



**SPECIALIST  
MANUFACTURERS OF  
ENVIRONMENTAL ANALYSIS  
AND MONITORING  
EQUIPMENT**

# **MOBILE LABORATORIES**

**WAGTECH PROJECTS - TRACE20**



## MOBILE LABORATORIES

Wagtech Projects have many years' experience in creating bespoke mobile laboratories, which are ideal for situations where central fixed laboratory sites are either not available or not practical.

We use many different brands and models of vehicles, from Land Rovers to Ford Rangers, to Toyota Hiluxs and Land Cruisers, so that we can find a solution that meets not only your budget, but also your exact requirements.



The most efficient Mobile Laboratories are mounted directly on or into the rear of a suitable vehicle and can provide well equipped facilities for a broad range of testing, and are often the laboratory of choice when civil works make construction of a fixed site laboratory too expensive.

The Wagtech range of mobile laboratories are specifically designed for each application and offer complete flexibility of design, including:

- ⊙ Single or double cab options
- ⊙ Generators for alternative power options
- ⊙ Water, electricity and gas services
- ⊙ Waste disposal
- ⊙ Solar water heating systems
- ⊙ Laboratory space that can either be entered on foot, or accessed while outside the vehicle
- ⊙ Storage solutions
- ⊙ Refrigeration
- ⊙ Overhead lighting
- ⊙ Complete fit out of laboratory equipment and consumables

## ADVANTAGES

- ⊙ Laboratory quality testing in remote locations
- ⊙ Able to access even the most difficult areas
- ⊙ Allows immediate testing of samples, without the need to transport
- ⊙ Allows non-portable laboratory equipment to be used in the field, giving a greater range of tests in a field testing environment
- ⊙ Allows fast and simple area survey without the high cost of local laboratory infrastructure





# THE RANGE

## MOBILE BOX LABORATORY

Mobile Box Laboratories are an enclosed built laboratory fixed directly onto the chassis, with the ability to uniquely customise to the user's required needs. These can provide more space and work area with the options of a single or double cab vehicle. The Mobile Box Laboratory is one of the most popular options, which is being used around the world in a range of sectors.



## MOBILE 4x4 LABORATORY

Entry-level Mobile 4x4 Laboratories offer a smaller and more compact laboratory space which is directly built within the vehicle, with no changes to the vehicle size. Having the lab fully contained within the vehicle means it has the ability to be deployed in the roughest of terrain.

## MOBILE VAN LABORATORY

The Mobile Van Laboratory combines the large workspace of a single-cab box laboratory with the fully-integrated approach of the inbuilt laboratory. It offers the greatest number of features within the vehicle laboratory range and has the ability to be tailored to the needs of the user and be provided with all the necessary equipment needed.



## TRAILER LABORATORIES

Trailer Laboratories offer the largest laboratory space available, more akin to a traditional laboratory and can be deployed either on a temporary or semi-permanent basis. They can also be used as permanent installations as a low cost alternative to expensive civil works project. The Trailer Laboratory can offer all the facilities that a fixed laboratory can provide, including equipment and utilities required for high-end analytical instruments such as HPLC and GC.



# MOBILE BOX LABORATORIES

The Mobile Box Laboratory is a well-equipped enclosed box laboratory which is fixed onto a vehicle rather than inside. This allows the user to utilise the high functionality of a fixed lab and the convenience of real-time, in-field testing. It is also uniquely customisable, whereby you can chose to opt for a double cab which carries a greater number of passengers at the expense of workspace, or a single cab which carries fewer passengers but has a larger work area – neither option compromises on height, therefore the user can stand in both models. Our standard vehicles are the Toyota Land Cruiser and Hilux, however other models can be used upon request.

The Mobile Box Laboratory is an extremely popular option, which is used around the world by scientists and technicians in sectors which include, but are not limited to, education, health, academic research, farming, industrial processing, mining and oil and gas. Wagtech Projects is able to recommend suitable field and laboratory instruments for a wide range of studies which can be stored and used in the vehicle.

Models shown below: Ford Ranger (Single Cab) and Toyota Land Cruiser (Double Cab) Box Laboratories







# MOBILE BOX LAB - STANDARD SPECIFICATION

Whilst each Mobile Box Laboratory has a bespoke design to meet the exact needs of each deployment, standard features would include the following:

## Wagtech Mobile Box Laboratory, based on Toyota Land Cruiser 79 Single Cab

Code: EN95-200

### BODY:

- ⦿ Box Internal dimensions 2.6m (L) x 2m (W) x 1.8m (H)
- ⦿ Mount coated sub-frame & fitted with modular body of insulated laminated panelling with heavy duty light aluminium internal and external extrusions
- ⦿ Double skin tropical, insulated roof painted Fuji white
- ⦿ External lower lockers and skirts

### FLOOR:

- ⦿ 12mm Phenolic ply floor overlaid with aluminium tread-plate

### WINDOWS:

- ⦿ Sliding window to right hand side with security grille
- ⦿ Fixed window to entrance door with grille

### ENTRANCE:

- ⦿ Fold down rear steps (stair cased) entrance

### GENERATOR:

- ⦿ Generator housing complete with access door together with exhaust ducting
- ⦿ External Generator locker at rear with noise-free 2.5kVa generator

### AIR CONDITIONING:

- ⦿ Roof mounted air conditioning unit for mobile lab

### ROOF RACK:

- ⦿ Box section roof rack with expanded mesh, painted black with access ladder
- ⦿ Kick plate behind ladder

### NEAR SIDE:

- ⦿ Work top
- ⦿ 4 lockable drawers at right hand front
- ⦿ Desk area with swivel chair
- ⦿ 12v Fridge/Freezer Min capacity 100L/10L

### OFF SIDE:

- ⦿ Work top, lockable cupboard with shelves and storage
- ⦿ Battery and inverter cupboard
- ⦿ Tank stowage fresh and waste with level indicator
- ⦿ Sink and cold water tap with pump, waste water to tank

### WATER:

- ⦿ Storage locker for fresh and dirty water containers (100 litres each)
- ⦿ Water containers, drain taps to be fitted to each unit
- ⦿ External filler for fresh water to tank

### ELECTRICS:

- ⦿ Heavy duty maintenance free batteries with split charge relay
- ⦿ Pure sine wave inverter 1000kw
- ⦿ Battery charger
- ⦿ Switch over from generator to inverter
- ⦿ 4 power socket to above worktop in ducting (round pin sockets)
- ⦿ 12v teal hand wash unit
- ⦿ 240v Hook socket on external panel (supply plug loose)
- ⦿ Exterior socket for submersible pump (Voltage TBA)
- ⦿ Interior overhead lighting x 2 LED switch near entrance door
- ⦿ Extraction fan at rear 12v
- ⦿ 12v lab electrics via auxiliary battery

