



TECHNICAL SPECIFICATION-PASSENGER BOAT FOR EXCURSION

BUILDING PROCESS

The CROSSCAT 16 is built with 2 main parts, hulls and deck with painted in yacht paint.

HULLS & BRIDGE.

- Each hull is laminated in a female mould (laminated Fiberglass / Polyester resin and sandwich PVC foam) with temperature and humidity conditions controlled and regulated, according to the rule book. White painted.
- Exterior areas are treated with a white anti-skid finishing paint.

DECK

The deck is built in Polyester with PVC foam sandwich and painted anti-skid finishing white paint and fixed 2 main cabins with toilets on the deck.

Port Deck A/C Guest Cabin- 01

- Main entrance with the sandwich door.
- 2 lighting spot in bedroom
- 3 Portlights on the wall.
- teak floor
- fully air-conditioned
- 1 access door to toilet
- 1 Fixed Acrylic window.
- 1 Opening hatch Goyot 50
- White paint finish
- Electric toilet with wash basin.

STB Deck A/C Cabin- 02

- Main entrance with the sandwich door.
- 2 lighting spot in bedroom
- 3 Port lights on the wall.
- Teak floor.
- fully air-conditioned
- 1 access door to toilet
- 1 Fixed Acrylic window.

- 1 Safety hatch Goiot50.
- White paint finish
- Electric toilet with wash basin.

INTERIOR LAYOUTS

From forward to aft, the main partition bulkheads are as followed:

- Fore beam watertight bulkhead
- Engine room watertight fore-bulkhead
- Engine room watertight aft bulkhead & Aft beam watertight bulkhead
- 6 Guest cabins + 2 Crew cabins

Each compartment is equipped as define :

FORWARD PORTSIDE COMPARTMENT – Crew Cabin A

- 1 opening deck hatch Goiot 60.60
- 1 aluminum/composite access ladder
- 1 light point
- 1 Teak floor.
- White paint finish

FORWARD STARBOARD SIDE COMPARTMENT – Crew Cabin B

- 1 opening deck hatch Goiot 60.60
- 1 aluminum/composite access ladder
- 1 light point
- 1 Teak floor.
- White paint finish

Central PORTSIDE COMPARTMENT- 2 MAIN CABINS

Forward A/C Cabin - 03

- 1 opening deck hatch Goiot 60-60
- 1 Gangway access with composite steps with door.
- 2 lighting spot in bedroom
- Teak floor
- fully air conditioned
- 1 access door to toilet
- 1 access door to bedroom
- 1 Safety hatch Goiot44
- White paint finish

Toilets & bathroom.

The toilet compartment is in counter moulded Polyester and situated after the fore main beam bulkhead. This toilet compartment includes :

- 1 Electric seawater toilet (type Comfort 30) with draining to a 25 liters holding tank equipped with discharge, anti-odor filter and blowhole,
- 1 washbasin supplied by the fresh water pump and draining direct to the sea
- 1 opening porthole GOIOT 33.13
- 1 lighting spot
- Paint finishing

Rear A/C Cabin – 04

- 1 opening deck hatch Goint 60
- 1 Gangway access with composite steps with door.
- 2 lighting spot in bedroom
- Teak floor
- fully air conditioned
- 1 access door to toilet
- 1 access door to bedroom
- 1 Safety hatch Goint44
- White paint finish

Toilets & bathroom.

The toilet compartment is in counter moulded Polyester and situated after the fore main beam bulkhead. This toilet compartment includes :

- 1 Electric seawater toilet (type Comfort 30) with draining to a 25 liters holding tank equipped with discharge, anti-odor filter and blowhole,
- 1 washbasin supplied by the fresh water pump and draining direct to the sea
- 1 opening porthole GOIOT 33.13
- 1 lighting spot
- Paint finishing

Central Starboard Side Compartment -2 MAIN CABINS

Forward A/C Cabin - 05

- 1 opening deck hatch Goint 60-60
- 1 Gangway access with composite steps with door.
- 2 lighting spot in bedroom
- Teak floor
- fully air conditioned
- 1 access door to toilet
- 1 access door to bedroom
- 1 Safety hatch Goint44
- White paint finish

Toilets & bathroom.

