

**Annex 5: BoQ and Technical Specification for each typology**

BILL OF QUANTITIES					
T A - RESILIENT STRUCTURE - VARIANT 1					
PROJECT:	CERRP-Housing Sub Component				
ITEM	DESCRIPTION	UN	QUANT.	P.UNIT. (MZM)	TOTAL
<b>SUPER- STRUCTURE</b>					
<b>1</b>	<b>PRELIMINARY WORKS</b>				
1.1	Mobilization of personnel, construction material, equipment and tools, personal protective equipment (PPE), and construction board.	vg	1,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>2</b>	<b>EXCAVATION AND SOIL MOVEMENTS</b>				
2.1	In-plant layout, excavation of soil for foundations. Sides of the trenches shall be vertical and its bottom shall be levelled, both longitudinally and transversely	m3	5,35		0,00
2.2	Backfill of foundation bed and floor box, if necessary to fill with borrowed soil	m3	9,38		0,00
2.3	Irrigation and compaction of the foundation bed and floor box	m2	32,84		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>3</b>	<b>FOUNDATIONS</b>				
<b>3.1</b>	<b>Foundation footing (Sapata Corrida)</b>				
3.1.1	Supply and application of B25 concrete with a thickness of 5cm	m3	0,39		0,00
<b>3.2</b>	<b>Foundation footing (Sapata Isolada)</b>				
	<b>Concrete Footing section 40 X 40 X 15 cm - (Structural details, page 1.1.2.1)</b> <b>A400 steel with Ø8 minimum number of 6 units per footing, in accordance with the drawings and details, including binding wire in accordance with the drawings and details page 1.1.2.1</b>				
3.2.1	Supply and application of B25 concrete with a thickness of 15cm	m3	0,16		0,00
3.2.2	Ø8 (0,395 kg/m) main steel supply and assembly	kg	6,26		0,00
<b>3.3</b>	<b>PILLARS</b>				
	<b>Concrete B25 pillars 15 X 15 CM embedded in blocks 0.20x0.20 cm - (Structural details, page 1.1.2.1)</b> <b>A400 steel in pillars with Ø6 stirrups rebar at a distance of 15 cm and Ø10 bars, with a minimum number of 4 units per pillar, in accordance with the drawings and details, including binding wire in accordance with the drawings and details page 1.1.2.1</b>				
3.3.1	Supply and application of B25 concrete with (15X15)cm	m3	0,47		0,00
3.3.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel, distance of 15 cm	kg	17,69		0,00
3.3.3	Ø10 (0,617 kg/m) main steel supply and assembly, considering the bending to fit the wooden beam	kg	61,90		0,00
<b>3.4</b>	<b>FLOOR BEAM</b>				

	<b>Concrete beam section 15 X 17 CM, seated in blocks (0.20x0.20x0.30) cm</b> - (Structural details, page 1.1.2.2) <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of 3 <b>units beam</b> , including binding wire in accordance with the drawings and details page 1.1.2.2				
3.4.1	Supply and application of B25 concrete with (15X15)cm	m3	0,76		0,00
3.4.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	30,49		0,00
3.4.3	Ø8 (0,395 kg/m) main steel supply and assembly	kg	31,28		0,00
<b>3,5</b>	<b>FLOOR</b>				
3.5.1	Supply and application of B25 concrete with thickness of 10cm, above compacted soil	m3	2,64		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>4.0</b>	<b>MASONRY</b>				
4.1	Supply and assembly, Masonry of hollow blocks of cement and sand with section 20x20x30, including mortar with ratio 1:4, formwork for concrete floor beam	m2	5,28		0,00
4.2	Supply and assembly, Masonry foundation in cement and sand, massive blocks with section 20x20x40 cm, including laying mortar with ratio 1:4	m2	10,56		0,00
4.3	Supply and assembly, Lifting masonry in cement and sand, with section 20x20x40 cm, including laying mortar with ratio 1:4	Un	168,00		0,00
4.4	Ø8 (0,395 kg/m) main steel supply and assembly for masonry waiting rod	kg	15,21		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>5.0</b>	<b>ROOF STRUCTURE "All pine wood properly treated"</b>				
<b>5.1</b>	<b>Double Timber upper beam (Pine Wood)</b>				
5.1.2	Supply and assembly, Wooden beams in accordance with the project, previously treated with carbolineum in 3 coats, dimensions 150x50 mm, including splicing connecting elements and M10 threaded rod with nuts and washers on both ends in each 1m (detail connection of double crowning beam, pages 1.1.2, 1.1.2.9 and 1.1.2.10)	ml	47,41		0,00
<b>5.2</b>	<b>TRUSSES AND CROSS BRACING (Pine Wood)</b>				
5.2.1	<b>Supply and assembly of the TRUSSES TYPE A:</b> Wooden roof structure as per project drawings specifications Intermediate trusses, previously treated, according to the project. previously treated with carbolineum in 3 coats <b>"DETAILED VIEW OF THE INTERMEDIATE TRUSSES" and "DETAILED SECTION OF THE INTERMEDIATE TRUSSES" (pages 1.1.2.3). DO NOT APPLY SPLICING</b>	Un	2,00		0,00
5.2.2	<b>Supply and assembly of the TRUSSES TYPE B:</b> Wooden roof structure as per project drawings specifications Intermediate trusses, previously treated, according to the project. previously treated with carbolineum in 3 coats <b>"DETAILED VIEW OF THE TRUSSES type B" and "DETAILED SECTION OF THE TRUSSES B" (pages 1.2.2.4). DO NOT APPLY SPLICING</b>	Un	2,00		0,00
5.2.3	<b>Supply and assembly, treated pine wood rafters 150x50 mm, "Detailed Roof Structure Plan". Do not apply splicing</b>	ml	19,50		0,00

