

## TEST REPORT

*Performance Evaluation of*  
Sliding Glass Door  
"Capri 3.0"

*Performed in Accordance with:*  
AAMA/WDMA/CSA101/I.S.2/A440-22 (NAFS-22)  
& CSA A440S1-19

Report No.: L24-926-6873

Report Date: February 6, 2024

Prepared for:  
Vista Patio Doors Inc.  
69 Jardin Drive  
Concord, ON L4K 1X5  
Canada

### Overall Performance Rating

**Test Completion Date: December 20, 2023**

Class R-PG1440: Size tested 1830 mm x 2000 mm-Type SGD

Class R-PG30: Size tested 72.05 in x 78.74 in-Type SGD

Positive Design Pressure: 1440 Pa (30.00 psf)

Negative Design Pressure: 1440 Pa (30.00 psf)

Water Penetration Resistance: 220 Pa (4.59 psf)

Canadian Air Infiltration/Exfiltration: A3

Forced Entry Resistance: Grade 10

*Respectfully submitted by:*

**CANADIAN BUILDING ENVELOPE**  
Science and Technology (CAN-BEST)



*Tests Performed by:*

Sandi Abdelrehim, E.I.T.  
Project Manager



*Person in Responsible Charge:*

Elie Alkhoury, M.Eng. (Building Science), P.Eng.  
Director, Research and Testing Services

1. This report does not constitute certification of the test product. The reported test results refer only to the specimen tested. No representation is made that other samples of similar design will feature like performance.
2. This report was prepared for the consideration of the addressee only. It shall not be used by any other party without the written consent of CAN-BEST.
3. This report may not be reproduced or quoted in partial form without the approval of CAN-BEST.

## 1. INTRODUCTION

Canadian Building Envelope Science and Technology (CAN-BEST) was retained by Vista Patio Doors Inc. to test one Sliding Glass Door. Testing was conducted in accordance with the performance requirements outlined in AAMA/WDMA/CSA101/I.S.2/A440-22 'North American Fenestration Standard / Specification for Windows, Doors, and Skylights' and its Canadian Supplement CSA A440 S1-19. Where applicable, testing was carried out in accordance with the corresponding ASTM standard test method.

This report covers tests carried out on one specimen of specific dimensions. Product performance is affected by variations in its dimensions, assembly details and installation method. The reader is advised to ensure product conformity with all the details of the test sample described in the following section.

No conclusions regarding glass structural performance may be drawn from the reported results.

## 2. SAMPLE DESCRIPTION

**Designation:** "Capri 3.0"

**Type:** Vinyl Sliding Glass Door 1830 mm wide by 2000 mm high (72.05 in by 78.74 in)

**Sampling:** Sampling of the test specimen was carried out by the Client.

**Specimen Details:** Details of specimen construction and installation, as provided by the client and verified by CAN-BEST, are provided in the following drawings:

**Drawings:** *Description Pages:* 2 pages

*Vertical and horizontal sections* 3 pages

*Bill of Materials* 1 page

*Die Drawings* 8 pages

Copy of the above drawing(s), stamped "Canadian Building Envelope Science and Technology", is enclosed with this report.

## 3. TEST RESULTS

Detailed test results are presented in Tables (1.1) and (1.2) for the Gateway and Optional Performance requirements respectively.

---

### Notes:

1. *This report does not constitute certification of this product, which may only be granted by an Accredited Certification Agency.*

2. *The reported results were secured by using the designated test methods and they (DO) indicate compliance with the performance requirements of the referenced publication.*

3. *The product tested is detailed in drawings, which were supplied by the manufacturer and annexed to this report. Any other descriptions were supplied verbally by the manufacturer. The general descriptions in this report are for reference only.*

**Table (1.1): Test Results, Gateway Performance Requirements**

Test Size: 1830 mm x 2000 mm (72.05 in x 78.74 in)

Test Start Date: December 20, 2023

Test Finish Date: December 20, 2023

Test	Specifications	Test Results	Rating
<b>Air Leakage Resistance</b>  <b>8.3.2</b> <i>ASTM E283</i>	Rate of air leakage (Infiltration/Exfiltration) shall be less than or equal to the following:  <i>l/s/m<sup>2</sup> (cfm/ft<sup>2</sup>)</i>  <i>Canadian A2:</i> 1.5 (0.30) <i>Canadian A3:</i> 0.5 (0.10) <i>Canadian Fixed:</i> 0.2 (0.04) Test Pressure, Pa (psf): 75 (1.57)	Surface Area, m <sup>2</sup> (ft <sup>2</sup> ): 3.660 (39.40)  Measured Air Flow, l/s (cfm):  <i>Infiltration:</i> 1.13 (2.39) <i>Exfiltration:</i> 1.81 (3.84)  Rates of Air Flow, l/s/m <sup>2</sup> (cfm/ft <sup>2</sup> ):  <i>Infiltration:</i> 0.31 (0.06) <i>Exfiltration:</i> 0.49 (0.10)	<b>PASS</b> Canadian A3
<b>Water Resistance</b>  <b>8.3.3</b> <i>ASTM E 547</i>	No leakage past innermost plane following four pressure cycles, each five minutes "ON" and one minute "OFF".  Test Pressure, Pa (psf): 140 (2.92) (Equivalent to wind speed of 34 mph)	No leakage past innermost plane was observed.  <i>Test Result</i> <i>With Screen, OK 4 cycles</i> <i>Without Screen, OK, 4 Cycles</i>	<b>PASS</b>
<b>Uniform Load Deflection</b>  <b>8.3.4.2</b> <i>ASTM E 330</i>	Report the net deflections at the following test pressure, Pa (psf):  Inward Pressure: 720 (15.03) Outward Pressure: 720 (15.03) (Equivalent to wind speed of 77 mph)	Span, mm (in): 1880 (74.02)  Measured net deflection of Meeting Stiles:  <i>Deflection, mm (in)</i>  Inward: 5.8 (0.230) Outward: 7.2 (0.283)	<b>Report Only</b>
<b>Uniform Load Structural</b>  <b>8.3.4.3</b> <i>ASTM E 330</i>	No glass breakage or permanent damage to window components at the following test pressure, Pa (psf).  Net Permanent Deflection to be less than 0.4% of span, or 7.5 mm (0.296 in).  Inward Pressure: 1080 (22.55) Outward Pressure: 1080 (22.55) (Equivalent to wind speed of 94 mph)	Measured net permanent deflection of Meeting Stiles, mm (in):  Span = 1880 (74.02)  <i>Deflection % Span</i>  Inward: 0.62 (0.024) 0.03 Outward: 0.98 (0.039) 0.05	<b>Report Only</b>

