

## Annex 1

### Technical specifications – Lot 1 (Block)

#### 1. Residential Block Structure **32 m<sup>2</sup>**

*Design code: BS32*

<u>Sub- items</u>	<u>Unit</u>	<u>Quantity</u>
<p><b>1.a</b> <b>Residential Block Structure 32 m<sup>2</sup></b></p> <p><b>Reinforced concrete B-250 floor slabs with ground beams:</b></p> <ul style="list-style-type: none"> <li>-Supply, mix and cast reinforced concrete floor slab grade 'B 250' of cement content not less than 300 kg and reinforcement steel (8mm bars every 20cm in both directions. Including the ground beams with their reinforcement steel.</li> <li>-Price to include formwork, reinforcement, installing of plastic sheets between the concrete and the ground, curing and all necessary works.</li> <li>-Do all required excavating and filing in order to obtain levelled ground with zero level slopes under the structures and in the school yard.</li> <li>-Excavation to any depth in any type of soil including rock.</li> <li>-To use selected materials under the structural elements (beams and columns) and school yard. Price to include levelling compacting and watering.</li> <li>-All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</li> </ul> <p><b>Concrete block works:</b> Supply and build concrete block walls, Grade 35 of high quality standards with block dimensions (40x20x15) cm according to the detailed drawings and supervisor engineer instructions; Block works include:-</p> <ul style="list-style-type: none"> <li>-Vertical and horizontal joints.</li> <li>-Cement and mortar.</li> <li>-Galvanized angles butterfly ties (at joints and between walls with different materials .</li> <li>-Lintels and bond beams to the full length of the wall with minimum height of 20 cm and in the same wall thickness of reinforced concrete grade B-200 with due reinforcement steel, on top of doors and windows or as specified per drawings.</li> <li>-All needed materials and work to complete job as per drawings, specifications and supervisor engineer instructions.</li> </ul> <p><b>Internal and external plastering:</b></p> <ul style="list-style-type: none"> <li>-Supply and apply internal and external plaster of natural thermal insulation plaster Styronit mixed with bond.</li> <li>-Thermal Conductivity: 0,048 W/(m.K).</li> <li>-Plastering works should be in two layers, the final one is for fair finish face. The total plaster thickness should be 1.0-1.5 cm.</li> <li>-All according to the specifications, detailed drawings and supervisor engineer instructions.</li> <li>-Steel angle should be installed in each corner internally and externally.</li> </ul> <p><b>Marble window frames (lentils):</b></p> <ul style="list-style-type: none"> <li>-Supply and install local made 5cm thick marble frame for all windows' sides, top and bottom.</li> <li>-The windows and frames must be prepared before starting the implementation in site to ensure the quick implementation of the new structures.</li> </ul> <p>All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</p> <p><b>Toilet tiles:</b> Supply, Install and finish porcelain floor tiles lazer cutting, half glossy Polish. Price to include Pre-cast Porcelain skirting same type and size, 7 cm thick with same marble chipping, bedding and jointing in cement and sand mortar with ratio 1:3, and 2-3cm thick, pointing with approved materials, required adasiyah or sand fill, and on site grinding where required, polishing and cleaning. (colors according to supervisor engineer instructions).</p> <ul style="list-style-type: none"> <li>-Works to include supply, install and finish <b>two</b> (3 cm thick) marble door, the width of lintels must be same as the wall thickness.</li> <li>- Walls tile size : 20 x 40 x .9 cm, (All walls should be tiled fully from the ground to roof).</li> <li>- Floor tile : 20 x 40 x .9 cm.</li> <li>-All according to the specifications, detailed drawings and supervisor engineer instructions.</li> </ul> <p><b>Marble Door threshold:</b></p> <ul style="list-style-type: none"> <li>-Works to include supply, install and finish one (5 cm thick) marble Door threshold, the width of lintels must be the same as the wall depth.</li> </ul> <p><b>External roof:</b> Supply and install "sandwich panel" boards consist of double galvanized 0.5 mm thickness steel sheets, with mixed color (silver for external side and white for internal one), separated by <b>7 cm</b> of high density Polystyrene (Kalkal) with F20 of compression .The boards' dimensions are ((230x117x 7) cm, and they are fixed with frames of U galvanized steel angle (7 cm x 7 cm x 7 cm) with thickness of 3mm from all sides. All fixed by special screws and elastic rubber to prevent water leakage according to the detailed drawings. Board weight must be at least 10 kg/sqm.</p> <p><b>Galvanized profiles</b> as indicated below:</p>	L.S	1

Supply and install one column (8 x 8) cm, and 2mm thick. As indicated in the drawing.  
 Supply and install a connected steel beam (8 x 4), and 2mm thick which has to be installed inside the bond beam as indicated in the drawings.  
 - Galvanized steel U angles (1.5mm thick), welded together and fixed correctly on the top (roof side) of the gathered zinc boards for each facade, and same for all internal partitions and where needed.

#### System fixation

It will be pre-prepared, using the CO2 method welding in lines. For the profiles and U angle intersections, welding should be done at the site only when needed; taking into consideration the unit should consist of several complete parts to be joined at the site either by specified welding method or using drilling with 8 mm diameter screws.

