Załącznik nr 4 do Zapytania ofertowego 27/RN/2024 - Przedmiar do badania cen w budownictwie realizowanego w 2023 r. (materiał poglądowy)



Contact the PLANCO team

Construction Survey 2023 Select your country



Basic heading	Nr of items to price	Project	Specification	General total	Fees %	Fee total	Total price (incl fees - excl VAT)	% change	Pricing status
n.a.	7	<u>Labour</u>	<b>Labour</b> Price in full						7 Unpriced labour rates
	95	<u>E.01.2.1.0.01.a</u>	<b>Detached house</b> Price in full	-	0,0%	-			Unpriced project
Residential buildings	49	E.01.2.1.0.01.d	Renovation of detached house Price in full	-	0,0%	-			Unpriced project
	70	<u>E.01.2.1.0.02.a</u>	Apartment Price in full	-	0,0%	-			Unpriced project
Non-residential	129	<u>E.01.2.2.0.01.a</u>	<b>Light industrial</b> Price in full	-	0,0%	-			Unpriced project
buildings	98	<u>E.01.2.2.0.02.a</u>	<b>Office</b> Price in full	-	0,0%	-			Unpriced project
Civil engineering works	27	<u>E.01.2.3.0.01.a</u>	<b>Asphalt road</b> Price in full	-	0,0%	-			Unpriced project
Civil engineering works	18	<u>E.01.2.3.0.01.b</u>	<b>Road resurfacing</b> Price in full	-	0,0%	-			Unpriced project
Total	493								

## Pricing policy

First select your country in cell D4 above.

NSIs and CEs should price all seven BQs in full together with the seven labour rates.

Prices should be mid 2023 (June/July) and reflect national averages, in National Currency as per the methodology in previous surveys.

Hyperlinks - to go to any project click the project number above then to return to this sheet click the PLANCO Logo.

There is a full set of documentation including the Construction Pricing Guidelines and the complete set of drawings filed on CIRCABC in the 2023 Construction Survey folder at:

CIRCABC > Eurostat > Purchasing Power Parities (PPPs) > Library > ESTAT > 2023 > Construction Survey 2023

#### Checks and Warnings

Check the summary table above to see that the Total price appears for all the projects that you have priced. If the Total price is blank go to the project sheet and check that you have inserted the Fees %, then look in the 'Items to be priced' column, the number of unpriced items will be shown and they will also be marked with an X further down the column. The Total price will not appear until all items have been priced.

### **Pricing Notes and Comments**

We include pricing notes where we think additional information may be useful or where countries have provided useful comments with previous surveys. If you have priced a different specification to the one shown please describe the differences in the Expert's comments column and any other relevant comments you deem to be appropriate.

On the Specifications sheet we show tables of typical concrete mixes and ground classifications. Please feel free to email us with further information as we would like to build up a collection of relevant reference material for the benefit of future surveys.

### Additions and changes

We have added a column to each project sheet and labour to show the percentage change from the previous survey. On the project sheets, if the price decreases it will highlight the cell in blue. If the price increases by 50% to <100% it will highlight the cell in orange and any price 100% or greater will highlight the cell in red.

A new 'Item Summary' sheet is provided which allows all item price changes to be compared. Grossed items are not comparable with the previous year and have been excluded.

#### Be careful

The sheets are protected but you can adjust column widths and row heights without turning off the protection.

If you accidentally enter a price in the wrong cell please do not try to move or drag it to the correct cell as this will damage formula even on a protected sheet. Instead copy the price to the new cell and then delete the original mistake.

The optimum view is displayed at 100% zoom. Other percentage zooms may result in some cells with wrapped text not fully displaying, if so,

try a different percentage or look in the edit bar to see the full text.

If changes are made that prevent automatic data retrieval we may require you to re-enter your data into a new file. If you have any technical problems with this workbook please contact the PLANCO team at construction@planco.de

## Finally

If the summary table above is showing all your data, send a copy of this completed file to your NSI who will forward it to Eurostat via eDAMIS (dataset PPP\_CNSTR\_A, reference year 2023) We will upload your initial dataset to the Validation Tool (VT).

Data omitted from the initial dataset and later validation amendments should be entered directly into the VT by you or your NSI.



Gross pay (NC per hour)

## NC = National Currency



# Labour rates

**Note**: Labour rates should reflect contractors' gross costs to employ labour, including pre-tax wages and any additional costs such as insurance, pension contributions, and whatever is custom for that country.

Trade	2022	2023	% change	
General labourers, unskilled				Insert labour rate
Bricklayer, skilled				Insert labour rate
Plumber, skilled				Insert labour rate
Carpenter, skilled				Insert labour rate
Structural steel worker, skilled				Insert labour rate
Electrician, skilled				Insert labour rate
Machine (equipment) operator, skilled				Insert labour rate

				Trade			
	General labourers, unskilled	Bricklayer, skilled	Plumber, skilled	Carpenter, skilled	Structural steel worker, skilled	ielectrician, skilled	Machine (equipment) operator, skilled
General definition	Performs routine tasks in connection with building construction and demolition work	Lays bricks, pre-cut stones and other types of building blocks in mortar to construct and repair walls partitions arches	Assembles, installs, repairs and maintains pipe systems, fittings and fixtures for water, gas, drainage, sewerage systems, and hydraulic and pneumatic equipment	Cuts, shapes, assembles, erects, maintains and repairs various types of structures and fittings made from wood and other materials	Assembles, erects and dismantles structural metal frames of buildings and other structures	repairs electrical wiring systems and related equipment and fixtures	Operates machines, such as bulldozers, excavators and front-end loaders, to excavate, grade, level, smooth and compact earth or similar materials
Example tasks (a)	(a) cleaning used building bricks and doing other simple work on demolition sites	construct or repair walls, partitions, fireplaces and other structures such as	(a) measuring, cutting, threading, bending, jointing, assembling, installing, maintaining and repairing pipes, fittings and fixtures of drainage, heating, water supply and sewerage systems	(a) making, altering and repairing structural and other woodwork at a work- bench and on a construction site	(a) marking metal framework as a guide when drilling, cutting, and shaping them for use in buildings and other structures	wiring systems and related equipment in various buildings such as schools, hospitals, commercial establishments, residential buildings and other	(a) operating and monitoring excavating machinery equipped with moveable shovel, grab- bucket or dragline bucket, to excavate and move earth, rock, sand, gravel or similar materials
Example tasks (b)	(b) mixing pouring and spreading materials such as concrete, plaster and mortar	(b) laving footnaths, kerbs	(b) installing gas appliances, dishwashers and water heaters, sinks and toilets using hand and power tools	(b) constructing, erecting and installing heavy- framed wooden structures on building sites	(b) drilling, cutting and shaping structural steel in a workshop		(b) operating and monitoring machinery for digging trenches for sewers, drainage, water, oil, gas or similar pipelines

Example tasks (c)	(c) digging and filling holes and trenches using hand held tools	(c) laying bricks or other masonry to build patios, garden walls and other decorative installations	(c) laying clay, concrete or cast-iron pipes in ditches	(c) fitting, assembling and altering internal and external fixtures of buildings, such as walls, doors, door and window frames, facings and panelling	(c) erecting steel framework for buildings, bridges and other constructions	installation of electrical wiring, equipment and fixtures based on job	(c) operating and monitoring machinery equipped with concave steel blade to move, distribute and level earth, sand, snow and other materials
Example tasks (d)	(d) spreading sand, soil, gravel and similar materials		(d) inspecting, examining and testing installed systems and pipes, using pressure gauge, hydrostatic testing,		(d) assembling and erecting the framework and other metal parts of structures	(d) inspecting electrical systems, equipment, and components to identify hazards, defects, and the need for adjustment or	(d) operating and monitoring equipment to remove sand, gravel and mud from bottom of body of water
Example tasks (e)	(e) loading and unloading construction materials, excavated material and equipment and transporting them around construction sites using wheelbarrows, and hand trucks				(e) shaping and fitting structural-steel plates of ships under construction or repair	(e) selecting, cutting and connecting wire and cable to terminals and connectors	(e) operating and monitoring machines for hammering wooden, concrete or steel piles into ground
Example tasks (f)	(f) cleaning work sites and removing obstructions				(f) riveting structural-metal members by hand, machine or pneumatic riveter	(f) measuring and laying out installation reference points	(f) operating and monitoring power roller to compact and smooth layers of materials in making roads, pavements and similar work
Example tasks (g)						(g) positioning and installing electrical switchboards	(g) operating and monitoring machines which spread and smooth concrete or bituminous or tar preparations to construct roadways, roads or similar surfaces
Example tasks (h)						(h) testing continuity of circuit	



E.01.2.1.0.01.a Provided by RICS 2019 Estimate for a detached house



## Preamble

The building is a two-storey, 3-bedroom, detached house built in England in 2017 and located on the outskirts of a suburb of a large city with a small front garden and the building site limited to the backyard. There is to be no interference with road traffic. The building time is limited to 12 months, with work to start in April and occupation the following April. Total GIFA is 125m2 with the storey height being 2.5m.

External walls are facing brick and block with cavities partially filled with insulation. Internal walls on the ground floor are load-bearing block and non-load-bearing timber stud partitions. On the second floor, all internal walls are non-load-bearing timber stud partitions. The roof comprises timber trusses covered with clay pan tiles and includes non-converted loft space.

Neither the associated street excavation and mains connection work nor the connection charges are included in the estimate. Costs for energy and water incurred on-site should be included in unit prices. Transport of waste to a spoil pit should be calculated based on a distance of 10km unless otherwise specified. All services are to be cleaned and tested beforehand being handed over to the client.

"Make good" refers to finishes and means the specified item is finished to a professional level leaving no visible imperfections and may include provisions like filling voids created by the installation and touching up paintwork if necessary.

Item	Item encolfication	Uni	Quantit	20	22	20	23	%	Items to	Pricing notes	Everent's comments
ref	Item specification	t	у	Unit price	Total price	Unit price	Total price	chang	be	Pricing notes	Expert's comments
	1. Earthworks								95	95 items in total	
10.aa	Machine excavation for site strip and foundations in soft ground, up to 1m deep below bottom of site excavation or ground level; load and dump on site stockpile, up to 100m distance	m3	39	#N/D!	#N/D!		_		x		
10.ab	Machine excavation of foul and surface water drainage trenches; dispose of in spoil heap on-site (not including disposal offsite); 450mm wide; 1m deep	m	25	#N/D!	#N/D!		-		x		
10.ac	Granular material; type B (20-40mm); supply and place; 150mm thick as sub-base; levelled and compacted	m3	9	#N/D!	#N/D!		-		x		
10.ad	Supply, spread and level 50mm layer of sand as blinding to sub-base	m3	3	#N/D!	#N/D!		-		X		

10.ae	Disposal of uncontaminated excess spoil from site, loading and transporting, distance 5km (excluding tipping fees)	m3	39	#N/D!	#N/D!	-	X	
			TOTAL 1		#N/D!	-		
	2. Concrete							
20.aa	Trench fill foundations under walls in C20/25 concrete; including steel rebar reinforcement (130kg/m3), tamped surface to levels	m3	18	#N/D!	#N/D!	-	X	
20.ab	Ground floor slab in C25/30 concrete, including steel fabric mesh reinforcement (150kg/m3), levelled and tamped; 125mm thick	m3	6	#N/D!	#N/D!	-	X	
20.ac	Filling to cavity of hollow walls to ground level in C12/15 concrete; cavity not exceeding 150mm wide	m3	1	#N/D!	#N/D!	-	Χ	
20.ad	1200 gauge polythene damp proof membrane laid on sand blinding (priced separately), lapped joints; dressed up wall and into DPC course	m2	69	#N/D!	#N/D!	-	X	
20.ae	Expanded polystyrene (XPS) insulation; 150mm thick laid horizontally over 300mm wide, (0.13W/m2 K)	m2	62	#N/D!	#N/D!	-	X	
20.af	Expanded polystyrene (XPS) insulation; 25mm thick fixed vertically not exceeding 300mm wide	m	51	#N/D!	#N/D!	-	X	
			TOTAL 2		#N/D!	-		
	3. Masonry							
30.aa	Foundation masonry of 100mm 7KN concrete block outer leaf; facing brickwork where exposed, 140mm 7KN concrete block inner leaf, with 100mm wide cavity; stainless steel wall ties at 5 per m2	m2	16	#N/D!	#N/D!	-	X	
30.ab	Foundation walls of 100mm 7KN concrete blocks to internal partitions	m2	5	#N/D!	#N/D!	-	X	In 2022 this iten was estimated using a grossing factor.