### MISC:

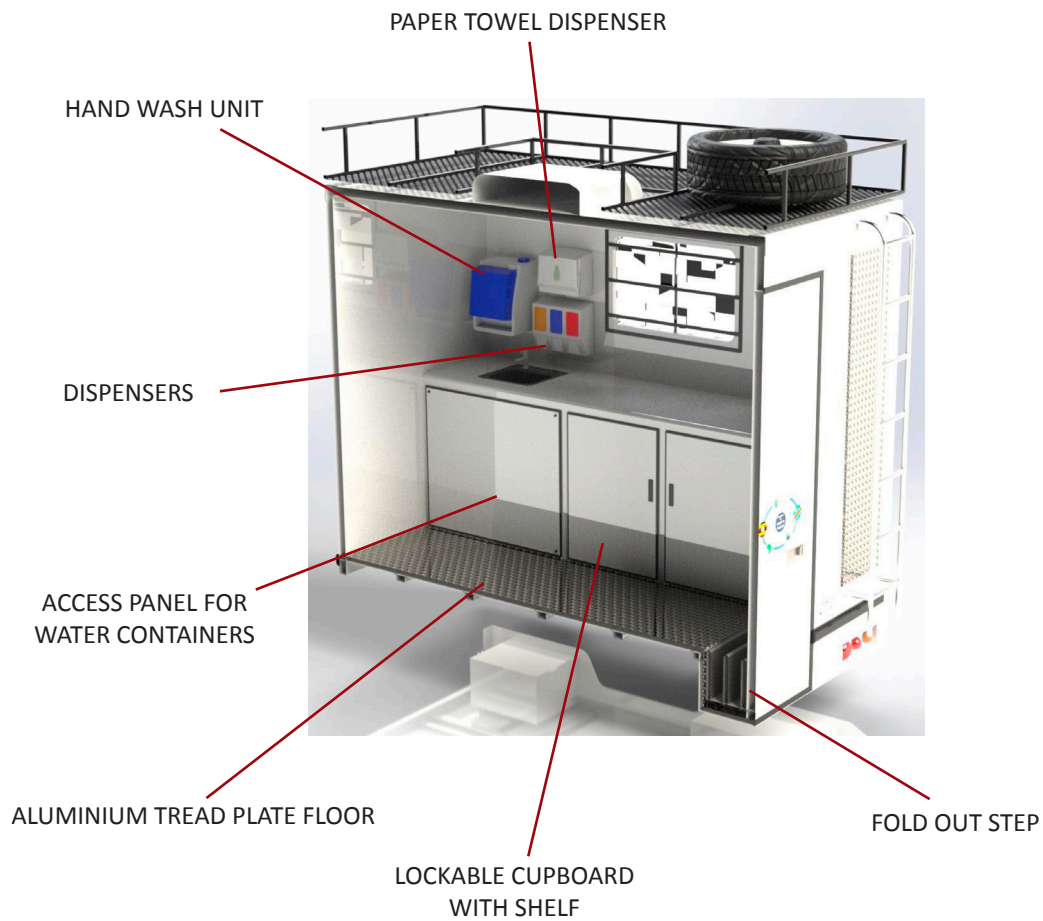
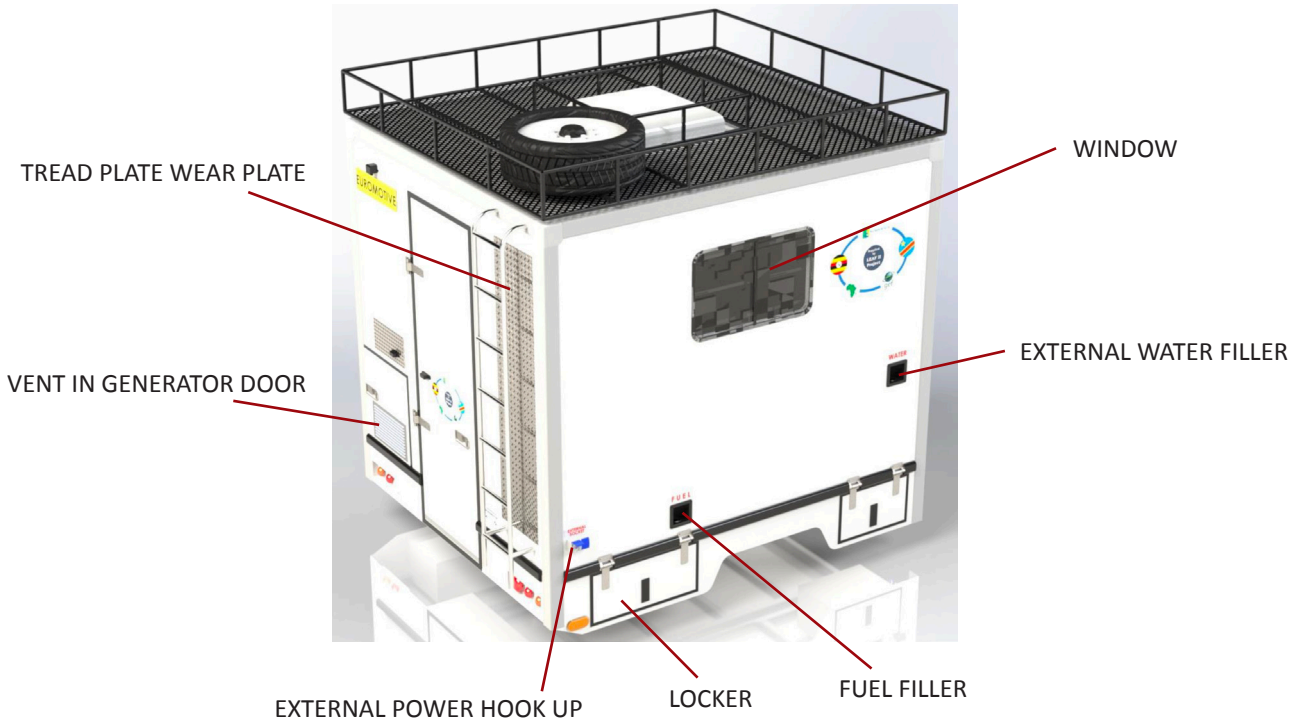
- ⦿ Hand wash liquid soap and hand lotion dispensers
- ⦿ Hand dry paper towels
- ⦿ Fire extinguisher
- ⦿ First aid kit

## Other optional facilities also available on consultation:

- ⦿ Company branding
- ⦿ Write up desk/area
- ⦿ Additional water tanks/sinks
- ⦿ Hazardous Materials work bench
- ⦿ Sleeping area
- ⦿ External Canopy/Retractable Awning
- ⦿ Toilet
- ⦿ Shower