#### Off-white Aluminum windows

-4 **Windows** (120 x 120) cm, model No.7700 of national industry, and of 4 mm thickness double glass framed by Aluminum profile with a movable galvanized steel external mosquito netting on the whole window.(Three portions).  
 -1 **Window** (60 x 60) cm, model No.4000 of national industry, and of 4 mm thickness (Mobazzar) glass framed by Aluminum profile with a movable galvanized steel external mosquito netting on the whole window.(Three portions).

#### Windows Protections

Supply and implement spear shaped protection for every window in shelter unit, where the protection steel is to be painted with three coats (one primer coat) with the color approved by the Supervisor Engineer. Steel bars; dimensions 10 mm with spacing distance of 12 cm between spears.

#### Wooden doors (90x200x5)cm

Supply and install 2 wooden doors with the following specifications:

- The door shall be made from sandwich boards 17 mm in both sides consisting of pinewood strips placed end to end. The width of each strip shall not exceed 25 mm. The strips shall be placed side by side, which shall then be glued between the two wooden layers from each side (Sandwich and beech layers).
- The surface shall be made with Formica sheets.
- Frames shall be made from Swedish wood with square and flat shape, the corners of frame being fabricated to a true right angle. Both the fixed and opening frames shall be constructed of sections which have been cut to length, mitered and screwed at the corners.
- Good quality of door handle attached with lever lock operated by key and lockable from both inside and outside

#### Steel Door (100x200x5)cm

Supply and install a steel door with the following details:

- The door shall be made from Galvanized steel sheets 2 mm in both sides consisting (Internal and external), in addition to two steel frames from outside.
- The surface shall be painted twice (Primer layer and grey color)
- Frames shall be manufactured out of (2 mm) Galvanized Steel box 6x3 cm.
- Good quality of door handle attached with lever lock operated by key and lockable from both inside and outside

#### Toilet

**Turkish or European** (Based on request)

Turkish toilet: (45\*55) cm, caramel color correctly connected to plastic flush tank (Negara 3/6 liters with buttons on top).

OR

European Water toilet Caramel color correctly connected to ceramic flush tank (Negara 3/6 liters with buttons on top).

#### Water tap

Water tap of type Chrome (long neck) of first grade, which installed on the basin itself.

#### Basin

Caramel Basin (45\*55) cm.

#### Shower base

Shower base fabricated from metal sheet coated with PVC layer with a clear resulted area of (80\*80) cm, 2mm thickness fixed on steel base with specifications as shown in the attached drawings, (see detail BS32).

(Shower room should be elevated with 20 cm, from the shelter level)

#### Shower tape

Single chrome tap with double use (tape and shower hand) of first grade.

#### Piping

- Connecting 2" PVC pipes and needed fitting with suitable length for the shower and kitchen for the purpose of drainage, and 16 mm diameter HDPE pipes for water supplying. The contractor should supply and install buried drilled barrel for drainage.
- Connecting 4" PVC corrugated HDPE pipes and needed fitting with 10 meter length as sewer connection.
- Supply galvanized Steel Stand for Water tank(See the drawings BS32)

- Supply transfer, and install polyethylene water tank Size 1 m3:

-The Water Tank must be made by blow molding method.

-The water tank must be free of any holes.

-Water Tank must be made of LLDPE materials in White color.

-Water tank must have 7 internal rings at least with 1 cm depth for each ring.

-Water Tank Durability 30 years at least.

-Water Tank wall thickness must not be less than (7) mm, with four layers of polyethylene, (White: 2.8 mm, Black: 1.4 mm, Red: 1.4 mm, Blue: 1.4 mm).

- color must be White.

