

ANNEX A- TECHNICAL REQUIREMENTS

A. BACKGROUND/GENERAL INFORMATION

UNHCR Turkey in Ankara requires to procure renovation works for Migrant Center and Council in Kecioren. The works shall be maintained in accordance with below required specifications:

B. GENERAL PROVISIONS

1. The contractor shall receive an approval for each material from UNHCR/Kecioren Municipality prior to use. UNHCR/Kecioren Municipality shall choose from material samples which shall comply with TSE or TSEK standards.
2. All materials shall be compliant with TSE or DIN standards.
3. All materials specified in this document are samples and equivalent or better products can be used upon approval of UNHCR/Kecioren Municipality.
4. Roads, infrastructures, pavements, green areas, landscapes that are damaged during the renovation shall be repaired and restored by the contractor. Repairs shall not disturb or delay the renovation works.
5. Materials obtained from excavations, demolition or dismantling shall be properly dumped according to regulations. Expense of such activities shall be covered by the contractor.
6. The contractor shall take necessary safety precautions, such as work safety signs, in accordance with local work safety regulations.
7. UNHCR and/or may require additional safety measures to be taken in the work site if it determines that measures taken are insufficient.
8. Labor, water, electricity, transportation, etc. expenses shall be covered by the contractor.

C. RENOVATION WORKS FOR KECIOREN MIGRANT SERVICE CENTRE (KGHM)

C.1 CONSTRUCTION WORKS

No	1
Item No	18.138/A12
Definition	Double Prof.-40 cm axle ar. one front 12.5 mm + 12.5 mm double layer, one front 12.5 mm single layer plaster wall panel. single scaffold. partition wall
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)



Description	<p>According to the Project and details as approved by the Administration, 1 m² price for fastening 75 mm U wall-profiles (DU75) to the floor and ceiling with screws and plastic wall plugs at intervals of 60 cm, sticking 75 mm soundproofing tape under the DU75 and 75 mm C wall-profiles (DC75) to be attached to the side walls, cutting the DC75 profiles, placing the double DC75 profile back to back between the DU75 profiles at 40 cm intervals, placing rockwool panels of 5 cm with a density of 50-52 kg / m³ and on one side of the wall, fastening gypsum wallboards of 12.5 mm on DU75 and DC75 profiles with drywall screws of 25 mm for the first layer and of 35 mm (or 38 mm) for the second layer, fastening the single layer gypsum wallboard on the other side of the wall in a similar way, cutting and sizing of gypsum wallboard when necessary, prefilling gaps of over 3 cm with joint sealant, covering screw heads with joint sealant, sticking the joint tape on the joints of the gypsum wallboard, forming the partition wall by applying joint sealant on the tape, all kinds of materials and wastes, labor charges, loading on the work site, vertical and horizontal handling, unloading and general contractor expenses and profit:</p> <p>MEASUREMENT: It is calculated as m² based on the dimensions in the project.</p> <p>NOTE: Gaps smaller than 0.50 m² are not deducted.</p>
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No	2
Item No	22.081
Definition	Type wooden, under-counter kitchen cabinet '1.68x0.85)=1.43 m ²
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)
Description	<p>No 5781 type wooden, under-counter kitchen cabinet, according to the Project and details, 1 m² price for the construction of a wooden under-counter kitchen cabinet of a 19 mm particle board covered by 0.65 mm laminated board, transfer to the worksite, installation, preparing the places for metal parts and fitting the metal parts, all kinds of materials, labor charges, loading and unloading, vertical and horizontal handling and general contractor expenses and profit (except for the cost of metal parts):</p> <p>MEASUREMENT: The Front of the cabinet is calculated based on its project.</p>

No	3
Item No	22.082
Definition	Type wooden, countertop kitchen cabinet '3.04x0.80)=2.46 m ²
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)
Description	<p>No 5781 type wooden, countertop kitchen cabinet, according to the Project and details, 1 m² price for the construction of a wooden countertop kitchen cabinet of a 19 mm particle board covered by 0.65 mm laminated board, transfer to the worksite, installation, preparing the places for metal parts and fitting the metal parts, all kinds of materials, labor charges, loading and unloading, vertical and horizontal handling and general contractor expenses and profit (except for the cost of metal parts):</p> <p>MEASUREMENT: The Front of the cabinet is calculated based on its project.</p>

