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OUTDOOR LIVING CONNECTION TEST REPORT

SCOPE OF WORK
STRUCTURAL PERFORMANCE TESTING ON THE 8 FT BY 36 IN ALUMINUM LEVEL GUARDRAIL SYSTEM

REPORT NUMBER
S3518.02-119-19 R0

TEST DATES
02/28/25 - 03/03/25

ISSUE DATE
06/27/25

RECORD RETENTION END DATE
03/03/29

PAGES
25

DOCUMENT CONTROL NUMBER
RT-R-AMER-Test-2846 (02/09/18)
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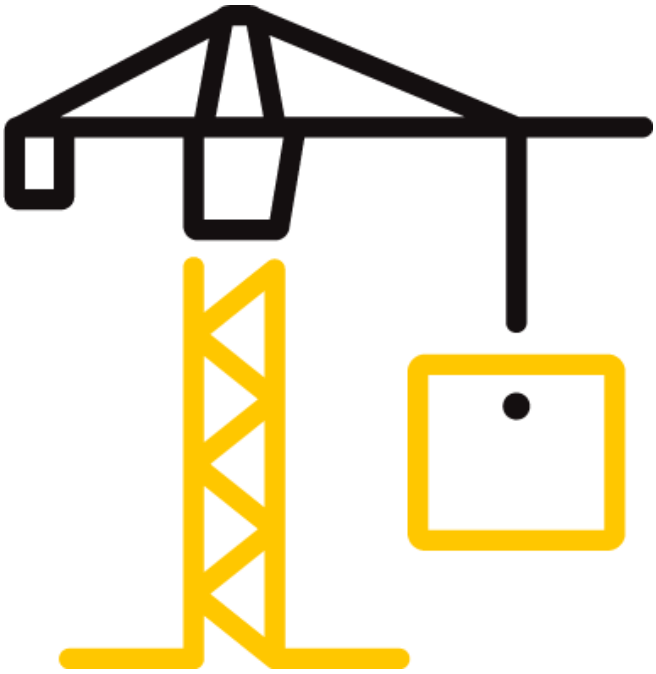

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OUTDOOR LIVING CONNECTION
Report No.: S3518.02-119-19 R0
Date: 06/27/25

REPORT ISSUED TO

OUTDOOR LIVING CONNECTION
702 W Main Street
Genoa, IL 60135

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Outdoor Living Connection, 702 W Main Street, Genoa, IL 60135 to perform structural performance testing in accordance with the 2024 IRC on their 8 ft wide by 36 in high level aluminum guardrail system. All tests performed were to evaluate structural performance of the guardrail assembly to carry and transfer imposed loads to the supporting structure. The test specimens evaluated included the infill, rails, rail brackets, and support posts. Anchorage of support posts to the supporting structure is not included in the scope of this testing and would need to be evaluated separately.

Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at Intertek test facility in York, Pennsylvania. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2

SUMMARY OF TEST RESULTS

The specimen met the 2024 IRC design load performance requirements.

For INTERTEK B&C:

COMPLETED BY:	Jeffrey C. Jones	**REVIEWED BY:**	Travis A. Hoover
TITLE:	Technician I	**TITLE:**	Senior Manager
SIGNATURE:	Digitally Signed by: Jeffrey Jones	**SIGNATURE:**	Digitally Signed by: Travis Hoover
DATE:	06/27/25	**DATE:**	06/27/25

jcj;tah/aas

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SECTION 3
TEST METHODS

The specimen was evaluated in accordance with the following:

2024, *International Residential Code*®, International Code Council

Structural tests were performed according to Chapter 17 (Structural Tests and Special Inspections) of IBC 2024.

SECTION 4
MATERIAL SOURCE/INSTALLATION

The specimens were selected by Intertek B&C personnel. The specimens were witnessed during production and tagged prior to shipment on 02/17/25. Representative samples of the test specimens will be retained by Intertek B&C for a minimum of four years from the test completion date.

The 8 ft wide by 36 in high guardrail assembly was installed and tested as a single railing section by directly securing the posts into a rigid steel test fixture, which rigidly restrained the posts from deflecting. For the concentrated load test on the stand-alone post mount, the post was directly secured into the surface of a rigid steel channel (to simulate anchorage into concrete) with four (4) 5/8" bolts. Transducers mounted to an independent reference frame were located to record movement of reference points on the guardrail system components (ends and mid-point) to determine net component deflections. See photographs in Section 11 for individual test setups.

SECTION 5
EQUIPMENT

The guardrail was tested in a self-contained structural frame designed to accommodate anchorage of the guardrail assembly and application of the required test loads. The specimens were loaded using an electric winch mounted to a rigid steel test frame. High strength steel cables, nylon straps, and load distribution beams were used to impose test loads on the specimens. Applied load was measured using an electronic load cell located in-line with the loading system. Electronic linear motion transducers were used to measure deflections.

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SECTION 6
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Hannah Davekos	Outdoor Living Connection
Alex Dumoulin	Outdoor Living Connection
Jeffrey C. Jones	Intertek B&C
Travis A. Hoover	Intertek B&C

SECTION 7
TEST PROCEDURE

Each test specimen was inspected prior to testing to verify size and general condition of the materials, assembly, and installation. No potentially compromising defects were observed prior to testing.

An initial load, not exceeding 50% of design load, was applied and transducers were zeroed. Load was then applied at a steady uniform rate until reaching 2.0 times design load in no less than 10 seconds. After reaching 2.0 times design load, the load was released. After allowing a minimum period of one minute for stabilization, load was reapplied to the initial load level used at the start of the loading procedure, and deflections were recorded and used to analyse recovery. Load was then increased at a steady uniform rate until reaching 2.5 times design load or until failure occurred. The testing time was continually recorded from the application of initial test load until the ultimate test load was reached.

Deflection and permanent set were component deflections relative to their end-points; they were not overall system displacements. All loads and displacement measurements were horizontal, unless noted otherwise.

Key to Test Results Tables:

Load Level: Target test load

Test Load: Actual applied load at the designated load level (target). Where more than one value is reported, the test load was the range (min.-max.) that was held during the time indicated in the test.

Elapsed Time (E.T.): The amount of time into the test with zero established at the beginning of the loading procedure. Where more than one value is reported, the time was the range (start-end) that the designated load level was reached and sustained.

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SECTION 8
TEST SPECIMEN DESCRIPTION

Outdoor Living Connection provided the fully-assembled test specimens with the following details:

PRODUCT	Aluminum Guard Rail
OVERALL LENGTH	- 96 in (inside of post to inside of post)
OVERALL HEIGHT	- 37 in high - 36 (nominal)
TOP RAIL	1-3/16 in high by 1-3/4 in wide contoured 6005-T5 aluminum extrusion with 0.115 in wall thickness on top and 0.100 in wall thickness on side wall
BOTTOM RAIL	1-7/16 in wide by 1-1/2 in deep 6005-T5 aluminum square extrusion with 0.083 in wall
PICKETS (IN-FILL)	3/4 in square 6063-T5 aluminum extrusion with 0.04 in wall thickness and 0.054 in wall thickness at raised groove on all four sides of extrusion to engage into the polypropylene baluster connectors attached to the bottom rail
RAIL BRACKETS	Extruded and milled 6063-T6 aluminum saddle brackets contoured to shape of rails
FASTENERS	#8-16 by 3/4 in self-drilling, pan head, square drive screws (three in bracket/post); #8-16 by 3/4 in self-drilling, countersunk head, square drive screws (three in top rail/bracket, two in bottom rail/bracket)
POST	2-1/2 in square by 0.125 in wall hollow 6005-T5 aluminum extrusion welded onto 4.4 in square by 5/16 in thick 6005-T5 aluminum base plate; attached to rigid steel channel for testing with four 5/8 in bolts for stand-alone post test
SUPPORT FOOT	3/4 in square by 1-1/2 in high 6063-T5 aluminum picket piece fastened to a cast ADC12 aluminum 1 in square by 1-1/2 in high, with a 1-3/4 in rectangular prism forming halfway down the height, with a polypropylene baluster connector that attaches to the bottom rail for connection (#8-16 by 3/4 in self-drilling, pan-head, square drive screw, one into plug/bottom rail, and one #8-16 by 3/4 in self-drilling, countersunk head, square drive screw into the 1 in cast aluminum piece)

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Date: 06/27/25

SECTION 9
TEST RESULTS

Test No. 1 - 02/28/25
Design Load: 50 lb / 1 Square ft of In-fill at Center of Three Pickets

LOAD LEVEL	TEST LOAD (lb)	E.T. (min:sec)	DISPLACEMENT (in)			
			END	MID	END	NET [1]
Initial Load	25	00:00	0.00	0.00	0.00	0.00
2.0x Design Load	103	00:15	0.00	0.58	0.00	0.58
Initial Load	30	01:37	0.00	0.00	0.00	0.00
100% Recovery from 2.0 x Design Load						
2.5x Design Load	144	01:43	Achieved Load without Failure			

Test No. 2 - 02/28/25
Design Load: 50 lb / 1 Square ft of In-fill at Bottom of Three Pickets

LOAD LEVEL	TEST LOAD (lb)	E.T. (min:sec)	DISPLACEMENT (in)			
			END	MID	END	NET [1]
Initial Load	25	00:00	0.00	0.00	0.00	0.00
2.0x Design Load	103	00:12	0.00	0.44	0.00	0.44
Initial Load	35	01:25	0.00	0.02	0.00	0.02
95% Recovery from 2.0 x Design Load						
2.5x Design Load	129	01:31	Achieved Load without Failure			

Test No. 3 - 02/28/25
Design Load: 200 lb Concentrated Load at Midspan of Top Rail (Horizontal)

