

BUILDING ON THE CADASTRAL LOT NO. 713, MISLOĐIN, OBRENOVAC

BILL OF QUANTITIES

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
I EARTH WORKS					
1.	Clear the terrain before the start of the building, including removal of existing non-load bearing layer and excavation of the surface layer of humus in accordance with the geo-technical study. After removing the non-load bearing layer, measure and mark the structure. The amount of soil needed for backfilling shall be stored at the construction site landfill. Calculation per m2 of excavated soil.	m ²	1,034.00		
2.	Excavate III category soil for strip foundations of the building . The excavation shall be performed using machines, or manually where necessary to bring the terrain to the designed position. Store the necessary amount of soil on the construction site landfill. Calculation per m3 of compacted excavated soil.	m ³	380.00		
3.	Excavate III category soil using machines for basement rooms of the building and set the soil aside and transport it to the construction site landfill. The price shall include the necessary manual planning of excavation base. The necessary amount of soil for backfilling shall be stored at the construction site landfill. Calculation per m3 of compacted excavated soil.	m ³	122.10		
4.	Excavate III category soil for ramp and staircase foundations positioned adjacent to the main entrances to the building . The excavation shall be performed using machines, or manually where necessary to bring the terrain to the designed position. Store the necessary amount of soil on the construction site landfill. Calculation per m3 of compacted excavated soil.	m ³	120.00		
5.	Excavate III category soil for retaining walls of the building. The excavation shall be performed using machines, or manually where necessary to bring the terrain to the designed position. Store the necessary amount of soil on the construction site landfill. Calculation per m3 of compacted excavated soil. Calculation per m3 of excavated compacted soil.	m ³	23.61		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
6.	Purchase the material, transport, fill and spread the gravel for base layer d=10 cm underneath the strip foundations and the floor slab of the building. The price shall include compacting the layer to the level of compactness stipulated in the design. Calculation per m3 of spread and compacted surface.				
	Underneath the strip foundations	m ³	26.10		
	Underneath the floor slab	m ³	73.74		
7.	Purchase the material, transport, fill and spread the gravel for the base layer d=10 cm under the staircase foundations and ramps positioned adjacent to the main entrances to the building . The price shall also include compacting the layer to the level of compactness stipulated in the design. Calculation per m3 of spread and compacted surface.				
		m ³	3.60		
8.	Purchase the material, transport, fill and spread the gravel for the base layer d=10 cm under the pavement and the inclined staircase slab positioned adjacent to the building . The price shall include also compacting the layer to the level of compactness stipulated in the design using machine tools. Calculation per m3 of spread and compacted surface.				
		m ³	30.00		
9.	Backfill around the basement walls and foundation walls using excavated soil, to the terrain level stipulated in the design. The price shall include necessary compacting in layers using machine tools. Calculation per m3 of backfilled and compacted surface.				
		m ³	205.00		
10.	Backfill under the pavement, to the designed terrain level using excavated soil. The price shall also include the necessary compacting in layers using machine tools. Average height of backfill shall be around 60 cm. Calculation per m3 of backfilled and compacted surface.				
		m ³	180.00		
11.	Backfill under the access staircase and ramps at the entrance of the building using excavated soil, to the terrain level stipulated in the design. The price shall cover also the necessary compacting in layers Ms=35Mpa. Average backfill height shall be around 85 cm. Calculation per m3 of backfilled and compacted surface.				
		m ³	35.00		
12.	Transport of excess excavated soil within the construction site landfill. The price shall include loading, transport, unloading and return to the construction site. Calculation per m3 of transported soil in compacted state.				
		m ³	80.00		

TOTAL EARTH WORKS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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II CONCRETE WORKS

1.	Purchase material, transport and install compacted concrete underneath the strip foundations . Compacted concrete shall be d=5 cm thick. The upper surface of the concrete must not be uneven and damaged. The price shall include the necessary formwork. Calculation per m2.	m ²	260.00		
2.	Purchase material, transport and build the concrete in AB foundation strips The concrete shall be MB 20. The works shall be fully performed in accordance with the main construction design, general description and valid Rulebook for concrete and reinforced concrete. The price for the formwork is included. Calculation per m3.	m ³	120.00		
3.	Build reinforced concrete foundation walls of the basement MB 30. Make the formwork for the foundation walls and reinforce in accordance with the design, details and static calculation. The concrete shall be built in and treated as per regulations. The price shall also include the formwork. Calculation per m3 of concrete.	m ³	13.86		
4.	Purchase material, transport and build in the concrete in the AB floor slab d=10 cm, in appropriate formwork. Concrete shall be MB 30. Works shall be fully performed in accordance with the main construction design, general description and valid Rulebook for concrete and reinforced concrete. Calculation per m2.	m ²	737.42		
5.	Make reinforced concrete beams MB 30. Make the concrete formwork and reinforce the concrete in accordance with the design, details and static calculations. The concrete shall be built in and treated as per regulations. The price shall include the formwork. Calculation per m3 of foundations.	m ³	33.26		
6.	Make armed concrete columns , MB 30. Make the formwork and reinforce columns in accordance with the project, details and static calculations. Calculation per m3 of columns.				
	basement	m ³	4.92		
	ground floor	m ³	10.13		
	first floor	m ³	5.37		
7.	Make reinforced concrete bond beams MB 30. Make the formwork and reinforce bond beams in accordance with the design, details and static calculations. The concrete shall be built in and treated in accordance with the regulations. The price shall include the formwork, reinforcement and auxiliary scaffolding. Calculation per m3 of bond beam.				
	vertical bond beams	m ³	21.28		
	horizontal bond beams	m ³	43.81		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
8.	Make reinforced concrete access staircases, landings, ramps and planting boxes at the main entrances to the building, using MB 30 concrete. Make formwork for inclined slabs, stairs, ramps and reinforce using Q-188 mesh in the lower zone of the slab and two-sided Q-132 for the walls. Note: Make protective concrete curbs (stops) dimensions 5x5 cm. The concrete shall be built in and treated in accordance with the regulations. The price shall include reinforcement. Calculation per m3 of concrete.				
	Block one	m ³	7.07		
	Block two	m ³	19.67		
	Block three	m ³	6.61		
9.	Make reinforced concrete inclined slabs and stairs of the indoor staircase , using MB 30 concrete. Make the concrete form for inclined slabs and stairs and reinforce in accordance with the design, details and static calculations. The price shall include formwork, props and auxiliary scaffolding. Calculation per m3 of concrete.				
	Floor slabs on the part of the hallway and inclined staircase slab (Blocks I and III) d=16 cm with stairs	m ³	10.61		
	Inclined staircase slab (Block II) d=12 cm with stairs	m ³	2.47		
10.	Purchase, transport and make the floor structure. Ground floor ceiling shall be made of fert beams and filler with concrete d=16+4 cm thick with all the necessary props and formwork. Use concrete MB 30. Calculation per m2 of complete structure.	m ²	1,542.48		
11.	Make reinforced concrete MB 30 slab in block two, between the apartment no. C4 loggia and common room. Make the formwork with props and reinforce in accordance with the design, details and static calculations. The concrete shall be built in and treated as per regulations. Calculation per m3 of cast slab.	m ³	0.22		
12.	Make reinforced concrete brand MB 30 slab above the wind protection area. Make concrete forms with props and reinforce slabs in accordance with the project, details and static calculation. Concrete shall be built in and treated as per regulations. Calculation per m3 of cast slab.	m ³	0.54		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
13.	Make pavements positioned adjacent to the building using light reinforced concrete, d=10 cm thick, brand MB 20. The pavement shall be reinforced using mesh reinforcement Q-188 in the lower zone. The price shall include reinforcement. Calculation per m2 of pavement.	m ²	200.00		
14.	Make inclined slabs and stairs of the outdoor staircase positioned adjacent to the building, using light reinforced concrete, d=10 cm thick, brand MB 20. Make the staircase form and reinforce slabs using Q-188 mesh in the lower zone. The concrete shall be built in and treated as per regulations. Calculation per m2.	m ²	7.00		
15.	Make reinforced lintels above doors and windows. Make formwork and reinforce lintels in accordance with the details and static calculations. The concrete shall be built in and treated as per regulations. The price shall include the formwork, props and auxiliary scaffolding. Calculation per m3.	m ³	15.67		
16.	Make reinforced concrete MB 20 foundations for retaining walls. Make the formwork and reinforce foundations in accordance with the design, details and static calculations. Pour concrete over spread gravel in a layer 10 cm thick. The concrete shall be built in and treated as per regulations. The price shall include the formwork and the gravel layer. Calculation per m3.	m ³	3.44		
17.	Make smooth reinforced concrete MB 20 retaining walls. Make fair faced shuttering using fillets towards the visible side of the retaining wall and reinforce in accordance with the project, details and static calculations. The concrete shall be built in and treated as per regulations. The price shall include the shuttering, beams, props and auxiliary scaffolding. Calculation per m3.	m ³	3.73		

