

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
	All work shall be done fully according to the standing law on Planning and Construction and all standing Rulebooks and Conditions of the competent Institute for the Protection of Cultural Monuments of the City of Belgrade No 0383/14 as of 25/07/2014.				
<b>A) PREPARATORY WORK AND DISMOUNTING &amp; DEMOLITION WORK</b>					
<b>I) PREPARATORY WORK</b>					
1	<b>Mounting and dismantling metal tubular façade scaffold fully according to the standing regulations and PP measures.</b> The scaffold shall be structurally stable, anchored to the building and properly grounded. Working platforms made of 2.5cm thick boards or metal decks shall be placed at every 2.00m of height. Upright 2.5cm board arm rests shall be placed on the outward facing side of the scaffold. The entire scaffold surface shall be covered with jute or PVC perforated cloth. The structural engineer shall perform handover and allow use of the scaffold via construction log. The scaffold shall be used for the entire duration of work. Calculated per m2 of the mounted scaffold vertical projection.				
	street facade	m2	150.00		
	courtyard facade	m2	150.00		
2	<b>The pavement shall be protected with PVC foil prior to mounting the tubular scaffold and perimeter around the building.</b> Calculated per m2 of horizontal projection.				
	street facade	m2	38.00		
3	<b>Making a tunnel for pedestrian access to the building.</b> Tunnel width shall not be smaller than the width of the portal; tunnel height shall be 240cm and length shall be approx. 370cm. The top of the tunnel shall be covered with 2.5cm thick boards or oblique panels like on the construction site fence. The upper surface shall be covered with PVC foil or tar paper and fixed with battens. The canopy shall be handed over to the Supervisor (structural engineer). It shall be used for the entire duration of work and paid once regardless of whether it shall be dismantled and remounted during the course of the work. Calculated per m2 of horizontal projection surface area.				
	street facade	m2	8.00		
	courtyard facade	m2	8.00		
4	<b>Procurement and placement of protective PVC foil over all openings on the façade except the entrance gate.</b> The foil shall be fixed using wooden battens, taking care not to damage the doors and windows. All and any damage to the doors and windows shall be covered by the Contractor. Calculated per m2 of the surface area of all openings.				
	street facade	m2	30.00		
	courtyard facade with passage	m2	30.00		
5	<b>Manufacture and placement of notice boards informing about ongoing construction,</b> with the basic information about the building, Contractor, Investor and Designer. The board shall be 200x100cm, fully in accordance with the Rulebook on the Appearance, Contents and Location of the Construction Site Notice Board (O. Gazette of the RS No 4). Calculated per piece.				
		pcs.	1.00		
6	<b>Manufacture and placement of boards and other warning signs,</b> according to technical regulations. The board shall be 80x60cm. Calculated per piece.				
		pcs.	2.00		

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7	<b>Procurement and mounting of protective PVC foil to protect the library books and floor ceilings during the execution of roof reconstruction work.</b> The foil shall be secured in a way to provide adequate protection for the books, taking care not to damage the furniture. All and any damage to the furniture shall be covered by the Contractor. Calculated per m <sup>2</sup> of floor surface area.				
		m2	400.00		
8	<b>Cleaning and washing the construction site after the completion of all work.</b> A thorough sweep of the entire construction site, washing of all glass surfaces and detailed washing of all indoor areas and outdoor surfaces shall be performed. The price shall include the 2m perimeter.				
		m2	560.00		
<b>Preparatory Work Total:</b>					
<b>II DISMOUNTING &amp; DEMOLITION WORK</b>					
1	<b>Dismounting the candelabra on the street façade.</b> The candelabra shall be dismantled carefully and disposed of in a location designated by the Investor. Calculated per piece.				
		pcs.	1.00		
2	<b>Dismounting existing boards and street signs</b> and their disposal in a location designated by the Investor for remounting. The price shall include rubble transport. Calculated per piece.				
		pcs.	1.00		
3	<b>Dismounting external air conditioner units.</b> The price shall include disconnection from the building's electricity grid. Calculated per piece.				
	street facade	pcs.	2.00		
	courtyard facade	pcs.	2.00		
4	<b>Removing the beaver-tail tile roof cover.</b> The tiles shall be removed safely, stored on site and prepared for remounting. Damaged tiles shall be put away and prepared for transportation to the landfill. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m <sup>2</sup> of inclined surface area.				
	beaver-tail tiles roof cover in simple overlapping bond	m2	325.00		
5	<b>Removing roofing battens.</b> Removed battens shall be loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m <sup>2</sup> of battened surface area.				
		m2	325.00		
6	<b>Dismounting of galvanized sheet metal gutters.</b> Gutters shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per m' of gutters.				
	street facade	m'	19.00		
	courtyard facade	m'	19.00		
7	<b>Dismounting of galvanized sheet metal spout pipes.</b> Spouts shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per m' of spout pipes.				
	street facade	m'	12.00		
	courtyard facade	m'	12.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
8	<b>Dismounting of apron flashing above the hanging gutters, various flashings (gable wall, chimney and roof ventilation ducts as well as fascia).</b> Flashings shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per m' of flashings.				
	street facade	m'	80.00		
9	<b>Dismounting ventilation caps.</b> Caps shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per piece.				
		pcs.	3.00		
10	<b>Dismounting of roof hatch cover.</b> Covers shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per piece.				
		pcs.	3.00		
11	<b>Dismounting of board eaves flashing.</b> Flashings shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per m' of flashings.				
	street facade	m'	19.00		
	courtyard facade	m'	19.00		
12	<b>Dismounting of foundation board formwork.</b> Formwork of the foundation wooden beam for the cellar staircase. Formwork shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per m' of formwork.				
	courtyard facade	m'	9.00		
13	<b>Dismounting of entrance 100/240 and 274/235 cm vehicle and pedestrian gate.</b> The gate shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per piece.				
		pcs.	1.00		
14	<b>Dismounting of cellar door.</b> The door shall be dismantled, packed, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The price shall include cleaning and sorting of useful waste. Calculated per piece.				
		pcs.	1.00		
15	<b>Chiseling plaster from façade walls and ceilings.</b> Prior to chiseling plaster silicate rubber casts shall be taken on the façade garland and the street façade shallow architectural decorations (PL) shall be surveyed in detail. Chiseled surfaces shall be cleaned using steel brushes; the plaster shall be removed from joints to the depth of approx. 2cm and the entire surface shall be washed using clean water. Dcalculated per m2 of vertical wall projection surface area regardless of the depth of the ornaments. The surface of all openings shall be deducted from the total surface area.				
	street facade and passage	m2	132.00		
	courtyard facade	m2	158.00		

