



HORIZON 97 Raise Pilot House MOTOR YACHT

2010 Standard Specifications (AUD) (Annex A)

Valid date: May, 2010

Principal dimensions (approximate):

L.O.A.	:	97'-0"	(29.57 m)
L.W.L.	:	86'-3"	(26.30 m)
Beam	:	21'-6"	(6.55 m)
Draft (prop. tip clearance)	:	6'-4"	(1.93 m)
Height (W.L. to top of arch)	:	33'-3"	(10.13 m)
Displacement (light approx.)	:	193,600 lbs.	(88 tons)
Fuel	:	3,000 US gal.	(11,300 litres.)
Fresh Water	:	500 US gallons	(1,900 litres.)

A. Hull and Main Structure:

1. White Gelcoat finish.
2. One-piece hull lamination and longitudinal stringers.
3. Hull, Deck & superstructure are built with licensed process SCRIMP™ for improved strength and less weight.
4. Fiberglass solid hull bottom.
5. High-density foam cored construction above water line.
6. Stringers with high density foam coring.
7. Foam cored reinforcement for strength.
8. Interior structural components all properly bonded to hull.
9. Strong collision bulkhead structure for extra safety.
10. INTERNATIONAL brand anti-fouling bottom paint, w/ anti-osmosis treatment.

B. Exterior Deck and Equipment:

1. Nonskid fwd deck, Teak Aft decks, teak swim platform and teak steps.
2. Teak cap rail w/o varnish.
3. Two vertical hydraulic anchor winches "Maxwell VWC4000".
4. Two high tensile 1/2 inch, 300 feet anchor chains.
5. Two stainless steel 220 lb anchors.
6. Two stainless steel rollers w/hull side pocket anchors design.
7. Heavy-duty 316# stainless steel cleats and fairlead w/rollers.



8. High bulwark w/ flush mounted deck lights.
9. 4 FRP bulwark side doors.
10. Freshwater anchor chain wash down.
11. Heavy-duty S/S 2" handrail w/1-1/4" stanchions.
12. Stainless flag pole on bow rail.
13. Forward deck storage locker for fender and lines– L shape for better access.
14. Forward deck seat.
15. Sunbathing cushion on fwd deck w/drink holders.
16. Frameless windows tinted tempered glass 12 mm for windshield & 10 mm for side windows.
17. Stainless steel "TREND" sliding door for main salon, self locking.
18. Two deckhouse side entrance doors.
19. After deck hidden trash can and sink.
20. After deck high-low dining table (fiberglass or teak).
21. Access flybridge through curved teak steps from after deck, stainless steel handrail.
22. S/S supporting pillars 5" on after deck.(for USA/Aussie only)
23. Internal boat hook holders on after deck.
24. 2" stainless steel rails around swim platform (removable) at stern.
25. Built-in shower with hot/cold water above swim platform.
26. Swimming ladder in folding storage well.
27. Solid stainless steel rub rail around upper hull side (for USA/Aussie only).
28. Fiberglass rub rail w/stainless steel cap on lower aft hull side (for USA/Aussie only).
29. Stainless steel portholes.
30. Exterior LED step lights.

C. Flybridge and Boat Deck:

Flybridge

1. Non-skid flybridge deck.
2. SUNBRELLA exterior cushions (standard shipyard colour choices).
3. SUNBRELLA canvas covers for flybridge, helm seats, aft deck seat, windshield, sun pad forward cushion and seat, standard shipyard selection.
4. Integral stainless steel handrails around exterior FRP cabinet.
5. Indirect lighting system under all furniture and seats.
6. Stainless steel sliding hatch on F/B deck step opening.
7. FRP cabinet with sink and flush mount Barbecue unit.
8. Oversize drains w/strainers on each corner of flybridge deck with internal overboard drains.
9. Fiberglass radar arch w/antenna bracket.
10. Two TOKAI SUNSHIN search light.
11. Chrome plated BUELL air horns on top of radar arch.
12. Space for dinghy or Jet Ski.



13. Flag staff on back of flybridge.
14. Hydraulic dinghy davit retractable "STEEL HEAD" 2500 lbs.
15. LED white light with 24vdc transformer on Horizon group logo in P&S.
16. Bracket for life raft (1).