**Table (1.1): Test Results, Gateway Performance Requirements, Continued**

Test Size: 1830 mm x 2000 mm (72.05 in x 78.74 in)

Test Start Date: December 20, 2023

Test Finish Date: December 20, 2023

Test	Specifications	Test Results	Rating
<b>Forced Entry Resistance</b>	No entry shall be gained during the following sequence of disassembly, load tests and hardware and sash manipulation tests:	No entry was gained following the specified sequence of testing.	
<b>8.3.5</b>	Disassembly T1: 5 minutes <u>Hardware Load: N (lbf)</u> L1: 1334 (300) L2: 778 (175)	<i>Test</i> Disassembly T1: OK <i>Hardware Load:</i> L1: OK L2: OK	<b>Grade 10</b>
<i>ASTM F 842</i>	Manipulation T1: 5 minutes	Manipulation T1: OK	
<b>Deglazing Test</b>	Sash members shall not move from their original position by more than 90% of the original glazing bite under the following applied loads, N (lbf):	Measured glazing bite mm: 12.50 <i>Member</i> <i>Deglazing</i> <i>%</i> Top Rail: 4.40 (0.173) 35% Bottom Rail: 4.00 (0.157) 32% Meeting Stile: 6.50 (0.256) 52% Lock Stile: 5.10 (0.201) 41%	<b>PASS</b>
<b>8.3.6.2</b>	Rails: 230 (51.70) Stiles: 320 (71.94)		
<i>ASTM E 987</i>			

**Table (1.2): Test Results, Optional Performance Requirements**

Class R-PG30-SGD

Test Size: 1830 mm x 2000 mm (72.05 in x 78.74 in)

Test Start Date: December 20, 2023

Test Finish Date: December 20, 2023

Test	Specifications	Test Results	Rating
<b>Water Resistance</b> <b>8.3.3</b> <i>ASTM E 547</i>	No leakage past innermost plane following four pressure cycles, each five minutes "ON" and one minute "OFF". Test Pressure, Pa (psf): 220 (4.59) (Equivalent to wind speed of 42 mph)	No leakage past innermost plane was observed.  <i>Test Result</i> With Screen, OK 4 cycles Without Screen, OK, 4 Cycles	<b>PASS</b>
<b>Uniform Load Deflection</b> <b>8.3.4.2</b> <i>ASTM E 330</i>	Report the net deflections at the following test pressures, Pa (psf):  Inward Pressure: 1440 (30.07) Outward Pressure: 1440 (30.07) (Equivalent to wind speed of 108 mph)	Span, mm (in): 1880 (74.02)  Measured net deflection of Meeting Stiles:  <i>Deflection, mm (in)</i> Inward: 10.4 (0.409) Outward: 12.8 (0.504)	<b>Report Only</b>
<b>Uniform Load Structural</b> <b>8.3.4.3</b> <i>ASTM E 330</i>	No glass breakage or permanent damage to window components, at Test Pressures, Pa (psf). Net Permanent Deflection to be less than 0.4% of span, or 7.5 mm (0.296 in). Inward Pressure: 2160 (45.11) Outward Pressure: 2160 (45.10) (Equivalent to wind speed of 163 mph)	Measured net permanent deflection of Meeting Stiles, mm (in): Span = 1880 (74.02)  <i>Deflection % Span</i> Inward: 0.89 (0.035) 0.05 Outward: 1.09 (0.043) 0.06	<b>Report Only</b>

**4. Modifications:** The following modifications were performed on the specimen during testing in order to attain the reported results:

*Air Leakage Resistance:* The operable panel was replaced in order to adjust the door.

## Revision Log

Rev. No	Change	Date	Apprv. By
-	Original report issued	February 6, 2024	EA

Item	Type, Material, Part #	Qty*	Size (W x H x D)	Location, Fastening, Seals, Comments
<b>Frame</b>	Sliding door, Extruded PVC	1	1816.1mm x 2012.95mm	One operable and one stationary panel
<b>Panel</b>	Lift-out, Extruded PVC	2	904.8750mm x 1920.8750mm	Stationary panel mechanically fastened to the jamb with clips and #8 x 1 1/4" (4.2mm x 31.75mm) screws.
<b>Joinery</b>	Mechanical			Mechanical corners – Fastened with #8 x 1 1/2" (4.2mm x 38.1mm) screws (4 per panel), perimeter sealed w/ silicone sealant.
<b>Installation</b>	Wood buck	1	1828mm x 2032mm	Fastened with #8 x 3 1/2" (4.2mm x 88.9mm) screws (10 per jamb), perimeter sealed w/ silicone sealant
<b>Glazing Method</b>	Laid in glazed			
	Gasket		149 mm x 60mm x 3.37mm	Sill gasket
	Gasket		149 mm x 56.30mm x 3.37mm	Header gasket
<b>Thermal Break</b>	None			
<b>Reinforcement</b>	Shape section	4	36.25mm x 40.29mm	Thickness 1.76mm
<b>Weatherstrips</b>				
Panel	Pile with high fin	2	Height: 7.50mm	Meeting stiles
Top/bottom	Pile	8	Height: 4.064 mm	Operable Panel
Frame	Pile	4	Height: 5.84 mm	Jambs
Frame	Bulb seal	4	Height: 11.20	Jambs
Screen	Pile	1	Height: 15.875 mm	Meeting stiles
<b>Drainage</b>				
Sash	Drain slots/ Holes	8	Diameter: 6.35mm	Glazing cavity, 9.30mm from the ends
Frame	Drain slots	2	Diameter: 25.4mm	Sill, ends of panel support interior face
Fix panel support	Drain slots	2	Diameter: 25.4mm	ends of fix panel support interior face
<b>Add-Ons</b>				
Fix Panel Support	Extruded PVC	1	Length: 914.4mm	Sill, exterior channel
Screen track	Snap-On/In, Aluminum	1	Length: 1758.95mm	Sill, Screen channel, full length
Roller track	Snap-On/In, Aluminum	1	Length: 1758.95mm	Sill, interior channel, full length



The above descriptions were provided by the manufacturer. Items and/or material properties were verified by CAN-BEST for general conformity only.