- The water tank must be free of any holes

<p>- Connect the structure (<i>Including toilet and kitchen</i>) and the mobile latrine with the above-mentioned water tank using HDPE pipes up to 12m long(depends on the real distance in each case). - Installing and connecting the system should be implemented correctly to have the system operating.</p> <p>-Supply and install water collectors with include XLPE Pipe 16mm, oven painted aluminum cabinet with two doors, valves for branches, main valves, vents, and all accessories.</p> <p><b>Installation of 80 cm long kitchen unit.</b> Stainless Steel basin 120 cm, and sandwich wooden cabinets, as shown in the drawings, a good quality cabinet hand, single Chrome long neck tap of first grade fixed to the basin, and connecting the required water supplying plastic pipes (20 mm diameter), and 2" PVC sewage pipe connected to the sewer tank.</p> <p><b>Roof water gutter</b> Supply and install roof gutter Including steel water gutter and steel pipes and steel rings (see detail AS). at lowest edge of the roof.</p> <p><b>Roof protection</b> All edges of roof boards should be collected after installation with U section galvanized profiles from 4 sides to protect edges from rust , the lower long side that connects to the gutter should be fixed according to details.</p> <p><b>Electricity network:</b> -Sockets and outlets: Supply, Install and Connect 3 pin Single-Phase 16 Amp sockets outlet points including (3*2.5mm2) including wires, conduits, sockets, draw boxes and all accessories up to DB as per drawings and specifications. -Lighting Points: Supply, Install and Connect Lighting Points including Conduits and (3*1.5 mm2) Wires up to the DB, Light Switches and all accessories as per drawings and specifications. -Lighting Fixtures: Supply, Install and Connect surface mounted decorative round Ø30cm waterproof lighting fixture 26w PL lamps with metal base and milky opal diffuser to the base with four screws IP54 lighting Fixtures including Boxes, switches, push buttons), bulbs or tubes. Correction capacitors and all accessories as per drawings and specifications. -All external wiring works must be XLP cables and applied in plastic truncks with suitable dimensions. -All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</p> <p><b>Supply and Install a Charged Solar Energy Lamp :</b> - Type: Ball Bulbs - Output power: 40W - Luminous flux: 130LM - CCT/Wavelength: 6500K - Voltage(V): DC 5V - Charging time (by solar panel): 5h - Using time: 3h - Lifespan: 30000hrs - Sheathing material: ABS synthetic plastics - Size: Solar panel: 50 x 50 cm.</p> <p><b>Supply and deliver a Hygiene Kit:</b> <b>(The following items must be put in a closed cartoon box):</b> -Hand Sanitizer (Instant hand sanitizer, approved brand by Palestinian MOH, size 400 ml). -Hand Soap (hypoallergenic, unperfumed, individually wrapped &amp; with far expiry dates). (10 pieces) -Toilet rolls (good quality with soft double-layer tissue that can be used for different purposes) (36 pieces) -Shampoo (1 bottle with 750 ml capacity) -Toothbrush Pack includes: 2 adult size medium hardness, 4 child size soft, each one shall be individually wrapped -Toothpaste (2 pieces, with 150ml) -Women hygienic-sanitary disposable pads, packs of 10 pads. -Detergent for cleaning dishes, gallon with size (3.75- 4 Liter) (1 Gallon) -Face Mask, pack of 50 masks</p>		
<p><b>1.b</b> <b>Residential Block Structure 32 m2 – without Toilet:</b></p> <p>Ditto, (as mentioned in section 1.a) but <b>excluding</b> the following specification:</p> <p>- Toilet tiles, Toilet, Water tap, Basin, Shower base, Shower tape, 1 Wooden door, 1 Window 60x60</p>	L.S	1
<p><b>2. Residential Block Structure 48 m<sup>2</sup></b> <i>Design code: BS48</i></p>		
<u>Sub- items</u>	<u>Unit</u>	<u>Quantity</u>
<p><b>2.a</b> <b>Residential Block Structure 48 m2</b></p> <p><b>Reinforced concrete B-250 floor slabs with ground beams:</b></p> <p>-Supply, mix and cast reinforced concrete floor slab grade 'B 250' of cement content not less than 300 kg and reinforcement steel (8mm bars every 20cm in both directions. Including the ground beams with their reinforcement steel.</p>	L.S	1

-Price to include formwork, reinforcement, installing of plastic sheets between the concrete and the ground, curing and all necessary works.  
 -Do all required excavating and filing in order to obtain levelled ground with zero level slopes under the structures and in the school yard.  
 -Excavation to any depth in any type of soil including rock.  
 -To use selected materials under the structural elements (beams and columns) and school yard. Price to include levelling compacting and watering.  
 -All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.

**Concrete block works:**

Supply and build concrete block walls, Grade 35 of high quality standards with block dimensions (40x20x15) cm according to the detailed drawings and supervisor engineer instructions; Block works include:-  
 -Vertical and horizontal joints.  
 -Cement and mortar.  
 -Galvanized angles butterfly ties (at joints and between walls with different materials .  
 -Lintels and bond beams to the full length of the wall with minimum height of 20 cm and in the same wall thickness of reinforced concrete grade B-200 with due reinforcement steel, on top of doors and windows or as specified per drawings.  
 -All needed materials and work to complete job as per drawings, specifications and supervisor engineer instructions.

**Internal and external plastering:**

-Supply and apply internal and external plaster of natural thermal insulation plaster Styronit mixed with bond.  
 -Thermal Conductivity: 0,048 W/(m.K).  
 -Plastering works should be in two layers, the final one is for fair finish face. The total plaster thickness should be 1.0-1.5 cm.  
 -All according to the specifications, detailed drawings and supervisor engineer instructions.  
 -Steel angle should be installed in each corner internally and externally.

**Marble window frames (lentils):**

-Supply and install local made 5cm thick marble frame for all windows' sides, top and bottom.  
 -The windows and frames must be prepared before starting the implementation in site to ensure the quick implementation of the new structures.  
 All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.

**Toilet tiles:**

-Supply, Install and finish porcelain floor tiles lazer cutting, half glossy Polish. Price to include Pre-cast Porcelain skirting same type and size, 7 cm thick with same marble chipping, bedding and jointing in cement and sand mortar with ratio 1:3, and 2-3cm thick, pointing with approved materials, required adasiyah or sand fill, and on site grinding where required, polishing and cleaning. (colors according to supervisor engineer instructions).  
 -Works to include supply, install and finish **two** (3 cm thick) marble door, the width of lintels must be same as the wall thickness.  
 - Walls tile size : 20 x 40 x .9 cm, (All walls should be tiled fully from the ground to roof).  
 - Floor tile : 20 x 40 x .9 cm.  
 -All according to the specifications, detailed drawings and supervisor engineer instructions.

**Marble Door threshold:**

-Works to include supply, install and finish one (5 cm thick) marble Door threshold, the width of lintels must be the same as the wall depth.

