



## HORIZON-FD80 SKYLINE MOTOR YACHT

2020 Standard Specifications

Effective date: Jan 1<sup>st</sup>, 2020

### Principal Dimensions (approximate):

♦ L.O.A.	:	80'-7"	(24.56 m)
♦ L.W.L.	:	70'-5/8"	(21.35 m)
♦ Hull Beam	:	22'-8 1/8"	(6.91 m)
♦ Max Beam (with bump out)	:	23'-7 3/4"	(7.21 m)
♦ Draft (half load)	:	5'-3 3/8"	(1.61 m)
♦ Height (half load, W.L. to hardtop)	:	22'-4 3/8"	(6.82 m)
♦ Displacement (half load)	:	174,160 lbs	(79 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 27 kW (50Hz) or 2 x Onan 29kW (60Hz)	

### A. Hull and Main Structure

1. ABS/DNV type approved fiber / resin & sandwich core material applied.
2. White gelcoat finish for hull above water line, exterior decks and furniture.
3. One piece hull SCRIMP™ cored lamination w/ deep skeg and longitudinal girders.
4. Hull, deck & superstructure are built with licensed process SCRIMP™ for improved strength and less weight.
5. High-density foam cored hull bottom.
6. 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.

9. Strong collision bulkhead structure for extra safety.
10. 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

1. Teak aft deck, teak swim platform and teak steps to swim platform, and stair to



- boat deck. Non-skid for the rest.
2. FRP cap rail.
  3. Maxwell VWC3500 vertical hydraulic anchor winch(x1) w/ local foot switch and remote.
  4. 350 ft high tensile 1/2" anchor chain (x1).
  5. 120kg S/S anchor (x1).
  6. S/S rollers and chain stopper.
  7. Heavy-duty 316 S/S cleats and fairlead w/ rollers.
  8. Forward deck and aft deck hawsers (x4).
  9. Bulwark w/ flush mounted courtesy lights.
  10. Bulwark side doors (x2) aft deck for boarding.
  11. Freshwater and seawater anchor chain washdown system by manual operation.
  12. 1-3/4" handrail with 1- 1/2" S/S stanchions and steel cables around entire boat.
  13. S/S flag pole at bow.
  14. Standard lines and Polyform F-7 fenders (x6).
  15. Portuguese bridge with seats.
  16. Foredeck sunpad w/ drink holders.
  17. Frameless windows slightly tinted tempered laminated Low-E glass for windshield.
  18. Frameless windows tinted tempered laminated glass for side windows.
  19. 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 hinged doors).
  22. Aft deck hi-lo dining table with FRP seating as per layout.
  23. One stair from aft deck to boat deck.
  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. S/S portholes.
  31. Exterior LED step lights.

#### **Beach Club**

32. Hydraulic door with pantograph door in the middle.
33. Sofa seat w/ table as per layout.

#### **C. Skylounge and Boat Deck**

##### **Skylounge**

1. Helm station.
2. Sliding door to boat deck with self-locking.
3. Air Conditioner.
4. Hatch on F/B roof (aft starboard corner) with a ship loose retractable ladder.
5. L-shaped seats w/ table as per layout.

##### **Boat Deck**

6. Non-skid deck.
7. Standard choices of Sunbrella fabrics for exterior cushions.
8. Standard choices of Sunbrella canvas covers for boat deck, helm seats, aft deck seats, windshield, sunpad and foredeck cushions and seat.
9. Standard choices of marble/Corian for countertop from standard collection.
10. Custom wet bar with sink and



refrigerator as per layout.

11. One 24" barbecue in custom cabinet as per layout.
12. Oversize drains w/ strainers on each corner of boat deck and internal overboard drains.
13. Radar arch w/ antenna bracket.
14. Tokai Sanshin LED search light (x1).
15. Chrome plated Buell air horns on top of radar arch.
16. S/S flag pole at stern.
17. Hydraulic Steelhead davit (1000lb).
18. LED white lights for Horizon logo on port and starboard side.

#### **D. Pilothouse and Instrument**

1. Stidd pilot chair (x1, manual).
2. Heavy-duty Speich S/S wipers w/ wiper wash system.
3. Variable speed control on each windshield wiper.
4. Ritchie, or Danforth, or equivalent magnetic compass at helm.
5. International LED navigation lights.
6. Full set of engine gauges at helm.
7. Electric fuel and water level gauges.
8. Monitoring system for important equipment (bilge pumps, blowers, navigation lights).
9. Surveillance camera system (PTZ cameras at aft deck and engine room).