5.2.4	Supply and assembly, Braced Bar (Barrote de Travamento) with wood <b>50x150 mm</b> , previously treated with carbolineum in 3 coats, <b>VIEW DETAILS OF THE WOODEN BLOCKING - page 1.1.2.8. DO NOT APPLY SPLICING</b>	Un	2,00		0,00
<b>5.3</b>	<b>PURLINS</b> Construction and assembly of the roof structure according to the specifications of the project drawings (Pine Wood), the joints of the purlins must be located on the axis of the trusses and interspersed, avoiding a greater number of joints of the purlins. with 0,3mm flat plates (Both sides) dimensions 12x7,5cm				
5.3.1	Supply and assembly <b>main wooden purlins and wooden purlins for flat plat ridge fixing</b> in accordance with the project, previously treated with carbolineum in 3 coats, dimensions <b>75x50 mm</b> , Including fixing nails trusses and purlins <b>"PURLINS AND TRUSSES CONECTION DETAIL"</b> (details in pages 1.1.2.15 and 1.1.2.16)	ml	89,0		0,00
5.3.2	Supply and application galvanized wire thickness 2mm ligation trusses and purlins <b>"View Purlin and Rafter connection Detail"</b> , pages 1.1.2.15 and 1.1.2.16	kg	15,0		0,00
<b>5.4</b>	<b>ROOFING - METAL SHEET IBR TYPE 0,4mm</b>				
5.4.1	Supply and assembly, cover plate 0.4mm Thermo-lacquered IBR galvanized roofing sheet (AS DETAILED IN DESING roof fixing detail - pages 1.1.2.13 and 1.1.2.14) nailed with roof nails 4.5 x 90 mm sheet nails	m2	45,00		0,00
5.4.2	Supply and assembly, ridge caps 0.4mm Thermo-lacquered IBR galvanized roofing sheet (AS DETAILED IN DESING ridge installation in roof structure detail - page 1.1.2.17) nailed with roof nails 4.5 x 90 mm sheet nails	m2	9,13		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>6.0</b>	<b>CONNECTING PARTS OF WOODEN ELEMENTS</b>				
6.1	Supply and assembly of pre-painted angle brackets with a crossbar the double wooden beam, fixed with a 10mm diameter steel threaded rod and nuts according to the detail truss wood beam connection - details in pages 1.2.1.10	un	24,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>7.0</b>	<b>STAIR</b>				
7.1	Execution and application of a 10x20x40 block ladder with dimensions of 1m tablet x length min 0.30m with one step, finishing in cement and sand mortar, based on a simple concrete footing, including all the complementary works for good execution.	vg	1,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>8.1</b>	<b>LOGISTIC AND LABOUR</b>				
8.1.1	<b>Logistic and Transport</b>	Vg	1,00		
8.1.2	<b>Labour</b>	Vg	1,00		
				<b>SUB TOTAL 8</b>	<b>0,00</b>
<b>TOTAL SUB-TOTAL</b>					<b>0,00</b>
<b>Contingencies 10%</b>					<b>0,00</b>
<b>Total Grand</b>					<b>0,00</b>

