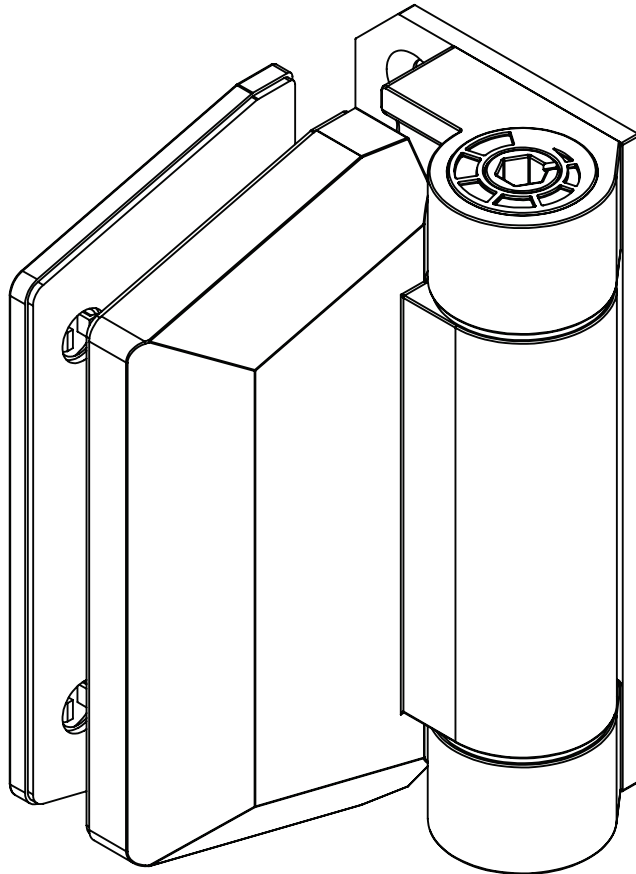


RETRO FIT

155 SERIES POOL HINGE

GLASS TO WALL/SQUARE POST



FINISHES AND FUNCTIONS

- 2205 GRADE STAINLESS STEEL
- 3 SURFACE FINISHES
- SIMPLE *QUIK-ADJUST* RATCHET SYSTEM
- SINGLE ACTION
- SOFT CLOSE
- NON-HOLD OPEN
- SAFETY CAP INCLUDED



8mm
10mm
12mm



MAX.
900mm WIDE x
1500mm HIGH



MAX 45kg



- 10°C
+ 50°C

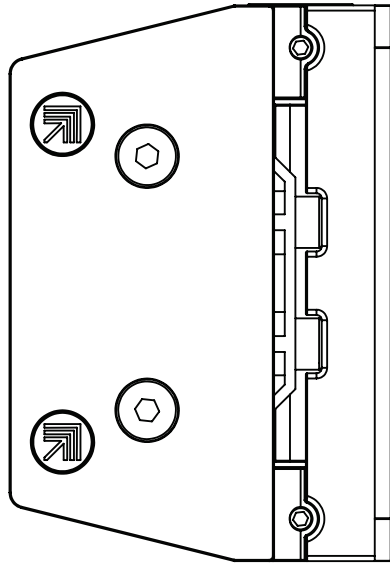


180°

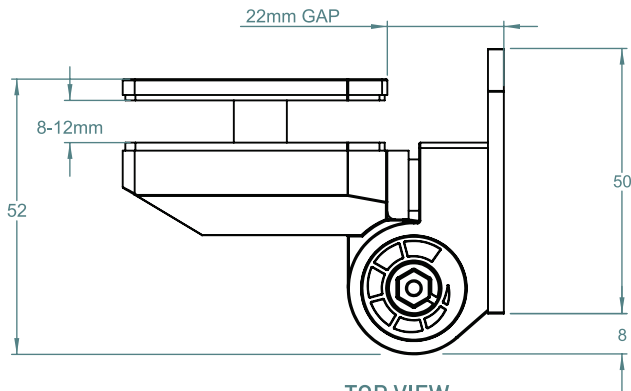
155 SERIES POOL HINGE

- SELF-CLOSING SAFETY HINGE FOR GLASS POOL FENCING
- TO BE USED WITH CHILD PROOF SAFETY LATCH
- COMPLIES WITH AUSTRALIAN STANDARDS FOR POOL GATE HARDWARE
- NATA ACCREDITED AND INDEPENDENTLY TESTED TO 25 000 CYCLES (NATA = NATIONAL ASSOCIATION OF TESTING AUTHORITIES AUSTRALIA)

