

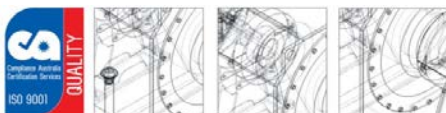
CONFIDENTIAL DATA

Royal Wolf Trading Construction Hoarding Design Certification

40-ft Gantry Hoarding

rwt1507-crt-str040-001

Issue	Date	Description	Author	Reviewed	Approved
0	7/12/2015	Client Review	AWR	MG	




1. Design Approval Certificate

Approval Number:	rwt1507-crt-str040-001
File No:	rwt1507-crt-str040-001-0.docx

Equipment Name:	40-ft Gantry Hoarding
Equipment No:	-
Reference Drawings:	Table 2-2 Reference Documentation
Reference Documents:	Table 2-2 Reference Documentation

We, being the authorised representatives of Royal Wolf Trading, hereby certify that the 40-ft Gantry Hoarding, manufactured in accordance with the design drawings and standards, will remain structurally sound when used in accordance with the data nominated within Section 2 - Design Data.

Signature	Name	Position	Date
	Andrew Reid of HAALD Engineering Pty Ltd	Principal Mechanical Engineer BEng (Mech), RPEQ 7387	07/12/15
Design Authority:	Royal Wolf Trading		

2. Design Data

Table 2-1 – Design parameters

Item	Parameter	Value	Comments
1.	Design life	<5yrs	
2.	Materials of construction	Appendix A	Typical (rwt1507-dcr-grn040-001)
3.	Wind Region	A	Stack two high (gantry + 2)
4.		B	Restricted stacking to one high (gantry + 1)
5.	Structure importance level	2	Normal structures and structures not falling into other levels
6.	Annual probability of exceedance for wind	1/100	AS-1170.0 Table F2. Construction equipment (e.g. props, scaffolding, braces and similar)
7.	Wind directional multiplier	0.95	AS/NZS1170.2 - C3.3.2(a)
8.	Wind Terrain Category	3	AS/NZS1170.2 – C4.2.1
9.	Terrain / height multiplier	0.83	AS/NZS1170.2 Table 4.1A
10.	Shielding multiplier	0.9	Assume multi-storey construction projects. If installed in open areas assume restricted to one building high until shieling is provided by the construction
11.	Topographic multiplier	1	
12.	Dynamic response factor C_{dyn}	1	
13.	Building Length	12.2-m	
14.	Building Width	2.438-m	
15.	Height	Gantry	4-m
16.		Platform	0.25-m
17.		Building	2.9-m
18.	Imposed Loads		
18.1.	Floor Loads	2.0-kPa	Office use
18.2.	Walkways	2.5-kPa	
18.3.	Storage	5-kPa	
18.4.	Roof	10-kPa	Ultimate load case with permanent deformation allowable
18.5.	Tare mass - Hoarding	4360-kg	
18.6.	Mass ballasted platform	12000-kg	
18.7.	Tare 40' building	5000-kg	For stability
18.8.		6400-kg	For strength
18.9.	Maximum Dead Load	360-kN	Total
18.10.		130-kN	Per corner post in a static environment
18.11.	Maximum Live Load	120-kN	Per corner post in a static environment

Table 2-2 Reference Documentation

Item	Document Number	Description	Rev	Origin
1)	rwt1507-drw-rfrrwt-001	40ft Walkway – General Arrangement	A	RWT
2)	rwt1507-spc-rfrrwt-001	Technical Specification ⁽ⁱ⁾ 20'HC WALKWAY CONTAINER	A	RWT/CIMC

- i. **Note:** Used as guidance for material properties