#### **E. Engine Propulsion and Steering System**

1. Twin CAT C18A 1136HP diesel engines w/reduction gears.
2. S/S shafts Aqualoy 22 HS or equivalent.
3. High performance S class 5 blade

propellers in NiAlBr.

4. Main bronze strut w/ backing plate.
5. 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.
12. 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**

1. 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.
6. Delta-T or equivalent engine room de-misters.
7. 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.
2. Main electric panel includes AC & DC circuit breakers.
3. 24 volt DC monitoring and main circuit breaker panel.
4. Sub-panel design in each zone for electrical distribution.
5. AC volt receptacles located throughout including engine room.
6. GFI protection for all AC outlets in exterior, heads, galley, and engine room.
7. Fiberglass water/exhaust separator for generators.
8. Electrolysis bonding system.
9. Cathodic protection with zinc anodes for shafts, struts, etc.
10. Indirect lighting under valance in saloon, staterooms, Skylounge, and galley.
11. Dimmer system for LED ceiling lights in aft deck, Skylounge.
12. Dimmer system for LED ceiling lights in saloon, master, and VIP stateroom,
13. Italian Vimar switches for lighting system.
14. Underwater lights (x6).

### AC/DC Main Power System

15. Onan generators (x2) 27kW (50Hz) or 29kW (60Hz) with sound shield.
16. 255 Ah 12V AGM start batteries (x4) for engines/generators with battery chargers (x2).
17. 255 Ah 12V AGM batteries (x4) for ship's DC 24V service power with combined inverter/chargers (x2).
18. 210 Ah emergency batteries (x2) above

main deck w/ independent battery charger (x1).

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 shore power Cablemasters (x2) 50Amp w/ 75' power cable each. (One Cablemaster for Australia)
24. Shore power connection w/ 50Amp ISO boost transformers which will be wired as polarization transformers (x2) (One step down isolation transformer for Australia).
25. Shore power plugs (x2), 50Amp. (One 3 phases, 63Amp for Australia.)

\* 100 Amp for USA Only

### Navigation System

26. Garmin GPS.
27. Garmin 48" 12kW 72nm open array radar system.
28. Garmin 16" (x3) 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



1. Fuel tanks w/ sight & electric gauges and capacity as specified in Principal Dimension above.
2. ISO grade fuel hose through entire system.
3. Dual Racor 75/1000 MA fuel filters/ water separator, each engine.
4. Racor 500 MA fuel filter (x2, one on each generator).
5. Electric fuel transfer pumps (x2).
6. Oil change pump system for engines, gears, and generators.
7. Reverso FPS210 fuel polishing system (x1).

#### **Fresh Water System**

8. FRP water tank with capacity specified in Principal Dimension above.
9. Marine grade pipe lines for hot & cold water system.
10. 20 gallon water heaters (x2).
11. High-volume AC fresh water pressure pump and one DC pump for back up.
12. Sea Recovery water maker 700GPD.
13. Fresh water outlet & hose for filling engine and generator expansion tank.
14. Charcoal filters are plumbed into the fresh water line: fresh water pump, shore water inlet, galley.
15. Hot water circulation pump.

#### **Sanitary System**

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

#### **Bilge Water System**

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

#### **Air Conditioning System**

24. Marine Air chilled water air conditioning system.
25. A back up air conditioning sea water cooling pump (for USA ONLY).

#### **Fire Safety System**

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

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

##### **Interior Decoration**

1. Standard layout: ensuite staterooms (x3) and ensuite crew cabin (x1).
2. Standard collection of wood for interior.
3. Standard collection of carpet except in wood floor areas.
4. Interior stair from main deck to Skylounge.
5. Standard collection of interlocking vinyl ceiling panels throughout.



- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>6. Standard collection of wood or carpet floor in Skylounge.</li> <li>7. Choice of marble/granite/Corian/wood floors in galley, from standard collection.</li> <li>8. Choice of granite/mosaic/Corian/glass/quartz stone for galley countertop and backsplash, from standard collection.</li> <li>9. High-quality Frascio entrance door lock or equivalent and cabinet door locks per shipyard standard.</li> <li>10. High density hotel grade pocket spring mattresses for entire boat except crew cabins and upper bunks.</li> <li>11. Standard choice of fabrics for manual window/porthole blind (one layer per each) with valance.</li> <li>12. Standard choice of fabrics for bedspreads, decorative pillows and sheet set (flat sheet, fitted sheet, pillow cases), one set per berth.</li> <li>13. King size bed in master stateroom.</li> <li>14. Safe (x1) in master stateroom.</li> <li>15. Upholstered headboard for master staterooms, VIP stateroom, and guest stateroom.</li> <li>16. Wood or upholstered bed frames in all cabins.</li> <li>17. Hanging lockers in all staterooms.</li> <li>18. Escape hatch with ladder for master stateroom.</li> <li>19. Quick/Cantaluppi or equivalent LED ceiling lighting.</li> <li>20. Indirect lighting system under sofas, beds, valances &amp; all stairways.</li> <li>21. Choice of marble/granite/mosaic/Corian/glass/quartz stone for countertop and backsplash in all heads, from shipyard collection.</li> <li>22. Choice of marble/granite/Corian/wood</li> </ol> | <ol style="list-style-type: none"> <li>for floors in all heads, from shipyard collection.</li> <li>23. Glass/Dishes/Plates holders if sample provided.</li> <li>24. Seamless polyurethane finish with standard color selection in all shower stalls.</li> <li>25. Hansgrohe or equivalent faucets, towel bars, towel rings, cup/brush/soap holders, toilet brush for all heads.</li> <li>26. Exhaust blower for each head.</li> <li>27. Kohler or equivalent basins in forward heads.</li> <li>28. Bathtub in master stateroom (only if space allowed).</li> <li>29. Day head per layout.</li> </ol> <p><b>Crew Quarters</b></p> <ol style="list-style-type: none"> <li>30. Rear accommodation arrangement in accordance w/ layout plan – to include aft quarters, efficiency galley (if equipped, microwave, sink, undercounter refrigerator), head and shower, hanging lockers, bunks, storage lockers, A/C.</li> <li>31. Satin finish wood on walls, vinyl ceiling, round-dotted vinyl floor, Corian or equivalent countertop and floor in head, head hardware in Justime collection or equivalent. All materials for interior fit-out are from shipyard standard choices.</li> </ol> <p><b>Appliances</b></p> <ol style="list-style-type: none"> <li>32. Under counter ice maker (x1) or refrigerator (x1) per layout.</li> <li>33. S/S sink per layout.</li> <li>34. Garbage disposal.</li> <li>35. Sub-Zero refrigerator (x1).</li> <li>36. Miele or equivalent electric induction cook top with exhaust blower above.</li> </ol> |
|--|---|



- |   |  |
|---|--|
| <p>37. Miele or equivalent dishwasher.</p> <p>38. Miele or equivalent microwave and oven or one microwave-oven.</p> <p>39. Trash compactor.</p> <p>40. Miele or equivalent washer/dryer (x2, combo unit at forward cabin, stacked unit at crew).</p> <p><b>Telephone and Stereo System</b></p> <p>41. TV antenna on top of radar arch.</p> <p>42. Cellular router system with WiFi onboard.</p> <p>43. Skylounge 32" LCD TV with Fusion Marine Stereo (x1) and speakers (x4 inside, x2 outside).</p> <p>44. Upper deck Fusion Marine Stereo or amplifier (x1) and speaker (x2).</p> <p>45. Saloon 46" LCD TV with Bose home entertainment system and separate Blu-ray disc player and Apple TV.</p> <p>46. Aft deck Fusion Marine Stereo (x1) and</p> | <p>speaker (x2).</p> <p>47. Master stateroom 32" LCD TV with Bose home entertainment system and separate Blu-ray disc player and Apple TV.</p> <p>48. VIP stateroom 22" LCD TV with Fusion Marine Stereo (x1) and speakers (x2).</p> <p>49. Guest stateroom 22" LCD TV with Fusion Marine Stereo (x1) and speakers (x2).</p> <p>50. Crew mess 22" LCD TV (for one cabin only) with Fusion Marine Stereo (x1) and speakers (x2).</p> <p>51. Panasonic PBX Telephones (x4) with intercom features in saloon, Skylounge, master stateroom, and VIP stateroom; the remaining cabins with a telephone outlet.</p> <p>52. Exterior connector for shore phone and cable TV.</p> |
|---|--|

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

– the end –

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