BILL OF QUANTITIES					
RESILIENT STRUCTURE - VARIANT 2					
PROJECT:	CERRP-Housing Sub Component				
ITEM	DESCRIPTION	UN	QUANT.	P.UNIT. (MZM)	TOTAL
<b>SUPER- STRUCTURE</b>					
<b>1</b>	<b>PRELIMINARY WORKS</b>				
1.1	Mobilization of personnel, construction material, equipment and tools, personal protective equipment (PPE), and construction board.	vg	1,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>2</b>	<b>EXCAVATION AND SOIL MOVEMENTS</b>				
2.1	In-plant layout, excavation of soil for foundations. Sides of the trenches shall be vertical and its bottom shall be levelled, both longitudinally and transversely	m3	5,94		0,00
2.2	Backfill of foundation bed and floor box, if necessary to fill with borrowed soil	m3	11,94		0,00
2.3	Irrigation and compaction of the foundation bed and floor box	m2	40,49		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>3</b>	<b>FOUNDATIONS</b> - foundations and floor details, technical drawing page 1.2.1.1				
<b>3.1</b>	<b>Foundation Footing (corrida)</b>				
3.1.1	Supply and application of B25 concrete with a thickness of 15cm	m3	1,32		0,00
<b>3.2</b>	<b>Foundation Footing (isolada)</b>				
3.2.1	Supply and application of B25 concrete for main (30x30x60cm) and secondary (20x20x60cm) pillars	m3	0,67		0,00
3.2.3	Supply and application of Compressed stones footing 15cm thickness	m3	0,17		0,00
<b>3.3</b>	<b>PILLARS</b> - floor plan, page 1.2.2				
	<b>Wood pillars diameter 10cm secondary stakes and wood pillars diameter 14cm main stakes, vertical bracing diagonals diameter 10 cm, treated with CCA in 3 coats including the anchors, including connections with 4' nails and 8mm threaded rod</b> - (View floor Plan and structural details - pages 1.2.2, 1.2.1.12 and 1.2.1.13				
3.3.1	Supply and application of main stakes Ø 14cm with 3,60m	un	6,00		0,00
3.3.2	Supply and application of secondary stakes Ø 10cm with 3,60m	un	12,00		0,00
3.3.3	Supply and application of vertical bracing diagonals Ø 10cm with 2,75m	un	12,00		
<b>3.4</b>	<b>FLOOR BEAM</b>				
	<b>Concrete beam section 15 X 17 CM, seated in blocks (0.20x0.20x0.30) cm</b> - (Structural details, page 1.2.1.1) <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of <b>3 units beam</b> , including binding wire in				