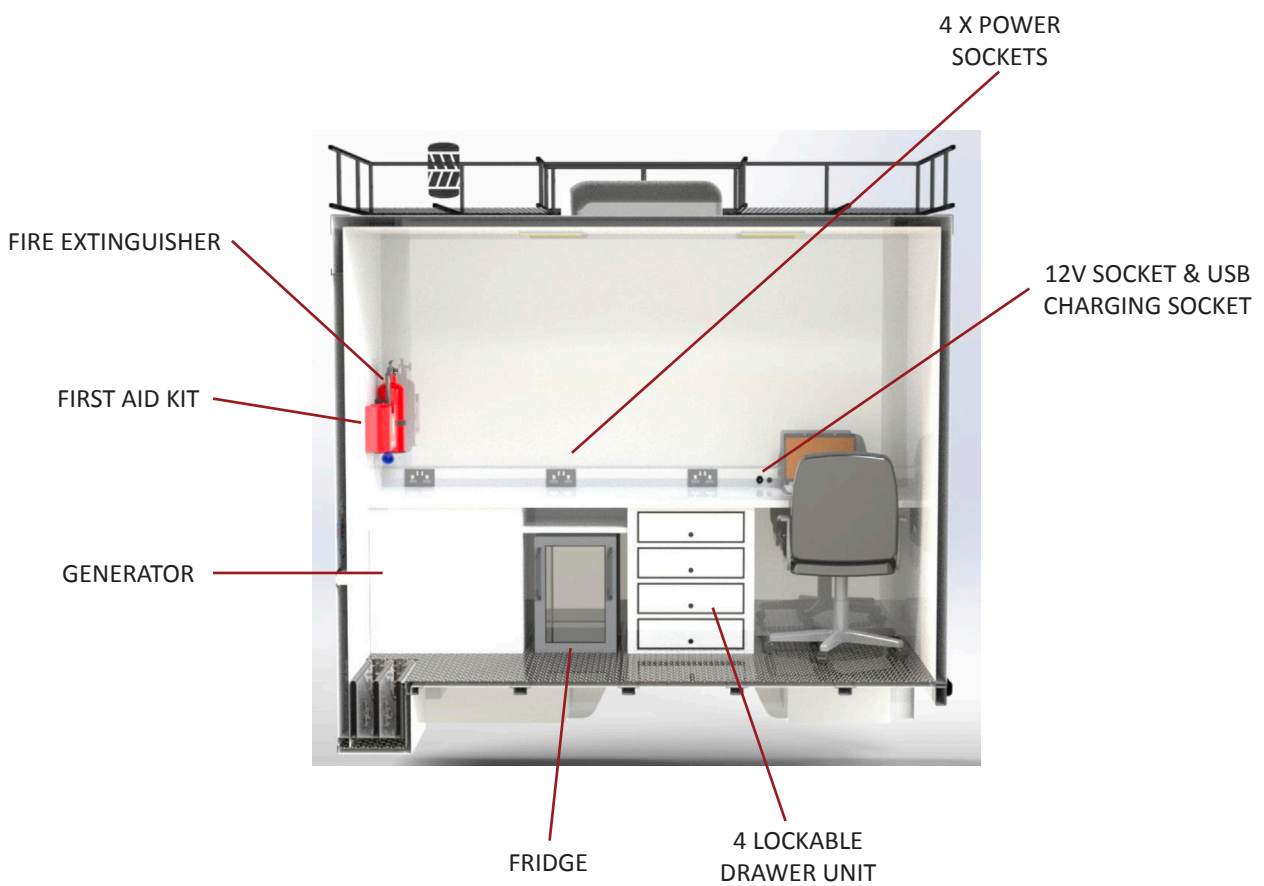
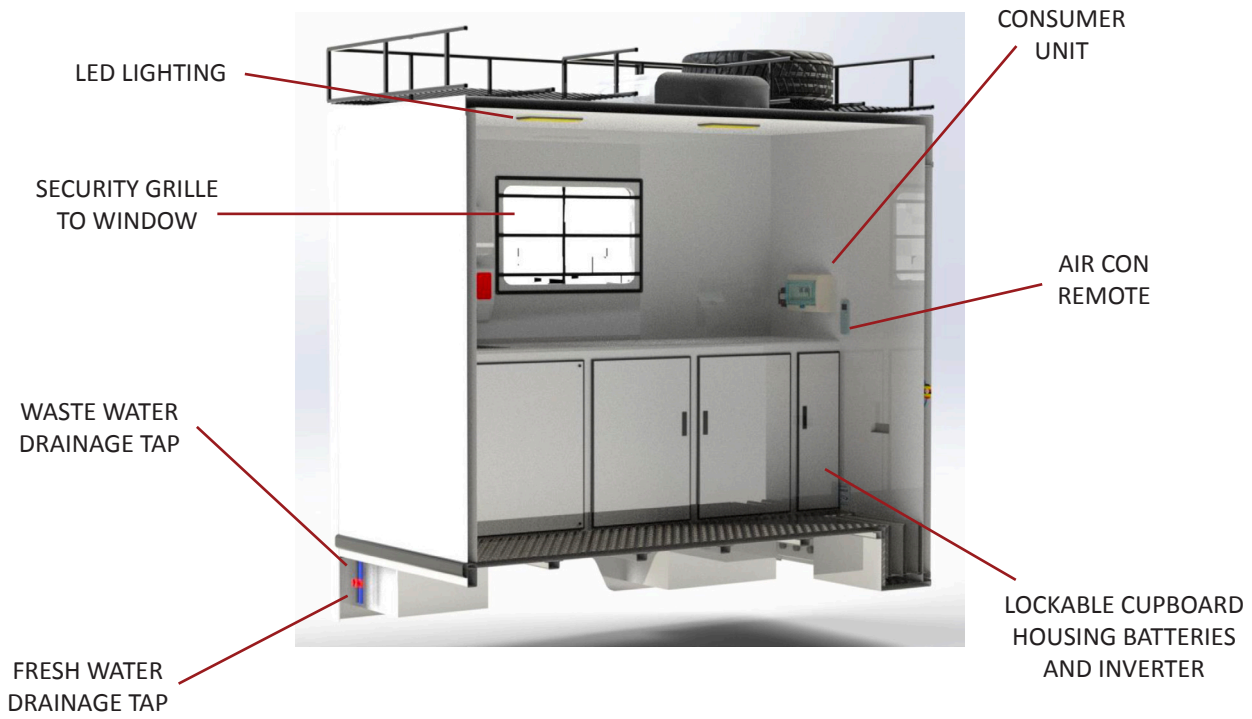
# MOBILE BOX LAB - TECHNICAL LAYOUT







# MOBILE BOX LAB - TECHNICAL LAYOUT





# MOBILE 4X4 LABORATORIES

Mobile 4x4 Laboratories offer the most compact, mobile and rugged laboratory in the range, while still offering key utilities and well-sized workspaces. Inside the vehicle there is a sink for hand washing, a benchtop work surface, a floor-level cupboard and a fridge for storing consumables and other items. A roof rack is included in order to increase storage space while maintaining the vehicle's unique degree of mobility. There is also space to work out the back of the vehicle which is perfect when regularly collecting field samples and analysing them onsite.

The lab is fully contained within the original shell of a 4x4 vehicle, which means it is able to be deployed in the roughest terrain and reach the most inaccessible areas. The Wagtech Mobile 4x4 Laboratory uses Toyota Land Cruiser as standard, which is renowned for its superior off-road capabilities and reliability, however other models can be used upon request, or we can even convert an existing vehicle.

Model shown below: Land Rover Defender 110 4x4 Laboratory







# MOBILE 4X4 LAB - STANDARD SPECIFICATION

Whilst each Mobile 4x4 Laboratory has a bespoke design to meet the exact needs of each deployment, standard features would include the following:

## Wagtech Mobile 4x4 Laboratory, based on Toyota Land Cruiser 78 hard top

Code: EN95-100

### VEHICLE SIZE:

- ⊙ Length: 5070mm
- ⊙ Width: 1770mm
- ⊙ Height: 2115mm
- ⊙ Ground clearance: 230mm
- ⊙ Gross Vehicle weight: 3200

### FLOOR:

- ⊙ 12mm Phenolic ply floor overlaid with aluminium tread-plate

### WINDOWS:

- ⊙ As per model of vehicle

### ENTRANCE:

- ⊙ Rear door entrance

### GENERATOR:

- ⊙ Generator housing complete with access door together with exhaust ducting
- ⊙ External Generator locker at rear with noise-free 2.5kVa generator

### AIR CONDITIONING:

- ⊙ Vehicles built in aircon unit

### ROOF RACK:

- ⊙ Box section roof rack with expanded mesh

### NEAR SIDE:

- ⊙ Work top
- ⊙ Lockable drawers
- ⊙ 12v Fridge/Freezer Min capacity 100L/10L

### MISC:

- ⊙ Fire extinguisher
- ⊙ First aid kit

### OFF SIDE:

- ⊙ Work top, lockable cupboard with shelves and storage
- ⊙ Battery and inverter cupboard
- ⊙ Tank stowage fresh and waste with level indicator
- ⊙ Sink and cold water tap with pump, waste water to tank

### WATER:

- ⊙ Storage locker for fresh and dirty water containers (100 litres each)
- ⊙ Water containers, drain taps to be fitted to each unit
- ⊙ External filler for fresh water to tank