**External roof:**

Supply and install "sandwich panel" boards consist of double galvanized 0.5 mm thickness steel sheets, with mixed color (silver for external side and white for internal one), separated by **7 cm** of high density Polystyrene (Kalkal) with F20 of compression .The boards' dimensions are (230x117x5) cm, and they are fixed with frames of U galvanized steel angle (7 cm x 7 cm x 7 cm) with thickness of 3mm from all sides. All fixed by special screws and elastic rubber to prevent water leakage according to the detailed drawings. Board weight must be at least 10 kg/sqm.

**Galvanized profiles** as indicated below:

Supply and install one column (8 x 8) cm, and 2mm thick. As indicated in the drawing.  
 Supply and install a connected steel beam (8 x 4), and 2mm thick which has to be installed inside the bond beam as indicated in the drawings.  
 - Galvanized steel U angles (1.5mm thick), welded together and fixed correctly on the top (roof side) of the gathered zinc boards for each facade, and same for all internal partitions and where needed.

**System fixation**

It will be pre-prepared, using the CO2 method welding in lines. For the profiles and U angle intersections, welding should be done at the site only when needed; taking into consideration the unit should consist of several complete parts to be joined at the site either by specified welding method or using drilling with 8 mm diameter screws.

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**-2 Window** (60 x 60) cm, model No.4000 of national industry, and of 4 mm thickness (Mobazzar) glass framed by Aluminum profile with a movable galvanized steel external mosquito netting on the whole window.(Three portions).

**Windows Protections**

Supply and implement spear shaped protection for every window in shelter unit, where the protection steel is to be painted with three coats (one primer coat) with the color approved by the Supervisor Engineer. Steel bars; dimensions 10 mm with spacing distance of 12 cm between spears.

**Wooden doors (90x200x5)cm**

Supply and install 2 wooden doors with the following specifications:

- The door shall be made from sandwich boards 17 mm in both sides consisting of pinewood strips placed end to end. The width of each strip shall not exceed 25 mm. The strips shall be placed side by side, which shall then be glued between the two wooden layers from each side (Sandwich and beech layers).
- The surface shall be made with Formica sheets.
- Frames shall be made from Swedish wood with square and flat shape, the corners of frame being fabricated to a true right angle. Both the fixed and opening frames shall be constructed of sections which have been cut to length, mitered and screwed at the corners.
- Good quality of door handle attached with lever lock operated by key and lockable from both inside and outside

**Steel Door (100x200x5)cm**

Supply and install a steel door with the following details:

- The door shall be made from Galvanized steel sheets 2 mm in both sides consisting (Internal and external), in addition to two steel frames from outside.
- The surface shall be painted twice (Primer layer and grey color)
- Frames shall be manufactured out of (2 mm) Galvanized Steel box 6x3 cm.
- Good quality of door handle attached with lever lock operated by key and lockable from both inside and outside

**Toilet**

**Turkish or European** (Based on request)

Turkish toilet: (45\*55) cm, caramel color correctly connected to plastic flush tank (Negara 3/6 liters with buttons on top).

OR

European Water toilet Caramel color correctly connected to ceramic flush tank (Negara 3/6 liters with buttons on top).

**Water tap**

Water tap of type Chrome (long neck) of first grade, which installed on the basin itself.

**Basin**

Caramel Basin (45\*55) cm.

**Shower base**

Shower base fabricated from metal sheet coated with PVC layer with a clear resulted area of (80\*120) cm, 2mm thickness fixed on steel base with specifications as shown in the attached drawings, (see detail BS48).  
(Shower room should be elevated with 20 cm, from the shelter level)

**Shower tape**

Single chrome tap with double use (tape and shower hand) of first grade

**Piping**

- Connecting 2" PVC pipes and needed fitting with suitable length for the shower and kitchen for the purpose of drainage, and 16 mm diameter HDPE pipes for water supplying. The contractor should supply and install buried drilled barrel for drainage.
- Connecting 4" PVC corrugated HDPE pipes and needed fitting with 10 meter length as sewer connection.

- Supply galvanized Steel Stand for Water tank(See the drawings BS48)

- Supply transfer, and install polyethylene water tank Size 1 m3:

-The Water Tank must be made by blow molding method.

-The water tank must be free of any holes.

-Water Tank must be made of LLDPE materials in White color.

-Water tank must have 7 internal rings at least with 1 cm depth for each ring.

-Water Tank Durability 30 years at least.

-Water Tank wall thickness must not be less than (7) mm, with four layers of polyethylene, (White: 2.8 mm, Black: 1.4 mm, Red: 1.4 mm, Blue: 1.4 mm).color must be White. The water tank must be free of any holes.

- Connect the structure (*Including toilet and kitchen*) and the mobile latrine with the above-mentioned water tank using HDPE pipes up to 12m long(depends on the real distance in each case). - Installing and connecting the system should be implemented correctly to have the system operating.

-Supply and install water collectors with include XLPE Pipe 16mm, oven painted aluminum cabinet with two doors, valves for branches, main valves, vents, and all accessories.

**Installation of 120 cm long kitchen unit.**

Stainless Steel basin 120 cm, and sandwich wooden cabinets, as shown in the drawings, a good quality cabinet hand, single Chrome long neck tap of first grade fixed to the basin, and connecting the required water supplying plastic pipes (20 mm diameter), and 2" PVC sewage pipe connected to the sewer tank.

**Roof water gutter**

Supply and install roof gutter Including steel water gutter and steel pipes and steel rings at lowest edge of the roof.

