and Dead Loads on Glass

Performance Standards: AAMA/WDMA/CSA 101/I.S.2/A440-17
ASTM E1996-17, ASTM E1886-13a
ASTM E1300-12ae1

Product Description: Window Frame Aluminum (6063-T6)
Miter cut corner with internal aluminum corner keys and secured with two (2) #8 x 1-1/2" screws and two (2) #8 x 1" screws at each corner.

Window Sash Aluminum (6063-T6)
Miter cut corner with internal aluminum and cast steel corner keys.

Glazing Validate Glazing with ASTM E1300

Glazing Type	Glazing Construction
1-1/4" IG	(2) 1/8" Annealed + 0.030" PVB Interlayer (Exterior) 9/16" Air Space with Stainless Steel Spacer 1/8" Annealed + 0.060" PVB Interlayer + 1/4" Annealed (Interior)

Note: PVB = Eastman Chemical Company *Saflex* PVB (NOA 23-0713.18)

Interior glazed against 1/8" POLYshim glazing tape. Interior snap-in aluminum glazing bead with 3/16" dartwedge glazing gasket. Exterior cap bead of silicone sealant. 1/2" bite.

Anchorage Various anchorages (see *Installation*)

For additional product information see Appendix A and attached Product drawings.

	PROJECT: 4040 HS Impact – Product Evaluation	BY: JAR DATE: 08/23/2023
	PROJECT NO.: Q4674.04-122-34	CKD: TAD SHEET: 4 OF 5

Supporting Evidence: Test Report QCT20-6063.01 (ASTM E1886-13a, ASTM E1996-17)
Revision -, 11/16/20
Quast Consulting and Testing. Mosinee, Wisconsin (TST8039)

Test Report QCT19-5924.01 (AAMA/WDMA/CSA 101/I.S.2/A440-17)
Revision -, 07/27/20
Quast Consulting and Testing. Mosinee, Wisconsin (TST8039)

Calculation Report Q4674.03-122-34
Revision -, 08/23/23
Joseph A. Reed, PE (FL PE 58920)

Certification of Independence: In accordance with Rule 61G20-3 Florida Administrative Code, Architectural Testing, Inc. hereby certifies the following:

1. Architectural Testing, Inc. does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products tested or labeled by the agency.
2. Architectural Testing, Inc. is not owned, operated or controlled by any company manufacturing or distributing products it tests or labels.
3. Joseph A. Reed, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the reports are being issued.
4. Joseph A. Reed, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

Reference Drawings: *4040 Horizontal Sliding – Impact*. Drawing No. Q4674-1002 Rev. -, 08/23/23.

Revision Log

<u>Identification</u>	<u>Date</u>	<u>Page & Revision</u>
Original Issue	08/23/23	Not Applicable

	PROJECT: 4040 HS Impact – Product Evaluation	BY: JAR DATE: 08/23/2023
	PROJECT NO.: Q4674.04-122-34	CKD: TAD SHEET: 5 OF 5

Appendix A – Detailed Product Description

Glazing Details: Interior glazed against 1/8" POLYshim glazing tape. Interior snap-in aluminum glazing bead with 3/16" dartwedge glazing gasket. Exterior cap bead of silicone sealant. 1/2" bite.

Weatherstripping: 1/4" 5-fin Twelve rows: Interior side and exterior side of interior and exterior sash pockets at head; interior and exterior of exterior sash pocket at jamb and sill; interior and exterior of interior sash pocket at jamb and sill.

1/4" pile Fixed sash meeting stile interlock.

5/32" pile Operating sash meeting stile interlock.

2-fin Gask. Parting stop.

Felt Adhered to PVC blocks at parting stop.

Frame Construction: Miter cut corner with internal aluminum corner keys and secured with two (2) #8 x 1-1/2" screws and two (2) #8 x 1" screws at each corner.