30.ad	4KN thermal block inner leaf, with 100mm cavity incorporating 100mm mineral wool insulation; stainless steel wall ties at 5 per m2	m2	161	#N/D!	#N/D!	-	X		
30.ae	Internal partition walls of 100mm 4KN thermal blockwork	m2	18	#N/D!	#N/D!	-	Χ		
30.af	Close cavity not exceeding 100mm wide between skins of hollow wall at ends, jambs or cills of openings, Manthorpe cavity closer or similar	m	44	#N/D!	#N/D!	-	X		
30.ag	Close cavity not exceeding 100mm wide at top of hollow wall with cement- based board bedded in gauged mortar (1:1:6)	m	38	#N/D!	#N/D!	-	X		
30.ah	Supply and install prestressed reinforced concrete lintel, 100 x 150mm high, in outer leaf, fair-faced two adjacent sides; 1200mm long	Nr	4	#N/D!	#N/D!	-	X		
30.ai	Supply and install prestressed reinforced concrete lintel, 100 x 150mm high, in outer leaf, fair-faced two adjacent sides; 1500mm long	Nr	11	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
30.aj	Supply and install prestressed reinforced concrete lintel, 140 x 150mm high, in inner leaf; 1200mm long	Nr	4	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
30.ak	Supply and install prestressed reinforced concrete lintel, 140 x 150mm high, in inner leaf; 1500mm long	Nr	11	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
30.am	Hyload pitch polymer DPC; forming cavity trays; over 300mm wide	m2	6	#N/D!	#N/D!	-	Χ		
		Т	OTAL 3		#N/D!	-			
	4. Roofing								
40.aa	Clay tile roofing; Sandtoft or similar; alloy nailed alternate courses; 38 x 25mm tanalised softwood battens; Tyvek or similar breathable underfelt; 384 x 267mm clay pantiles; 58mm lap	m2	90	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	

40.ab	Clay tile roofing; Sandtoft or similar; 38 x 25mm tanalised softwood battens; extra for eaves with undercloak; build in proprietary ventilation units; bed and point in mortar (1:3)	m	18	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
40.ac	Clay tile roofing; Sandtoft or similar; 38 x 25mm tanalised softwood battens; extra for verge with undercloak; bed and point in mortar (1:3)	m	18	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
40.ad	Clay tile roofing; Sandtoft or similar; 38 x 25mm tanalised softwood battens; extra for half or third round ridge tiles; bedding and pointing in cement mortar (1:3); double dentil slips both sides; half or third round ridge tiles	m	10	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
40.ae	Supply and lay glass fibre insulation between and across joists at 600mm centres in roof space, 0.044W/Mk; 300mm thick	m2	63	#N/D!	#N/D!	-	X	
			TOTAL 4		#N/D!	-		
	5.1 Joinery - Carpentry							In 0000 this item
51.aa	Fink or W trusses; preservative treated and stress graded softwood; 400mm overhang at eaves; 30 degree pitch; 600mm centres; span 7.20m over wall plate; steel nail plates for connections in truss construction, all to detail	Nr	15	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
51.ab	Treated sawn softwood; grade GS; 50 x 100mm wall plates, plasterboard edge support and under restraint noggins	m	85	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
51.ac	Treated sawn softwood; grade GS; 25 x 100mm wind bracing to trusses	m	110	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	Treated sawn softwood; grade SC3; 50 x 200mm joists at 400mm centres;			#N/D!			Х	In 2022 this item was estimated

-					-	 			-
51.ae	Treated sawn softwood; grade GS; 50 x 200mm solid strutting at mid-span of joists	m	14	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
51.af	V313 moisture resistant tongued and grooved chipboard or similar boarding to floors; BS5669; 22mm thick to first floor	m2	60	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
51.ag	Treated sawn softwood; grade GS; 50 x 100mm; studwork in partitions; horizontally every 400m and three times vertically (noggins) per floor	m	253	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
51.ah	Glass fibre insulation quilt; vertical; to void in partition walls; 100mm thick	m2	134	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
51.ai	Framework; treated sawn softwood; to receive pipe casings; 25 x 38mm vertically; 25 x 25mm horizontally at 450mm centres; two sided; 300mm girth	m	10	#N/D!	#N/D!	-	x		
51.aj	Far Eastern hardwood faced MR boarding ply; grade B/BB; 9mm; fixed to framework (exclude framework from price as priced separately); two sided to casings; 300mm girth	m2	2	#N/D!	#N/D!	-	x		
51.ak	Trim out for and install insulated loft hatch (hinged swinging down) incorporating polystyrene slab achieving U value in excess of 0.35 W/m <sup>2</sup> k; including linings; size of hatch: 550 x 700mm; situated over landing area.	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
51.al	PVCu fascia, bargeboard and soffit assembly; 200mm fascia/bargeboard and 200mm soffit; including batten support fixed to external wall	m	38	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
51.am	Supply and install pre-finished internal softwood door and frame in white, standard quality, 25 x 75mm softwood architrave both sides; including ironmongery (pair hinges, latch & lever handles); 826 x 2040 x 40mm; to internal door openings	Nr	10	#N/D!	#N/D!	-	x		

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51.an	Supply and install MDF white standard quality cupboards (base units) 800mm height, comprising 1Nr 1000mm sink base unit , 1Nr 1000mm corner base unit, 4Nr 600mm single base units and 1Nr 600mm base unit for oven. All cupboards to include standard quality finishings: ironmongery, white glossy surface doors and brushed steel handles.	Nr	1	#N/D!	#N/D!	-	X	
51.ao	Supply and install (wall mounted on bracket) 4Nr 600 x 800mm single MDF white cabinets including standard quality finishings: ironmongery, white glossy surface doors and brushed steel handles (total width of cabinets 2.4m)	Nr	1	#N/D!	#N/D!	-	x	
51.ap	Supply and install new 38mm thick white laminate worktop, 640mm wide and make good including sealing with mastic sealant	m	6	#N/D!	#N/D!	-	X	
51.aq	Supply and install standard proprietary softwood pattern staircase; unfinished; straight flight; 13 riser; 2.6m total rise; balustrades in softwood; 25 x 25mm balusters housed at 100mm centres; 50 x 75mm moulded handrail; 25 x 75mm string capping: 100 x 75/100mm newels; 1000mm high raking and horizontal	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
51.ar	Skirtings; wrought softwood; plain square edge: 25 x 145mm	m	117	#N/D!	#N/D!	-	Χ	
51.as	Window boards; wrought softwood; nosed and tongued: 25 x 225mm	m	8	#N/D!	#N/D!	-	Χ	
		Т	OTAL 5.1		#N/D!	 -		
	5.2 Metalwork							
52.aa	Supply and install 3 sections Aluminium loft ladder 12 rungs 1302mm; including anti-slip feet & treads; max. static vertical load: 150kg; fixed to loft hatch to provide access (loft hatch priced separately (51.ak))	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.

52.ab30 x 5 x 1000mm galvanised heavy duty mild steel restraint straps; fixing to woodwork and masonry52.acGalvanised steel truss clips; fixing to woodwork; to suit trussed rafter construction at plate; width: 38mmGalvanised steel joist hangers; build	Nr Nr	28		#N/D! #N/D!	-	x x	In 2022 this item was estimated using a grossing factor. In 2022 this item was estimated using a grossing factor. In 2022 this item
52.ad in to masonry: size: 50 x 200mm; as support to ends of floor joists	Nr	40 FOTAL 5.2		#N/D! #N/D!	-	 <b>.</b>	was estimated using a grossing factor.
5.3 Joinery - Windows							
<ul> <li>Install new pre-finished PVCu casement triple glazed window with two 16mm argon filled cavity (4-16-4 16-4, providing 0.6W/m2 K), includin frames, linings, ironmongery and the like: 1200 x 1050mm</li> </ul>	g	8	#N/D!	#N/D!	-	X	
Install new pre-finished PVCu casement triple glazed frosted window with two 16mm argon filled 53.ab cavity (4-16-4-16-4 providing 0.6W/m2 K), including frames, lining ironmongery and the like: 1200 x 1050mm	Nr ۶,	2	#N/D!	#N/D!	-	X	
<ul> <li>Install new pre-finished PVCu single external door and frame, safety double glazed units with one argon filled cavity (5-18-5, providing 1.1/m² K), including frames, linings, ironmongery and security (5 locking points); pointing frames externally with coloured mastic sealant; 900 x 2050 x 44mm overall size</li> </ul>	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.