\* Quantity is total unless otherwise specified

**TEST SAMPLE DESCRIPTION** Model: "CAPRI 3.0" SLIDING DOOR

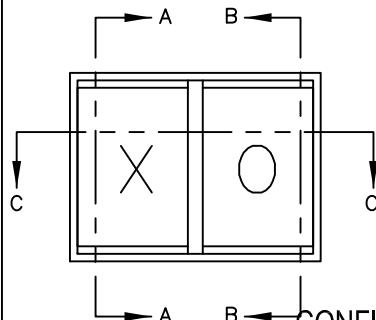
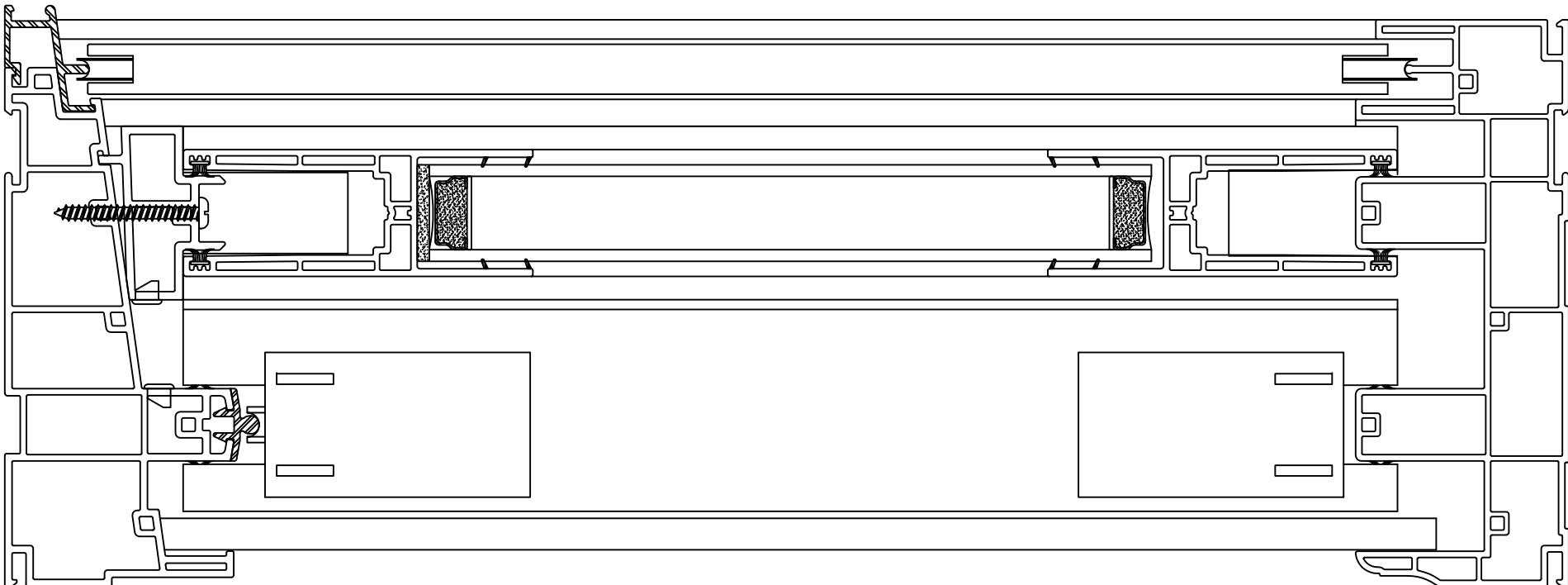
PAGE 2 OF 2

Item	Type, Material, Part #	Qty*	Size (W x H x D)	Location, Fastening, Seals, Comments
Sill Cap	Snap-On/In, Aluminum	0		Sill, exterior channel
Interlocks	Extruded PVC	2	1920.875mm	snap on no screw
Travel Limiter	Extruded PVC	x	Length: xx	Ends of stationary jambs
<b>Hardware</b>				
Lock	Two-Point Lock, Metal	1	Length: 1111.25mm	Lock stile, center, mechanically fastened with 4.2mm x 19.05mm screws
Handle	Metal	1	Length: 328.6125	Pull stile, center, fastened with 4.2mm x 53.975mm screws and 4.2mm x 25.4mm
Keepers	Two points engagement system, metal	1	Lenth: 1069.975mm	Lock jamb, interior channel, center, fastened with 4.2mm x 63.5mm screws
Rollers	Nylon	2	Length: 168.275mm	End of bottom rail, operable panel, each fastened with xxx screws
<b>Screen</b>			(863.6mm x 1946.275 mm)	Half Screen, Exterior, supported on 4 sides, corner key:, Frame: Extruded Aluminum, Mesh: Fiberglass, Spline: Round
Rollers	Plastic	2	Length: 123.825mm	Ends of top and bottom rails
Lock	Plastic	1	Length: 130.175mm	Operable stile, center, fastened with 3.3mm x 19.05mm screws



The above descriptions were provided by the manufacturer. Items and/or material properties were verified by CAN-BEST for general conformity only.

\* Quantity is total unless otherwise specified



 Canadian Building Envelope  
Science and Technology  
**CAN-BEST**  
This document forms part of:

