

HORIZON-FD102 SKYLINE MOTOR YACHT

2020 Standard Specifications

Effective date: Jan. 1st, 2020

Principal Dimensions (approximate):

LO.A. 107'- 5 1/2" (32.75 m) L.W.L. 92'- 6" (28.19 m) Hull Beam 24'- 9 3/4" (7.57 m) Max Beam (with bump out) 25'- 2 1/2" (7.69 m) Draft (half load) 5'-11 3/4" (1.82 m) Height (W.L. to hardtop) 24'-63/4" (7.49 m) Displacement (half load) 277,780 lbs. (126 tons) Fuel 4,500 US gallons (17,030 ltrs.) Fresh Water 800 US gallons (3,025 ltrs.)

◆ Engine : Twin CAT C32A 1,600HP

• Generator : 2 x Onan 55kW (60Hz) or 2x Onan 50kW (50Hz)

A. Hull and Main Structure

- ABS/DNV type approval fiber / resin & sandwich core material applied.
- White gelcoat finish for hull above water line, exterior decks and furniture.
- 3. One piece hull $SCRIMP^{TM}$ cored lamination w/ deep skeg and longitudinal girders.
- Hull, deck & superstructure are built with licensed process SCRIMPTM for improved strength and less weight.
- 5. Fiberglass solid hull bottom.
- High-density Divinycell or equivalent foam cored hull sides, decks and superstructure.
- 7. Stringers with high density foam coring.
- 8. Interior structural components all properly bonded to hull.

- Strong collision bulkhead structure for extra safety.
- International anti-fouling bottom paint w/ anti-osmosis treatment.
- 11. PropSpeed/PropGold metal paint for underwater appendages.
- 12. Tunnels for reduced draft.
- 13. High Performance Piercing Bow (HPPB) with S/S protection plates.
- 14. Upper deck with bump out design at PORT and STBD side.

B. Exterior Deck and Equipment

- Teak aft deck, teak swim platform and teak steps to swim platform, and steps to upper deck. Non-skid for the rest.
- 2. FRP cap rail.
- 3. Maxwell VWC4000 vertical hydraulic



- windlass (x2) w/ local foot switches and remote.
- 4. 300 ft high tensile 1/2" anchor chains (x2).
- 5. 110kg S/S anchors (x2).
- S/S rollers (x2) w/ hull side pocket anchors design.
- 7. Heavy-duty 316 S/S cleats and fairlead w/rollers.
- 8. Bulwark w/ flush mounted courtesy lights.
- 9. Aft deck corner hawser (x2).
- 10. Bulwark side doors (x2) at aft deck for boarding.
- Freshwater/sea water anchor chain washdown system by manual operation.
- 12. 2" handrail with 1-1/2" S/S stanchions and steel cable around entire boat.
- 13. S/S flag pole at bow.
- 14. Standard lines and Polyform F-7 fenders (x8).
- Portuguese bridge with sofa seats as per layout.
- Foredeck sunbathing cushion w/ cup holders.
- Frameless windows slightly tined tempered laminated Low-E glass for windshield.
- 18. Frameless windows tinted tempered laminated galss for side windows.
- Stairs from aft deck to swim platform w/
 S/S gate doors and handrails.
- 20. S/S sliding saloon entrance door, self locking.
- 21. Deckhouse w/ two hinged doors..
- 22. Aft deck Hi-Lo dining table.
- 23. Two integrated stairs from aft deck to upper deck (one from port side, and one from starboard side).
- 24. Hydraulic Hi-Lo swim platform w/ function as tender life up to max 2000lb.
- 25. Two pop-up cleats on Hi-Lo swim

- platform.
- 26. Boat hook (x2, ship loose).
- 27. Built-in shower with hot/cold water above swim platform.
- 28. Extractable or foldable swim ladder.
- 29. Rub rail around hull side.
- 30. S/S portholes.
- 31. Exterior LED step lights.
- 2" removable S/S rails around swim platform at stern.

Beach Club

- Hydraulic door with pantograph door in the middle.
- 34. Sofa seat w/ table as per layout.
- Bar w/ stools, sink, refrigerator, and ice maker as per layout.

C. Skylounge and Boat Deck Skylounge

- 1. Pilot house (helm station).
- Choice of marble/ Corian for countertop from standard collection.
- 3. "L" shape seats as per layout.
- Custom two-levels bar with stools, sink, ice maker, and refrigerator as per layout (either in Skylounge or on boat deck).
- 5. Sliding door to boat deck with self lock.
- 6. Hatch (x1) on hardtop (w/ a ship loose retractable ladder).