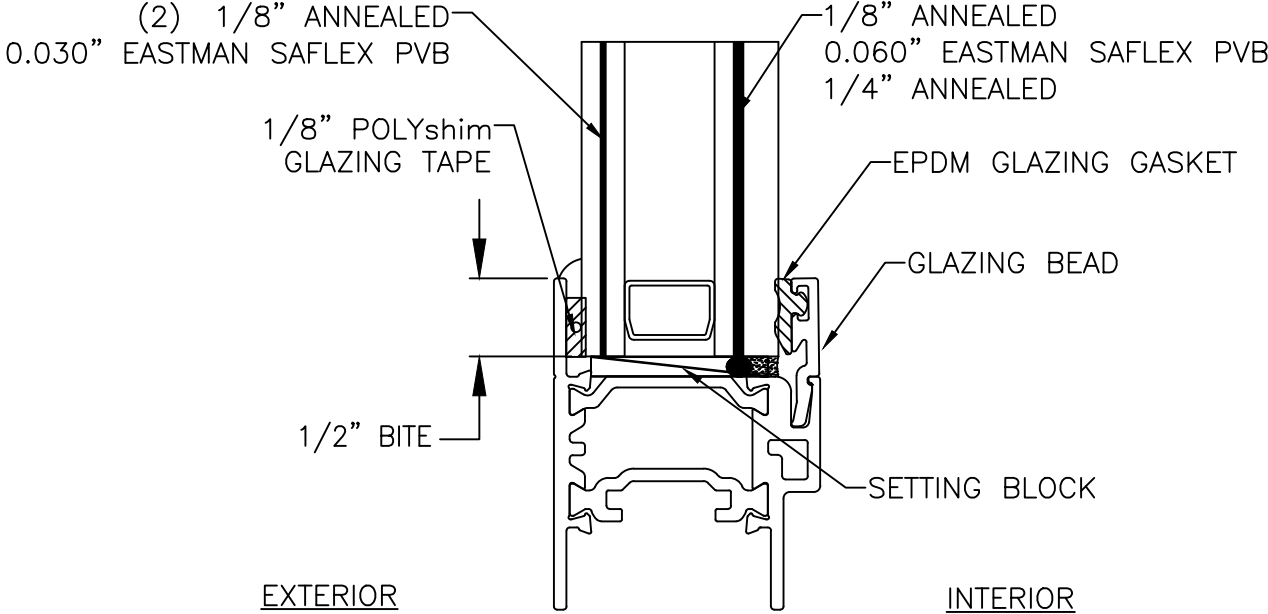
Sash Construction: Miter cut corner with internal aluminum and cast steel corner keys.

Drainage: (2) 1-1/2" x 5/16" weep slot with cover	Sill, 4" from each jamb
(4) Ball Valves	Each end of interior and exterior sill pockets.

Hardware: Sweep Locks	Two (2) total	Operable sash meeting stile, 14-1/2" from each end.
Sweep Lock Keeper	Two (2) total	Fixed sash meeting stile, 14-1/2" from each end
Spring Lock	One (1) total	Operable sash at jamb stile
Stainless Steel Roller Assembly	Four (4) total	Two per sash

Reinforcement: None

GLAZING DETAIL
1-1/4" INSULATING GLASS



4040 Horizontal Sliding - Impact
Glazing Details

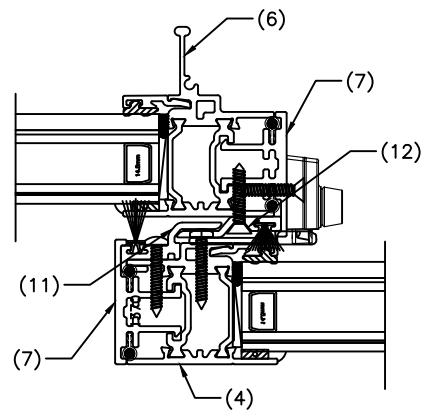
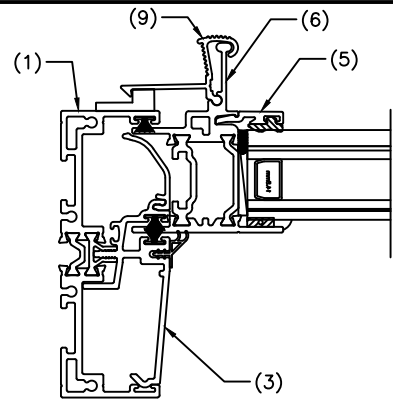
St. Cloud Window