No	4
Item No	A.04
Definition	Installation of inside and outside-door lock with build-in cylinder (wide and narrow type)
Unit	AD
Book	Ministry of Environment and Urbanization(BAY)



No	5
Item No	A.08
Definition	Installation of door handles and mirrors (with chrome plating)
Unit	AD
Book	Ministry of Environment and Urbanization(BAY)

No	6
Item No	A.10
Definition	Installation of the hinge
Unit	AD
Book	Ministry of Environment and Urbanization(BAY)

No	7
Item No	Özel Poz/1
Definition	Construction of 16mm Gray Aluminum Venetian Blind Curtain
Unit	M2
Book	PROJECT-SPECIFIC (PRJ)
Description	Construction work of 16mm Gray Aluminum Venetian Blind Curtain, including installation and all kinds of equipment, tools and transfer, taking into account the curtain and its installation location, the size of the ceiling, the wall and the window profiles will be measured for the curtain. The width of one single piece will not be over 250 cm. The product will have "OEKO-TEX" Certificate.

No	8
Item No	Y.21.280/03
Definition	Floor covering with Ac4 class 32 laminated flooring (including skirting)
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)
Description	<p>In accordance with the approved detail drawings, 1 m² price for laying the polyethylene sheet of 2 mm on the surface prepared for laminated flooring and over it, laying the self-clipping (dowelled) AC4 class 32 laminated flooring in line with the technique and fastening the skirting on the wall, loading on the construction site, vertical and horizontal handling and unloading, all kinds of materials and wastes, labor charges, tool and equipment expenses, general contractor expenses and profit:</p> <p>MEASUREMENT: In accordance with the project measurements, all the covered areas are measured. No extra payment is made for the skirting.</p>

No	9
Item No	Y.22.001/01
Definition	Construction and Installation of wooden inner doorframe and trim with massive sheet
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)
Description	<p>In accordance with its Project, 1 m² price for the construction of solid frames of at least 45 mm and a double-sided trims of at least 22 mm of first class white pine (fir) for inner doors, fastening with three wedges to be placed on the wall, placing a lath on the side of the frame or trim when necessary, all the necessary materials and wastes, tools, equipment, labor charges, vertical and horizontal handling on the work site, unloading, general contractor expenses and profit (excluding the paint and polish):</p>



	<p>MEASUREMENT: The frame and trim area is calculated according to the project.</p> <p>NOTE: The lath is not included in the measurement.</p>
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No	10
Item No	Y.22.009/04
Definition	Construction and Installation of a laminated inner door wing, pressed with (MDF) double-sided wood fiber boards, filled with perforated particle boards
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)
Description	<p>According to its project, 1 m² price for the construction of inner door wings of at least 45 mm of first class pine wood pressed with (MDF) double-sided wood fiber boards on both sides of the framework made of perforated boards of 35 mm on the cross section between the framing made of square heads of at least 35 mm, lamination of both sides and all kinds of materials and wastes for the installation including nails, screws, glue etc., labor charges, loading on the worksite, vertical and horizontal handling, unloading, installation of metal parts, fixing and working the door wing, general contractor expenses and profit (except for the cost of metal parts):</p> <p>MEASUREMENT:</p> <p>1) The surface are is calculated by multiplying the width and length of the door wing from outside. The doorframes are not included in this measurement.</p> <p>2) In case the door wings within the cavity are multiplied, the folding and fixed wings will be included in the measurement while they are closed (If the fixed wings end as batten board frames, they will also be included in the measurement and extra cost for frames will not be covered)</p> <p>NOTE:</p> <p>1) The metal parts to be used in the door joinery include all kinds of locks and lock levers, mirrors, bolts, stop rubber strings, hinges and spring hinges on the condition that the Administration approves.</p> <p>The labor work of fitting the metal parts is included within the joinery costs.</p>