TOTAL CONCRETE WORKS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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III REINFORCEMENT WORKS

1.	<p>Building.</p> <p>Purchase material, transport, straighten, cut bend and install reinforcement (B500B, MA 500/600) in the formwork according to the details in the static calculations.</p> <p>Concrete steel shall meet all the valid standards as well as relevant provisions of the valid Rulebook for concrete and reinforced concrete. The quantity of reinforcement shall be based on plans and specifications of the reinforcement.</p> <p>Calculation per kg of completely assembled and installed reinforcement.</p>				
	B500B	kg	22,016.00		
	MA500/600	kg	8,813.00		
2.	<p>Retaining walls.</p> <p>Purchase material, transport, straighten, cut, clean, bend and install reinforcement (B500B, MA 500/600) in the formwork in accordance with the details in the static calculations.</p> <p>Concrete steel shall meet the valid standards as well as relevant provisions of the valid Rulebook for concrete and reinforced concrete. The quantity of reinforcement shall be based on plans and reinforcement specification.</p> <p>Calculation per kg of completely assembled and installed reinforcement.</p>				
		kg	300.00		

TOTAL REINFORCEMENT WORKS					
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IV MASONRY WORKS

1.	<p>Build foundation walls using concrete blocks in cement mortar, in 1:3 proportion. Wet the blocks before building.</p> <p>The price shall include auxiliary scaffolding.</p> <p>Calculation per m2 of wall.</p>				
	thickness d=25 cm	m ³	64.98		
	thickness d=20 cm	m ³	45.78		
2.	<p>Build the protection wall over waterproofing in the basement, on the outside, using 12 cm thick brick.</p> <p>Use solid brick in cement mortar 1:3 and make reinforced concrete bond beam.</p> <p>Calculation per m2 of completed item together with the sand and concrete bond beam.</p>				
		m ²	70.42		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
3.	Build protection wall over waterproofing in the basement, on the outside, using 12 cm thick brick in the second block, axis 13 underneath the staircase. Use solid brick in cement mortar 1:3 and make reinforced concrete bond beam. Calculation per m2 of completed item together with the sand and concrete bond beam.	m ²	5.98		
4.	Purchase the material, transport and build exterior walls and attic using aerated concrete blocks Ytong, d=25 cm thick. Adhere to technical specifications and normatives regulating this type of works, as well as the product instructions. The price shall also include props and formwork. Calculation per m3 completed wall.				
	Basement	m ³	14.74		
	Ground floor	m ³	73.53		
	Floor	m ³	74.80		
	Attic	m ³	31.70		
5.	Purchase material, transport and build interior walls between apartments and hallway using aerated concrete blocks Ytong, d=25 cm thick. Adhere to technical specifications and normatives regulating this type of works, as well as the product instructions. The price shall also include props and formwork. Calculation per m3 completed wall.	m ³	36.91		
6.	Purchase material, transport and build interior load bearing walls and attic walls (on the building dilatation) using thermal blocks d=20 cm thick and lime cement mortar P 1:3:9. The price shall also include the making of AB horizontal bond beams in the wall, with reinforcement. Adhere to technical specifications and normatives regulating this type of works. Calculation per m2.				
	Basement	m ²	48.70		
	Ground floor	m ²	294.65		
	Floor	m ²	295.57		
	Attic	m ²	32.00		
7.	Purchase material, transport and build partition walls using thermal clay blocks d=12 cm thick, in lime cement mortar P 1:3:9. The price shall also include the making of horizontal bond beams in the wall, with reinforcement. Adhere to technical specifications and normatives regulating this type of works. Calculation per m2 of completed wall.				
	Basement	m ²	17.37		
	Ground floor	m ²	191.42		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
	Floor	m ²	227.77		
8.	Purchase materials, transport and build partition walls using solid brick d=12 cm thick with lime cement mortar P 1:3:9. The price shall also include the making of AB horizontal bond beams in the wall, with reinforcement. Adhere to technical specifications and normatives regulating this type of works. Calculation per m2 of completed wall.				
	Basement	m ²	16.93		
	Ground floor	m ²	107.12		
	Floor	m ²	117.05		
9.	Purchase material, transport and build lining wall, using solid brick d=7 cm thick and lime cement mortar P 1:3:9. The price shall also include the making of AB horizontal bond beams within the wall, with reinforcement. Adhere to technical specifications and normatives regulating this type of works. Calculation per m2 of completed wall.				
	Lining in bathrooms	m ²	42.98		
	Lining in kitchens	m ²	56.43		
10.	Purchase material, transport and build in cement screed. Cement screed shall be placed over floor slab, waterproofing and thermal insulation. Build fibres in the screed to prevent cracking. Calculation per m2.				
	Thickness d= 7-9 cm (loggia on the ground)	m ²	20.08		
	Thickness d=6 cm (floor on the ground / apartments, storage rooms, hallway)	m ²	603.44		
	Thickness d=4-8 cm (floor on the ground in front of the main entrances)	m ²	44.75		
	Thickness d=4 cm (loggia / common room)	m ²	2.16		
	Thickness d=4 cm (apartments/floors)	m ²	610.32		
	Thickness d=4-6 cm (loggia)	m ²	26.89		
	Thickness d=4-7 cm (on the roof above second entrance)	m ²	3.96		
	Thickness d=7 cm (hallway)	m ²	42.67		
	Thickness d=3 cm (staircase)	m ²	48.49		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
11.	Purchase material, transport and build three-layer chimney ducts using prefabricated elements, with lime cement mortar and finishing cap. The chimney shall consist of inside fireproof pipe, mineral wool strip and shroud. The price shall include all the work necessary for the completion of works. Adhere to technical specifications and normatives regulating this type of works. Calculation per m1.	m1	84.95		
12.	Purchase material, transport and build lining wall, using solid brick d=12 cm thick and lime cement mortar P 1:3:9. The price shall also include the making of AB horizontal bond beams within the wall, with reinforcement. Adhere to technical specifications and normatives regulating this type of works. Calculation per m2 of completed wall.	m ²	76.64		
13.	Mortar interior walls using lime cement mortar in two layers. Before the mortar clean the surfaces and spray with milk. The first, ground, layer shall be made using lime cement mortar in a layer up to 2 cm thick using screened "number one" gravel and lime. Keep stirring the mortar to prevent the lime milk from separating. Mortar shall be placed over wetted surface and cut for better placement of the second layer. The second layer shall be made using fine and clean sand, without any sludge or organic matter. Float, wet and even out using small floaters. Mortared surfaces must be flat without cracks or waves, and edges sharp and straight. Wet the mortar in order to prevent quick drying and "burning". Calculation per m2 of mortared surface.				
	Basement	m ²	435.25		
	Ground floor	m ²	1,634.98		
	Floor	m ²	1,687.58		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
14.	Mortar using cement mortar in 1:4 proportion in two layers. Before mortaring, clean the surfaces and spray with weak cement milk. The first, ground, layer, shall be done using cement mortar 1:4 proportion up to 2 cm thick layer using screened "number one" gravel and cement. Keep stirring the mortar to prevent the cement milk from separating. Mortar shall be placed over wetted surface and cut for better placement of the second layer. The second layer shall be made using fine and clean sand, without any sludge or organic matter. Float, wet and even out using small floaters. Mortared surfaces must be flat without cracks or waves, and edges sharp and straight. Wet the mortar in order to prevent quick drying and "burning". Calculation per m2 of mortared surface.				
	Basement	m ²	64.75		
	Ground floor	m ²	315.12		
	Floor	m ²	309.04		
15.	Mortar the ceiling using lime cement mortar in two layers. Before mortaring, clean the surfaces and spray with milk. The first, ground, layer, shall be done using lime cement mortar up to 2 cm thick layer using screened "number one" gravel and lime. Keep stirring the mortar to prevent the cement milk from separating. Mortar shall be placed over wetted surface and cut for better placement of the second layer. The second layer shall be made using fine and clean sand, without any sludge or organic matter. Float, wet and even out using small floaters. Mortared surfaces must be flat without cracks or waves, and edges sharp and straight. Wet the mortar in order to prevent quick drying and "burning". Calculation per m2 of mortared surface.				
	Basement	m ²	230.00		
	Ground floor	m ²	589.47		
	Floor	m ²	592.79		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
16.	Mortar walls in between the apartments and hallway using lime cement mortar in two layers with the addition of wire lath. Place the mesh reinforcement $\phi 6$ mm with mesh size 15/15 cm over thermal insulation Heraklith boards and anchor it to the walls. Galvanized wire lath shall be tied to the mesh reinforcement and then mortared. Mortared surfaces must be flat without cracks or waves, and edges sharp and straight. Wet the mortar in order to prevent quick drying and "burning". Wet the base surface, put the first layer of mortar and cut it. The second layer shall be made using fine and clean sand, without any sludge or organic matter and placed over the first layer. Calculation per m2 of mortared surface.	m ²	176.93		