RETRO FIT



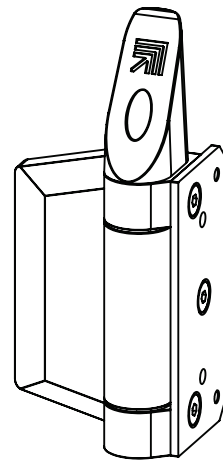
REAR VIEW



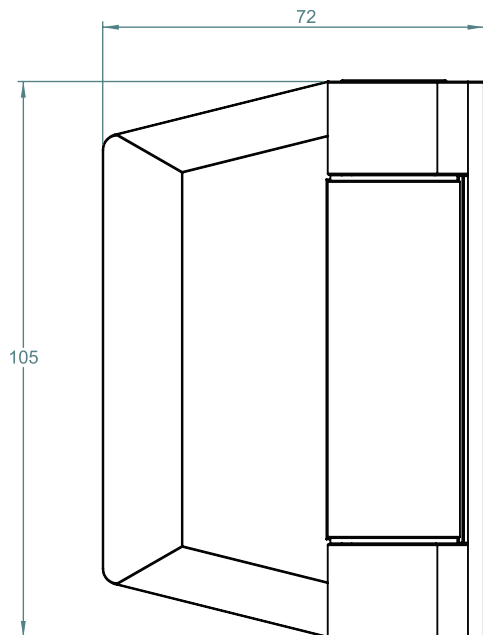
TOP VIEW

TO ORDER SPECIFY:

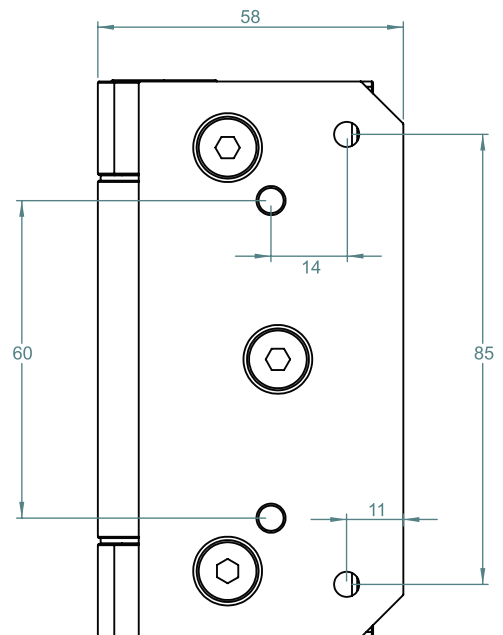
- 155WP POLISHED FINISH
- 155WS SATIN FINISH
- 155WB BLACK FINISH



INSTALLED SAFETY CAP



FRONT VIEW

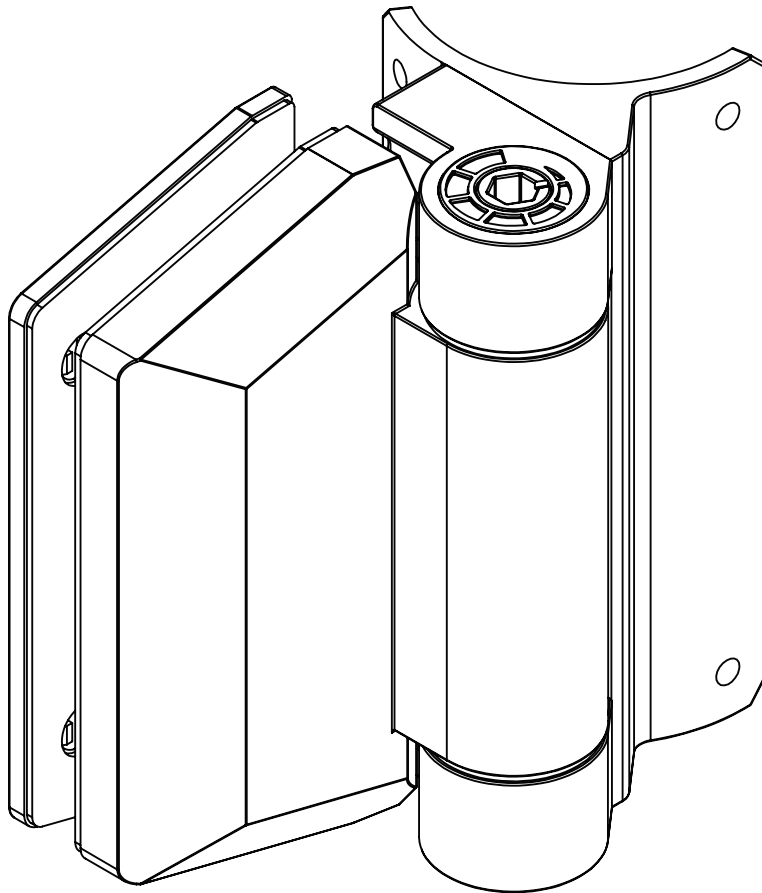


SIDE VIEW

RETRO FIT

155 SERIES POOL HINGE

GLASS TO ROUND POST



FINISHES AND FUNCTIONS

- 2205 GRADE STAINLESS STEEL
- 3 SURFACE FINISHES
- SIMPLE *QUIK-ADJUST* RATCHET SYSTEM
- SINGLE ACTION
- SOFT CLOSE
- NON-HOLD OPEN
- SAFETY CAP INCLUDED