**Roof protection**

<p>All edges of roof boards should be collected after installation with U section galvanized profiles from 4 sides to protect edges from rust , the lower long side that connects to the gutter should be fixed according to details.</p> <p><b>Electricity network:</b></p> <ul style="list-style-type: none"> <li>-Sockets and outlets: Supply, Install and Connect 3 pin Single-Phase 16 Amp sockets outlet points including (3*2.5mm2) including wires, conduits, sockets, draw boxes and all accessories up to DB as per drawings and specifications.</li> <li>-Lighting Points: Supply, Install and Connect Lighting Points including Conduits and (3*1.5 mm2) Wires up to the DB, Light Switches and all accessories as per drawings and specifications.</li> <li>-Lighting Fixtures: Supply, Install and Connect surface mounted decorative round Ø30cm waterproof lighting fixture 26w PL lamps with metal base and milky opal diffuser to the base with four screws IP54 lighting Fixtures including Boxes, switches, push buttons), bulbs or tubes. Correction capacitors and all accessories as per drawings and specifications.</li> <li>-All external wiring works must be XLP cables and applied in plastic trunks with suitable dimensions.</li> <li>-All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</li> </ul> <p><b>Supply and Install a Charged Solar Energy Lamp :</b></p> <ul style="list-style-type: none"> <li>- Type: Ball Bulbs</li> <li>- Output power: 40W</li> <li>- Luminous flux: 130LM</li> <li>CCT/Wavelength: 6500K</li> <li>- Voltage(V): DC 5V</li> <li>- Charging time (by solar panel): 5h</li> <li>- Using time: 3h</li> <li>- Lifespan: 30000hrs</li> <li>- Sheathing material: ABS synthetic plastics</li> <li>- Size: Solar panel: 50 x 50 cm.</li> </ul> <p><b>Supply and deliver a Hygiene Kit:</b></p> <p><b>(The following items must be put in a closed cartoon box):</b></p> <ul style="list-style-type: none"> <li>-Hand Sanitizer (Instant hand sanitizer, approved brand by Palestinian MOH, size 400 ml).</li> <li>-Hand Soap (hypoallergenic, unperfumed, individually wrapped &amp; with far expiry dates). (10 pieces)</li> <li>-Toilet rolls (good quality with soft double-layer tissue that can be used for different purposes) (36 pieces)</li> <li>-Shampoo (1 bottle with 750 ml capacity)</li> <li>-Toothbrush Pack includes: 2 adult size medium hardness, 4 child size soft, each one shall be individually wrapped</li> <li>-Toothpaste (2 pieces, with 150ml)</li> <li>-Women hygienic-sanitary disposable pads, packs of 10 pads.</li> <li>-Detergent for cleaning dishes, gallon with size (3.75- 4 Liter) (1 Gallon)</li> <li>-Face Mask, pack of 50 masks</li> </ul>		
<p><b>2.b</b> <b>Residential Block Structure 48 m<sup>2</sup> – without Toilet:</b></p> <p>Ditto, (as mentioned in section 2.a) but <b>excluding</b> the following specification:</p> <ul style="list-style-type: none"> <li>- Toilet tiles, Toilet, Water tap, Basin, Shower base, Shower tape, 1 Wooden door, 1 Window 60x60</li> </ul>	L.S	1
<p><b>3. Fixed Latrine</b> <i>Design code: FL</i></p>		
<p><b>Reinforced concrete B-250 floor slabs with ground beams:</b></p> <ul style="list-style-type: none"> <li>-Supply, mix and cast reinforced concrete floor slab grade 'B 250' of cement content not less than 300 kg and reinforcement steel (8mm bars every 20cm in both directions. Including the ground beams with their reinforcement steel.</li> <li>-Price to include formwork, reinforcement, installing of plastic sheets between the concrete and the ground, curing and all necessary works.</li> <li>-Do all required excavating and filing in order to obtain levelled ground with zero level slopes under the structures and in the school yard.</li> <li>-Excavation to any depth in any type of soil including rock.</li> <li>-To use selected materials under the structural elements (beams and columns) and school yard. Price to include levelling compacting and watering.</li> <li>-All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</li> </ul> <p><b>Concrete block works:</b></p> <p>Supply and build concrete block walls, Grade 35 of high quality standards with block dimensions (40x20x15) cm according to the detailed drawings and supervisor engineer instructions; Block works include:-</p> <ul style="list-style-type: none"> <li>-Vertical and horizontal joints.</li> <li>-Cement and mortar.</li> <li>-Galvanized angles butterfly ties (at joints and between walls with different materials .</li> <li>-Lintels and bond beams to the full length of the wall with minimum height of 20 cm and in the same wall thickness of reinforced concrete grade B-200 with due reinforcement steel, on top of doors and windows or as specified per drawings.</li> <li>-All needed materials and work to complete job as per drawings, specifications and supervisor engineer instructions.</li> </ul> <p><b>Internal and external plastering:</b></p> <ul style="list-style-type: none"> <li>-Supply and apply internal and external plaster of natural thermal insulation plaster Styronit mixed with bond.</li> </ul>	Unit	Quantity
<p><b>Reinforced concrete B-250 floor slabs with ground beams:</b></p> <ul style="list-style-type: none"> <li>-Supply, mix and cast reinforced concrete floor slab grade 'B 250' of cement content not less than 300 kg and reinforcement steel (8mm bars every 20cm in both directions. Including the ground beams with their reinforcement steel.</li> <li>-Price to include formwork, reinforcement, installing of plastic sheets between the concrete and the ground, curing and all necessary works.</li> <li>-Do all required excavating and filing in order to obtain levelled ground with zero level slopes under the structures and in the school yard.</li> <li>-Excavation to any depth in any type of soil including rock.</li> <li>-To use selected materials under the structural elements (beams and columns) and school yard. Price to include levelling compacting and watering.</li> <li>-All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</li> </ul> <p><b>Concrete block works:</b></p> <p>Supply and build concrete block walls, Grade 35 of high quality standards with block dimensions (40x20x15) cm according to the detailed drawings and supervisor engineer instructions; Block works include:-</p> <ul style="list-style-type: none"> <li>-Vertical and horizontal joints.</li> <li>-Cement and mortar.</li> <li>-Galvanized angles butterfly ties (at joints and between walls with different materials .</li> <li>-Lintels and bond beams to the full length of the wall with minimum height of 20 cm and in the same wall thickness of reinforced concrete grade B-200 with due reinforcement steel, on top of doors and windows or as specified per drawings.</li> <li>-All needed materials and work to complete job as per drawings, specifications and supervisor engineer instructions.</li> </ul> <p><b>Internal and external plastering:</b></p> <ul style="list-style-type: none"> <li>-Supply and apply internal and external plaster of natural thermal insulation plaster Styronit mixed with bond.</li> </ul>	L.S	1