The toilet compartment is in counter moulded Polyester and situated after the fore main beam bulkhead. This toilet compartment includes :

- 1 manual seawater toilet (type Comfort 30) with draining to a 25 liters holding tank equipped with discharge, anti-odor filter and blowhole,
- 1 washbasin supplied by the fresh water pump and draining direct to the sea
- 1 opening porthole GOIOT 33.13
- 1 lighting spot
- Paint finishing

Rear A/C Cabin - 06

- 1 opening deck hatch Goiot 54-54
- 1 Gangway access with composite steps with door.
- 2 lighting spot in bedroom
- Teak floor
- fully air conditioned
- 1 access door to toilet
- 1 access door to bedroom
- 1 Safety hatch Goiot44
- White paint finish

Toilets & bathroom.

The toilet compartment is in counter moulded Polyester and situated after the fore main beam bulkhead. This toilet compartment includes :

- 1 manual seawater toilet (type Comfort 30) with draining to a 25 liters holding tank equipped with discharge, anti-odor filter and blowhole,
- 1 washbasin supplied by the fresh water pump and draining direct to the sea
- 1 opening porthole GOIOT 33.13
- 1 lighting spot
- Paint finishing

ENGINE ROOMS

- 1 lighting spot
- 1 Opening deck hatch Goiot 80-80
- 1 soundproofing and heat insulation on the bulkheads of the engine compartment

MANOEUVERING SYSTEM

The steering system located in fly bridge of the CROSSCAT 16 consists of :

- 1s/s wheel – diameter 800 mm
- 1 hydraulic pump 70 CT CAR double bearing Lecomble et Schmitt
- 1 overpressure valve and one set of hydraulic pipes for the jacks + by pass

And for each hull :

- 1 jack VHM 40 DTP on the aft compartment with its fiberglass
- 1 Polyester composite rudder blade
- 1 rudder stock and high and low self aligning bearings
- 1 hand tiller
- 1 anti drift Polyester keel, with a central sump

ENGINE ROOM

MECHANICS

Each engine compartment is fitted with:

- 1 60 Sail drive YANMAR INBOARD Diesel engine – Power 80Hp
- One 3 blades foldable GORI Propeller
- Control system at the steering position
- Control panels with tachometer, hour meter, water temp, Oil temp. and alarms.

ENGINE REFRIGERATION

Cooling seawater engines is ensured by:

- 1 sea water intake dimensioned according to engine's specification
- 1 block valve on the sea water intake

VENTILATION & HATCHES

Ventilation of boat is held by:

- 1 fresh air intake on hull, giving in funds machinery rooms
- 1 extraction ventilating fan with exhaust on hull
- 1 closed system breakdowns accessed from outside the compartment
- 10 Opening hatches -60x60
- 4 Opening hatches -54x54
- 2 Opening hatches -30x30
- 24 Opening Portholes -33.13
- 2 Opening hatches -80x80

FUEL

Fuel system is equipped with 2 x 200 liters (Total Capacity – 400 L) rigid plastic fuel tanks with the following accessories:

- 1 level gauge for each tank
- 2 filling port from deck
- 1 fuel water separator with ball valve for each tank.
- Located in Port & STB aft bedrooms.

WATER

- The fresh water storage is based on 4 x 215 liters fixed tanks with level gauges & 2 x 200 liters flexible tanks (Total Capacity – 1260 L). These tanks are coupled with hydrophore group in the hull. It supplies to all cabins and kitchen.

BILGE SYSTEM

The complete draining of the boat is based on the following equipment for each hull :

- 1 fully automatic 500GPH, 12V bilge pumps in engine room.
- 1 shower pumps 12V in the each bathroom.
- 1 fully automatic 500GPH, 12V bilge pumps in front compartment.
- All the hull valves are brass & nylon.