8mm
10mm
12mm



MAX.
900mm WIDE x
1500mm HIGH



MAX 45kg



- 10°C
+ 50°C

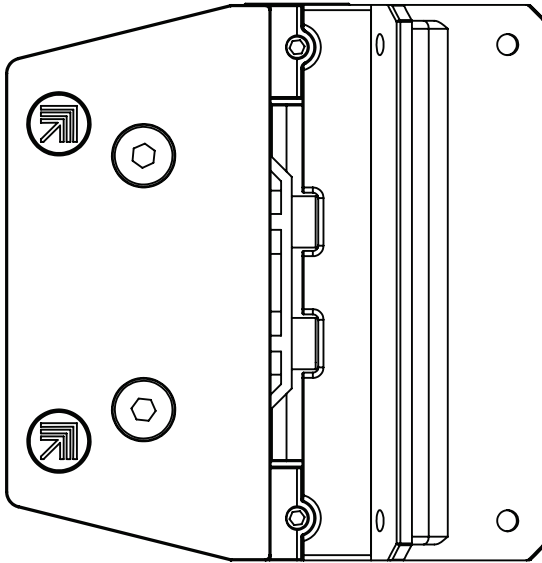


180°

155 SERIES POOL HINGE

- SELF-CLOSING SAFETY HINGE FOR GLASS POOL FENCING
- TO BE USED WITH CHILD PROOF SAFETY LATCH
- COMPLIES WITH AUSTRALIAN STANDARDS FOR POOL GATE HARDWARE
- NATA ACCREDITED AND INDEPENDENTLY TESTED TO 25 000 CYCLES (NATA = NATIONAL ASSOCIATION OF TESTING AUTHORITIES AUSTRALIA)

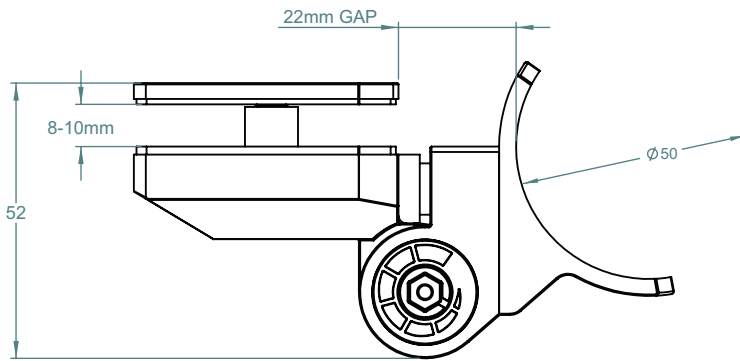
RETRO FIT



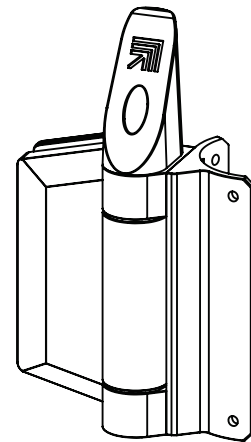
REAR VIEW

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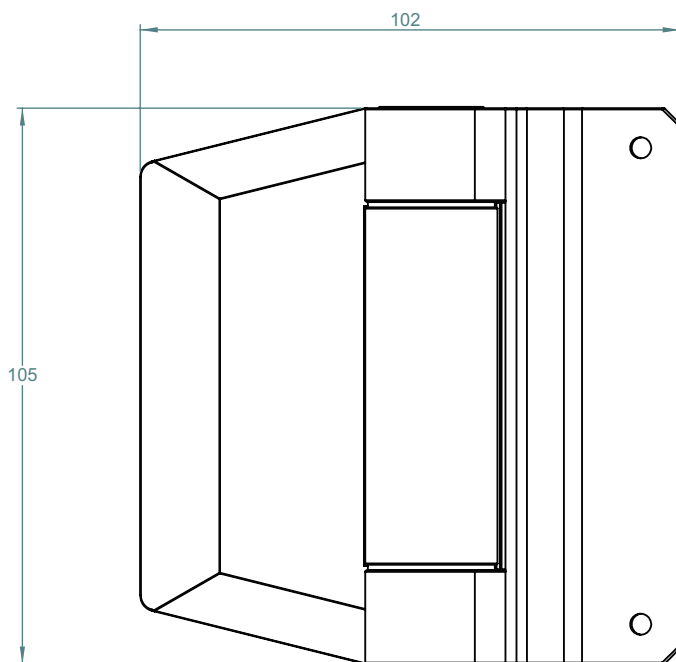
- 155RP POLISHED FINISH
- 155RS SATIN FINISH
- 155RB BLACK FINISH