53.ad	Install new pre-finished PVCu pair external glazed French doors and frame, safety double glazed units with one argon filled cavity (5-18-5, providing 1.1/m2 K), including frames, linings, ironmongery and security (5 locking points); pointing frames externally with coloured mastic sealant; 1200 x 2050 x 44mm overall size	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
		1	OTAL 5.3		#N/D!	-		
			TOTAL 5		#N/D!	-		
	6. Finishings							
60.aa	Cement and sand (1:3); trowelled finish to floors 65mm thick, float finish; incorporating mesh reinforcement	m2	62	#N/D!	#N/D!	-	X	
60.ab	Cement and sand (1:3) to walls in render coats, overall 10mm thick; finish with 5mm thick coat of plaster	m2	186	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
60.ac	Plasterboard linings to ceilings; 12.5mm wallboard to woodwork backgrounds; Thistle plaster finish; one coat for scrimming joints and filling nail holes	m2	123	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
60.ad	Plasterboard linings to walls; 12.5mm wallboard to woodwork backgrounds; Thistle plaster finish; one coat for scrimming joints and filling nail holes	m2	112	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
60.ae	Supply and install medium quality Polypropylene carpet; pile height 10mm and 10mm recycled PU foam underlay; 2.9 tog rating; including gripper and oak effect laminate 50mm door bars	m2	79	#N/D!	#N/D!	-	X	
60.af	200mm; length 1380mm. Cost to include 5mm underlay	m2	41	#N/D!	#N/D!	-	X	
60.ag	Paint internal wall; two coats vinyl silk emulsion paint white	m2	283	#N/D!	#N/D!	-	Χ	

						 -	-	_	_
60.ah	Paint skirting (height 145mm), one coat undercoat alkyd-based paint, white and one coat gloss, standard quality	m	117	#N/D!	#N/D!	-	X		
60.ai	Paint plaster ceiling one coat primer, two coats white vinyl silk emulsion	m2	125	#N/D!	#N/D!	-	X		
60.aj	Glazed ceramic wall tiling 200 x 200 x 10mm white colour, fixing with adhesive	m2	15	#N/D!	#N/D!	-	x		
			TOTAL 6		#N/D!	-			
	7.1 Mechanical Installations - Sanita	ry In	stallation a	and plumbing		I			
71.aa	Extend hot and cold services with 15mm polybutylene push-fit pipes, including all fixings and connections from bathroom to en-suite, 2.5m in length each (5m in total)	Nr	1	#N/D!	#N/D!	-	x		
71.ab	Extend soil and waste pipe with 110mm diameter PVCu push-fit pipes, including all fixings and connections from bathroom to en- suite, 5m in length	Nr	1	#N/D!	#N/D!	-	x		
71.ac	Stainless steel sink 1000 x 600mm, single bowl, single drainer, complete with mixer taps and associated fittings; connecting to services	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
71.ad	Supply and install 5mm white acrylic bath 1700 x 700mm; 540mm high with white vinyl wrapped MDF panel. Including taps and associated fittings; fixing in position including connecting to services	Nr	1	#N/D!	#N/D!	-	x		
71.ae	Supply and install 500mm rectangular basin in white vitreous china with pedestal; standard quality; complete with mixer tap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	3	#N/D!	#N/D!	-	x		

71.af	Supply and install rectangular close coupled WC suite in white vitreous china; standard quality; complete with cistern, seat and flap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	3	#N/D!	#N/D!	-	x	
′1.ag	Supply and install white 900 x 900mm acrylic shower tray, 25mm high and 6mm thick glass quadrant (door); inclusive of waste, complete with associated fittings; fixing in position including connecting to services n.e. 1.5m from unit	Nr	1	#N/D!	#N/D!	-	X	
1.ah	Supply and install exposed thermostatic bar mixer shower in chrome specification; Hansgrohe Croma 100 Showerpipe or similar; fixing in position; connecting to services not exceeding 1.5m from unit	Nr	1	#N/D!	#N/D!	-	x	
1.ai	Cold water plumbing pipework; surface mounted 15mm copper including associated fittings; 8Nr stop valves; insulated in roof space	m	35	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
1.aj	Hot water plumbing pipework; surface mounted 15mm copper including associated fittings; 3Nr stop valves	m	30	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
1.ak	Provision of cold water supply, 10m MDPE pipe 20mm dia; metre position to rising main position, including stop cock and non-return valve	Nr	1	#N/D!	#N/D!	-	X	
1.al	PVCu rainwater pipes and fittings; BS 457668; pipes including shoes and offsets; fixing with standard clips to masonry backgrounds: 68mm diameter	m	10	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
.am	PVCu rainwater gutters and fittings; BS 4576; gutters including stop ends and running outlets; fixing with standard clips to woodwork or plastic backgrounds; 112mm dia	m	18	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
		тс	TAL 7.1		#N/D!	-		

						 	-			
72.aa	Install and commission gas-fired 32kW wall mounted fan-assisted condensing boiler, connecting to, and including, inlet/exhaust flue and pipework	Nr	1	#N/D!	#N/D!	-		X	In 2022 this item was estimated using a grossing factor.	
72.ab	15mm Polyethylene (PE-X) piping from boiler hot and cold services to sanitary fixtures and fittings complete with all bends, couplers, brackets etc as appropriate and including 4nr valves in total	m	84	#N/D!	#N/D!	-		X		
72.ac	22mm Polyethylene (PE-X) piping for flow and return to boiler	m	18	#N/D!	#N/D!	-		Χ	In 2022 this item was estimated using a grossing factor.	
72.ad	Wall mounted double-panel double convector steel radiator 600 x 1200mm white; 7324Btu, 2146W output, including thermostatic valve and manual control valve; including connection to pipework	Nr	10	#N/D!	#N/D!	-		X	In 2022 this item was estimated using a grossing factor.	
		Т	OTAL 7.2		#N/D!	-				
	7.3 Mechanical Installations - Ventila	ation				1				
73.aa	Form a 150mm diameter aperture in 350mm external cavity wall for venting kitchen beside double door. Supply and install 150mm dia x 350mm PVCu pipe for extractor fan (Note: extractor fan priced separately)	Nr	1	#N/D!	#N/D!	-		X		
73.ab	Form a 100mm diameter aperture in 350mm external cavity wall for venting en-suite. Supply and install 100mm dia x 350mm PVCu pipe for extractor fan (Note: extractor fan priced separately)	Nr	3	#N/D!	#N/D!	-		X		
73.ac	Supply and install new 100mm extractor fan; (c.20Ltr/sec) connect to ducting and electrics and make good wall finishes on completion of work element	Nr	3	#N/D!	#N/D!	-		X		
73.ad	Supply and install new 150mm extractor fan; (c.60Ltr/sec) connect to ducting and electrics and make good wall finishes on completion of work element	Nr	1	#N/D!	#N/D!	-		X		

		TOTAL 7.3	6	#N/D!		-		
		TOTAL 7	,	#N/D!		-		
	8. Electrical Installations				<u> </u>			
80.aa	Supply and install new 6W 90mm LED recessed ceiling light and switch for en-suite, creating new routes and 3m of wiring to electrics	Nr 14	#N/D!	#N/D!		-	X	
80.ab	Supply and install new shaving socket to en-suite, creating new routes and 3m of wiring to electrics	Nr 2	? #N/D!	#N/D!		-	Χ	
80.ac	Supply and install standard built in electric oven (600 x 600 x 600mm) and induction hob including wires and routing to electrics	Nr 1	#N/D!	#N/D!		-	X	
80.ad	Supply and install new smart smoke & Carbon Monoxide alarm (Nest S3000 Protect or equivalent); wire into electrics for fail-safe (assume 2m of wire required)		2 #N/D!	#N/D!		-	X	
80.af	Supply and install double switched sockets to all rooms, hall and landing areas excluding toilet, bathroom and en-suite, creating routes and 3m of wiring in sheathing to electrics for each outlet, make good	Nr 28	3 #N/D!	#N/D!		-	X	In 2022 this item was estimated using a grossing factor.
80.ag	Supply and install consumer unit; metalclad 8-way; SPN 240V; single phase, complete with circuit breakers and RCDs	Nr 1	#N/D!	#N/D!		-	X	In 2022 this item was estimated using a grossing factor.
		TOTAL 8	8	#N/D!		-		
	9. Drainage System							
90.aa	150mm bed and surround in pea shingle and 150mm covering of pea shingle to pipes; 110mm dia, 450mm wide (allow a total of 0.135m3 pea shingle per m)	m 25	5 #N/D!	#N/D!		-	X	
90.ab	PVCu pipes; OsmaDrain or similar; 110mm dia soil waste pipework complete with accessories including connectors, bends, access doors, branches etc; fixing with standard clips	m 25	5 #N/D!	#N/D!		-	X	

90.ad	PVCu inspection chambers; granular bed and surround; 110mm; 475mm diameter base, raising piece, medium duty cover and frame; 930mm deep	Nr 2	#N/D!	#N/D!		-		X	In 2022 this item was estimated using a grossing factor.	
		TOTAL 9		#N/D!		-				
	Please complete details below for Fees		Chapter	2022 Total	Chapter	2023 Total (	% Change			
			1	#N/D!	1	-				
			2	#N/D!	2	-				
			3	#N/D!	3	-				
			4	#N/D!	4	-				
			5	#N/D!	5	-				
			6	#N/D!	6	-				
			7	#N/D!	7	-				
			8	#N/D!	8	-				
			9	#N/D!	9	-				
			General Total	-	General Total	-				
ARCHI	TECT'S AND ENGINEER'S FEES (% o	f general total )		#ARG!		-		Insert FEE	S percentage	
			TOTAL PRICE	#ARG!	TOTAL PRICE			Check un	oriced items marked	I X above



## E.01.2.1.0.01.d Provided by RICS 2018 Estimate for renovation of a detached house



## Preamble

The building to be renovated is a two-storey detached house built in England during the late 1980s, and located on the outskirts of a suburb of a large city with a small front garden and the building site limited to the backyard. There is to be no interference with road traffic and during the renovation work the occupants will vacate the premises and move elsewhere. The building time is limited to three months, with work to start in April and occupation by June at the latest. Total GIFA amounts is c. 125m2 with the storey height being 2.5m.

External walls are facing brick and block cavity partially filled with insulation. Internal walls on the ground floor are load bearing block and non-load bearing timber stud partitions. On the second floor all internal walls are non-load bearing timber stud partitions. The roof comprises timber trusses covered with clay pan tiles and includes non-converted loft space. All lose furniture will be removed prior to the commencement of works.

The ground floor living room will be expanded to include the floor space of the study with the internal wall being knocked through. A new window will be added to the side wall of the newly expanded living room to provide natural light throughout the day. The kitchen will be refurbished and feature new cabinets, cupboards, cooker etc. with all electrical and plumbing supplies being disconnected prior to commencement of the works. The existing combi boiler will be replaced with a more energy efficient one. All light fittings, pendants and bulbs will be replaced with new energy efficient ones.

On the second floor the linen cupboard will be removed and the existing door used to access bedroom 1 will be blocked up. The access originally for linen cupboard will be expanded to accommodate a larger door and the linen cupboard rear wall will be knocked through providing access to bedroom 1. An internal wall will be added to bedroom 1 creating space for an en-suite which will include shower quadrant, basin and WC.

The whole house will be redecorated with paint to ceilings, walls and skirting's. New carpet will be laid in all areas except kitchen, utility, en-suite, toilet and bathroom which will feature new laminate flooring.

"Make good	" refers to finishes and means th	e specified item is finished to	a professional level leaving r	no visible imperfections and ma	y include provision like fillin	g voids created by ins	tallation and touching
up paintwor	k if necessary.						