SAFETY PACK

FIRE PROTECTION AND FIGHTING

The Fire Fighting system is provided by:

- 1 x 2 kg Co2 fire extinguisher in each engine room
- 1 x 2 kg co2 extinguishers in kitchen.

Other Safety Equipment

- 3.5 Rigid inflatable boat + OBM x 01
- Life raft 20 passengers x 02
- Life Jackets x 35 (Size – Ex S, S, M, L, Ex L, XXL)
- Life Rings x 02
- Horse Buoy x 01
- Safety Hatch 44 x 02

MOORING SYSTEM

MOORING

- 1 electrical windlass LOFRAN TIGER 1500 W 12V near the mast step.
- 2 x Up and down control buttons and switch circuit breaker for the windlass

Mooring equipment:

- 1 main anchor 50 kg
- 60 m chain 10 mm diameter
- 1 textile lashing in the chain locker + dagger for emergency release 100 m of synthetic fiber rope diameter 22 mm

ELECTRICITY

Electrical supply network includes:

DC 12 V

- Starting batteries 12V for the main engine on each engine compartment
- 1 set of 5 Service battery 12V / 220 Ah in the forward port board compartment
- Distribution panel including switches for the protection of the network
- Every switches and cables are carefully marked and listed

LOAD SYSTEM

- 1 alternator 12 V – 125A per engine for starting and service batteries loading
- 1 charger 220V/12V 100 A for service batteries loading

AC 220V

- 1 shore power box with protection in the central compartment
- 1 x 220 V MARINCO plug on the transom with a 20m cable

NAVIGATION

- 1 steering compass OLYMPIC 135 PLASTIMO with white protection
- 1 electric horn on mat with control at helm station
- 3 Navigation lights, 1 Mast top light & 1 Deck light & VHF, GPS.

EXTERIOR LAYOUTS

Exterior layout includes the following equipment's:

FORE DECK

- 2 trampoline nets in Dyneema , the lacing of the nets is done via fibber battens
- Deck Shower

Kitchen

Includes:

- 1 Kitchen fitted to aft with work tops cupboards, double sink and fresh water supply with serving counter to front.
- 2 PMMA fixed glass smoke gray.
- 1 Marine grade Fridge with deep freezer 225L in the kitchen 220V.

MAST, RIGGING AND SAILS

MAST, BOOM AND STANDING RIGGING

Aluminum Mast

- Profile with shrouds and spreaders
- Anodised treatment
- External rigging anchors
- Halyards outputs for GV, Solent, Gennaker
- 1 tensioning device with solent halyard slider
- Boxes sheave
- Clutches
- Cleats
- Mast steps
- Pipe for electrical and electronic cables
- Hardware and complete facilities

Boom

- Anodised treatment
- 2 articulated stainless steel brackets for reefing
- 2 ends with toe and sheave
- 1 topping lift plate
- 1 lazy bag fixing system
- Hardware and complete facilities

Standing Rigging Mast is maintained by:

- 1 stainless steel fore stay
- 2 sheathed backstay on s/s chain plate
- 4 intermediary shrouds on s/s chain plate

SAILS

- FULL BATTEN MAIN SAIL
- Jib on fuller

Lazy Bag

RUNNING RIGGING

Mast :

- 1 mainsail halyard
- 1 solent halyard on swig
- 1 gennaker halyard
- 2 courtesy flag halyards
- 3 reef lines
- 2 boom toping lift for lazy jack
- 3 pairs of lazy jacks
- 1 boom toping lift

Deck:

- 1 mainsail sheet Ø12
- 2 solent jib sheets Ø12
- 2 gennaker sheets Ø12
- 1 roller-furling stopper Ø8 for solent
- 1 roller furler stopper Ø8 for gennaker