	accordance with the drawings and details page 1.2.1.1				
3.4.1	Supply and application of B25 concrete with (15X17)cm	m3	0,58		0,00
3.4.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	23,49		0,00
3.4.3	Ø8 (0,395 kg/m) main steel supply and assembly	kg	27,11		0,00
<b>3,5</b>	<b>FLOOR</b>				
3.5.1	Supply and application of B25 concrete with thickness of 10cm, above compacted soil	m3	2,64		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>4.0</b>	<b>MASONRY</b>				
4.1	Supply and assembly, Masonry of hollow blocks of cement and sand with section 20x20x30 cm, including mortar with ratio 1:4 formwork for concrete floor beam	m2	4,16		0,00
4.2	Supply and assembly, Masonry foundation in cement and sand, massive blocks with section 20x20x40 cm, including laying mortar with ratio 1:4	m2	8,32		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>5.0</b>	<b>ROOF STRUCTURE "All pine wood properly treated"</b>				
<b>5.1</b>	<b>Timber upper beam (Pine Wood)</b>				
5.1.2	Supply and assembly, Wooden beams in accordance with the project, previously treated with carbolineum in 3 coats, dimensions 150x50 mm, including splicing connecting elements (detail connection of double crowning beam, pages 1.2.1.8 and 1.2.1.9)	ml	26,40		0,00
<b>5.2</b>	<b>TRUSSES AND CROSS BRACING (Pine Wood)</b>				
5.2.1	<b>Supply and assembly of the TRUSSES TYPE A:</b> Wooden roof structure as per project drawings specifications Intermediate trusses, previously treated, according to the project. previously treated with carbolineum in 3 coats <b>"DETAILED VIEW OF THE INTERMEDIATE TRUSSES" and "DETAILED SECTION OF THE INTERMEDIATE TRUSSES" (pages 1.2.3 and 1.2.1.2). DO NOT APPLY SPLICING</b>	Un	2,00		0,00
5.2.2	<b>Supply and assembly of the TRUSSES TYPE B:</b> Wooden roof structure as per project drawings specifications Intermediate trusses, previously treated, according to the project. previously treated with carbolineum in 3 coats <b>"DETAILED VIEW OF THE TRUSSES type B" and "DETAILED SECTION OF THE TRUSSES B" (pages 1.2.3 and 1.2.1.3). DO NOT APPLY SPLICING</b>	Un	2,00		0,00
5.2.3	<b>Supply and assembly, treated pine wood rafters 150x50 mm, "Detailed Roof Structure Plan". Do not apply splicing</b>	ml	19,37		0,00
5.2.4	Supply and assembly, Braced Bar (Barrote de Travamento) with wood <b>50x150 mm</b> , previously treated with carbolineum in 3 coats, <b>VIEW DETAILS OF THE WOODEN BLOCKING. DO NOT APPLY SPLICING</b>	Un	2,00		0,00
<b>5.3</b>	<b>PURLINS</b>				
	Construction and assembly of the roof structure according to the specifications of the project drawings (Pine Wood), the joints of the purlins must be located on the axis of the trusses and interspersed, avoiding a greater number of joints of the purlins. with 0,3mm flat plates (Both sides) dimensions 12x7,5cm				
5.3.1	Supply and assembly <b>main wooden purlins and wooden purlins for flat plat ridge fixing</b> in accordance with the project, previously treated with carbolineum in 3 coats, dimensions <b>75x50 mm</b> , Including fixing nails trusses and purlins <b>"PURLINS AND TRUSSES CONECTION DETAIL"</b> (details in page 1.2.1.16 and	ml	88,9		0,00

	1.2.1.17)				
5.3.2	Supply and application galvanized wire thickness 2mm ligation trusses and purlins "View Purlin and Rafter connection Detail", pages 1.1.2.15 and 1.1.2.16	kg	15,0		0,00
<b>5.4</b>	<b>ROOFING - METAL SHEET IBR TYPE 0,4mm</b>				
5.4.1	Supply and assembly, cover plate 0.4mm Thermo lacquered IBR galvanized roofing sheet (AS DETAILED IN DESING roof fixing detail - pages 1.2.1.14 and 1.2.1.15) nailed with roof nails 4.5 x 90 mm sheet nails	m2	45,00		0,00
5.4.2	Supply and assembly, ridge caps 0.4mm Thermo lacquered IBR galvanized roofing sheet (AS DETAILED IN DESING ridge installation in roof structure detail - page 1.2.1.18 ) nailed with roof nails 4.5 x 90 mm sheet nails	m2	9,13		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>6.0</b>	<b>CONNECTING PARTS OF WOODEN ELEMENTS</b>				
6.1	Supply and assembly of pre-painted angle brackets with a crossbar the double wooden beam, fixed with a 10mm diameter steel threaded rod and nuts according to the detail truss wood beam conection - details in pages 1.2.1.10	un	32,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>7.0</b>	<b>STAIR</b>				
7.1	Execution and application of a 10x20x40 block ladder with dimensions of 1m tablet x length min 0.30m with one step, finishing in cement and sand mortar, based on a simple concrete footing, including all the complementary works for good execution.	vg	1,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
<b>8.1</b>	<b>LOGISTIC AND LABOUR</b>				
8.1.1	Logistic and Transport	Vg	1,00		
8.1.2	Labour	Vg	1,00		
				<b>SUB TOTAL 8</b>	<b>0,00</b>
<b>TOTAL SUB-TOTAL</b>					<b>0,00</b>
<b>Contingencies 10%</b>					<b>0,00</b>
<b>Total Grand</b>					<b>0,00</b>