LOAD LEVEL	TEST LOAD (lb)	E.T. (min:sec)	RAIL DISPLACEMENT (in)			
			END	MID	END	NET [1]
Initial Load	39	00:00	0.00	0.00	0.00	0.00
2.0x Design Load	403	00:21	0.59	2.81	0.77	2.13
Initial Load	41	01:47	0.05	0.16	0.11	0.08
97% Recovery from 2.0 x Design Load						
2.5x Design Load	506	02:03	Achieved Load without Failure			

[1] *Net displacement was mid-rail displacement relative to the rail at the support posts.*

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Report No.: S3518.02-119-19 R0
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Test No. 4 - 02/28/25
Design Load: 200 lb Concentrated Load at Midspan of Top Rail (Vertical)

LOAD LEVEL	TEST LOAD (lb)	E.T. (min:sec)	RAIL DISPLACEMENT (in)
			MID
Initial Load	40	00:00	0.00
2.0x Design Load	412	00:12	0.25
Initial Load	50	01:28	0.08
68% Recovery from 2.0 x Design Load			
2.5x Design Load	596	01:32 - 01:33	Achieved Load without Failure

Test No. 5 - 02/28/25
Design Load: 200 lb Concentrated Load at Ends of Top Rail (Brackets) (Horizontal)

LOAD LEVEL [1]	TEST LOAD (lb)	E.T. (min:sec)	RAIL DISPLACEMENT (in)	
			RAIL END #1	RAIL END #2
Initial Load	80	00:00	0.00	0.00
2.0x Design Load	805	00:31	1.47	1.59
Initial Load	89	02:24	0.27	0.34
79% Recovery from 2.0 x Design Load				
2.5x Design Load	1006	02:42	Achieved Load without Failure	

[1] *A spreader beam was used to impose loads on* both *ends of the railing system; therefore, loads were doubled.*

Test No. 6 - 02/28/25
Design Load: 200 lb Concentrated Load at Ends of Top Rail (Brackets) (Vertical)

LOAD LEVEL [1]	TEST LOAD (lb)	E.T. (min:sec)	RAIL DISPLACEMENT (in)	
			RAIL END #1	RAIL END #2
Initial Load	79	00:00	0.00	0.00
2.0x Design Load	816	00:10	0.00	0.05
Initial Load	113	01:30	0.00	0.01
80% Recovery from 2.0 x Design Load				
2.5x Design Load	1023	01:43	Achieved Load without Failure	

[1] *A spreader beam was used to impose loads on* both *ends of the railing system; therefore, loads were doubled.*

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Test No. 7 - 03/03/25
Design Load: 200 lb Concentrated Load at Top of Stand-Alone [1] Post (36" high)

LOAD LEVEL	TEST LOAD (lb)	E.T. (min:sec)	POST DISPLACEMENT (in)
Initial Load	40	00:00	0.00
2.0x Design Load	410	00:14	1.23
Initial Load	43	01:39	0.09
94% Recovery from 2.0 x Design Load			
2.5x Design Load	510	01:48	Achieved Load without Failure

[1] *Post was conservatively tested without a railing attached.*

SECTION 10
CONCLUSION

Using performance criteria of withstanding an ultimate load of 2.5 times design load, the test results substantiate compliance with the design load requirements of the 2024 International Residential Code for the 96 ft wide by 36 in high railing assembly reported herein.

Anchorage of support posts to the supporting structure is not included in the scope of this testing and would need to be evaluated separately.

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SECTION 11
PHOTOGRAPHS

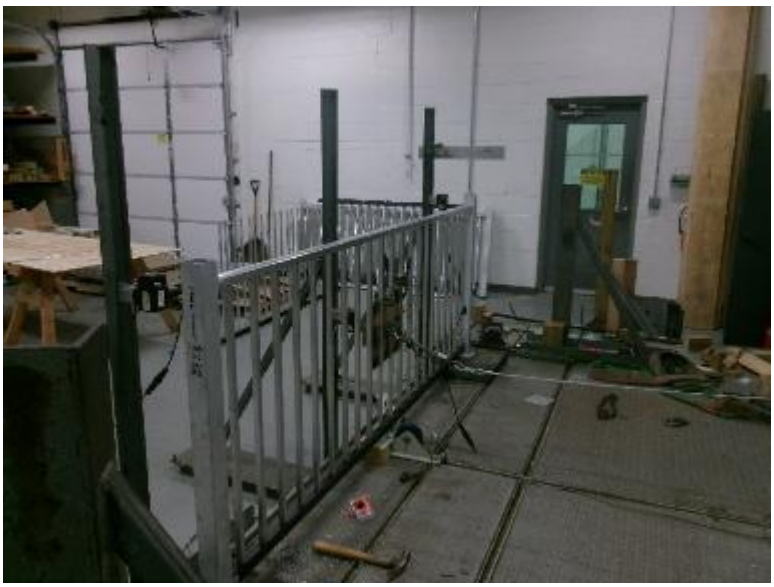

Photo No. 1
In-Fill Load Test at Center of Three Pickets

Photo No. 2
In-Fill Load Test at Bottom of Three Pickets

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Photo No. 3
Concentrated Load Test at Midspan of Top Rail (Horizontal)

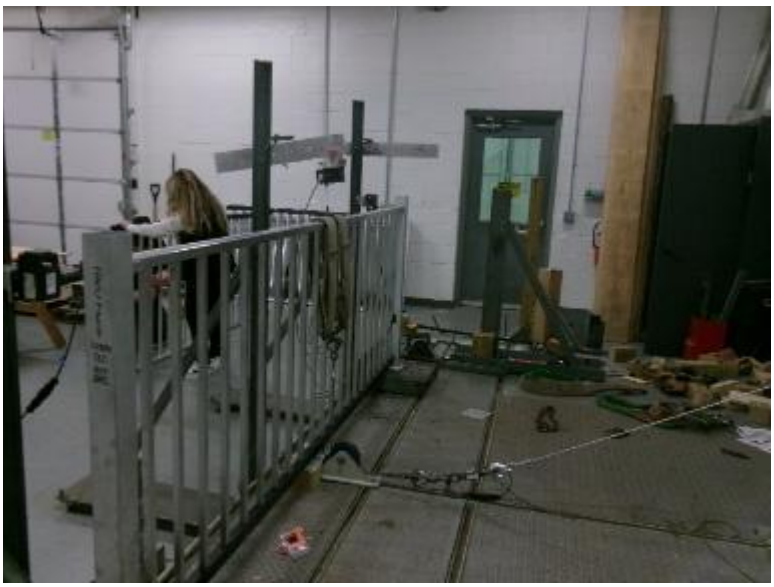

Photo No. 4
Concentrated Load Test at Midspan of Top Rail (Vertical)

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Photo No. 5
Concentrated Load Test at Ends of Top Rail (Brackets) (Horizontal)

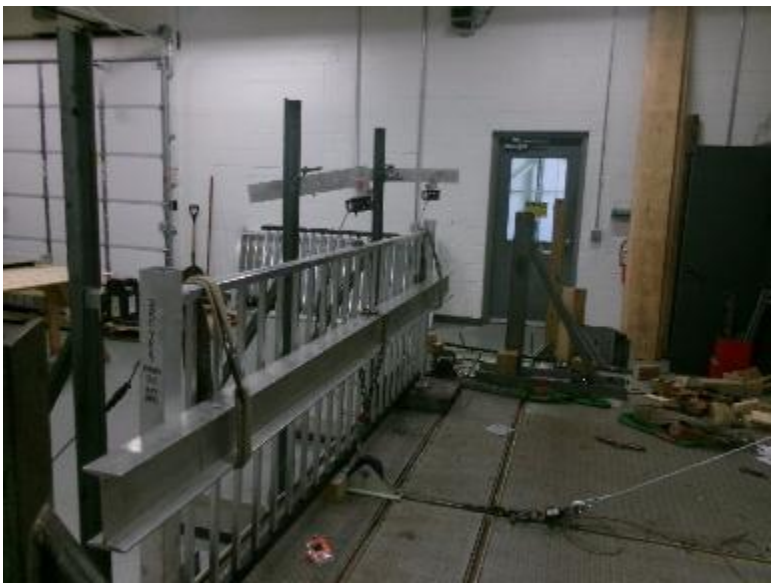

Photo No. 6
Concentrated Load Test at Ends of Top Rail (Brackets) (Vertical)

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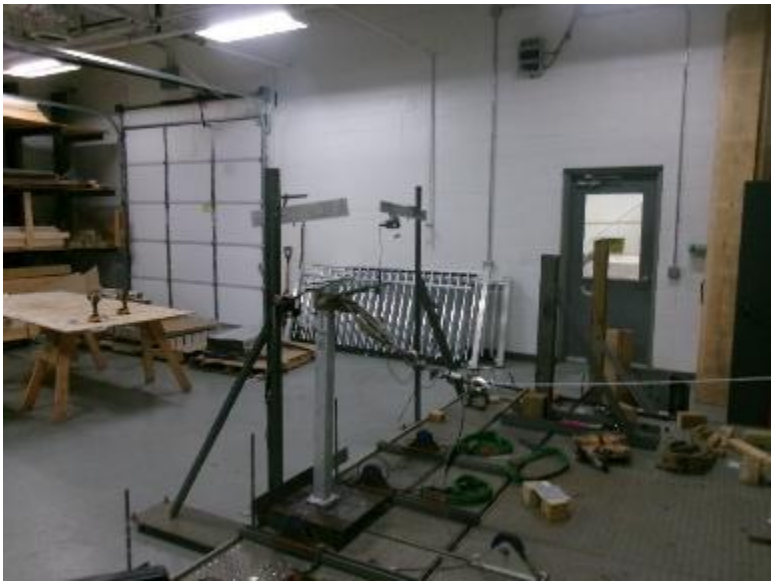
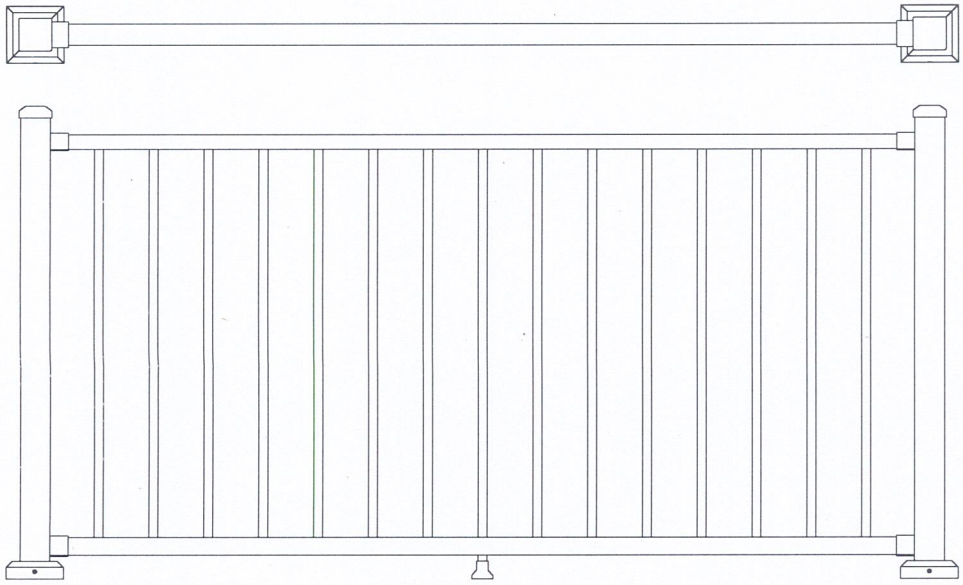