### ELECTRICS:

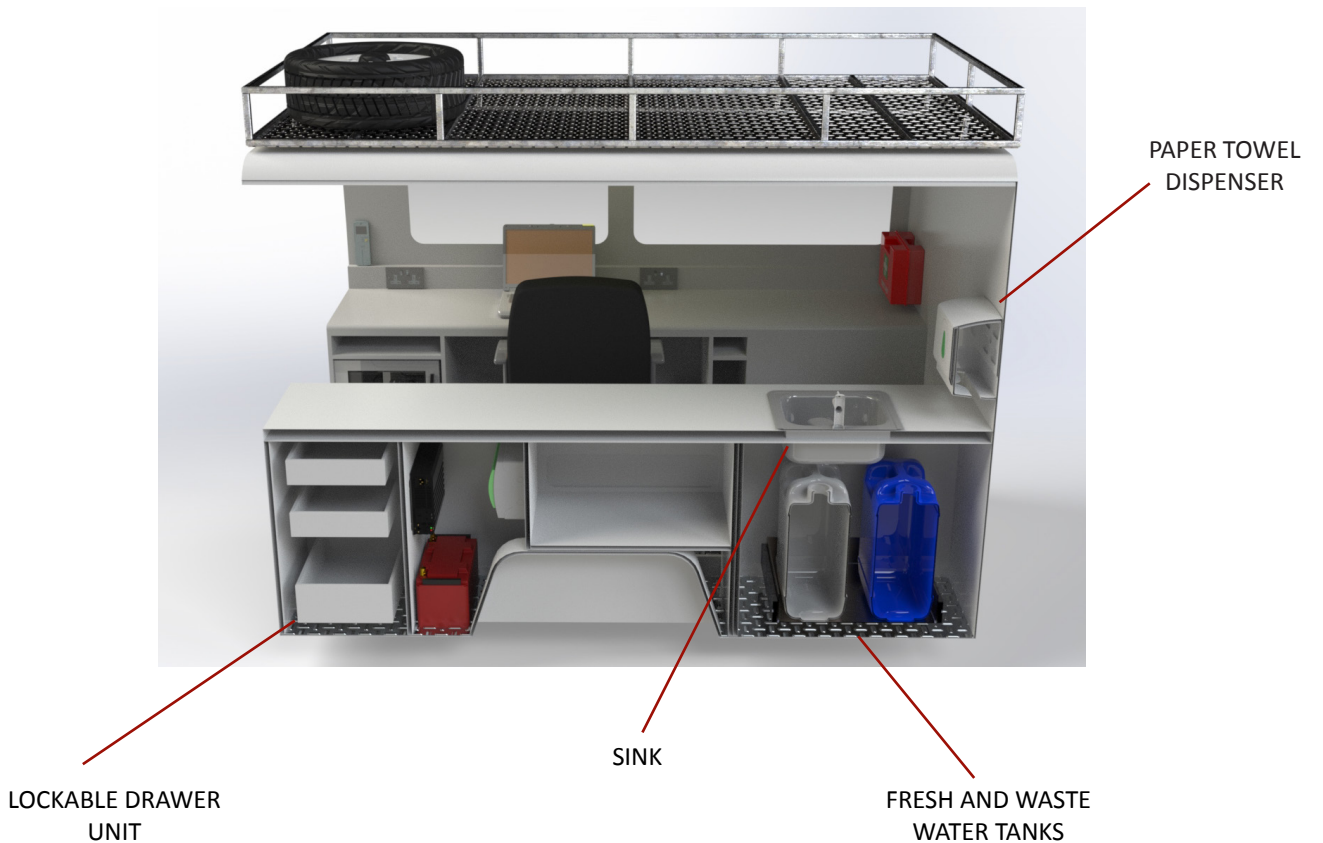
- ⊙ Heavy duty maintenance free batteries with split charge relay
- ⊙ Pure sign wave inverter 1000kw
- ⊙ Battery charger
- ⊙ Switch over from generator to inverter
- ⊙ Power sockets to above worktop in ducting
- ⊙ Interior overhead lighting x 2 LED switch near entrance door
- ⊙ 12v lab electrics via axillary battery

### Other optional facilities also available on consultation:

- ⊙ Company branding
- ⊙ Pull out workspace
- ⊙ External Canopy/Retractable Awning
- ⊙ Additional water tanks/sinks
- ⊙ Hazardous Materials work bench



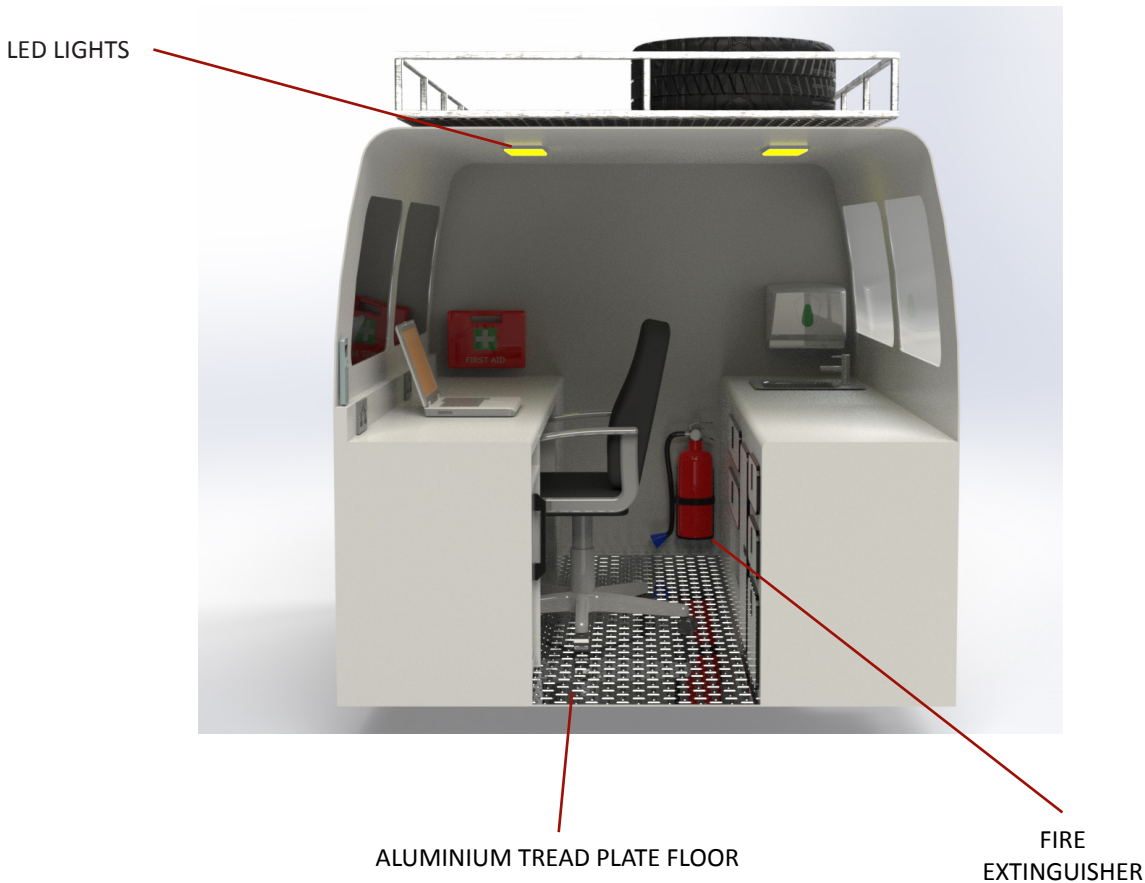
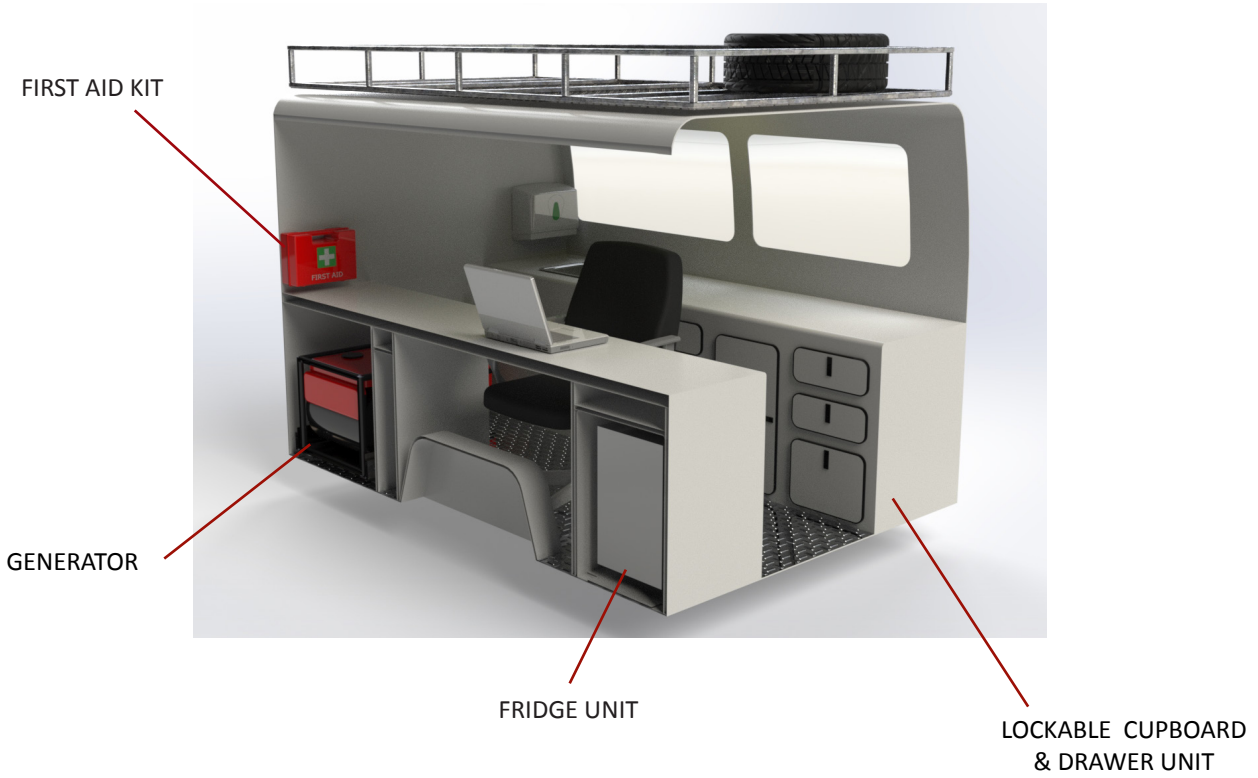
# MOBILE 4X4 LAB - TECHNICAL LAYOUT