No	11
Item No	Y.25.003/18
Definition	Two layers of water-based silk matt paint applied on new plaster surfaces by applying primer (interior wall)
Unit	M2
Book	Ministry of Environment and Urbanization(BAY)
Description	<p>After sanding, grinding and cleaning the surface to be cleaned, water-based primer of 0.150 kg is applied, 1 m² price for painting with silk matte paint over this in desired color (1st coat: 0,100 kg; 2nd coat: 0.100 kg), all kinds of materials and wastes, labor charges, general contractor expenses and profit:</p> <p>MEASUREMENT: Painted surfaces are measured in accordance with the Project. All the gaps are deducted.</p> <p>NOTE: A separate scaffold shall be provided for walls and ceilings higher than 3m. If a scaffold is already provided for plaster, a separate one shall be provided for the painting.</p>



C.2 MECHANICAL WORKS (MACHINE INSTALLATION / Joint Installation)

No	1
Item No	072201
Definition	Washbasin installation, with wall type faucet, first class (Faucet TS EN 200 or TS EN 817; Siphon TS-EN 274-1-2-3)
Unit	TK
Book	Ministry of Environment and Urbanization(BAY)
Description	To be used alongside the washbasins mentioned in BFT.071-000, provision, installation and functional delivery of the above mentioned item with drainpipe link adapter and 32 mm compression lavatory trap resistant to temperatures of at least 80 ° C and acids, removable and cleanable in accordance with TS-EN 274-1-2-3, complete with a rosette made of brass or of chromium plating and with an extension piece of at least 16 cm, containing a removable and cleanable odor closure of 6 cm, certified in line with TS –EN 274-1-2-3; tap rosette or tap mixer of 15 mm, with a certificate of quality, brass chromed or plastic-based (acetal copolymer) (Drainpipe is not included in the price.)

No	2
Item No	083.101
Definition	Single bowl sink without drip cap, faience 40x50x15, extra
Unit	AD
Book	Ministry of Environment and Urbanization(BAY)
Description	Provision and delivery at the work site of the white single bowl sink, type and size of which is specified below along with its console made of construction iron of D 16 mm in U shape double-painted with read lead and oil paint with a special wedge over it made of four rubber bands and installation over a console or a table Note: If colored glazed ceramic is used, the cost including the mounting shall be increased by 15% while the mounting price itself shall remain the same.

No	3
Item No	165.1106
Definition	40 kWatt U type tubular radiant heater
Unit	AD
Book	Ministry of Environment and Urbanization(BAY)
Description	Provision and functional delivery at the worksite of a gas burner (burner), a high temperature resistant stainless steel SS connected to the burner or flame tube made of titanium alloy aluminized steel, heat treated aluminized radiant pipes, aluminum reflectors, couplings and turbulators made of stainless steel SS, vacuum or blow type radiant heaters fitted with a vacuum fan resistant to high temperature (250 C) which absorbs and disposes the combustion air and products from the burner with a galvanized pipe and a U elbow reflector brackets (suspension materials), manufactured in accordance with TS EN 416-1, Directive 2009/142 / EC on Gas-fired appliances and Directive 305/2011 / EU Building Materials, marketed with CE conformity mark.

No	4
Item No	204.3102
Definition	Pn 20 polypropylene 1/2 "016/ 3.4 mm washbasin supply pipes
Unit	MT



Book	Ministry of Environment and Urbanization(BAY)
Description	TS EN ISO 15874-1, 2, 3, 5, 7 Provision of polypropylene (PPR-C) pipes made of Type 3 in conformity with TS EN ISO 15874-2 and certified by the Ministry of Health as safe to be used as potable water pipe, cutting of pipes in accordance with the Project, welding of conduit fittings to pipe ends with physioterm welding machine at 260 °C. (Including all kinds of materials and labor charges for welding) The cost of mounting tools shall be paid separately.