Boat Deck/Upper Deck

- 7. Non-skid upper deck.
- Boat deck furnishing: 1) a Jacuzzi w/ heating and FRP cover w/ sunpad above;
 OR 2) sun loungers (x3).
- Standard choices of Sunbrella fabrics for exterior cushions.
- 10. Standard choices of Sunbrella canvas



- covers for upper deck furniture, aft deck seat, windshield, sunpad and foredeck cushions and seat.
- Choice of marble/ Corian/ Teak for countertop from standard collection.
- 12. One 24" barbecue or 15" Teppanyaki in custom cabinet as per layout.
- Oversize drains w/ strainers on each corner of flybridge deck with internal overboard drains.
- 14. Radar arch w/ antenna bracket.
- 15. Tokai Sanshin LED search lights (x2).
- 16. Chrome plated Buell air horns on top of radar arch.
- 17. S/S flag pole at stern.
- 18. Hydraulic davit 2000 lbs (2500 lbs for USA ONLY).
- LED white light Horizon group logo port and starboard sides.
- 20. Indirect lighting system under all furniture and seats.

D. Pilot House and Instrument

- 1. Stidd pilot chair (x2, manual).
- Integrated instrument panel on helm station, standard choices of wood & leather.
- 3. Sofa seat w/ table as per layout.
- 4. Heavy-duty Speich S/S wipers and wash system.
- Variable speed control on each windshield wiper.
- 6. Ritchie, or Danforth, or equivalent magnetic compass on both helms.
- 7. International LED navigation lights.
- 8. Full set engine gauges on helm.
- 9. Electrical fuel and water level gauges.
- Monitoring system for important equipment (bilge pumps, blowers,

- navigation lights).
- 11. Surveillance camera system (PTZ cameras at aft deck and engine room).
- 12. USB charger x1.
- 13. Chart storage if space allowed.

E. Engine Propulsion and Steering System

- Twin CAT C-32A 1600HP diesel engines w/ reduction gears.
- 2. S/S shafts Aqualoy 22 HS or equivalent.
- High performance S class 5 blade propellers in NiAlBr.
- Main and intermediate bronze struts w/ backing plates.
- Shaft and rudder packing glands with
 Tides Marine dripless seals or equivalent.
- ZF Mathers engine controls with chrome control heads or Glendinning electronic engine control system at helm station.
- ONE remote handheld control (with throttles, gears, and thrusters) and TWO locations for "plug-in" receptacle (one at aft deck and one at pilothouse).
- 8. Jastram or equivalent power steering system.
- 9. S/S rudder w/ zinc plates.
- 10. S/S emergency wheel in rudder cabin.
- 11. Custom steering wheels at both stations.
- Under water exhaust system for engines w/ bypass mufflers.
- 13. ABT Zero Speed Stabilizer (440/20X).
- 14. ABT 55 HP hydraulic bow and stern thrusters.
- 15. Anti-noise treatment to exhaust system.

F. Engine Room and Equipment

 Engine room clean designed w/ lightweight floor.



- 2. Heavy-duty insulated engine room door.
- 3. S/S overhead grab rail on each side of engine.
- 4. Engine room LED ceiling lights.
- 5. Engine compartment ventilation blowers.
- 6. Delta-T or equivalent engine room demister filters.
- Engine load distributed through flexible mountings on S/S engine bed bonded to FRP hull girder.
- Engine alarm system as per engine standard.
- 9. Air compressor.
- Trident hose or equivalent for engine exhaust.

G. Electrical Systems

General Description

- 1. Color-coded wiring for easy identification.
- 2. Main electric panel w/ AC & DC circuit breakers.
- 24 volt DC monitoring and main circuit breaker panel.
- Sub panel design in each zone for electrical distribution.
- Emergency power package & lighting system.
- AC volt duplex receptacles located throughout including engine room.
- GFI protection for all AC outlets in heads, galley, and engine room.
- 8. Fiberglass water/exhaust separator for generator.
- 9. Electrolysis bonding system.
- 10. Cathodic protection with zinc anodes for shafts, struts, etc.
- Indirect lighting under valance in saloon, staterooms, pilothouse, and galley.
- 12. Dimmer system for LED ceiling lights in

- aft deck and Skylounge.
- Dimmer system for LED ceiling lights in saloon, master, and VIP staterooms.
- 14. Italian Vimar switches for lighting system.
- 15. Underwater light (x8).