390 Industrial Boulevard
Sauk Rapids, MN 56379

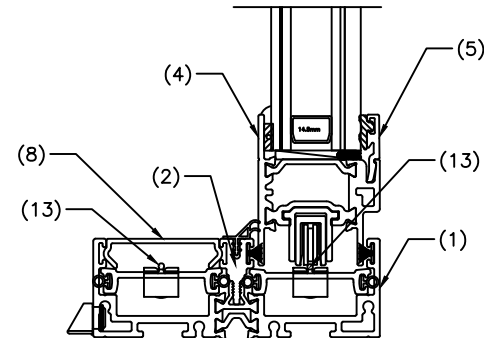
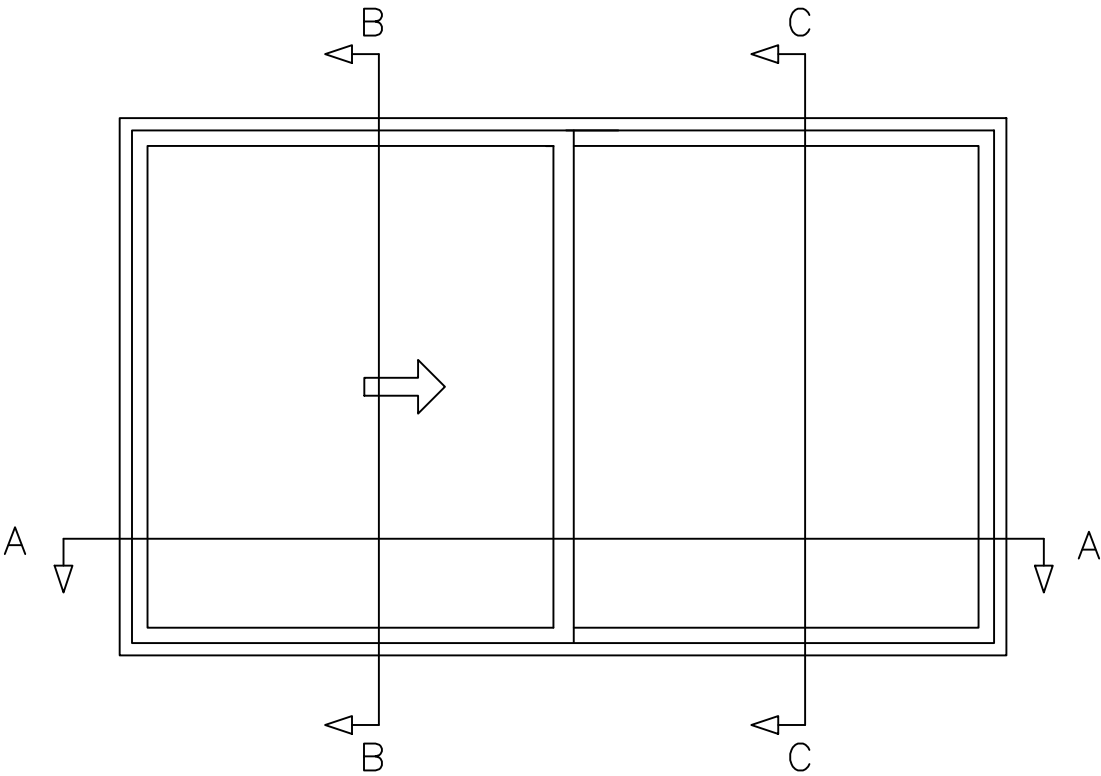
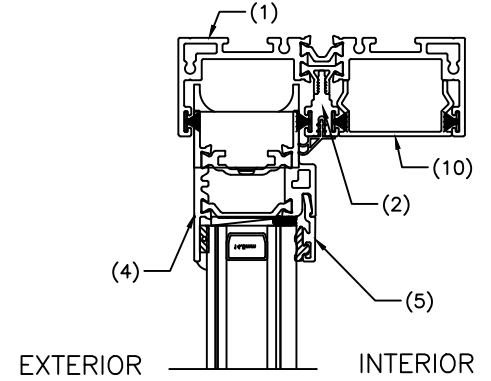
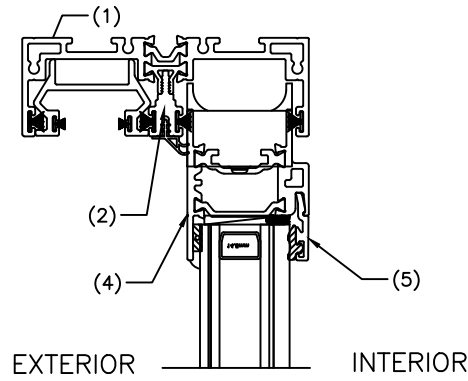
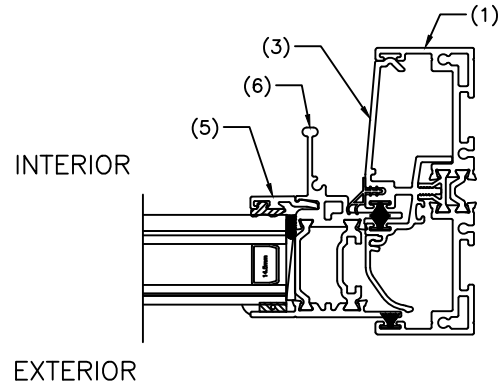
Drawing No.: Q4674-1002
Project No.: Q4674.01-122-34
Drawn By: JAR Rev: - Date: 08/23/23