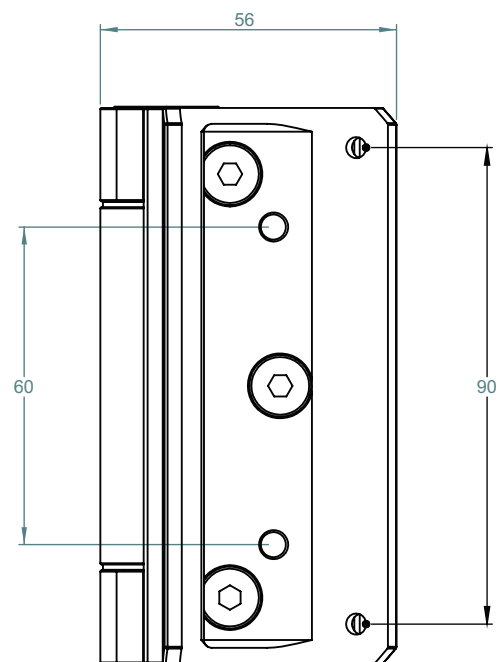
TOP VIEW



INSTALLED SAFETY CAP



FRONT VIEW

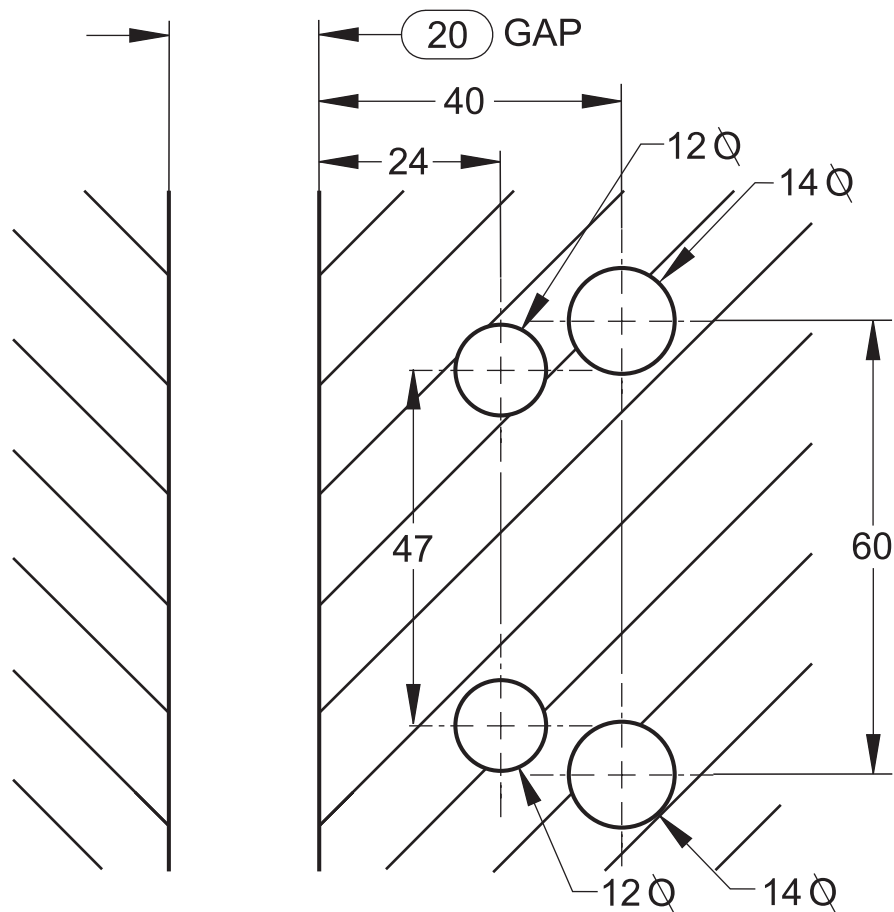


SIDE VIEW

GLASS PREPARATION

155 HINGE

GLASS TO WALL/POSTS



GLASS CUT-OUT TOP AND BOTTOM
(ALL DIMENSIONS IN MILLIMETERS)

TEST REPORT



A Z U M A
Design

POOL FENCE



CLIENT – GLASS HARDWARE AUSTRALIA

PRODUCT – POLARIS SOFT CLOSE HINGE 155 SERIES

TESTED BY

AZUMA DESIGN PTY LTD

AZT0353.20

NATA ACCREDITED LABORATORY NO. 15147

This document shall not be reproduced, except in full

Test results in this report are relevant only to the sample tested

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

1 Customer Requirements

To test the pool fence sample according to AS1926.1 Set 2012- Swimming Pool Safety Standards Set- Section 3- Loading Requirements. Only the applicable tests for this type of sample shall be carried out.

2 Test Sample Information

2.1 General Information

Product Name/Number	Polaris Soft Close Hinge 125 Series
Customer	Glass Hardware Australia
Address	Unit 6, 4 Stockyard Place, West Gosford NSW 2250
Azuma Test Number	AZT0353.20
Date of Test	07/09/2020 – 18/09/2020
Sample	Supplied and installed by Customer in good condition
Overall Size	1275 mm (Height) x 2650 mm (Width)
Test Sample Description	Glass gate assembly consisting of three panels of glass. Two side fixed glass panels one with a latching bracket and the other with hinge fixings for two hinges. Hinges have soft closing action and the latch has a magnetic strike and bolt.