DECK HARDWARE / EQUIPMENT / LIGHTS

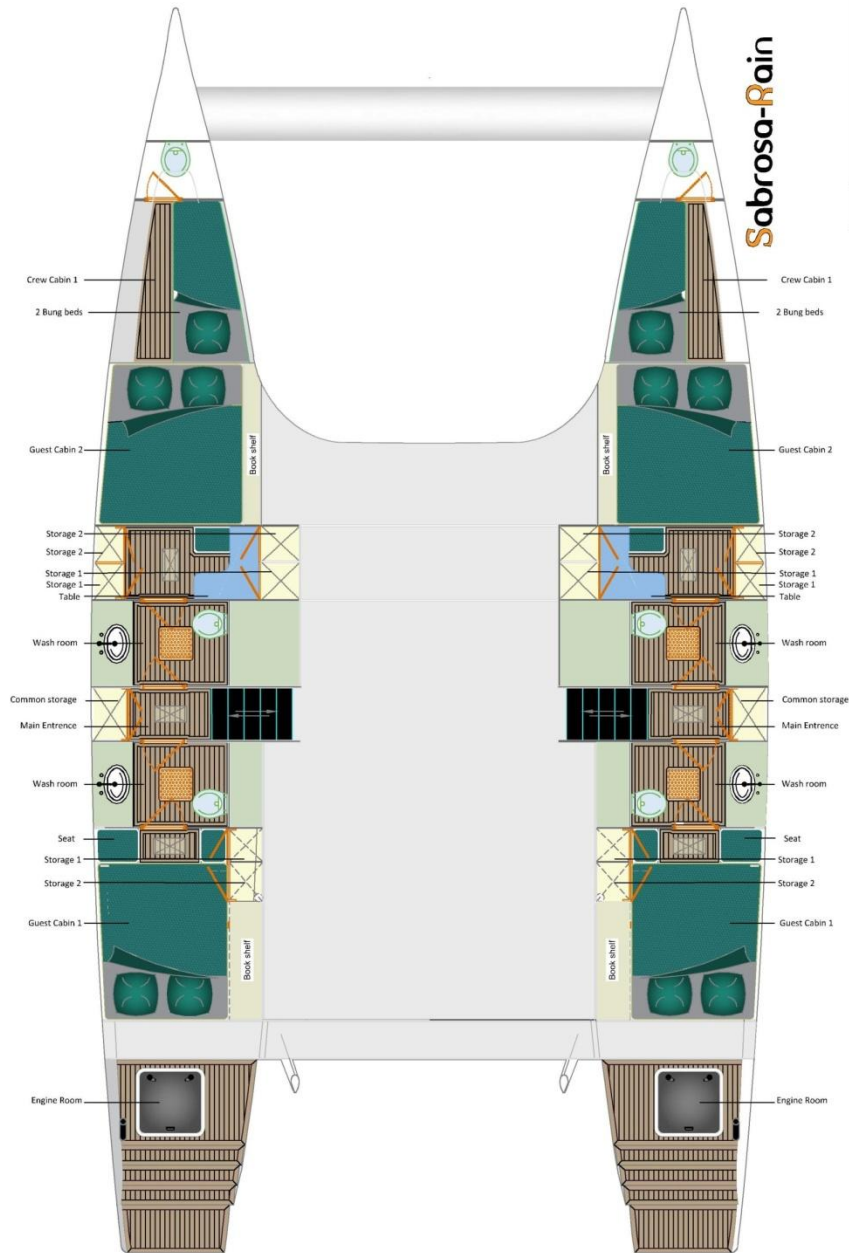
DECK HARDWARE LEWMAR

- 1 Mainsail rails system
- 1 Main sail hoist
- 1 Main sail pulley block
- Mast step tackle blocks
- Winches –(1 Self Tailing 52 ST 2 speeds manual winches on mast step - 3 Self Tailing 52 ST 2 speeds manual winches on deck - 4 winch handles)
- 1 Stand up black magic ø100 mm pulley for main sail sheet on windlass