TOTAL MASONRY WORKS:

V WATERPROOFING WORKS

1.	<p>Make horizontal water proofing over the concrete base above the ground. The proofing shall be done over a completely dry and clean base. Use brush or spray sealing compound bitulite "A", on a temperature above 10 degrees. Heat the bitumen mass to a maximum of 180 degrees, keep stirring and pour it hot in a 2-3 mm layer.</p> <p>Paste the bitumen strip immediately, with 15 cm overlap.</p> <p>Use the following layers for water proofing:</p> <ul style="list-style-type: none"> - Sealing compound bitulite "A" - Hot coating using bitumen "MBH" - Kondor 3, pasted to the surface - Hot coating using bitumen "MBH" - Two layers of polyethylene foil <p>Calculation per m2 of proofing.</p>	m ²	737.42		
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No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
2.	<p>Make vertical water proofing on the part of the room with residents' storage rooms. Use brush or spray sealing compound bitulite "A", on a temperature above 10 degrees. Heat the bitumen mass to a maximum of 180 degrees, keep stirring and pour it hot in a 2-3 mm layer.</p> <p>Paste the bitumen strip immediately, with 15 cm overlap.</p> <p>Use the following layers for water proofing:</p> <ul style="list-style-type: none"> - Sealing compound bitulite "A" - Hot coating using bitumen "MBH" - Kondor 3, pasted to the surface - Hot coating using bitumen "MBH" - Two layers of polyethylene foil <p>Calculation per m2 of proofing.</p>	m ²	115.05		
3.	<p>Make vertical water proofing in block two in axis 13 under the staircase. Use brush or spray sealing compound bitulite "A", at a temperature above 10 degrees. Heat the bitumen mass to a maximum of 180 degrees, keep stirring and pour it hot in a 2-3 mm layer.</p> <p>Paste the bitumen strip immediately, with 15 cm overlap.</p> <p>Use the following layers for water proofing:</p> <ul style="list-style-type: none"> - Sealing compound bitulite "A" - Hot coating using bitumen "MBH" - Kondor 3, pasted to the surface - Hot coating using bitumen "MBH" - Two layers of polyethylene foil <p>Calculation per m2 of proofing.</p>	m ²	3.77		
4.	<p>Make horizontal water proofing over concrete slab (over common room). The proofing shall be done over a completely dry and clean base. Use brush or spray sealing compound bitulite "A", on a temperature above 10 degrees. Heat the bitumen mass to a maximum of 180 degrees, keep stirring and pour it hot in a 2-3 mm layer.</p> <p>Paste the bitumen strip immediately, with 15 cm overlap.</p> <p>Use the following layers for water proofing:</p> <ul style="list-style-type: none"> - Sealing compound bitulite "A" - Hot coating using bitumen "MBH" - Kondor 3, pasted to the surface - Hot coating using bitumen "MBH" - Two layers of polyethylene foil <p>Calculation per m2 of proofing.</p>	m ²	3.60		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
5.	<p>Purchase the material, transport and install floor and wall polymer-cement waterproofing in sanitary facilities. Waterproofing shall be placed over the floors and walls at the height of 20 cm around the edges, i.e. 100 cm around the shower. Waterproofing shall consist of cement with added polymer that prevents water penetration, keeping relatively high vapour permeability. The base (cement screed on the floors and cement mortar on the walls) should be clean, without any grease, debris, dust, etc. If necessary, before putting polymer cement mortar the surface should be evened out and wetted properly without accumulating water. Before putting it, the holes around the penetration of water and sewerage pipes through the walls should be filled. Waterproofing shall be installed in accordance with the product manual.</p> <p>Calculation per m2.</p>				
	Floors	m ²	73.29		
	Walls	m ²	56.85		
6.	<p>Purchase material, transport and install floor polymer-cement waterproofing on the part of the loggia, at the floor-wall joint - 40 cm wide on the floor and 40 cm on the skirting. Waterproofing shall consist of cement with added polymer that prevents water penetration, keeping relatively high vapour permeability. The base (cement screed on the floors and cement mortar on the walls) should be clean, without any grease, debris, dust, etc. Waterproofing shall be installed in accordance with the product manual.</p> <p>Calculation per m2.</p>	m ²	66.45		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
7.	Purchase the material, transport and install floor polymer-cement waterproofing on the entire surface of the loggia. Waterproofing shall consist of cement and with added polymer that prevents water penetration, keeping relatively high vapour permeability. The base (cement screed on the floors and cement mortar on the walls) should be clean, without any grease, debris, dust, etc. If necessary, before putting polymer cement mortar the surface should be evened out and wetted properly without accumulating water. Before putting it, the holes around the penetration of water and sewerage pipes through the walls should be filled. Waterproofing shall be installed in accordance with the product manual. Calculation per m2.	m ²	3.78		
8.	Install moisture barrier on the part of the attic structure. Moisture barrier shall be placed under a layer of mineral wool. Calculation per m2.	m ²	581.83		
9.	Install polyethylene foil as protection over the layer of mineral wool at the part of the attic structure. Calculation per m2.	m ²	581.83		
10.	Install moisture barrier on the slab above second entrance. Moisture barrier shall be placed underneath the layer of extruded polystyrene. Calculation per m2.	m ²	3.76		
11.	Place polyethylene foil as protection over the layer of extruded polystyrene on the slab above the second entrance. Calculation per m2.	m ²	3.76		
12.	Purchase and install waterproofing – synthetic PVC membrane d=1.5 mm, type SikaPlan G or equivalent, on the roof above the second entrance, mechanically fixed to the base. On the layer of 4-7 cm inclination place waterproofing membrane and then mechanically attach it using screws and fix to the base. All membrane joints shall be overlapped and welded (fully according to the recommendations of the waterproofing producers). This item includes purchase, transport and installation of the entire material. Calculation per m2 of oblique projection of the roof.	m ²	5.68		
13.	Place moisture barrier on the floor slab of the loggia above common room. Moisture barrier shall be placed under the layer of extruded polystyrene. Calculation per m2.	m ²	2.16		
14.	Place polyethylene foil as protection over the layer of extruded polystyrene on the floor slab of the loggia above the common room. Calculation per m2.	m ²	2.16		