- Thermal Conductivity: 0,048 W/(m.K).
- Plastering works should be in two layers, the final one is for fair finish face. The total plaster thickness should be 1.0-1.5 cm.
- All according to the specifications, detailed drawings and supervisor engineer instructions.
- Steel angle should be installed in each corner internally and externally.

**Marble window frames (lentils):**

- Supply and install local made 5cm thick marble frame for all windows' sides, top and bottom.
  - The windows and frames must be prepared before starting the implementation in site to ensure the quick implementation of the new structures.
- All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.

**Tiles:**

- Supply, Install and finish porcelain floor tiles lazer cutting, half glossy Polish. Price to include Pre-cast Porcelain skirting same type and size, 7 cm thick with same marble chipping, bedding and jointing in cement and sand mortar with ratio 1:3, and 2-3cm thick, pointing with approved materials, required adasiyah or sand fill, and on site grinding where required, polishing and cleaning. (colors according to supervisor engineer instructions).
- Works to include supply, install and finish **two** (3 cm thick) marble door, the width of lintels must be same as the wall thickness.
- Walls tile size : 20 x 40 x .9 cm, (All walls should be tiled fully from the ground to roof).
- Floor tile : 20 x 40 x .9 cm.
- All according to the specifications, detailed drawings and supervisor engineer instructions.

**External roof:**

Supply and install "sandwich panel" boards consist of double galvanized 0.5 mm thickness steel sheets, with mixed color (silver for external side and white for internal one), separated by **7 cm** of high density Polystyrene (Kalkal) with F20 of compression .The boards' dimensions are (230x117x5) cm, and they are fixed with frames of U galvanized steel angle (7 cm x 7 cm x 7 cm) with thickness of 3mm from all sides. All fixed by special screws and elastic rubber to prevent water leakage according to the detailed drawings. Board weight must be at least 10 kg/sqm.

- 1Window** (60 x 60) cm, model No.4000 of national industry, and of 4 mm thickness (Mobazzar) glass framed by Aluminum profile with a movable galvanized steel external mosquito netting on the whole window.(Three portions).

**Steel Door (100x200x5)cm**

Supply and install a steel door with the following details:

- The door shall be made from Galvanized steel sheets 2 mm in both sides consisting (Internal and external), in addition to two steel frames from outside.
- The surface shall be painted twice (Primer layer and grey color)
- Frames shall be manufactured out of (2 mm) Galvanized Steel box 6x3 cm.
- Good quality of door handle attached with lever lock operated by key and lockable from both inside and outside

**Toilet**

**Turkish or European** (Based on request)

Turkish toilet: (45\*55) cm, caramel color correctly connected to plastic flush tank (Negara 3/6 liters with buttons on top).

OR

European Water toilet Caramel color correctly connected to ceramic flush tank (Negara 3/6 liters with buttons on top).

**Water tap**

Water tap of type Chrome (long neck) of first grade, which installed on the basin itself.

**Hand Water Spray**
**Basin**

Caramel Basin (45\*55) cm.

**Shower base**

Shower base fabricated from metal sheet coated with PVC layer with a clear resulted area of (80\*120) cm, 2mm thickness fixed on steel base with specifications as shown in the attached drawings, (see detail FL).

**Shower tape**

Single chrome tap with double use (tape and shower hand) of first grade,

**Piping**

- Connecting 2" PVC pipes and needed fitting with suitable length for the shower and kitchen for the purpose of drainage, and 16 mm diameter HDPE pipes for water supplying. The contractor should supply and install buried drilled barrel for drainage.
- Connecting 4" PVC corrugated HDPE pipes and needed fitting with 10 meter length as sewer connection.
- Supply galvanized Steel Stand for Water tank(See the drawings FL)

- Supply transfer, and install polyethylene water tank Size 1 m3:

- The Water Tank must be made by blow molding method.
- The water tank must be free of any holes.
- Water Tank must be made of LLDPE materials in White color.
- Water tank must have 7 internal rings at least with 1 cm depth for each ring.
- Water Tank Durability 30 years at least.
- Water Tank wall thickness must not be less than (7) mm, with four layers of polyethylene, (White: 2.8 mm, Black: 1.4 mm, Red: 1.4 mm, Blue: 1.4 mm).
- color must be White.