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16	<b>Old plaster shall be chiselled off from parts of the façade, garland profiles and eaves cladding.</b> Prior to chiselling of the plaster, two best preserved profiles shall be left on each type of profiles (FV1 and FV2) in the width of 20-30cm to take casts and as control profiles. The Supervisor and Contractor shall designate surface areas where plaster shall be chiselled off in writing. The plaster shall be chiselled off carefully, so as not to damage built parts of garland profiles. Joints shall be cleaned to the depth of 2cm using clamps; bricks shall be cleaned using steel brushes; cleaned walls shall be washed with water. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of chiselled surface area.				
	street facade	m2	10.00		
	courtyard facade	m2	10.00		
17	<b>Stripping of flooring with subfloor, joists and layer of sand, complete with battens.</b> The floor, subfloor, joists and battens shall be stripped, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of floor.				
		m2	38.00		
18	<b>Stripping of the ceramic tile floor and vinas tile staircase set in cement mortar in the cellar.</b> Tiles shall be chiselled off and sublayer stripped down to the concrete. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of floor.				
		m2	50.00		
19	<b>Demolition of the internal brick wall, bick old format, in the basement.</b> Demolition of walls perform together with ring beams, lintels and all the paneling on the wall. Bricks cleaned and hold on a construction site landfill. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculation per m2 demolished wall, wall openings deductable.				
	подрум	m2	90.00		
20	<b>Chiselling plaster from interior walls.</b> The plaster shall be chiselled off and joints shall be cleaned to the depth of 2cm using clamps. Brick surface shall be cleaned with steel brushes and the walls shall be washed with water. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of chiselled area, all openings shall be deducted. NOTE: cellar walls shall be completely chiselled while the ground floor walls shall be chiselled to the height of 1.5m in places designated by the Supervisor.				
	cellar	m2	75.00		
	ground floor	m2	127.00		
21	<b>Stripping lime mortar with reed ceiling. The wooden substructure shall be kept.</b> All usable materials shall be cleaned, loaded onto a lorry and transported to a landfill designated by the Investor up to 15km away. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of ceiling. NOTE: floor work shall be done in stages with moving the furniture and protecting the library books which shall be provided for in separate items. Construction staging shall be defined on site.				
	cellar	m2	44.00		
	ground floor	m2	110.00		
	1st floor	m2	205.00		
	Total:		359.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
22	<b>Dismounting of wooden ceiling battens.</b> Ceiling battens shall be dismantled carefully, cleaned and piled in the covered construction site landfill for reuse. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of ceiling.				
	cellar	m2	44.00		
	ground floor	m2	110.00		
	1st floor	m2	205.00		
	Total:		359.00		
23	<b>Demolition of the 12cm concrete floor slab for caulking cellar walls and foundations.</b> The rubble shall be taken out, loaded onto a lorry and transported to the town landfill. Calculated per m2 of floor.				
	1st floor	m2	12.00		
24	<b>Moving the existing furniture from the space being refurbished – upstairs.</b> The furniture shall be returned to its original position after completing the work. Calculated per m2 of room surface area.				
		m2	240.00		
25	<b>Demolishing the brick fence built in lime mortar.</b> Bricks shall be cleaned of mortar and stacked for rebuilding. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m3 of fence. The price shall include demolition of the finishing concrete ring beam – top cap. NOTE: buildings on the neighbouring parcel shall be secured during demolition.				
		m3	8.00		
26	<b>Stripping the clay pantile hipset and beaver-tail tile cap.</b> The ridges shall be taken down from the fence safely. The rubble shall be collected, taken out, loaded onto a lorry and transported to the town landfill. Calculated per m1 of hipsets and ridge.				
		m'	95.00		
27	<b>Dismounting and remounting of cast iron ground floor radiators.</b> The radiators shall be dismantled carefully, washed, cleaned and remounted. Any damaged spots shall be carefully cleaned with a steel brush and painted in the same shade. Radiator carriers shall be cleaned of dirt, old paint shall be physically or chemically removed and remounted. The price shall include painting radiators with adequate high temperature resistant paint in a dark shade of brown, modelled after the existing paint job. Damaged valves shall be replaced with new ones.				
	32 ribs	pcs.	2.00		
	23 ribs	pcs.	2.00		
	4 ribs	pcs.	2.00		
	25 ribs	pcs.	2.00		
	16 ribs	pcs.	2.00		
<b>Dismounting &amp; Demolition Work Total:</b>					
<b>Б) CONSERVATION AND RESTAURATION WORK</b>					
<b>I) GROUND WORK</b>					
1	<b>Probing work.</b> Manual soil excavation in order to define the depth of existing foundations of the brick fence. Probing shall be done by way of 1x1m excavations next to the fence wall. Probing shall be done on all sides of the fence. Calculated per m3.				
		m3	3.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
2	<b>Manual soil excavation in 1m long strips under the existing fence foundations for the construction of new recessed foundation.</b> Excavations shall be done according to the developed and approved scheme, from the corners toward the middle of the walls. Excavations shall be done in the width of the foundations; the entire width of the foundations shall be concreted simultaneously. The soil shall be cast aside and transported to the construction landfill. After excavations the bottom shall be cleaned with spatulas & brooms and washed with water. The price shall include possible strutting and planking. Calculated per m3 of soil in autochthonous state.				
		m3	26.00		
3	<b>Manual soil excavation in 1m long strips under the existing foundations for the construction of new recessed cellar foundation.</b> Excavations shall be done according to the developed and approved scheme, from the corners toward the middle of the walls. Excavations shall be done across the entire width of the foundations; the entire width of the foundations shall be concreted simultaneously. The soil shall be cast aside and transported to a landfill up to 15km away. After excavations the bottom of the foundations shall be cleaned with spatulas & brooms and washed with water. The price shall include possible strutting and planking. Calculated per m3 of soil in autochthonous state. Work shall be executed from inside the cellar, according to detail and scheme provided in the design.				
		m3	18.00		
4	<b>Procurement and spreading of gravel under the foundations of cellar walls.</b> The gravel buffer shall be poured in layers, compacted and finely levelled with a height tolerance of +1cm. Calculated per m3 of compacted gravel. Layer thickness 10cm max.				
		m3	4.00		
5	<b>Procurement and spreading of gravel under the fence foundations.</b> The gravel buffer shall be poured in layers, compacted and finely levelled with a height tolerance of +1cm. Calculated per m3 of compacted gravel. Layer thickness 10cm max.				
		m3	2.00		
6	<b>Manual excavation of the 20cm thick sublayer for vehicle transport made of river stone and compacted soil.</b> Separating rock from soil, releveling of the terrain, pouring 10cm of gravel on the terrain with compacting and reuse of existing river pebbles and setting in a layer of granulated coarse sand. Joints final pour with a fine-grained concrete. The stones shall previously be cleaned from any remaining dirt and mud residue. Work shall be done in stages not to disturb the existing original texture. Calculated per m2 of surface area.				
		m2	50.00		
<b>Ground Work Total:</b>					
<b>II BRICKLAYING WORK</b>					
1	<b>Rebuilding the fence with solid brick in 1:2:6 lime mortar.</b> Fence beds shall be cleaned, hosed down and sprayed with cement grout made with very coarse sand. Bricks shall be cleaned and the fence rebuilt. The joints shall be pointed after bricklaying. The price shall include the procurement of missing bricks to the amount of 10% total, as well as scaffolding. Calculated per m3 of fence.				
		m3	8.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
2	<b>Plastering interior cellar walls using watertight plaster with the addition 'Izolit 1 ISOPLAST-Dramin Zemun' additive or a product of equivalent characteristics.</b> The sublayer shall be prepared to be firm, clean, dust free and dry. After that the sublayer shall be wetted so as not to leave excess droplets. The sublayer shall then be sprayed with 2mm of grout made of cement and sand in proportion 1:1. After that a second coat (0-4mm) of cement plaster shall be applied with the mentioned additive; the cement-to-sand ratio shall be 1-2.5:3. In the third coat the ratio between cement and sand shall be 1:3. Cement plaster shall be applied over the Q131 mesh anchored according to the description in the Design. Preparation of additive fully according to the manufacturer's technical instructions. Calculated per m2 of plastered area.				
		m2	75.00		
3	<b>Plastering interior ground floor walls using watertight plaster with the addition 'Izolit 1 ISOPLAST-Dramin Zemun' additive or a product of equivalent characteristics.</b> The sublayer shall be prepared to be firm, clean, dust free and dry. After that the sublayer shall be wetted so as not to leave excess droplets. The sublayer shall then be sprayed with 2mm of grout made of cement and sand in proportion 1:1. After that a second coat (0-4mm) of cement plaster shall be applied with the mentioned additive; the cement-to-sand ratio shall be 1-2.5:3. In the third coat the ratio between cement and sand shall be 1:3. Cement plaster shall be applied over brick walls. At connections between old and new walls plastering shall be done over industrial wire mesh. Preparation of additive fully according to the manufacturer's technical instructions. Calculated per m2 of plastered area.				
		m2	127.00		
4	<b>Plastering of exterior walls with 'BAUMIT' thermal render or a product of equivalent characteristics. 'Thermo extra' facade system.</b> The sublayer shall be prepared with Vorspritzer cement grout. Thermo extra thermal render shall be applied after that in a 4cm layer. The render shall be reinforced with Star Tex fibre glass mesh treated with vapour permeable reinforcing adhesive. A 1,5mmK coat of SilikatTop finishing render shall be applied over the coat of adhesive with prior application of silicate base coat UniPrimer 25/1. System thermal conductivity coefficient $\lambda = 0,09W/mk$ . Work shall be performed fully in accordance with the manufacturer's technical instructions. Calculated per m2 of plastered surface area. All openings shall be deducted. NOTE: Plastering shall include the manufacture of plaster ornaments modelled after the existing ones. The price shall include the manufacture of steel patterns for drawn profiles for the manufacture of street- and courtyard-facing facade rings (FV1 and FV2) as well as the manufacture of shallow architectural ornaments on the street facade in the form of pilasters (PL).				
	street facade and passage	m2	132.00		
	courtyard facade	m2	158.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
5	<b>Plastering the exterior West side gable wall with 'Baumit' vapour permeable thermo render or a product of equivalent characteristics. Thermo extra' facade system.</b> The sublayer shall be prepared with Vorspritzer cement grout. Thermo extra thermal render shall be applied after that in a 4cm layer. The render shall be reinforced with Star Tex fibre glass mesh treated with vapour permeable reinforcing adhesive. A 1,5mmK coat of SilikatTop finishing render shall be applied over the coat of adhesive with prior application of silicate base coat UniPrimer 25/1. System thermal conductivity coefficient $\lambda = 0,09W/mk$ . Work shall be performed fully in accordance with the manufacturer's technical instructions. Calculated per m2 of plastered surface area. All openings shall be deducted. NOTE: The price shall include the construction of a complex facade scaffold.				
	gable wall	m2	60.00		
6	<b>Plastering the exterior eaves ceiling with cement plaster over wire mesh.</b> The mesh shall be sprayed with grout twice. After that a coat of thick plaster shall be applied to encase the mesh. The base coat shall be made with very coarse sand and applied to the ceiling. The second coat shall be made with clean small grain sand with no mud or organic matter, and applied over the first coat. The surface shall be floated with wetting using small floats. The price shall include scaffolding. Calculated per m2 of ceiling.				
		m2	25.00		
7	<b>Restauration of decorations and ornaments on the courtyard facade. Facade rings.</b> Calculated per m'.				
		m'	80.00		
8	<b>Plastering 15cm wide electrical installation 'strips' with lime plaster.</b> Plastering with wire mesh placed on the connection between the old and new plaster coats. Work shall be done fully in accordance with regulations for this type of work. Calculated per m'.				
		m'	150.00		
<b>Bricklaying Work Total:</b>					
<b>III CONCRETE WORK</b>					
1	<b>Concreting under the existing foundations of the cellar and fence in 1m strips with MB30 concrete.</b> Prior to work commencement the Contractor shall be obligated to develop the strip concreting sequence and obtain approval from the structural engineer in accordance with the graphic sketch. After excavation (provided for in a separate item) the bottom of the foundation wall shall be thoroughly cleaned of soil with spatulas and steel brushes. Concreting shall be performed to the height defined by the structural engineer in accordance with the detail provided in the Design. After the concrete bonds, the connection between the bottom of the existing and top of the newly concreted foundation shall be caulked with dry concrete made with very coarse sand. The other strips shall be constructed after that according to the predetermined sequence. The price shall include all work and materials with cleaning, formwork, concreting and caulking. NOTE: Provide for an adequate bond with the old concrete floor slab in terms of rebar or some other connecting agent.				
	cellar	m3	17.00		
	fence foundations	m3	24.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
2	<b>Manufacture of a reinforced concrete fence cap of concrete mark MB20.</b> The formwork shall be made and the cap shall be reinforced along the entire length of the fence according to detail and the Design, modelled after the existing one. The concrete shall be poured in and cared for. The price shall include formwork and reinforcement bars. Calculated per m' of fence cap.				
		m'	95.00		
3	<b>Manufacture of a cement screed.</b> The cement screed shall be made fully according to the conditions for this type of work over loop wire mesh. The slab shall be made, installed and cared for according to regulations. The price shall include reinforcement bars. Calculated per m2 of slab.				
		m'	44.00		
<b>Concrete Work Total:</b>					
<b>IV WEATHERPROOFING</b>					
1	<b>Procurement and placement of vapour permeable watertight roofing foil.</b> Foil type TOPDACH or a product of equivalent characteristics. The foil shall be fixed directly to the rafters, fully according to the manufacturer's instructions and the type of work. Calculated per m2 of inclined roof surface.				
		m2	325.00		
2	<b>Procurement and placement of rock wool in the form of especially soft panels type URSA or a product of equivalent characteristics, 5cm thick, density 35kg/m3.</b> Rock wool shall be placed as thermal insulation, soundproofing and fire protection for suspended ceilings, according to the detail and the Designer's instructions. A2 grade fireproof for 30min fire resistance. Calculated per m2 of ceiling.				
	cellar	m2	44.00		
	ground floor	m2	110.00		
	1st floor	m2	205.00		
	Total:	m2	359.00		
2	<b>Procurement and placement of rock wool in the form of hard panels type 'Knauf insulation - Pod plus' or a product of equivalent characteristics, 5cm thick.</b> Rock wool shall be placed as filling between the joists, prior to putting up the wooden floor boards, according to the detail and the Designer's instructions. Calculated per m2 of floor.				
		m2	38.00		
3	<b>Procurement and placement of PVC foil in the attic as the sublayer for floor insulation.</b> The foil shall be fixed to the attic floor structure with overlaps, fully according to the regulations for this type of work. Calculated per m <sup>2</sup> of floor surface.				
		m2	400.00		
4	<b>Procurement and placement of 'Austrotherm TPE' attic floor panels on the attic floor.</b> The product shall be made by a specialised manufacturer. The bottom layer shall be Austrotherm EPS® AF 100mm insulation panel; the top layer shall be 8mm plywood staggered by 10mm. Placement shall be done according to the manufacturer's instructions with the Supervisor's approval. Levelling shall be performed if needed. Calculated per m <sup>2</sup> of floor surface.				
		m2	240.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
5	<b>Procurement and installation of waterproofing for cellar walls and exterior ground floor walls to the height of 1.5m with waterproofing penetrating sealant.</b> Coating type 'Izolit PENETAT - Dramin Zemun' or a product of equivalent characteristics. Work shall be done over brick walls where plaster was previously chiselled off. Prior to work commencement all joints shall be filled and walls pointed. Floors shall be levelled with self-levelling compounds. All surfaces shall be clean and prepared in accordance with the manufacturer's specific conditions. Fully according to the specialized manufacturer's instructions. The price shall include wall pointing and floor levelling after the tiles have been stripped. Calculated per m2 of treated surface area.				
	interior walls	m2	202.00		
	outer walls	m2	78.00		
6	<b>Cutting off capillary moisture in ground floor walls, just above the basement, with SIKAMUR-INJECTOCREAM-100 or a product of similar characteristics.</b> The work shall be done fully according to the specialized manufacturer's instructions. Cutting perform at the level immediately above the ground level and a below the basement ceiling on the inside, and with the consent of the supervisory authority. Calculated per m' of wall.				
		m'	36.00		
<b>Weatherproofing Total:</b>					
<b>V   CARPENTRY WORK</b>					
1	<b>Reinforcement of existing ceiling joists in places they are compromised.</b> Ceiling joists shall be reinforced on both sides by nailing in wooden panels with consulting the structural engineer and Supervisor, from underneath after exposing the ceiling structure. It is assumed that ceiling joists are spaced at 80cm, that they are 20cm tall and that they should be reinforced with 2.5cm thick boards on both lateral sides. Calculated per m'.				
		m'	250.00		
2	<b>Examination and verification of the existing roof structure, with replacement of worn and inadequate parts with new, in accordance with existing ones.</b> Replacement shall be done with consulting the Supervisor and structural engineer, in a manner that does not compromise the original construction system and in accordance with the competent Institute for the Protection of Cultural				
		lump	1.00		
3	<b>Manufacture of the OSB panel sublayer as a base for the ground floor hard floor.</b> Panels shall be placed over the wooden joists with necessary levelling. Expansion joints between panels shall not be larger than 5mm. Calculated per m2.				
		m2	38.00		
4	<b>Manufacture of the wooden substructure as a base for the hard floor.</b> The wooden substructure shall be made of 50/50mm wooden battens spaced at 40cm. The battens shall be fixed to the floor structure with screws and anchors above joists. Calculated per m2.				
		m2	38.00		
<b>Carpentry Work Total:</b>					
<b>VI   JOINERY WORK</b>					
	<b>Note:</b> In the event that the restoration and rehabilitation of existing elements is not possible to predict the production of new as well as existing at all, and with the approval and supervision of the Institute for Protection of Cultural Monuments City of Belgrade.				

