

Pacific Asian Enterprises, Inc. 25001 Dana Drive, Dana Point CA 92629 (949) 496-4848 phone NORDHAVN 41

STANDARD SPECIFICATIONS

GENERAL DIMENSIONS*

*Dimensions are subject to change with Buyer's selected options and personal effects which may add to displacement and increase both draft and waterline length

LOA: 41'- 41/4" (12.60 m) LWL: 40-'0" (12.19 m) BEAM: 13'- 11" (4.24 m) BEAM W/L 13'-4 1/2" (4.08m) DRAFT: 4' 6 ½" (1.38 m)

DISPLACEMENT: 43,300LBS, 19.2 LT, 677CU. FT. (19.5 METRIC TONS)

WATER CAPACITY: 300 GALLONS (1,136 LITERS) FUEL CAPACITY: 900 GALLONS (3407 LITERS)

HOLDING TANK CAPACITY: 70 GALLONS (265 LITERS)
GRAY WATER CAPACITY: 70 GALLONS (265 LITERS)

A/B RATIO: 1.90/1

BASIC STRUCTURE

Builder to utilize the latest vacuum bagging and resin infusion techniques on all main structures in order to save weight and increase strength

1. HULL LAMINATION schedule per construction plan

- A. Metyx brand multiaxial fabrics for composites and Sisecam brand glass fibers
- B. Skin Coat: DSM ATLACK 580 ACT Hi TG (132 C degree) Vinyl ester resin
- C. General laminating resin: DSM Synolite 0288-L-1 (Hi TG Resin)
- D. Gelcoat: Bufa iSO/NPG spray type, BÜFA®-Marine NPG-Gelcoat-S

2. DECK LAMINATION schedule per construction plan

- A. Metyx brand multiaxial fabrics for composites and Sisecam brand glass fibers
- B. Skin Coat: DSM ATLACK 580 ACT Hi TG (132 C degree) Vinyl ester resin
- C. General laminating resin: DSM Synolite 0288-L-1 (Hi TG Resin)
- D. Gelcoat: Bufa İSO/NPG spray type, BÜFA®-Marine NPG-Gelcoat-S

3. Core: Gurit, Airex or Diab Core Baltek Balsa

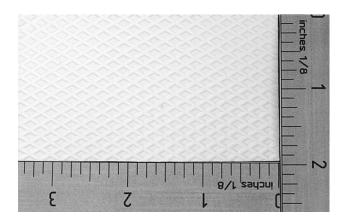
- A. Cabin side (vertical surfaces)
- B. Cabin top and deck (horizontal surface)
- C. Hull (12" above w/l)

4. DECK/HULL JOINT:

- A. Between deck and hull flange: Crystic Crestomer 1152 urethane acrylate adhesive
- B. Inside of joint: Two (2) layers mat and woven roving
- C. Mechanical fastening: 5/16" (6.35 mm) x 20unc thru bolt on 6" (15.2 cm) centers where accessible. In areas that cannot be accessed self-tapping machine screws used

5. LONGITUDINAL STRINGERS

- A. Hull: port and starboard, engine beds, and floor stringers
- B. Deck: per design
- **6. INTERIOR TRANSVERSE FLOORS:** Per design w/ foam core
- 7. BALLAST: Internal weight 4000 lbs (1814 kg) glassed in place
- **8. HULL COLOR** Pebble Gray # RAL 7032
 - A. Deck Pure White # RAL 9010
 - B. Non Skid Signal White # RAL 9003
 - Non-Skid <u>Gibco Flex-Mold 102</u>



C. Boot top - Signal Black # RAL9004



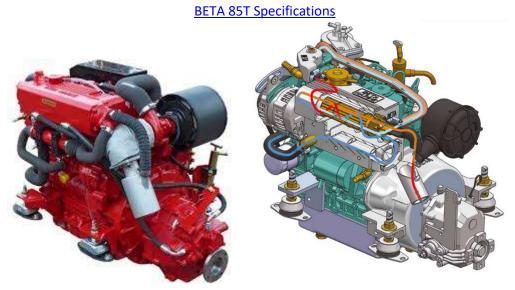
beufa.de

9. BOTTOM PAINT (Black)

- A. Two (2) coats Sea Hawk epoxy barrier coat
- B. Three (3) coats of Sea Hawk AF33 anti-fouling paint