<ul style="list-style-type: none"> <li>- The water tank must be free of any holes</li> <li>-Supply and install water collectors with include XLPE Pipe 16mm, oven painted aluminum cabinet with two doors, valves for branches, main valves, vents, and all accessories.</li> </ul> <p><b>Supply and Install a Charged Solar Energy Lamp :</b></p> <ul style="list-style-type: none"> <li>- Type: Ball Bulbs</li> <li>- Output power: 40W</li> <li>- Luminous flux: 130LM</li> <li>- CCT/Wavelength: 6500K</li> <li>- Voltage(V): DC 5V</li> <li>- Charging time (by solar panel): 5h</li> <li>- Using time: 3h</li> <li>- Lifespan: 30000hrs</li> <li>- Sheathing material: ABS synthetic plastics</li> <li>- Size: Solar panel: 50 x 50 cm.</li> </ul> <p><b>Supply and deliver a Hygiene Kit:</b></p> <p><b>(The following items must be put in a closed cartoon box):</b></p> <ul style="list-style-type: none"> <li>-Hand Sanitizer (Instant hand sanitizer, approved brand by Palestinian MOH, size 400 MI).</li> <li>-Hand Soap (hypoallergenic, unperfumed, individually wrapped &amp; with far expiry dates). (10 pieces)</li> <li>-Toilet rolls (good quality with soft double-layer tissue that can be used for different purposes) (36 pieces)</li> <li>-Shampoo (1 bottle with 750 ml capacity)</li> <li>-Toothbrush Pack includes: 2 adult size medium hardness, 4 child size soft, each one shall be individually wrapped</li> <li>-Toothpaste (2 pieces, with 150ml)</li> <li>-Women hygienic-sanitary disposable pads, packs of 10 pads.</li> <li>-Detergent for cleaning dishes, gallon with size (3.75- 4 Liter) (1 Gallon)</li> <li>-Face Mask, pack of 50 masks</li> </ul>		
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<h2 style="margin: 0;">4.Fixed PWD Latrine</h2> <p style="margin: 0; color: red; font-weight: normal;">Design code: FPWDL</p>
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	<u>Unit</u>	<u>Quantity</u>
<p><b>Reinforced concrete B-250 floor slabs with ground beams:</b></p> <ul style="list-style-type: none"> <li>-Supply, mix and cast reinforced concrete floor slab grade 'B 250' of cement content not less than 300 kg and reinforcement steel (8mm bars every 20cm in both directions. Including the ground beams with their reinforcement steel.</li> <li>-Price to include formwork, reinforcement, installing of plastic sheets between the concrete and the ground, curing and all necessary works.</li> <li>-Do all required excavating and filing in order to obtain levelled ground with zero level slopes under the structures and in the school yard.</li> <li>-Excavation to any depth in any type of soil including rock.</li> <li>-To use selected materials under the structural elements (beams and columns) Price to include levelling compacting and watering.</li> <li>- Reinforced Concrete Ramp with dimension 2.0m x 1.75m.</li> <li>-All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</li> </ul> <p><b>Concrete block works:</b></p> <p>Supply and build concrete block walls, Grade 35 of high quality standards with block dimensions (40x20x15) cm according to the detailed drawings and supervisor engineer instructions; Block works include:-</p> <ul style="list-style-type: none"> <li>-Vertical and horizontal joints.</li> <li>-Cement and mortar.</li> <li>-Galvanized angles butterfly ties (at joints and between walls with different materials .</li> <li>-Lintels and bond beams to the full length of the wall with minimum height of 20 cm and in the same wall thickness of reinforced concrete grade B-200 with due reinforcement steel, on top of doors and windows or as specified per drawings.</li> <li>-All needed materials and work to complete job as per drawings, specifications and supervisor engineer instructions.</li> </ul> <p><b>Internal and external plastering:</b></p> <ul style="list-style-type: none"> <li>-Supply and apply internal and external plaster of natural thermal insulation plaster Styronit mixed with bond.</li> <li>-Thermal Conductivity: 0,048 W/(m.K).</li> <li>-Plastering works should be in two layers, the final one is for fair finish face. The total plaster thickness should be 1.0-1.5 cm.</li> <li>-All according to the specifications, detailed drawings and supervisor engineer instructions.</li> <li>-Steel angle should be installed in each corner internally and externally.</li> </ul> <p><b>Marble window frames (lentils):</b></p> <ul style="list-style-type: none"> <li>-Supply and install local made 5cm thick marble frame for all windows' sides, top and bottom.</li> <li>-The windows and frames must be prepared before starting the implementation in site to ensure the quick implementation of the new structures.</li> </ul> <p>All according to the specifications, detailed drawings and ACTED supervisor engineer instructions.</p> <p><b>Tiles:</b></p> <ul style="list-style-type: none"> <li>-Supply, Install and finish porcelain floor tiles lazer cutting, half glossy Polish. Price to include Pre-cast Porcelain skirting same type and size, 7 cm thick with same marble chipping, bedding and jointing in cement and sand mortar with ratio 1:3, and 2-3cm thick, pointing with approved materials, required adasiyah or sand fill, and on site grinding where required, polishing and cleaning. (colors according to supervisor engineer instructions).</li> <li>-Works to include supply, install and finish <b>two</b> (3 cm thick) marble door, the width of lintels must be same as the wall thickness.</li> <li>- Walls tile size : 20 x 40 x .9 cm, (All walls should be tiled fully from the ground to roof).</li> </ul>	L.S	1



- Floor tile : 20 x 40 x .9 cm.
- All according to the specifications, detailed drawings and supervisor engineer instructions.