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
1	<p><b>Restoration and rehabilitation of double windows.</b> The windows shall carefully be stripped of residual paint down to sheer wood. Cleaning shall be done chemically and physically, careful not to damage the wood and profiling and so that the wood does not change colour. The entire windows shall thoroughly be examined and refitted, all damaged parts shall be rehabilitated by reinforcing weak parts with epoxy two-component adhesive and sawdust from the same wood. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted. The wood shall be sanded down using fine grain sandpaper and protected by submerging or otherwise coating against fungi and insects. Windows shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Supervisor's and Designer's approval. Fully according to joinery sketches. Replacement of broken panes and any possible damage during work execution shall be e manufacture of shallow architectural ornaments on</p>				
	street facade				
	ITEM 1 - 60/60	pcs.	3.00		
	ITEM 2 - 100/157	pcs.	3.00		
	ITEM 3 -94/175	pcs.	3.00		
	ITEM 4 -97/135	pcs.	6.00		
	courtyard facade				
	ITEM 5 - 37/37	pcs.	3.00		
	ITEM 6 - 87/120	pcs.	2.00		
	ITEM 7 - 68/106	pcs.	1.00		
	ITEM 8 - 93/107	pcs.	1.00		
	ITEM 9 - 74-77/100	pcs.	4.00		
	ITEM 10 - 125-145/157 (arc windows)	pcs.	7.00		
	interior windows				
	ITEM 11 - 96/110	pcs.	3.00		
2	<p><b>Restoration and rehabilitation of single and double solid wood ground floor partially glazed doors.</b> The doors shall carefully be stripped of residual paint down to sheer wood. Cleaning shall be done chemically and physically, careful not to damage the wood and profiling and so that the wood does not change colour. The entire doors shall thoroughly be examined and refitted, all damaged parts shall be rehabilitated by reinforcing weak parts with epoxy two-component adhesive and sawdust from the same wood. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted. The wood shall be sanded down using fine grain sandpaper and protected by submerging or otherwise coating against fungi and insects. The doors shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Supervisor's and Designer's approval. Calculated per door piece. Replacement of broken panes and any possible rebar or some other connecting agent. ornaments on the street facade in the form of pilasters (P</p>				
	street facade				
	ITEM V - 98/200 (partially glazed)	pcs.	3.00		
	courtyard facade in the passage (solid wood)				
	ITEM VI - 106/200	pcs.	2.00		
	interior doors				
	ITEM VII - 70/200 (double plywood-coated door)	pcs.	2.00		
	ITEM VIII - 70/200 (solid wood)	pcs.	1.00		
	ITEM IX - 83-96/200 (solid wood)	pcs.	6.00		
	ITEM X - 90/100 (partially glazed)	pcs.	2.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
3	<b>Restoration and rehabilitation of ventilation caps on the roof at the height of approximately 5m from the attic elevation point.</b> The caps shall carefully be stripped of residual paint down to sheer wood. Cleaning shall be done chemically and physically, careful not to damage the wood and profiling and so that the wood does not change colour. All damaged parts shall be rehabilitated by reinforcing weak parts with epoxy two-component adhesive and sawdust from the same wood. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted. The wood shall be sanded down using fine grain sandpaper and protected by submerging or otherwise coating against fungi and insects. The caps shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Supervisor's and Designer's approval. The price shall include scaffolding. Calculated per cap piece.				
		pcs.	2.00		
4	<b>Manufacture and placement of cellar entrance solid wood door with solid panels and profiled elements.</b> The door shall be made of 1 <sup>st</sup> class dry fir and spruce, without thresholds, modelled after the existing ones. The original door shall be carefully dismantled and measures shall be taken on site. Dismounting shall be included in a separate item. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted on the new door. The door shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Supervisor's and Designer's approval. Calculated per door piece.				
	ITEM I - 180/200	pcs.	1.00		
5	<b>Manufacture and mounting of entrance gate and door made of solid wood, with solid panels and profiled elements.</b> The door shall be made of 1st class dry fir and spruce, without thresholds, modelled after the existing ones. The original door shall be carefully dismantled and measures shall be taken on site. Dismounting shall be included in a separate item. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted on the new door. The door shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Designer's and Supervisor's approval. Fully in accordance with the design detail and requirements of the competent Institute for the Protection of Cultural Monuments. Calculated per piece.				
	ITEM II - 110/240 and ITEM III - 250/240	pcs.	1.00		
6	<b>Manufacture of a double courtyard solid wood gate, dimensions according to the design detail.</b> The door shall be made of 1 <sup>st</sup> class dry fir and spruce. Fittings shall be made of wrought iron, fully according to design detail. The door shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Designer's and Supervisor's approval. Calculated per piece.				
	ITEM XI - 430/205	pcs.	1.00		
7	<b>Manufacture of a 'salon' gate – solid wood swing door, dimensions according to the design detail, modelled after the original door.</b> The door shall be made of 1 <sup>st</sup> class dry fir and spruce. Fittings shall be made of wrought iron, fully according to design detail. The door shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Designer's and Supervisor's approval. Calculated per piece.				
	ITEM IV - 180/200	pcs.	1.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
8	<b>Restoration and rehabilitation of ground floor wooden pillars.</b> The pillars shall be stripped of residual paint down to sheer wood. Cleaning shall be done chemically and physically, careful not to damage the wood and profiling and so that the wood does not change colour. All damaged parts shall be rehabilitated by reinforcing weak parts with epoxy two-component adhesive and sawdust from the same wood or replaced with new wood of the same type. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted. The wood shall be sanded down using fine grain sandpaper and protected by submerging or otherwise coating against fungi and insects. The pillars shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Designer's and Supervisor's approval. The price shall include scaffolding. Calculated per m2 of pillar spread surface area.				
	street facade	m2	5.00		
	courtyard facade	m2	10.00		
9	<b>Restoration and rehabilitation of indoor and outdoor wooden staircase.</b> The steps, risers and outdoor staircase walls shall be stripped of residual paint down to sheer wood. Cleaning shall be done chemically and physically, careful not to damage the wood and profiling and so that the wood does not change colour. All damaged parts shall be rehabilitated by reinforcing weak parts with epoxy two-component adhesive and sawdust from the same wood or replaced with new wood of the same type. Fittings shall be checked, cleaned and repaired; missing parts shall be made after the model of the existing ones and fitted. The wood shall be sanded down using fine grain sandpaper and protected by submerging or otherwise coating against fungi and insects. The pillars shall be finished by painting in a shade of brown using water-based primer and finishing paint in the adequate shade of brown, with the Designer's and Supervisor's approval. The price shall include scaffolding. Calculated per m2 of spread surface area.				
	indoor staircase	m2	10.00		
	outdoor staircase	m2	25.00		
10	<b>Procurement and mounting of joist (pillar carrier) board flashings.</b> Flashings of the cellar staircase foundation wooden beam. Flashings shall be made of 25mm thick pine lumber. It shall be nailed into the existing joist. Cladding shall be protected from the elements as well as fungi and insects. Cladding shall be finished by painting in two coats of primer and a finishing coat in a shade of brown. The paint shall be water-based. Calculated per m2 of spread surface of the flashings.				
	courtyard facade	m2	10.00		
11	<b>Procurement and mounting of eaves board flashing.</b> Flashings shall be made of 25mm thick pine lumber. It shall be nailed into the existing rafters. Cladding shall be protected from the elements as well as fungi and insects. Cladding shall be finished by painting in two coats of primer and a finishing coat in a shade of brown. The paint shall be water-based. Calculated per m2 of spread surface of the flashings.				
		m2	8.00		
<b>Joinery Work Total:</b>					
<b>VII METAL WORK</b>					
1	Manufacture of aluminium decorations. Weight: 12-13kg Finishing: dark, black, anodized Height: approx. 70cm Width: approx. 48cm Suspended on consoles in two places, each with three anchors in the wall.				