STANDARD MACHINERY DETAILS

1. ENGINES- Betamarine 85T x 2 Kubota Model: V3307 base engine, 4 cylinder 74 bhp @ 2800rpm 70amp 12v alternator heat exchanger cooling, white poly urethane paint finish, EPA certified Tier 3, EU Compliance 2013/53/EU



A. Transmission: standard - PRM750D 3.942:1 offset straight reduction gear x 2, PTO for hydraulics on one transmission, soft shift, painted to match the engine



- B. Engine instrument panel: deluxe with instrumentation for oil pressure, water temperature, voltage, revolutions, hour meter, with alarms
- C. Sea Star Solutions engine control levers model # Twin S top mount x 2
- D. Morse control cables 33C Supreme length to suit

- **2. PROPELLER SHAFT:** $1 \frac{3}{4}$ " (5.1 cm) diameter stainless steel x 2, A22 or equivalent A. Standard S.A.E. double taper
- **3. PROPELLER STRUTS:** x 2 V shaped struts per PAE design.

A.316 stainless steel

B. Cutless bearing Dura Max

4. PROPELLER: 4-bladed bronze, 28" diameter x "pitch (cm d x cm p) x 2 counter rotation

5. STERN TUBE: FRP

A. Stuffing box: Tides Marine

ABS and Lloyds Type Approval.



6. FUEL FILTERS: Duplex Racor 500 MA plus engine mounted filters x 2 UL classified in accordance with ISO 11088 for CE systems RACOR Information Packet



- A. Fuel Transfer: system with one Racor 500 MA and Walboro 12v pump
- B. Fuel gauges at helm
- C. Timer switch for 60 minute intervals
- D. Fuel manifold

7. WET EXHAUST

8. ENGINE COOLING SYSTEM: Filled with suitable mixture of coolant/antifreeze to insure coolant does not freeze for winter shipment

9. ENGINE ROOM FLOORS: FRP with nonskid

10. ENGINE ROOM FINISH: Molded FRP engine beds and floors, insulated with Technicon or equivalent fire proof foiled and leaded foam 2"(5.08 cm) thick. All exposed insulated surfaces lined with perforated anodized aluminum



11. ENGINE ROOM BLOWERS: Delta T Systems Ignition protected 11 Inch (279.4) DC Axial Fans with flow rates to 1424 CFM (2419 m3/h) 12 Volt DC - Part No. 500-311122IP x 2

A. CE Labeled and conforms to J1171, ISO 8846 and ISO 9097

<u>Delta T Spec Sheet</u>



12. STABILIZERS: ABT 220 stabilizer with 6 Sq. Ft. fins

A. New TRACLink control panel





13. SIDE POWER BOW THRUSTER

A. Side Power SE Series



STEERING SYSTEM

- 1. HYPROMARINE Electronic Command Steering consisting of the following components:
 - A. I/B Cylinder BA150 9TM Brass
 - B. HM5160 ECS Helm Unit Front Mount
 - C. ECS Power Unit
 - D. HM5750 Bypass Valve
 - E. Tie rod
 - F. HM5195/15 ECS Wiring Harness Assembly 15m
 - G. Bypass valve for emergency tiller steering



HYPRO Steering Manual

2. HYDRAULIC LINES: Eaton brand

3. BY-PASS VALVE for emergency tiller steering



4. STEERING WHEEL: 18" (45.72 cm) x 1

5. EMERGENCY TILLER: Attached to top of starboard rudder post via inspection port and stows in lazerrette

6. RUDDERS: Airfoil cast Bronze x2

A. Rudder stock: 2" (3.81 cm) Airfoil cast Bronze

B. Rudder shelf: Molded FRP

C. Tides Marine Tube system including bearings and lip seal



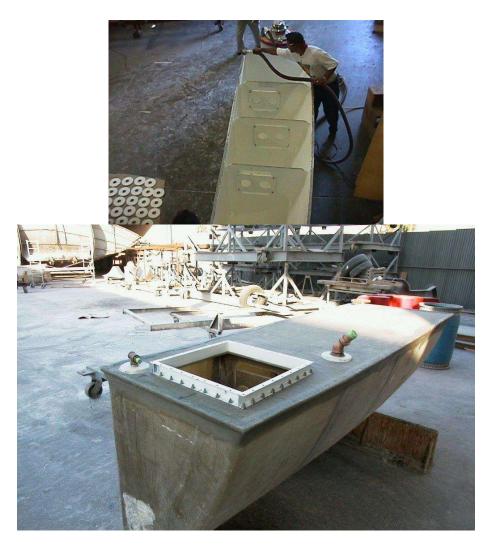
PLUMBING SYSTEM

1. WATER TANKS:

- A. Number and capacity: One (1) tanks totaling 300 gallons (1,136 liters)
- B. FRP construction