Item	Item enceification	Uni	Quantit	20	)22	20	)23	%	Items to	Pricing notes	
ref	Item specification	t	у	Unit price	Total price	Unit price	Total price	chang	be	Pricing notes	Expert's comments
	3. Masonry								49	49 items in total	
30.aa	Form new window opening: 1200 x 1050mm with sills in 350mm external cavity wall: cut opening, provide and build in suitable steel lintel over, cavity gutters, closing cavities, vertical damp proof courses; making good plaster work internally and extending to reveals	Nr	1	#N/D!	#N/D!		-		X		
			TOTAL 3		#N/D!		-				

	4. Roofing							
40.aa	Take up, remove and dispose of in skip on-site (not including disposal off-site); defective glass fibre insulation quilt between joists; 100mm thick	m2 63	#N/D!	#N/D!	-	x		
40.ab	Supply and lay glass fibre insulation between and across joists at 600mm centres in roof space, 0.044W/Mk; 300mm thick	m2 63	#N/D!	#N/D!	-	x		
		TOTAL 4		#N/D!	-			
	5.1 Joinery - Carpentry							
51.aa	Take up, remove and dispose of in skip on-site (not including disposal offsite); internal stud wall comprising of 38 x 75mm softwood head, sole plate and vertical studs at 400mm centres with horizontal noggins at 600mm centres, clad both sides with 12.5mm wallboard. Once stud wall removed make good and extending finishing's	m2 14	. #N/D!	#N/D!	-	x		
51.ab	Take up, remove and dispose of in skip on-site (not including disposal offsite); kitchen cupboards and worktop, incl. oven, hob and sink and taps. Kitchen comprises 1x 1000mm sink base unit with dummy drawer lines, 1000mm corner base unit, 4x 600mm single base unit with drawer lines and 1x 600mm base unit housing oven (assume 20m manual transportation)	Nr 1	#N/D!	#N/D!	-	x		
51.ac	Take up, remove and dispose of in skip on-site (not including disposal offsite); softwood internal door and frame, 1981 x 762 x 35mm	Nr 1	#N/D!	#N/D!	-	x		

51.ad	Timber stud partition or the like comprising 75mm studs at 400mm centres, including 75mm mineral wool between studs, both faces lined with 12.5mm plasterboard with taped joints, polythene acoustic sealant and make good and extending finishing's including skirting	m2	8	#N/D!	#N/D!	)!	x	
51.ae	Form new door opening 2040 x 826mm in 75mm timber stud walls or the like, make good and extending finishing's	Nr	1	#N/D!	#N/D!		x	
51.af	Take up, remove and dispose of in skip on-site (not including disposal offsite)softwood linen cupboard door 1981 x 690mm, enlarge opening and fit new frame and door 2040 x 826mm to bedroom 1 and make good and extending finishing's	Nr	1	#N/D!	#N/D!	)!	x	
51.ag	Take up, remove and dispose of in skip on-site (not including disposal offsite); softwood door. Supply and install new pre-finished internal softwood door and frame in white, 2040 x 826 x 40mm, standard quality, including ironmongery	Nr	10	#N/D!	#N/D!	)! –	x	
51.ah	Supply and install MDF white standard quality cupboards (base units) 800mm height, comprising 1Nr 1000mm sink base unit , 1Nr 1000mm corner base unit, 4Nr 600mm single base units and 1Nr 600mm base unit for oven. All cupboards to include standard quality finishings: ironmongery, white glossy surface doors and brushed steel handles.	Nr	1	#N/D!	#N/D!	)!	X	
51.ai	Supply and install (wall mounted on bracket) 4Nr 600 x 800mm single MDF white cabinets including standard quality finishings: ironmongery, white glossy surface doors and brushed steel handles (total width of cabinets 2.4m)	Nr	1	#N/D!	#N/D!	)!	x	

	Supply and install new 38mm thick									
	white laminate worktop, 640mm wide	m	6	#N/D!	#N/D!	_		Χ		
UT.aj	and make good including sealing with		Ŭ	$\pi \mathbf{N} \mathbf{D}$	#N/D:			Λ		
	mastic sealant									
		т			#N/DI					
		10	OTAL 5.1		#N/D!	-				
	5.3 Joinery - Windows									
	Take up, remove and dispose of in									
	skip on-site (not including disposal									
	offsite); timber casement windows in	Nr	9	#N/D!	#N/D!	-		Χ		
	1200mm x 1050mm with frames,		-					Λ		
	linings, ironmongery and the like									
	Install new pre-finished PVCu									
	casement triple glazed window with									
	two 16mm argon filled cavity (4-16-4-							V		
	16-4, providing 0.6W/m2 K),	Nr	8	#N/D!	#N/D!	-		Χ		
	including frames, linings,									
	ironmongery and the like: 1200 x									
	1050mm									
	Install new pre-finished PVCu									
	casement triple glazed frosted									
	window with two 16mm argon filled									
	cavity (4-16-4-16-4 providing	Nr	2	#N/D!	#N/D!	-		Χ		
	0.6W/m2 K), including frames,									
	linings, ironmongery and the like:									
	1200 x 1050mm									
		T	OTAL 5.2		#N/D!	 -				
			TOTAL 5		#N/D!	-				
	6. Finishings									
	Take up, remove and dispose of in									
	skip on-site (not including disposal	m2	36	#N/D!	#N/D!			Χ		
00.aa	offsite); 2mm thick linoleum floor;	ΠZ	30	#IN/D!	#N/D!	-		Λ		
	including adhesive									
	Take up, remove and dispose of in									
	skip on-site (not including disposal	_						V		
	offsite); 10mm thick clay wall tiles	m2	15	#N/D!	#N/D!	-		Χ		
	including sealants and adhesives									
	Take up, remove and dispose of in									
	skip on-site (not including disposal	m2	83	#N/D!	#N/D!	-		Χ		
	offsite); carpet and underlay including							<i>/</i> \		
	tack strips									

60.ad	Supply and install medium quality Polypropylene carpet; pile height 10mm and 10mm recycled PU foam underlay; 2.9 tog rating; including gripper and oak effect laminate 50mm door bars	m2	79	#N/D!	#N/D!	-	X		
	Supply and install 8mm thick 'standard quality' laminate floor; oak imitation; dimensions c. width 200mm; length 1380mm. Cost to include 5mm underlay	m2	41	#N/D!	#N/D!	-	X		
60.af	Paint internal wall; two coats vinyl silk emulsion paint white	m2	283	#N/D!	#N/D!	-	Χ		
60.ag	Painting new plaster walls internally; one coat primer, two coats vinyl silk emulsion paint, white	m2	5	#N/D!	#N/D!	-	X		
60.ah	Paint skirting (height 145mm), one coat undercoat alkyd-based paint, white and one coat gloss, standard quality	m	117	#N/D!	#N/D!	-	X		
60.ai	Paint plaster ceiling one coat primer, two coats white vinyl silk emulsion	m2	125	#N/D!	#N/D!	-	Χ		
60.aj	Glazed ceramic wall tiling 200 x 200 x 10mm white colour, fixing with adhesive	m2	15	#N/D!	#N/D!	-	 X		
		тс	OTAL 6		#N/D!	-			
	7.1 Mechanical Installations - Sanita	ary Insta	Ilation	and plumbing					
71.aa	Extend hot and cold services with 15mm polybutylene push-fit pipes, including all fixings and connections from bathroom to en-suite, 2.5m in length each (5m in total)	Nr	1	#N/D!	#N/D!	-	X		
71.ab	Extend soil and waste pipe with 110mm diameter PVCu push-fit pipes, including all fixings and connections from bathroom to en- suite, 5m in length	Nr	1	#N/D!	#N/D!	-	X		

		-				 			
71.ac	Isolate water and disconnect, remove and dispose of in skip on-site (not including disposal offsite); PVCu bath 1700 x 700mm; 5mm thick	Nr	1	#N/D!	#N/D!	-	X		
71.ad	Isolate water and disconnect, remove and dispose of in skip on-site (not including disposal offsite); WC	Nr	2	#N/D!	#N/D!	-	X		
71.ae	Isolate water and disconnect, remove and dispose of in skip on-site (not including disposal offsite); 500mm basin	Nr	2	#N/D!	#N/D!	-	X		
71.af	Isolate water and disconnect, remove and dispose of in skip on-site (not including disposal offsite); shower unit, incl. trap	Nr	1	#N/D!	#N/D!	-	X		
71.ag	Supply and install 5mm white acrylic bath 1700 x 700mm; 540mm high with white vinyl wrapped MDF panel. Including taps and associated fittings; fixing in position including connecting to services	Nr	1	#N/D!	#N/D!	-	X		
71.ah	Supply and install 500mm rectangular basin in white vitreous china with pedestal; standard quality; complete with mixer tap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	3	#N/D!	#N/D!	_	x		
71.ai	Supply and install rectangular close coupled WC suite in white vitreous china; standard quality; complete with cistern, seat and flap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	3	#N/D!	#N/D!	-	X		
71.aj	Supply and install white 900 x 900mm acrylic shower tray, 25mm high and 6mm thick glass quadrant (door); inclusive of waste, complete with associated fittings; fixing in position including connecting to services n.e. 1.5m from unit	Nr	1	#N/D!	#N/D!	-	x		

71.ak	Supply and install exposed thermostatic bar mixer shower in chrome specification; Hansgrohe Croma 100 Showerpipe or similar; fixing in position; connecting to services not exceeding 1.5m from unit	Nr	1 7.1	#N/D!	#N/D! #N/D!	-	X		
	7.2 Mechanical Installations - Heatir	ng and hot v	vate	r supply					
72.aa	Isolate power and disconnect, remove and dispose of in skip on-site (not including disposal offsite); existing boiler and replace with new gas-fired, 32kW wall mounted fan- assisted condensing boiler, including draining down system as necessary and connecting to and including, inlet/exhaust flue and pipework	Nr	1	#N/D!	#N/D!	-	X		
		TOTAL	7.2		#N/D!	-			
	7.3 Mechanical Installations - Ventil	ation							
73.aa	Form a 150mm diameter aperture in 350mm external cavity wall for venting kitchen beside double door. Supply and install 150mm dia x 350mm PVCu pipe for extractor fan (Note: extractor fan priced separately)	Nr	1	#N/D!	#N/D!	-	X		
73.ab	Form a 100mm diameter aperture in 350mm external cavity wall for venting en-suite. Supply and install 100mm dia x 350mm PVCu pipe for extractor fan (Note: extractor fan priced separately)	Nr	1	#N/D!	#N/D!	-	X		
73.ac	Supply and install new 100mm extractor fan; (c.20Ltr/sec) connect to ducting and electrics and make good wall finishes on completion of work element	Nr	3	#N/D!	#N/D!	-	X		

	Supply and install new 150mm extractor fan; (c.60Ltr/sec) connect to ducting and electrics and make good wall finishes on completion of work element	Nr 1 TOTAL 7.3	#N/D!	#N/D! #N/D!		-	X		
	8. Electrical Installations	TOTAL 7		#N/D!		-			
	Rewire light switch in living room (incl. former study) using existing wires and routes so they operate both lights together and making good	Nr 2	#N/D!	#N/D!		-	x		
90 ob	Move light switch for bedroom 1 to new door location and rewire to electrics using existing wires and route and making good	Nr 1	#N/D!	#N/D!		-	x		
80.ac	Supply and install new 6W 90mm LED recessed ceiling light and switch for en-suite, creating new routes and 3m of wiring to electrics	Nr 1	#N/D!	#N/D!		-	x		
	Supply and install new shaving socket to en-suite, creating new routes and 3m of wiring to electrics	Nr 1	#N/D!	#N/D!		-	X	<u> </u>	
	Supply and install standard built in electric oven (600 x 600 x 600mm) and induction hob including wires and routing to electrics	Nr 1	#N/D!	#N/D!		-	x		
80.af	Isolate power and disconnect, remove and dispose of in skip on-site (not including disposal offsite); light fittings from ceiling and replace with 500mm pendant; 9W E27 LED - standard shape bulb	Nr 12	#N/D!	#N/D!		-	x		
80.ag	Supply and install new smart smoke & Carbon Monoxide alarm (Nest S3000 Protect or equivalent); wire into electrics for fail-safe (assume 2m of wire required)	Nr 2	#N/D!	#N/D!		-	x		
		TOTAL 8		#N/D!		-			
	Please complete details below for Fees		Chapter	2022	Chapter	2023	%		

	onapter	Total	onapter	Total Change	9
	3	#N/D!	3	-	
	4	#N/D!	4	-	
	5	#N/D!	5	-	
	6	#N/D!	6	-	
	7	#N/D!	7	-	
	8	#N/D!	8	-	
	General Total	-	General Total	-	
ARCHITECT'S AND ENGINEER'S FEES (% of general total		#ARG!		-	Insert FEES percentage
	TOTAL PRICE	#ARG!	TOTAL PRICE		Check unpriced items marked X above



E.01.2.1.0.02.a Provided by Switzerland - 2012 Estimate for an apartment block



#### Preamble

This 7 storey block of 39 apartments, was built in 2009 in the greater Geneva metropolitan area, far away enough from the centre to be out of the hot spots and still representative for the urban area.