Scale: NTS

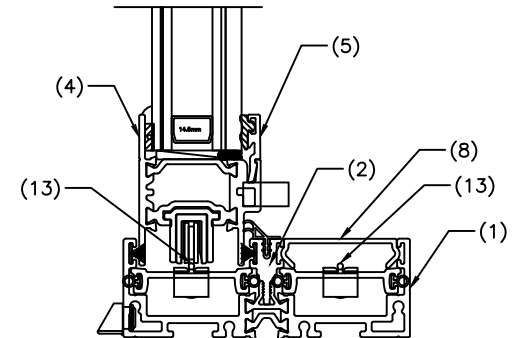
Sheet 6 of 8



SECTION A-A



SECTION B-B



SECTION C-C

HARDWARE		
ITEM	NUMBER	LOCATION
SWEEP LOCK	2	OPERABLE SASH MEETING STILE
SWEEP LOCK KEEPER	2	FIXED SASH MEETING STILE
PINCH LOCK	1	OPERABLE SASH JAMB STILE
STAINLESS STEEL ROLLER ASS'Y	4	TWO EACH SASH
WEATHERSTRIPPING		
ITEM	NUMBER	LOCATION
1/4" 5-FIN	4 ROWS	SASH POCKETS AT HEAD
1/4" 5-FIN	4 ROWS	INTERIOR SASH, SASH POCKETS AT JAMB AND SILL
1/4" 5-FIN	4 ROWS	EXTERIOR SASH, SASH POCKETS AT JAMB AND SILL
1/4" PILE	1 ROW	FIXED SASH MEETING STILE
5/32" PILE	1 ROW	OPERABLE SASH MEETING STILE
2-FIN GASKET	1 ROW	PARTING STOP
FELT	2	AT PVC BLOCKS AT PARTING STOP