# MOBILE 4X4 LAB - TECHNICAL LAYOUT





## MOBILE VAN LABORATORIES

The Mobile Van Laboratory is a complete solution which combines the large workspace of a single-cab Mobile Box Laboratory with the fully-integrated approach of the 4x4 option. This results in a highly capable laboratory which can be transported long distances both on road and over rough terrain.

The Mobile Van Laboratory boasts the greatest number of features in the range, which includes but is not limited to, vast storage space, two dedicated spaces for desktop computers/laptops with office chairs and LED lighting in the lab space and doorway. Wagtech can also tailor the Mobile Van to your needs, as well as provide all the necessary equipment based on the requirements of the end user.

Our standard vehicle for this type of mobile laboratory is the Iveco Daily van which is one of the biggest vans available and is known for its tough construction, however we can supply other models upon request.

Models shown below: Mercedes Sprinter LWB 3500 GVW and Iveco Daily Van Laboratories





# MOBILE VAN LAB - STANDARD SPECIFICATION

Whilst each Mobile Van Laboratory has a bespoke design to meet the exact needs of each deployment, standard features would include the following:

## Wagtech Mobile Van Laboratory, based on Iveco Daily

Code: EN95-300

### BODY:

- ⊙ Length: 5669mm
- ⊙ Width: 2010mm
- ⊙ Height: 2280mm

### FLOOR:

- ⊙ 12mm ply floor overlaid with anti-slip vinyl
- ⊙ Linings
- ⊙ Wipe clean linings with insulation side and roof, colour white

### WINDOWS:

- ⊙ 2 x sliding windows to right hand side, privacy glass
- ⊙ 1 x sliding window to left hand side, privacy glass

### GENERATOR:

- ⊙ Generator housing complete with access door vented through the floor
- ⊙ External generator locker at rear with slide out 2.5kVa generator

### AIR CONDITIONING:

- ⊙ Over cab mounted air conditioning vented into for mobile lab

### NEAR SIDE:

- ⊙ Work top/Cupboards
- ⊙ Work bench with storage shelf under

### OFF SIDE:

- ⊙ Desk area for 2 occupants with 2 swivel chairs
- ⊙ Work top, lockable cupboard with shelves, drawers and cupboards

### Other optional facilities also available on consultation:

- ⊙ Company branding
- ⊙ Write up desk/area
- ⊙ Additional water tanks/sinks
- ⊙ Hazardous Materials work bench
- ⊙ Additional Storage
- ⊙ Sleeping area
- ⊙ External Canopy/Retractable Awning
- ⊙ Toilet
- ⊙ Shower

- ⊙ Battery and inverter cupboard at rear, accessed from rear doors
- ⊙ Sink and cold water tap with pump, with waste water to tank
- ⊙ 12v fridge Water

### WATER:

- ⊙ Underfloor tank stowage, fresh and waste with level indicator
- ⊙ Water containers with drain taps
- ⊙ External filler for fresh water to tank

### ELECTRICS:

- ⊙ Heavy duty maintenance free batteries, with split charge relay
- ⊙ Pure sign wave inverter 1000kw
- ⊙ Battery charger
- ⊙ Switch over from generator to inverter
- ⊙ Multi power socket to N/S and O/S worktop in ducting (round pin socket)
- ⊙ 12V hand wash unit (waste to tank)
- ⊙ Heater and water pump operates when engine is running
- ⊙ 240v hook socket on external panel
- ⊙ Interior overhead lighting, switch near entrance door
- ⊙ Key out facility
- ⊙ 12V lab electrics via axillary battery
- ⊙ Consumer unit