It has two entrances, internal staircases and elevators and is constructed from in situ concrete and brick walls. The specification includes underfloor heating and covers up to date fire isolation requirements.

- the underground garage and various store rooms have been omitted, as have nuclear and chemical protection cellars which are a unique Swiss requirement
- the 'cantilever connection system elements' or 'thermal break solution elements', (e.g. maxfrank.co.uk reinforcements technologies) between floors and balconies have been omitted
- The number of different floor layouts has been reduced and has been taken into account in the quantities. The number of different window sizes and styles has been reduced
- electrical and sanitary equipment item specifications have been set up to allow some items to either be priced separately or to be included in the rates for other items see pricing notes for the use of sub-components - all needed specifications have been given directly in the text of the sub-components and these should be taken into account when pricing items directly

The original design has been simplified slightly and certain more complex details have been excluded to make the construction appropriate to a wider range of countries.

Where possible apply European standards for construction products Index 1) Concrete as defined by europ. Norm Index 2) Steel S 500 as defined by europ. Norm Index 3) Formwork as defined by europ. Norm

#### Pricing notes Sub-components

Swiss specifications for item sub components and quantities are shown in blue in the cells below items and, for comparability of pricing, should be followed whenever possible. You do not have to price sub components individually, but may do so if it helps you build up the overall item rate. These sections have some unprotected space in case you need to make additional calculations but please follow the Swiss proposals as closely as possible. Sub component rates and details are not entered into the validation tool. Sub components may be left blank or priced; amended or unamended. There is some additional space to add further sub items. You may need to insert your own formulae. They are not included in the Validation Tool

#### Item rates

The total rate for each item should be entered into the highlighted cells under the heading '2023 Unit Price'. Either enter a rate directly into the cell or a formula linking to your rate built up from sub-component prices. In the mechanical and electrical chapters some general items may be priced separately or included in the other rates. If they are included in other rates you will need to enter a zero to complete the pricing process. Item rates will be entered into the validation tool.

### Preliminaries

The cost of preliminaries (together with contactor's overheads and profit) should be included in the item rates as a percentage addition spread evenly across all items, please read the 'Pricing Guidelines' for further advice. The section below shows items and quantities that Switzerland thinks are appropriate for this project. The table is unprotected and you may use or adapt it if you think it will be helpful in determining the correct percentage addition for your country, or you may leave it unpriced. The list is not comprehensive and items should be included, excluded or amended according to normal practice in your country. Items in this table do not appear in the Validation Tool.

#### **Preliminaries Percentage Calculator**

For information only, <u>NOT</u> included in Project Total - see Preliminaries note above.

							20	)23	
lte re		Item specification	Uni t	Quantit y	Unused columns	Sub- component Rate	Sub- component price	Unit price	Total price
0	G	0. General site facilities							
0,	1 D0	Barriers and temporary enclosures	m	170					0,00

0, 1	S1	Building site fencing, metal wire mesh panel type, 10 X 20 cm meshs, diameter of steel wire about mm 5, height 2 m, fixed on concrete stands.	m	170		0,00	
0,1	S2	Entrance gate, 4 m width, plus a 1m wicket door, of the same type as building site fence	Nr	1		0,00	
		item total	m	170	 0,00	0,00	
0.2			m2	100	0,00	0,00	0,00
0,2		Access roads, site compounds Access roads, building site	1112	100			0,00
0,2	S1	compounds (oversighting of sail by	<i>m</i> 2	100		0,00	
		item total	<i>m</i> 2	100	0,00	0,00	
03		Site office for clerk of works	M2 Nr	100	0,00	0,00	0.00
0,3			111				0,00
0,3	S1	Temporary containers (dimension 9 m x 2.5 m): Works management offices, meeting, etc	Nr	3		0,00	
0,3	S2	Rental period (u= month)	Nr	12		0,00	
- í						,	
		item total	Nr	1	0,00	0,00	
0,4	D0	Temporary facilities (Installation of temporary services)	Nr	1			0,00
0,4	S1	Temporary facilities 1 x sanitary unit, sewage system; Ø 125cm and 50 m long. Cut and fill included.	Nr	1		0,00	
0,4	S2	Temporary facilities: Electricity Temporary panel with a meter for a PW of 80 KW with circuit breakers.	Nr	1		0,00	
0,4	S3	Temporary facilities: water, sewage; Ø PE 50 and 50 m long. Cut and fill included.	Nr	1		0,00	
			Nr	1	0,00	0.00	
0.5	00	item total Front scaffolding (0.6m width)	m2	2 576	0,00	0,00	0,00
0.5			1112	2 370			0,00
0.5	S1	Light front scaffolding (200kg loads, cm 60 width) height 18 m, including safety devices: return journey, installing, fitting, removing, commissioning operations.	<i>m</i> 2	2 576		0,00	

0.5 S2	Front scaffolding rental (quantity = m2 x 6 months)	m2 / mont h	15 465			0,00		
			0.570					
06 4	GENERAL EXPENSES	m2	2 576		0,00	0,00		
	Cleaning of the building (prior to	m2	4 229					0,00
	client handover)	=						-,
0.6 S1	Complete cleaning of the buildings including: scouring the floors, vacuuming the parquet floors and cabinet bases, including complete cleaning of the cabinets. Complete cleaning. Cleaning the windows inside and outside panels as well as dusting all the interior iron works to make the buildings ready to use. Cleaning the heating elements. Cleaning of the lamps and suspended ceiling.	m2	4 229			0,00		
	item total	<i>m</i> 2	4 229		0,00	0,00		
	Additional items	Nr	1		0,00	0,00		0,00
								-,
			1.00		0.00			
	item total	Nr	1,00		0,00	0,00		
			TOTAL					0,00
				g fees from below				0,00
Prelimina	ries / (project cost - preliminar	ies)_	not includ	<u>led</u> in the rates below				
Please in	clude this built up percentage	or ar	nother sui	table percentage for Prelimit	naries + Contr	actor's overhe	ads	
and profit	t in the item unit rates below.							
The table	e above is unprotected and i	not i	ncluded	in the Validation Tool				
				2022		20	)23	

				20	022		20	)23		%	Items to		
Item	Item specification	Uni	Quantit			Sub-	Sub-			chang			Expert's comments
ref		t	У	Unit price	Total price	component	•	Unit price	Total price	e	priced	i nong notoo	
						Rate	price						
	000 1. Earthworks										70	70 items in total	

									1		
1	D01	Excavation of great volume, assigned in general to specialized companies; this group includes the earthworks related to fill excavations for building as well as the required building site facilities; the earthworks carried out by the masonry contractor are not included here. (loose ground, with 25% breaking up)									
10.aa		Excavating of topsoil; 210 - 300mm in depth	m3	170	#N/D!	#N/D!			0,00	X	
1,1	S1	Top soil machine scraping, horizontal surf aces or slope land up to 1:4. Theoretical bill of quantities volume, (in place) thickness 21 to 30 cm , including loading on vehicle.	m3	170,00				0,00			
1,1	S2	Transportation, bills of quantities by theoretical volume, 5 to 50 m and unloaded on the building site premises (theoretical volume)	m3	170,00				0,00			
		item total	<i>m</i> 3	170.00			0,00	0.00			
40 /				,	10.10		0,00	0,00		V	
10.ab		Excavating; up to 2.5m in depth	m3	1 330	#N/D!	#N/D!			0,00	X	
1,2	S1	Machine excavation works, horizontal surfaces or slope land up to 1:3. Unshielded excavations, up to 2,50m in depth. Including loading on vehicle.	т3	1 330,00				0,00			
1,2	S2	Compaction of the excavation bottom.	<i>m</i> 2	570,00				0,00			
1,2	S3	Transportation, bills of quantities by theoretical volume, 5 to 50 m and unloaded on the building site premises (theoretical volume)	т3	200,00				0,00		 _	
1,2	S4	Transport of surplus earth to an external site, with 5 km range maximum, including disposal taxes, bill of quantities: theoretical volume	т3	1 130,00				0,00		 _	
	-	item total	<i>m</i> 3	1 330,00			0,00	0,00			
10.ac	;	Slope protections works (slope 3:2); 0.5mm plastic sheets	m2	200	#N/D!	#N/D!			0,00	X	
	\$1	0.5 mm plastic sheets	<i>m</i> 2	200,00				0,00			
				200,00				0,00			
	07										
	01								 		

		item total	<i>m</i> 2	200,00			0,00	0,00		
10.ad		Backfilling against walls below ground level	m3	280	#N/D!	#N/D!			0,00	X
1,4	S1	Reclaiming the soil disposed of, through 30 cm layer compaction. (Reclaiming, loading, placing)	т3	200,00				0,00		
1,4	S2	Supplying, transporting and setting clean materials, crusher-run aggregate size 16 to 32 mm for backfilling.	т3	80,00				0,00		
		item total	<i>m</i> 3	280,00			0,00	0,00		
		2. Concrete		TOTAL 1		#N/D!			0,00	
20.aa		Raft foundation or ground slab, reinforced concrete 300mm thick	m2	570	#N/D!	#N/D!			0,00	X
2,1	D1	Foundation raft, 30 cm thick concrete, steel = 90 kg/m3 including form-work, steels and additives								
2,1	D2	- thickness 0.3 m								
2,1	D3	- Concrete volume (total) 171 m3								
2,1	D4	- Concrete surface (total) 570 m2								
2,1	S1	peripheral formwork (banks) 30 cm high	<i>m</i> 2	37,00				0,00		
2,1	<b>S</b> 2	Concrete B35/25 2)	<i>m</i> 3	171,00				0,00		
2,1	S3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	15 390,0				0,00		
2,1	S4	Lean concrete blinding 10 cm thick	<i>m</i> 2	570,00				0,00		
2,1	S5	Surface treatment, floated finish (mechanical treatment to have constant thickness and smooth surface)	<i>m</i> 2	570,00				0,00		
2,1	S6	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00		
		item total	<i>m</i> 2	570,00			0,00	0,00		
20.ab		Staircases and landings reinforced concrete insitu. Thickness 210 - 250mm	m2	246	#N/D!	#N/D!			0,00	X
2,2	D1	Flights cast installed. Constant dim. : width 120 cm, tread 27 cm, riser 17.5 cm. Height to climb by half-flight 140 cm, 6 no floor heights (storeys). Including miscellaneous.								
· ·		- thickness 0.25 m								
2,2	D3	- Concrete volume (total) 62 m3								