D. RENOVATION WORKS FOR KECIOREN MIGRANT COUNCIL

D.1 CONSTRUCTION WORKS

No	1
Item No	18.138/A12
Definition	X2 prof. -40 cm ax. single sided 12,5 mm+12,5 mm dual layer, single sided, 12,5 mm single layer plaster, wall.plt. single scaff.div. wall.
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	As per the project and details approved by the administration; floor and ceiling mounting of 75 mm wall U profiles (DU75) using screws and plastic inserts at 60 cm intervals, adhesion of the 75 mm sound insulation tape under 75 mm DU75 and DC75 C-wall profiles to be fitted on side walls, cutting of DU75 profiles and back-to-back positioning at 40 cm intervals of DC75 profiles to be positioned between DU75 profiles, placement of 5 cm-thick rock-wool plates with a density of 50-52 kg/m ³ and on one side of the wall, fitting of the plaster wall plate (12,5 mm thick) on DU75 and DC75 profiles using 25 mm (layer 1) and 35 mm or 38 mm (layer 2) drywall screws, fixing on the other side of the wall of the single-layer plaster wall plate (similar procedure), tailoring of the size of the plaster plate as and if required, pre-fill of joints thicker than 3 mm, covering of screw heads with plaster filler, joint tape to be adhered on the joints of plaster wall plates, application of joint filler plaster on the tape to complete the dividing wall, including any and all materials and loss/damage, loading at the place of work, upstairs/downstairs and level hauling, unloading, contractor overheads and profits, 1 m ² price: MEASUREMENT: to be calculated in m ² with reliance on project dimensions NOTE: gaps less than 0,50 m ² not deducted.

No	2
Item No	18.195
Definition	Dismantling of any and all wooden doors, windows, and panes
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	Neat dismantling of any and all wooden door frames and door wings, windows and panes, storage at administration-specified premises and delivery to administration, including upstairs/downstairs and level hauling, loading at the place of work, unloading, tool and equipment costs, contractor overheads and profits 1 m ² price: MEASUREMENT: Sizes specified in respective item no. shall be applied as is to dismantling works and respective manufacture.

No	3
Item No	18.198/12
Definition	Dismantling of ceramic, tile, etc. covers.
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)



Definition	Dismantling of ceramics, tiles, etc. including upstairs/downstairs and level hauling, loading at the place of work, unloading, tool and equipment costs, contractor overheads and profits 1 m ² price: MEASUREMENT: dismantled coating area calculated.
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No	4
Item No	22.081
Definition	Under-counter wooden type kitchen cupboard (1.68x0.85)=1.43 m ²
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	Under-counter wooden Type No. 5781 kitchen cabinet of T: 19 mm coated with 0,65 mm laminated plank manufacture as per project details, transportation, installation and assembly, preparation of metal fitting slots, related applications and assemblies, including upstairs/downstairs and level hauling, loading at the place of work, unloading, tool and equipment costs, contractor overheads and profits 1 m ² price (except metal fitting prices): MEASUREMENT: Frontal of the cupboard to be calculated on the basis of respective project.

No	5
Item No	22.082
Definition	Counter-top wooden type kitchen cupboard (3.04x0.80)=2.46 m ²
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	Counter-top wooden Type No. 5781 kitchen cabinet of T: 19 mm coated with 0,65 mm laminated plank manufacture as per project details, transportation, installation and assembly, preparation of metal fitting slots, related applications and assemblies, including upstairs/downstairs and level hauling, loading at the place of work, unloading, tool and equipment costs, contractor overheads and profits 1 m ² price (except metal fitting prices): MEASUREMENT: Frontal of the cupboard to be calculated on the basis of respective project.

No	6
Item No	A.04
Definition	Fitting of interior and exterior doors with embedded drum-type locks (wide and narrow types)
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	

No	7
Item No	A.08
Definition	Fitting of door handles and knobs and lock plates (chrome coated)
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	

No	8
Item No	A.10
Definition	Fitting of hinges
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	