TOTAL WATERPROOFING WORKS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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VI THERMAL INSULATION WORKS

1.	Purchase materials, transport and install extruded polystyrene d=8 cm, weight 25-35 kg/m ³ over the floor slab in the ground floor and waterproofing. Works shall be performed fully in accordance with technical specifications and normatives regulating this type of works. Calculation per m ² .	m ²	466.33		
2.	Purchase material, transport and install expanded polystyrene d=5 cm, on the dilatation part. Works shall be fully performed in accordance with technical specifications and normatives regulating this type of works. Calculation per m ² .	m ²	227.20		
3.	Purchase material, transport and install extruded polystyrene d=3cm as sound proofing. The proofing shall be placed over floor structure of the floor in the area of the apartments. Calculation per m ² .	m ²	742.66		
4.	Purchase material, transport and install extruded polystyrene d=2cm on the loggias. Insulation shall be placed over the loggia floor slabs. Calculation per m ² .	m ²	29.60		
5.	Purchase material, transport and install expanded polystyrene d=2 cm on the ceilings and edge beams of the loggias. The works shall be fully performed in accordance with the technical specifications and normatives regulating this type of works. Calculation per m ² .	m ²	60.07		
6.	Purchase material, transport and install mineral stone wool d=14cm, in the attic over the floor structure above the floor, weight 80 kg/m ³ . The works shall be fully performed in accordance with the technical specifications and normatives regulating this type of works. Calculation per m ² .	m ²	581.83		
7.	Purchase material, transport and install expanded polystyrene d=15 cm, on the ceiling above the main entrance. Expanded polystyrene shall be fixed to the ceiling structure using suitable plugs. Calculation per m ² .				
	Entrance one	m ²	3.12		
	Entrance three	m ²	3.12		
8.	Purchase material, transport and install extruded polystyrene d=2 cm. Insulation shall be placed on the slab above the second entrance. Calculation per m ² .	m ²	3.76		
9.	Purchase and install thermal insulation boards, Styropor, self-extinguishing, 3 cm thick, mass 16-20 kg/m ³ . The boards shall be cut and placed around the openings as per design, details provided and designer instructions. Calculation per m ² installed boards.	m ²	105.03		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
10.	Purchase material, transport and install Heraklith boards d=3 cm, on the walls in between the hallways and apartments. Insulation shall be placed over the layer of construction adhesive, fixed with plugs and surfaces prepared for mortar. Calculation per m2.	m ²	176.93		
11.	Purchase material, transport and install Heraklith boards d=3 cm, on the walls in between the apartments and common room. Insulation shall be placed over the layer of construction adhesive, fixed with plugs and surfaces, prepared for mortar. Calculation per m2.	m ²	30.94		
12.	Purchase material, transport and install Heraklith boards d=8 cm, on the ceiling of storage rooms. Insulation shall be placed over the layer of construction adhesive, fixed with plugs and surfaces prepared for mortar. Calculation per m2.	m ²	133.55		
13.	Purchase material, transport and install extruded polystyrene d=15 cm, weight 25-35 kg/m3 over the loggia floor slab (position above the common room). Works shall be performed fully in accordance with technical specifications and normatives regulating this type of works. Calculation per m2.	m ²	2.16		
14.	Purchase and install thermal insulation boards Styropor on the facade walls, 6 cm thick, mass 20 kg/m3. Styropor boards shall be installed as wall thermal insulation, in accordance with the details and designer instructions. Calculation per m2.	m ²	1,127.77		

TOTAL THERMAL INSULATION WORKS:
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No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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VII DOORS AND WINDOWS