2. FUEL TANK:

- A. Number and capacity: Two (2) tank totaling 900 gallons (3407 liters)
- **B. FRP Construction**
- C. Inspection plate appropriately positioned for interior access by average size man. Each internal baffle with a removable panel to allow access to entire interior of both fuel tanks
- D. Aluminum supply reservoir
- E. Sight gauges provided to monitor fuel level
- F. Tanks air tested to 3.5 psi (24 kPa) per square inch
- G. Baffles provided on 24" (61cm) centers



3. FUEL PIPE AND HOSE:

A. Supply line from tank to supply reservoir is 3/4" (1.9 cm) I.D. with <u>Vetus</u> brand FUHOSE10A fuel hose and reusable fittings



- B. Fuel lines from supply reservoir to engines are 1/2" (1.27 cm) I.D. with Vetus brand fuel hose and reusable fittings
- C. Fuel line from supply reservoir to optional generator 1/2" (1.27 cm) I.D. with Vetus brand fuel hose and reusable fittings



- D. Vent lines are fuel certified A1 or A2, reinforced hose 1" (1.9 cm) I.D.
- E. Tank fill lines are fuel certified A1 or A2 reinforced hose 1-1/2" (3.81 cm) ID



4. WATER HOSES:

A. Cold water: blue 1/2" (1.27 cm) diameter Whale brand tubing system or equivalent with all Whale fittings

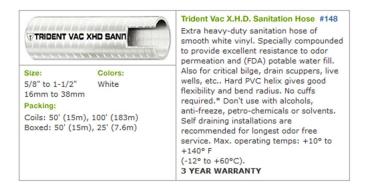


B. Hot water: red 1/2" (1.27 cm) diameter Whale brand tubing with all Whale fittings



Whale tubing and fittings

- C. Sea water hoses: Vetus reinforced rubber certified for marine use and provided with double stainless steel clamps below the water line
- D. Fresh water fill hose to be Vetus brand hose



5. WATER HEATER: Seaward #S1100 (11 gallon) (41.6 liters) for 110 volt and heat exchanger operation for US builds Quick Nautic BXS 45 liter boiler for EU builds



Seaward Owner's Manual

6. THRU HULLS: Trudesign Composite fittings

A. Each thru hull has a clearly visible tag indicating its function



7. WATER PUMP: Flojet Quad II Demand Pump 4.9 GPM 12 VDC 45 PSI # 4300-143A



8. PLUMBING FIXTURES:

A. Head sink: VirtA S50 Bowl



B. Galley sink: Franke Box BBX-110-68 SS



C. Head faucet: <u>GROHE Essence Single Handle Faucet S-size</u>



D. Galley faucet: GROHE Minta Single Handle Pull Out Faucet



E. Shower fixture - GROHE New Tempesta Cosmopolitan 100 Shower Rail Set



9. BILGE PUMPS:

A. Electric: Rule 3700 GPH Heavy-Duty Bilge Pump (X 2)



B. Manual: Whale Gusher 30 operable from main salon



C. High water bilge pump: Rule 4000 GPH (15,141 liters) - mounted in bilge above normal bilge water height including Ultra Sr. pump switch #WPS-01-24/32 and Ultra bilge alarm #WA-201





10. TOILET AND HOLDING TANK:

A. Dometic VacuFlush 509 Vacuum Toilet, white 12v



B. Holding tank: FRP 70 gallons (265 liters)

C. Sealand T12 pump



D. Holding tank fitted with a deck pump out fixture

E. Y-Valve for tank or overboard discharge



11. GRAY WATER TANK: 70 gallons (265 liters)

A. Galley sink, head sink, shower sump and washing machine drain to 70 gallon (265 liter) gray tank. Each drain has an appropriate water trap to control odors. Tank includes Sealand Tank Watch 4 12 volt level indicator and a Sealand T12 waste pump fitted with an 12 volt Ultra Jr. pump switch #PS02-12volt and auto/manual control panel. Whale/Henderson #BP0527 hand operated diaphragm bilge pump installed in line with Sealand T12 for manual pumping of gray water tank per PAE design