D. Pilot house and instrument:

1. One Stidd helm chairs Admiral Model.
2. Instrument console with leather covering.
3. "U" shape seats w/ wood high-low table. (In accordance with layout)
4. TV cabinet, refrigerator, storage locker per layout designs.
5. Heavy-duty SPEICH Stainless steel wipers w/wiper washer system.
6. Variable speed control on each windshield wiper.
7. Full set engine gauges at both stations.
8. Monitoring system for important equipment (bilge pumps, blowers, nav Lights).
9. DANFORTH or equivalent magnetic compass at both helms.
10. International navigation lights.
11. TANK TENDER fuel and water management system.
12. Fuel and water electrical level gauges.
13. ELBEX closed circuit T.V. monitor with 2 cameras (aft deck and engine room).
14. All other navigational equipment, an owner supplied option from approval supplier only.

E. Engine propulsion and Steering system:

1. Twin CATERPILLAR C-32A 1600hp diesel engines w/reduction gears.
2. Stainless steel shafts AQUAMET HS 22# or equivalent.
3. High performance 4 blade propellers.
4. Main and intermediate bronze struts w/backing plates.
5. Shaft and rudder packing glands with TIDES Marine drip less seals or equivalent.
6. MMC engine controls with chrome control heads or GLENDENING electronic engine control system at each station.
7. Third control station (engine gear, thrusters) on aft deck. (In accordance with layout)
8. HYNAUTIC power steering system.
9. Stainless steel rudder w/zinc plates.
10. Stainless steel emergency tiller in rudder cabin.
11. Custom steering wheels at both stations.
12. Under water exhaust system for engines w/mufflers.
13. Hydraulic AMERICAN BOW THRUSTER 45 hp.
14. HYNAUTIC or equivalent heavy-duty trim tabs with indicators.



F. Engine room and equipment:

1. Engine room clean design with lightweight floor.
2. White engine room overhead ceilings.
3. A30 grade fire insulation.
4. Heavy-duty insulated engine room door.
5. Stainless steel overhead grab rail on each side of engine.
6. Engine room AC florescent lights and DC dome lights.
7. Four engine compartment blowers (two AC & two DC).
8. DELTA T or equivalent engine room de-mister filters.
9. Engine mounts on one piece white paint steel channel.
10. Engine alarm system for low oil pressure and high water temperature.
11. Air compressor.
12. TRIDENT HOSE for engine exhaust.
13. NUTONE Central vacuum cleaner.

G. Electrical systems:

1. Two Onan generators 27KW (50 Hz) or 32KW (60 Hz) with sound shield.
2. Two GLENDENNING shore power cable masters 50amp w/75' cable each.
3. Shore power connection, Charles ISO boost transformer 50 Amp.
4. Extra shore power plugs (2) on fwd deck.
5. Colour-coded wiring for easy identification.
6. Fiberglass water/exhaust separator for generator.
7. Inverter/Charger XANTREX 4kW/150Amp or MASTERVOLT COMBI 2kW/60Amp (total 2 units).
8. GUEST battery switch (vapour proof).
9. Four engines start batteries.
10. Eight 200 AH gel cell batteries for ship's service power.
11. Separate 120 amp/hr starting battery for generator.
12. All batteries enclosed with boxes and cover.
13. Main electric panel includes AC & DC circuit breakers.
14. 24 volt DC monitoring and main circuit breaker panel.
15. 12 volt cigarette lighter in main helm station.
16. AC volt duplex receptacles located throughout including engine room.
17. Italian VIMAR switches for lighting system.
18. GFI protection for AC required outlets.
19. Indirect lighting under valance in saloon, staterooms, pilothouse and galley.
20. TV antenna on top of radar arch.
21. 24 volt to 12 volt converter for supply of 12-volt components.
22. Electrolysis bonding system.
23. Cathodic protection with zinc anodes for shafts, struts, etc.



24. Dimmer system for DC halogen lights in aft deck.
25. Dimmer system for AC halogen lights in saloon, master & VIP cabins.
26. Sub panel design in each zone for electrical distribution.

H. Mechanical systems:

Fuel oil system

1. 3,000 Gallons Aluminium fuel tanks w/sight & electric gauges.
2. Dual RACOR 75/1000 MA fuel filters/water separator, each engine.
3. Fuel transfer pump.
4. RACOR 500 MA fuel filter for each generator.
5. Oil change pumps system for engines & generator.

