



Data Sheet of Typical Offshore GFRP Handrail

SN	Description	Property	Comment
A. Design			
1	Design Criteria	Offshore -Wave zone Area	-
2	Design Standard	IBC/ ASCE-07	-
3	Design Method	Finite Element Method	-
4	Design Temp	60 °C	-
5	Design Live Load	730 N/m	-
6	Safety Factor	3.4	-
7	Design Wind Speed	17.2 m/s @1 Year & 26.7 m/s @ 100 Years	-
8	Design Wave Data	Max Wave H 5.4 m @1 Year & 10.7 m @ 100 Years	up to max 4.7 m/s
B. Process & Material			
9	Manufacturing Process	Pultrusion for Top/Bottom rail & Post open mould for curved ends	-
10	Material of Construction	Fiberglass (FRP/GRP)	-
11	Vertical Post Height	1095 mm	-
12	Max Distance Post	1500 mm	-
13	Top Rail Profile	Dia 50 mm	-
14	Vertical Post Profile	Dia 50 mm	-



Data Sheet of Typical Offshore GFRP Handrail

SN	Description	Property	Comment
15	Bottom Rail	Dia 50 mm	-
16	Color	RAL 1023 (SafetyYellow) or any RAL	Pigmented Resin during process
17	Glass Content	50-70 %	as per ASTM D2584-18
18	UV Effect	UV Resistant	as per ASTM D4329
19	Chemical Resistance	Polyester Resin	Resistant to Sea water
20	Fire Properties	Resistant as per ASTM E84 /D635	Class 1
C. Accessories			
21	Floor Mounting Brackets	Steel welded sockets	By Contractor
22	Kick Plate	Stainless Steel SS316 / A4	By Contractor
23	Fasteners	SS 316/A4	Ceramic primer & Fluoropolymer
24	Gasket Seal	Neoprene 13 mm thick	-
25	Identification Tags	Aluminum	-

