

Improvement of wash facility accessible for CwD, Improvement of schools safety, preparedness of school emergency plan , maintenance of ALSs and ECCDs centers in Domiz 1. Domiz 2, Bardarash and Gewelan camps.

Duhok Government

TECHNICAL SPECIFICATION AND BILL OF QUANTITIES



Save the Children®

- a) All the works must be executed in accordance with the Iraqi General Technical Specifications (I.G.T.S.) published by Ministry of Housing and Reconstruction/ Republic of Iraq, the drawings, contract documents and instructions of the engineer.
- b) All works and materials must be approved by the project engineer.**
- c) The materials shall be tested and approved by the National Centre of Construction Laboratories (NCCL).
- d) The contractor must employ a permanent resident engineer to be present at the project site during the execution period.
- e) The contractor must set-up a temporary and adequate office at the project site.
- f) All the materials shall be new and deemed to be of best available type in the local market and as approved by the project engineer.
- g) The item description herein after means "Preliminaries, supply of all materials, manpower, transportation, equipment, tools, machinery, construction plant & equipment, site facilities, temporary works and all the other works required including overheads", as approved by the project engineer.
- h) The contractor shall check all items and measurements given in the BoQ. All changes, additional quantities etc. require the written approval by the project engineer. A site assessment by the contractor is mandatory.
- i) Please, read all the documents carefully, then price it.