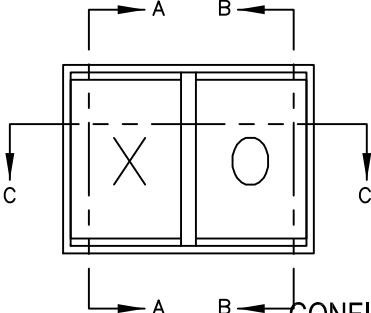
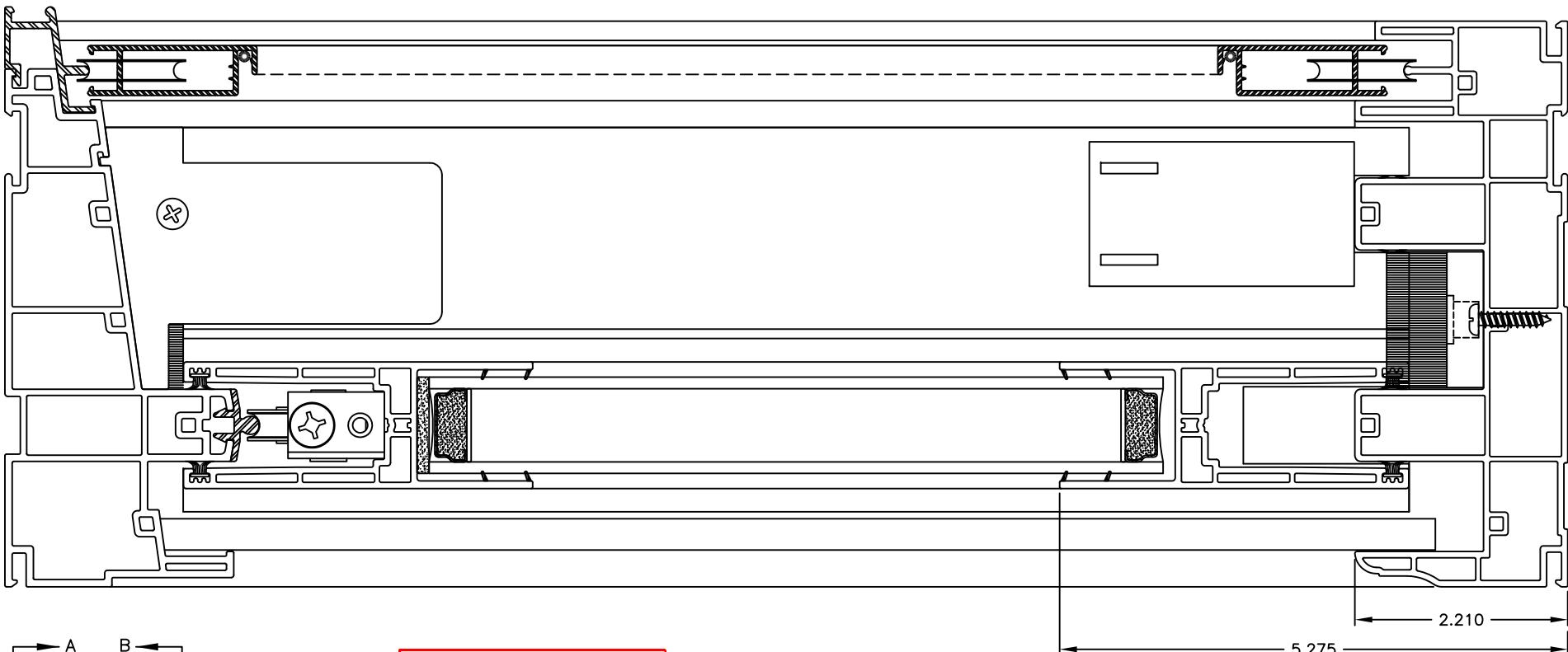
Report No.:	L24-926-6873
Verified By:	
Date:	FEBRUARY 06, 2024

## VERTICAL SECTION A-A

THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED WITHIN ARE  
THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. ITS CONTENTS ARE NOT TO  
BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT  
THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..

Title: CAPRI 3.0 SLIDING GLASS DOOR	Scale: FULL	Designed By:	Dwg. No.:	Die No.:
Customer: VISTA PATIO DOOR	Date: 3-MAY-21	Drawn By: CDF	Material: PVC	Prog .No.:

**vinylCraft**  
extrusions

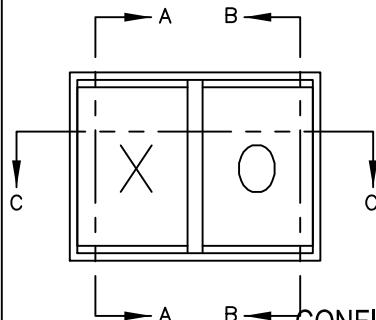
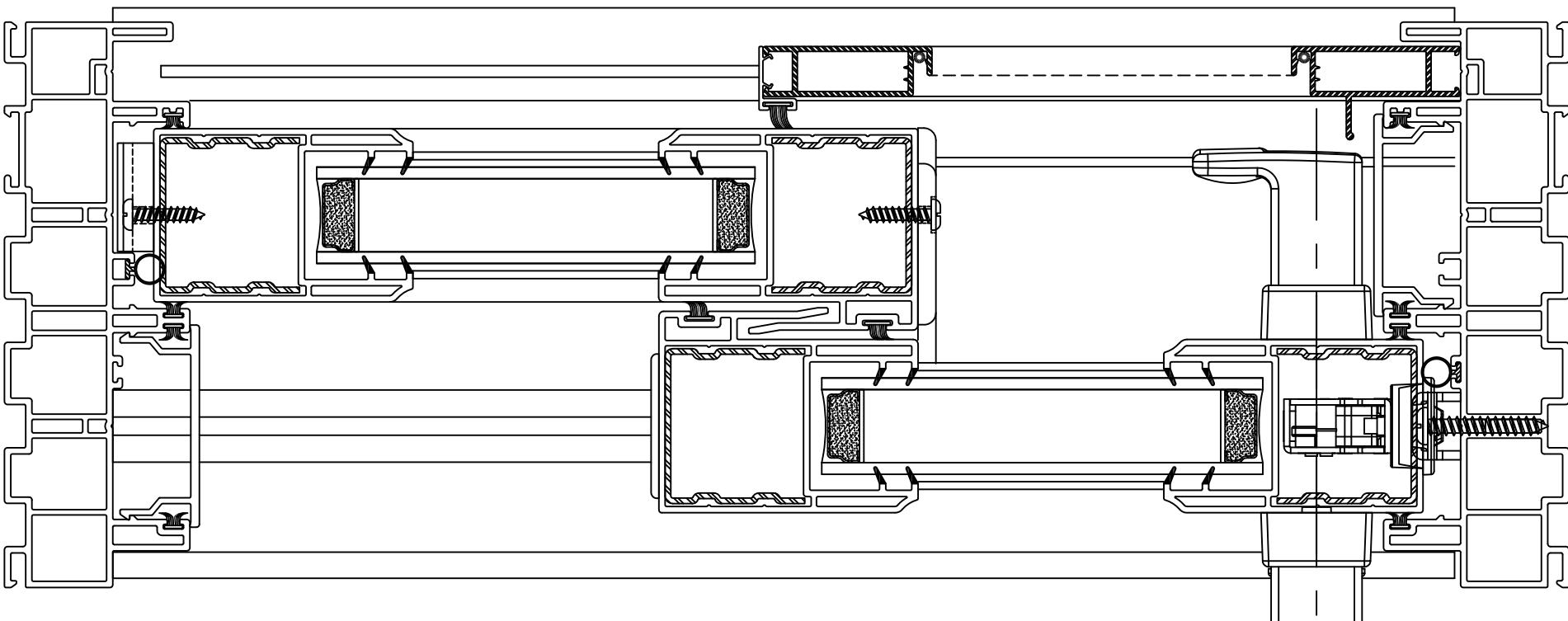


CONFIDENTIAL !  
THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED WITHIN ARE  
THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. ITS CONTENTS ARE NOT TO  
BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT  
THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..