2.2 Barrier

Material	Toughened Glass	
Overall Dimensions	Hinge Panel	1200 mm (H) x 1000 mm (W) x 12 mm (T)
	Latch Panel	1200 mm (H) x 800 mm (W) x 12 mm (T)
Gap between Vertical Elements (< 100 mm)	N/A	
Gap between Horizontal Elements (> 900 mm)	1275 mm	
Total Product Height Greater than 1100 mm	1275 mm	
Gap between bottom of barrier and finished ground level (< 100 mm)	75 mm	

Azuma Design Pty Ltd

38 Redfern Street Werherill Park, NSW, 2164 Australia +61(02) 9604 0255

Test results in this report are relevant only to the sample tested.

Accreditation Number: 15147 - Accredited for compliance with ISO/IEC 17025 - TESTING

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AZT 0353.20



2.3 Gate

Material	Toughened Glass
Overall Dimensions	1200 mm (H) x 800 mm (W) x 8 mm
Gap between Vertical Elements (< 100 mm)	10 mm Latch side 8 mm Hinge side
Gap between Horizontal Elements (> 900 mm)	1275 mm
Total Product Height Greater than 1100 mm	1275 mm
Gap between bottom of barrier and finished ground level (< 100 mm)	75 mm

2.4 Spigots (Supplied by Azuma Design)

Material	Duplex 2205 Stainless Steel
Overall Dimensions	50 mm (Width) x 50 mm (Depth) x 160 mm (Height)
Base Plate (if applicable)	100 mm (Width) x 100 mm (Depth) x 8 mm (Thickness)
Drawing Supplied	N/A
Fixing Method	14G x 50 mm Countersunk hex drive screw into timber
Spacing between Posts	220 mm (Left Side) and 700 mm (Right Side)

2.5 Hardware

Latch	Polaris Standard Side Pull Latch
Hinge	Polaris 155 Retro-Fit Polaris Soft Close Hinge

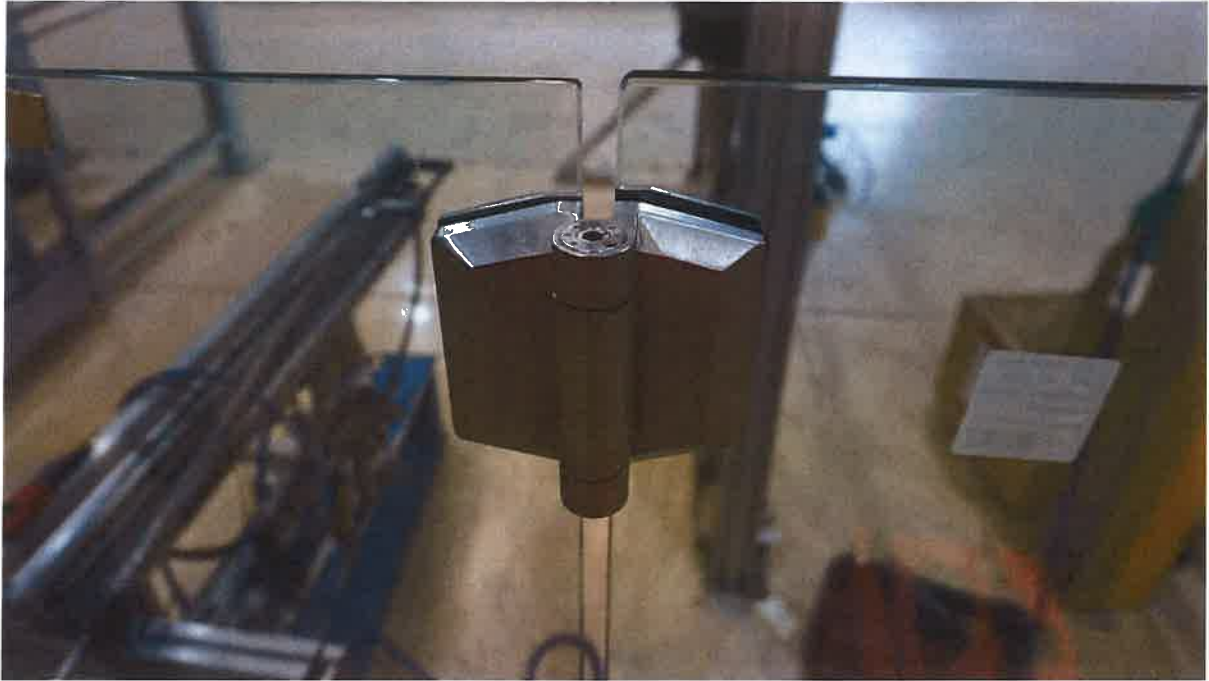


Figure 1: Tested Hinge



Figure 2: Tested Latch

3 Strength and Rigidity of Barrier Openings

This Test is not applicable to this test sample

4 Strength of Posts and Footings

This Test is not applicable to this test sample

5 Strength of Fencing Components

This Test is not applicable to this test sample

6 Flexible Materials & Components

This Test is not applicable to this test sample

7 Strength Test for Rigid Components of Gate Units

This Test is not applicable to this test sample

8 Durability of Gate Units

8.1 Procedure

From AS 1926.1 - 2012 - Appendix F - Test of Durability of Gate Units.