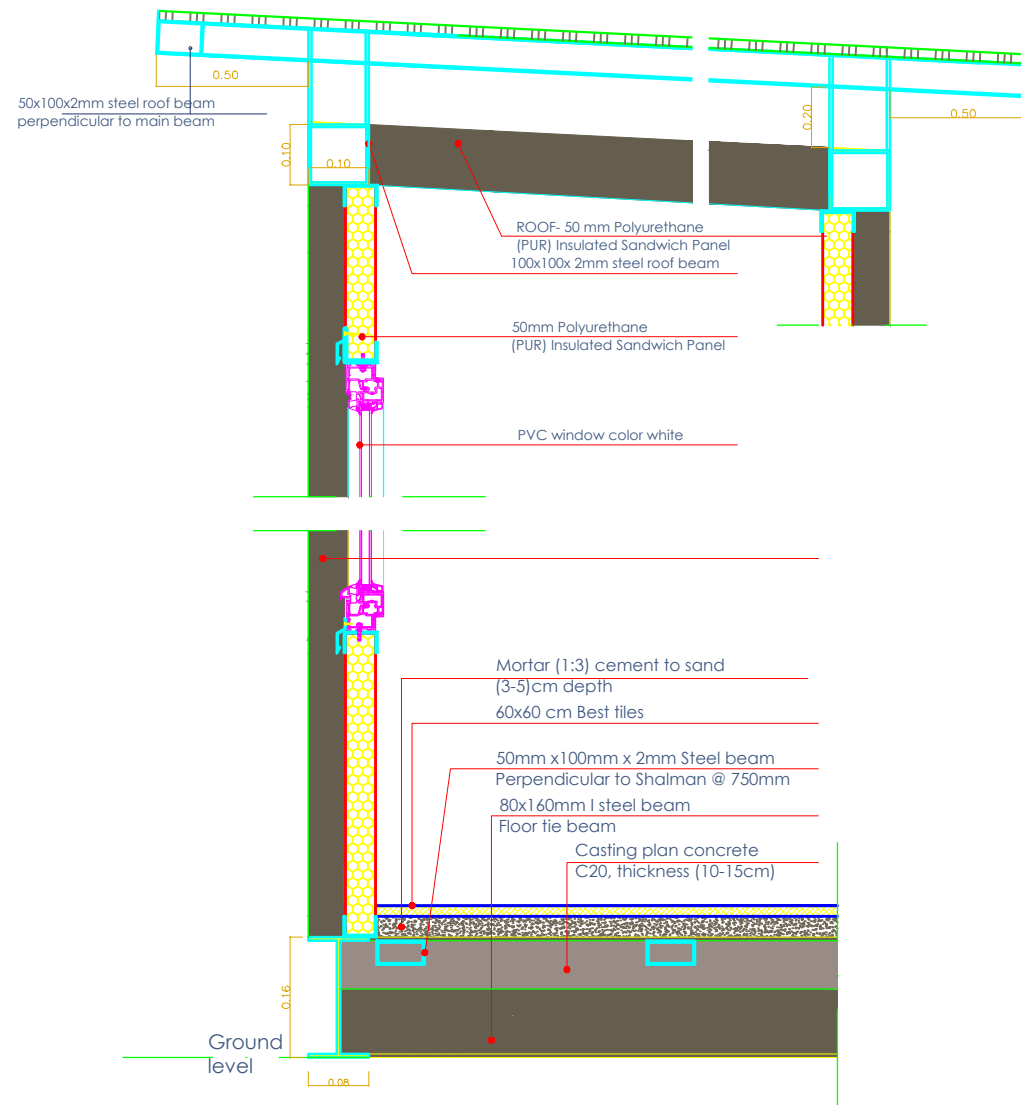
No.	Items	Unit	Qty	Cost IQD/unit	Total cost
A Jegerkheen schools in Gewelan camp					
A_1	Camera system need to repair, any needs to complete and working all cameras. System including 8 cameras , 4-megapixel and hard 1 tera	L.S	1		
A_2	Television 32 inch, 1920x1080 FHD, 75 HZ and IPS with holder and connecting with camera system.	No.	1		
A_3	Filtration of water bring and install in site, 7-8 liters per hours. any needs to complete work.	0	4		
A_4	Door need to repair with any needs to complete the work. Like; handle, slice and hinge etc.	No.	5		
A_5	Fixing and maintenance the fence around the school by increase the peace of BRC, fixing their base with concrete, welding the BRC with columns and beams, increasing the adjustable clamp.	M. length	150		
A_6	Manhole: excavating the concrete area and lay out of all existing materials such as concrete, soil to permitted dump site. And install a new manhole.	No.	2		
A_7	Cleaning latrines. Bring big water tank, discharging water manhole and cleaning it.	No.	1		
A_8	Water pump 1 horse power the ability to raise water to 10 meters height,	No.	1		
A_9	Lamps (كؤوب), best types, prices include fixing in site and connecting with electricity with all needs ...according to instructions of supervisor engineer.	No.	35		
A_10	Switch plug socket: single and double switch, Turkish type and best quality with fixing and replace.	No.	5		
A_11	Changing glasses for windows, replace the broken double layers of glasses 4mm by a new one, the price includes all the necessary requirements and fixing in the site.	m2	7		
A_12	AC: air cooler need to repair and changing the compressor or cart or changing pipe or refilling gas, the price includes all the necessary requirements, materials, equipment and fixed.	No.	21		
Sub total				IQD	-
B Bardarash primary school in Bardarash camp					
B_1	Security cameras, No. 10, 4-megapixel, hard 1 tera, battery + inventor with television 32 inch. the price including fixing, connecting by suitable wire and testing. Total dimension of school is 35x50 m.	Set	1		
B_2	Neon Lamps (نئون) best types.	No.	25		
B_3	Base of Neon lump 120cm best quality with fixing in site by a suitable wire, should be the same exist type in the school,	No.	25		
B_4	External LED lump: 18 watt, The price including transportation and fixing in site and connecting with electricity wire.	No.	30		
B_5	Changing glasses for windows, replace the broken double layers of glasses 4mm by a new one, the price includes all the necessary requirements and fixing in the site.	m2	10		
B_6	Bill: bill for school, The price including transportation and fixing in site and connection.	No.	2		
B_7	Switch plug socket: single and double switch, Turkish type and best quality with fixing and replace.	No.	10		
B_8	Premium Multi-Line extension socket, 5 meters	No.	10		
B_9	Handles of door, with all the necessary materials. According to instructions of supervisor engineer.	No.	15		
Sub total				IQD	-