BILL OF QUANTITIES					
TB- HOUSE RETROFITING					
CERRP-Housing Sub Component					
ITEM	DESCRIPTION	UN	QUANT.	P.UNIT.	TOTAL
<b>SUPER- STRUCTURE</b>					
<b>1</b>	<b>PRELIMINARY WORKS</b>				
1.1	Mobilization of personnel, construction material, equipment and tools, personal protective equipment (PPE), and construction board.	vg	1,00		0,00

1.2	removal of damaged roof sheeting and roof structures , demolition of walls and other components and disposal of debris	vg	1,00		0,00
				<b>SUB TOTAL 1</b>	<b>0,00</b>
<b>2,0</b>	<b>PILLARS and BEAMS</b>				
	<b>Concrete B25 pillars 15 X 15 Cm - Page</b> <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø10 bars</b> , with a minimum number of <b>4 units per pillar, including binding wire</b> in accordance with the drawings and details.				
2.1.1	Supply and application of B25 concrete with (15X15)cm	m3	0,14		0,00
2.1.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	4,50		0,00
2.1.3	Ø10 (0,617 kg/m) steel supply and assembly	kg	15,75		0,00
<b>2.2</b>	<b>BONDING BEAM</b>				
	<b>Concrete beam section (15 X 20) cm,</b> <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of <b>3 units beam, including bonding wire</b> in accordance with the drawings and details				
2.2.1	Supply and application of B25 concrete with (15X15)cm	m3	0,75		0,00
2.2.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	26,22		0,00
2.2.3	Ø8 (0,395 kg/m) main steel supply and assembly	kg	32,59		0,00
2.2.4	Pine wood formwork, including fixing nails	ml	52,80		0,00
<b>2,3</b>	<b>RING BEAM AT THE TOP</b>				
	<b>Concrete beam section (15 X 20) cm, - (Structural details)</b> <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of <b>3 units beam</b> , in accordance with the drawings and details				
2.3.1	Supply and application of B25 concrete with (15X15)cm	m3	0,56		0,00
2.3.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	20,33		0,00
2.3.3	Ø8 (0,395 kg/m) main steel supply and assembly	kg	42,66		0,00
2.3.4	Reusable pine wood formwork, including fixing nails	ml	0,00		0,00
				<b>SUB TOTAL 2</b>	<b>0,00</b>
<b>3,0</b>	<b>MASONRY and REINFORCED EXTERNAL PLASTERING</b>				
3.1.1	Supply and assembly masonry in cement and sand blocks, section 15x20x40 cm, including laying mortar with ratio 1:4	Un	33,00		0,00
3.1.2	Supply and application of the 2mm hexagonal chicken mesh to reinforce existing corner walls external plastered with cement and sand mortar in the proportion of 1:3. 2.5 cm thickness Page 1.1	m2	19,80		0,00
				<b>SUB TOTAL 3</b>	<b>0,00</b>
<b>4,0</b>	<b>ROOF STRUCTURE</b>				
4.1	<b>Timber rafter:</b> supply and assembly of pine timber rafters 50x150mm, previously treated with carbonileum in 3 coats. The wood must be continuous, without splices and <b>connected to the concrete beam through a 8mm anchored rebar</b>	ml	13,20		0,00
4.2	<b>Purlins:</b> Supply and assembly, timber purlins in accordance with the project, previously treated with carbolineum in 3 coats, dimensions 75x50 mm, Including fixing nails.	ml	55,00		0,00
4.3	Supply and application galvanized wire thickness 2mm to brace rafters and purlins in each connection. Page 1.2.2	kg	14,0		
<b>4.1</b>	<b>ROOFING - METAL SHEET IBR TYPE 0,4 mm</b>				
4.4.1	Supply and assembly, cover plate 0.4mm Thermo lacquered IBR galvanized roofing	m2	29,43		0,00

	sheet fixed with roof nails 4.5 x 90 mm				
4.4.2	Supply and assembly, ruff 0.4mm galvanized plain sheet 0.4 mm nailed with 4.5 x 90 mm nails in all waves and with 2.5 cm nails on the sides and back. Page 1.2.5	m2	7,59		0,00
				<b>SUB TOTAL 4</b>	<b>0,00</b>
<b>5.1</b>	<b>LOGISTIC AND LABOUR</b>				
5.1.1	Logistic and Transport	Vg	1,00		
5.1.2	Labour	Vg	1,00		
				<b>SUB TOTAL 5</b>	<b>0,00</b>
<b>TOTAL SUB-TOTAL</b>					<b>0,00</b>
<b>Contingencies 10%</b>					<b>0,00</b>
<b>Total Grand</b>					<b>0,00</b>

