

# HORIZON-FD77 SKYLINE MOTOR YACHT

# 2018 Standard Specifications

Effective date: Feb. 2<sup>nd</sup>, 2018

# Principal Dimensions (approximate):

L.O.A. 80'-6 5/8" (24.55 m) L.W.L. 70'-11 1/2" (21.63 m) 22'-10" Beam (6.96 m) Draft (half load) 5'-6 1/2" (1.69 m) Height (half load, W.L. to top of arch) 29'-7 1/2" (9.03 m) Displacement (half load) 169,300 lbs (76.8 tons) Fuel 2,700 US gal. (10,220 ltrs.) Fresh Water 400 US gal. (1,500 ltrs.)

Engines : Twin CAT C18A 1136HP

• Generators : 2 x Onan 22.5 kW (50Hz) or 2 x 21.5kW (60Hz)

# A. Hull and Main Structure

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

- Strong collision bulkhead structure for extra safety.
- International anti-fouling bottom paint w/ anti-osmosis treatment.
- PropSpeed/PropGold metal paint for underwater appendages.
- 12. Tunnels for reduced draft.
- 13. High Performance Piercing Bow (HPPB).

#### B. Exterior Deck and Equipment

- Teak aft deck, teak swim platform and teak steps to swim platform, and stair to flybridge. Non-skid for the rest.
- 2. FRP cap rail.
- Maxwell VWC3500 vertical hydraulic anchor winch(x1) w/ local foot switch and remote.



- 4. 330 ft high tensile 1/2" anchor chain (x1).
- 5. 120kg S/S anchor (x1).
- 6. S/S rollers and chain stopper.
- Heavy-duty 316 S/S cleats and fairlead w/ rollers.
- 8. Forward deck and aft deck hawsers (x4).
- Bulwark w/ flush mounted courtesy lights.
- 10. Bulwark side doors (x2) aft deck for boarding.
- Freshwater and seawater anchor chain washdown system by manual operation.
- 12. 1-1/2" handrail with 1- 1/4" S/S stanchions and steel cables around entire boat.
- 13. S/S flag pole at bow.
- Standard lines and Polyform F-7 fenders (x6).
- 15. Portuguese bridge with seats.
- 16. Foredeck sunpad w/ drink holders.
- Frameless windows clear tempered laminated Low-E glass for windshield.
- 18. Frameless windows tinted tempered laminated glass for side windows.
- Stairs from aft deck to swim platform with S/S gate doors and handrails.
- 20. S/S sliding saloon entrance door, self-locking.
- 21. Deckhouse side entrance doors (x2, one hinged door, and one sliding door).
- 22. Aft deck hi-lo dining table (fiberglass or satin teak top).
- 23. One stair from aft deck to flybridge.
- 24. Hydraulic hi-lo swim platform with function as tender lift up to max. 1000lb.
- 25. Two pop-up cleats on hi-lo swim platform.
- 26. Boat hooks (x2) (shipped loose).
- 27. Built-in shower with hot/cold water

- above swim platform.
- 28. One extractable swim ladder.
- 29. Rub rail around hull sides.
- 30. CE approved S/S portholes.
- 31. Exterior LED step lights.

# C. Skylounge and Boat Deck Skylounge

- 1. Carbon fiber dash board panel.
- 2. Choice of marble/Corian/Teak for countertop from standard collection.
- 3. L-shaped seats w/ table as per layout.
- Custom two-level bar with S/S bar stools, sink, 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 (with a ship loose retractable ladder).

# Boat Deck/Upper Deck

- 7. Non-skid deck.
- 8. Standard choices of Sunbrella fabrics for exterior cushions.
- Standard choices of Sunbrella canvas covers for furniture, aft deck seats, sunpad and foredeck cushions and seat.
- 10. Choice of marble/Corian/Teak for countertop from standard collection.
- Integral S/S handrails around exterior FRP cabinet.
- 12. One 24" barbecue in custom cabinet as per layout.
- Oversize drains w/ strainers on each corner of flybridge deck and internal overboard drains.
- 14. Radar arch w/ antenna bracket.
- 15. Tokai Sunshin search light (x1).
- 16. Chrome plated Buell air horns on top of



- radar arch.
- 17. S/S flag pole at stern.
- 18. Hydraulic Steelhead davit (1000lb).
- LED white lights for Horizon logo on port and starboard side.

# D. Pilothouse and Instrument

- 1. Stidd pilot chair (x1, manual).
- Integrated instrument panel on helm station, standard choices of wood & leather.
- L-shaped seats w/ wood table (in accordance with layout).
- 4. Heavy-duty Speich S/S wipers w/ wiper wash system.
- Variable speed control on each windshield wiper.
- 6. Danforth or equivalent magnetic compass at helm.
- 7. International LED navigation lights.
- 8. Full set of engine gauges at helm.
- 9. Electric fuel and water level gauges.
- 10. Monitoring system for important equipment (bilge pumps, blowers, navigation lights).
- Surveillance camera system (PTZ cameras at aft deck and engine room).