DECK EQUIPEMENT

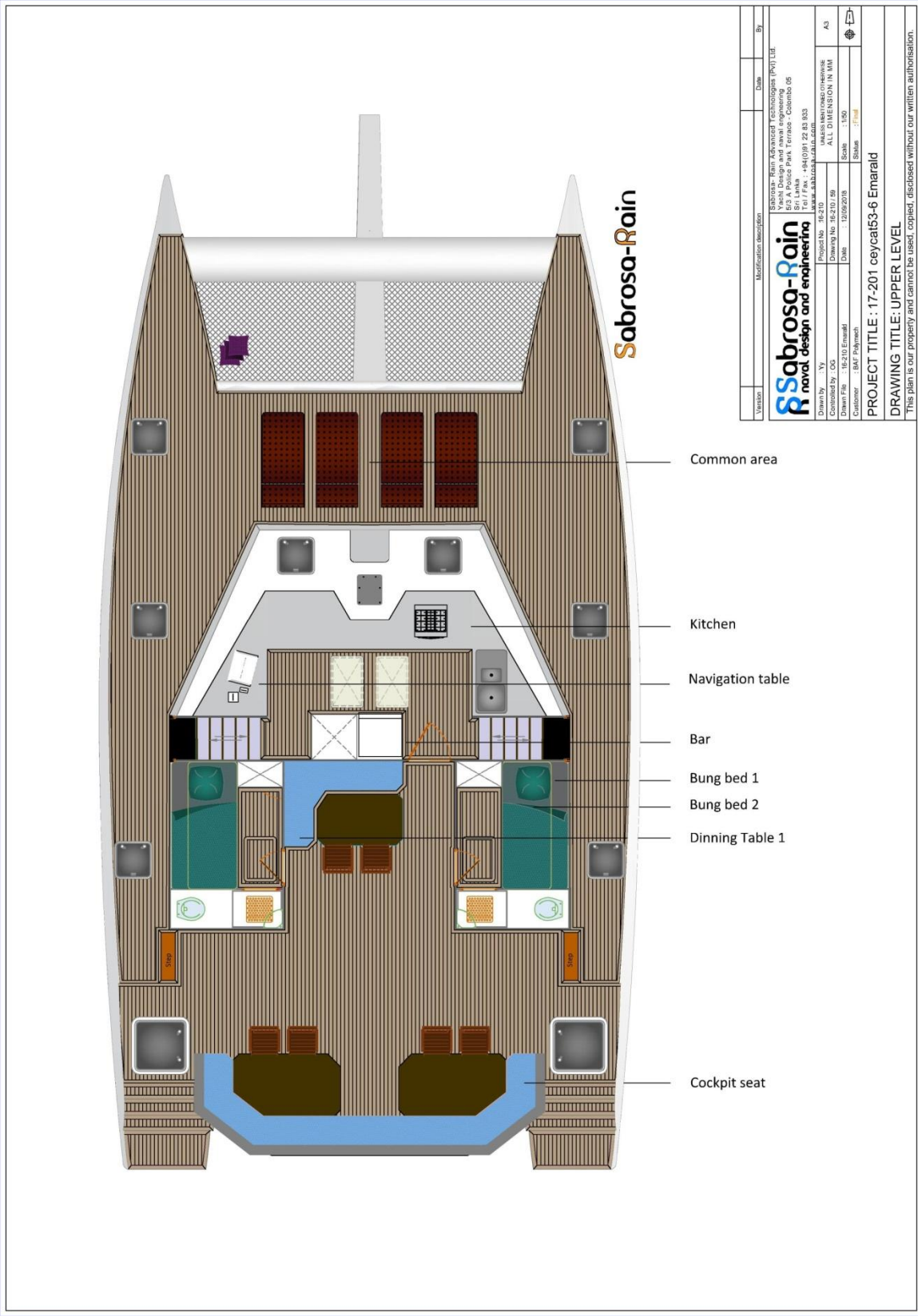
- 08 mooring cleats on exterior tacks (4 on each hulls)
- 1 SS pipe diameter 32mm guard rails around the main deck and fly bridge.