2	D4	- Concrete surface (total) 246 m2										
-,-												
2,2	S1	High standard formwork Type 4 3), (architectural concrete, ready to paint surface)	<i>m</i> 2	246,00				0,00				
2.2	S2	Concrete B35/25 2)	<i>m</i> 3	62,00				0.00				
2,2	S3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	148,80				0,00				
2,2	S4	Surface treatment (finished concrete)	<i>m</i> 2	246,00				0,00				
2,2	S5	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00				
		item total		240.00			0.00	0.00				
			m2	246,00			0,00	0,00				
20.ac		Floor slabs reinforced concrete 210mm deep	m2	3 534	#N/D!	#N/D!			0,00	 Χ		
2,3	D1	Formwork, reinforced concrete, frameworks, surface treatment, edges and seals, incl. miscellaneous. No additives.										
2.3	D2	- thickness 0.21 m										
2,3		- Concrete volume (total) 742 m3										
2,3	D4	- Concrete surface (total) 3534 m2										
2,3	S1	Type 4 formwork 3), (architectural concrete, ready to paint surface)	<i>m</i> 2	3 534,00				0,00				
2,3	S2	Concrete B35/25 2)	<i>m</i> 3	742,00				0,00				
2.3		Reinforcement steel S 500 1)	kg	96 460,0				0.00				
2,3	S4	Surface treatment (floated clean)	<i>m</i> 2	3 534,00				0,00				
2,3	S5	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00				
		item total	m?	3 534,00			0,00	0,00				
		Slabs		0.001,00			5,00	0,00				
20.ad		balconies reinforced concrete 210mm deep	m2	890	#N/D!	#N/D!			0,00	Χ		
2,4	D1	Formwork, reinforced concrete, framework, surface treatment, edges and seals, incl. miscellaneous. No additives.										
2,4	D2	- thickness 0.21 m										
2,4	D3	- Concrete volume (total) 187 m3										
2,4	D4	- Concrete surface (total) 890 m2										
2,4	S1	Type 4 formwork 3), (architectural concrete, ready to paint surface)	<i>m</i> 2	890,00				0,00				
2,4		Concrete B35/25 2)	<i>m</i> 3	187,00				0,00				
2,4	00	Reinforcement steel S 500 1)	kg	24 310,0				0,00				

2.4	\$4	Surface treatment (floated clean)	<i>m</i> 2	890.00				0.00					
2,4	34	Miscellaneous (edges, seals)	1112	090,00				0,00					
2.4	S5	(typically between 5 - 10 % of all the	%	0,00				0,00					
í.		other sub-components)		, i i				· · · · · ·					
		item total	<i>m</i> 2	890,00			0,00	0,00					
20.ae		Insulation under slab	m2	572	#N/D!	#N/D!			0,00		Χ		
		Styropor (or similar) insulation under										http://iwww.plastics	
2.5	S1	slab 80 mm thick, 40 g/ms density	<i>m</i> 2	572,00				0,00				portal.com/product	
		mechanical fastening by PVC cleat.										s/styropor.html	
		item total	<i>m</i> 2	572,00			0,00	0,00	 				
		Roof slabs reinforced											
20.af		concrete 210mm, roof on 5th floor	m2	895	#N/D!	#N/D!			0,00		Χ		
		and top-floor Formwork, reinforced concrete,											
		framework, surfaces treatment,											
2.6	D1	edges and seals, incl. miscellaneous.											
		No additives.											
2.6	D2	- thickness 0.21 m											
2.6	D3	- Concrete volume (total) 188 m3											
2.6	D4	- Concrete surface (total) 895 m2											
		High standard formwork Type 4 3),											
2.6	S1	(architecural concrete, ready to paint	<i>m</i> 2	895,00				0,00					
		surface)											
2.6	S2	Concrete B35/25 2)	<i>m</i> 3	188,00				0,00					
2.6	<b>S</b> 3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	24 440,0				0,00					
		,											
2.6	S4	Surface treatment (finished concrete)	<i>m</i> 2	895,00				0,00					
		Miscellaneous (edges, seals)											
2.6	S5	(typically between 5 - 10 % of all the	%	0,00				0,00					
		other sub-components)											
		item total	<i>m</i> 2	895,00			0,00	0,00	l				
		Round reinforced concrete pillars,											
20.ag		300mm dia; reinforcement	m	126	#N/D!	#N/D!			0,00		Х		
		325kg/m3											
	-	Circular formwork, reinforced											
	D1	concrete, framework. No additives.											
		Standard formwork 4 3), round,											
2.7	S1	300mm (architectural concrete, ready	m	126,00				0,00					
		to paint surface) diameter											
27	S2	Concrete B35/25 2) cast on site	<i>m</i> 3	3,00				0,00					
		Reinforcement steel S 500 1) (bent all											
2.7	S3	Ø 6 to 14 mm)	kg	975,00				0,00	1	1		1 1	

	Miscellaneous (typically between 5 - 10 % of all the other sub- components)	%	0,00				0,00			
	item total	m	126,00			0,00	0,00			
20.ah	Below ground perimeter and lift pit walls in reinforced waterproof concrete 250mm thick	m2	346	#N/D!	#N/D!			0,00	x	
	Reinforced concrete walls, formwork, framework, edges and seals, incl.									
2.8 DI	miscellaneous. Additive for waterproofing.									
2.8 D2	- thickness 0.25 m - Concrete volume (total) 87 m3									
2.8 D4	- Concrete surface (total) 346 m2									
	Standard formwork 2 3), (architectural concrete, ready to paint surface) diameter	<i>m</i> 2	692,00				0,00			
2.8 S2	Concrete B35/25 2)	<i>m</i> 3	87,00				0,00			
2.8 53	Additive for waterproofing (per m3 concrete)	Nr	87,00				0,00			
2.0 34	Reinforcement steel S 500 1) (bent all Ø 6 to 14 mm)	kg	11 310,0				0,00			
2.8 S5	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00			
	item total	<i>m</i> 2	346,00			0,00	0,00			
20.ai	Insulation below ground level on external walls	m2	346	#N/D!	#N/D!			0,00	X	
2.9 S1	Single layer bituminous proof treatment trowel applied	<i>m</i> 2	346,00				0,00			
2.9 52	Insulation EPS, 80mm thick, perimeter draining panels below ground level on external walls, up to one metre depth	<i>m</i> 2	120,00				0,00			
2.9 Z1										
	item total	<i>m</i> 2	346,00			0,00	0,00			
20.aj	Reinforced concrete exterior wall 250mm thick	m2	1 463	#N/D!	#N/D!			0,00	X	

2.91	D1	Reinforced concrete walls, formwork, framework, edges and seals, incl. miscellaneous. No additives.								
2.91	D2	- thickness 0.25 m								
2.91	D3	- Concrete volume (total) 366 m3								
2.91	D4	- Concrete surface (total) 1463 m2								
2.91	S1	Standard formwork 2 3), (architectural concrete, ready to paint surface) diameter	<i>m</i> 2	2 926,00				0,00		
2.91	S2	Concrete B35/25 2)	<i>m</i> 3	366,00				0,00		_
2.91	<b>S</b> 3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	47 580,0				0,00		
2.91	S4	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00		
	-	item total	m2	1 463,00			0,00	0,00		
20.ak		Reinforced concrete interior walls 180mm thick	m2	653	#N/D!	#N/D!		0,00	0,00	X
2.92	D1	Reinforced concrete walls, formwork, framework, edges and seals, incl. miscellaneous. Without additives								
2.92	D2	- thickness 0.18 m								
2.92	D3	- Concrete volume (total) 118 m3								
2.92	D4	- Concrete surface (total) 653 m2								
2.92	S1	Standard formwork 2 3) (normally to receive one layer of cement cm 1)	<i>m</i> 2	1 306,00				0,00		
2.92	S2	Concrete B35/25 2)	<i>m</i> 3	118,00				0,00		
2.92	<b>S</b> 3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	8 260,00				0,00		
2.92	S4	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00		
	-								 	
	1	item total	<i>m</i> 2	653,00			0,00	0,00		
				TOTAL 2		#N/D!		.,	0,00	

30.aa		Silico-calcareous brickwork , 150mm thick, non load bearing, for separations in the basement, bricks c. 250 x 140mm, (for replacements: unplastered masonry with smooth surface not needing any other coating or treatment, typically Heidelberger Kalksandstein sand lime brick. Industrial face quality, for basement use)	m2	222	#N/D!	#N/D!			0,00	x	<u>http://www.heidelbe rger- kalksandstein.com</u>	
3,1	S1	Silico-calcareous brickwork, 15 cm thick, non load bearing, architectural masonry work, including wall top. (brick typically 25 cm long and 14 cm high)	m2	222,00				0,00				
3,1	S2	Architectural concrete lintels	m	28,00				0,00				
3,1	Z1											
		item total	m2	222,00			0,00	0,00				
				222,00				0,00				
30.ab		Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked		718	#N/D!	#N/D!		0,00	0,00	X		
30.ab		Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm)			#N/D!	#N/D!		0,00	0,00	 x		
3,2		Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm) brickwork, thickness 12.5 cm, non load bearing brickwork, thickness 15 cm, load bearing	m2	718	#N/D!	#N/D!			0,00	x		
3,2	S1 S2	Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm) brickwork, thickness 12.5 cm, non load bearing brickwork, thickness 15 cm, load bearing mineral wool insulation, density 80 kg/m3, thickness 7.5 cm, including fittings	m2 <i>m</i> 2	718 718,00	#N/D!	#N/D!		0,00	0,00	 x		
3,2 3,2	S1 S2	Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm) brickwork, thickness 12.5 cm, non load bearing brickwork, thickness 15 cm, load bearing mineral wool insulation, density 80 kg/m3, thickness 7.5 cm, including fittings	m2 m2 m2	718 718,00 718,00	#N/D!	#N/D!		0,00	0,00	X		
3,2 3,2 3,2 3,2	S1 S2 S3	Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm) brickwork, thickness 12.5 cm, non load bearing brickwork, thickness 15 cm, load bearing mineral wool insulation, density 80 kg/m3, thickness 7.5 cm, including fittings insulation fixing to first wall, mechanical or adhesive	m2 m2 m2 m2	718 718,00 718,00 718,00	#N/D!	#N/D!		0,00 0,00 0,00	0,00	X		
3,2 3,2 3,2 3,2	S1 S2 S3 S4	Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm) brickwork, thickness 12.5 cm, non load bearing brickwork, thickness 15 cm, load bearing mineral wool insulation, density 80 kg/m3, thickness 7.5 cm, including fittings insulation fixing to first wall, mechanical or adhesive	m2 m2 m2 m2	718 718,00 718,00 718,00	#N/D!	#N/D!		0,00 0,00 0,00	0,00	X		
3,2 3,2 3,2 3,2	S1 S2 S3 S4	Sound insulating double brick wall between apartments, brick 125mm non-load bearing, 75mm insulation, brick 150mm, load bearing. (Typically baked clay 300 x 190mm) brickwork, thickness 12.5 cm, non load bearing brickwork, thickness 15 cm, load bearing mineral wool insulation, density 80 kg/m3, thickness 7.5 cm, including fittings insulation fixing to first wall, mechanical or adhesive	m2 m2 m2 m2	718 718,00 718,00 718,00	#N/D!	#N/D!		0,00 0,00 0,00	0,00	X		

