
TEMPORARY FENCING



A Z U M A
Design



THE AUSTRALIAN TRELLIS DOOR CO.

S04-1 WITH LOCKS

TESTED BY
AZUMA DESIGN PTY LTD

1 Test Standards

The sample provided was tested to the methods and criteria presented

- AS 4687 - 2007 Temporary fencing and hoardings

2 Test Sample Description

2.1 General

Product Name/No.	S04-1 with two side single point locking
Customer	The Australian Trellis Door Co.
Address	Head Office: Unit 5/1 Canal Road St Peters NSW 2044
Date of Test	23/06/2015

2.2 Product Information

Product Description	Fence panels are connected to vertical posts with two castor wheels for each post. Two panels are joined together with a bolt in the centre to be slotted into the floor. See attached drawing for more details.
Dimensions	Width - 2050 mm Height - 2015 mm
Locking Method	Single point locking placed at 1300 mm from finished ground level on each side connected to fixed frame
Other Fixings	14 mm steel peg dropped into a drilled hole located at centre post
Opening Shape	Diamond
Openings (Interior Dimensions)	310 mm x 75 mm - corner to corner dimensions (see drawing for more detail)
Meets Height Requirement (1500 mm Minimum)	Yes 2015 mm

3 Testing

3.1 Simulated Climbing Test

The method used in this test is taken from AS 4687 - 2007, Section 4.2.

3.1.1 Procedure

1. A test apparatus with a lever arm of 400 mm is attached to the top centre of the infill panel.
2. A 65 kg weight is then attached to the end of the lever arm and left to hang freely
3. The weight is suspended for a period of 3 minutes
4. The load is removed after 3 minutes and the specimen is inspected for damage to the infill panel and structural members

3.1.2 Results

Weight Used	65 ± 0.5 kg
Time Elapsed	3 minutes
Signs of Breakage/Damage or Failure	Nil
Result	Pass

3.1.3 Pictures



Figure 1: Simulated Climbing Test

3.2 Impact Test

The method used in this test is taken from AS 4687 - 2007, Section 4.3.

3.2.1 Procedure

1. A torispherically shaped impactor of 150 mm diameter, 270 mm long and weighing 37 kg is suspended above the test specimen in line with the impact area.
2. The impactor is then raised to a height such that it impacts with a force of 150 J
3. The impactor is released
4. The product is observed for the following:
 - (a) signs of penetration
 - (b) signs of failure between connecting materials and support frame
 - (c) signs of cracking or fractures on panels framework
 - (d) overturn due to impact; and
 - (e) exceeding a dynamic deflection of 300 mm at the point of impact
5. The test is conducted at the top corner, top centre, centre and side centre

3.2.2 Equation for Impact Height

To determine the drop height required for the impactor the following equation is used:

$$h = \frac{P.E.}{mg} = \frac{150}{37 * 9.8} = 0.413 \quad (1)$$

where

- P.E. is potential energy (150 Joules)
- m is mass (37 kg)
- g is gravity (taken as 9.8 m/s); and
- h is the height to be determined in meters

3.2.3 Results

Penetration To Infill	Failure Between Materials	Cracking/ Fracture	Overturn	Exceed 300 mm Deflection	Pass/Fail
Impact 1 - Top Left					
No	No	No	No	No	Pass
Notes: Nil					
Impact 2 - Center Left					
No	No	No	No	No	Pass
Notes: Nil					
Impact 3 - Top Center					
No	No	No	No	No	Pass
Notes: Nil					
Impact 4 - Center					
No	No	No	No	No	Pass
Notes: Nil					

3.2.4 Pictures

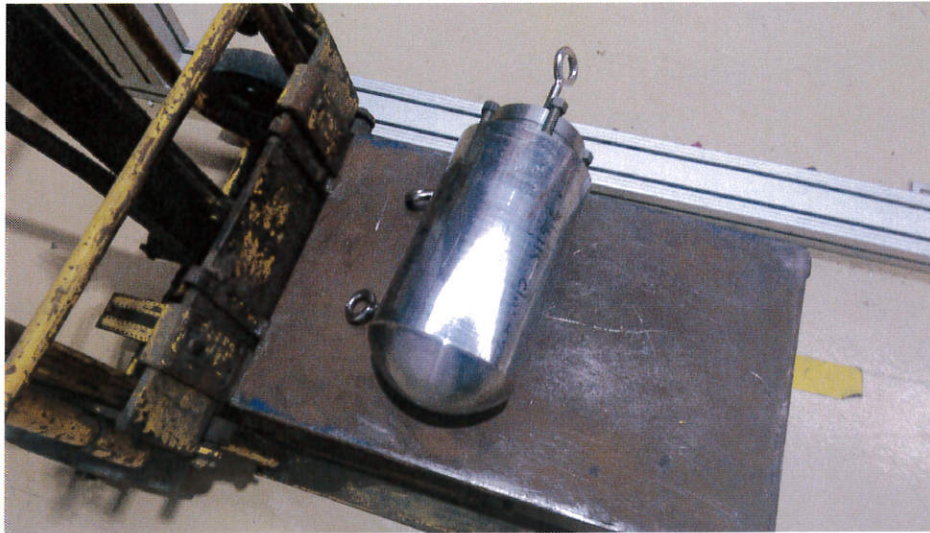


Figure 2: Impactor for Impact Test



Figure 3: Impactor set up to hit top left corner with 150 J

3.3 Wind Force Overturning Test

The method used in this test is taken from AS 4687 - 2007, Section 4.5.