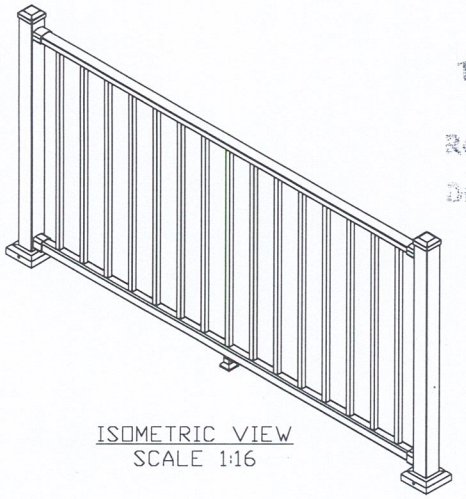
Photo No. 7
Concentrated Load Test at Top of Stand-Alone Post (36" high)

SECTION 12
DRAWINGS

The "As-Built" drawings, which follow, have been reviewed by Intertek B&C and are representative of the project reported herein. Project construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.

DRAWING: 15034-A-001
PAGE NUMBER 1 OF 5





ISOMETRIC VIEW
SCALE 1:16

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Test sample complies with these details.
Deviations are noted.

Report # 5351B.01

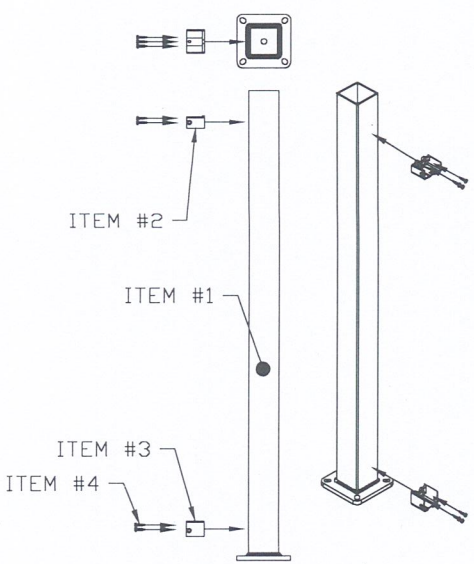
Date 5/16/25 Tech

ITEM LIST			
ITEM#	DRAWING#	DESCRIPTION	QTY. (4'/6'/8')
1	15387-A-001	RESIDENTIAL POST ASSEMBLY	2
2	15325-F-001	TOP RAIL SADDLE; NO RECESS	2
3	15327-F-001	BOTTOM RAIL SADDLE; NO RECESS	2
4	81012	#8 SCREW, ¾" LONG	15
5	15322	TOP RAIL	1
6	15333-A-001	BOTTOM RAIL; LEVEL	1
7	11501	BALUSTER	10/15/21
8	80771	LONG CONNECTOR	0/1/1
9	80790	#8 CS SCREW, ¾" LONG	15
10	15324-F-001	BALUSTER RAIL; LEVEL	1
11	11501	MID-RAIL BALUSTER	0/1/1
12	80778	MID-RAIL BALUSTER FOOT	0/1/1
13	15474	TOP RAIL SADDLE CAP	2
14	15475	BOTTOM RAIL SADDLE CAP	2
15	80776	POST BASE COVER	4
16	81013	#8 CS SCREW, 2" LONG	4
17	SEE NOTE #2	POST CAP	2

NOTES:
1) ITEM #11 AND #12 ONLY FOR 6' AND 8' LENGTHS; TO BE INSTALLED BY END USER.
2) ITEM #17 MAY VARY BASED ON PURCHASE.

CUSTOM ALUMINUM PRODUCTS, INC. 500 DIVISION STREET SOUTH ELGIN, ILLINOIS 60177	SCALE: 1:10	APPROVED BY: AED	DR.: CAB
	DATE: 11/10/22	PART #: LEVEL RAIL - R	MAT'L: VARIES
INDUSTRY STANDARD TOLERANCES UNLESS SPECIFIED OTHERWISE.	DESCRIPTION: ASSEMBLY FOR LEVEL RAIL; RESIDENTIAL		
	CUSTOMER: OUTDOOR LIVING CONNECT.		DRAWING: 15034-A-001

DRAWING:	15034-A-001
PAGE NUMBER	2 OF 5



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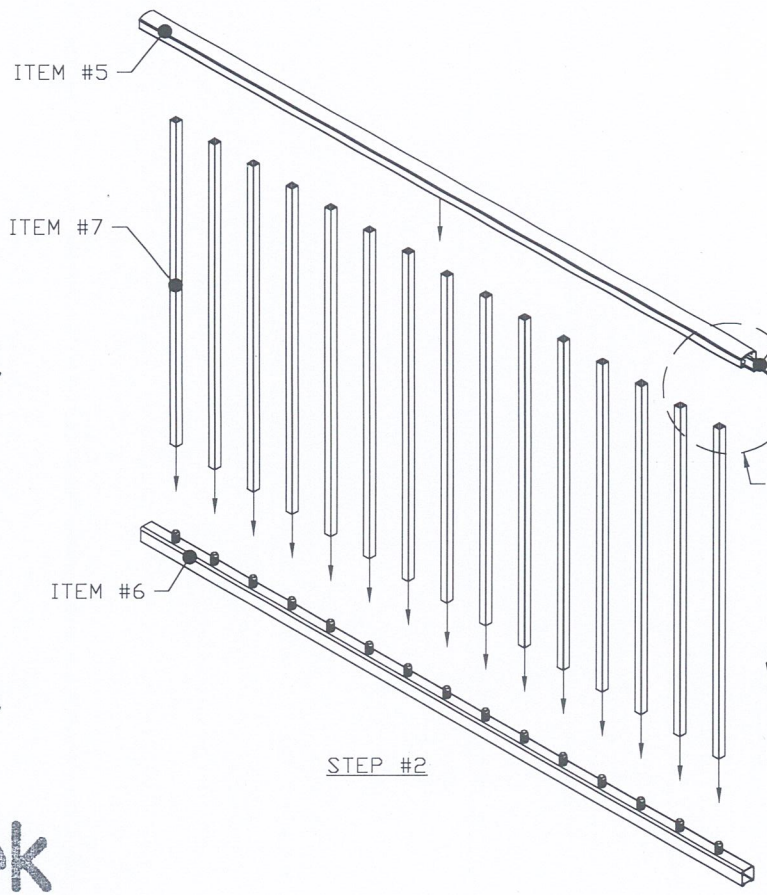

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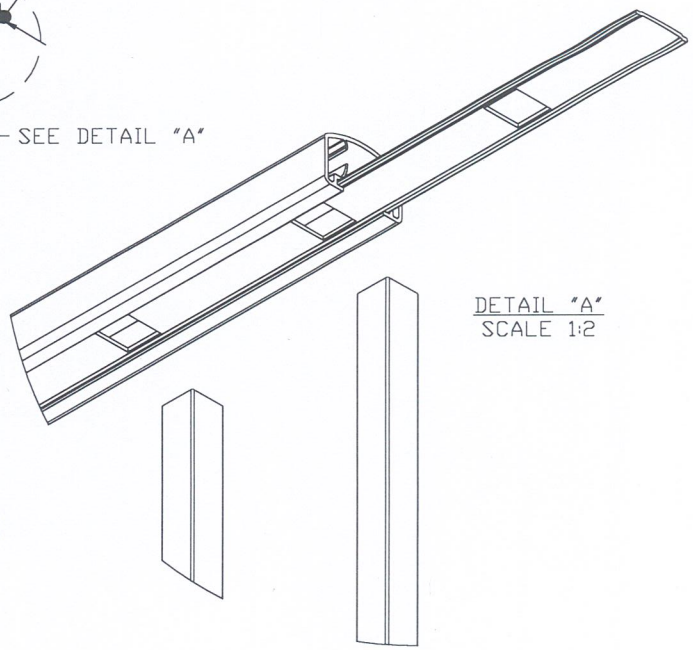

DETAIL "A"
SCALE 1:2

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Test sample complies with these details.
Deviations are noted.