C	Nazdar school in Domiz 1 camp				
C_1	Lavatory base: best quality Turkish made with all necessary materials and fittings.	No.	3		
C_2	Exhaust fan (30x30cm) and fixing with changing glasses and all needs, the work need full technical and without and exceed edge ...according to instructions of supervisor engineer.	No.	16		
C_3	Handles of door, with all the necessary materials. According to instructions of supervisor engineer.	No.	15		
C_4	Soap pan, medium size fixing on the wall	No.	15		
C_5	Porcelain stair; Provide materials and Paving the ground by Porcelain tile (Best type) with cement and sand mortar 1:3 and according to the supervisor engineer instructions. Width 1 m. 3-4 steps.	No.	8		
C_6	Manhole repair: add a number of iron pipe on the tope of manhole, fixing with welding and lay out of all existing materials such as concrete, soil to permitted dump site.	No.	12		
C_7	Water hose steel type, the price include fixing in site.	No.	25		
C_8	Water tank (1400liters): Supply and installing cylindrical galvanized iron water tanks (1.50mm thickness) including fittings, valves and float valves. It is standing on four iron feet. The price including transportation and fixing in site.	No.	3		
C_9	Connecting the 3 water tanks with main water system of school	L.S	1		
C_10	Concrete block 15x20x40 cm with transportation.	No.	100		
C_11	Lamps (كلوب), best types, prices include fixing in site and connecting with electricity with all needs ...according to instructions of supervisor engineer.	No.	20		
C_12	Switch plug socket: single and double switch, Turkish type and best quality with fixing and replace.	No.	5		
C_13	kitchen contour (cabinet): supply and install contour with their doors, hinges and handles. Best type in market, all according to the supervisor engineer.	Length	3		
C_14	Sony mar mar for contour with hand wish base, mix tap, outlet pipe and connecting with water source.	M.length	3		
C_15	Curtain: side from top to bottom for windows, Zebra type with fixing and all necessary work for windows, the engineer will choose color and type of curtain. Dimension are 1.50m x1.50x.	No.	8		
C_16	Cleaning latrines. Bring big water tank, discharging water manhole and cleaning it.	No.	1		
Sub total					IQD -
D	Kar school in Domiz 1 camp				
D_1	Excavation of existing concrete 10m length, 50cm width, 50cm depth. installing a PVC pipe 6 inch and 1 manhole.	L.S	1		
D_2	Concrete works- Supply materials and casting concrete, class C20 (1: 2: 4) with 12cm thickness and BRC steel mesh 15x15cm and Ø5mm, provide a layer of nylon in the ground before casting. 10m length, 50cm width, 50cm depth	L.S	1		
Sub total					IQD -
E	Jivan school in Domiz 2 camp				
E_1	Exhaust fan (30x30cm) and fixing with changing glasses and all needs, the work need full technical and without and exceed edge ...according to instructions of supervisor engineer.	No.	10		
E_2	Ceiling fan: installing and connecting with electricity resource and all necessary work.	No.	5		
E_3	Blachictor (بلاچكتور) and the price including fixing in site and connecting. 250 Watt	No.	5		
E_4	Blachictor (بلاچكتور) and the price including fixing in site and connecting. 50 Watt	No.	6		
E_5	Lamps (كلوب), best types, prices include fixing in site and connecting with electricity with all needs ...according to instructions of supervisor engineer.	No.	30		
E_6	LED lump 18 watt, The price including transportation and fixing in site and connecting with electricity wire.	No.	15		
E_7	Switch plug socket: single and double switch, Turkish type and best quality with fixing and replace.	No.	10		
E_8	Water pump 1 horse power the ability to raise water to 10 meters height, Automatic part on the pump.	No.	1		