BILL OF QUANTITIES					
TC - CORE HOUSING					
CERRP-Housing Sub Component					
ITEM	DESCRIPTION	UN	QUANT.	P.UNIT.	TOTAL
<b>SUPER- STRUCTURE</b>					
<b>1</b>	<b>PRELIMINARY WORKS</b>				
1.1	Mobilization of personnel, construction material, equipment and tools, personal protective equipment (PPE), and construction board.	vg	1,00		0,00
				<b>SUB TOTAL 1</b>	<b>0,00</b>
<b>2</b>	<b>EXCAVATION AND SOIL MOVEMENTS</b>				
2.1	In-plant layout, excavation of soil for foundations. Sides of the trenches shall be vertical and its bottom shall be levelled, both longitudinally and transversely	m3	5,95		0,00
2.2	Backfill of foundation bed and floor box, if necessary to fill with borrowed soil	m3	10,98		0,00
2.3	Irrigation and compaction of the foundation bed and floor box	m2	37,51		0,00
				<b>SUB TOTAL 2</b>	<b>0,00</b>
<b>3</b>	<b>FOUNDATIONS AND PILLARS</b>				
<b>3.1</b>	<b>Foundation Footing</b>				
3.1.1	Supply and application of B25 concrete with a thickness of 5cm	m3	0,50		0,00
<b>3.2</b>	<b>Foundation footing for pillars</b>				
	<b>Concrete Footing section 40 X 40 X15 cm - (Structural footing details page 1.1.1) A400 steel with Ø8 minimum number of 6 units per footing, including binding wire in accordance with the drawings and details</b>				
3.2.1	Supply and application of B25 concrete with a thickness of 15cm	m3	0,16		0,00
3.2.2	Ø8 (0,395 kg/m) steel supply and assembly	kg	6,26		0,00
<b>3,3</b>	<b>PILLARS</b>				



	<b>Concrete B25 pillars 15 X 15 cm</b> (Structural detail page 1.1.1) <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø10 bars</b> , with a minimum number of <b>4 units per pillar, including binding wire</b> in accordance with the drawings and details				
3.3.1	Supply and application of B25 concrete (15x15cm)	m3	0,39		0,00
3.3.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	17,40		0,00
3.3.3	Ø10 (0,617 kg/m) s beam steel supply and assembly	kg	51,96		0,00
3.3.4	supply and application of reusable wood formwork	ml	30,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>
				<b>3</b>	
<b>4</b>	<b>CONCRETE BEAMS</b>				
<b>4.1</b>	<b>FLOOR BEAM</b>				
	<b>Concrete beam section 20 X 20 CM</b> , (Structural details page 1.1.2) <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of <b>4 units</b> , including binding wire in accordance with the drawings and details page 1.1.4				
4.1.1	Supply and application of B25 concrete with (20X20)cm	m3	1,08		0,00
4.1.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	28,23		0,00
4.1.3	Ø8 (0,395 kg/m) beam steel supply and assembly	kg	43,45		0,00
4.1.4	supply and application of reusable wood formwork	ml	50,00		0,00
<b>4.2</b>	<b>BONDING BEAM</b>				
	<b>Concrete beam section 15 X 20 CM</b> , - (Structural details page 1.1.2) <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of <b>3 units beam</b> , including binding wire, in accordance with the drawings and details 1.1.4				
4.2.1	Supply and application of B25 concrete with (15X15)cm	m3	0,50		0,00
4.2.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	17,83		0,00
4.2.3	Ø8 (0,395 kg/m) beam steel supply and assembly	kg	22,16		0,00
4.2.4	Application of reusable wood formwork ml (34,00 ml)	ml	0,00	-	-
<b>4.3</b>	<b>RING BEAM AT THE TOP</b>				
	<b>Concrete beam section 15 X 20 CM</b> , - (Structural details page 1.1.3) <b>A400 steel</b> in pillars with <b>Ø6 stirrups rebar at a distance of 15 cm and Ø8 bars</b> , with a minimum number of <b>3 units</b> , including binding wire in accordance with the drawings and details				
4.3.1	Supply and application of B25 concrete with (15X20)cm	m3	0,14		0,00
4.3.2	Ø6 (0,220 kg/m) supply and assembly of stirrup steel	kg	5,08		0,00
4.3.3	Ø8 (0,395 kg/m) main steel supply and assembly	kg	5,87		0,00
4.3.4	Application of reusable wood formwork ml (9,00 ml)	ml	0,00	-	-
<b>4.4</b>	<b>FLOOR</b>				
4.4.1	Supply and application of B25 concrete with thickness of 10 cm, above compacted soil	m3	2,67		0,00
4.4.2	Stair: Execution and application of a 10x20x40 block ladder with dimensions of 1m tablet x length min 0.30m with one step, finishing in cement and sand mortar, based on a simple concrete footing, including all the complementary works for good execution.	vg	1,00		0,00
				<b>SUB TOTAL</b>	<b>0,00</b>