Report # S3518.01

Date 5/16/25 Tech

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	CUSTOMER: OUTDOOR LIVING CONNECT.		DRAWING: 15034-A-001

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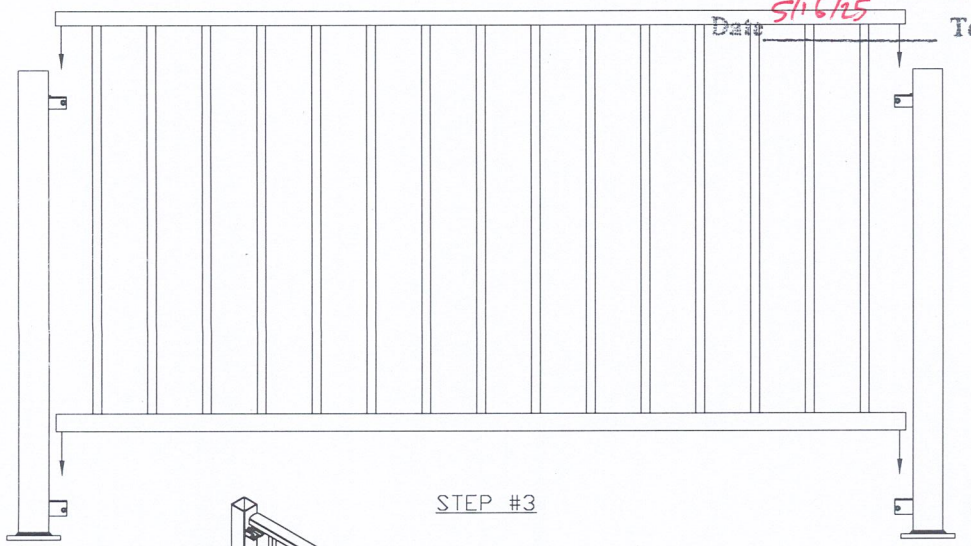
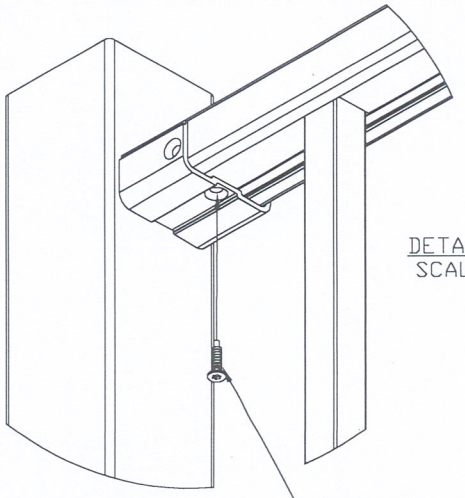
Test sample complies with these details.
Deviations are noted.

Report # 3351B.01

Date 5/16/25 Tech Y

DRAWING:	15034-A-001
PAGE NUMBER	3 OF 5





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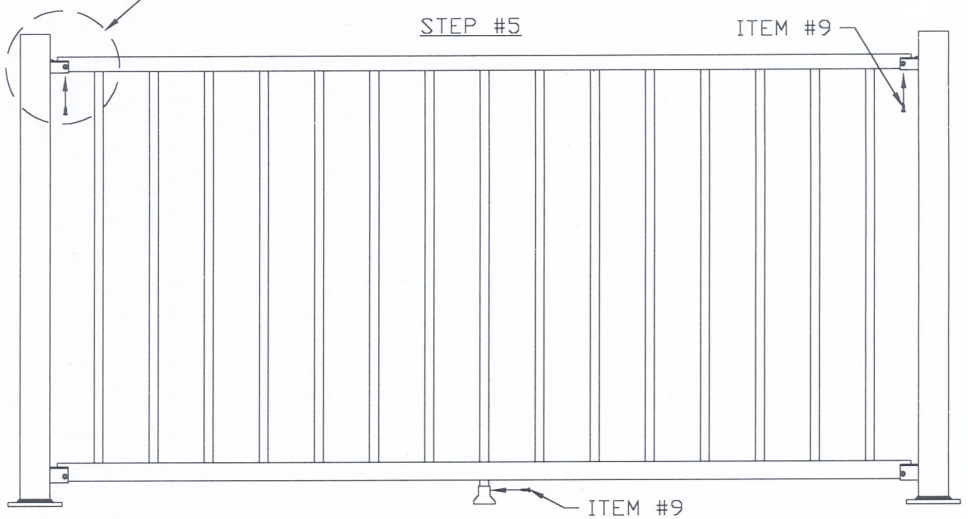
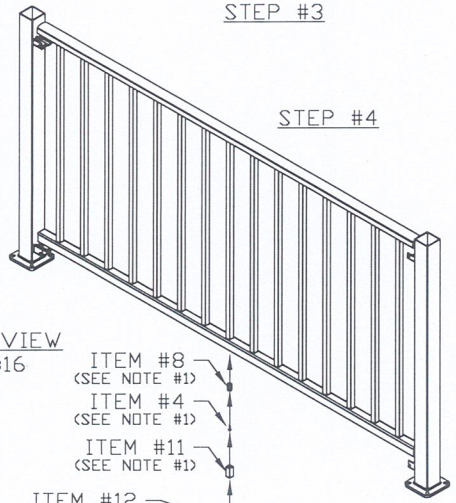
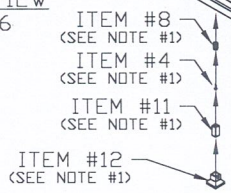




ISOMETRIC VIEW
SCALE 1:16



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CUSTOM ALUMINUM PRODUCTS, INC. 500 DIVISION STREET SOUTH ELGIN, ILLINOIS 60177	SCALE: 1:10	APPROVED BY: AED	DR.: CAB
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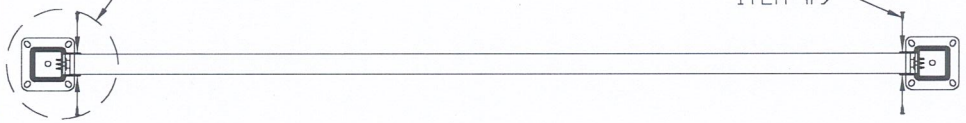
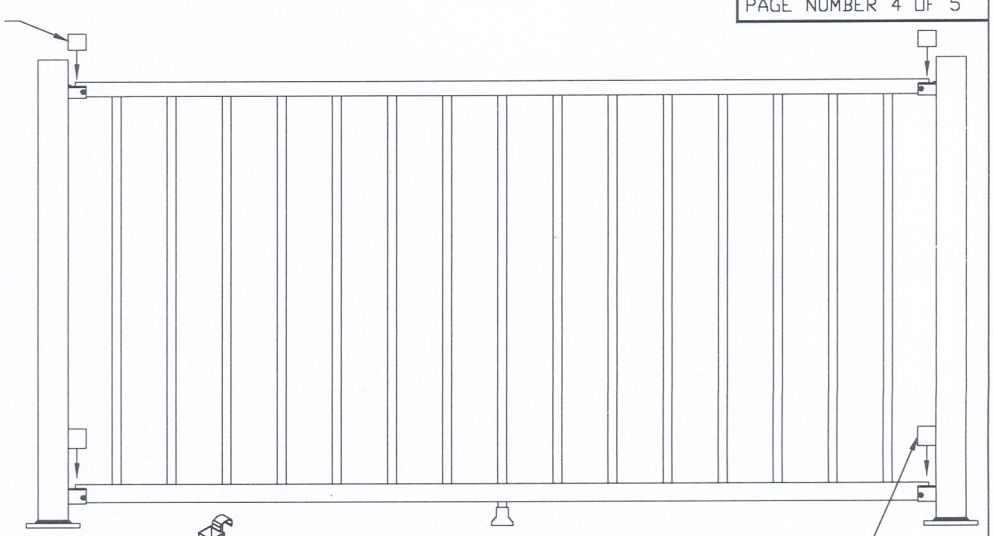
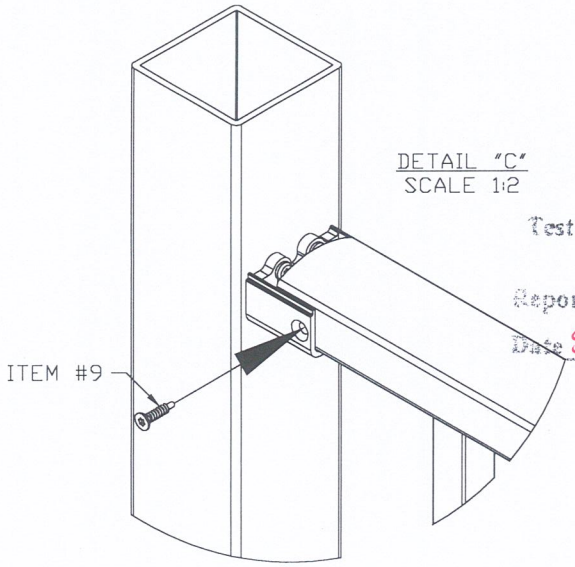
	CUSTOMER: OUTDOOR LIVING CONNECT.		DRAWING: 15034-A-001

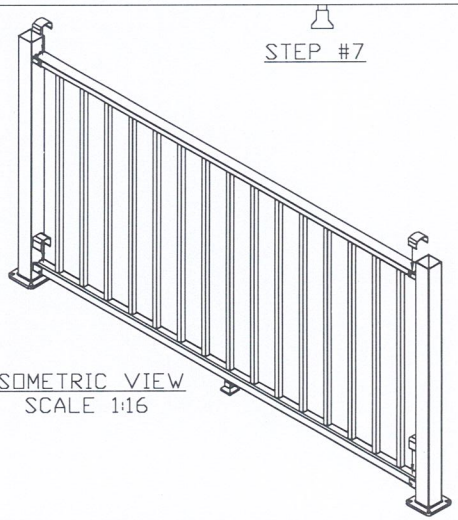


STEP #6





DETAIL "C"
SCALE 1:2



ISOMETRIC VIEW
SCALE 1:16

intertek

Test sample complies with these details.
Deviations are noted.