TankWatch 4 Owners's Manual

13. FRESH WATER WASH DOWN spigots at bow and stern



ELECTRICAL SYSTEM

1. ELECTRICAL PANEL set consisting of the following:

A. Electrical panel x one (1)



- B. Engine emergency shut off switch and panel with parallel switches
- C. Inverter: Victron Multiplus 120V -3000 Watt 125 Amp 12 v Combi Inverter/Charger for US builds

Victron Multiplus 230V -3000 Watt - 120 Amp - 12 v Combi Inverter/Charger for EU builds



D. inverter by-pass switch



- 2. SHORE POWER inlet and AC system per PAE design
 - A. Smart Plug shore power inlet- 120vac 30amp B30ASSY combo kit- includes 30amp inlet (BM30S) and 30amp connector (BF30)
 - B. Smart Plug shore power inlet- 230vac 32amp B32ASSY combo kit- includes 32amp inlet (BM32S) and 32amp connector (BF32) EU builds



- A. 120VAC 60 Hz
- B. 220VAC 50Hz
- C. Victron 3600W 115/230V isolation transformer for 60Hz
- D. Victron 7000W 230V isolation transformer for 50Hz
- E. Interior outlets per drawing
- F. All galley and head outlets GFCI type

3. BATTERY AND DC SYSTEM 12V per PAE design

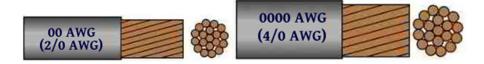
A. Batteries: Six (6) 255+ AH (8D) Lifeline batteries for house applications (1020 amps)



- B. Each battery secured with stainless steel tie downs
- C. Battery select switch (OFF, 1, 2, ALL)



4. BATTERY CABLE: .00 for general battery leads with .0000 for starting and optional bow thruster



- A. Positive lead is red
- B. Negative is yellow

5. ELECTROLYTIC CONTROL:

- A. All hardware mounted below waterline grounded into 12 volt DC ground system
- B. Zincs: One (1) 2-1/2" x 5-3/4" (6.35 cm x 14.6 cm) zinc plate tied into the 12 volt DC ground system
- C. Galvanic isolators on ships service and air conditioning shore power connectors ground
- **6. AC GENERATOR** Onan Marine QD 7/9 kW Space Saver Generator for Marine



A. Electrical panel to accommodate AC ship's power

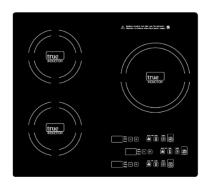
INTERIOR FINISH AND INTERIOR EQUIPMENT

1. GALLEY

A. Refrigerator - Vitrifrigo #DW250 Refer/Freezer drawers



C. Stove top -" <u>True Induction</u>" triple burner cook top 120VAC with pot two pot holders "<u>Wolf Induction</u>" triple burner contemporary cooktop for 50HZ builds





C. GE Profile™ Series Built-In Microwave/Convection Oven #PWB7030SLSS for US



D. GAGGENAU BM484110 COMBI MICROVAWE OVEN 220/240V 50-60 HZ for Europe



- D. Cabinetry/paneling walnut with a satin varnish
- E. Stove exhaust blower:
- F. Overhead: individual padded Majilite panels secured in place with Fast Mount system easily removable for service of deck hardware and wiring
- G. Locker interior finish: Formica

2. MAIN SALON/ HELM AREA

A. Floors: Teak and ebony laminate



- B. Cabinetry/paneling: walnut with satin varnish
- C. Dinette table: walnut with stainless steel pedestal
- D. Overhead: individual lacquered panels secured in place with Fast Mount system easily removable for service of deck hardware and wiring



E. Locker interior finish: Formica

F. Cushions with standard Budva 01-Linen



- G. Teak valances over windows
- H. Settee on port and starboard side
- I. Custom bench seat with folding bolster to allow for standing. Mounted on walnut box with storage under
- J. TV system at fwd starboard side to fit