1.	Purchase, transport and install interior single doors, dimensions 91/206 (calculate height when the floor is finished). The door wing shall be double veneered, the door frame shall be of solid wood – spruce. All wooden parts shall be painted using polyurethane colours chosen by the designer. Place PVC seal along the edge of the door. Install door casing next to the wall. Use polyurethane foam seal for door installation. Lock and hardware shall be domestically produced. Calculation per piece.				
	In the wall 12 cm thick	pcs	55.00		
	In the wall 20 cm thick	pcs	9.00		
2.	Purchase, transport and build in interior single doors in the bathrooms dimensions 81/206 (calculate height when the floor is finished). The door wing shall be double veneered, the door frame shall be of solid wood – spruce. All wooden parts shall be painted using polyurethane colours chosen by the designer. Place PVC seal along the edge of the door. Install door casing next to the wall. Use polyurethane foam seal for door installation. The lock and hardware shall be domestically produced. Build in wooden door sill with the door using beech wood, which will separate the tiles from the parquet floor. Insert ventilation openings in the lower part of the door. Calculation per piece.				
	In the wall 12 cm thick	pcs	22.00		
	In the wall 20 cm thick	pcs	1.00		
3.	Purchase, transport and build in exterior single entrance doors to the apartments and the common room dimensions 101/211 cm (calculate height when the floor is finished). The door wing shall be double veneered, equipped with peephole and security chain, the door frame shall be of solid wood – spruce. Install door casing next to the wall. Final finishing shall be painting using polyurethane colours chosen by the designer. Place PVC seal along the edge of the door. Build in wooden door sill using beech wood. Use polyurethane foam seal for door installation. Install hardware made of eloxed aluminium, mortise lock with cylinder and three keys, three mortise hinges per wing, chosen by the designer. The lock and hinges shall be domestically produced. Note: Entrance door to apartments must meet class I soundproofing standards, Rw=30-34 dB, according to SRPS U.J6.201. standard. Calculation per piece.				
		pcs	22.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
4.	<p>Purchase, transport and install PVC windows. The windows shall be made of highly resistant hard PVC with five-chamber profile system. The windows shall be sealed using permanently elastic EPDM rubber, welded at the corners. Window sashes shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and seal using EPDM rubber along the edges. On the inside make appropriate PVC window board. The window shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard and tilt opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire window for installation.</p> <p>All elements used to fix the windows and hardware that come into contact with Ytong blocks must be made of galvanized elements because faster metal oxidation in contact with Ytong.</p> <p>The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$.</p> <p>Note: Window handles with higher parapet shall be placed at the height ~ 1.5 m (measured from the level of finished floor).</p> <p>Calculation per piece.</p>				
	Dimensions 61/131 cm	pcs	11.00		
5.	<p>Purchase, transport and install PVC windows. The windows shall be made of highly resistant hard PVC with five-chamber profile system. The windows shall be sealed using permanently elastic EPDM rubber, welded at the corners. Window sashes and the fixed part of the window shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. On the inside make appropriate PVC window board. The window shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard tilt opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire window for installation. All elements used to fix the windows and hardware that come into contact with Ytong blocks must be made of galvanized elements because faster metal oxidation in contact with Ytong. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. The windows shall consist of a fixed lower part and opening upper part. The fixed part shall be protected from the outside using metal railing (included in separate item). The opening handle is</p>				
	Dimensions 91/231 cm	pcs	55.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
6.	<p>Purchase, transport and install PVC fixed window in the second entrance to the building. The windows shall be made of highly resistant hard PVC with five-chamber profile system. The windows shall be sealed using permanently elastic EPDM rubber, welded at the corners. Window sashes shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. On the inside make appropriate PVC window board. The window shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard and tilt opening all in accordance with doors and windows schematic. All elements used to fix the windows that come into contact with Ytong blocks must be made of galvanized elements because faster metal oxidation in contact with Ytong. Use polyurethane foam around the edges of the entire window for installation. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. Calculation per piece.</p>				
	Dimensions 210/260 cm	pcs	1.00		
7.	<p>Purchase, transport and install PVC doors. The doors shall be made of highly resistant hard PVC with five-chamber profile system. The doors shall be sealed using permanently elastic EPDM rubber, welded at the corners. Doors shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. On the inside make appropriate PVC door board. The doors shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard and tilt opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire door opening for installation. All elements used to affix the doors that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. Note: Door handles shall be placed at the height ~ 1.0 m (measured from the level of finished floor). Calculation per piece.</p>				
	Dimensions 81/231 cm	pcs	10.00		
	Dimensions 91/231 cm	pcs	35.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
	Dimensions 141/231 cm	pcs	42.00		
8.	<p>Purchase, transport and install PVC building entrance doors. The doors shall be made of highly resistant hard PVC with five-chamber profile system. The doors shall be sealed using permanently elastic EPDM rubber, welded at the corners. Doors shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. The doors shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire door opening for installation. All elements used to fix the doors that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. Note: Door handles shall be placed at the height ~ 1.0 m (measured from the level of finished floor). Entrance doors shall be equipped with interphone lock and hydraulic door closer. Calculation per piece.</p>				
	Dimensions 141/231 cm	pcs	2.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
9.	Purchase, transport and install PVC building entrance doors (position 6). Entrance doors shall be made of highly resistant hard PVC with five-chamber profile system. The doors shall be sealed using permanently elastic EPDM rubber, welded at the corners. Doors shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. The doors shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire door opening for installation. All elements used to fix the doors that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. Note: Door handles shall be placed at the height ~ 1.0 m (measured from the level of finished floor). Calculation per piece.				
	Dimensions 281/231 cm	pcs	1.00		
10.	Purchase, transport and install PVC building entrance doors with over light. Entrance doors shall be made of highly resistant hard PVC with five-chamber profile system. The doors shall be sealed using permanently elastic EPDM rubber, welded at the corners. Doors shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. The doors shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire door opening for installation. All elements used to affix the doors that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. Note: Door handles shall be placed at the height ~ 1.0 m (measured from the level of finished floor). Entrance doors shall be equipped with interphone lock and hydraulic door closer. Calculation per piece.				
	Dimensions 170/230+40 cm	pcs	1.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
11.	Purchase, transport and install PVC building entrance doors. Entrance, wind protection doors shall be made of highly resistant hard PVC with five-chamber profile system. The doors shall be sealed using permanently elastic EPDM rubber, welded at the corners. Doors shall be glazed using low emission double (Ap) see-through glass (4+15+4mm) and sealed using EPDM rubber along the edges. The doors shall be equipped with suitable hardware in accordance with the opening method with two hinges vertically and mechanism for standard opening all in accordance with doors and windows schematic. Use polyurethane foam around the edges of the entire door opening for installation. All elements used to affix the doors that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. The highest allowed heat transfer coefficient shall be $U_{wmax}=1.5W/m^2K$. Note: Door handles shall be placed at the height ~ 1.0 m (measured from the level of finished floor). Calculation per piece.				
	Dimensions 141/231 cm	pcs	3.00		

TOTAL DOORS AND WINDOWS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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VIII METAL WORKS