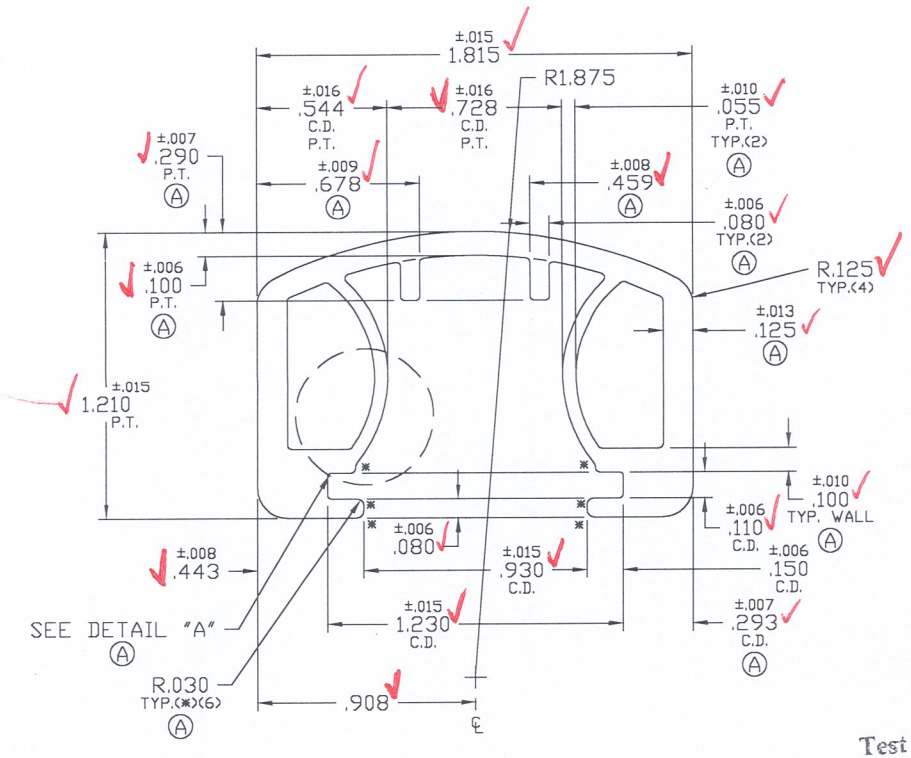
Report # S3518.01

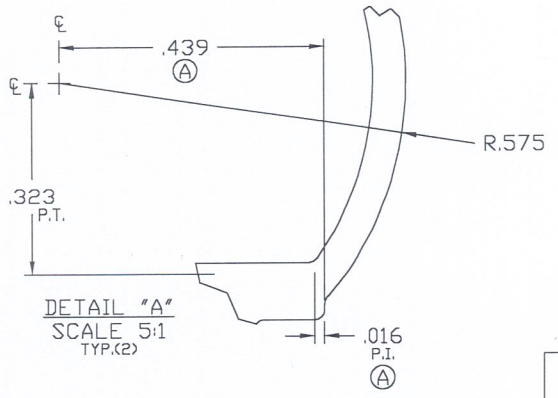
Date 5/16/25 Tech

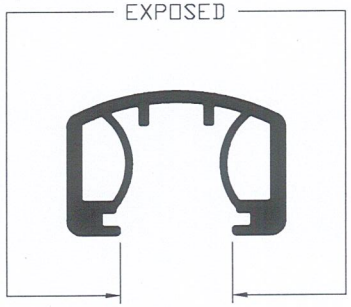
NOTES:
1) ITEM #11 AND #12 ONLY FOR 6' AND 8' LENGTHS; TO BE INSTALLED BY END USER.
2) ITEM #17 MAY VARY BASED ON PURCHASE.

CUSTOM ALUMINUM PRODUCTS, INC. 500 DIVISION STREET SOUTH ELGIN, ILLINOIS 60177	SCALE: 1:10	APPROVED BY: AED	DR.: CAB
	DATE: 11/10/22	PART #: LEVEL RAIL - R	MAT'L: VARIES
INDUSTRY STANDARD TOLERANCES UNLESS SPECIFIED OTHERWISE.	DESCRIPTION: ASSEMBLY FOR LEVEL RAIL; RESIDENTIAL		
	CUSTOMER: OUTDOOR LIVING CONNECT.		DRAWING: 15034-A-001

DIE NO.	15772A
QUENCH REQ.	







intertek

Test sample complies with these details.
Deviations are noted.

Report # S3518.01

Date 05/13/2025 Tech SamCMcKelly

NOTES:

1) STANDARD TOLERANCES
   ANGULARITY= ±2°
   FLATNESS= .006 X MEASURED WIDTH IN INCHES.
   STRAIGHTNESS= .010 X MEASURED LENGTH, FT.
   TWIST= 1/2 X MEASURED LENGTH, FT.=DEGREES
   (MAX. DEGREES= 5)
2) C.D. DENOTES CRITICAL DIMENSION.
3) THIS DIE MATES WITH DIE# 15324 AND DIE# 15098.
4) THIS DIE REPLACES DIE# 15322.

REVISIONS				
#	DESCRIPTION	ECN#	INT.	DATE
A	REVISED WALL THICKNESSES AND INNER RIBS	7889	CAB	01/09/25

TYPICAL WALL THICKNESS	.100 ± .010	IN.
BREAK SHARP CORNERS TO	.015	IN.
STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ROD, BAR, & SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE		
ESTIMATED AREA	.667	SQ. IN.
ESTIMATED WEIGHT PER FT.	.800	LBS.
ESTIMATED PERIMETER	12.688	IN.
FINISHED PERIMETER	8.956	IN.
FACTOR	16	
CIRCUMSCRIBED CIRCLE DIAMETER	2.25	IN.

CUSTOM ALUMINUM PRODUCTS, INC.
500 DIVISION STREET
SOUTH ELGIN, ILLINOIS 60177

CUSTOMER OUTDOOR LIVING CONNECTION			
SCALE 2:1	CUST. PART NO. TOP RAIL - CLOSED		
DATE 01/08/25	APPROVED BY	PAGE 1 OF 1	
DIE NO. 15772A	CAD NAME P-OLC469	DR CAB	
SHAPE CLASS III	ALLOY 6005	TEMPER T5	
TYPE DIE HOLLOW	BACKER DESC. -	HOLES 2	
LG. BOL. DESC. 2-H	SM. BOL. DESC. 2-H	BILLET SIZE 8"	

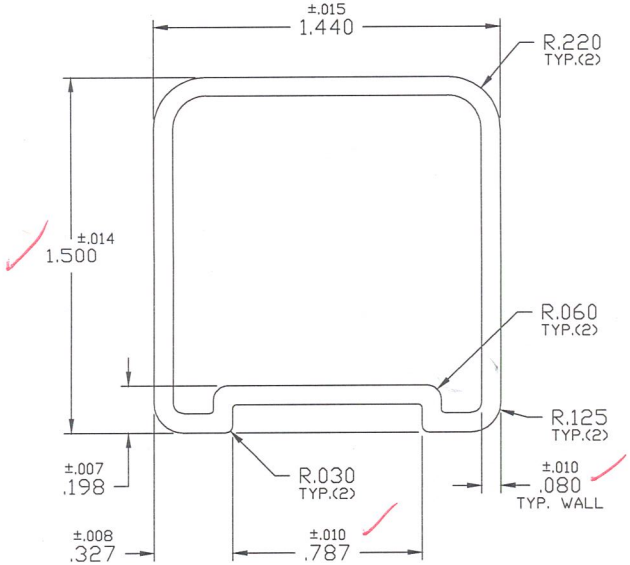
DIE NO.	15333
QUENCH REQ.	

intertek

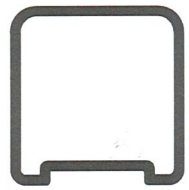
Test sample complies with these details.
Deviations are noted.

Report # S3518.01

Date 5/16/25 Tech



ALL OUTSIDE SURFACES EXPOSED



ACTUAL SIZE

NOTES:

1) STANDARD TOLERANCES
   ANGULARITY= ±1 °
   FLATNESS= .004 X MEASURED WIDTH IN INCHES.
   STRAIGHTNESS= .0125 X MEASURED LENGTH, FT.
   TWIST= 1/2 X MEASURED LENGTH, FT.=DEGREES
   (MAX. DEGREES= 5)
2) THIS DIE REPLACES DIE# 15211.

REVISIONS				
#	DESCRIPTION	ECN#	INT.	DATE
3	UPDATED ALLOY FROM 6005A TO 6005	7890	CAB	01/16/25
2	UPDATED ALLOY FROM 6005 TO 6005A	7815	CAB	08/06/24
1	ADDED WATER QUENCH	7797	CAB	07/17/24

TYPICAL WALL THICKNESS	.080 ± .010	IN.
BREAK SHARP CORNERS TO	.015	IN.
STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ROD, BAR, & SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE		
ESTIMATED AREA	.443	SQ. IN.
ESTIMATED WEIGHT PER FT.	.532	LBS.
ESTIMATED PERIMETER	11.034	IN.
FINISHED PERIMETER	5.781	IN.
FACTOR	21	
CIRCUMSCRIBED CIRCLE DIAMETER	2.25	IN.