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
		pcs.	1.00		
2	Restoration of wrought iron flag holders. Petty metalwork repairs shall be done if needed. New casts shall have smooth edges, any welding shall be perfectly sanded. Old paint shall be stripped by sandblasting. Impregnation shall be performed after repairs, followed by the application of two coats of anticorrosion coating and finally painted in matt black enamel varnish. Calculated per piece of workshop prepared, painted and mounted flag holder.				
	street facade	pcs.	1.00		
				<b>Metal Work Total:</b>	
<b>VIII SHEET METAL WORK</b>					
1	<b>Horizontal gutters.</b> Procurement of materials, workshop manufacture and mounting of new horizontal suspended 12cm semi-circular gutters made of 0.55mm thick brown plasticized sheet metal, with sufficient spread width to be fixed onto the rafter. Carriers modelled after the present ones shall be used for mounting. Slope towards the spouts shall be min 0.5%.				
		m'	40.00		
2	<b>Apron flashing.</b> Procurement of materials, workshop manufacture and mounting of apron flashing made of 0.55mm thick brown plasticized sheet metal between the gutters and lower edge of roofing tiles. Connection in the direction of the water flow shall be made in the form of double tongue and groove. Apron flashing spread width shall be up to 50cm. Calculated per m'.				
		m'	40.00		
3	<b>Vertical spouts.</b> Procurement of materials, workshop manufacture and mounting of new circular vertical spouts of diameter approx. 10cm made of 0.55mm thick brown plasticized sheet metal, modelled after the existing ones. Carriers modelled after the present ones and painted brown shall be used for mounting the spouts. The price shall include the manufacture of a water collector at the connection with the gutters, modelled after the existing one. Dismounting of existing spouts is included in a separate item. Price per m'.				
		m'	24.00		
4	<b>Fascia.</b> Flashing roof edges and fascia with galvanized sheet metal, spread width (SW) up to 40cm, 0.60mm thick, in brown. Flashing shall be done according to the design, detail and the Designer's instructions. Calculated per m' of roof edge.				
		m'	27.00		
5	<b>Flashing the chimney and ventilation caps.</b> Flashing the chimney and ventilation caps with galvanized sheet metal, spread width (SW) up to 60cm, 0.60mm thick, in brown. The sheet metal shall be raised by no less than 20cm up the chimney walls. The edge of the sheet metal shall be inserted into the brick joint. Chimney flashing shall be done according to the detail and the Designer's instructions. Calculated per m' of outer chimney edge.				
		m'	12.00		
6	<b>Cap roof cover.</b> Covering the roof with 0.80mm thick plasticized sheet metal in brown. Covering shall be done according to the design, detail and the manufacturer's and Designer's instructions. Calculated per m2 of covered surface area.				
		m2	3.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
7	<b>Manufacture and mounting of ventilation heads, 100mm in diameter, made of 0.80mm thick plasticized sheet metal, modelled after the existing ones.</b> Ventilation heads shall be placed on 75mm pipes. A part of the head pipe has to enter the ventilation duct by no less than 50mm and it shall be glued with silicone putty. The price shall include flashing the breaches with manufacture of slips under the roofing tiles; approximate dimensions shall be 50x50cm. Calculated per piece of ventilation head.				
		pcs.	3.00		
8	<b>Manufacture and mounting of the roof hatch flashing made of 0.70mm thick plasticized sheet metal, required spread width (SW) up to 33cm.</b> Flashing the hatch shall be done after the model of the existing one. Calculated per m' of flashings, measured along the outer side of the hatch.				
		m'	5.00		
9	<b>Manufacture and mounting of the roof hatch cover, approximate dimensions 60x60cm, made of 0.70mm thick plasticized aluminium sheet metal, modelled after the existing one.</b> The cover shall be made with necessary hinges and opening handle, modelled after the existing one. Calculated per piece of hatch cover.				
		pcs.	2.00		
<b>Sheet Metal Work Total:</b>					
<b>IX DRY MOUNT WORK</b>					
1	<b>CLADDING THE CEILING:</b> Ceilings of all floors shall be clad with 15mm GKF fire-resistant gypsum boards, complete with manufacturing a steel substructure attached to the ceiling structure by spacers. The substructure shall be made of prefabricated galvanized profiles CD 60x27mm and attached to the load bearing ceiling structure; the grille shall be cladded with gypsum boards, fully according to the design and the manufacturer's instructions. Joints shall be treated with skim coat and bandage tape as instructed by the Designer. The price shall include scaffolding. Calculated per m2 of assembled surface area. Thermal insulation, sound- and fire-proofing shall be provided in a separate item. NOTE: Connections with the wall shall be bandaged adequately so that no cracks appear.				
	cellar	m2	44.00		
	ground floor	m2	110.00		
	1st floor	m2	205.00		
		m2	359.00		
<b>Dry Mount Work Total:</b>					
<b>X FLOORING WORK</b>					
1	<b>Putting up 33x33cm floor tiles in cement mortar in the shade of TERRACOTTA.</b> The 1 <sup>st</sup> class tiles shall be set in cement mortar in a bond selected by the Designer. The sublayer shall previously be sprayed with grout. If needed the tile edges shall be additionally ground. Setting shall be flat and tiles shall be grouted. Once set, tiles shall be pointed and cleaned with sawdust. <u>The price shall include tile procurement and transportation as well as the manufacture of 10cm tall skirting.</u> Calculated per m2 of floor.				
	cellar	m2	44.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
2	<b>Tiling the staircase in 33x33cm floor tiles set in adhesive in the shade of TERRACOTTA.</b> The 1 <sup>st</sup> class tiles shall be set edge to edge in a bond selected by the Designer. If needed the tile edges shall be additionally ground. Setting shall be flat. Once set, tiles shall be pointed and cleaned with sawdust. <u>The price shall include tile procurement and transportation as well as the manufacture of 10cm tall skirting.</u> Calculated per m2 of tiles surface area.				
	cellar	m2	6.00		
3	<b>Procurement and installation of 22mm thick pine wood floor boards.</b> The 1 <sup>st</sup> class, knag-free and dry floor boards shall be manufactured according to detail and the manufacturer's instructions. The boards shall be connected tongue-and-groove and nailed into the wooden batten substructure. A 8cm tall and 2.2cm thick oak profiled skirting board shall be placed next to the walls. Connections shall be trimmed and the skirting board fixed with anchored brass screws spaced at 80cm. The skirting board shall be included in the floor price. Calculated per m2 of floor.				
		m2	38.00		
4	<b>Manufacture and placement of a 8cm tall and 22mm thick profiled pine skirting board at the connection between the floor and walls.</b> The skirting board shall be made and profiled according to detail from 1 <sup>st</sup> class, straightened and dry pine wood, and all connections shall be trimmed. The board shall be fixed to the wall with anchored brass screws spaced at 80cm. Calculated per m' of skirting board.				
		m'	60.00		
5	<b>CARPETING. Removing the existing, procurement and installation of a new CARPET on the 1<sup>st</sup> floor of the building.</b> In the shade of the existing carpet (grey). Materials shall be adequate for a public building. Compliant with EU standards, with B1 certificate. Fire retardant, anti-slip. The carpet shall possess antistatic properties which will enable easy maintenance. Light resistance shall comply with the standard DIN54004(5-6); water resistance according to standard DIN54006(3-4); frequency according to standard DIN 54021(4); furniture-proof (no wear and tear). All materials shall possess required domicile certificates according to standing standards. Calculated per m2. The price shall include moving and repositioning the existing furniture, taking out and transportation of the odl carpet. Calculated per m2 of floor.				
	ground floor	m2	90.00		
	1st floor	m2	195.00		
<b>Flooring Work Total:</b>					
<b>XI PAINT WORK</b>					
1	<b>Procurement of materials and painting facade walls and ceilings after plastering.</b> Prior to the commencement of painting the sublayer shall be dry. The insulation base coat shall be applied first. After that the facade shall be painted with two coats of silicone paint with added fibre, all necessary preparatory activities included. THE PAINT SHALL BE VAPOUR PERMEABLE and watertight, with added microfiber. The paint shall be resistant to scratches, elements and UV rays and shall be in white. Calculated per m2 of surface area of vertical wall projection regardless of the depth of various profiling. Doors and windows above 3m2 shall be deducted from the total surface area.				
	courtyard + street facade	m2	382.00		