1.	<p>Purchase, treat and install steel columns in the second entrance of the building. Steel columns shall be treated, cleaned and coloured using anti-corrosion colour in two layers. Make supports and place steel joist on the floor slab of the wind protection area and affix it to the ceiling slab. The price shall include strutting, chase cutting, supports, removal of debris.</p> <p>All the elements for fixing the metal parts that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong.</p> <p>Calculation per meter of length.</p>	m	5.44		
2.	<p>Purchase, make and install railings on the loggia. The railing posts made of box profiles dimensions 40x20x33 mm shall be affixed to the floor slab. The handrail shall be formed using steel box profiles dimensions 40x100x3 mm. The handrail shall be fastened to the posts and on the sides anchored to the AB bond beam. Railing filling shall be of profiles dimensions 40x20x3 mm horizontally filled with flat bars 40x5 mm, fully in accordance with the metalwork schematic. Put decorative flat bars in the places where the handrail penetrates the wall and poles penetrate the floor. Clean the railing with posts and decorative flat bars, coat with read led primer and colour with metal colours, twice. All elements for fixing the metalwork that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. Calculation per meter of length.</p>				
	40x20x3mm	m	277.58		
	40x5mm	m	269.80		
	40x100x3mm	m	55.36		
3.	<p>Purchase, make and install the railing on french balconies. The handrail shall be formed using steel box profiles dimensions 40x100x3 mm. The handrail shall be fastened directly to the wall. Railing filling shall be of profiles dimensions 40x20x3 mm horizontally filled with flat bars 40x5 mm, fully in accordance with the metalwork schematic. Clean the railing coat with read led primer and paint with metal paints, twice. All elements for fixing the metalwork that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. Calculation per meter of length.</p>				
	40x20x3mm	m	302.40		
	40x5mm	m	586.46		
	40x100x3mm	m	118.65		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
4.	Make and install the railing of the indoor staircase using steel profiles and flat bars. The railing shall be made and installed in accordance with the details in the metalwork schematic. The joints and welds shall be ideally made, cleaned and ground. Before installing the railing it shall be cleaned of corrosion and dust, ground and brushed off. Put proofing coat, base colour and install the railing. After installation repaired the base colour, pre-putty and grind and paint twice. The price shall include anchors, screws, shims, scaffolding and certification of the structure and the welds. Calculation per m.				
	40x20x3mm	m	94.25		
	40x5mm	m	146.00		
	40x100x3mm	m	29.80		
4a.	Make and install the additional handrail on the indoor staircase (all three in the house), on the wall side. The handrail shall be formed using steel box profiles dimensions 40x100x3 mm and directly fastened to the wall on the 5 cm distance. Before installing the railing it shall be cleaned of corrosion and dust, ground and brushed off. Put proofing coat, base colour and install the railing. After installation repaired the base colour, pre-putty and grind and paint twice. The price shall include anchors, screws, shims, scaffolding and certification of the structure and the welds. Calculation per m.				
		m	25.60		
5.	Make and install single metal door in the storage rooms in the basement. The door shall be made of box steel profiles, in accordance with the details and instructions given by the designer. The door wing shall be coated with steel sheet on one side. Three hinges shall be placed on the wing. The hardware, hinges and cylinder lock with three keys shall be chosen by the designer. Before painting clean the metal of corrosion and dust, put proofing and base colour and then pre-putty and grind. Put the first metal paint coat, putty and grind and put the second finishing coat. All elements for fixing the metalwork that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. Calculation per piece.				
	110/205cm	pcs	1.00		
6.	Make and install metal grid dimensions 90x50 cm, in accordance with the design. The frame of the grid shall be made of angle bars and the filling of flat bars. Fixed frame, girder, shall be made of angle bars and installed. Clean the grid and girder, coat with red led and paint twice using metal paint. Calculation per piece.				
		pcs	9.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
7.	<p>Make and install single metal window in the storage rooms in the basement. The door shall be made of box steel profiles, in accordance with the details and instructions given by the designer. Two hinges shall be placed on the wing. The hardware and hinges shall be chosen by the designer. Before painting clean the metal of corrosion and dust, put proofing and base colour and then pre-putty and grind. Put the first metal paint coat, putty and grind and put the second finishing coat. Calculation per piece.</p>	KOM	9.00		
8.	<p>Purchase, transport and install handrails on the staircase in the first, second and third entrance. All the handrails shall be made of cold formed round steel sections. The handrail shall be made of profiles Ø 48.3 mm, welded on vertical posts. The posts of Ø 33.7 mm cross-section, shall be anchored over escutcheon plates with three screws in the facade wall, completely in accordance with the metalwork schematics and drawings. The joints and welds shall be ideally made, cleaned and ground. Before installation clean the railing of corrosion and dust, grind and brush off. Put the proofing coat, base colour and install the railing. After installation repair the base colour, pre-putty and grind and paint twice. All elements for fixing the metalwork that come into contact with Ytong blocks must be made of galvanized elements because of faster metal oxidation in contact with Ytong. Calculation per m1 of railing.</p>	m1	4.28		
9.	<p>Purchase, transport and install railing on the staircase in the second entrance. All the elements shall be made of cold formed round steel sections. The handrail shall be made of profiles Ø 48.3 mm, welded on vertical posts. The posts of Ø 33.7 mm cross-section shall be anchored at the bottom in the staircase slab over escutcheon plates with three screws. Between the posts place horizontal and vertical profiles 21.3 mm, completely in accordance with the metalwork schematic and drawings. The joints and welds shall be ideally made, cleaned and ground. Before installation clean the railing of corrosion and dust, grind and brush off. Put the proofing coat, base colour and install the railing. After installation repair the base colour, pre-putty and grind and paint twice. Calculation per m1 of railing.</p>	m1	6.66		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
10.	Purchase, transport and install railing on access ramps at the entrances to the building. All the elements shall be made of cold formed round steel sections. The handrail shall be made of profiles Ø 48.3 mm, welded to vertical posts. The posts of Ø 33.7 mm cross-section, shall be anchored with three screws at the bottom in the staircase slab over escutcheon plates . Between the posts place horizontal profiles Ø 33.7 mm in two rows, completely in accordance with the metalwork schematic and drawings. The joints and welds shall be ideally made, cleaned and ground. Before installation clean the railing of corrosion and dust, grind and brush off. Put the proofing coat, base colour and install the railing. After installation repair the base colour, pre-putty and grind and paint twice. Calculation per m1 of railing.	m1	36.46		
11.	Purchase, transport and install railing on access staircases to the building. All the elements shall be made of cold formed round steel sections. The handrail shall be made of profiles Ø 48.3 mm, welded to vertical posts. The posts of Ø 33.7 mm cross-section, shall be anchored with three screws at the bottom in the staircase slab over escutcheon plates. Between the posts place horizontal and vertical profiles 21.3 mm, completely in accordance with the metalwork schematic and drawings. The joints and welds shall be ideally made, cleaned and sanded. Before installation clean the railing of corrosion and dust, sand and brush off. Put the impregnation, base coat and install the railing. After installation repair the base coat, pre-putty and sand and paint twice. Calculation per m1 of railing.	m1	9.00		
12.	Make and install metal grid – door mat, dimensions 100x50 cm at the entrance to the building. The grid shall consist of bearing and dividing strips pressed into one another under pressure in order to achieve solid joint and equally distributed load on the grid. The metal grid shall be placed in the level of finished floor in the opening with built in frame. Calculation per piece.	pcs	3.00		
13.	Make and install shutters for entrance to the attic, dimensions 70x70 cm. The shutters shall be made of cold formed sections. The frame with anchors shall be made of angle bars 50/50/3 mm. The shutters shall be installed in the box frame 30x30x3 mm encased with black sheet metal 1 mm with two hinges, handle for lifting and lock. Clean the shutter and frame, coat with red lead and paint twice using metal paint. The price shall include the making, finishing and installing the shutter. Enable locking the shutter using padlock. Calculation per piece of shutter.	KOM	2.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
14.	<p>Make and install the cover for roof exit, covering the opening dimensions 70x70 cm. The cover shall be made forming a wooden element frame, which shall be fastened to the rafters and joists, completely in accordance with the design. The cover shall be made of galvanized PVC coated sheet metal, planned for covering the roof and include hinges, padlock bolt and padlock. All wooden elements shall be protected using colourless impregnation coat. The opening with the cover shall be formed in such a way that it fits with the roof inclination and it is elevated from the roof level a minimum of 10 cm in the lowest part. It is necessary to protect the formed opening using waterproofing, make sheet metal lining and install sheet metal elements that prevent water collection in the place where the water flows from the main roof surface directly on the formed opening.</p> <p>Calculation per piece of completely assembled item:</p>	KOM	2.00		