LOWER LEVEL



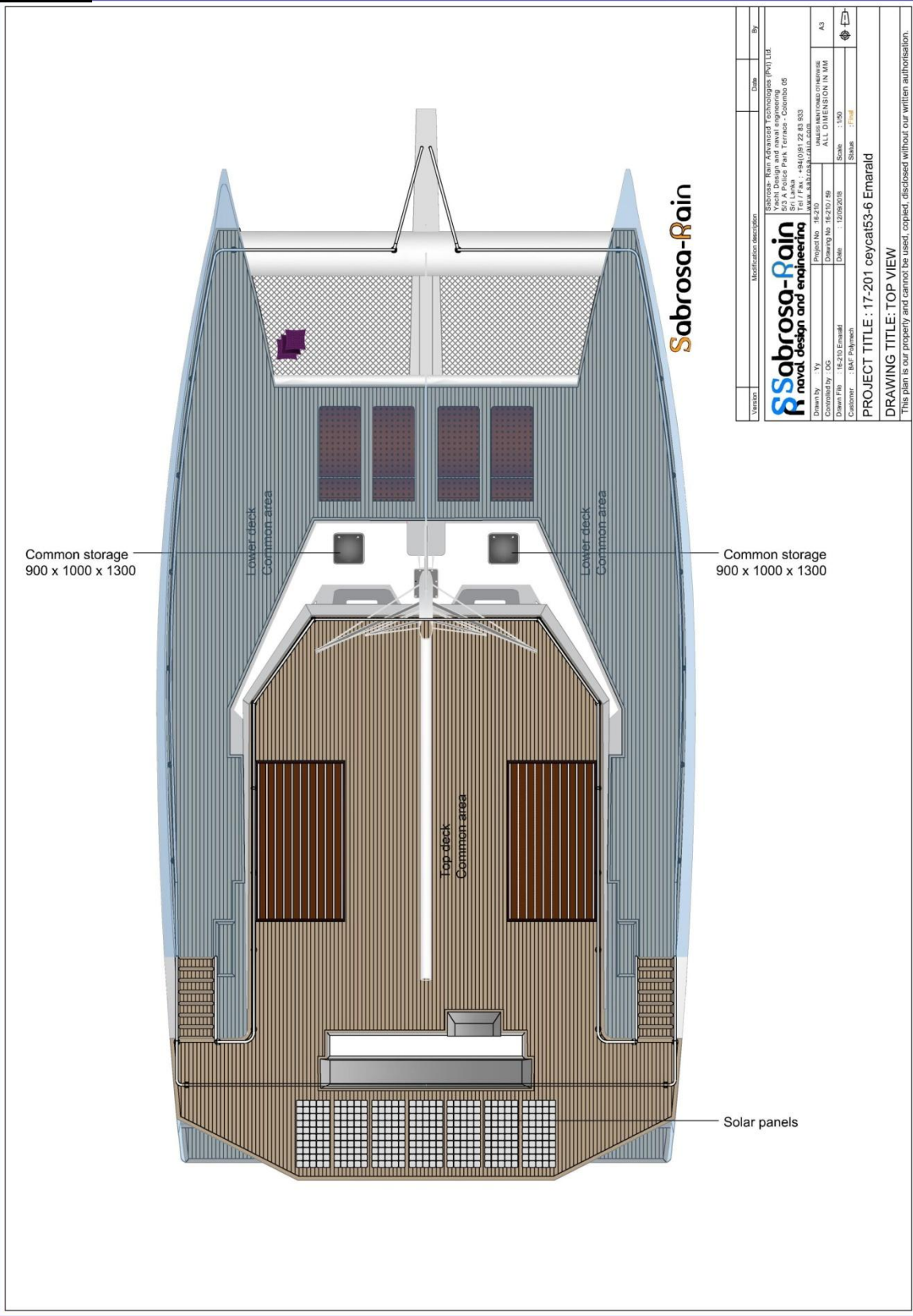
Version	Modification description	Date	By
1	Sabrosa-Rain Advanced Technologies (Pvt) Ltd Sri Lanka 505 A Police Park, Terrence - Colombo 05 Sri Lanka +94 (0)91 22 83 833 www.sabrosarain.com		
Drawn by	Y.Y.	Project No	16-210
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	16-210 Emerald	Scale	1:150
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PROJECT TITLE : 17-201 ceycal53-6 Emerald			
DRAWING TITLE : LOWER LEVEL			
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UPPER LEVEL