E_9	Handles of door, with all the necessary materials. According to instructions of supervisor engineer.	No.	15		
E_10	Door need to repair with any needs to complete the work. Like; handle, slice and hinge etc.	No.	10		
Sub total				IQD	-
F	ECCD center in Gewelan camp				
	Prefabricated cabin 7m x 5m, Height (2.9 - 3.10)m				
F_1	Technical specifications of Sandwich Panels: 5cm for wall and 5cm for Ceiling, Polyurethane (PUR) Insulated Sandwich Panel: External Sheet- 0,45mm thick, 5 micron back coat and 20 micron, polyester painted galvanized steel; Internal Sheet- 0,45mm thick, 5 micron back coat and 20 micron, polyester painted galvanized sheet; Density- 38-42 kg/m³ (standard); Fire Class- EN 13501-1 building material class B- s1, d0 (low flammability/ no flaming droplets); R value: 26.- Creating a steel structure as a static supporting element for the assembly of the sandwich panel. Price includes all fittings, connection pieces, welding etc. The structure is made from the following: square column 100X100X2mm and main beam on top of cabin hollow section 100x100x2mm, Roof chassis iron bar 100x100x2 mm to two perpendicular bars like plus shape, cross bar weld equally between bars to protect roof from heavy loads. Slope roof. paint by Primer anti rust and 2 layers of oil paint red color.- Base: Shalman size of (16x8)cm Turkish type thickness 6mm ,paint by Primer anti rust and 2 layers of oil paint red color. and secondary beams between shalman in one direction 100X50x 2mm @ 75cm. Two small columns in the middle of cabin 100x50x2mm used as a support for beams and four hooks on top for loading and offloading.- Supply materials and casting concrete in a base of cabin between shalman, class C20, 12cm thickness. - Side disable Ramp: concrete ramp in front of cabin door 100cm width length according to the shape of ground easy access to disable wheel to climb. slope rate not more than 1/8 and according instruction of engineer. -Electricity: using wire 2.5 mm with all accessory of electrical work, fixing 4 double socket, switch pluck in three side of cabin and fixing the wire by pipe conduits 2cm. connecting with the main electrical source by suitable cable wires(6mm). circuit breaker 40A. internal LED with base fixing LED (No.8). Providing electricity for cabins: connecting wire (4x6mm) from main resource to board inside center, then connecting wire (6mm) from board to each cabin and where is need. install 4 sockets (serket) 40 amp in side the board, Doors and Windows: fixing 1 iron door in the shape of wood door (1*2.2m) thickness of plate 1.25mm for both sides, SCI iron logo 2mm and cutting by laser machine and weld on the outer face of the door, frame of door is 40x80x1.25mm and 2 PVC windows (1.2*1.2m) Turkish best type available in market with double glasses (4mm) and wire mesh 2 mm for the windows openings including all work requirements and necessary accessories like door and windows lock,.....etc. <u>Curtain</u>: side from top to bottom for each windows, Zebra type with fixing and all necessary work for windows, the engineer will choose color and type of curtain. Ventilation Fan: 40cm square fan and one smock detector connecting with electricity resource and all necessary work (No.1). Ceiling fan: connecting with electricity resource and all necessary work(No.1). -Circuit breaker 40A The price includes supplying, transportation, labor and all necessary equipment and machinery to be used for a proper installation. All the works will be done according to the instructions and under the supervision of the site engineer.	Each	1		
F_2	Shading for prefab cabin : providing materials and install shade area above the cabin by steel column size 10x10cm, 2 mm thickness, 30cm height @2m, steel beam 5cmX10cmX2mm and secondary beam perpendicular on the main beam 10cmx5cmx2mm and 15cm overlap between two plates sheet and cover by plate (Kirby sheet) Swedish made 0.5mm all the work includes paint by primer anti rust and 2 layer of oil paint red color ,weld perfectly with the beam of cabin and bolt and welding work ...etc.). covered all cabin with extended 30cm from four sides, closing all end of square pipe by the iron piece. the price includes water drainage channel in back side with drainage pipe and all the necessary requirements according to the details as per the drawings and instructions of supervisor engineer.	m2	48		
F_3	Provide materials and Paving the ground by Porcelain tile (Best type) of dimensions 60*60cm with cement and sand mortar 1:3 and according to the supervisor engineer instructions.	m2	35		

