

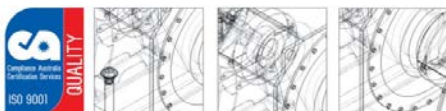
CONFIDENTIAL DATA

Royal Wolf Trading Construction Hoarding Design Certification

10-ft Gantry Hoarding

rwt1507-crt-str010-001

Issue	Date	Description	Author	Reviewed	Approved
0	15/12/2015	Client Review	AWR	MG	AWR
1	16/12/2015	General Release	AWR		



1. Design Approval Certificate


Approval Number:	rwt1507-crt-str010-001
File No:	rwt1507-crt-str010-001-1.docx

Equipment Name:	10-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 10-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.

NOTE:

HAALD Engineering (HAALD) were engaged by Royal Wolf Trading (RWT) to undertake a structural design review of a 20-ft Hoarding. The hoarding system supports an office module as used on construction sites; acting as an overhead protective hoarding. This 10-ft hoarding has similar end portals to the 20-ft hoarding and receives similar unit loading. By inspection, as the 20-ft hoarding has been deemed fit for service under the design load conditions, the 10-ft hoarding is also be deemed fit for service.

Signature	Name	Position	Date
	Andrew Reid of HAALD Engineering Pty Ltd	Principal Mechanical Engineer BEng (Mech), RPEQ 7387	14/12/15
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	rwt1507-dcr-gnr020-001
3.	Wind Region	C	Restricted stacking to one high (gantry + 1)
4.	Structure importance level	2	Normal structures and structures not falling into other levels
5.	Annual probability of exceedance for wind	1/100	AS-1170.0 Table F2. Construction equipment (e.g. props, scaffolding, braces and similar)
6.	Wind directional multiplier	0.95	AS/NZS1170.2 - C3.3.2(a)
7.	Wind Terrain Category	3	AS/NZS1170.2 – C4.2.1
8.	Terrain / height multiplier	0.83	AS/NZS1170.2 Table 4.1A
9.	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
10.	Topographic multiplier	1	
11.	Dynamic response factor C_{dyn}	1	
12.	Building Length	3.-m	
13.	Building Width	2.438-m	
14.	Height	Gantry	2.9-m
15.		Platform	0.25-m
16.		Building	2.9-m
17.	Imposed Loads		
17.1.	Floor Loads	2.0-kPa	Office use
17.2.	Walkways	2.5-kPa	
17.3.	Storage	5-kPa	
17.4.	Roof	10-kPa	Ultimate load case with permanent deformation allowable
17.5.	Tare mass - Hoarding	1190-kg	

Table 2-2 Reference Documentation

Item	Document Number	Description	Rev	Origin
1)	rwt1507-dcr-gnr020-001	Design Criteria	0	Haald Engineering
2)	rwt1507rpr-str020-001	Design Review & Certification Report	0	Haald Engineering
3)	rwt1507-drw-rfrrwt -001	20ft Walkway – General Arrangement	B	RWT/CIMC
4)	rwt1507-spc-rfrrwt-001	Technical Specification 20'HC WALKWAY CONTAINER	A	RWT/CIMC
5)	rwt1507-clc-mch020-001	Loading calculations – 20ft Hoarding	0	Haald Engineering
6)	rwt1507-clc-str020-001	FE Analysis – 20ft Hoarding	g	Haald Engineering