No	9
Item No	MSB.661



Definition	Manufacture of T: 3 cm marble plank oval Hilton sink and bath-counter
Unit	M2
Book	Ministry of National Defense (MSB)
Definition	<p>Cutting at the workshop of the marble piece procured as per project requirements, cutting out the oval per top rim measure of the Hilton type sink, arrangement of faucets slots, following beveling, adhesion of the sink under the marble piece inside tailored canals, packaging and transportation to the worksite of the counter thus prepared, including any tool and equipment costs required for installation, labor and contractor overheads and profits 1 m² counter price:</p> <p>Measurement: The width of counter to be multiplied by the length, except the front marble piece and skirts</p> <p>Notes:</p> <p>K= determined factor, a=W (cm), b=L (cm), h=Thickness (cm)</p> <p>$K=(k1 \times k2)-1$, $k1=\log(axb)/\log(180)-0,22$ (size up-coeff.) , $k2=\log(h)/\log(6)+0,61$ (Th. up coeff.)</p> <p>Size up-coefficient for all free sizes shall be $k1=1$.</p> <p>For L. of 3x30xs., $k1=1$, $k2=\log(3)/\log(6)+0,61=1,22$</p> <p>$K=(1 \times 1,22)-1= 0,22$</p> <p>For L. of 2x30xs.</p> <p>$K=1$</p> <p>$04.416/A023.....1,00 \times 0,22 + 0,29 \times 0,22 = 0,28 \text{ m}^2$</p>

No	10
Item No	Y.22.001/01
Definition	Manufacture of massive wooden plank interior door frame and sill, and installation
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	<p>First quality fir (white glass) massive door frame and double sided sill manufacture with a finished T. of at least 45 mm and 22 mm, respectively, fixing the latter 3 x wedges to be placed on the wall, placement of lathes on the edges of the sill and/or the frame as required, including upstairs/downstairs and level hauling, loading at the place of work, unloading, tool and equipment costs, contractor overheads and profits 1 m² price (except paint and varnish):</p> <p>MEASUREMENT : the surface area of the door frame and sills manufactured as per project</p> <p>NOTE: Lathes excluded from calculation.</p>

No	11
Item No	Y.22.009/04
Definition	Manufacture and installation of laminated interior door wings of pressed wood fiber plates (mdf), and perforated chip-filler interior door wings
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)



Definition	<p>Manufacture of interior door wings as per project, using Class 1 pine timber with clean T: at least of 45 mm where clean T: for doorposts shall be used where in between the posts the frame of perforated planks (min cross-section of at least 35 mm) shall be fitted on which 3 mm wooden fiber plates (mdf) will be pressed laminated coating on both sides including any and all materials such as nails, screws, adhesives, etc. during assembly, any loss and damages and upstairs/downstairs and level hauling, loading at the place of work, unloading, tool and equipment costs, contractor overheads and profits 1 m² price (except metal fitting prices):</p> <p>MEASUREMENT:</p> <p>1)The surface area of the door calculated by multiplying marginal L and W of the door wings. Door framems excluded from calculation.</p> <p>2) Additional number of door wings will include all movable as well as fixed door wings in the calculation in closed position (if fixed wings terminate at the frames thwy will also be included in the calculation with no additional payment for the doorframe).</p> <p>NOTE :</p> <p>1) Metal fittings to be used in door profiles shall consist of any and all locks and related fittings, lock plates, rubber stoppers, bolts, hinges and spring-hinges subject to the approval of the administration.</p> <p>2) Labor for fitting of metal pieces included in the price for profiles.</p>
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No	12
Item No	Y.23.241
Definition	Plastic profile manufacture and installation (manufacture of any and all doors, windows, coating, etc. from hard PVC profiles)
Unit	KG
Book	Ministry of Environment and Urbanization (BAY)