ITEM NO.	NAME	MATERIAL	DESCRIP.
1	Master Frame	6063-T6	EXTRUSION
2	Parting Stop	6063-T6	EXTRUSION
3	Sill Snap	6063-T6	EXTRUSION
4	Sash Frame	6063-T6	EXTRUSION
5	Glazing Bead	6063-T6	EXTRUSION
6	Sash with Lift Handle	6063-T6	EXTRUSION
7	Rail Cover	6063-T6	EXTRUSION
8	Snap-in Trim	6063-T6	EXTRUSION
9	Pinch Lock	6063-T6	EXTRUSION
10	Snap-in Trim	6063-T6	EXTRUSION
11	Interlock	PVC	EXTRUSION
12	Interlock	PVC	EXTRUSION
13	Roller Support	6063-T6	EXTRUSION

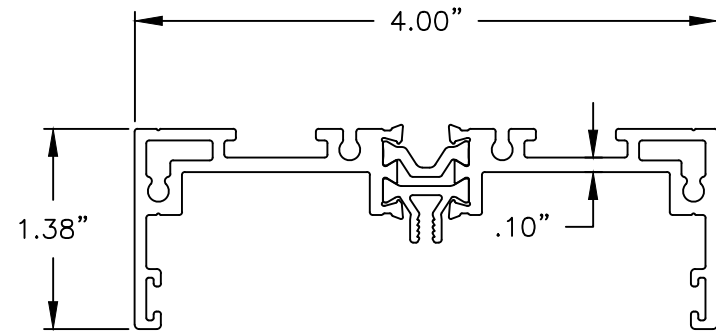
4040 Horizontal Sliding - Impact
Sections and Bill of Materials

St. Cloud Window
390 Industrial Boulevard
Sauk Rapids, MN 56379

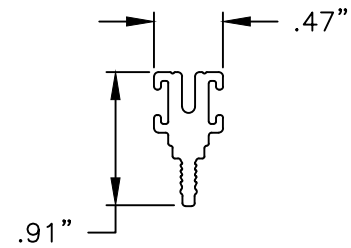
Drawing No.: Q4674-1002
Project No.: Q4674.01-122-34
Drawn By: JAR Rev: - Date: 08/23/23