3.3.1 Procedure

1. The specimen is set up in the test chamber
2. A horizontal wind speed is gradually applied to the specimen until the test value is reached
3. The force is held for 30 seconds at the maximum value
4. The specimen is observed for overturning and physical damage

3.3.2 Results


Wind speeds could not be achieved due to the physical nature of the product. The fan used in the test rig reached its maximum output of 50 Hz.

4 Conclusion and Signatories

4.1 Conclusion

From the results achieved, it is evident that the sample satisfied the tested requirements as per AS4687-2007 Temporary fencing and hoarding.

4.2 Signatories

Tested By: Ashley Horne
Signatory Name: Rob Irvine
Signatory Signature: 
Date: 14/7/15

504-1 Mobile Barrier

R-7
RAS

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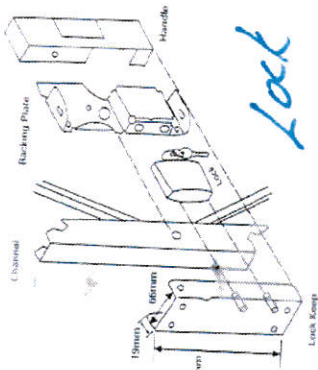
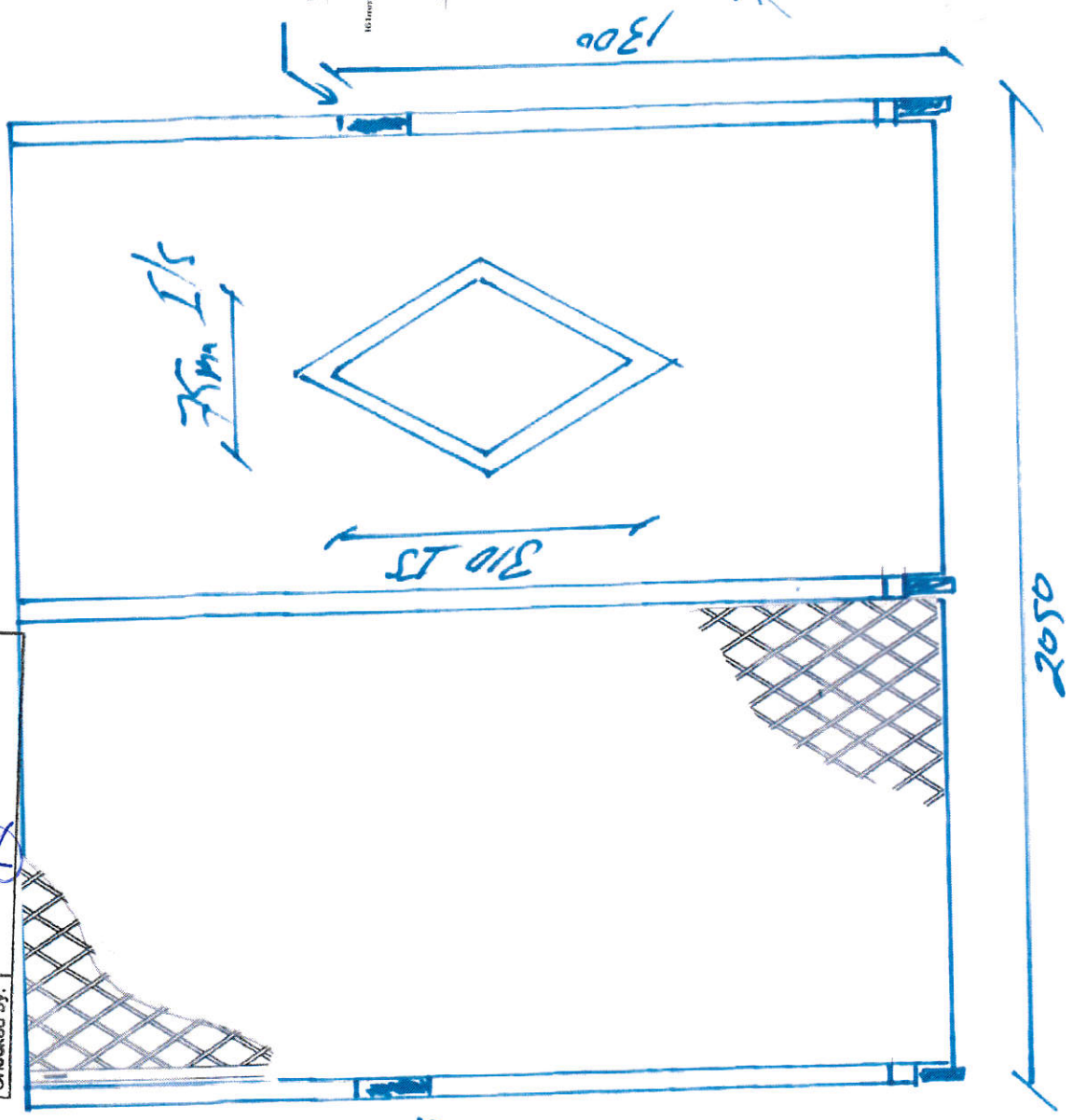
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Checked by: *[Signature]*

504-1
RAS

Lock

3x 30mm
5x 50mm
Lock



From Castor
Wheel