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
2	<b>Skim coating of finely plastered interior walls and ceilings using emulsion putty.</b> All surfaces shall be sanded, cleaned and neutralised. Small damaged areas and cracks shall be checked and puttied. The walls shall be impregnated and coated three times with emulsion putty. Calculated per m2 of skim coated surface area.				
	cellar	m2	119.00		
	ground floor	m2	415.00		
	1st floor (ceilings)	m2	205.00		
3	<b>Procurement of materials and painting of interior walls and ceilings using white emulsion paint.</b> Prior to commencement of painting the sublayer shall be dry. Where there are cracks, paint shall be stripped using a spatula. The price shall include repairs of small cracks by skim coating. Calculated per m2 of surface area of vertical wall projection regardless of the depth of various profiles. Doors and windows above 3m2 shall be deducted from the total surface area.				
	cellar	m2	119.00		
	ground floor	m2	424.00		
	1st floor (ceilings)	m2	680.00		
4	<b>Stripping and painting the new wooden floor with protective compound.</b> Anti-fungi and moth coat shall be applied. Calculated per m2 of surface area.				
		m2	85.00		
<b>Paint Work Total:</b>					
<b>XII ROOFING WORK</b>					
1	<b>Battening the roof with 30-40/50mm battens spaced for the double – ‘crown’ cover with beaver-tail tiles.</b> Battening shall be done with dry, straight and high quality fir battens of optimum length. Calculated per m2, measured according to the roof slope.				
		m2	325.00		
2	<b>Placing flat beaver-tail tiles – ROOF COVERING using existing tiles that have been dismantled. Double cover system – the ‘crown cover’.</b> Tiles shall be flat, undamaged and of high quality. Galvanized sheet metal strips size 5x34cm shall be placed under the contact joints of the top two tiles that do not touch the tiles under them for the entire visible stretch. The first and last rows shall have double tiles. The price shall include procurement and mounting of clay pantile ridges in lime mortar. The price shall also include procurement of new beaver-tail tiles modelled after and of identical size as the existing ones. The quantity of new tiles is estimated at 20%. Calculated per m2 of inclined roof surface area. NOTE: actual quantities for the procurement of new tiles shall be approved and verified by the Supervisor. New tiles shall be placed towards the courtyard, from the gable/east side westward.				
	placing old tiles (approx 80%)	m2	162.50		
	procuremnt and placement of new tiles (approx 20%)	m2	162.50		
3	<b>Procurement and placement of flat beaver-tail tiles over the built sourtyard fence – the ‘crown cover’.</b> Tiles shall be flat, undamaged, of high quality and set in cement mortar as the finishing cover of the built courtyard fence. The price shall include mounting clay pantile ridges in lime mortar. Placement manner in accordance with the existing one. Fence width at ridge level shall be 30cm. Placement shall be done ‘gable style’. Calculated per m2 of placed surface area.				
		m2	30.00		
<b>Roofing Work Total:</b>					

Item No	ITEM DESCRIPTION	UoM	Quant	Price	Total
<b>XIII EQUIPMENT</b>					
1	<b>Mounting of existing street name signs and institution name sign.</b>				
		pcs.	1.00		
2	<b>Mounting of split system outdoor units in the passage i.e. in the porch portion.</b> Work shall include positioning outdoor Freon pipe and condensate drain pipe units in a place designated by the Supervisor with the approval of the competent Institute for the Protection of Cultural Monuments. The price shall include all petty consumables, Freon pipes and condensate drain pipes in the length up to 15m and insulation materials. Calculated per set.				
	street facade	pcs.	2.00		
	courtyard facade	pcs.	2.00		
3	<b>Procurement and installation of street FIXED posts by the specialised manufacturer 'Euromodul' or a product of equivalent characteristics.</b> Work shall include procurement and screw mounting of steel posts in shade 'inox AISI 304' fully according to the manufacturer's instructions. Mounting shall be done spaced at 1.5m. Calculated per piece.				
	street facade	pcs.	13.00		
<b>Equipment Total:</b>					