Title: CAPRI 3.0 SLIDING GLASS DOOR	Scale: FULL	Designed By:	Dwg. No.:	Die No.:
Customer: VISTA PATIO DOOR	Date: 3-MAY-21	Drawn By: CDF	Material: PVC	Prog .No.:

VERTICAL SECTION B-B

**vinylCraft**  
extrusions



HORIZONTAL SECTION C-C

THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED WITHIN ARE THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. ITS CONTENTS ARE NOT TO BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..

CONFIDENTIAL !

Title: CAPRI 3.0 SLIDING GLASS DOOR	Scale: FULL	Designed By: <input checked="" type="checkbox"/>	Dwg. No.: <input checked="" type="checkbox"/>	Die No.: <input checked="" type="checkbox"/>
Customer: VISTA PATIO DOOR	Date: 3-MAY-21	Drawn By: CDF	Material: PVC	Prog .No.: <input checked="" type="checkbox"/>

**vinylCraft**  
extrusions

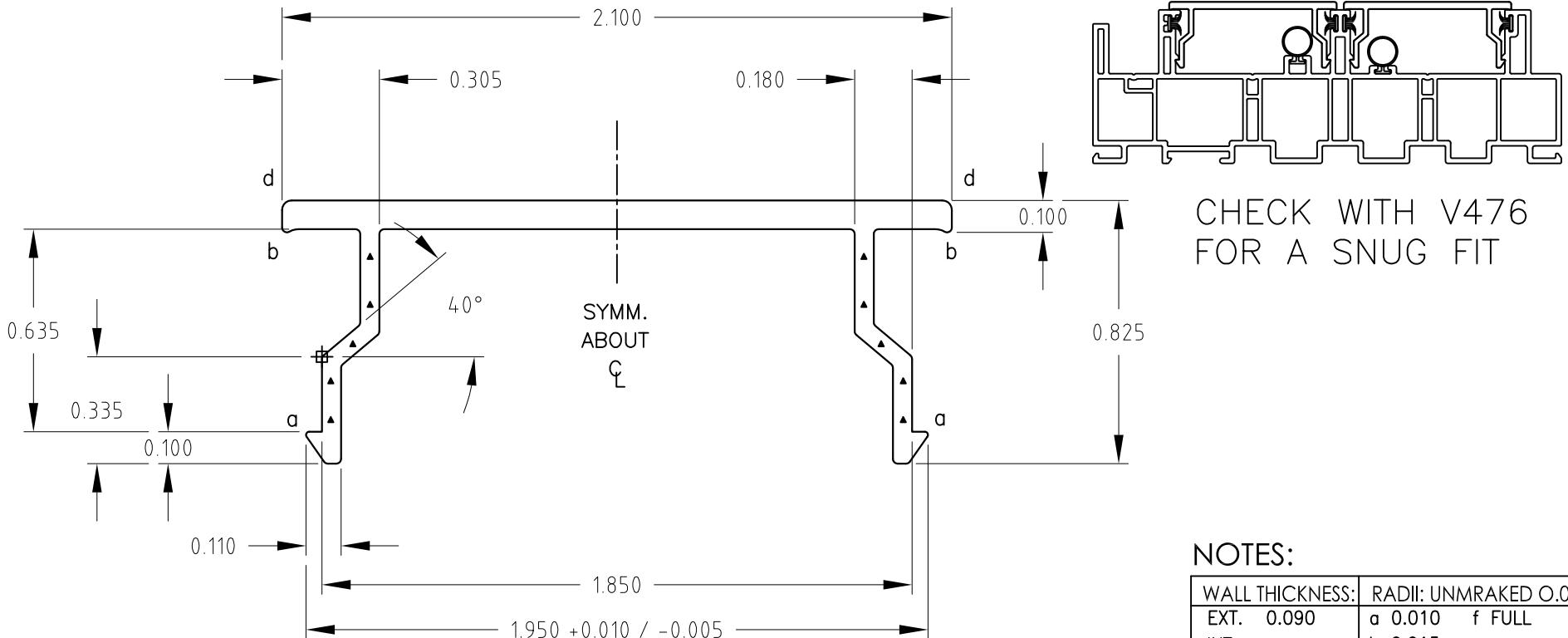
PART NUMBER	PART NAME
V412	JAMB
V457	HEADER
V411	SILL
V838	FIX PANEL SUPPORT
V016	LOCK RAIL/LOCKRAIL
V020	INTERLOCK
V014	TOP/BOTTOM
D939	JAMB POCKET COVER
187 Backing/ Pile220	JAMB WEATHERSTRIP
187 backing /pile 150	TOP/ BOTTOM WEATHERSTRIP
310 BACKING / pile 250	INTERLOCK WEATHERSTRIP
VISTA4	SASH CLIP
VISTA1	PANEL FLAT CAP
VISTA2	END CAP
VISTA6	ANTI LIFT
2217VIS	BUMBER
PD 1609G0605625	ALUMINUM REINFORCEMENT

 <b>Canadian Building Envelope Science and Technology</b>	
<i>This document forms part of:</i>	
Report No.:	L24-926-6873
Verified By:	
Date:	FEBRUARY 06, 2024









## NOTES:

WALL THICKNESS:	RADIi: UNMRAKED 0.015
EXT. 0.090	a 0.010 f FULL
INT. -----	b 0.015 g -----
▲ 0.060	c 0.020 h -----
• -----	d 0.030 i -----
e -----	m MINIMUM RAD

## TOLERANCES:

DIMENSIONS:  $+\/- 0.015$  UNLESS SPECIFIED  
 WALL THICKNESS:  $+\/- 0.005$  UNLESS SPECIFIED  
 COMPONENT WEIGHT:  $+\/- 5\%$   
 # INTERSECTION  
 CRITICAL  $+\/- 0.010$

AREA (RIGID): -----  
 AREA (FLEX): N/A  
 WEIGHT (TOTAL): -----  
 MATERIAL:  
 HATCHED AREA: RIGID PVC  
 FILLED AREA: FLEX PVC

CONFIDENTIAL !

THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED WITHIN ARE THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. IT'S CONTENTS ARE NOT TO BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..