Definition	<p>Hardened PVC plastic profiles and accessories with window posts per the admin-approved project details shall be all-weather resistant and with smooth surfaces. Heat and sound-proof main PVC profile (T. Class 'A' as per standard and T. on visible surfaces 2,8 mm, 2,5 on hidden surfaces) with frontal chambers system for fast water removal. Main and supporting metal profiles (frame, mid-post, wings) shall be adequately robust. Metal support profiles shall be U or box-profiles hot galvanize dipped and with anti-rust protection. Metal plate T. in both cases for the frame and wings shall be no more than 1.5 mm and more than 2 mm for the mid-post. (However, in cases where due to very large posts and wings the moment of inertia is calculated to be well above metal plate thickness specified above, metal plates with adequate thickness shall be used). Metal-reinforced PVC profiles shall be combined with plastic edges, screws, wing-connections etc. so as to enable the manufacture of all sorts of window frames, doors, windows etc. with the help of auxiliary profiles, plates and other profiles etc. In line with the system proposed by the manufacturing company wing gauges shall be insulated using 2-strips of EPDM rubber, neoprene or tpe gaskets. Fitting of all sorts of windows shall be through the use of window posts. In fixing of windows as per system proposed by the manufacturing company washers, sealants and other methodologies shall be used. Each window is installed on the profile with at least 2 (two) hinges and the doors are installed with at least 3 (three) hinges. The hinges will have the endurance and design to allow the flaps to operate in different angles. Plastic profile and flap components are cut with 45 degree angle and welded with machinery developed for this purpose and shall be installed to the wall via clamp and screw anchors or to the blind frame if necessary via stainless screws or anchor profiles. Cost of 1kg plastic profile including the water, weather, sound isolation, all sorts of materials for proper installation of isolation washers to the system and their cost, in situ loading, vertical and horizontal hauling, unloading, workmanship, materials and tools, general contractor expenses and profit:</p> <p>MEASUREMENT: 1) Only, tough PVC plastic profile material, epdm, neopren and tpe washers, silicone based putty, anchor screws or anchor profiles, joint parts and supports inside the profile, are weighted together. 2) Weighing scale results according to the weights of the profiles given in the table may be verified based on the project size if deemed necessary by the Management. Payment up to 7% extra weight (extra to the table) shall be paid base on the results of the weighing scale. If the result of the scale is lower than the values given in the table, with the approval of manufacturing by the management, the cost shall be based on the results of the weighing scale. 3) The unit weights of the plastic profiles, and weights per meter of metal support profiles, to be used in detail projects, if necessary, shall be specified.</p> <p>Note: 1) The installation cost of metal profile is included in the profile prices. 2) Plastic profile accessories (window bar, hinges, lock and extras, transom spring and latch, pivot hinges, rails, brush weatherstrips, all sorts of door handles, open/close/lock mechanisms which resemble hydraulic mechanisms etc.) are not included in the weighing process. Their cost shall be paid from their market value, if there is no specific value their cost shall be paid 25% additional to the invoice approved by the authorities including general costs and profit. 3) All main profiles and additional profiles must be marked along the profile at 1 meter intervals in a legible way and only visible when the window is open. The markings on the main profiles and additional profiles must contain the information below. -Name or trade mark of the manufacturer, - Sign and number of this standard (such as TS EN 12608-1) - Width class, -Manufacturing code to provide traceability (date etc.)</p>
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No	13
Item No	Y.25.003/07
Definition	Painting the older painted surfaces with two layers of water based semi-matte paint by applying primer (interior walls)
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	<p>Cost of 1 m² including the cost of all materials for the following works: Cleaning the older painted surfaces with metal brushes, sandpaper or mechanically, mending and the plaster where needed, applying 0,150 kg water based primer, and 0,100 kg 1st layer and 0,100 kg 2nd layer water based semi-matte paint in the color of choice, and including workmanship, contractor expenses and profit.</p> <p>MEASUREMENT: The painted surfaces are measured on the project. All empty spaces are excluded. NOTE : Extra scaffold is provided for walls and ceilings higher than 3 meters. If there is a scaffold for the primer, an additional scaffold is not provided for the paint job.</p>

No	14
Item No	Y.26.005/402
Definition	Laying (30x30 cm) or (33x33 cm) 1st quality colored ceramic tiles with any pattern and surface texture with 3mm gaps for mortar (with tile cement)
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)



Definition	Cost of 1 m ² for the following works including cost of any and all materials, workmanship, equipment costs, loading, transportation and unloading works and contractor expenses and profit: cleaning the dust, dirt etc. which will prevent adhesion, from the surface in line with the approved detail project, dampening the surface and applying cement based, standard performance, tile adhesive with reduced slip, and grooving the adhesive with a special comb, installing the 1st class (30x30 cm) or (33 x 33 cm) tiles with any color or surface pattern according to its primer and grading, with 3mm of space in between for adhesive, filling the spaces with cement based standard tile adhesive in the desired color, cleaning the surface. Measurement: The tiled area and baseboard (if any) are calculated based on the measurements on the project.
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No	15
Item No	Y.28.645/C02
Definition	Installation of 4+4mm thick 12mm spaced double glazed window with PVC and aluminum profile
Unit	M2
Book	Ministry of Environment and Urbanization (BAY)
Definition	Cost of 1 m ² for the following works including cost of any and all materials, workmanship, equipment costs, loading, transportation and unloading works and contractor expenses and profit: preparing the 4+4m thick, 12mm spaced double glazed window unit according to its place, placing support blocks to the window socket and installing the window, profile and weatherbar, balancing the unit with support block, applying neutral cure silicone to the joints of the profile. MEASUREMENT: Areas where the windows are installed are calculated according to the measurements in the project. NOTE: Profile and weatherband cost is paid on its own profile item