SUMMARY		
<b>A. PREPARATORY WORK AND DISMOUNTING &amp; DEMOLITION WORK</b>		
	I	PREPARATORY WORK
	II	DISMOUNTING & DEMOLITION WORK
		<b>A. TOTAL</b>
<b>B. CONSERVATION AND RESTAURATION WORK</b>		
	I	GROUND WORK
	II	BRICKLAYING WORK
	III	CONCRETE WORK
	IV	WEATHERPROOFING
	V	CARPENTRY WORK
	VI	JOINERY WORK
	VII	METAL WORK
	VIII	SHEET METAL WORK
	IX	DRY MOUNT WORK
	X	FLOORING WORK
	XI	PAINT WORK
	XII	ROOFING WORK
	XIII	EQWUIPMENT
		<b>B. TOTAL</b>
<b>A + B TOTAL w/o VAT</b>		

**BILL OF QUANTITIES  
FOR ELECTRICAL INSTALLATION WORK**

Item	Description	UoM	Quantity	Unit Price	Total
(1)	(2)	(3)	(4)	(5)	(6)=(5)*(4)
<b>01.00</b>	<b>CONSTRUCTION WORK</b>				
<b>01.01</b>	Dismounting old electricity installations with distribution cabinets. A part of the dismantled equipment shall be handed over to the Investor and the other part of decommissioned equipment shall be transported to the nearest landfill. The rooms shall be cleaned and prepared for the development of new electricity installations. The item shall include complete dismantling of existing equipment, which shall amount to the total of:	lump	1		
<b>CONSTRUCTION WORK TOTAL:</b>					

<b>02.00</b>	<b>DISTRIBUTION CABINETS</b>				
<b>02.01</b>	Delivery and mounting of equipment required for mounting in the metering and distribution cabinet <b>(MDC)</b> located in the place provided on the building ground floor. The metering and distribution cabinet <b>(MDC)</b> shall be of standard dimensions <b>(650x320x220)mm</b> and shall be fitted with the following required equipment: - 1 pc existing three-phase two-tariff meter equivalent to type: <b>DB2, (10-40)A, 'ENEL'</b> - 1 pc circuit breakers <b>'C25A', 3p, 'Schneider Electric'</b> Other necessary petty material (terminal strips, PVC raceways and wiring conductors) shall be taken if needed. Complete set up and connection of the equipment in the metering and distribution cabinet <b>(MDC)</b> shall amount to the total of:	complete	1		

02.02	<p>Delivery and mounting of equipment required for mounting in the main distribution cabinet (<b>MDC</b>) located in the place provided on the building ground floor. The metering and distribution cabinet (<b>MDC</b>) shall be of standard dimensions (800x600x220)mm and shall be fitted with the following required equipment:</p> <ul style="list-style-type: none"> <li>- 1pc new main switch with thermal-magnetic protection <b>NS-63/100A</b>, 'Schneider Electric'</li> <li>- 20pcs circuit breakers <b>C60N10A</b>, <b>6kA</b>, <b>1P</b>, 'Schneider Electric'</li> <li>- 16pcs circuit breakers <b>C60N16A</b>, <b>6kA</b>, <b>1P</b>, 'Schneider Electric'</li> <li>- 5 pcs circuit breakers <b>C60N16A</b>, <b>6kA</b>, <b>3P</b>, 'Schneider Electric'</li> <li>- 1pc photo relay with probe equivalent to type 'Schneider Electric'</li> <li>- 1pc contactor equivalent to type <b>LC1-D09P7</b> 'Schneider Electric'</li> <li>- 3pcs drum switch <b>K1A-001ALH</b> 'Schneider Electric'</li> </ul> <p>Other necessary petty material (terminal strips, <b>PVC</b> raceways and wiring conductors) shall be taken if needed. Complete set up and connection of the equipment in the main distribution cabinet (<b>MDC</b>) shall amount to the total of:</p>	complete	1		
02.03	<p>Delivery and mounting of equipment required for mounting in the distribution cabinet (<b>DC</b>) located in the place provided in the heating substation in the cellar. The distribution cabinet (<b>DC.TP</b>) shall be of standard dimensions (400x400)mm and shall be fitted with the following required equipment:</p> <ul style="list-style-type: none"> <li>- 6pcs circuit breakers <b>C60N10A</b>, <b>6kA</b>, <b>1P</b>, 'Schneider Electric'</li> <li>- 3pcs circuit breakers <b>C60N16A</b>, <b>6kA</b>, <b>1P</b>, 'Schneider Electric'</li> <li>- 1pc motor switch <b>GV2-ME04</b> 'Schneider Electric'</li> </ul> <p>Other necessary petty material (terminal strips, <b>PVC</b> raceways and wiring conductors) shall be taken if needed. Complete set up and connection of the equipment in the distribution cabinet (<b>DC.TP</b>) shall amount to the total of:</p>	complete	1		
02.04	<p>Delivery and mounting of equipment required for mounting in the (<b>CPC</b>) cabinet equivalent to type <b>EDB100A</b>, to be mounted at the most adequate position on the entrance porch facade. The (<b>CPC</b>) cabinet shall be fitted with the following required equipment:</p> <ul style="list-style-type: none"> <li>-3pcs fusible plugs <b>NV00-35/100A</b>, 'Schneider Electric'</li> </ul> <p>Other necessary petty material shall be taken if needed. Complete set up and connection of the equipment in the (<b>CPC</b>) cabinet shall amount to the total of:</p>	complete	1		
<b>DISTRIBUTION CABINETS TOTAL:</b>					

<b>03.00 POWER CABLES</b>
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03.01	Delivery, procurement and mounting of main power cable <b>PP00-A-4x25mm<sup>2</sup>, 1kV, Al</b> to power the building, from the nearest <b>NN-</b> post ( <b>SDC</b> ) cabinet or existing transformer station. The power cable shall be laid in a <b>0.8m</b> ditch along the entire route from the connection place to the ( <b>CPC</b> ) cabinet. The total length of the power cable shall be 50m (precise length shall be taken on site during work execution). The item shall include complete laying of power cable into a previously prepared ditch which, with the connection at both ends, shall amount to:	m.	50		
03.02	Delivery, procurement and mounting of halogen free installation cable <b>N2XH-J-3x1,5mm<sup>2</sup>,1kV,Cu</b> to power the complete cellar, ground floor and 1 <sup>st</sup> floor lighting, mounted under the plaster and where needed in <b>PNK</b> -cable trays or <b>PVC halogen free raceways</b> . Power cables shall extend from the distribution cabinet ( <b>DC.TP</b> ) in the cellar and the main distribution cabinet ( <b>MDC</b> ) on the ground floor. The average length of the installation cable was taken to be approximately <b>10m</b> as a norm. The price includes cutting grooves in walls to lay installation cables in the building which, together with mounting and connection at both ends, shall amount to:	pcs.	154		
03.03	Delivery, procurement and mounting of installation cable <b>PP00-Y-3x2,5mm<sup>2</sup>,1kV,Cu</b> to power the outdoor lighting of the fence and building facade, laid inside a <b>PVC</b> hose in a 0.8m ditch. The installation cable shall extend from the main distribution cabinet ( <b>MDC</b> ) on the ground floor. The average length of the installation cables was taken to be approximately <b>15m</b> as a norm. The price includes cutting grooves in walls to lay installation cables in the building which, together with mounting and connection at both ends, shall amount to:	pcs.	27		
03.04	Delivery, procurement and mounting of installation cable <b>N2XH-J-3x2,5mm<sup>2</sup>, 1kV, Cu</b> , to power all single phase sockets, hot water boilers, hand driers and other single phase sockets in the building, mounted under the plaster and where needed in <b>PNK</b> -cable trays or <b>PVC halogen free raceways</b> . Power cables shall extend from the distribution cabinet ( <b>DC.TP</b> ) and the main distribution cabinet ( <b>MDC</b> ) on the ground floor. The average length of the installation cable was taken to be approximately <b>12m</b> as a norm. The price includes cutting grooves in walls to lay installation cables in the building which, together with mounting and connection at both ends, shall amount to:	pcs.	33		
<b>POWER CABLES TOTAL:</b>					