Title: JAMB CAP

Customer:

Scale: 2:1

Date: 8-SEPT-20

Designed By: CDF

Drawn By: CDF

Dwg. No.:

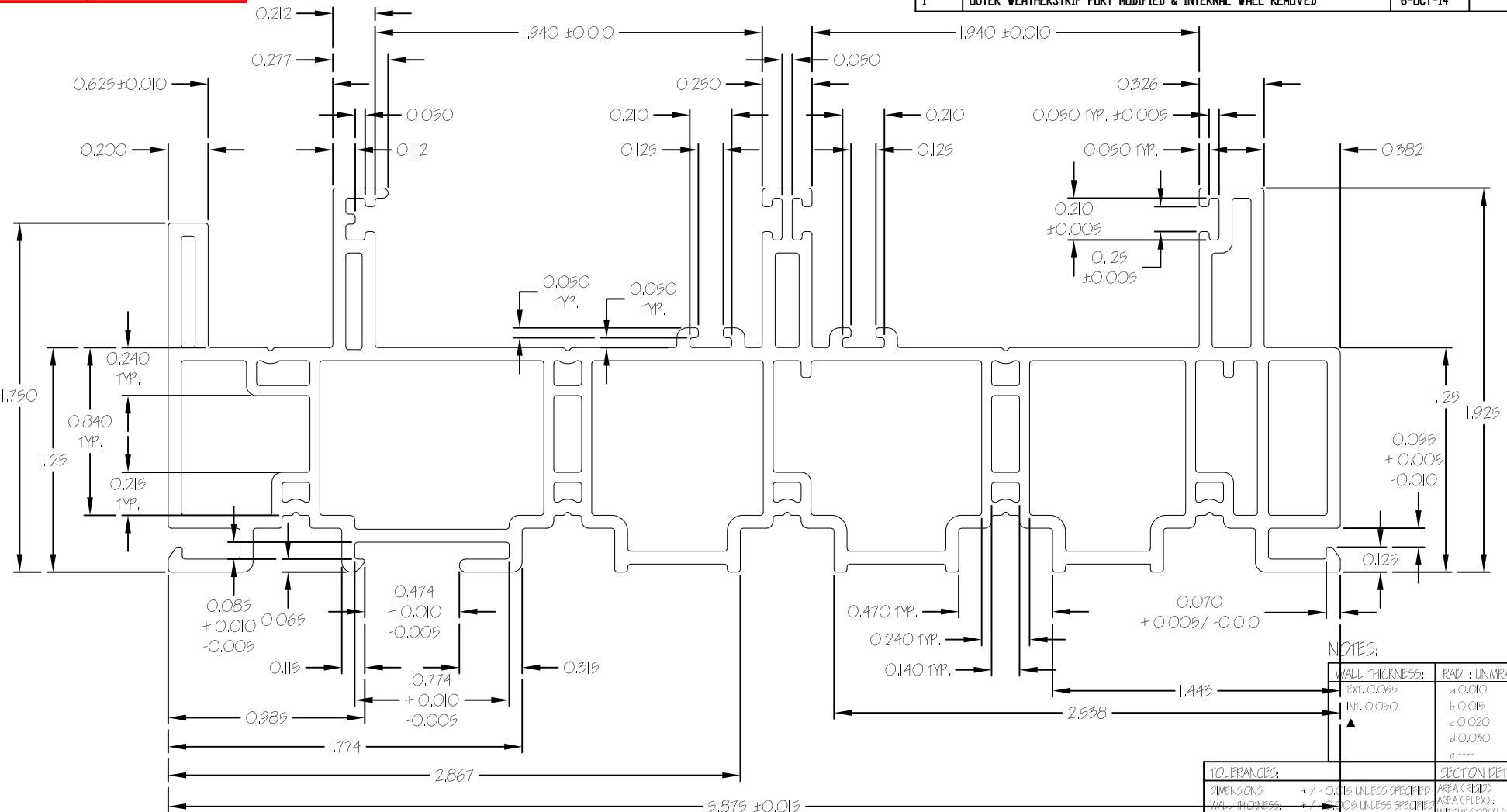
Material: PVC

Die No.: D939

Prog. No.:



RevNo	Revision note	Date	Signature	Checked
1	OUTER WEATHERSTRIP PORT MODIFIED & INTERNAL WALL REMOVED	6-OCT-14		