AC/DC Main Power System

- Onan generators (x2) 50kW (50Hz) or 55kW (60Hz) with sound shield.
- 17. AC electrical system: 230V, single phase 2 wires, 50Hz; or 240V/120V, single phase 3 wires, 60Hz.
- 18. 255 Ah AGM start batteries (x4) for engines and generators w/ battery chargers (x2).
- 210 Ah AGM batteries (x8) for ship's DC
 24V service power w/ combined inverter/chargers (x2).
- 20. 210Ah emergency batteries (x2) above main deck with a dedicated battery charger (x1).
- 21. All batteries enclosed with proper fixtures.
- 22. Vapor proof battery switch.
- 23. Octoplex multiplexing power distribution system.
- 24. Maretron monitoring and control system.(* OR equivalent traditional AC & DC system)

Shore Power System

- 25. Glendinning shore power Cablemasters(x2) 100Amp w/ 75' power cable each.(One Cablemaster for Australia)
- 26. Shore power connection w/ 100Amp ISO boost transformers which will be wired as polarization transformers (x2) (One step down isolation transformer for Australia)
- 27. Shore power plugs (x2), 100Amp. (One 3 phases, 63Amp for Australia)



Navigation System

- 28. Raymarine GPS.
- 29. Raymarine 48" 12kW 72nm open array and 72" 12kW 72nm open array radar system.
- 30. Raymarine 12"(x2) and 15"(x3) multifunction displays.
- 31. Raymarine Fish finder and transducer.
- 32. Raymarine Autopilot System.
- Raymarine Wind/Speed/Depth/Temp transducers.
- 34. Raymarine VHF with second station mic and built-in Loudhailer.
- 35. Raymarine AIS.
 - * Garmin system with equivalent spec/ budget can be selected upon requested.

H. Mechanical Systems

Fuel Oil System

- Fuel tanks w/ sight & electric gauges and capacity specified in Principal Dimension above.
- 2. ISO grade fuel hose through entire system.
- Dual Racor 79/1000 MA fuel filters/water separator for each engine.
- 4. Electric fuel transfer pumps (x2).
- 5. Racor 500 MA fuel filter (x2) one on each generator.
- 6. Oil-change pump system for engines, gears, and generators.
- 7. Reverso FPS210 fuel polishing system (x1).
- FRP water tanks w/ capacity specified in Principal Dimension above.

Fresh Water System

9. FRP water tanks w/ capacity specified in

- Principal Dimension above.
- Marine grade pipe lines for hot & cold water system.
- 11. 30 (x3) gallon water heaters.
- 12. Water maker "Sea Recovery" 1400 GPD.
- High-volume Headhunter AC fresh water pressure pump and one DC pump for back up.
- 14. Charcoal filter are plumbed into the fresh water lines: fresh water pump, shore water inlet, galley and crew mess (if space allowed).
- Fresh-water outlets & hose for filling engine and generator expansion tanks.
- 16. Hot water circulation pump.

Sanitary System

- Headhunter toilets system (for USA). OR
 Tecma OR equivalent system.
- 18. 200 gallon holding tank w/ Y-valve and deck fitting for dockside pump out.
- 200 gallon sump tank w/ pumps for each shower & water drainage area.
- 20. Electrical level indicators for holding tank and sump tank.

Bilge Water System

- 21. Electric Rule bilge pumps.
- 22. Manual bilge pumps (x2) in engine room and forward staterooms.
- 23. High water level bilge alarm.
- 24. Bilge exhausts ventilation fans.

Air Conditioning System

- 25. Marine Air chilled water air conditioning system.
- A back up sea water cooling pump (for USA ONLY).
- 27. Ship loose a back up air conditioning circulation pump (for USA ONLY).



28. Air handlers through boat (incl. Skylounge or Flybridge).

Fire Safety System

- 29. Fire insulation in engine room.
- 30. Fire resistant treatment for pipe penetrations.
- Fixed fire extinguisher FM 200 or equivalent for engine room with remote control.
- 32. Auto shutdown system.
- 33. Auto fire damper system.
- 34. Portable fire extinguishers.
- Integrated fire alarm system in Skylounge,
 with heat or smoke detector in each cabin.

I. Interior Design and Equipments(As per layout plan)

Interior Decoration

- Staterooms: 4 staterooms (ensuite) and 2 crew cabin (ensuite).
- Forward saloon layout: 1) saloon w/ formal dining and dining chairs, OR 2) saloon web bar w/ refrigerator and ice maker.
- 3. Standard collection of wood for interior.
- Standard collection of carpet excep in wood floor area.
- Interior stairs from main deck to Skylounge.
- Standard collection of interlocking vinylceiling panels throughout.
- Standard collection of wood or carpet floor in Skylounge.
- Standard collection of marble/ granite/ Corian/ wood for floors in galley.
- Standard collection of granite/ mosaic/ Corian/ glass/ quartz stone for galley countertop and backsplash.