1. Install the gate unit in accordance with the manufacturer's instructions on a site which simulates the in situ condition with the gate posts securely anchored into the ground.
2. Ensure that the gate and its latch comply with Clause 2.4.
3. Measure and record the force (to the nearest 5 N) required to release the latch.
4. Release the latch and open the gate to the 90-degree position.
5. Release the gate and allow it to close under the action of the self-closing device.
6. Repeat Steps (d) and (e) for a total of 10 000 operations or until the latch fails to operate, whichever occurs first. The latch shall not be lubricated or adjusted during this test.
7. Inspect the gate to see whether it still complies with Clause 2.4.
8. Measure and record the force (to the nearest 5 N) required to release the latch.
9. Inspect the gate, including the hinges and latch together with the gate posts, for any damage which would affect the ability of the gate to comply with the requirements of Section 2.

8.2 Results

Number of Operations the sample completed	26,068 cycles
Does the gate still comply with clause 2.4 after test completed	Yes
The force required to release the latch at the start of the test	10 N
The force required to release the latch at the end of the test	10 N
Any damage to the gate, hinges, latching device or gate posts at the end of the test	Nil
Result	Pass

9 Additional Testing for Gate Units

From AS 1926.1 - 2012 - Section 3.4 - Closing and Latching of Gates.

1. The gate shall close and latch from fully open to resting on the latch, under both of the following conditions:
 - a. Under the natural weight of the gate.
 - b. With the gate open and after a weight of 25 kg has been placed on the top rail or component at a point 100 mm from the outer edge of the locking stile of the gate for 30 seconds and then removed.
2. With the gate closed, the latch and posts of the barrier to which the gate is attached shall be capable of retaining the gate in a closed position when 25 kg is placed at the same location and remains on the gate.

Gate Closes under natural weight	Pass
Gate opened and 25 kg placed 100 mm from locking stile	Pass
Gate closed and 25 kg placed 100 mm from locking stile	Pass
Result	Pass



Figure 3: 25 kg Gate Open



Figure 4: 25 kg Gate Closed

10 Conclusion and Signatories

10.1 Conclusion

From the results achieved, it is evident that the sample satisfied the tested requirements as per AS1926.1-2012 Swimming Pool Safety Standards Set.

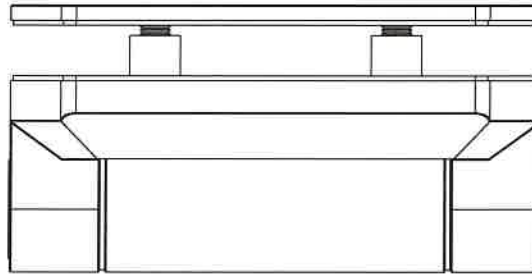
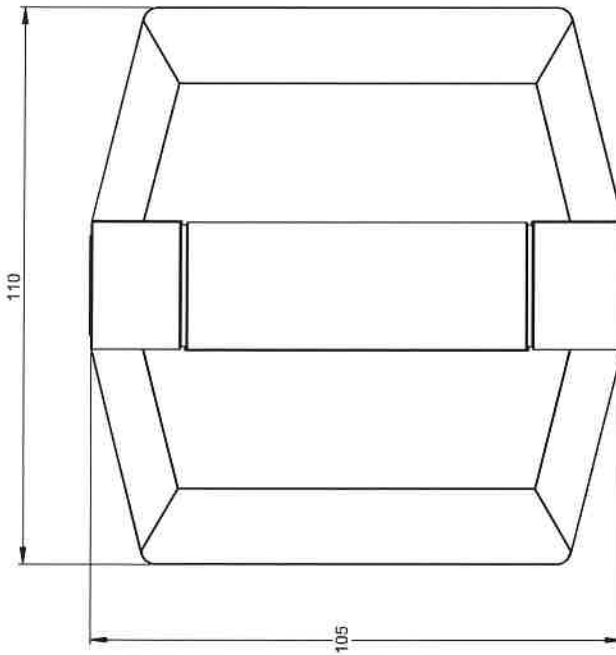
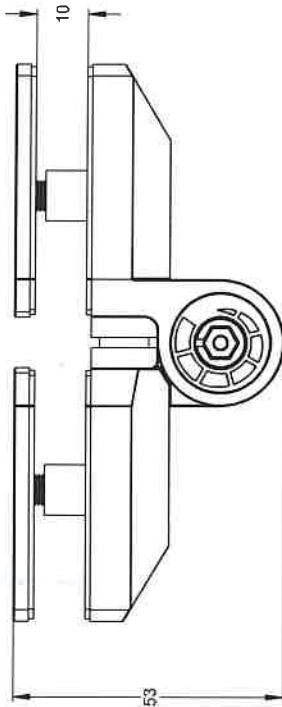
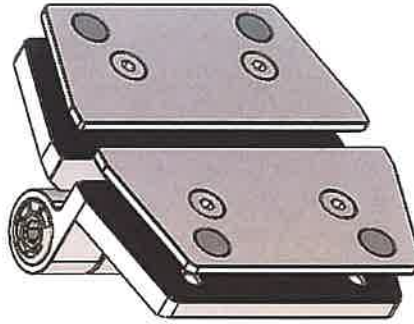
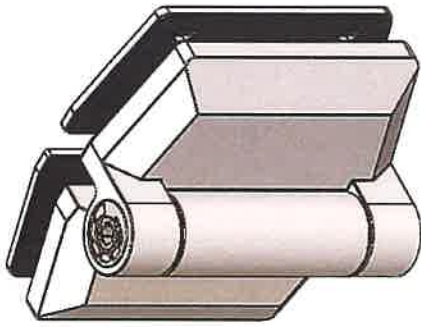
10.2 Signatories