#### E. Engine Propulsion and Steering System

- Twin CAT C18A 1136HP diesel engines w/reduction gears.
- 2. S/S shafts Aqualoy 22 HS or equivalent.
- High performance S class 4 blade propellers in NiAlBr.
- 4. Main bronze strut w/ backing plate.
- Shaft and rudder packing glands with
   Tides Marine dripless seals or equivalent.

- 6. Engine controls.
- 7. One remote control (with throttles, gears, and thrusters) with plug on aft deck.
- 8. SeaStar or equivalent power steering system.
- 9. S/S rudders w/ zinc plates.
- 10. S/S emergency tiller in rudder cabin.
- 11. Custom steering wheel.
- Underwater exhaust system for engines w/ bypass mufflers.
- 13. ABT zero Speed Stabilizer (300/9X).
- 14. ABT hydraulic bow and stern thrusters(38 HP).
- 15. Bennett or equivalent heavy-duty trim tabs with indicators.
- 16. Anti-noise treatment to exhaust system.

#### F. Engine Room and Equipment

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

# G. Electrical Systems General Description



- 1. Color-coded wiring for easy identification.
- Main electric panel includes AC & DC circuit breakers.
- 24 volt DC monitoring and main circuit breaker panel.
- 4. Sub-panel design in each zone for electrical distribution.
- Emergency power package & lighting system.
- AC volt receptacles located throughout including engine room.
- GFI protection for all AC outlets in exterior, heads, galley, and engine room.
- 8. Fiberglass water/exhaust separator for generators.
- 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, pilothouse, and flybridge.
- Dimmer system for LED ceiling lights in saloon, master, and VIP stateroom,
- 14. Italian Vimar switches for lighting system.
- 15. Underwater lights (x6).

### AC/DC Main Power System

- Onan generators (x2) 22.5kW (50Hz) or
   21.5kW (60Hz) with sound shield.
- 255 Ah AGM start batteries (x4) for engines/generators with battery chargers (x2).
- 210 Ah AGM batteries (x4) for ship's DC
   24V service power with combined inverter/chargers (x2).
- 19. All batteries enclosed with proper fixtures.
- 20. Vapor proof battery switch.
- 21. Octoplex multiplexing power distribution

- system.
- 22. Maretron monitoring and control system.

#### **Shore Power System**

- 23. Glendinning 50 Amp shore power cable master (x2) each w/ 75' power cable.
- 24. Shore power connection w/ 50 Amp ISO boost transformer which will be wired as polarization transformer (x2, except Australia w/ step-down instead).
- 25. Shore power plug (x2), 50Amp.
  - \* 150 Amp (total) for USA only.

# **Navigation System**

- 26. Garmin GPS.
- 27. Garmin 48" 12kW 72nm open array radar system.
- 28. Garmin 12"(1) and 16"(x2) multifunction displays.
- 29. Garmin Autopilot system.
- 30. Garmin Wind/Speed/Temp/Depth transducers.
- 31. Garmin VHF with built-in loudhailer.
- 32. Garmin AIS.
  - \*Raymarine system with equivalent spec/budget can be selected upon requested.

#### H. Mechanical Systems

# **Fuel Oil System**

- Fuel tanks w/ sight & electric gauges and capacity as specified in Principal Dimension above.
- 2. ISO grade fuel hose through entire system.
- Dual Racor 75/1000 MA fuel filters/ water separator, each engine.



- 4. Electric fuel transfer pump (x2).
- Racor 500 MA fuel filter (x2, one on each generator).
- Oil change pump system for engines, gears, and generators.
- Reverso FPS210 fuel polishing system (x1).

#### Fresh Water System

- FRP water tank with capacity specified in Principal Dimension above.
- Sea Recovery Water maker 700GPD w/ fresh water flush function.
- 10. High-volume AC fresh water pressure pump and one DC pump for back up.
- 11. Fresh water charcoal filters in main supply pipes and in galley.
- 12. Fresh water hose for filling engine and generator expansion tank.
- 13. Marine grade lines for fresh water system.
- 14. 20 gallon water heaters (x2).
- 15. Hot water circulation pump.

# Sanitary System

- 16. Tecma toilet system.
- 17. 100 gallon holding tank w/ macerator pump.
- Y-valve for holding tank with deck fitting for dockside pump out.
- 19. Sump pumps system for grey water.
- 20. Electric level indicators for holding tank.

#### Bilge Water System

- 21. Electric Rule bilge pumps (x5).
- Manual bilge pumps (x2) in engine room and forward stateroom.
- 23. High water level bilge alarm.
- 24. Bilge exhaust ventilation fans.

# Air Conditioning System

- Marine Air chilled water air conditioning system.
- 26. Ship loose a back up air conditioning sea water cooling pump.
- 27. Air handlers throughout boat.

