

TARTAN 455 // STANDARD SPECIFICATIONS

HULL

- NPG Isophthalic gelcoat
- Modified epoxy resin used throughout laminate for superior bonding
- Engineered multi-axial E-Glass fiber reinforcements, locally reinforced in high-load areas
- CNC computer cut closed-cell synthetic foam coring
- Laminated in “one shot” resin infusion process eliminating secondary bonding of structural materials
- All hull penetrations made through solid E-Glass laminate “core windows”
- Interior surfaces painted out for aesthetics
- Internal structural grid designed to carry rig and keel loads, bonded and glass-taped into hull
- UL and ABS approved, corrosion free Marelon flush through hull fittings
- Built to meet ABS Plan Certification
- Transferrable 10-year hull structure and blister warranty

DECK

- NPG Isophthalic gelcoat
- Modified epoxy resin used throughout laminate for superior bonding
- Engineered multi-axial E-Glass fiber reinforcements, locally reinforced in high-load areas
- CNC computer cut sealed end-grain balsa coring
- Laminated in “one shot” resin infusion process eliminating secondary bonding of structural materials
- All deck penetrations made through solid E-Glass laminate “core windows”
- Interior surfaces painted out for aesthetics
- Molded nonskid surface on working areas
- 6061 T6 aluminum backing plates added at lamination for all loaded hardware
- Inward-facing hull flange with integrally molded 6061 T6 aluminum bar forming a full length backing plate for hull-to-deck joint
- Hull-to-deck joint fasteners, 316 stainless steel that meet or exceed ABS standard for offshore use
- Hull-to-deck joint bonded with 3M 5200 adhesive sealant

KEEL & BALLAST

- Fin keel with ballast bulb, beavertail keel, or (optional) keel/centerboard configuration
- Antimonial hardened lead keel castings
- Template-ground for fit and maximum performance
- Faired and epoxy coated
- Keel is through bolted to hull with cast-in-place stainless-steel 40 bolts
- Keel bolt quantity and size exceed ABS standard for offshore use

RUDDER & STEERING SYSTEM

- Dual-wheel cable steering system with custom carbon-fiber pedestals
- 40” stainless-steel wheels
- Stainless-steel pedestal guards
- 5” lighted compass at each (3) steering positions
- Stainless-steel single-lever engine control to starboard in cockpit and at interior helm station
- Carbon-fiber rudder post with stainless-steel bearing sleeves
- Rudder blade is high density, closed-cell foam with reinforced skins
- High density, low friction rudder bearings
- Flexible “gaiter” seal at rudder post
- Emergency tiller

DECK HARDWARE

- (1) Harken 40.2 STC (self-tailing chrome) halyard winch on mast
- (2) Harken 50.2 STC (self-tailing chrome) cockpit winches
- Mainsheet led aft to port and starboard cockpit winches
- Harken self-tacking jib traveler with double-ended sheet led aft to cockpit winches
- Harken over/under style aft lead control blocks for self-tacking jib
- Polished type 316 stainless-steel outboard genoa tracks mounted on toe rail
- 27" x 1 1/8" diameter type 316 stainless-steel stanchions
- 27" x 1 1/8" tube double type 316 stainless-steel bow rail with navigation light
- 27" x 1 1/8" tube double type 316 stainless-steel split stern rail with navigation light
- 1 x 19 double lifelines with port, starboard, and transom boarding gates
- Custom type 316 stainless-steel stem fitting with integral single bow roller
- Stainless steel 10" bow mooring cleats
- Stainless steel 8" mid-ship mooring cleats
- Custom fabricated stainless-steel mid-ship chocks
- (6) type 316 stainless-steel 10" mooring cleats
- 2 3/4" x 2" teak toe rails through-bolted to hull flange. (aluminum slotted toe rails available)
- Stern type 316 stainless-steel quarter caps
- (3) Harken aluminum winch handles
- Custom stainless steel mast collar with attachment points for mast-base blocks
- Harken turning blocks at base of mast for leading sail controls aft to cockpit
- Spinlock rope clutches for aft led sail controls
- Match molded anchor locker lid with latch
- Deck drains to waterline discharge, eliminates hull streaking
- Teak cabin-top handrails
- Cockpit mounted manual bilge pump
- Offshore ready, match-molded and gasketed cockpit seat hatches

VENTILATION

- (8) Stainless steel CE unlimited offshore approved deck hatches
- (6) Cabin-side mounted stainless-steel opening portlights with fly screens
- Cockpit-mounted stainless-steel portlight with fly screen
- Lexan sliding companionway hatch, sliding door access to deckhouse from cockpit.