Fresh water system

1. 450 gallon water tanks.
2. High-volume AC fresh water pressure pump and one DC pump for back up.
3. Fresh water Charcoal filters in main supply pipe and in galley.
4. Fresh-water hose for filling engine and generator expansion tank.
5. Marine grade lines for fresh water system.
6. Two 30 or three 20 gallon water heaters.
7. Water Maker "Sea Recovery" 1400 gal/day.
8. Hot water circulation pump.

Sanitary system

9. TECMA toilet system or equivalent.(4 Toilets)
10. 200 gallon holding tank w/macerator pump.
11. "Y" valve for holding tank with deck fitting for dockside pump out.
12. 100 gallon sump tank.
13. Sump pumps system for grey water.
14. Electrical level indicators for holding tank and sump tank.

Bilge water system

15. Five electric RULE bilge pumps.
16. Two manual bilge pumps in engine room and forward cabin.
17. High water level bilge alarm.
18. Bilge exhausts ventilation fans.

Air conditioning system

19. Chilled water MARINE AIR, air conditioning.



20. Back up air conditioning sea water cooling pump.
21. Evaporators thru boat.

Fire safety system

22. A30 grade fire insulation in engine room.
23. Fixed fire extinguisher (FM200) for engine room with remote control.
24. Auto shutdown system.
25. Automatic fire damper system.
26. 4 portable fire extinguishers in recessed lockers.
27. CO2 Fire detector or smoke detector in each cabin.
28. Fire resistant treatment for pipe penetrations.

I. Interior design and equipments:

(As per layout plan)

Interior decoration

1. High-gloss wood finish on vertical and horizontal surfaces (Standard Cherry wood knot/Macore/ Bird's eye Maple/ walnut).
2. Interior stairs from main deck to flybridge.
3. Interlocking vinyl-ceiling panels throughout.
4. Teak & holly floor in pilothouse.
5. Teak & holly or marble floors in galley.
6. Marble or granite counter top in galley.
7. Carpet (local supply) floor thru boat except wood floor areas.
8. Italian High-quality door lock and cabinet door locks.
9. Leather saloon and dinette sofa.
10. High-density foam mattress with custom bedding covers.
11. King size bed in master stateroom.
12. Three double or twin staterooms w/ensuite head & shower.
13. Leather bed headboard Master only.
14. Wood bed frames in all cabins.
15. Hanging lockers in all staterooms.
16. Escape hatch with ladder for master stateroom.
17. Halogen ceiling lighting, DC 28V.
18. LED rope lights for safety step lights.
19. LED rope lights under sofas, beds, and valances.
20. Marble or granite counter top and back splash in all heads.
21. Marble or granite floors in all heads.
22. Seamless polyurethane finish in all shower stalls.



23. Towel bars, rings, cup holders, brush, etc. for all heads.
24. Exhaust blower for each head.
25. Inlaid sink with curved wood face for each head.
26. Bathtub in master cabin.
27. Rear accommodation arrangement plan: In accordance w/ layout plan – to include aft quarters, efficiency galley, head and shower, hanging lockers, bunks, storage lockers, A/C.
28. Anti-noise treatment to exhaust system.

Home appliances

29. U-LINE ice maker or refrigerator per layout.(max.1)
30. Stainless steel sink w/garbage disposal.
31. SUBZERO refrigerator.
32. Full size electric cook top with exhaust blower above.
33. Dishwasher.
34. Full size microwave convection oven.
35. Trash compactor.
36. GE or equivalent stack type washer/dryer

Telephone and Stereo System

37. TV cabinet in all staterooms, saloon High-Low TV system.
38. 42" Plasma TV with separate DVD player in saloon.
39. 19" TV with DC12V DVD car stereo for each cabin. Max. 5.
40. PANASONIC PBX Telephone with intercom feature, w/outlets in salon, pilothouse, master stateroom, VIP stateroom.
41. Car stereo with two speakers in flybridge.
42. Exterior connector for shore phone and cable TV.

****All specifications subject to change without notice****

The end

Not included are pieces of free standing furniture and lamps, special designer specified lighting, art work, cooking utensils, cutlery and flatware, soft goods and the design fees attendant to personalizing the Owners interior arrangement plan and design.

Qualifications and Notice to Reader

Performance statistics, weight, draft, freeboard and height are estimated only and are not warranted, and actual figures will vary depending on tolerances achieved during the vessel's construction process and the equipment, supplies and stores on board, as well as operational and sea conditions. Horizon reserves the right to substitute equipment and materials stated herein to others which it believes to be of equal or superior quality and to make such design and dimensional changes as it believes are necessary to improve the vessel's performance and function.