F_4	Secondary roof (Cotic): provide materials and installing with prefab roof and panel around the cabin under supervisor of the site engineer. the engineer will choose the type and color.	m2	35		
F_5	Air Conditioning system: AC split Unit (1 Tons), wall type. connecting with the main electrical source by Suitable cable wires (2x4mm).	No.	1		
Prefabricated cabin 3.0mx5m, divided to office and store Height (2.9 - 3.10)m					
F_6	Technical specifications of Sandwich Panels: 5cm for wall and 5cm for Ceiling, Polyurethane (PUR) Insulated Sandwich Panel: External Sheet- 0,45mm thick, 5 micron back coat and 20 micron, polyester painted galvanized steel; Internal Sheet- 0,45mm thick, 5 micron back coat and 20 micron, polyester painted galvanized sheet; Density- 38-42 kg/m³ (standard); Fire Class- EN 13501-1 building material class B- s1, d0 (low flammability/ no flaming droplets); R value: 26.- Creating a steel structure as a static supporting element for the assembly of the sandwich panel. Price includes all fittings, connection pieces, welding etc. The structure is made from the following: square column 100X100X2mm and main beam on top of cabin hollow section 100x100x2mm, Roof chassis iron bar 100x100x2 mm to two perpendicular bars like plus shape, cross bar weld equally between bars to protect roof from heavy loads. Slope roof. paint by Primer anti rust and 2 layers of oil paint red color.- Base: Shalman size of (16x8)cm Turkish type thickness 6mm ,paint by Primer anti rust and 2 layers of oil paint red color. and secondary beams between shalman in one direction 100X50x 2mm @ 75cm. Two small columns in the middle of cabin 100x50x2mm used as a support for beams and four hooks on top for loading and offloading.- Supply materials and casting concrete in a base of cabin between shalman, class C20, 12cm thickness. - Side disable Ramp: concrete ramp in front of cabin door 100cm width length according to the shape of ground easy access to disable wheel to climb. slope rate not more than 1/8 and according instruction of engineer. -Electricity: using wire 2.5 mm with all accessory of electrical work, fixing 4 double socket, switch pluck in three side of cabin and fixing the wire by pipe conduits 2cm. connecting with the main electrical source by suitable cable wires(6mm). circuit breaker 40A. internal LED with base fixing LED (No.8). Providing electricity for cabins: connecting wire (4x6mm) from main resource to board inside center, then connecting wire (6mm) from board to each cabin and where is need. install 4 sockets (serket) 40 amp in side the board, Doors and Windows: fixing 2 iron door in the shape of wood door (1*2.2m) thickness of plate 1.25mm for both sides, SCI iron logo 2mm and cutting by laser machine and weld on the outer face of the door, frame of door is 40x80x1.25mm and 2 PVC windows (1.2*1.2m) slide with iron protection 30x30x2mm @10cm, Turkish best type available in market with double glasses (6mm) and wire mesh 2 mm for the windows openings including all work requirements and necessary accessories like door and windows lock,.....etc. Curtain: side from top to bottom for each windows, Zebra type with fixing and all necessary work for windows, the engineer will choose color and type of curtain. Ventilation Fan: 40cm square fan and one smock detector connecting with electricity resource and all necessary work (No.1). Ceiling fan: connecting with electricity resource and all necessary work(No.1). -Circuit breaker 40A The price includes supplying, transportation, labor and all necessary equipment and machinery to be used for a proper installation. All the works will be done according to the instructions and under the supervision of the site engineer.	Each	1		
F_7	Shading for prefab cabin : providing materials and install shade area above the cabin by steel column size 10x10cm, 2 mm thickness, 30cm height @2m, steel beam 5cmX10cmX2mm and secondary beam perpendicular on the main beam 10cmx5cmx2mm and 15cm overlap between two plates sheet and cover by plate (Kirby sheet) Swedish made 0.5mm all the work includes paint by primer anti rust and 2 layer of oil paint red color ,weld perfectly with the beam of cabin and bolt and welding work ...etc.). covered all cabin with extended 30cm from four sides, closing all end of square pipe by the iron piece. the price includes water drainage channel in back side with drainage pipe and all the necessary requirements according to the details as per the drawings and instructions of supervisor engineer.	m2	24		
F_8	Provide materials and Paving the ground by Porcelain tile (Best type) of dimensions 60*60cm with cement and sand mortar 1:3 and according to the supervisor engineer instructions.	m2	15		
F_9	Secondary roof (Cotic): provide materials and installing with prefab roof and panel around the cabin under supervisor of the site engineer. the engineer will choose the type and color.	m2	15		
F_10	Air Conditioning system: AC split Unit (1 Tons), wall type. connecting with the main electrical source by Suitable cable wires (2x4mm).	No.	1		