3. MASTER CABIN

- A. Floors: Teak and ebony laminate
- B. Cabinetry/paneling: walnut paneling satin varnished
- C. Overhead: individual padded Majilite panels secured in place with Fast Mount system easily removable for service of deck hardware and wiring
- D. Locker interior finish: Formica
- E. Foam mattress with memory foam topper
- F. Access to chain locker behind removable panel

4. HEAD

- A. Floors: molded fiberglass with gelcoat surface
- B. Countertop: White Corian or equivalent
- C. Mirror on medicine cabinet
- D. Shower pan fiberglass with molded in nonskid
- E. Overhead: molded FRP
- F. Locker interior finish: vinyl/Formica
- G. Exhaust blower
- H. Bi-fold shower door

5. FOREPEAK

A. Painted with gelcoat

B. Drains overboard

6. GUEST STATEROOM

- A. Floors: Teak and ebony laminate
- B. Upper / lower bunks with foam mattress
- C. Hanging locker and night stand under upper bunk
- D. Floors: carpet
- E. Dresser with drawers at forward end
- F. Overhead: individual padded Majilite panels secured in place with Fast Mount system easily removable for service of deck hardware and wiring

7. COMMISSARY AREA:

A. Spendide Combo washer dryer Combo-o-matic 7100xx for USA Siemens IQ500 Series Combo washer /dryer for Europe



B. Front loading freezer 24" wide 33" tall



- C. Shelving on port side
- D. Access hatch with ladder

E. Gelcoated FRP finish

8. ALL LOCKER DOORS and drawers to have <u>Southco pull to open latch MP-05-212-11</u>



9. INTERIOR DOOR to be HAFELE BLAIRE with HAFELE Privacy Door Locks



10. LIGHTING

A. Main overhead lighting: Quick Marine Lighting $\underline{\sf BRYAN~4W}$ polished 316SS WARM WHITE



B. Bulkhead reading lights: Quick Marine lighting QB Swivel 4W chrome, warm white



C. Engine/laz Room DC Lights: SANEL LED lights (4) total Gladis 1L



D. Exterior Overhead Lights: Quick Marine Lighting <u>Sonia 105mm</u>. 4W IP66 Mirror Polished 316 SS Day Light



E. Courtesy lights: Quick Marine Lighting GLADIS 1L Chrome Finish 1.5 W IP65 Day Light



F. Interior Hanging Locker Lights: Quick Marine Lighting Syria Velvet 15 1.5W



G. Exterior Courtesy Lights: Quick Marine Lighting <u>Grace 1L</u>Chrome Finish 1.5 W IP65 Day Light



H. Switch and Outlet Frames: Vimar Idea Classica Chrome



G. Navigation Lights: Hella NaviLed Pro Navigation Lights



- 11. INTERIOR HAND RAILS to be stainless steel
- **12. AIR-CONDITIONING:** Two self-contained air-conditioning systems for lower cabins and main cabin 10k BTU for lower cabins and two 13k BTU for salon/galley



13. WEBASTO forced air heating system



14. ENTERTAINMENT SYSTEM

A. <u>Fusion MS-UD755</u>Marine stereo with Blue Tooth connectivity, with secondary control unit in stateroom.



B. Fusion SG F88 8.8 inch coaxial speaker mounted in saloon overhead



C. LED TV in saloon and owner's cabin



15. NAVIGATIONAL EQUIPMENT:

A. <u>Garmin Chartplotter</u> and Sounder - GPS Map 8616 XSV 16" screen with Bluechart



B. Garmin Radar GMR 4' open array - 4KW



C. Garmin Autopilot- Reactor Hydraulic Corepack with Smart Pump



D. Garmin VHF AIS Marine Radio



E. Garmin AIS 600 Transceiver



F. Garmin GC 12 Camera mounted in engine room



G. GPS 19x NMEA 2000 antenna



- H. Garmin P 319 Transducer
- I. ACR searchlight RCL 100 LED



EXTERIOR, DECK HARDWARE AND EQUIPMENT

- 1. HORIZONTAL SURFACES on deck have diamond pattern non-skid. Nonskid to be white
 - A. Cockpit to have FRP non-skid with optional teak deck
- 2. CHOCKS for mooring lines:
 - A. Transom: stainless steel
 - B. Transom sides: stainless steel bollards x 2
 - C. Amidships: stainless steel
 - D. Bow: stainless steel bollards x 2
 - E. Two (2) x 12" (30.5 cm) stainless steel cleats at bow
 - F. Two (2) x 10" (25.4 cm) stainless steel cleats amidships