30.ac		Brickwork, thickness 150mm, load bearing, ground floor and upper floors, (Typically baked clay 300 x 190mm)	m2	823	#N/D!	#N/D!			0,00	x
3,3	S1	brickwork, thickness 15 cm, load bearing, including wall top	<i>m</i> 2	823,00				0,00		
3,3	S2	precast concrete lintels height = brick HT	m	100,00				0,00		
		item total	<i>m</i> 2	823,00			0,00	0,00		
0.ad		Partition walls, 80 and 60mm smooth blockwork for painting	m2	895	#N/D!	#N/D!			0,00	X
3,4	S1	Partition walls in solid gypsum blocks 8 cm thick. Including angles and jointing finish. Ready to receive a finish coating.	<i>m</i> 2	395,00				0,00		
3,4	S2	Linings and brick partitions in the sanitation quarters and kitchen in waterproof solid gypsum blocks 6 cm thick.	m2	500,00				0,00		
		item total	<i>m</i> 2	895,00			0,00	0,00		
30.ae		Steel frame partition walls incl. plasterboard & insulation	m2	929	#N/D!	#N/D!			0,00	X
3,5	S1	Steel framework partition walls, double framework, 2 layers plasterboard (2 x 12.5 mm) on each side. Partition thickness D= 15.5 cm Insulation: 5.0 cm, soundproofing, Rw 67dB control, heat insulation, Value U 0.54W/m2.	<i>m</i> 2	929,00				0,00		
3,5	Z1	entraxe des montants 62,5								
		item total		929,00			0,00	0,00		
		1 Decting		TOTAL 3		#N/D!			0,00	
		4. Roofing								
		Roof covering, 40mm screed,		1		-				

1										
4,1	S1	Vapour barrier made of elastomeric bitumen strips reinforced by a synthetic lattice thick 2.5mm, stuck in full with overlapping strips on 15 cm strips, single layered, fittings included	m2	895,00		0,00				
4,1	S2	Raised edges type E.1.A (see detail E.1.A) 50 cm expansion	m	153,00		0,00				
4,1	00	Raised edges type E.1.C (see detail E.1.C) 100 cm expansion	m	120,00		0,00				
4,1	S4	closed edges type E.1.B (see detail E.1.B)	m	80,00		0,00				
4,1	S5	closed edges type E.1.D (see detail E.1.D)	m	100,00		0,00				
4,1	S6	Hard foam insulation made of extruded polystyrene, 140 mm thick	m2	895,00		0,00				
4,1	S7	Two layers bitourninous sheet, 3 mm + 5 mm, stuck hot with overlapping strips on 15 cm strips, double layered, fittings included	m2	895,00		0,00				
		protection matting ballast (gravel), 80 mm, washed,	<i>m</i> 2	895,00		0,00				
4,1	S9	dimension maximum Ø 32 mm	<i>m</i> 2	628,00		 0,00				
4,1	S91	a cement slab coating, 40 mm thick, 40 X 40 cm, plastic bracket included	m2	267,00		0,00				
		sealing small fittings on roof	Nr	10,00		0,00				
4,1	S93	sealing joints on roof if not included above	m2	887,00		0,00				
4,1	Z1									
4,1	Z2		22							
4,1	Z3									

4,1	Ζ4		52								
		item total	<i>m</i> 2	895,00			0,00	0,00			
.ab		Dome roof window incorporating roof hatch	Nr	2	#N/D!	#N/D!			0,00	X	
,2		Square dome roof windows: dimensions 1.0 x 1.0 m, day.									
4,2	S1	Translucent polycarbonate glass dome with triple walls, U-value 1.65W/m2K. Day cm 100 X 100. Anti- yellowing protection applied to polycarbonate. Luminous transmission 67%.	Nr	2,00				0,00			
,2	S2	Synthetic square roof curb reinforced with glass fibres, on roof edge. Thickness of walls 6 cm, U-value 0.44 W/m2K. Wall height 30 cm. Insulated joining flance. Thickness 14 cm.	Nr	2,00				0,00			
2	S3	Opening device and mobile frame. Power driven, V24.	Nr	2,00				0,00			
1,2	Ζ1										
		item total	Nr	2,00			0,00	0,00	 		
				TOTAL 4		#N/D!			0,00		
		5.1 Carpentry									
a		Landing doors and frames, softwood, painted, incl. locks and ironmongery	m2	78	#N/D!	#N/D!			0,00	х	

5,11	S1	Wood landing doors to be painted. thickness 55 mm. Opening size 0.90 X 2.05 m false-wall frameworks and door frame with 2 X perimeter joints, fire requirement (EI-30 = 30 min fire resistance), metal threshold on the door base. Including metal work,	Nr	39,00				0,00				
5,11	<u>S2</u>	handle, peep hole, lock with cylinder painting (total area of both sides)	<i>m</i> 2	163,80				0,00				
		item total	m2	78,00			0,00	0,00				
51.ab		Louvered partition walls for cellars	m2	345	#N/D!	#N/D!			0,00	X		
5,12	D1	Louvered partition wall to separate the cellars, planed wood dim. 24 x 48mm, including cross-pieces and mullions.										
5,12	S1	Louvered partition walls to separate the cellars	<i>m</i> 2	345,00				0,00				
5,12	S2	Single leaf louvered door, including lock	Nr	39,00				0,00				
		item total	<i>m</i> 2	345,00			0,00	0,00				
51.ac		Passage door and frames, incl mortice lock and ironmongery	m2	337,68	#N/D!	#N/D!			0,00	 X		
5,13	S1	Supply and fit passage door and frame, opening size 0.84 X 2 m, in and including false wall. Alveolar door panel 15 kg/m2. Mortice lock with key, including door ironmongery.	Nr	201,00				0,00				
		item total	<i>m</i> 2	337,68			0,00	0,00				
51.ad		Standard fitted wardrobes, laminated MDF 18mm thick, 2.4m high, 4m wide	Nr	39	#N/D!	#N/D!			0,00	X		
5,14	S1	Standard wardrobes, 2/3 closet, 1/3 compartments, 4m length per apartment, height 2.4m. Body, back and compartments in white laminated panel with PVC bordered edges. Wardrobe front and body edges to be painted, hinges invisible. Base and locking strip up to the ceiling to be painted.	Nr	39,00				0,00				

Z1											
	itom total		20.00			0.00	0.00				
			39,00			0,00	0,00				
	set into a worktop on a floor mounted double cupboard (delivery, assembly and all	Nr	39	#N/D!	#N/D!				0,00		X
S1	ordinary stainless drainer 2VA	Nr	39,00				0,00				
		Nr	39,00				0,00				
S3	draining with dump siphon (distance	Nr	39,00				0,00				
S4	furniture Dim cm: length. 120 X 90 ht X depth 60 white laminated wood, particle boards 19mm, with 2 leafs	Nr	39,00				0,00				
S5	One of the leafs equipped with a dustbin bag stand 30 litres.	Nr	39,00				0,00				
	item total	Nr	39,00			0,00	0,00				
		Т	TOTAL 5.1		#N/D!				0,00		
									1		
		m2	887	#N/D!	#N/D!				0,00		Χ
D1	roof fittings and chimney block unit, gutters and downpipes (RW=rain water), small fittings and joints on										
31	> 300 mm	Nr	6,00				0,00				
S2	heigth > 200 mm, perimeter about 3	Nr	1,00				0,00				
	gutters, half-round section 300 mm, stub and expansion bend included	m	124,00				0,00				
									1		
	downpipes in stainless steel (RW=rain water) Ø 100 mm	m	76,00				0,00				
		m	76,00				0,00				
	S1 S2 S3 S4 S5 S5 D1 D1 S1 S2	item total         Kitchen; basic equipment; 1 sink set into a worktop on a floor mounted double cupboard (delivery, assembly and all connections)         1 sink: 2 bowls with ordinary stainless drainer 2VA dimension about 115 x 51 cm         S2       A hot and cold single lever water mixer tap (chrome plated)         Kit and cold water supply and draining with dump siphon (distance from access point resp. collector: 5m)         The sink is set on a low piece of furniture Dim cm: length. 120 X 90 ht X depth 60 white laminated wood, particle boards 19mm, with 2 leafs French style.         S5       One of the leafs equipped with a dustbin bag stand 30 litres.         item total       item total         statem and cold water supply and training with of the leafs equipped with a dustbin bag stand 30 litres.         S5       One of the leafs equipped with a dustbin bag stand 30 litres.         item total       item total         staternal metalwork to roof fittings, gutters, downpipes         iron work: stainless steel including roof fittings and chimney block unit, gutters and downpipes (RW=rain water), small fittings and joints on proof treatment         S1       roof fittings, round Ø 125 mm, heigth > 300 mm         s2       nord fittings and chimney block unit, heigth > 200 mm, perimeter about 3 m	item total       m         Kitchen; basic equipment; 1 sink set into a worktop on a floor mounted double cupboard (delivery, assembly and all connections)       Nr         1 sink: 2 bowls with ordinary stainless drainer 2VA dimension about 115 x 51 cm       Nr         S2       A hot and cold single lever water mixer tap (chrome plated)       Nr         S3       draining with dump siphon (distance from access point resp. collector: 5m)       Nr         S4       X depth 60 white laminated wood, particle boards 19mm, with 2 leafs French style.       Nr         S5       One of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S5       One of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S5       Dre of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S5       Dre of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S5       Dre of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S6       Dre of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S6       Dre of the leafs equipped with a dustbin bag stand 30 litres.       Nr         S7       Dre of fittings and chimney block unit, gutters, downpipes (RW=rain water), small fittings and joints on proof treatment       Nr         S1       roof fittings, round Ø 125 mm, heigth > 300 mm       Nr	Image: Second State State State       Image: State State State       Image: State       Image: State         Image: State State       Image: State       Image: State       Image: State       Image: State         Image: State       Image: State       Image: State       Image: State       Image: State       Image: State         Image: State	Image: Second	Image: Second	Image: Second	Image: Second	Image: Second	Amount of the set of the	Image: Second Secon

		item total	<i>m</i> 2	887,00			0,00	0,00			
52.ab		External balcony railings, 1m high; standard quality	m	410	#N/D!	#N/D!			0,00	X	
5,22	S1	Hot-dip galvanized metal railing (see photo), steel flat, heigth 1.0 m, maximum 11 cm between the lattice bars	m	410,00				0,00			
5,22	Z1										
		item total	m	410,00			0,00	0,00			
52.ac		Staircase 33mm tubular handrail installed against walls	m	63	#N/D!	#N/D!			0,00	X	
5,23		Staircase handrail, inclined, hot- dipped galvanized steel tube, diameter 33 mm, screwed on goose neck on flat part 40/27/3 mm with attachment plate dim 60/60 mm with screw and buffers to be installed against walls.	m	63,00				0,00			
		the second s		00.00			0.00	0.00			
52.ad		item total Safety cylinders, with master-key for doors & letterboxes	m Nr	<u>63,00</u> 123	#N/D!	#N/D!	0,00	0,00	0,00	x	
5.24		for landing doors	Nr	39.00				0.00			This is the key syste <mark>m, with</mark>
		building entrance doors	Nr	2,00				0,00			one key for all functions
5,24	S3	letter-boxes (half-cylinder)	Nr	39,00				0,00			and a protection pla <mark>n to</mark>
5,24	S4	cellars (half-cylinder)	Nr	43,00				0,00			keep them compatib <mark>le with</mark>
											the master key
		item total	Nr	123,00			0,00	0,00			
52.ae		Multi-purpose unit including 20 letter box compartments	Nr	2	#N/D!	#N/D!			0,00	X	
5,25	S1	Block with 20 boxes combined with packages compartment, fire service compartment, slits for intercom and ringing, anodized aluminium front with round shaped lines, wall fixing.	Nr	2,00				0,00			