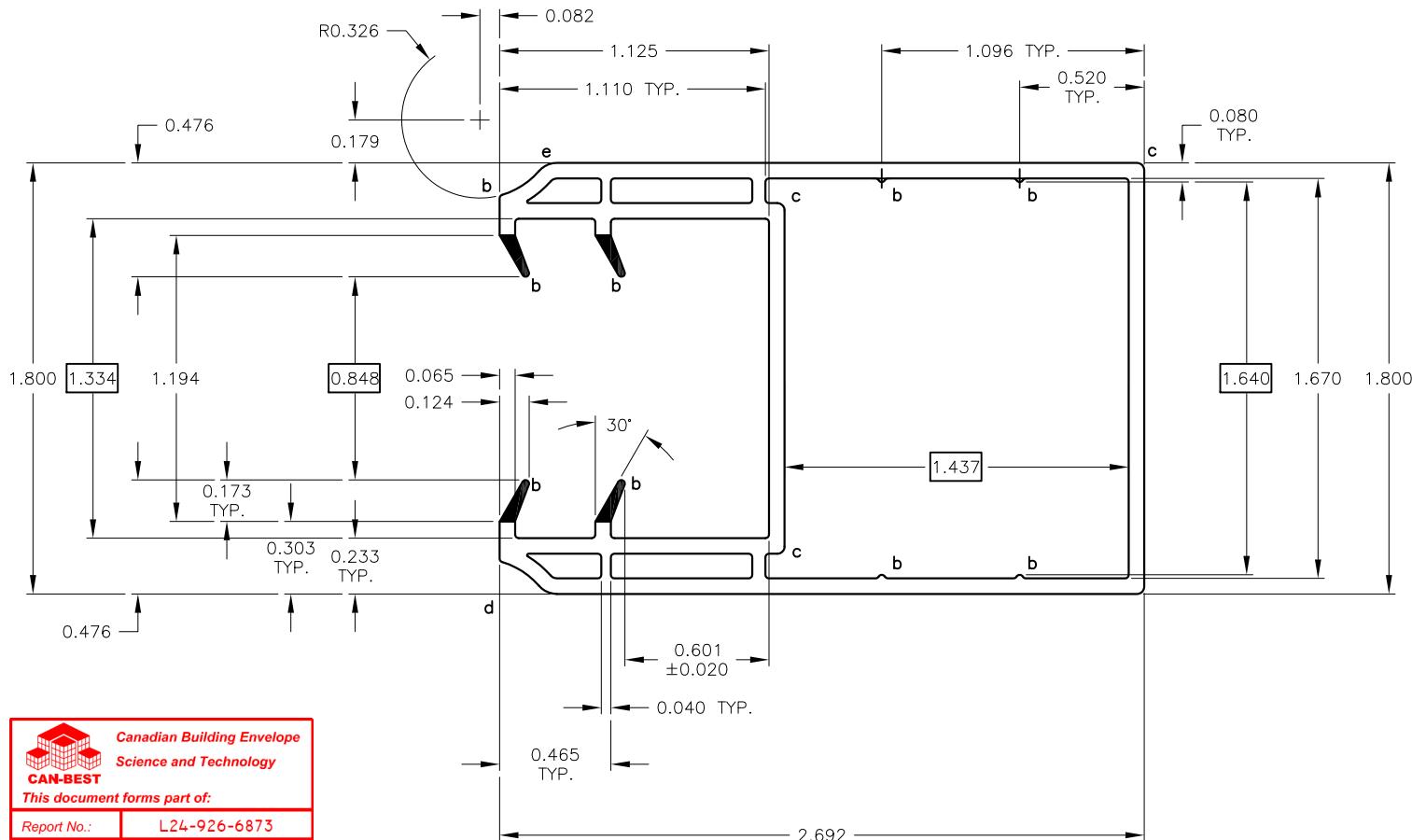


CONFIDENTIAL !

THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED WITHIN ARE THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. ITS CONTENTS ARE NOT TO BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..

Title: PATIO DOOR JAMB		Scale: 2:1	Designed By: <i>[Signature]</i>	Dwg. No.: XXXX	Die No.: V412
Customer: <i>[Signature]</i>		Date: 21-JAN-13	Drawn By: CDF	Material: PVC	Prog. No.: XXXXX

RevNo	Revision note	Date	Signature	Checked
1	DIMENSION AND TOLERANCE FOR INSIDE REVISED FROM 1.625 TP 1.640	9-MAY-19		
2	FLEX REVISED FOR 1.025 GLASS, GLAZING CHANNEL GROOVES REMOVED	9-MAY-19		



CONFIDENTIAL !

THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED WITHIN ARE THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. ITS CONTENTS ARE NOT TO BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..

Title: <b>PULL STILE SASH</b>	Scale: 2:1	Designed By: CDF	Dwg. No.:	Die No.:
Customer:	Date: 29-JAN-13	Drawn By: CDF	Material: PVC	Prog .No.:

vinylCraft  
extrusions

## NOTES:

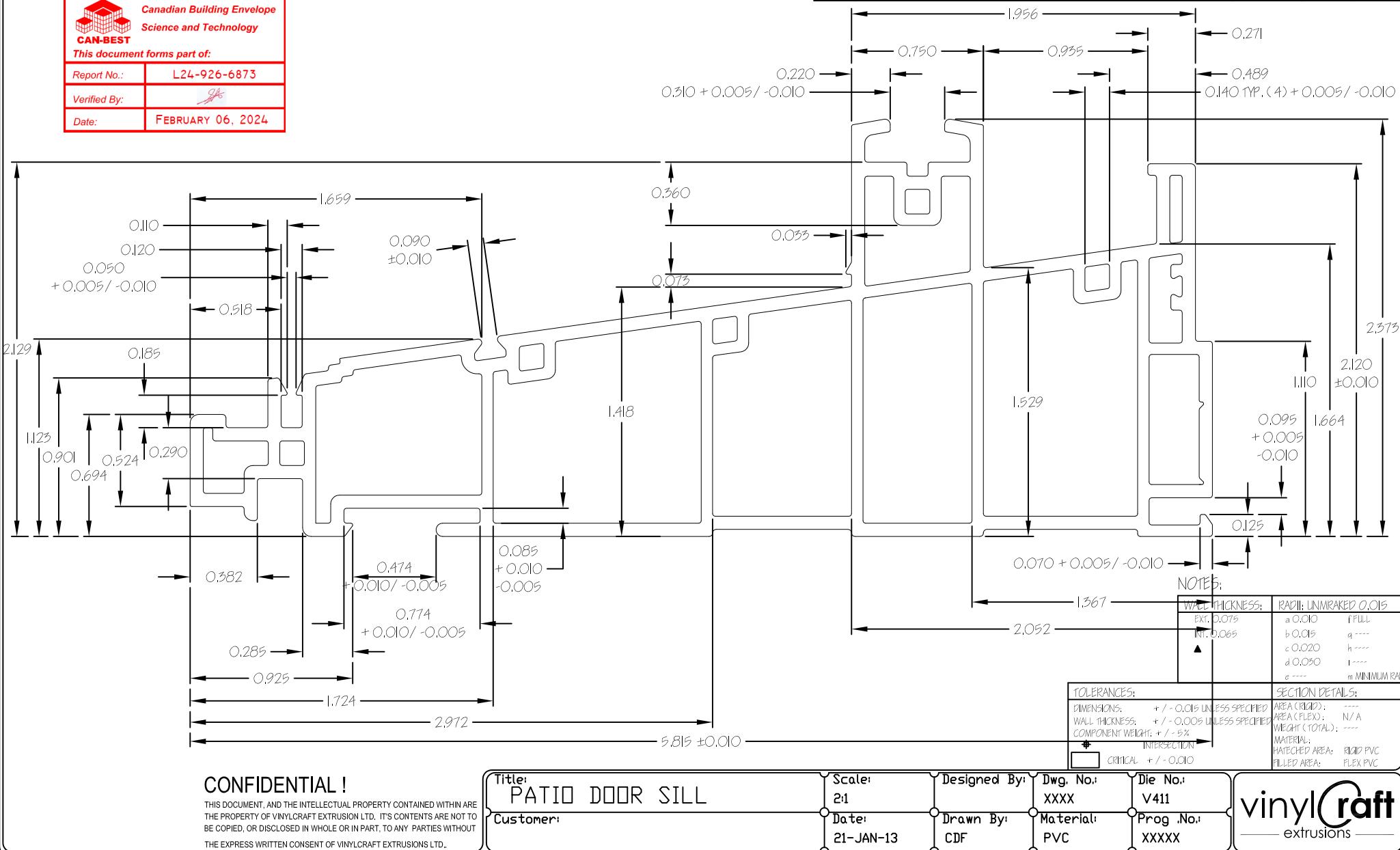
WALL THICKNESS:	RADII: UNMRAKED 0.015		
EXT. 0.065	a	0.010	f FULL
INT. 0.055	b	0.015	g -----
▲ -----	c	0.030	h -----
	d	0.050	i -----
	e	0.100	m MINIMUM RAD