D.2 MECHANICAL WORKS (MACHINE INSTALLATION / Sanitary Installation)

No	1
Item No	071.112
Definition	Approx. 45x55cm half leffed single glazed ceramic extra class sinks
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	Supply, delivery to the workplace and installation of sinks with type and measurements stated below, with fixed soap holder, white, installation screw and pin included. Note: If colored glazed ceramics are used the installed costs shall increase 15% but installation costs shall remain the same. Sinks are present in the market bearing the CE conformity mark in accordance with the 305/2011/EU Construction Products Regulation.

No	2
Item No	072.201
Definition	Sink installation wall type faucet 1st class (Faucet TS EN 200 or TS EN 817 ; Flusher TS-EN 274-1-2-3)
Unit	TK
Book	Ministry of Environment and Urbanization (BAY)
Definition	Supply, installation and delivery in working condition of: 15mm brass plated faucet, to be on the sinks mentioned in BFT.071-000, with plastic based (acetal copolymer) quality certificate, brass plated tough plastic 32mm compression drain tap ,which can withstand 80°C, in sizes appropriate to the TS-EN 274-1-2-3, with 6cm removable odor fighting apparatus in line with the TS-EN 274-1-2-3 with 16cm extension part and link adapter to the wastewater pipe. (Wastewater pipe is not included in the price.)

No	3
Item No	079.700
Definition	Inset flush tank squat-toilet set
Unit	TK
Book	Ministry of Environment and Urbanization (BAY)



Definition	White 4 cornered toilet stone; 6 cm in conformity with the TS-EN 274-1-2-3. 100mm odor fighting floor drain and casing or 100mm PVC single piece 6cm which can withstand 80°C. Delivery to the workplace and installation along with installation components of odor fighting squat toilet drain; manufactured with materials in conformity with TS EN 12164 and 12165, faucets in conformity with TS EN 200 with TS EN 248 surface standards; in set plastic and stainless steel profile flusher reservoir in conformity with TS EN 14055+A1 ,TS EN 10088-1/2/3. The products shall be in conformity with the 305/2011 Construction Products Regulation and bear the CE conformity stamp.
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No	4
Item No	089.101
Definition	Short faucet 1/2" (including the filtered head)
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	The supply and delivery to the workplace of the fittings quality certificates of which is presented below.

No	5
Item No	097.302
Definition	Floor drain with aluminum grate
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	Supply and delivery to the workplace of peak cast, odor fighting, grated ground drain with cleaning plug. H=13.5 cm Ø 50 mm.

No	6
Item No	204.3102
Definition	Pn 20 polypropylene 1/2" ø16/3.4 mm clean water pipes
Unit	Meter
Book	Ministry of Environment and Urbanization (BAY)
Definition	TS EN ISO 15874-1, 2, 3, 5, 7 Delivery to the workplace of PPR-C type 3 pipes certified by the Ministry of Health to be used as drinking water pipe, in conformity with TS EN ISO 15874-2 standards, cutting the pipes in accordance with its project, welding the pipe junctions to pipes at 260 °C. (Including any and all materials necessary for welding and workmanship.) The cost of installation materials shall be paid separately.

No	7
Item No	210.623
Definition	Brass, teflon (manufactured in presser) T. F. E.) w/ washer, 15 Ø mm, 1/2" (TS 3148)
Unit	QTY
Book	Ministry of Environment and Urbanization (BAY)
Definition	Supply, delivery to the workplace and installation of spherical valves with brass cutter, peak carbon steel or stainless steel screws or brackets, controlled by a sphere, and with manual open and close system, into the water, air, steam installations in accordance with 97/23/EC Pressure Equipment Directive.