CUSTOM ALUMINUM PRODUCTS, INC.
500 DIVISION STREET
SOUTH ELGIN, ILLINOIS 60177

CUSTOMER OUTDOOR LIVING CONNECTION			
SCALE 2:1	CUST. PART NO. BOTTOM RAIL, LEVEL		
DATE 04/18/23	APPROVED BY M.D.	PAGE 1 OF 1	
DIE NO. 15333	CAD NAME P-OLC381		DR CAB
SHAPE SOLID	ALLOY 6005		TEMPER T5
TYPE DIE HOLLOW	BACKER DESC. –		HOLES 2
LG. BOL. DESC. 2-H	SM. BOL. DESC. 2-H		BILLET SIZE 8"

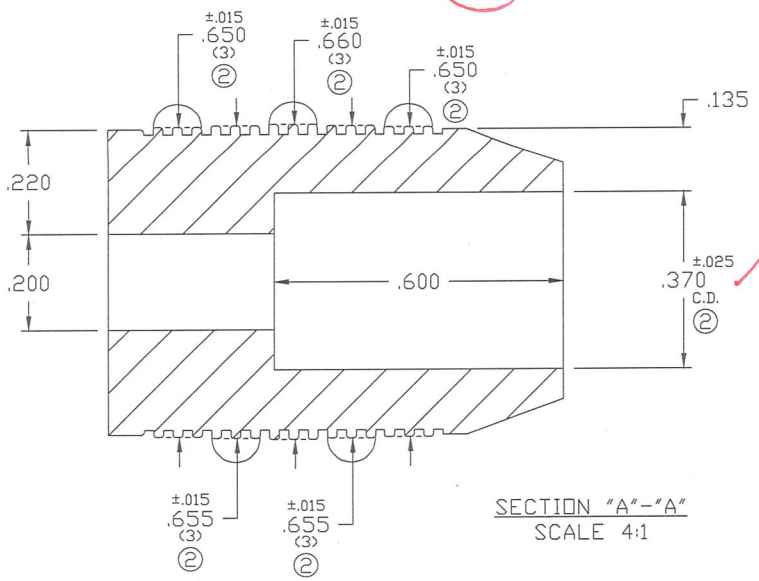
DRAWING: 80771
PAGE NUMBER 1 OF 1

intertek

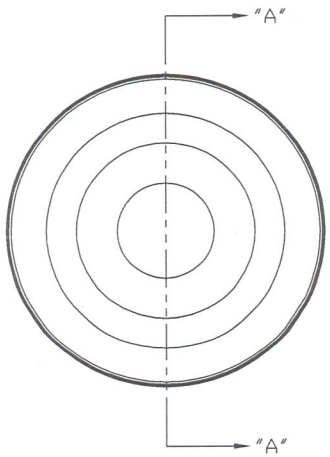
Test sample complies with these details.
Deviations are noted.

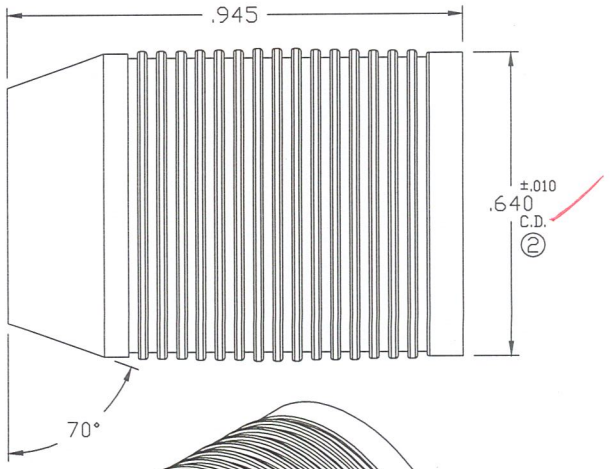
Report # S3518.01

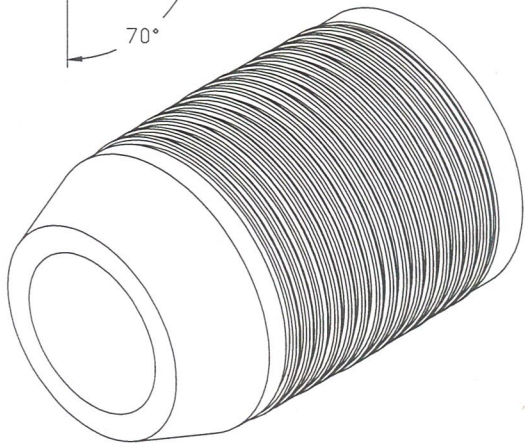
Date 5/16/25 Tech Y



SECTION "A"–"A"
SCALE 4:1







ISOMETRIC VIEW
SCALE 4:1

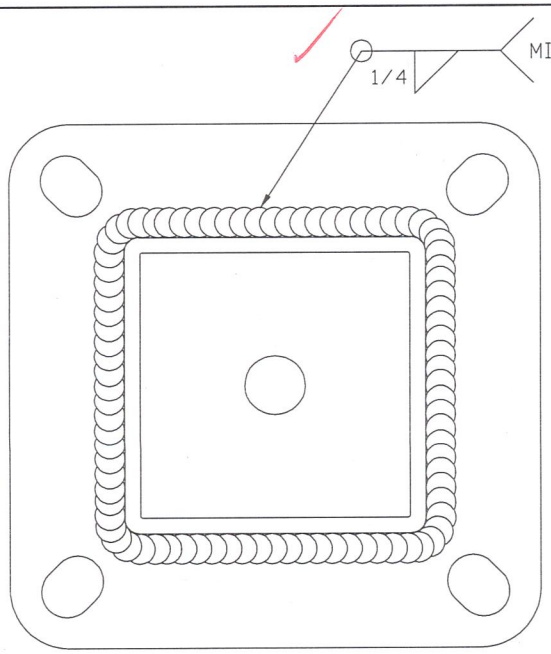
NOTES:

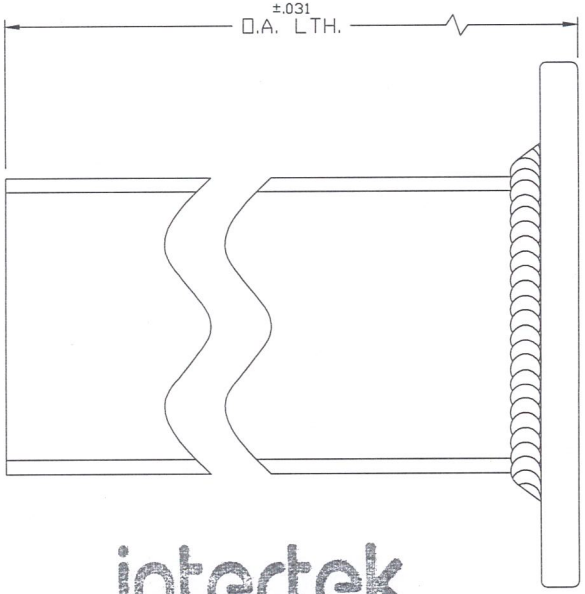
1) ALL SURFACES EXPOSED.

VENDOR:	MATERIAL:
HEBEI METALS	POLYPROPYLENE

CUSTOM ALUMINUM PRODUCTS, INC. 500 DIVISION STREET SOUTH ELGIN, ILLINOIS 60177	SCALE: 4:1	APPROVED BY: A.E.D.	DR.: CAB
	DATE: 10/04/22	PART #: 80771000945B1I	C.A.P. #:
ALL TOLERANCES REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. SEE CONTROL PLAN FOR TOLERANCES IF APPLICABLE.	DESCRIPTION: LONG CONNECTOR .945 FOR SQUARE BALUSTERS		
	CUSTOMER: OUTDOOR LIVING CONNECT.		DRAWING: 80771

DRAWING: 15387-A-001
PAGE NUMBER 1 OF 1



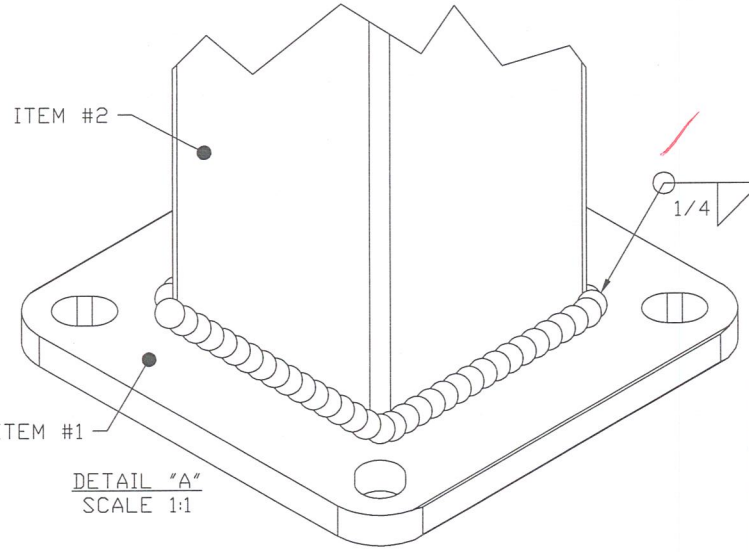


intertek

Test sample complies with these details.
Deviations are noted.