F_11	Door need to repair with any needs to complete the work. Like; handle, slice and hinge etc.	No.	5		
F_12	LED lump 25 cm diameter and 18 watt, The price including transportation and fixing in site and connecting with electricity wire.	No.	5		
F_13	Iron Box for A.C: dimension are 110x60x80 cm contain of L30x30x3mm for frame and 30x30x3 mm for steel grid, the price includes all the necessary requirements, materials and fixed by welding. All work according to instructions of supervisor engineer.	No.	2		
F_14	Shading for the side of prefab cabin : providing materials and install shade area by Iron beam 5cmX10cmX2mm @ 50cm and cover by plate (Kirby sheet) 0.5mm 100 cm width all the work includes paint by primer anti rust and 2 layer of oil paint, weld perfectly with the beam of cabin and bolt and welding work etc.), closing all end of square pipe by the iron piece.	m.length	19		
F_15	Concrete block 15x20x40 cm with cement and sand mortar 1:3, and according to the supervisor engineer instructions.	No.	1080		
F_16	Soil: for fill the area between the wall, under base of cabin	m3	31		
Sub total					IQD -
G	ECCD center in Bardarash				
G_1	Site preparation and removal of debris ,clearance and lay out of all existing materials to permitted dump site. then Compacting the natural soil layer and first layer by roller compactor. Provide materials and tools and fill the first layer of garden by normal soil to suitable elevation and the second layer of garden by sand which is used for gardens (layer thickness 10cm), after laying second layer of soil, the elevation should be less than the concrete level by 5cm.	m2	48		
G_2	Seed for Garden, Type of seed is Parto (Barbas), box cover 40 meter square.	box	2		
G_3	Lawn fertilizer (كيمياء الحدائق).	kg	3		
G_4	plant trees: prepare site, excavate a hole, and plant trees , the type of trees is srro lemon or Laylandi and height not less than 2.0m the dimension of the hole to be decided by the supervisor engineer.	No.	10		
G_5	Natural Rock Vase: dimension 50x50cm	No.	3		
G_6	plant trees in vase: the type of trees is ball Pine and height between 1-1.2m.	No.	3		
G_7	Provide iron benches (4 seaters) 128cm width and fix it by concrete base the dimension of base is 2.0x1.2x0.25m. The type of benches see attached picture No.1	No.	3		
Sub total					IQD -
H	ECCD center in Domiz 1				
H_1	Camera system need to repair, any needs to complete and working all cameras. System including 8 cameras , 4-megapixel and hard 1 tera	L.S	1		
H_2	Exhaust fan (30x30cm) and fixing with changing glasses and all needs, the work need full technical and without and exceed edge ...according to instructions of supervisor engineer.	No.	2		
H_3	LED lump 18 watt, The price including transportation and fixing in site and connecting with electricity wire.	No.	2		
Sub total					IQD -
I	ECCD center in Domiz 2				
I_1	Camera system need to repair, any needs to complete and working all cameras. System including 8 cameras , 4-megapixel and hard 1 tera	L.S	1		
I_2	LED lump 18 watt, The price including transportation and fixing in site and connecting with electricity wire.	No.	5		
Sub total					IQD -
TOTAL COST					IQD -