<b>04.00 SOCKETS AND SWITCHES</b>
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04.01	<p>Delivery and mounting of white wall-mount single phase sockets similar to type <b>MOSAIC</b> -Legrand mounted according to items provided in the appendix to the graphic documents, consisting of the following elements:</p> <ul style="list-style-type: none"> <li>- 1pc plaster mounting box <b>2M</b>, cat No. <b>801 41</b>,</li> <li>- 1pc carrier <b>2M</b>, cat No. <b>802 51</b>,</li> <li>- 1pc socket <b>2P+E, 16A, 2M</b>, cat No. <b>772 10</b>,</li> <li>- 1pc frame <b>2M</b>, cat No. <b>788 02</b>,</li> </ul> <p>The item includes complete procurement of regular single phase sockets with mounting and connection, which amounts to the total of:</p>	pcs.	26		
04.02	<p>Delivery and mounting of double white wall-mount single phase sockets similar to type <b>MOSAIC</b> Legrand, mounted according to the scheme provided in the graphic documents, consisting of the following elements:</p> <ul style="list-style-type: none"> <li>- 1pc plaster mounting box <b>4M</b>, cat No. <b>801 49</b>,</li> <li>- 1pc carrier <b>4M</b>, cat No. <b>802 14</b>,</li> <li>- 1pc socket <b>2P+E, 16A, 2M</b>, cat No. <b>772 10</b>,</li> <li>- 1pc frame <b>4M</b>, cat No. <b>788 14</b>,</li> </ul> <p>The item includes complete procurement of double phase sockets with mounting and connection, which amounts to the total of:</p>	pcs.	5		
04.03	<p>Delivery and mounting of regular wall-mount white single pole installation switches similar to type <b>MOSAIC</b>-Legrand, mounted according to the items provided in the appendix to the graphic documents, consisting of the following elements:</p> <ul style="list-style-type: none"> <li>- 1pc plaster mounting box <b>2M</b>, cat No. <b>801 41</b>,</li> <li>- 1pc carrier <b>2M</b>, cat No. <b>802 51</b>,</li> <li>- 1pc switch <b>10A, 250V, 1M</b>, cat No. <b>770 00</b>,</li> <li>- 1pc frame <b>2M</b>, cat No. <b>788 11</b>,</li> </ul> <p>The item includes complete procurement of regular installation switches with mounting and connection, which amounts to the total of:</p>	pcs.	8		
04.04	<p>Delivery and mounting of serial wall-mount white single pole installation switches similar to type <b>MOSAIC</b>-Legrand, mounted according to the items provided in the graphic documents, consisting of the following elements:</p> <ul style="list-style-type: none"> <li>- 1pc plaster mounting box <b>2M</b>, cat No. <b>801 41</b>,</li> <li>- 1pc carrier <b>2M</b>, cat No. <b>802 51</b>,</li> <li>- 2pcs switch <b>10A, 250V, 1M</b>, cat No. <b>770 10</b>,</li> <li>- 1pc frame <b>2M</b>, cat No. <b>788 02</b>,</li> </ul> <p>The item includes complete procurement of serial installation switches with mounting and connection, which amounts to the total of:</p>	pcs.	5		
04.05	<p>Delivery and mounting of multiway wall-mount white installation switches similar to type <b>MOSAIC</b>-Legrand, mounted according to the items provided in the appendix to the graphic documents, consisting of the following elements:</p> <ul style="list-style-type: none"> <li>- 1pc plaster mounting box <b>2M</b>, cat No. <b>801 41</b>,</li> <li>- 1pc carrier <b>2M</b>, cat No. <b>802 51</b>,</li> <li>- 2pcs switch <b>10A, 250V, 1M</b>, cat No. <b>792 01</b>,</li> <li>- 1pc frame <b>2M</b>, cat No. <b>788 02</b>,</li> </ul> <p>The item includes complete procurement of multiway switches with mounting and connection, which amounts to the total of:</p>	pcs.	9		

04.06	Delivery and mounting of single phase wall-mount sockets with protective covers and <b>IP55</b> protection, mounted in the upstairs toilets according to the scheme provided in the appendix to the graphic documents. Single stage weatherproof sockets shall be equivalent to type <b>PLEXO-Legrand</b> whici, together with mounting, shall amount to the total of:	pcs.	2		
<b>SOCKETS AND SWITCHES TOTAL:</b>					

<b>05.00 LIGHTING</b>					
05.01	Delivery and mounting of ceiling-mount lights ( <b>S1</b> ) with housing and a transparent diffuser made of injected <b>UV</b> stabilised <b>V2</b> self-extinguishing halogen-free polycarbonate, polyurethane watertight seal, white reflector and electronic interconnecting device equivalent to type <b>BS111 228-2xT16/28W/840/G5, 230V, IP65</b> , manufactured by <b>BUCK-BEGHELLI</b> . The lighting fixtures shall be delivered with light sources and shall be mounted on the ceilings of all rooms provided for in the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	9		
05.02	Delivery and mounting of circular direct light ceiling-mount lights ( <b>S2</b> ) with steel sheet metal housing painted white with a diffuser made of opal glass and electronic interconnecting device equivalent to type <b>CASTELO226-2xFLC/26W/840/G24d(q)3" 230V, IP44</b> , manufactured by <b>BUCK-BEGHELLI</b> . The lighting fixtures shall be delivered with light sources and shall be mounted on the ground floor and 1 <sup>st</sup> floor toilet ceilings, according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	9		
05.03	Delivery and mounting of a direct light rail-mount <b>LED</b> light ( <b>S3</b> ) with passive cooling, a compact sinngle-piece cast aluminium housing finished with epoxy-polyester powder protection polymerised at 180°, small grain texture and precise light beam direction with rotation ability along two axes, equivalent to type <b>AIRO LED SLE, 1000LM, 4000K, 28°, 230V, IP20</b> , manufactured by <b>BUCK</b> . The lighting fixtures shall be delivered with light sources and complete mounting kits and shall be mounted on the ceiling in the 1 <sup>st</sup> floor reading room, according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs. pl.	1		

05.04	Delivery and mounting of wall mount light ( <b>S4</b> ) with a extruded aluminium housing with anodized finish in the shade of natural aluminium with console carriers and the ability of directing the light beam and a transparent diffuser made of polyurethane, equivalent to type: <b>ANCORA W-1xT16/14W/840/G5, 30V, IP68</b> , manufactured by <b>BUCK</b> . The lighting fixture shall be delivered with the light source and shall be mounted according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	1		
05.05	Delivery and mounting of wall mount light ( <b>S5</b> ) with a extruded aluminium housing with anodized finish in the shade of natural aluminium with console carriers and the ability of directing the light beam and a transparent diffuser made of polyurethane, equivalent to type: <b>ANCORA W-1xT16/28W/840/G5, 30V, IP68</b> , manufactured by <b>BUCK</b> . The lighting fixture shall be delivered with the light source and shall be mounted according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	1		
05.06	Delivery and mounting of wall mount light ( <b>S6</b> ) with a extruded aluminium housing with anodized finish in the shade of natural aluminium with console carriers and the ability of directing the light beam and a transparent diffuser made of polyurethane, equivalent to type: <b>ANCORA W-1xT16/49W/840/G5, 30V, IP68</b> , manufactured by <b>BUCK</b> . The lighting fixture shall be delivered with the light source and shall be mounted according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	13		
05.07	Delivery and mounting of direct light ceiling-mount lights ( <b>S7</b> ) with steel sheet metal housing finished by white epoxy-polyester powder protection and a highly luminous double parabolic <b>Dark Light</b> raster <b>UGR&lt;19, L&lt;1.000cd/m<sup>2</sup></b> with an electronic interconnection device equivalent to type <b>ORIEN DL 224-2xT16/24W/840/G5 230V, IP20</b> , manufactured by <b>BUCK</b> . The lighting fixtures shall be delivered with light sources and shall be mounted on ground floor and 1 <sup>st</sup> floor office ceilings, according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	42		

05.08	Delivery and mounting of ceiling-mount lights ( <b>S8</b> ) with housing made of <b>UV</b> stabilised polycarbonate with a silver finish, matte diffuser made of <b>UV</b> stabilised <b>V2</b> self-extinguishing vandal resistant polycarbonate and a magnetic interconnecting device equivalent to type: <b>1260VEGA-2xTC-L/18W/840/2G11,230V, IP65, IK08</b> , manufactured by <b>BUCK-DISANO</b> . The lighting fixtures shall be delivered with light sources and shall be mounted in all rooms they were planned for according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	15		
05.09	Delivery and mounting of <b>Ø235mm</b> direct light circular ceiling-mount lights ( <b>S9</b> ) with a grey ring and an opal <b>UV</b> stabilised diffuser and an electronic interconnecting device equivalent to type: <b>OFFICE-2/226-2xFLC-D/E/26W/840/G24q-3, 230V, IP44</b> , manufactured by <b>BUCK-FOSNOVA</b> . The lighting fixtures shall be delivered with light sources and shall be mounted on the ground floor toilet ceilings, according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	36		
05.10	Delivery and mounting of ceiling-mount fluorescent lights ( <b>S10</b> ), <b>PANIK</b> , similar to type: <b>BPN-ASTETICA - SE/3h/T16/G5/108-1x8W, IP40</b> , manufactured by <b>BUCK</b> , tested for operation in humid environments. Panic lights shall have a constantly powered <b>accu-battery</b> so that they can operate for no less than 3 hours without power in case of a power failure. Lights shall be ceiling- or wall-mount throughout the building, according to the scheme given in the appendix to the graphic documents. Material and labour shall be paid completely, which shall amount to:	pcs.	25		
05.11	Delivery and mounting of uplights ( <b>S11</b> ) to light the outdoor facades of the building from the floor, with grey aluminium housing, equivalent to type: <b>1678 Floor inox-adjustabile Power LED - COB/system/19W", 230V, IP67, IK10</b> , manufactured by <b>DISANO</b> . The lighting fixtures shall be delivered with light sources and shall be mounted in special concrete floor casings at the distance of 1m from the facade, according to the scheme given in the appendix to the graphic documents. The construction of concrete casings, material and labour shall be paid completely, which shall amount to:	pcs.	12		