## TOLERANCES:

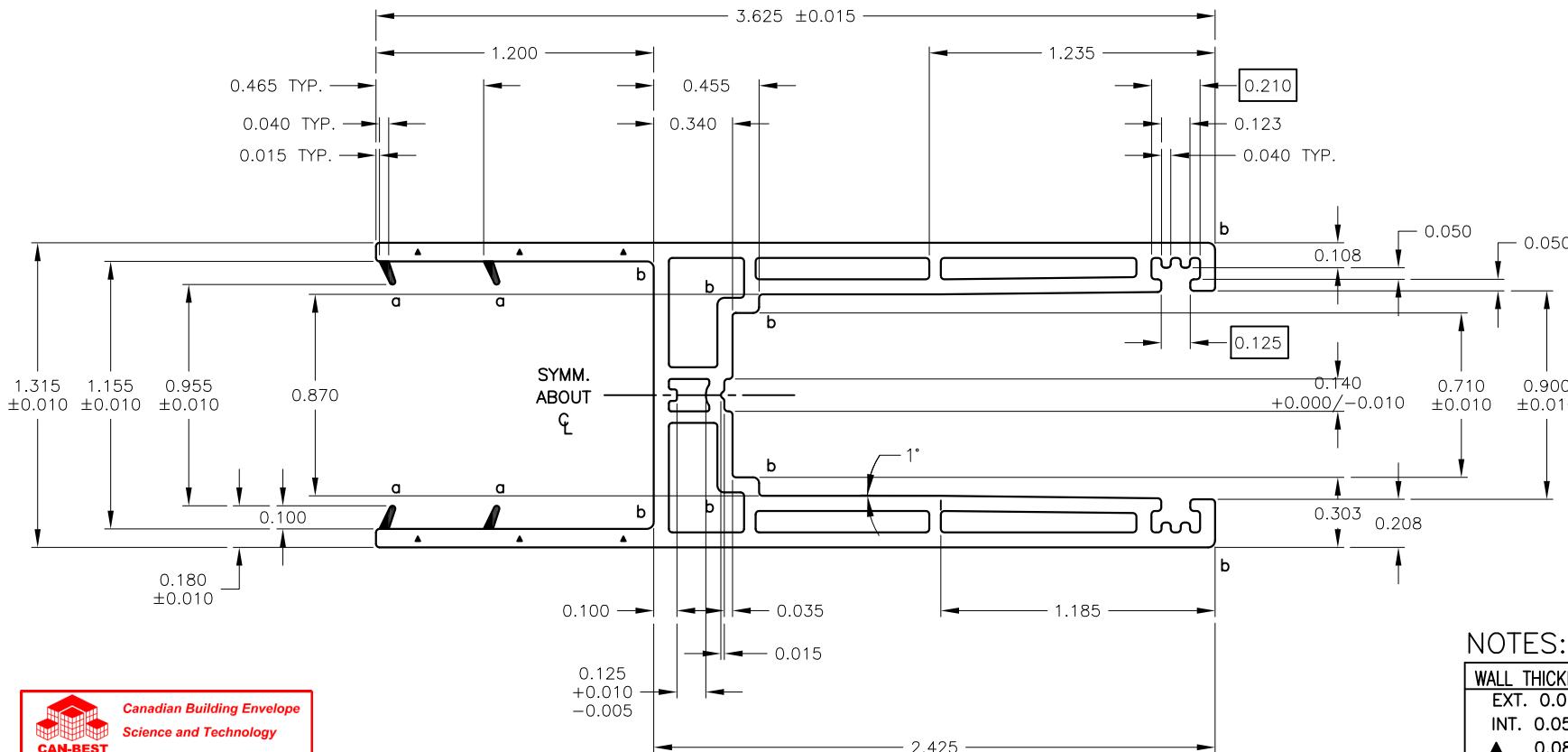
DIMENSIONS:  $+\/- 0.015$  UNLESS SPECIFIED  
WALL THICKNESS:  $+\/- 0.005$  UNLESS SPECIFIED  
COMPONENT WEIGHT:  $+\/- 5\%$   
+ INTERSECTION  
CRITICAL  $+\/- 0.010$

 <b>Canadian Building Envelope</b> <b>Science and Technology</b> <b>CAN-BEST</b>	
<i>This document forms part of:</i>	
Report No.:	L24-926-6873
Verified By:	<i>[Signature]</i>
Date:	FEBRUARY 06, 2024

RevNo	Revision note	Date	Signature	Checked
-------	---------------	------	-----------	---------



RevNo	Revision note	Date	Signature	Checked
1	RIBS REMOVED, FLEX GAP INCREASED & SHOULDER HEIGHT REDUCED	3-FEB-14		
2	FLEX POST REMOVED AND FLEX THINNED OUT TO SUIT 1.025" IGU	15-MAY-19		



CONFIDENTIAL

CONFIDENTIAL  
THIS DOCUMENT, AND THE INTELLECTUAL PROPERTY CONTAINED IN ARE  
THE PROPERTY OF VINYL CRAFT EXTRUSION LTD. ITS CONTENTS ARE NOT TO  
BE COPIED, OR DISCLOSED IN WHOLE OR IN PART, TO ANY PARTIES WITHOUT  
THE EXPRESS WRITTEN CONSENT OF VINYL CRAFT EXTRUSION LTD..

Title: <b>TOP &amp; BOTTOM SASH</b>		Scale: 2:1	Designed By:	Dwg. No.: XXXX	Die No.: V014
Customer:		Date: 29-JAN-13	Drawn By: CDF	Material: PVC	Prog. No.: XXXXX
					

## NOTES:

WALL THICKNESS:	RADI: UNRMRKED	0.015
EXT. 0.065	a 0.012	f FULL
INT. 0.050	b 0.030	g -----
▲ 0.080	c -----	h -----
	d -----	i -----
	e -----	j -----
	f -----	m MIN. RAD.

TOLERANCES:		SECTION DETAILS:	
DIMENSIONS:	+/- 0.015 UNLESS SPECIFIED	AREA (RIGID):	-----
WALL THICKNESS:	+/- 0.005 UNLESS SPECIFIED	AREA (FLEX):	-----
COMPONENT WEIGHT:	+/- 5%	WEIGHT (TOTAL):	-----
<b>+</b> INTERSECTION <input type="checkbox"/>		MATERIAL:	
<b>CRITICAL</b> +/ - 0.005		HATCHED AREA:	RIGID PVC
		FILLED AREA:	FLEX PVC