File Name:
Cabin details

Cabin section

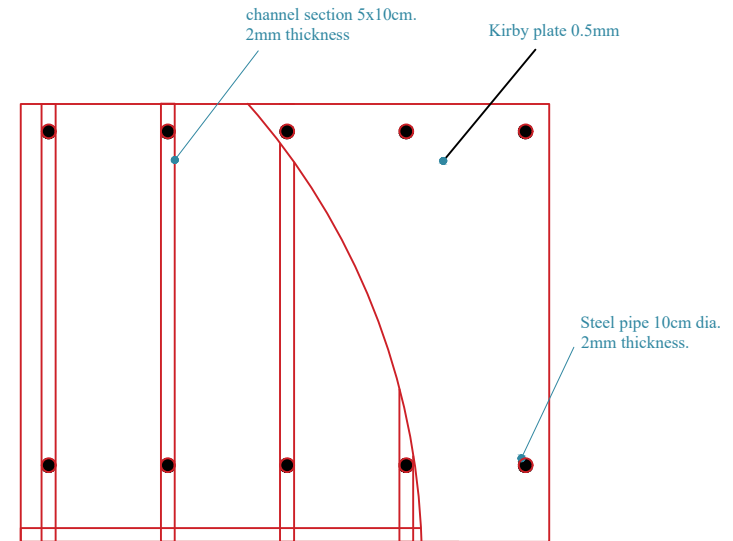
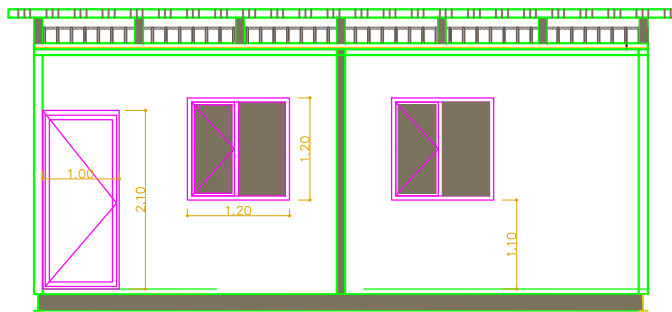
Drawn by Engineer

SCI (Save the children)