Tested By: Ash Horne

Signature: AHorne

Date: 01/10/2020

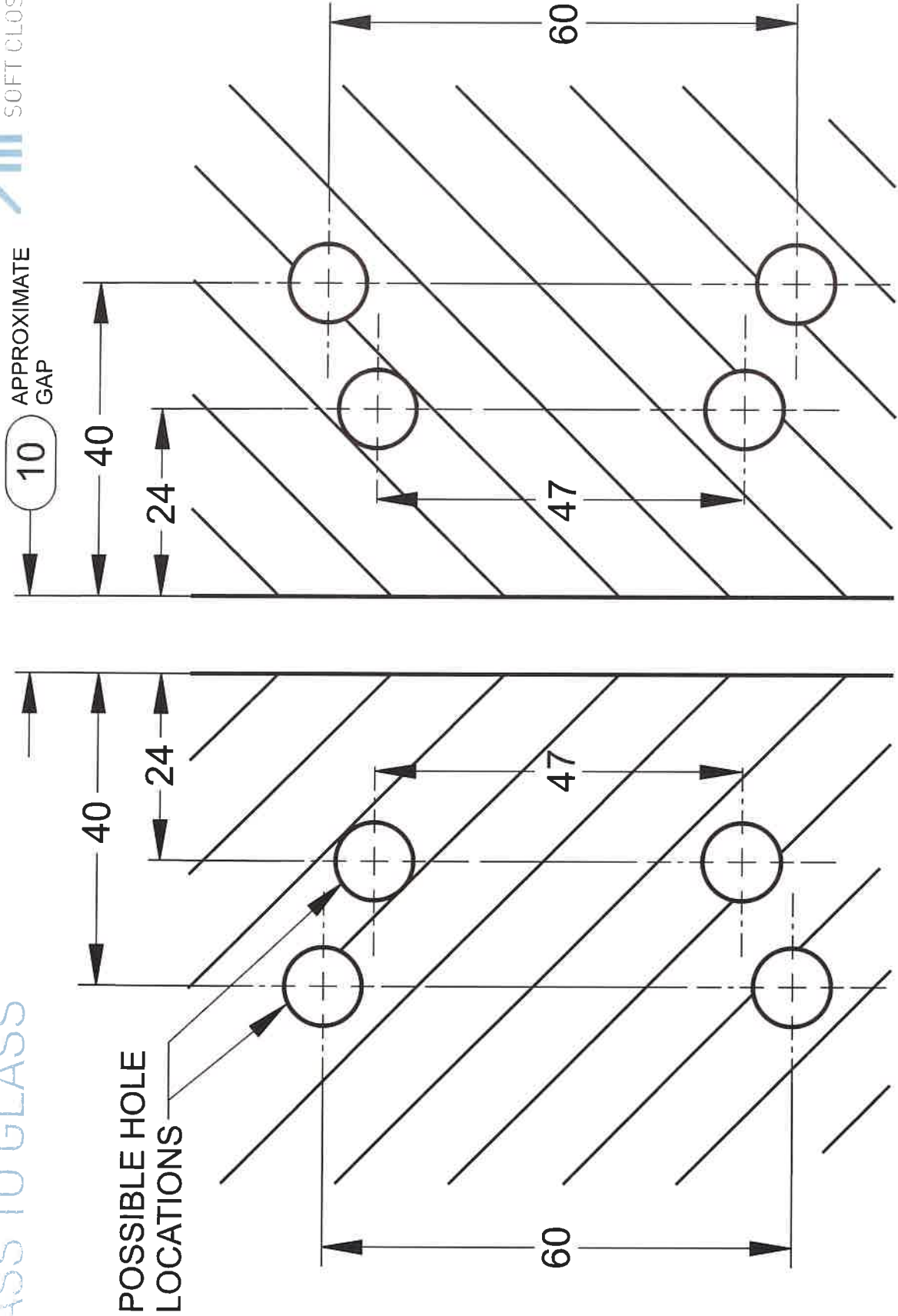
END OF REPORT



INFORMATION SUPPLIED BY CUSTOMER

PROJECT POLARIS 155 HINGE - GC	TITLE 155GG HINGE - GA
	PART NUMBER 155GG-001
MATERIAL: SEE PARTS	EST. WEIGHT: 822g
FINISH: TBA	SHEET SIZE: A3
SHEET: 1 of 2 REV: B	
DRAWN BY: CAS	DRAWN DATE: 12/06/2020
APPROVED BY:	APPROVED DATE:
THIS DRAWING AND ANY INFORMATION OR DATA CONTAINED HEREIN IS THE CONFIDENTIAL AND THE COPYRIGHT PROPERTY OF POLARIS HINGE PTY. & GLASS HARDWARE AUSTRALIA PTY LTD. IT MUST NOT BE DISCLOSED, COPIED, LOANED IN WHOLE OR PART OR USED FOR ANY PURPOSE WITHOUT THE PERMISSION OF SHROUD AND/OR THEIR CLIENT.	