- Standard collection of high-quality Frascio entrance door lock or equivalent and cabinet door locks.
- High density hotel grade pocket spring mattress for entire boat except crew cabins and upper bunks.
- Standard choice of fabrics for manual window/porthole blind (one layer per each) with valance.
- 13. Standard collection of fabrics for bedspreads, decorative pillows and sheet set (flat sheet, fitted sheet, pillow cases), one set per berth.
- 14. King size bed in master stateroom.
- 15. Safe(x1) in master stateroom.
- Upholstered headboard master, VIP, and guest staterooms.
- Wood or upholstered bed frames in all staterooms.
- 18. Hanging lockers in all staterooms.
- 19. Escape hatch w/ ladder for master stateroom.
- 20. Quick/ Cantaluppi or equivalent LED ceiling lighting.
- 21. Indirect lighting system under sofa, bed, valance & all stairways.
- Standard collection of marble/ granite/ mosaic/ Corian/glass/ quartz stone for countertop and backsplash in all heads.
- 23. Standard collection of marble/ granite/ Corian/ wood floors in all heads.
- 24. Glass/ dishes/ plates holders if sample provided.
- Seamless polyurethane finish w/ standard color collection in all shower stalls.
- 26. Hansgrohe or equivalent faucets, towel bars, towel rings, cup/brush/soap/toilet paper holders, toilet brush in forward heads.
- 27. Exhaust blower for each head.



- 28. Kohler or equivalent basins in forward heads.
- 29. Bathtub in master stateroom (only if space allowed).
- 30. Day head per layout.
- 31. One USB charger for each stateroom.

Crew Quarters

- 32. Rear accommodation arrangement plan: in accordance w/ layout plan to include aft quarters, efficiency galley (if equipped, two-burner cook top, microwave, sink, undercounter refrigerator), head and shower, hanging lockers, bunks, storage lockers, A/C.
- 33. Satin finished wood walls, vinyl ceiling, round-dotted vinyl floor, Corian or equivalent counter top and floor in head, head hardware in Justime collection or equivalent. All materials for interior fit-out are from standard collection.

Appliances

- 34. Under counter ice maker (x1) or refrigerator (x1) as per layout.
- 35. Wine cooler per layout.
- 36. S/S sink as per layout.
- 37. Garbage disposal.
- 38. Subzero refrigerator (x1).
- Miele or equivalent electric induction cooktop w/ exhaust blower above.
- 40. Miele or equivalent dishwasher.
- 41. Miele or equivalent microwave and oven or one microwave-oven.
- 42. Trash compactor.
- Miele or equivalent stacked washer/dryer (x2).

44. Dyson or equivalent vacuum cleaner (x2).

Telephone and Stereo System

- 45. TV antenna on top of radar arch.
- 46. Cellular router system with Wi-Fi onboard..
- 47. Skylounge 32" LED TV w/ Fusion Marine Stereo(x1) and speakers (x2).
- 48. Upper deck Fusion Marine Stereo and speakers (x2).
- 49. Saloon 50" LED TV w/ TV system with Bose home entertainment system and separated Blu-ray disc player.
- Fwd deck Fusion Marine Stereo(x1) and speakers(x2).
- 51. Aft deck 32" LED TV w/ Fusion Marine Stereo(x1) and speakers(x2).
- 52. Master stateroom 40" LED TV with Bose home entertainment system and separated Blu-ray disc player.
- 53. VIP stateroom 32" LED TV with Fusion Marine Stereo(x1) and speakers(x2).
- 54. Guest stateroom 22" LED TV with Fusion Marine Stereo(x1) and speakers(x2).
- Crew mess 22" LED TV with Fusion Marine Stereo(x1) and speakers(x2).
- 56. Crew cabins 22" LED TV (for one cabin only) with Fusion Marine Stereo(x1) and speakers(x2).
- 57. Beach club 32" LED TV with Fusion
 Marine Stereo (x1) and speakers (x2).
- 58. Panasonic PBX Telephones (x6) with intercom features in saloon, Skylounge, master, VIP staterooms, and crew mess.

 And the rest cabins with a telephone outlet.
- Exterior connector for shore phone and cable TV.



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Qualifications and Notice to Reader

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. 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 vessels 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. Owner supplied items or special treatment of interior fit-out and/or use of non-standard soft furnishings required by the purchaser may subject to additional charge.