**External roof:**

Supply and install "sandwich panel" boards consist of double galvanized 0.5 mm thickness steel sheets, with mixed color (silver for external side and white for internal one), separated by **7 cm** of high density Polystyrene (Kalkal) with F20 of compression .The boards' dimensions are (230x117x5) cm, and they are fixed with frames of U galvanized steel angle (7 cm x 7 cm x 7 cm) with thickness of 3mm from all sides. All fixed by special screws and elastic rubber to prevent water leakage according to the detailed drawings. Board weight must be at least 10 kg/sqm.

**-1Window** (60 x 60) cm, model No.4000 of national industry, and of 4 mm thickness (Mobazzar) glass framed by Aluminum profile with a movable galvanized steel external mosquito netting on the whole window.(Three portions).

**Grab handles:** three Stainless steel handles, according to the following details:

- **GH1 95 x 65 cm** : should fixed on the right side of the toilet (one side on the wall and the other on the ground).
- **GH2 65 x 65 cm** : should fixed on the left side of the toilet (both sides on the wall)
- **GH3 60 cm** : should be fixed on the door from inside.

**Steel Door (100x200x5)cm**

Supply and install a steel door with the following details:

- The door shall be made from Galvanized steel sheets 2 mm in both sides consisting (Internal and external), in addition to two steel frames from outside.
- The surface shall be painted twice (Primer layer and grey color)
- Frames shall be manufactured out of (2 mm) Galvanized Steel box 6x3 cm.
- Good quality of door handle attached with lever lock operated by key and lockable from both inside and outside

**European Toilet**

European Water toilet Caramel color correctly connected to ceramic flush tank (Negara 3/6 liters with buttons on top). The toilet shall be designed for people with special needs and not normal like normal toilets.

**Water tap**

Water tap of type Chrome (long neck) of first grade, which installed on the basin itself.

**Hand Water Spray**

**Basin**

Caramel Basin (45\*55) cm.

**Shower base**

Shower base fabricated from metal sheet coated with PVC layer with a clear resulted area of (80\*80) cm, 2mm thickness fixed on steel base with specifications as shown in the attached drawings, (see detail FPWDL). The shower should be attached with movable seat fixed on the side wall with special design for people with disabilities.

**Shower tape**

Single chrome tap with double use (tape and shower hand) of first grade,

**Piping**

- Connecting 2" PVC pipes and needed fitting with suitable length for the shower and kitchen for the purpose of drainage, and 16 mm diameter HDPE pipes for water supplying. The contractor should supply and install buried drilled barrel for drainage.
- Connecting 4" PVC corrugated HDPE pipes and needed fitting with 10 meter length as sewer connection.
- Supply galvanized Steel Stand for Water tank(See the drawings FPWDL)

- Supply transfer, and install polyethylene water tank Size 1 m3:

- The Water Tank must be made by blow molding method.
- The water tank must be free of any holes.
- Water Tank must be made of LLDPE materials in White color.
- Water tank must have 7 internal rings at least with 1 cm depth for each ring.
- Water Tank Durability 30 years at least.
- Water Tank wall thickness must not be less than (7) mm, with four layers of polyethylene, (White: 2.8 mm, Black: 1.4 mm, Red: 1.4 mm, Blue: 1.4 mm).
- color must be White.
- The water tank must be free of any holes
- Supply and install water collectors with include XLPE Pipe 16mm, oven painted aluminum cabinet with two doors, valves for branches, main valves, vents, and all accessories.

**Supply and Install a Charged Solar Energy Lamp :**

- Type: Ball Bulbs
- Output power: 40W
- Luminous flux: 130LM
- CCT/Wavelength: 6500K
- Voltage(V): DC 5V
- Charging time (by solar panel): 5h
- Using time: 3h
- Lifespan: 30000hrs



- Sheathing material: ABS synthetic plastics
- Size: Solar panel: 50 x 50 cm.

**Supply and deliver a Hygiene Kit:**

**(The following items must be put in a closed cartoon box):**

- Hand Sanitizer (Instant hand sanitizer, approved brand by Palestinian MOH, size 400 ml)
- Hand Soap (hypoallergenic, unperfumed, individually wrapped & with far expiry dates). (10 pieces)
- Toilet rolls (good quality with soft double-layer tissue that can be used for different purposes) (36 pieces)
- Shampoo (1 bottle with 750 ml capacity)
- Toothbrush Pack includes: 2 adult size medium hardness, 4 child size soft, each one shall be individually wrapped
- Toothpaste (2 pieces, with 150ml)
- Women hygienic-sanitary disposable pads, packs of 10 pads.
- Detergent for cleaning dishes, gallon with size (3.75- 4 Liter) (1 Gallon)
- Face Mask, pack of 50 masks