Report # 53518.01

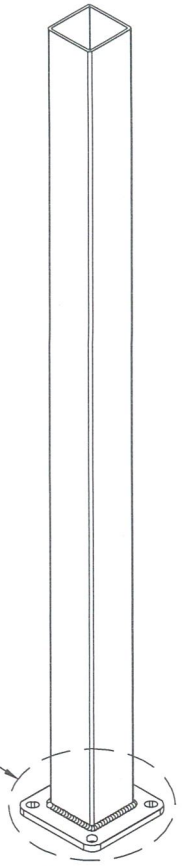
Date 5/16/25 Tech



DETAIL "A"
SCALE 1:1

ITEM LIST			
ITEM #	DRAWING #	DESCRIPTION	QTY.
1	15387-F-001	POST MOUNT	1
2	15034	2.500" POST	1

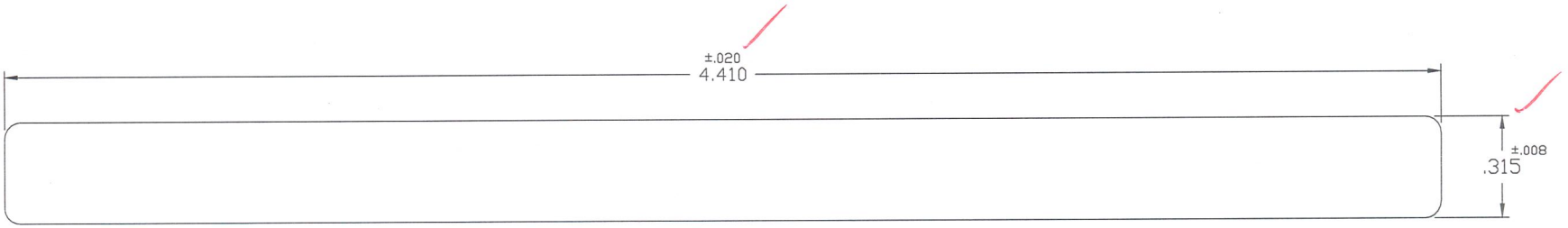
SEE DETAIL "A"



ISOMETRIC VIEW
SCALE 1:5

CUSTOM ALUMINUM PRODUCTS, INC. 500 DIVISION STREET SOUTH ELGIN, ILLINOIS 60177	SCALE: 1:1	APPROVED BY: A.E.D.	DR.: CAB
	DATE: 07/17/23	PART #: VARIES	MAT'L: VARIES
INDUSTRY STANDARD TOLERANCES UNLESS SPECIFIED OTHERWISE.	DESCRIPTION: ASSEMBLY OF POST - RESIDENTIAL		
	CUSTOMER: OUTDOOR LIVING CONNECT.		DRAWING: 15387-A-001

DIE NO.	15387
QUENCH REQ.	



intertek

Test sample complies with these details.
Deviations are noted.

Report # 5351801

Date 5/16/25 Tech

ALL SURFACES EXPOSED

ACTUAL SIZE

NOTES:

1) STANDARD TOLERANCES
ANGULARITY= ±1 °
FLATNESS= .004 X MEASURED WIDTH IN INCHES.
STRAIGHTNESS= .0125 X MEASURED LENGTH, FT.
TWIST= 1/4 X MEASURED LENGTH, FT.=DEGREES
(MAX. DEGREES= 3)

REVISIONS

#	DESCRIPTION	ECN#	INT.	DATE
2	UPDATED ALLOY FROM 6005A TO 6005	7890	CAB	01/16/25
1	UPDATED ALLOY FROM 6005 TO 6005A	7815	CAB	08/06/24

TYPICAL WALL THICKNESS	– ± –	IN.
BREAK SHARP CORNERS TO	.015	IN.
STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ROD, BAR, & SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE		
ESTIMATED AREA	1.387	SQ. IN.
ESTIMATED WEIGHT PER FT.	1.664	LBS.
ESTIMATED PERIMETER	9.364	IN.
FINISHED PERIMETER	9.364	IN.
FACTOR	6	
CIRCUMSCRIBED CIRCLE DIAMETER	4.75	IN.

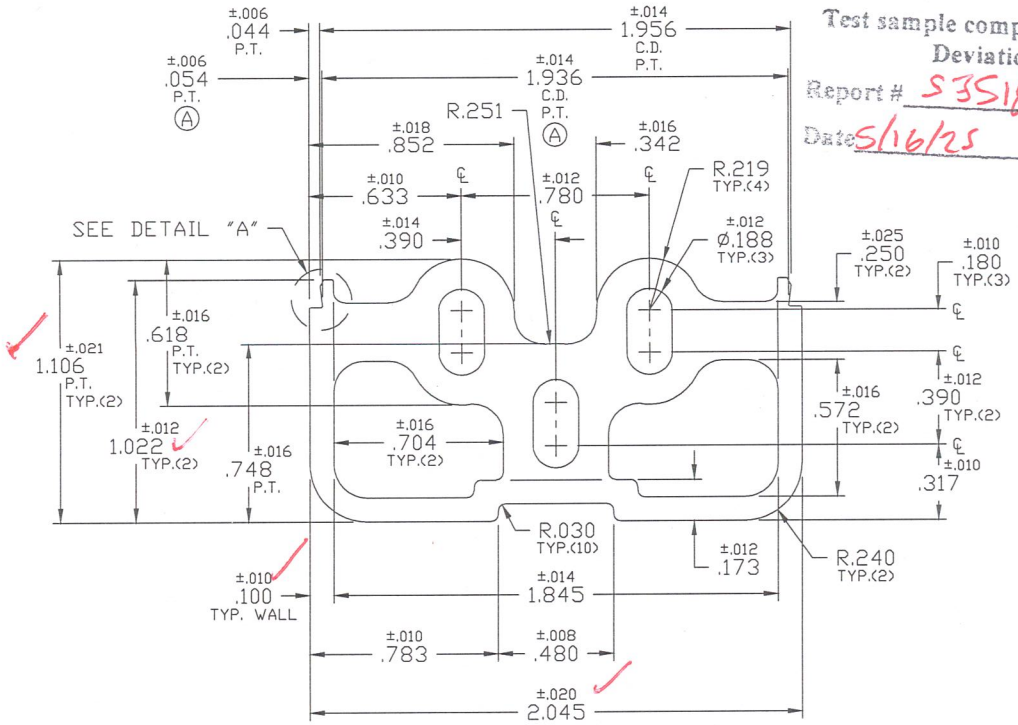
CUSTOM ALUMINUM PRODUCTS, INC.
500 DIVISION STREET
SOUTH ELGIN, ILLINOIS 60177

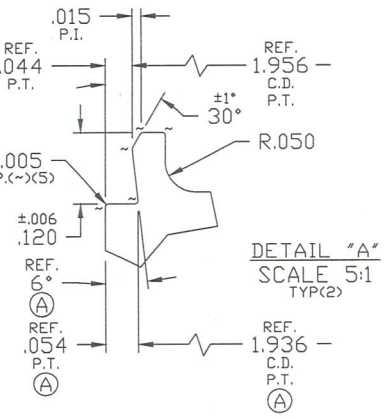
CUSTOMER OUTDOOR LIVING CONNECTION		
SCALE 3:1	CUST. PART NO. 2.5" BASE PLATE – R	
DATE 07/17/23	APPROVED BY A.E.D.	PAGE 1 OF 1
DIE NO. 15387	CAD NAME P-OLC385	DR CAB
SHAPE SOLID	ALLOY 6005	TEMPER T5
TYPE DIE WELD POCKET	BACKER DESC. 15387	HOLES 1
LG. BOL. DESC. 2716	SM. BOL. DESC. 2716	BILLET SIZE 8'

DIE NO.	15325A
QUENCH REQ.	N/A

intertek

Test sample complies with these details.
Deviations are noted.
Report # 5351801
Date 5/16/23 Tech





ALL SURFACES EXPOSED

ACTUAL SIZE

NOTES:

1) STANDARD TOLERANCES
   ANGULARITY= ±2 °
   FLATNESS= .006 X MEASURED WIDTH IN INCHES.
   STRAIGHTNESS= .010 X MEASURED LENGTH, FT.
   TWIST= 1/2 X MEASURED LENGTH, FT.=DEGREES
   (MAX. DEGREES= 5)
2) THIS DIE MATES WITH DIE# 15474.
3) C.D. DENOTES CRITICAL DIMENSION.
4) THIS DIE REPLACES DIE# 15051.

REVISIONS

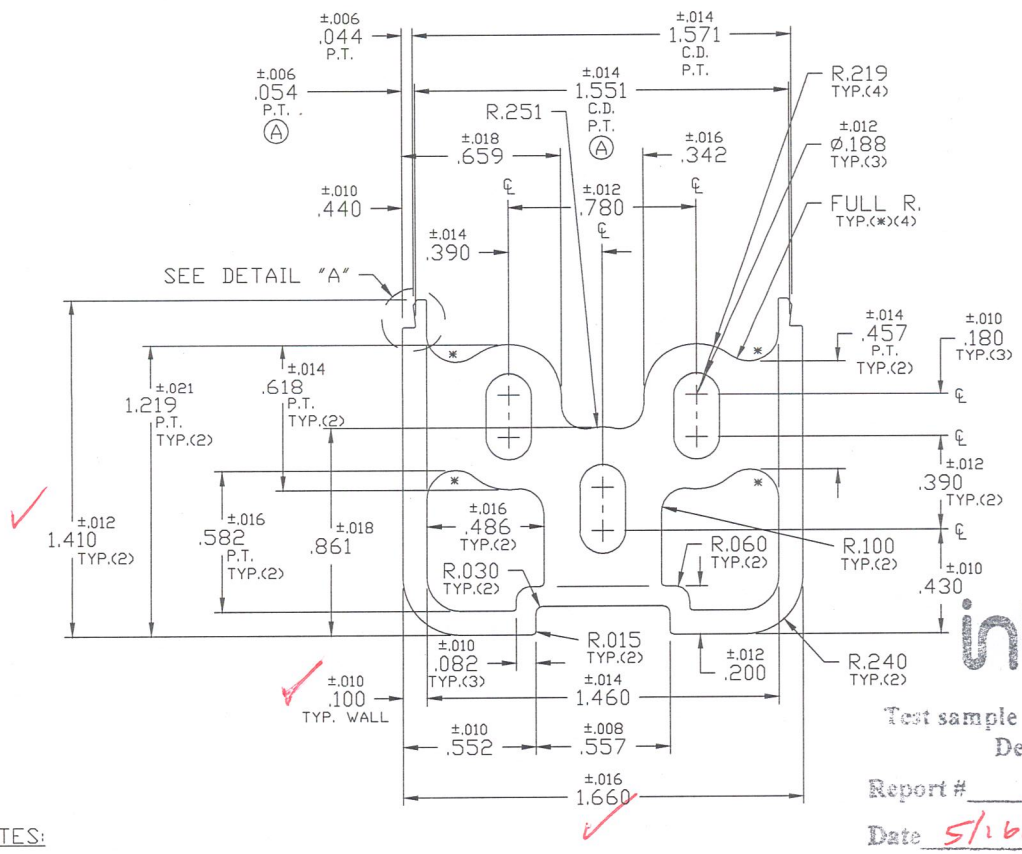
#	DESCRIPTION	ECN#	INT.	DATE
1	UPDATED NOTE #2	7618	CAB	10/02/23
A	UPDATED MATING ANGLE FROM 9 DEGREEES TO 6 DEGREES	7546	CAB	07/20/23

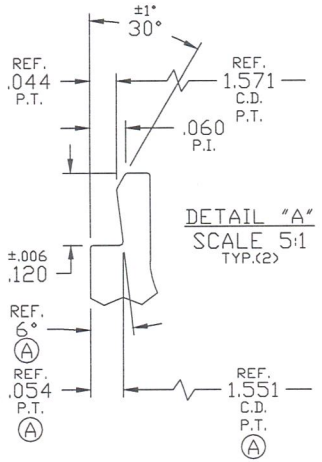
TYPICAL WALL THICKNESS	.100 ± .010	IN.
BREAK SHARP CORNERS TO	.125	IN.
STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ROD, BAR, & SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE		
ESTIMATED AREA	1.078	SQ. IN.
ESTIMATED WEIGHT PER FT.	1.294	LBS.
ESTIMATED PERIMETER	14.051	IN.
FINISHED PERIMETER	6.730	IN.
FACTOR	11	
CIRCUMSCRIBED CIRCLE DIAMETER	2.50	IN.