ENGINE & MECHANICAL

- 75 hp diesel saildrive with four-blade folding propeller
- Engine panel in cockpit with repeater at interior helm station
- 140-gallon fuel capacity in two aluminum tanks with crossover and remote gauges
- Approximate 500-nautical-mile range at cruise (2400 rpm)
- Fuel filter/water separator
- Well insulated engine/systems room
- 115-amp output alternator

ELECTRICAL

- (2) 8D AGM house batteries, (1) Group 31 AGM starting battery
- 30-amp battery charger
- Dual 30-amp shore power services
- Polished chrome and stainless steel interior lighting fixtures with LED lights
- Interior, cockpit, and transom door courtesy lighting
- Automatic lights in hanging lockers, liquor locker, and refrigerator compartment

- Service lighting in engine/systems room and cockpit lockers
- Directional LED reading lights at berths and main cabin settees
- Directional LED spot lights in galley and over main cabin table
- Recessed, dimmable LED spotlights in cabin overhead
- 110 VAC distribution panel prepped to accept generator
- 110 VAC outlets in each cabin with GFI protection
- 12 VDC and 110 AC digital metered distribution panel
- Battery selector switch
- ABYC compliant color coded wiring throughout
- UL approved, stranded, tinned, copper wiring
- All wiring is chafe-protected where it passes through internal structure
- Wiring bundled in PVC conduit with room for future installations
- Electrical bonding system
- Electric sump pump with automatic float switch for shower drains
- Electric bilge pumps with automatic float switches with manual override
- High-water bilge alarm
- USCG approved navigation lights on bow rail, stern rail, and mast

INTERIOR

- Structural fiberglass timbers taped to hull to carry mast and keel loads
- Structural bulkheads bonded to hull and deck
- Wood-faced bulkheads and risers
- Solid stock wood trim throughout
- Solid stock raised panel wood passage doors
- Polished chrome, mortised door lock sets
- Solid stock wood cabinet faces throughout
- Positive lock polished chrome cabinet hardware
- Solid wood-faced, dovetail joined, all-wood drawers throughout
- Deckhouse settee table with Tartan logo inlay
- Tongue- and-groove solid wood hull ceilings in sleeping cabins
- Wood-battened overhead with strategically placed access panels
- Varnished solid Teak cabin sole epoxy-bonded to composite panels with Teak banded access hatches
- Varnished solid teak handrails placed for security in a seaway
- Interior woodwork sprayed with satin finish solvent and UV resistant conversion varnish
- Selection of designer fabrics available for interior upholstery

ACCOMMODATIONS & STORAGE

- Deckhouse with large fixed windows provides spaciousness and 360-degree visibility
- (2) aft windows and sliding door/doors on aft deckhouse bulkhead
- Recess in deckhouse overhead, standard with Lexan skylight
- (4) hull portlights for increased light and visibility
- Forward cabin with extensive lockers, hanging locker, and dovetail drawers
- Aft cabin/cabins with extensive lockers, hanging locker, and dovetail drawers
- Queen-sized berth in forward cabin with quilted mattress
- Two- or three-cabin arrangement plan available
- Furniture-grade deckhouse cabin settees with contoured cushions
- Deckhouse steering station with ultraleather Llebroc captain's chair and console for instrumentation
- Deckhouse navigation/work station to port with double-width ultraleather Llebroc captain's chair
- Solid wood cabinets with ventilated raised panel doors throughout interior
- Large storage outboard of deckhouse settee seat backs
- Storage below berths
- Cockpit seat lockers