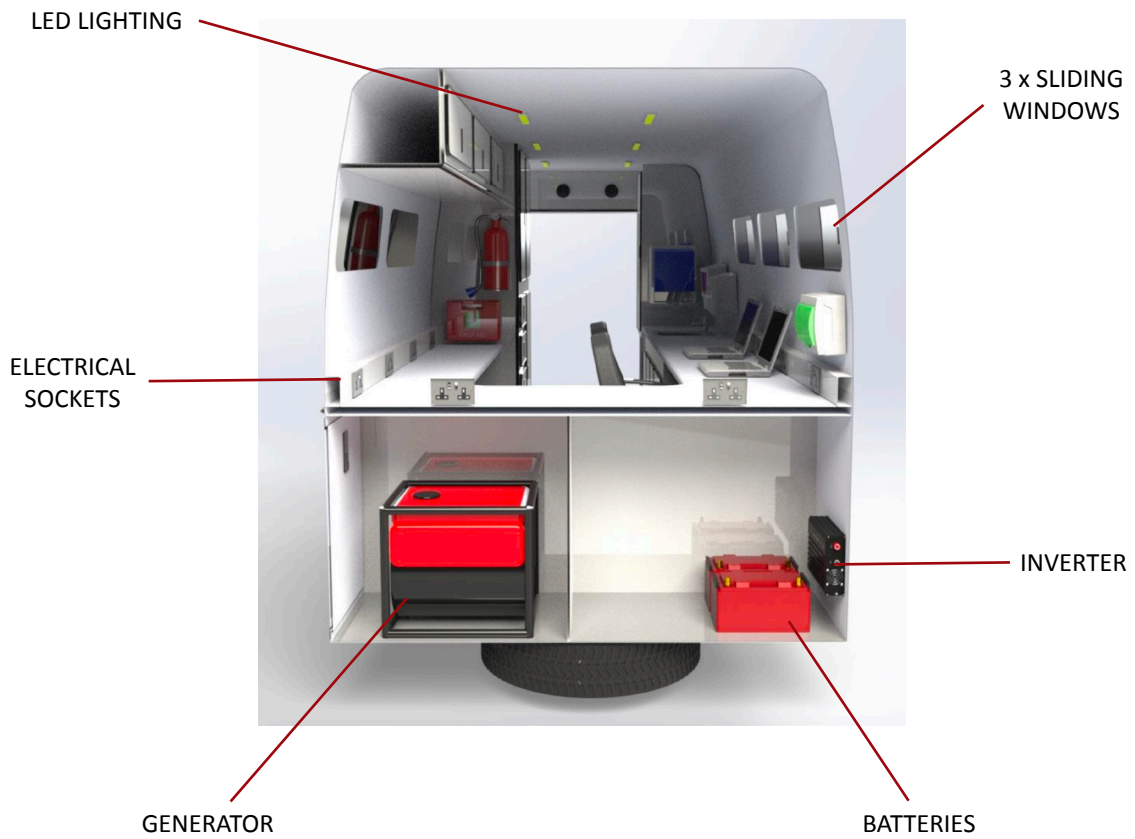
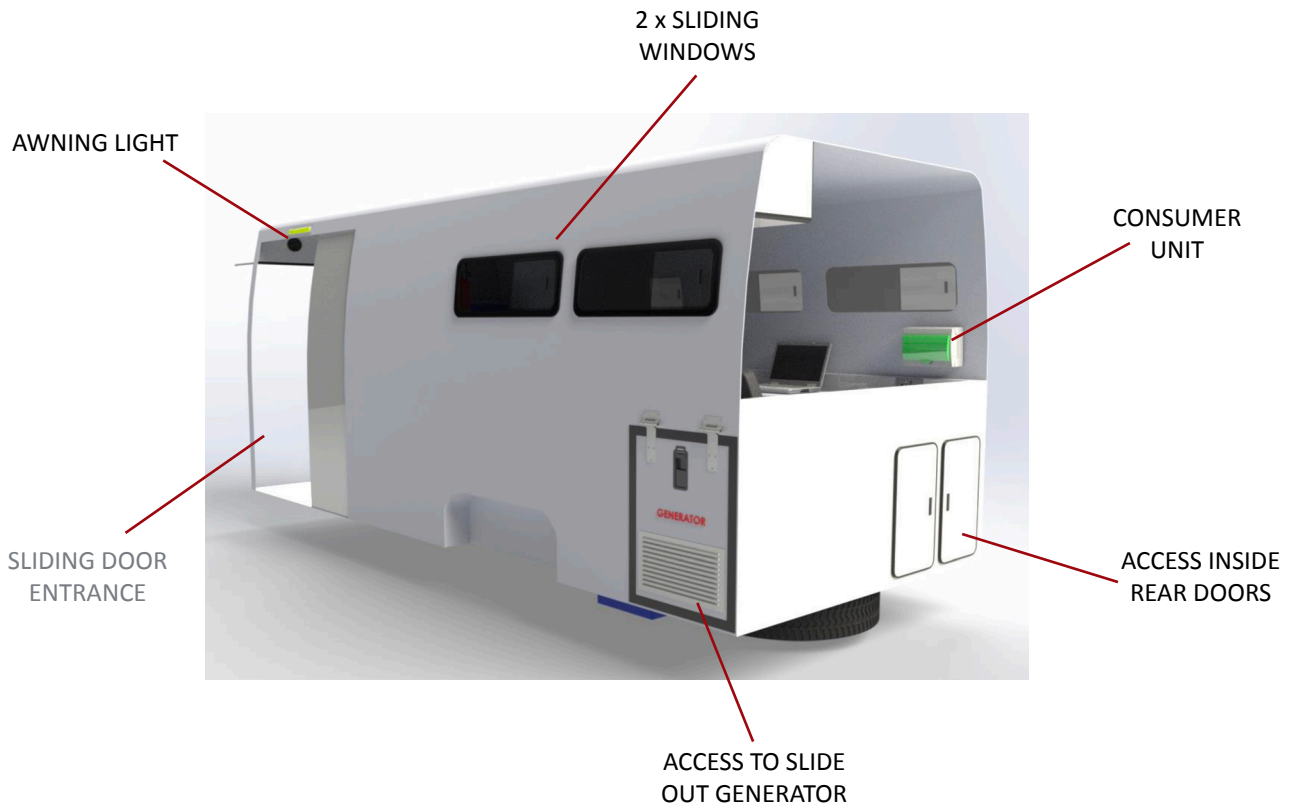
### MISC:

- ⊙ Fire extinguisher
- ⊙ First aid kit



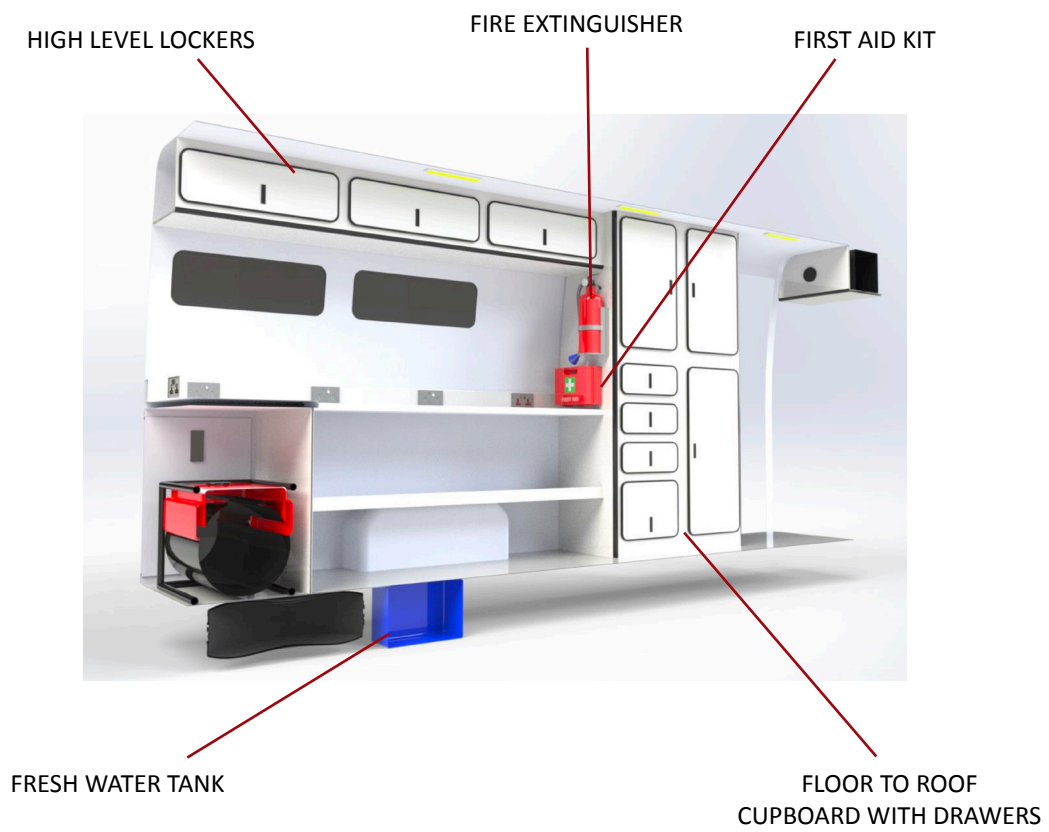
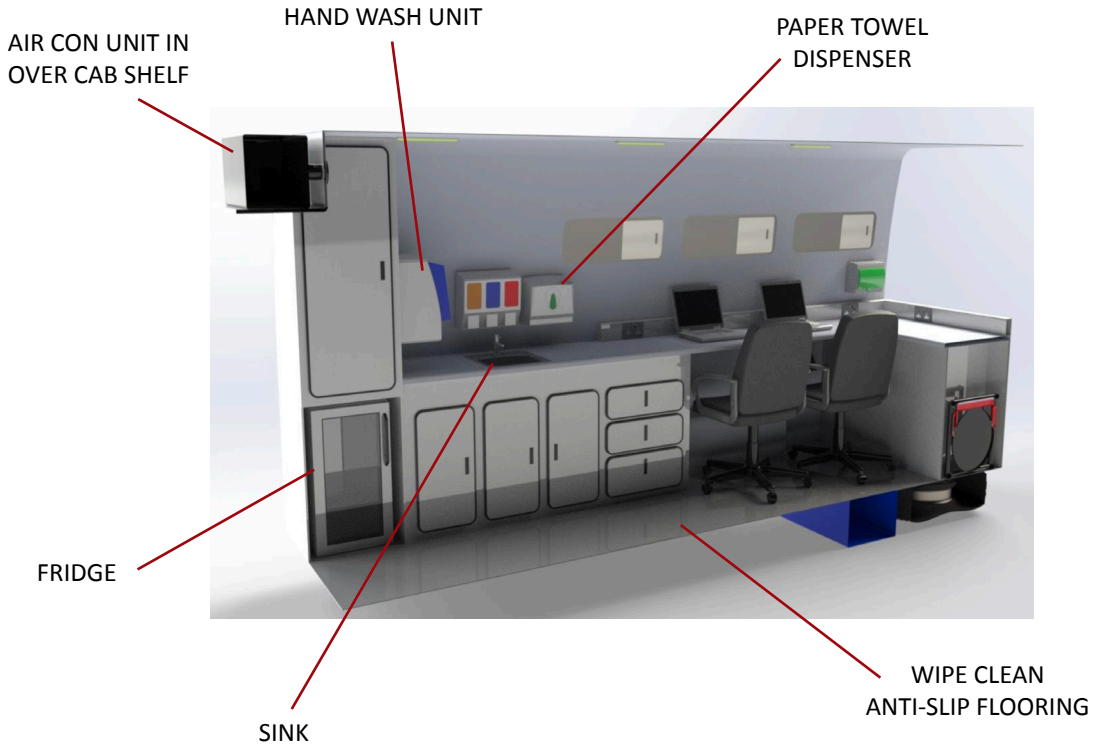


