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TEST CERTIFICATE

Project Title: Additional 1100mm Temporary Guardrail Testing	Ref No.: 30B-15-0096-COC-611077-0
	Date: 25 Nov 2016

Customer Information:

Customer:	Aldeck Group Pty Ltd
Address:	15 Brock Street Thomastown, Victoria, 3074, Australia
Contract/Purchase Order No.:	30B-15-0096-PTQ-483251-0, 30B-15-0096-CCR-610619-0

Sample Information:

Sample	Test
1100mm Temporary Guardrail Post	AS/NZS 4994.1:2009 Section 4.1
1100mm Temporary Guardrail Post with Telescopic Extension Post	AS/NZS 4994.1:2009 Section 4.1



Figure 1: 1100mm temporary guardrail post



Figure 2: 1100mm temporary guardrail post with telescopic extension post

Test Equipment:

Instrument	Manufacturer	Model	Vipac Asset No.
22000 N Load Cell	Wright Scientific	6110	34233
0.05 – 200m Distance Laser	Leica	Disto D5	33606
8m Tape Measure	Stanley	8m FatMax	33666
Stop Watch	Dick Smith	Y1299	33567

Fastener Information:

The fasteners that were used to install the product onto concrete were M8x60mm Screw Bolts (see Figure 3). The 1100mm guardrail post was tested with two fasteners in two different configurations; A and B. Figure 4 and Figure 5 show configurations A and B. The 1100mm guardrail post with the telescopic extension post was tested with three fasteners in two different configurations; C and D. Figure 6 and Figure 7 show configurations C and D.



Figure 3: Fasteners used

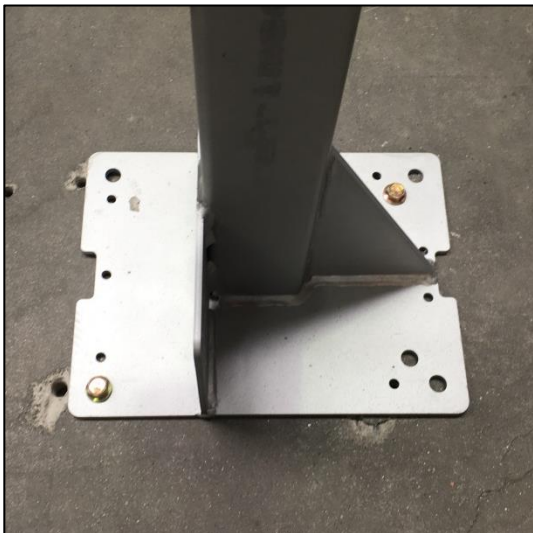


Figure 4: Fastener configuration A

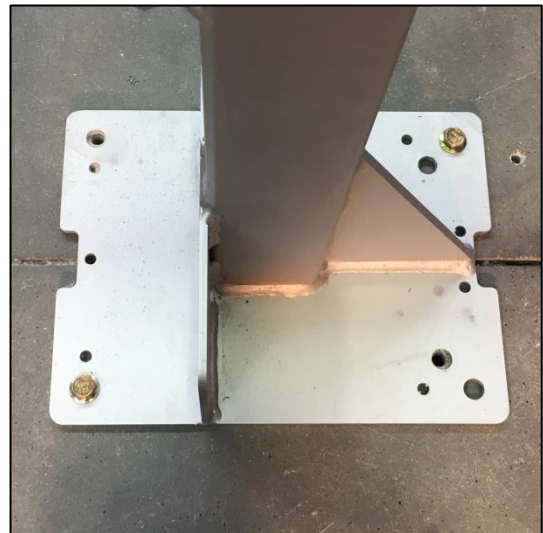


Figure 5: Fastener configuration B

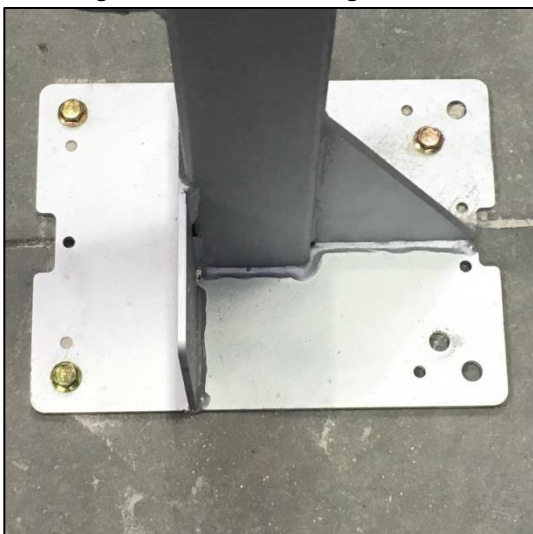


Figure 6: Fastener configuration C

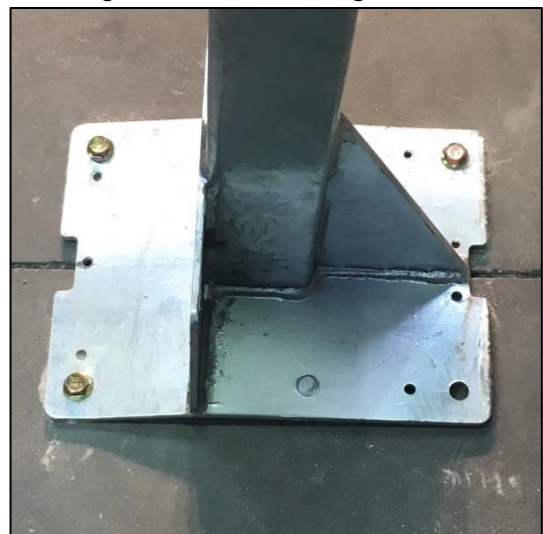



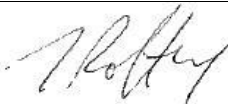
Figure 7: Fastener configuration D

Testing Results:

Sample	Fastener Configuration	Test	Deflection (mm)	Result
1100mm Temporary Guardrail Post	A	Static Inward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	8	Pass
		Static Outward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	8	Pass
		Static Outward (Maximum Load) (AS/NZS 4994.1:2009 Appendix A)	-	Pass
	B	Static Inward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	9	Pass
		Static Outward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	14	Pass
		Static Outward (Maximum Load) (AS/NZS 4994.1:2009 Appendix A)	-	Pass
1100mm Temporary Guardrail Post with Telescopic Extension Post (2.4m total height)	C	Static Inward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	85	Pass
		Static Outward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	78	Pass
		Static Outward (Maximum Load) (AS/NZS 4994.1:2009 Appendix A)	-	Pass
	D	Static Inward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	89	Pass
		Static Outward (Proof Load) (AS/NZS 4994.1:2009 Appendix A)	87	Pass
		Static Outward (Maximum Load) (AS/NZS 4994.1:2009 Appendix A)	-	Pass

Note: Samples have been tested previously. The test method and material information of the samples can be found in test report 30B-15-0096-TRP-484189-3.

Results Statement:

Result:	Vipac Engineers & Scientists have tested the above samples in accordance with AS/NZS 4994.1:2009 Section 4.1. During testing, deflection of each component tested did not reach 101mm and no ultimate failure occurred.	
Title:	Project Engineer (<i>Author</i>)	Project Engineer (<i>Reviewer</i>)
Name:	Jared Carnie	Tim Roffey
Signature:		
Date:	25 Nov 2016	25 Nov 2016