CUSTOM ALUMINUM PRODUCTS, INC.
500 DIVISION STREET
SOUTH ELGIN, ILLINOIS 60177

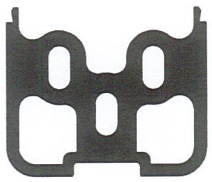
CUSTOMER OUTDOOR LIVING CONNECTION			
SCALE 2:1	CUST. PART NO. TOP SADDLE		
DATE 04/18/23	APPROVED BY M.D.	PAGE 1 OF 1	
DIE NO. 15325A	CAD NAME P-OLC372	DR CAB	
SHAPE CLASS III	ALLOY 6063	TEMPER T6	
TYPE DIE HOLLOW	BACKER DESC. –	HOLES 1	
LG. BOL. DESC. 2716	SM. BOL. DESC. 15061	BILLET SIZE 7"	

DIE NO.	15327A
QUENCH REQ.	N/A





ALL SURFACES EXPOSED



ACTUAL SIZE

intertek

Test sample complies with these details.
Deviations are noted.

Report # S3518.01

Date 5/16/25 Tech [illegible]

NOTES:

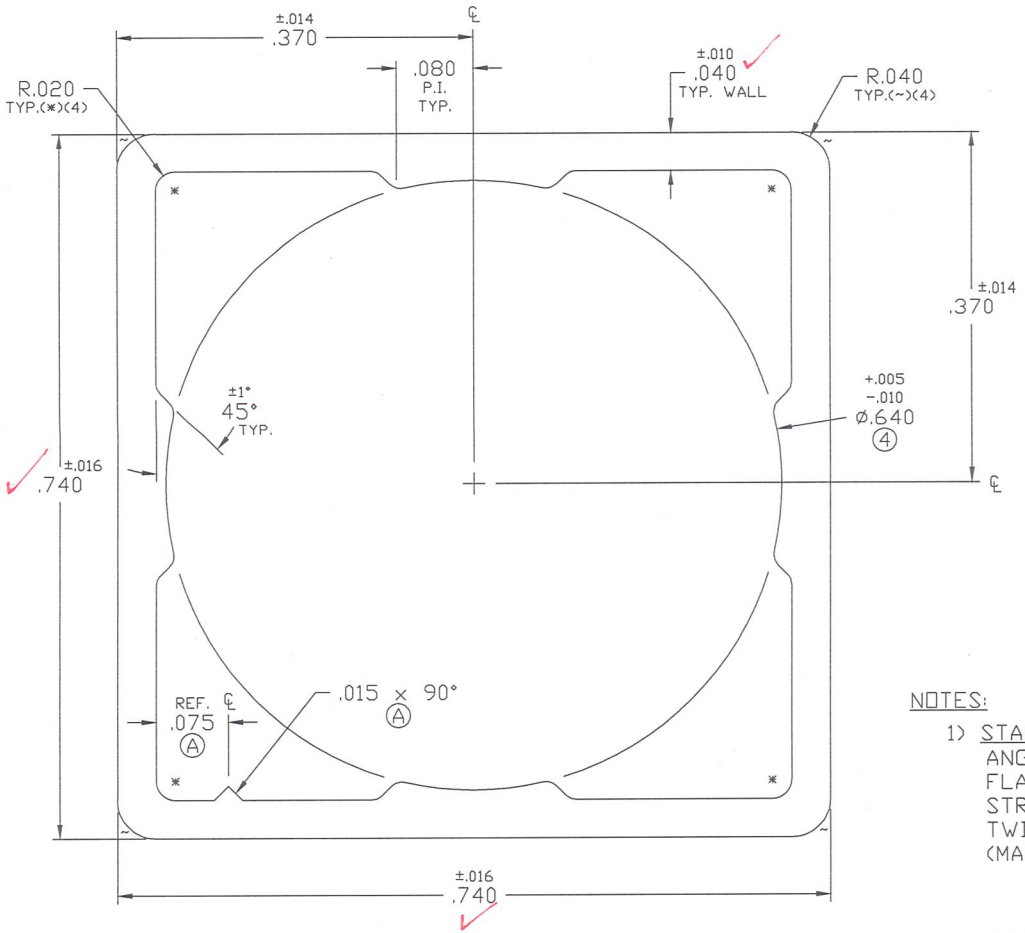
1) STANDARD TOLERANCES
   ANGULARITY= ±2°
   FLATNESS= .006 X MEASURED WIDTH IN INCHES.
   STRAIGHTNESS= .010 X MEASURED LENGTH, FT.
   TWIST= 1/2 X MEASURED LENGTH, FT.=DEGREES
   (MAX. DEGREES= 5)
2) THIS DIE MATES WITH DIE# 15475
3) C.D. DENOTES CRITICAL DIMENSION.
4) THIS DIE REPLACES DIE# 15053.

REVISIONS				
#	DESCRIPTION	ECN#	INT.	DATE
1	UPDATED NOTE #2	7618	CAB	10/02/23
A	UPDATED MATING ANGLE FROM 9 DEGREEES TO 6 DEGREES	7546	CAB	07/20/23

TYPICAL WALL THICKNESS	.100 ± .010	IN.
BREAK SHARP CORNERS TO	.005	IN.
STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ROD, BAR, & SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE		
ESTIMATED AREA	1.123	SQ. IN.
ESTIMATED WEIGHT PER FT.	1.348	LBS.
ESTIMATED PERIMETER	13.666	IN.
FINISHED PERIMETER	7.045	IN.
FACTOR	10	
CIRCUMSCRIBED CIRCLE DIAMETER	2.25	IN.

CUSTOM ALUMINUM PRODUCTS, INC.
500 DIVISION STREET
SOUTH ELGIN, ILLINOIS 60177

CUSTOMER OUTDOOR LIVING CONNECTION			
SCALE 2:1	CUST. PART NO. BOTTOM SADDLE		
DATE 04/18/23	APPROVED BY MD	PAGE 1 OF 1	
DIE NO. 15327A	CAD NAME P-OLC374	DR CAB	
SHAPE CLASS III	ALLOY 6063	TEMPER T6	
TYPE DIE HOLLOW	BACKER DESC. –	HOLES 1	
LG. BOL. DESC. 869	SM. BOL. DESC. 15061	BILLET SIZE 7"	



DIE NO.	11501A
QUENCH REQ.	

intertek

Test sample complies with these details.
Deviations are noted.

Report # 3518.01

Date 5/16/25 Tech

ALL OUTSIDE SURFACES EXPOSED

ACTUAL SIZE

NOTES:

1) STANDARD TOLERANCES
ANGULARITY= ±2°
FLATNESS= .006 X MEASURED WIDTH IN INCHES.
STRAIGHTNESS= .010 X MEASURED LENGTH, FT.
TWIST= 1 X MEASURED LENGTH, FT.=DEGREES
(MAX. DEGREES= 7)

REVISIONS				
#	DESCRIPTION	ECN#	INT.	DATE
4	UPDATED INNER CIRCLE TOLERANCE	7615	CAB	09/28/23
3	UPDATED PRESS INFO	5402	LMT	05/02/17
2	UPDATED PRESS INFO	3853	NMM	02/12/13
1	UPDATED PRESS INFO	3727	SDB	09/05/12
A	ADDED I.D. GROOVE	3514	CAF	01/04/12

TYPICAL WALL THICKNESS	.040 ± .010	IN.
BREAK SHARP CORNERS TO	.015	IN.
STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ROD, BAR, & SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE		
ESTIMATED AREA	.121	SQ. IN.
ESTIMATED WEIGHT PER FT.	.145	LBS.
ESTIMATED PERIMETER	5.566	IN.
FINISHED PERIMETER	2.891	IN.
FACTOR	38	
CIRCUMSCRIBED CIRCLE DIAMETER	1.25	IN.

CUSTOM ALUMINUM PRODUCTS, INC.
500 DIVISION STREET
SOUTH ELGIN, ILLINOIS 60177

CUSTOMER DECK SUPPLY SERVICES, LLC.			
SCALE 8:1	CUST. PART NO. BS26/BS32/BS36		
DATE 12/22/10	APPROVED BY	PAGE 1 OF 1	
DIE NO. 11501A	CAD NAME P-KPB305	DR CAF	
SHAPE CLASS II	ALLOY 6063	TEMPER T5	
TYPE DIE HOLLOW	BACKER DESC. -	HOLES 6	
LG. BOL. DESC. 6-T	SM. BOL. DESC. 6-T	BILLET SIZE 7"	

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

SECTION 13
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	06/27/25	N/A	Original Report Issue