# Fire Safety System

- 28. Fire insulation in engine room.
- 29. Fire resistant treatment for pipe penetrations.
- Fixed fire extinguisher FM 200 or equivalent for engine room with remote control.
- 31. Auto/manual shutdown system.
- 32. Automatic fire damper system.
- 33. Portable fire extinguishers (x4) in recessed lockers.
- 34. Integrated fire alarm system in pilothouse, with heat or smoke detector in each cabin.

# I. Interior Design and Equipment (As per layout plan)

#### **Interior Decoration**

- Standard layout: ensuite staterooms (x3)
   and ensuite crew cabin (x1).
- 2. Standard collection of wood for interior.
- Standard collection of carpet except in wood floor areas.
- Interior stair from main deck to Pilothouse.
- Standard collection of interlocking vinyl ceiling panels throughout.
- 6. Standard collection of wood or carpet floor in pilothouse.
- Choice of marble/granite/Corian/wood floors in galley, from standard collection.



- 8. Choice of granite/mosaic/Corian/glass/ quartz stone for galley countertop and backsplash, from standard collection.
- High-quality Frascio entrance door lock or equivalent and cabinet door locks per shipyard standard.
- 10. High density hotel grade pocket spring mattresses for entire boat except crew cabins and upper bunks.
- Standard choice of fabrics for bedspreads, decorative pillows and sheet set (flat sheet, fitted sheet, pillow cases), one set per berth.
- 12. King size bed in master stateroom.
- 13. Safe (x1) in master stateroom.
- 14. Upholstered headboard for master staterooms, VIP stateroom, and guest stateroom.
- Wood or upholstered bed frames in all cabins.
- 16. Hanging lockers in all staterooms.
- 17. Escape hatch with ladder for master stateroom.
- 18. Quick/Cantaluppi or equivalent LED ceiling lighting.
- Indirect lighting system under sofas, beds, valances & all stairways.
- 20. Choice of marble/granite/mosaic/ Corian/glass/quartz stone for countertop and backsplash in all heads, from shipyard collection.
- 21. Choice of marble/granite/Corian/wood for floors in all heads, from shipyard collection.
- 22. Glass/Dishes/Plates holders if sample provided.
- Seamless polyurethane finish with standard color selection in all shower stalls.

- 24. Hansgrohe or equivalent faucets, towel bars, towel rings, cup/brush/soap holders, toilet brush for all heads.
- 25. Exhaust blower for each head.
- 26. Kohler or equivalent basins in forward heads.
- 27. Bathtub in master stateroom (only if space allowed.
- 28. Day head per layout.

#### **Crew Quarters**

- 29. Rear accommodation arrangement in accordance w/ layout plan to include aft quarters, efficiency galley (if equipped, two-burner cook top, microwave, sink, counter refrigerator), head and shower, hanging lockers, bunks, storage lockers, A/C.
- 30. Satin finish wood on walls, vinyl ceiling, vinyl floor, Corian or equivalent countertop and floor in head, head hardware in Justime collection or equivalent. All materials for interior fitout are from shipyard standard choices.

#### **Appliances**

- 31. Under counter ice maker (x1) or refrigerator (x1) per layout.
- 32. S/S sink per layout.
- 33. Garbage disposal.
- 34. Full height refrigerator (x1) (Sub-Zero for USA ONLY).
- 35. GE electric induction cook top with exhaust blower above.
- 36. GE dishwasher.
- 37. GE or equivalent microwave and oven or one microwave-oven.
- 38. Trash compactor.
- 39. GE or equivalent washer/dryer (x2,



combo unit a t forward cabin, stacked unit at crew).

#### Telephone and Stereo System

- 40. TV antenna on top of radar arch.
- 41. WiFi booster system with wireless routers onboard.
- Skylounge Fusion Marine Stereo (x1) and speakers (x4).
- 43. Upper deck Fusion Marine Stereo amplifier and (x1) and speakers (x2) from skylounge Fusion Stereo.
- 44. Saloon 46" LCD TV with Bose lifestyle home entertainment system and separate Blu-ray disc player and Apple TV.
- 45. Aft deck Fusion Marine Stereo (x1) and speakers (x2).
- 46. Master stateroom 32" LCD TV with Bose

- SoundTouch Soundbar and separate Bluray disc player and Apple TV.
- 47. VIP stateroom 22" LCD TV with Fusion Marine Stereo (x1) and SM speakers (x2) and Apple TV.
- 48. Guest stateroom 22" LCD TV with Fusion Marine Stereo (x1) and SM speakers (x2).
- 49. Crew mess 22" LCD TV (for one cabin only) with Fusion Marine Stereo (x1) and SM speakers (x2).
- 50. Panasonic PBX Telephones (x4) with intercom features in saloon, pilothouse, master stateroom, and VIP stateroom; the remaining cabins with a telephone outlet.
- 51. Exterior connector for shore phone and cable TV.

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

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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 owner's 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 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. Special treatment of interior fit-out and/or use of non-standard soft furnishings required by the purchaser may be subject to additional charges.