TOTAL METAL WORKS:

IX TILING WORKS

1.	<p>Purchase the material, transport and install II class floor ceramic tiles. II class tiles shall be fixed using tile adhesive, in style chosen by the designer. The base surface shall previously be prepared and the laying of the tiles performed straight. The tiles shall be installed in the bathrooms, kitchens and entrance halls. The works and materials used must be in accordance with the standards, technical specifications and normatives defining this type of work. Calculation per m2 of finished floor.</p>				
	Bathrooms	m ²	73.29		
	Kitchens	m ²	109.72		
	Common room	m ²	28.16		
2.	<p>Purchase the material, transport and install wall ceramic II class tiles, glued to the wall with closed joints. The tiles shall be installed in bathrooms and kitchens.</p> <p>The height of the installed tiles shall be:</p> <ul style="list-style-type: none"> - in bathrooms h= 2.2 m - in kitchens h= 0.7 m <p>The works and materials used shall be in accordance with the standards, technical specifications and normatives defining this type of works.</p> <p>Calculation per m2 of finished wall.</p>				
	Bathrooms	m ²	332.29		
	Kitchens	m ²	55.44		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
3.	Purchase the material, transport and install II class ceramic tile skirting to a height of 10 cm. The tiles shall be glued using tile adhesive. The base surface must be flat and prepared. The installed tiles shall be pointed and the skirting cleaned. The works and materials used must be in accordance with the standards, technical specifications and normatives defining this type of works. Calculation per m' of finished floor.	m1	79.20		
4.	Purchase and install floor anti slip ceramic tiles on the staircase fronts and treads. The anti slip ceramic tiles shall be domestically produced. They shall be installed in cement mortar in 1:3 proportion, bonded close together. The tiles shall be pointed and cleaned with sawdust. The price shall include purchase and installation of tiles. Calculation per m2 of installed tiles.				
	Inside staircase (Block I, II and III)	m ²	48.78		
5.	Install serrated ceramic skirting, up to 15 cm height on part of the staircase. Place the skirting on tile adhesive. The surface must be flat and prepared. Installed tiles shall be pointed and the skirting cleaned. The price shall include the purchase of ceramic skirtings. Calculation per m1 of skirting.	m1	37.52		
6.	Purchase and install floor anti slip ceramic tiles. The anti slip ceramic tiles shall be domestically produced of II class. The tiles shall be glued using tile adhesive. The base surface shall previously be prepared and the laying of the tiles performed straight. The installed tiles shall be pointed and cleaned with sawdust. The price shall include purchase and installation of tiles. Calculation per m2 of installed tiles.				
	Wind protection area	m ²	13.32		
	Halls	m ²	110.49		
	Loggias	m ²	47.03		
7.	Install anti slip ceramic skirting, up to 15 cm height on part of the staircase. Place the skirting on tile adhesive. The surface must be flat and prepared. Installed tiles shall be pointed and the skirting cleaned. The price shall include the purchase of ceramic skirtings. Calculation per m1 of skirting.	m1	150.45		
8.	Purchase and install floor anti slip frost resistant ceramic tiles. The anti slip ceramic tiles shall be domestically produced of II class. The ceramic tiles shall be placed in cement mortar, in the style chosen by the designer. The surface shall previously be sprayed with cement milk. Lay the tiles straight and pour the cement milk over. Installed tiles shall be pointed and cleaned with sawdust. The price shall include purchase and installation of tiles. Calculation per m2 of installed tiles.				
	Outside staircase	m ²	17.00		
	Ramp	m ²	34.38		
	Building entrance	m ²	44.88		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
9.	Install anti slip ceramic skirting, frost resistant, up to 15 cm height. Place the skirting on tile adhesive. The surface must be flat and prepared. Installed tiles shall be pointed and the skirting cleaned. The price shall include the purchase of ceramic skirtings. Calculation per m1 of skirting.	m1	11.40		

TOTAL TILING WORKS:

X CARPENTRY WORKS

1.	Make roof structure using dry fir wood. The roof shall be made completely in accordance with the design and the details. Make all the required joinery. Calculation per m2 of roof oblique projection.	m2	693.53		
2.	Purchase and install sheathing over the roof structure. The boards shall be 24 mm, made of dry, straight and good quality fir wood, of optimum length, placed close together and nailed. Calculation per m2 measured per roof pitch.	m2	693.53		
3.	Make and install storage rooms for residents in the basement, in the form of wooden partitions with doors. The structure of the storage rooms shall be made of fir scantlings 5x8 cm filled with staves of cross-section 24/48 mm. Install a door dimensions 70x200 cm on each room, made of staves, with hinges, padlock bolt and padlock. All wooden elements shall be protected with colourless impregnation coating. The height of the partitions shall be 255 cm. Calculation per m2 of finished partitions.	m ²	219.05		

TOTAL CARPENTRY WORKS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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XI FLOORING WORKS

1.	Purchase material, transport and install laminate flooring d=0.8 cm, class 32, over the finished cement screed base, installing angle skirting boards. The laminate shall be installed in rooms, dining rooms and entrance halls of all apartments. Everything shall be done in accordance with technical specifications and normatives regulating this type of works. Calculation per m2.	m ²	909.66		
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TOTAL FLOORING WORKS:					
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XII SHEET-METAL WORKS