Sheet No : 01

Scale : Non





File Name:
Cabin details

Front view & cabin shading

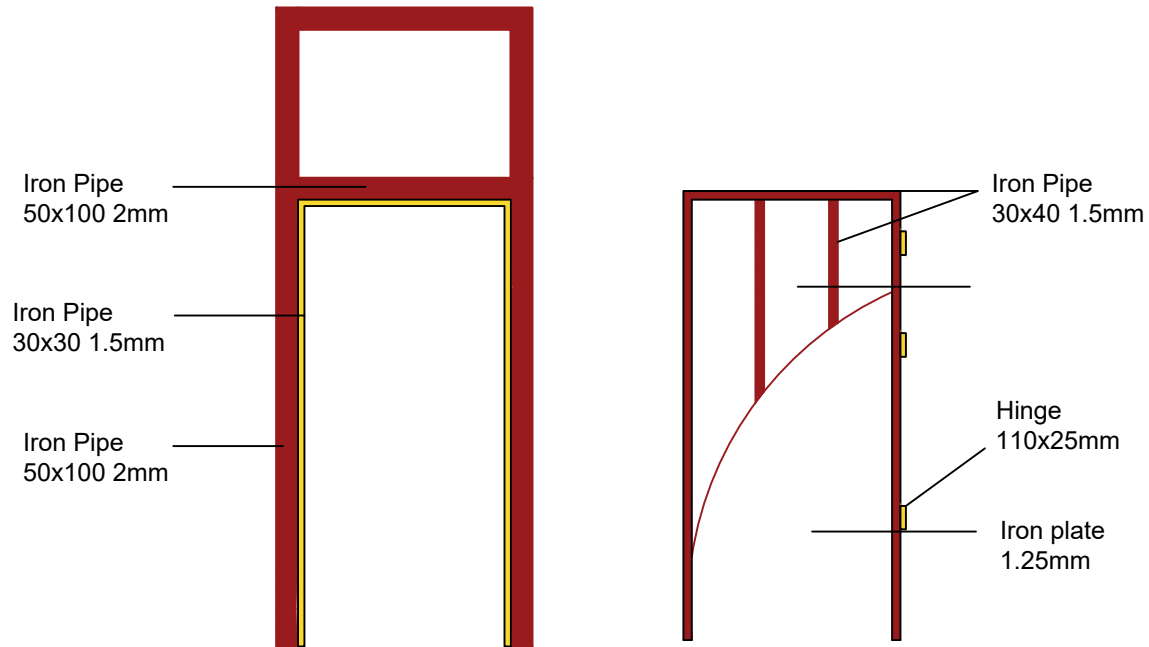
Drawn by Engineer

SCI (Save the children)

Sheet No : 02

Scale : Non





File Name:
Cabin details

Door details

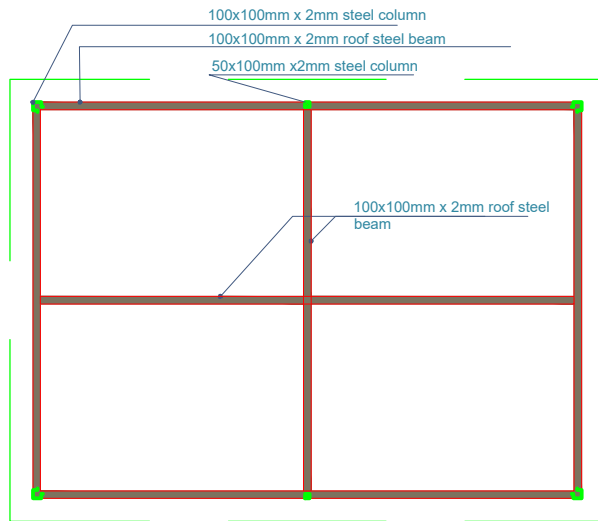
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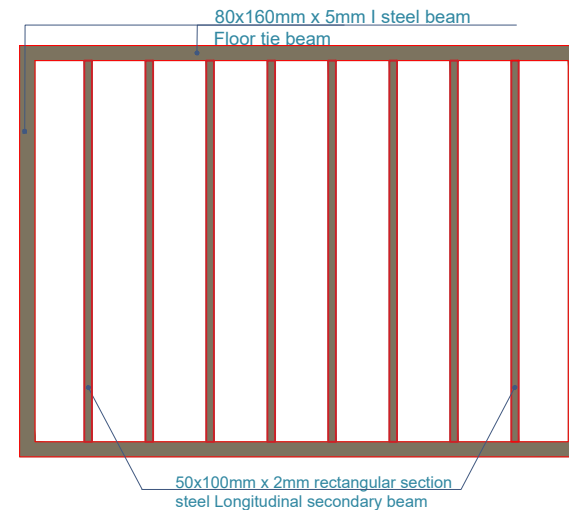
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Scale : Non





(Beams and Column)



(Base of Cabin)

File Name:
Cabin details

Cabin frame

Drawn by Engineer

SCI (Save the children)

Sheet No : 04

Scale : Non