05.12	Delivery and mounting of uplights ( <b>S12</b> ) to light the fence in the courtyard of the building from the floor, with grey aluminium housing, equivalent to type: <b>1670 Microfloor-Master LED/3W", 230V, IP67, IK08</b> , manufactured by <b>DISANO</b> . The lighting fixtures shall be delivered with light sources and shall be mounted in special concrete floor casings at the distance of 1m from the fence, according to the scheme given in the appendix to the graphic documents. The construction of concrete casings, material and labour shall be paid completely, which shall amount to:	pcs.	21		
<b>LIGHTING TOTAL:</b>					

<b>06.00 LIGHTNING ROD INSTALLATION</b>					
06.01	Reconstruction of complete lightning rod installation on the roof of the building after the replacement of the roof cover; inspection of the remaining existing lightning rod installation with replacement of all worn parts. The item includes lightning rod installation testing by the authorised Contractor or authorised competent Institute, which shall amount to the total of:	lump	1		
<b>LIGHTNING ROD INSTALLATION TOTAL:</b>					

<b>07.00 CERTIFICATES OF COMPLIANCE</b>					
07.01	Finishing complete electricity installations and acquisition of adequate certificates of compliance for all installed equipment. Measurements of the installation and grounding by the competent Institute and acquisition of the measurements study as well as commissioning of the produced electricity installations shall amount to the total of (lump sum):	pcs.	1		
<b>CERTIFICATES OF COMPLIANCE TOTAL:</b>					

**S U M M A R Y  
OF ELECTRICAL INSTALLATION WORK:**

<b>01.00</b>	<b>CONSTRUCTION WORK</b>
<b>02.00</b>	<b>DISTRIBUTION CABINETS</b>
<b>03.00</b>	<b>POWER CABLES</b>
<b>04.00</b>	<b>SOCKETS AND SWITCHES</b>
<b>05.00</b>	<b>LIGHTING</b>
<b>06.00</b>	<b>LIGHTNING ROD INSTALLATION</b>
<b>07.00</b>	<b>CERTIFICATES OF COMPLIANCE</b>
<b>HIGH VOLTAGE ELECTRICAL INSTALLATION TOTAL:</b>	

prices do not include VAT

I	AUTOMATIC FIRE ALARM				
No	Work Description	UoM	Quant	Price	Total

*The entire installation material shall be made of LSFR0H materials (without halogen materials, fire retardant, when exposed to fire releases fumes of low density).*

*Items shall include procurement and delivery of installation material and equipment, laying cables and mounting the equipment as well as their connection to the system.*

## 1.1 SYSTEM DEVICES

1.1.1	Analogue adressable fire alarm central (Quadel Alpha 1100-1L or similar), with the following characteristics and equipment: - 1 adressable line, expandable - 128 elements per line - 16 alarm zones minimum - 2 controlled outputs for alarm sounds - 4 programmable powerless contacts - 4 digital inputs - LCD display, LED signalling, beeper - event memory - grid power: 230VAC/24VDC - backup battery power 2x 12VDC 12Ah - Compliance with standard SRPS EN 54-2,4.	pcs.	1		
1.1.2	Analogue addressable photoelectric smoke sensor (Hochiki ALG-EN or similar) complete with base (individual sensitivity threshold setting in %/m, auto-compensation for fouling, flat response technology, nearly equal sensitivity to all types of smoke). Compliance with standard SRPS EN 54-7.	pcs.	18		
1.1.3	Analogue addressable heat sensor (Hochiki ACB-E or similar) complete with base (combined thermal maximum/termal differential sensor, individual setting of alarm thresholds in degrees of C, i.e. C/min). Compliance with standard SRPS EN 54-5.	pcs.	3		
1.1.4	Addressable indoor mount manual fire alarm with integrated short circuit isolator (Hochiki HCP-E/SCI or similar) including surface mount box and plastic protecting cover. Compliance with standard SRPS EN 54-11, 17.	pcs.	4		
1.1.4	Addressable outdoor mount manual fire alarm with integrated short circuit isolator (Hochiki HCP-E/SCI or similar) including surface mount box and plastic protecting cover, IP66. Compliance with standard SRPS EN 54-11, 17.	pcs.	1		
1.1.6	Conventional alarm sounder beacon with strobe light, with the following characteristics (Hochiki Banshee Excel Lite IP66 or similar): - 32 different sounds (440-2900Hz) - sound level up to 110dB@1m - consumption up to 40mA - operating power: 18-35VDC - IP66 - SRPS EN 54-3,23	pcs.	1		

- 1.1.7 Conventional alarm sounder beacon with the following characteristics (Hochiki Banshee Excel or similar): pcs. 3  
 - 32 different sounds (440-2900Hz)  
 - sound level up to 110dB@1m  
 - consumption up to 80mA  
 - operating power: 18-35VDC  
 - IP45  
 - SRPS EN 54-3

- 1.1.9 Telephone alarm sounder T-VOX (ability to split into 2 independent channels with 4 telephone numbers each, 30 sec voice messaging) pcs. 1

**1.2 INSTALLATION MATERIAL AND EQUIPMENT**

- 1.2.1 Corrugated LSFR0H installation pipe, diameter 13-16mm. The item includes installation of required junction boxes, clamps and extensions. m' 180

- 1.2.2 Installation cable J-H(St)H 2x2x0,8mm m' 320

- 1.2.3 Installation cable JE-H(St)H 2x2x0,8mm FE180E30 with clamps in class E30 m' 50

- 2.6 Plate to tag addressable elements pcs. 29

**1.3 OTHER**

- 1.3.1 Petty consumables and unforeseen costs. lump 1

- 1.3.2 After the completion of the job and execution of all types of work it is required to provide the following: pcs. 1  
 - An expert's finding of the inspection, measuring and testing electrical installations of the building in accordance with the Rulebook on technical norms for low voltage electrical installations ("Official Gazette of the SFRY" Nos. 53/88, 54/88, 28/95), i.e. in compliance with the standard SRPS EN 60364-6  
 - A deposition that the fire alarm system installation was performed in accordance with design documents  
 - According certificates of the alignment between the electricity distribution and the equipment that is the subject of the design  
 - Programming the central, functional testing and commissioning  
 - Education of system operators

- 1.3.3 Development of the as-built design of executed fire alarm system installation pcs. 1

**I TOTAL:**

II INTRUSION ALARM SYSTEM					
No	Work Description	UoM	Quant	Price	Total

*Celokupan instalacioni materijal je od LSFR0H materijala (bez halogenih elemenata, ne širi požar,*

**2.1 SYSTEM DEVICES**

2.1.1	Alarm central with the following characteristics and equipment: - metal casing connected to the main potential equaliser system - 192 zones - min 8 partitions - min 4 programmable outputs - min 8 on-board zones - integrated access control function - grid power: 230VAC - backup power 12V/7Ah - anti-tamper switch (Paradox Digiplex Evo192 or similar) <i>Procurement, delivery, mounting and connection of the following equipment with the alarm central:</i>	pcs.	1
2.1.2	Digital motion detector with a dula element; double PIR element; Digital Dual Edge Processing; 110° viewing angle, 12mx12m, complete with wall/ceiling mount bracket (Paradox DG55 or similar)	pcs.	5
2.1.3	Addressable digital infrared motion detector, dula element, anti-tamper switch, 12m range, 110° viewing angle, metal shield (protection against RF/EM disturbance) complete with detector wall/ceiling mount bracket (Paradox DM50 or similar)	pcs.	7
2.1.4	Magnetic contact for mounting in the wooden door	pcs.	2
2.1.5	Touch sense code keypad, LED backlight, 32 character LCD display, dust resistant, 1 zone, 1 PGM. (Paradox K656 or similar)	pcs.	3
2.1.6	Outdoor anti-sabotage sound beacon with own backup power (battery) and with strobe lamp 120dB/1m	pcs.	1
<b>2.2 INSTALLATION MATERIAL AND EQUIPMENT</b>			
2.2.1	Corrugated installation pipe, diameter 13-16mm. The item includes installation of required junction boxes, clamps and extensions.	m'	120
2.2.2	Installation cable J-H(St)H 3x2x0,6mm	m'	180
2.2.3	Installation cable J-H(St)H 1x2x0,6mm	m'	10
<b>2.3 OTHER</b>			
2.3.1	Petty consumables and unforeseen costs.	lump	1
2.3.2	After the completion of the job and execution of all types of work it is required to provide the following: 1. Programming the the central, functional testing and commissioning 2. Certificate of compliance for functional system testing 3. Education of system operators	pcs.	1
1.13	Development of the as-built design of executed intrusion alarm system installation	pcs.	1

**LOW VOLTAGE ELECTRICITY SUMMARY**

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I AUTOMATIC FIRE ALARM

II INTRUSION ALARM SYSTEM

## SUMMARY

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I Architecture and Construction Work

II High Voltage Electrical Installation

III Low Voltage Electrical Installation