1.	Cover the roof and line the attic using steel galvanized PVC-coated flat sheet metal, 0.55 mm thick, in the colour chosen by the designer. The cover shall be done in strips connected together by a double standing seam in the direction of the roof slope and double lying seam horizontally staggered by half. The cover and lining shall be made in accordance with the design, details and instructions from the designer. Put a layer of Izolim tape under the sheet metal, which shall be included in the price. Leave a 3 cm drip edge. Calculation per m2 of covered surface.	m ²	922.71		
2.	Make and install hanging semi-circular gutters made of galvanized PVC-coated sheet metal, of extended width 33 cm, width 15 cm and thickness 0.55 mm. Join the gutters using pop rivets in one row with maximum spacing of 3 cm and stick together using silicone. The hanging gutter support brackets shall be made of PVC coated flat bars 25x5 mm and riveted on the front side using pop rivets, spaced at up to 80 cm. Calculation per m1 of gutter.	m1	70.60		
3.	Purchase material, make, transport and install round section vertical gutter Ø 125 mm made of galvanized PVC-coated sheet metal d=55 mm, make proper connection with the roof cover and fasten the gutter to the facade using straps spaced at 2 m each. Extended width up to 45 cm. Gutter vertical shall end in an elbow enabling free outflow of rain water on the terrain, at the necessary places. The price shall include all the required preparatory works. The works and the material must meet the standards, technical conditions and normatives defining this type of works. All measurements to be verified on the spot. Calculation per m'.	m1	95.30		
4.	Make and install galvanized PVC-coated spout 0.55 mm thick. Make the spout 50 mm in diameter, 30 cm long, with strip 30x30 cm, in accordance with the details and instructions given by the designer. Calculation per piece of spout.	pcs	1.00		

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
5.	Make and install drip edge on the loggia floors. The drip edges shall be made of galvanized PVC-coated sheet metal, extended width 20 cm. They shall be placed along the edge of the loggia slab underneath the finishing. Calculation per m1.	m1	51.93		
6.	Line window boards and french balcony door sills using galvanized PVC-coated sheet metal, extended width up to 20 cm, 0.55 mm thick. The sides of the board towards the wall and window frame should be raised up to 25 mm and refract it into the fold on the lower window profile. The front side of the board shall be fastened to wooden strapping or drill the surface, put plastic plugs and fasten using galvanized wood screws. Place bolt over the head of the wood screw and solder. Place a layer of tar paper underneath the sheet metal, which shall be included in the price of the board. Calculation per m1 of window board and door sill.	m1	62.40		
7.	Purchase material, transport, make and line all protrusions, chimney ducts and ventilation verticals on the roof, using galvanized PVC-coated sheet metal d=55 cm, extended width up to 50 cm. Linings along all protrusions shall be at the height of 30 cm. The price shall include all preparatory works. The works and the material must meet the standards, technical specifications and normatives defining this type of works. Calculation per m.	m1	57.50		
8.	Make and install snow guard in two rows made of iron flat bars. The brackets shall be anchored to the surface with flat bars. Clean the snow guards, coat with red led and paint twice with metal paint. Calculation per m1 of snow guard.	m1	141.20		
9.	Purchase and install skirting strips at the joints of two different floorings in apartments (tiles-laminate). The boards shall be glued over the said floors. Calculation per m1 of installed strips.	m1	75.67		

TOTAL SHEET-METAL WORKS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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XIII DRY INSTALLATION WORKS

1.	Surround sewerage pipes under the ceiling in the bathrooms using gypsum cardboard boards 12.5 mm thick, and make metal substructure. The metal substructure shall be made of galvanized profiles CD 60x27 mm, in accordance with the design and product instructions. Coat the ceiling with mineral wool 75 mm thick, and then install and fasten gypsum cardboard boards. Finish the joints using skim coat and wall bandage, in accordance with the designer's instructions. The price shall include the scaffolding. Calculation per m2 of installed surface.	m2	17.64		
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TOTAL DRY INSTALLATION WORKS:					
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XIV FACADE WORKS

1.	Purchase material, transport and paint facade walls and ceilings using decorative facade mortar. The colour shall be chosen by the designer. The item shall include all the necessary preparatory and additional works needed for its completion. Preparatory works shall include purchase of the material and facade surface finishing (on installed panels spread adhesive evenly in a layer 2-3 mm and press in the fibreglass mesh over the entire surface. After drying, apply the adhesive in a layer 2-3 mm thick to even out the entire surface). The price shall include the assembly and dismantling of the facade scaffolding around the building. The scaffolding must be installed entirely in accordance with the scaffolding design. Adhere to technical specifications, standards and normatives regulating this type of works. (The item shall include facade walls, loggia ceilings, jut windows, columns, chimney and ventilation vertical walls). Calculation per m2.				
	Darker tone	m ²	205.14		
	Lighter tone	m ²	977.04		
2.	Finish the basement of the building and skirting around the building in the designed height (20 to 100 cm) using waterproof decorative mortar, per designer's choice. The price shall include the purchase of material, transport and finishing of facade walls, as well as all preparatory works and base surfaces, in accordance with the product instructions. Calculation per m2 of complete item.	m ²	93.75		

TOTAL FACADE WORKS:					
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No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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XV PAINT WORKS

1.	Paint and skim walls and ceiling using semi-dispersive paints. Mortared walls and ceilings shall be skimmed using dispersion putty. The surfaces shall be sanded, cleaned and neutralized. Inspect and putty smaller damages and cracks. Impregnate and spread dispersion putty three times. Sand all the surfaces, impregnate and putty smaller damages. pre-paint and correct using toned dispersion putty and then paint using semi-dispersive paint a first and second time. Colour and tone shall be chosen by the designer. (The item shall include all inside walls not covered with tiles). Calculation per m2 of painted surface.				
	Basement	m ²	406.19		
	Ground floor	m ²	2,558.12		
	Floor	m ²	2,622.42		

TOTAL PAINT WORKS:

XVI MISCELLANEOUS WORKS

1.	Purchase, transport and install post boxes. Calculation per piece.	pcs	22.00		
2.	Purchase and install plastic plates with apartment numbers. Calculation per piece of complete item.	pcs	22.00		
3.	Purchase and install plastic plates with numbers and signs for all levels. Calculation per piece of complete item.	pcs	7.00		
4.	Purchase and install the plastic sticker marked EXIT on the building exit doors.	pcs	6.00		
5.	Purchase and install portable dry fire extinguishers class S-9. The extinguishers should be placed in metal boxes fixed to the wall with marked content. The boxes should not be locked. The extinguishers should be placed on in the staircase, on the both ground and first floor. Calculation per piece of complete item.	pcs	6.00		
6	Final cleaning of the building and window, door and floor washing. Calculation per m2 of surface once, regardless of how many times it took to clean. Total surface shall include cleaning staircases, access areas, balconies, basement and similar and shall not be paid additionally.	m2	1,458.34		

TOTAL MISCELLANEOUS WORKS:

No.	Item Description	Unit of Measure	Number of Units	Unit Price	Total
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RECAPITULATION

I	EARTH WORKS				
II	CONCRETE WORKS				
III	REINFORCEMENT WORKS				
IV	MASONRY WORKS				
V	WATER PROOFING WORKS				
VI	THERMAL INSULATION WORKS				
VII	DOORS AND WINDOWS				
VIII	METAL WORKS				
IX	TILING WORKS				
X	CARPENTRY WORKS				
XI	FLOORING WORKS				
XII	SHEET-METAL WORKS				
XIII	DRY INSTALLATION WORKS				
XIV	FACADE WORKS				
XV	PAINT WORKS				
XVI	MISCELLANEOUS WORKS				

TOTAL WITHOUT VAT:					
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