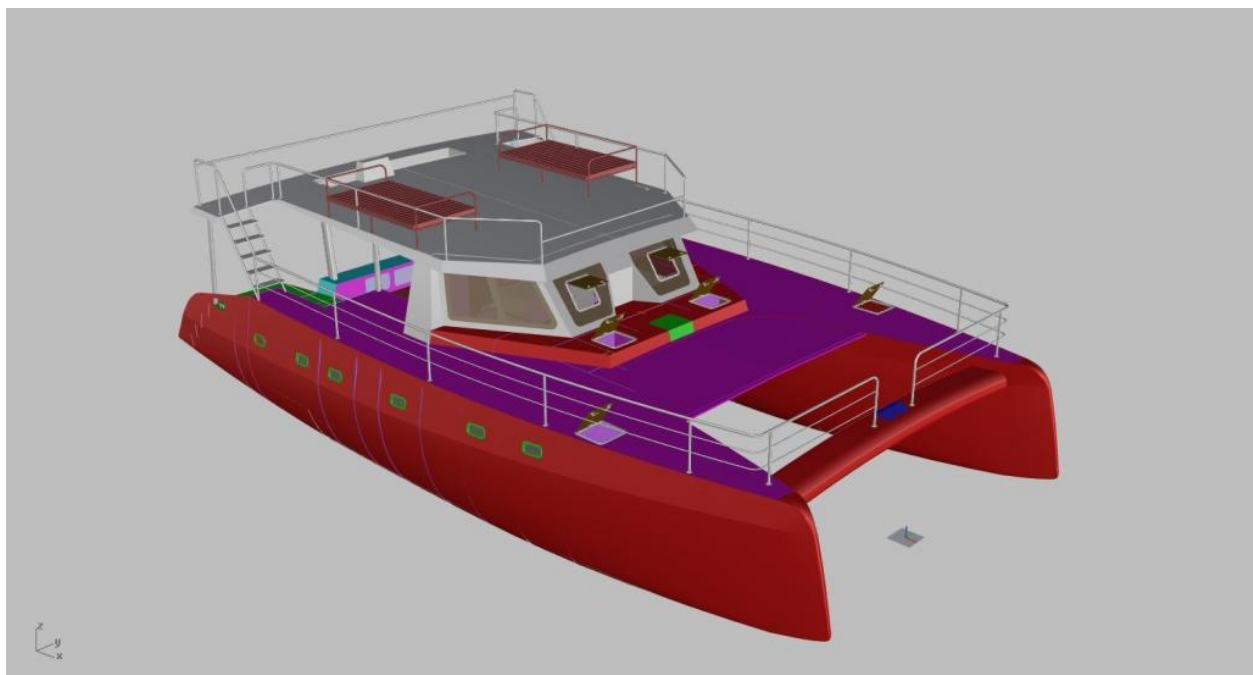


Version	Modification description	Date	By	
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		Scale		
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DRAWING TITLE : UPPER LEVEL				
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TOP VIEW



Version	Modification description	Date	By
1	Sabrosa-Rain Advanced Technologies (Pvt) Ltd. Sri Lanka 255 A Police Park Terrace - Colombo 05 Sri Lanka Tel: +94 (0)11 25 83 833 Fax: +94 (0)11 25 83 833 Email: info@sabrosarain.com Website: www.sabrosarain.com		
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DRAWING TITLE: TOP VIEW			
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Lenghts	-----	15.6 M
Maximum Beam	-----	8.40 M
Draft	-----	1.4 M
Engines	-----	53HP x 2nos
Capacity overnight	-----	12 passengers
Capacity Day charter	-----	35 Passengers
Color	-----	White