- G. One (1) x 10" (25.4 cm) stainless steel cleat for stern
- **3. UPPER AND LOWER RUB RAILS** molded from FRP with a stainless steel rub strip. Rub rails integral to hull
- **4. PORTS:** <u>Lewmar #30209900</u> Round Stainless Steel portlights 250 mm (7 ea), CE Approved, forward cabin sides; Lewmar 30169700 Round Stainless Steel portlight 296 mm, CE Approved, port cabin





- **5. BOW ROLLER:** Stainless steel bow roller designed to accommodate a 100 lbs (45 kg) Ultra anchor
- **6. STAINLESS STEEL STANCHIONS** starboard side deck and around foredeck and boat deck 1-1/4" (3.2 cm) diameter. Pulpit to be $1\ 1/4$ " (3.2 cm) diameter with socket for burgee. Hooking points on stanchion base
- **7. WINDLASS: Windlass:** Lofrans X3 1700 W 12vdc windlass to be mounted on a molded FRP base #600084 chain gypsy for 10mm or ISO4565 chain.
 - A. Anchor & Chain: 100 lbs (45 kg) Ultra anchor, 300 ft 10mm ISO4565 chain



- **8. DECK HATCHES:** <u>Lewmar Flush 3G</u> with outside opening levers standard color with proper drainage channels or scupper drains to suit
 - A. Lewmar #60 x 2 on foredeck
 - B. Lewmar #60 pilot house
 - C. Lewmar #70 for access to boat deck



10. WINDSHIELD WIPER: Roca parallel sweep RW with long stud BS blade and AS arm x two (2)



11. HORN: Kahlenberg K380+ Viair Compressor



12. LAZERETTE hatch with drains and locking latches



- 13. MAST AND SUPPORTS: Fabricated aluminum with radar mount and strong backs per design
- 14. WHEELHOUSE AND SALON WINDOWS to be .39" (10 mm) tempered glass
- **15. WINDOWS:** Sliding salon windows. Wheelhouse corner windows curved. Wheel house flat windows with heated glass for defogging

16. DINGHY DAVIT: Nick Jackson Pipe Davit

12 rule winch Blocks and tackle

Stainless steel saftey rail around davit area



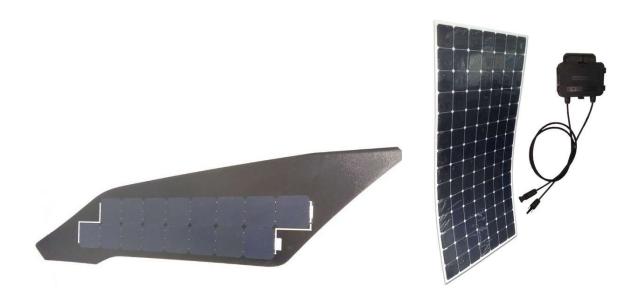
- 17. SALON DOOR: Dutch door FRP construction
- **18. SIDE DOOR** at helm station: Dutch door FRP construction A. Port and starboard boarding step
- 19. FRP BOARDING DOOR in transom with blind dog



- 20. STAINLESS STEEL U RAILS 1 1/2" dia. @ swim step x 2
- **21. BOAT DECK LADDER:** Stainless steel and teak ladder from lower aft deck to boat deck A. Mahogany flag pole at aft deck
- **22. SWIM LADDER** mounted on swim step to comply with CE requirements



23. SALON ROOF to have inset solar panels by Solbian or equivalent flexible solar panels



24. SAFETY EQUIPMENT:

A. All US Coast Guard safety gear (Mooring Lines, Fenders)

B. Fireboy 1 CG@ for 300QF in engine room



C. 1X Fireboy ES3 - 3 circuit shutdown for 2 engines and one blower



- D. Fireboy 1X CG2 for Lazarette 200QF
- E. Fireboy 1X Fireboy 3 circuit shutdown for generator in lazarette
- F. Four man canister life raft Revere FRP Canister and cradle





**Safety Equipment to be CE compliant with European equivalent for EU models **

*Specifications are subject to change at the discretion of designers and builders