				<b>4</b>	
<b>5.0</b>	<b>MASONRY and PLASTERING</b>				
5.1	Supply and assembly of foundation masonry cement filled blocks 20x20x40 cm (blocos maciçados), including laying mortar ratio 1:4.	m2	11,00		0,00
5.2	Supply and assembly of masonry for walls in cement and sand blocks 15x20x40 cm section, including laying mortar in the proportion 1:4.	m2	51,39		0,00
5.3	Supply and assembly of masonry cement filled blocks 15x20x40 cm (blocos maciçados) at the top of wall gable, including laying mortar ratio 1:4.	m2	1,54		0,00
5.4	Supply and application of external wall plastering with cement and sand mortar, ratio 1:3, thickness 2,5 cm including all complementary activities.	m2	61,72		0,00
				<b>SUB TOTAL</b>	
				<b>5</b>	<b>0,00</b>
<b>6.0</b>	<b>ROOF STRUCTURE</b>				
<b>6.1</b>	<b>Rafters and Purlins</b>				
6.1.1	<b>Timber rafter:</b> supply and assembly of pine timber rafters 50x150mm, previously treated with carbonileum in 3 coats. The wood must be continuous, without splices and connected to the concrete beam through a 8mm anchored rebar <b>Page 1.2</b>	ml	13,20		0,00
6.2.1	Supply and assembly, <b>timber purlins</b> in accordance with the project, previously treated with carbolineum in 3 coats, dimensions <b>75x50 mm</b> , Including fixing nails <b>Pages 1.2, 1.5.</b>	ml	27,5		0,00
6.2.3	Supply and application of galvanized wire thickness 2mm to brace rafters and purlins. See detail page <b>1.1.4</b>	kg	10,0		
<b>6.2</b>	<b>ROOFING - METAL SHEET IBR TYPE 0,4 mm</b>				
6.2.1	Supply and assembly, roof sheet 0.4mm Thermolacquered IBR, fixed with roof nails 4.5 x 90 mm. Pages 1.2.6, 1.2.7.	m2	20,34		0,00
6.2.2	Supply and assembly, ruff 0.4mm galvanized plain sheet 0.4 mm nailed with 4.5 x 90 mm nails in all waves and with 2.5 cm nails on the sides and back. Page 1.2.5	m2	7,46		0,00
				<b>SUB TOTAL</b>	
				<b>6</b>	<b>0,00</b>
<b>7.0</b>	<b>WINDOWS AND DOOR</b>				
7.1	Supply and assembly, single door with dimensions of 2.10x0.90, frame in treated wood and painted with enamel paint, including all accessories and hardware (3 hinges, locks). Page 1.10	un	1,00		0,00
7.2	Supply and installation of a WOODEN window with a dimension of 1.00 x1.20 with 1 glass of 3mm thickness and the entire connection system (hinge, catches, mosquito net and regulators), treated wood and painted with enamel paint. Page 1,10	un	2,00		0,00
				<b>SUB TOTAL</b>	
				<b>7</b>	<b>0,00</b>
<b>8.1</b>	<b>LOGISTIC AND LABOUR</b>				
8.1.1	<b>Logistic and Transport</b>	Vg	1,00		
8.1.2	<b>Labour</b>	Vg	1,00		
				<b>SUB TOTAL</b>	
				<b>8</b>	<b>0,00</b>
<b>TOTAL SUB-TOTAL</b>					<b>0,00</b>
<b>Contingencies 10%</b>					<b>0,00</b>
<b>Total Grand</b>					<b>0,00</b>