DRAWING SCALE: DO NOT SCALE FROM THIS DRAWING	UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN mm. DIMENSIONS IN: mm
PROJECTION METHOD: THIRD ANGLE	SURFACE FINISH:

155 HINGE MODEL GLASS TO GLASS



MATCH HOLES FOR RETRO FITMENT
TOP AND BOTTOM HINGES HAVE TO BE SPACED MORE THAN 900mm APART
(ALL DIMENSIONS IN MILLIMETERS)

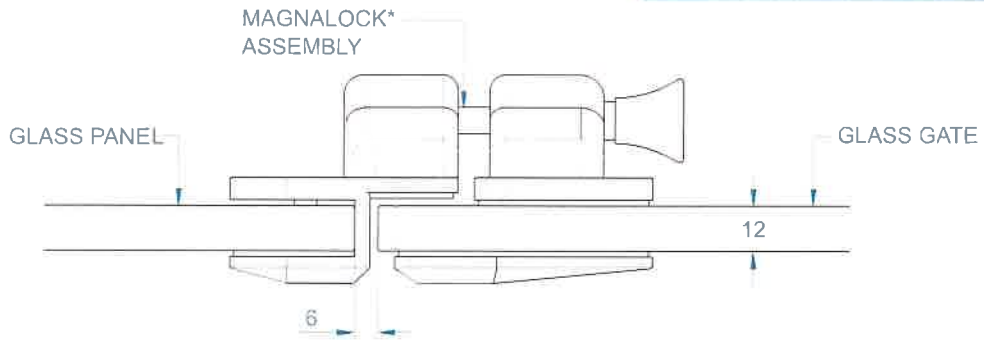
INFORMATION SUPPLIED BY CUSTOMER

LATCH GLASS TO GLASS 180°

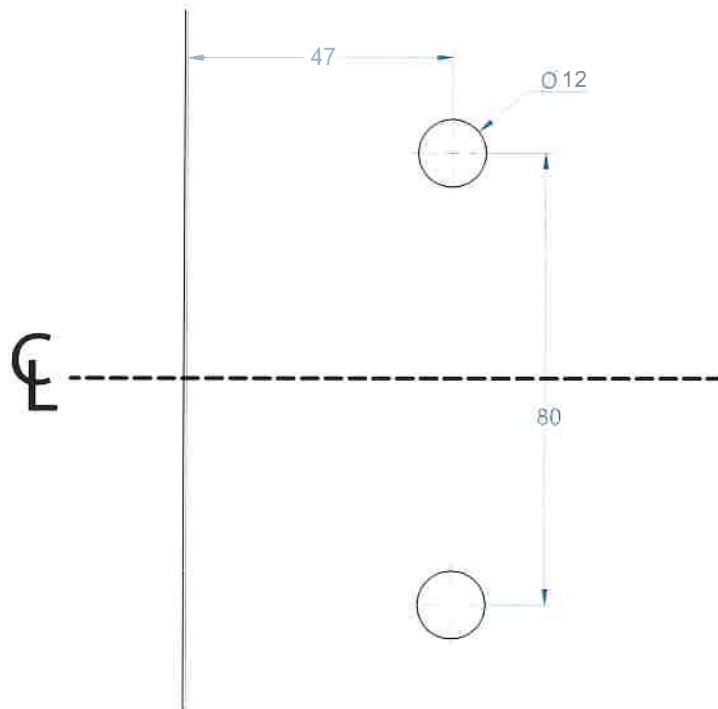
TO ORDER SPECIFY:

- LAGG180P POLISHED FINISH
- LAGG180S BRUSHED FINISH
- LAGG180B BLACK FINISH

*MAGNALOCK NOT INCLUDED



TOP VIEW



GLASS GATE HOLES

INFORMATION SUPPLIED BY CUSTOMER