GALLEY & PLUMBING

- Three-burner Force 10 gimbale LPG stove with oven and broiler
- LPG sniffer with automatic shut off
- Solid wood faced cabinetry with raised panel access doors
- Solid wood faced dovetailed cutlery drawers
- 9" deep sink with premium marine grade galley faucet and manual foot pump with swivel spigot
- Granicoat solid surface galley countertops
- Storage under galley sink through ventilated raised panel doors
- Drawer-style refrigerator with stainless-steel face, operates on 12V DC or 110V AC
- Drop in, top access freezer compartment, operates on 12V DC or 110V AC
- Hot and cold pressure water with service access to pump and plumbing
- Polyethylene tubing and Whale mechanical fittings for freshwater plumbing
- All below waterline hose connections are double-clamped with stainless steel hose clamps
- Premium marine-grade hoses used throughout
- 200 gallons (758 l) of freshwater tankage with distribution manifold
- 11-gallon (42 l) water heater, operates on 110 VAC or engine heat exchanger

HEADS

- (2) Marine heads, each with 30-gallon (113 l) holding tank.
- Deck pump out with vent
- Low-odor premium grade marine sanitation hose
- Separate stall shower in owner's head with Plexiglas enclosure, molded seat, and molded shower lockers
- Separate stall shower in guest head in two-cabin layout and wet head in three-cabin layout
- Shower drains to sump box with automatic overboard discharge
- Premium, marine-grade head faucets and shower mixers
- Molded Granicoat solid surface counter top with integral sink
- Utility storage under sink through raised panel door
- Solid wood-faced upper vanity cabinet with storage

SPARS & RIGGING

MAST

- Painted AMP Spars carbon-fiber mast with integrally molded carbon-fiber masthead and sheaves for (1) jib, (1) main, (1) reacher, (1) spinnaker halyard
- Harken 40.2 STC (self-tailing chrome) halyard winch
- Double tapered airfoil aluminum spreaders
- 1 x 19 Stainless steel wire rigging with forged turnbuckles
- Internal halyards
- Internal, single-line lazy jack system
- Harken furler for self-tacking jib
- Mast-to-deck tie rod to carry running rigging loads
- Masthead anchor light
- Steaming light with foredeck illuminator
- Mast wiring conduit
- Custom stainless steel chainplate system links to structural FRP grid in hull
- Spartite mast sealing and chock system
- (2) fold down stainless-steel mast steps
- Low friction mainsail track system

BOOM

- Painted AMP Spars carbon-fiber boom with lazy jack system
- (2) Single line reefs led aft to cockpit winch
- Internal 2:1 outhaul led to cockpit winch
- Two-part boom topping lift
- Rod vang with tackle led aft to cockpit winch

RUNNING RIGGING

- Low stretch aramid main and jib halyards
- Polyester double-braid mainsheet, and self-tacking jib sheets
- Polyester double-braid main traveler control lines
- (2) double-braid reef lines

SAILS

- Dacron Fully-battened mainsail with Sunbrella sail cover
- Dacron 100 %self-tacking jib



440.392.2628

www.tartanyachts.com

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DESIGN DIMENSIONS

LOA	45 ft 6 in
LWL	39 ft 6 in
Beam	14 ft 1 in

DRAFT

Beavertail	6 ft 6 in
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DISPLACEMENT

Beavertail	25,750 lb (light ship)
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BALLAST

Beavertail	9,750 lb
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CAPACITIES

Fuel	140 gal
Water	200 gal
Waste	60 gal
Auxiliary	75 hp diesel saildrive
Berths	4 or 6 in sleeping cabins

SAIL DIMENSIONS

I, self-tacking jib	57 ft
J, self-tacking jib	16 ft 6 in
I, 155% masthead reacher (optional)	59 ft 5 in
J, 155% masthead reacher (optional)	17 ft 9 in
P	53 ft 2 in
E	19 ft 1 in
Mainsail area	507.24 sq ft
Self-tacking jib area (100% foretriangle)	470.25 sq ft
Masthead reacher area	817.4 sq ft
Upwind sail area (main & self-tacking jib)	977.5 sq ft
Offwind sail area (main & reacher)	1324.6 sq ft
Bridge clearance (no electronics)	64 ft 3 in

PERFORMANCE RATIOS

Ballast/displacement ratio38
Displacement/length ratio	193.8
Sail area/displacement ratio (upwind with self-tacking jib)	18.01
Sail area/displacement ratio (offwind with 155% reacher)	24.4
Stix (CE Stability Index)	48
CE category "A" unlimited offshore	

Designer	Tim Jackett
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