# MOBILE VAN LAB - TECHNICAL LAYOUT





# MOBILE VAN LAB - TECHNICAL LAYOUT





## TRAILER LABORATORIES

Trailer Laboratories offer a larger laboratory space more akin to a traditional laboratory and can be deployed either on a temporary or semi-permanent basis. They can also be used as permanent installations as a low cost alternative to expensive civil works project. These labs can be towed by any suitable 4x4 vehicle.

The Trailer Laboratory can offer all the facilities that a fixed laboratory can provide, including equipment and utilities required for high-end analytical instruments such as HPLC and GC. Wagtech can also provide all laboratory equipment, consumables and reagents to give a complete solution.

Whilst each trailer has a bespoke design to meet the exact needs of each deployment, standard features would include a fully galvanized RHS and angle welded steel construction, PAR type side winding jacks, 12V lighting, approximate gross weight of 3500Kg and hydraulically damped coupling and jockey wheel.







# TRAILER LAB - STANDARD SPECIFICATION

Whilst each Trailer Laboratory has a bespoke design to meet the exact needs of each deployment, standard features would include the following:

## Wagtech Mobile Trailer Laboratory

Code: EN95-400

### CHASSIS:

- ⊙ Fully galvanized RHS and Angle welded steel construction
- ⊙ PAR type side winding jacks
- ⊙ 2 x 1800kg Peak full beam axle's c/w auto reverse brakes giving 3500kg gross weight
- ⊙ 155 x 70 R12 wheel and tyre combination
- ⊙ Hydraulically damped coupling cw TJ15 HD jockey wheel
- ⊙ 12v lighting to latest EEC construction and use regulations (rear lamps fitted into protective light recess)
- ⊙ Chassis mounted under floor spare wheel carrier

### BODY:

- ⊙ 7m x 2.3m x 2.2m
- ⊙ Carbofont (GRP laminated polycarbonate) body panels and roof
- ⊙ Aluminium bonded body kit
- ⊙ Fire rating is European classification M1; equivalent to BS476 part 6/7 Class1

### FINISH:

- ⊙ Gloss white body panels with mill finish extrusions, capping and trim
- ⊙ Etch primed and painted chassis

### EXTERNAL FITTINGS:

- ⊙ Personnel door fitted near side with 5 point locking door furniture
- ⊙ 3 windows- opening, sliding type c/w fly and blackout screen
- ⊙ Roof-mounted air conditioning unit 10,920 BTU
- ⊙ Galvanised roof rack, bases covered in aluminium tread-plate, access ladder

### INTERIOR:

- ⊙ Walls and ceiling to remain standard white GRP finish

### FITTED TOP RAIL SYSTEM WITH:

- ⊙ Four 500mm cupboards
- ⊙ Work surfaces equivalent to 4m total

### FLOOR:

- ⊙ 12mm treated FE ply with: Gerflor non slip, anti-static acid and alkali resistant safety vinyl

### ACCESS:

- ⊙ Folded and welded rigidised aluminium steps with fully adjustable feet, locating guides and locking bolts c/w hand rails
- ⊙ Water & Plumbing: Under floor 100ltr water tank
- ⊙ Under cupboard water heater c/w holding tank
- ⊙ 12v water pump (40psi)
- ⊙ Tap
- ⊙ SS sink c/w drainer
- ⊙ Paper towel dispenser
- ⊙ Soap dispenser

### ELECTRICAL INSTALLATION:

- ⊙ Mains inlet to consumer unit with RCD and MCB's

### CABLE RUNS IN MINI TRUNKING TO:

- ⊙ 4 x LED lamps
- ⊙ 8 x twin 13a sockets
- ⊙ 12v electrical installation
- ⊙ 2 x 12v External scene lights
- ⊙ 4KW (3500w continuous) Diesel generator, chassis mounted with remote start from trailer control panel, perfect sinus wave for sensitive equipment) c/w 58ltr fuel tank
- ⊙ Intermediate battery with split charge relay

### ACCESSORY PACK:

- ⊙ First Aid kit (travel type) & Fire extinguisher
- ⊙ Trolley jack
- ⊙ Wheel brace

## Other optional facilities also available on consultation:

- ⊙ Company branding
- ⊙ Write up desk/area
- ⊙ Toilets
- ⊙ Showers
- ⊙ Additional water tanks/sinks
- ⊙ Hazardous Materials work bench
- ⊙ Sleeping area
- ⊙ Separated laboratory area for mixed discipline labs
- ⊙ External Canopy/Retractable Awning
- ⊙ Fume Extraction System