Scale: NTS

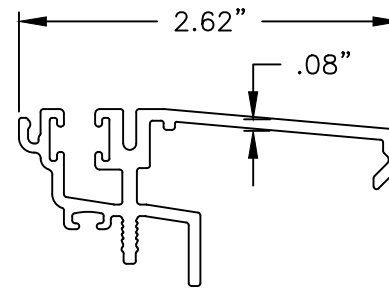
Sheet 7 of 8



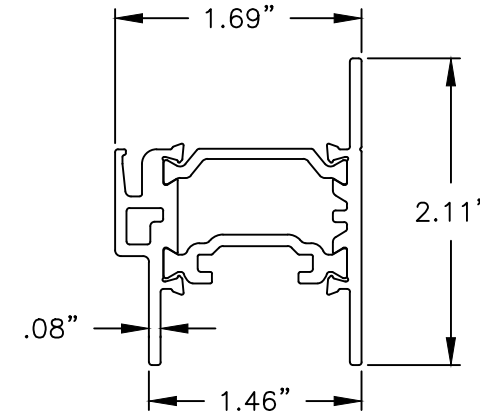
MASTER FRAME
6063-T6



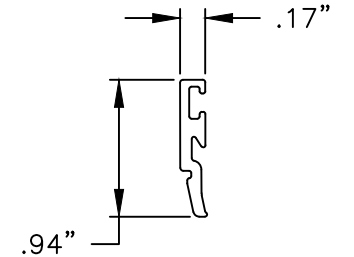
PARTING STOP
6063-T6



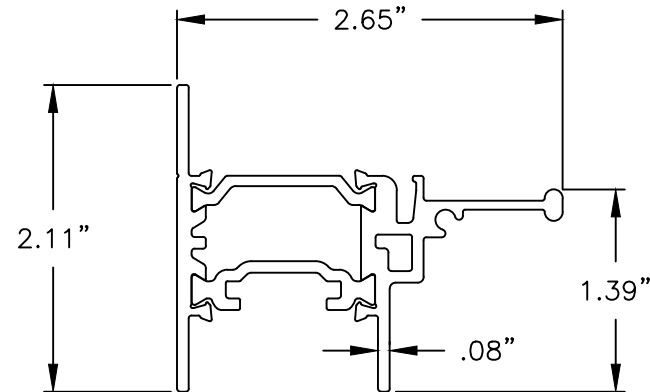
SILL SNAP
6063-T6



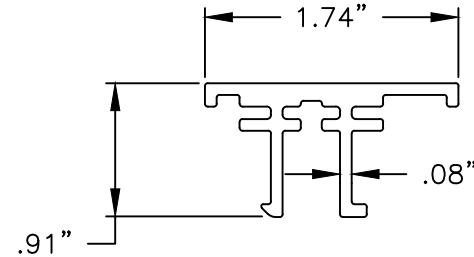
SASH FRAME
6063-T6



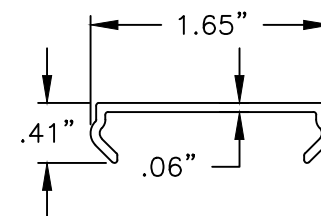
GLAZING BEAD
6063-T6



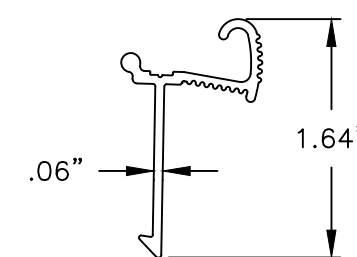
SASH WITH LIFT HANDLE
6063-T6



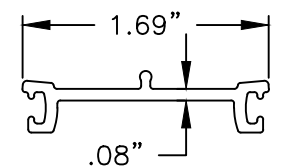
RAIL COVER
6063-T6



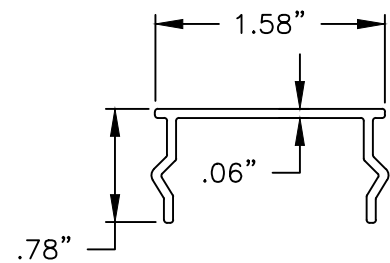
SNAP-IN TRIM
6063-T6



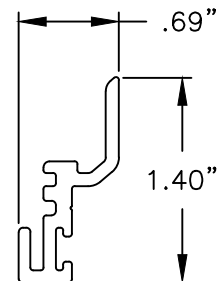
PINCH LOCK
6063-T6



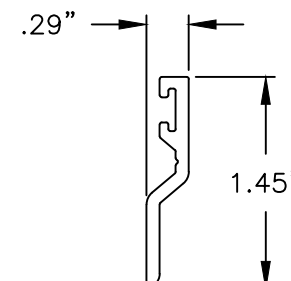
ROLLER SUPPORT
6063-T6



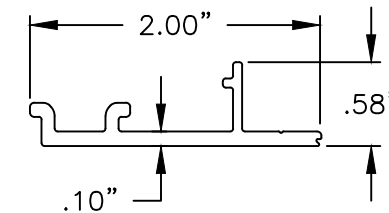
SNAP-IN TRIM
6063-T6



INTERLOCK
PVC



INTERLOCK
PVC



ANCHOR CLIP
6063-T6

4040 Horizontal Sliding - Impact Components

St. Cloud Window

390 Industrial Boulevard
Sauk Rapids, MN 56379

Drawing No.: Q4674-1002
Project No.: Q4674.01-122-34
Drawn By: JAR Rev: - Date: 08/23/23

Scale: NTS

Sheet 8 of 8