# TRAILER LAB - TECHNICAL LAYOUT

## DOORS

EXT. C/DECK 1

## WINDOWS

900 X 900 SLIDING 3

FLYSCREENS 3

## ELECTRICAL

LED LIGHT FITTING 4

EXT. LIGHT 1

D.B BOARD 1

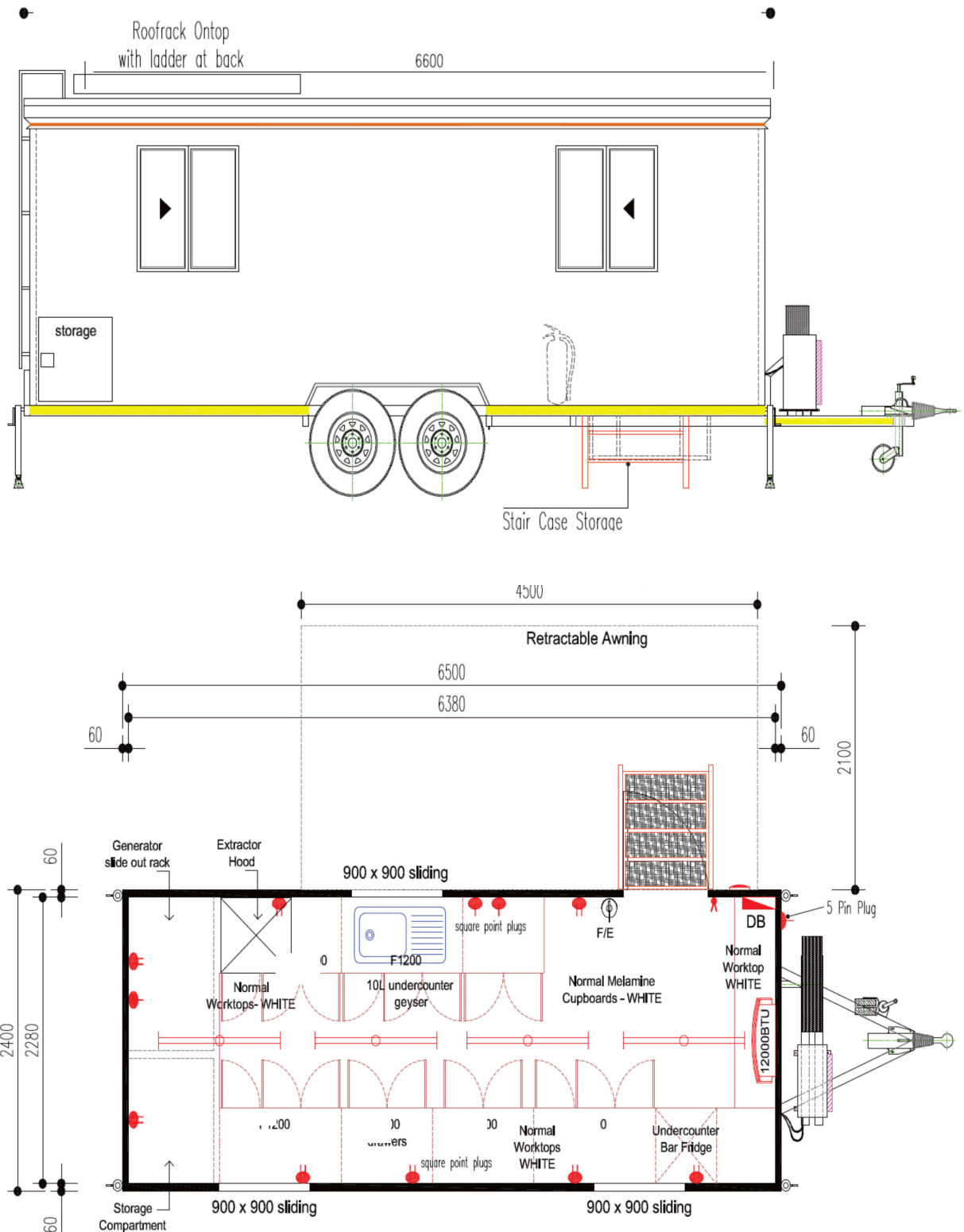
SINGLE SQUARE POINT PLUG 3

DOUBLE SQUARE POINT PLUG 7

2 LEVER SWITCH 1

GEYSER ISOLATOR 1

A/C ISOLATOR 1





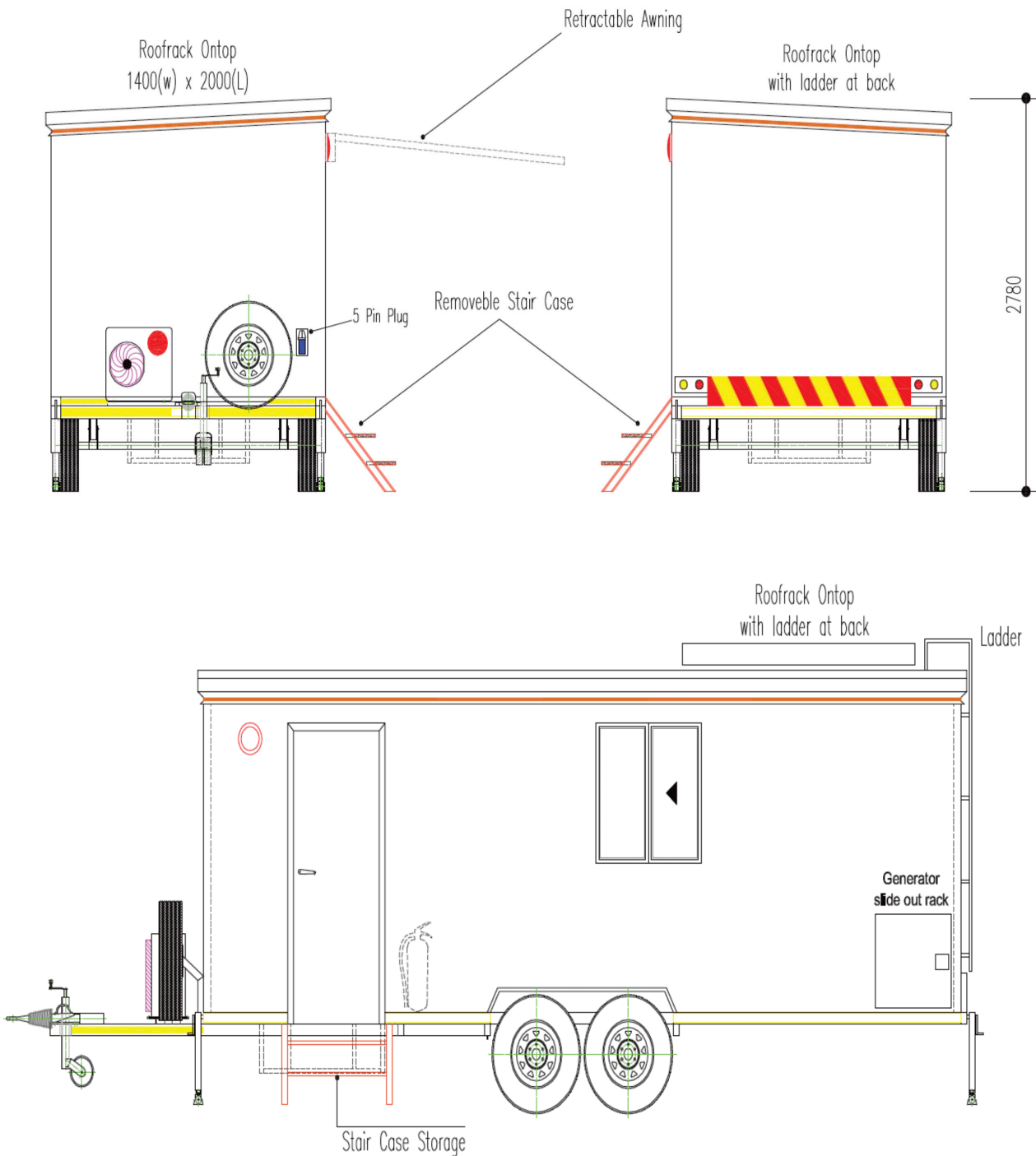
# TRAILER LAB - TECHNICAL LAYOUT

## PLUMBING

SST SINGLE SINK	1
GEYSER 10LTR UNDER COUNTER	1
WATER PUMP	1
WATER TANK- 100L	2
PLASTIC PAPER TOWEL DISPENSER	1
PLASTIC SOAP DISPENSER	1

## OTHER

CONVEYOR BELT BLOCK	4	STAIR CASE STORAGE	7
REMOVABLE STEPS C/W HANDRAIL	1	FIRE EXTINGUISHER	1
RUBBERISED FLOORING	YES	FIRST AID KIT	1
BLINDS	3	WORKTOPS	1
BURG, BARS	3	CUPBOARDS	1
SLIDING SECURITY GATE	1		







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