								 1			
5,25 Z1	26										
	item total	Nr	2,00			0,00	0,00				
52.af	Glass canopy	m2	18	#N/D!	#N/D!			0,00	X		
5,26 Si	Roof prefabricated, dimension 2 units x 4.0 m x 2.5 m, type: glass mm 8 with a anti-hail layer, put on silicon, canopy on a steel construction including iron work in 50 mm T section.	<i>m</i> 2	18,00				0,00				
5,26 Z1											
	item total		18,00			0,00	0,00		 		
52.ag	Installation of lightning conductor	m2	887	#N/D!	#N/D!			0,00	X		
5.27 S	Installation of a protection device against lightning conceived on the principle of "Faraday" consisting of a meshing placed on the building roof connected to the foundation ground network by down-lines incorporated in the concrete walls ensuring thus an excellent protection against atmospheric discharges.	m2	887,00				0,00				
	item total	<i>m</i> 2	887,00			0,00	0,00				
	5.0 Windows	ר	OTAL 5.2		#N/D!			0,00			
	5.3 Windows							1			
53.aa	Synthetic windows, PVCu or the like (Ug (glass) 1.1 W/m2K, Uw (window frame) 1.3 W/m2K	m2	1 076	#N/D!	#N/D!			0,00	Χ		
5,31 D	<ul> <li>* Bill of quantities mode:</li> <li>1 measured between the finished embrasements.</li> </ul>										

5.04	**Cost assignment: The whole surface of the windows or							
5,31	D2 French windows, window surround, opening, glass and metal fittings included.							
5,31	Synthetic windows and French windows, insulating Ug (glass) 1.1 W/m2K and Uw (window frame) 1.3 W/m2K, acoustic value 35 dB, white frame, including handle, split hinges, tilt and turn operation. French windows and french style opening windows, one tilt and turn by part. Measure the bay empty space:	m2 1 076,	00		0,00			
	Price overall above or individually below							
5,31	Z1 type 1**: dimension 40 units x 1.3 x 2 m	Nr 40,	00		0,00			
5,31	Z2							
5,31	Z3 type 2**: dimension 60 units x 2.4 x 2 m	Nr 60,	00		0,00			
5,31	24							
5,31	Z5 type 3**: dimension 30 units x 2.4 x 4.5 m	Nr 30,	00		0,00			
	26							
5,31	Z7 type 4**: dimension 40 units x 2.4 x 2.0 m	Nr 40,	00		0,00			
5,31	28							
5,31	Z9 type 5**: dimension 20 units x 2.4 x 3.5 m	Nr 20,	00		0,00			
5,31	Z10							

		item total	<i>m</i> 2	1 076,00			0,00	0,00		
53.ab		PVCu main entrance door, glazed, all ironmongery	m2	7	#N/D!	#N/D!			0,00	Х
5.32	S1	Main building entrance doors, glazing safety film, with steel sections, dimensions 150x220, with 1 fixed part and a single leaf door with a door lock, including handle, split hinges, door-lock with key, 3 X split hinges and electric striker remote controlled by intercom.	m2	7,00				0,00		
		item total		7,00			0,00	0,00		
			1	FOTAL 5.3		#N/D!			0,00	
		5.4 Shading						1	1	
54.aa		External venetian blind systems with manual winder; system consists of a zinc plated steel headrail, extruded aluminium bottom rail and stove enamelled aluminium slats with extruded aluminium side guides. Astralux 8000 system or equivalent	m2	1 038	#N/D!	#N/D!			0,00	x
5,41	D1	* Bill of quantities mode: measured between the finished embrasements.								
5,41	D2	**Cost assignment: The whole surface of the fabric blinds, metal fittings included.								
5,41	S1	Outside fabric roller blinds for blackout, acrylic fibre, customized dye according to standard range, with outside winder, side slides assembled on aluminium tubes, oscillating rod for manual operation.	<i>m</i> 2	1 038,00				0,00		
		Price overall above or individually below								
5,41	Z1	type 1**: dimension 40 units x 1.2 x 1.8 m	Nr	40,00				0,00		
5,41	Z2									
5,41	Z3	type 2**: dimension 90 units x 2.2 x 1.8 m	Nr	90,00				0,00		
5,41	Z4									

											_
5,41	Z5	<i>type</i> 3**: <i>dimension</i> 80 <i>units</i> x 2.2 x 0.9 <i>m</i>	Nr	80,00				0,00			
5,41	Z6										
5,41	Z7	type 4**: dimension 30 units x 2.2 x	Nr	30,00				0,00			
		3.1 m									
5 44	70										
5,41	20										
		item total	<i>m</i> 2	1 038,00			0,00	0,00			
			T	FOTAL 5.4		#N/D!	0,00	0,00	0,00		
		6. Finishings (floors, walls and c	oiling	TOTAL 5		#N/D!			0,00		
		External 140mm wall insulation,								V	
60.aa		rough cast render finish	m2	1 463	#N/D!	#N/D!			0,00	Χ	
		Peripheral expanded polystyrene insulation, about 90kg/m3, 140 mm									
6,1	S1	thick, stuck on concrete surface or on	<i>m</i> 2	1 463,00				0,00			External insulation
		masonry work Finish mineral rough-cast									
61	\$2	coating, structured surface, 1.5mm thick. Including reinforcement with	<i>m</i> 2	1 463,00				0.00			Similar to a thick reinforced textured
0, 1	02	synthetic band to edges, fittings and		, ,00,00				0,00			paint
		openings.									
		item total	<i>m</i> 2	1 463,00			0,00	0,00			
60.ab		Floating screed, insulation,	m2	3 291	#N/D!	#N/D!	,	· · · ·	0,00	Х	
		vapour barrier								 Λ	
		Floating screed embedding floor									
		<b>heating</b> , CP 400kg/m3 thickness 70 mm, for soundproofing, floor covering									
6,2	D01	thickness 20 mm, density, 20kg/m3 + heat insulation 20 mm									
		+ perimeter strip, with preparation.									
		Heating coils delivered and mounted separately, see 7.22 .									
6,2	S1	Floating screed 70 mm for floor heating	<i>m</i> 2	3 291,00				0,00			
6,2	S2	Rough surface cleaning, incl. removals	<i>m</i> 2	3 291,00				0,00			
6,2	S3	Soundproofing panels, thickness 20 mm (type EPS)	<i>m</i> 2	3 291,00				0,00			
6,2	S4	Heat insulation panels, thickness 20	<i>m</i> 2	3 291,00				0,00			
		mm (type XPS)						, i i i i i i i i i i i i i i i i i i i			I

	1										1
6,2	S5	Perimeter strip thickness 5 mm, high 15 cm, incl cutting and removal.	m	3 000,00				0,00			
6,2	<b>S</b> 6	Barrier sheet EP 0,2 mm	<i>m</i> 2	3 291,00				0,00			
6,2	Z1	2 6 1 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5									
		3 Barrier sheet EP 0,2mm 4 Soundproofing panels / heit insulation panels 5 Floor stab reinforced concrete 6 Heating coils delivered and mounted -> see 7.22 Heat distribution									
		6 Heating coils delivered and mounted -> see 7.22 Heat distribution								-	
		<i>item total</i> Floor ceramic tiling 300mm x	<i>m</i> 2	3 291,00			0,00	0,00			
60.ac		300mm and skirting tiles; average quality	m2	1 757	#N/D!	#N/D!			0,00	X	
6,3	S1	Primer coat (clamping coat) to prepare floor tiling	<i>m</i> 2	1 757,00				0,00			
6,3	S2	Supplying and fitting stoneware floor tiles, laundry and clearance in front of the cellars, dimensions 30 x 30 cm	<i>m</i> 2	120,00				0,00			
6,3	S3	Supplying and fitting non-skid stoneware tiles, dimensions 30 x 30 cm to staircase steps + risers.	<i>m</i> 2	208,00				0,00			
6,3	S4	Supplying and fitting stoneware floor tiles, dimensions 30 x 30 cm for balconies and terraces by double gluing.	<i>m</i> 2	1 157,00				0,00			
6,3	S5	Supplying and fitting stoneware tiles, dimensions $10 \times 30$ cm for bathroom, toilets and kitchen.	<i>m</i> 2	272,00				0,00			
6,3	S6	Tile plinths (skirting) identical to the floor tiles, including cutting and jointings	m	1 500,00				0,00			
		item total	<i>m</i> 2	1 757,00			0,00	0,00			
60.ad		15mm engineered oak floor; board dimensions 180 x 2200mm; 15mm engineered oak; solid 4mm wear layer with hardwood multi- ply core; tongue and grooved	m2	3 015	#N/D!	#N/D!			0,00	x	
6,4	S1	15mm engineered oak floor; board dimensions 180 x 2200mm; 15mm engineered oak; solid 4mm wear layer with hardwood multi-ply core; tongue and grooved	<i>m</i> 2	3 015,00				0,00			

		item total	<i>m</i> 2	3 015,00			0,00	0,00				
60.ae		Gypsum plaster to walls, rough cast, 2 coats, 10mm and 5mm	m2	5 790	#N/D!	#N/D!			0,00	Χ		
6,5	S1	Gypsum coating (application, not with plates) of the walls thickness 10mm	<i>m</i> 2	2 083,00				0,00				
6,5	S2	synthetic rough coat floated, grain 5 mm	m2	3 707,00				0,00			Typically one layer sprayed and smoothed with a large aluminim slat	
		item total	<i>m</i> 2	5 790,00			0,00	0,00				
60.af		Ceramics covering of the walls	m2	1 424	#N/D!	#N/D!	0,00	0,00	 0,00	Χ		
6,6	S1	Supplying and fitting ceramic tiles for bathroom, toilets and kitchen, including waterproof adhesive and grouting.	<i>m</i> 2	1 424,00				0,00			Use tiles of average quality and size as appropriate	
		item total	<i>m</i> 2	1 424,00			0,00	0,00				
60.ag		Interior painting, walls, 2 coats emulsion	m2	4 151	#N/D!	#N/D!			0,00	Χ		
6,7	S1	painting 2 coats emulsion on rough cast plaster	<i>m</i> 2	3 707,00				0,00				
6,7	S2	painting 2 coats emulsion on concrete or brick walls in the basement	m2	444,00				0,00				
		item total	<i>m</i> 2	4 151,00			0,00	0,00				
60.ah		Gypsum plaster to concrete ceilings, 6mm	m2	2 991	#N/D!	#N/D!			0,00	Χ		
6,8	S1	Gypsum coating (plaster) 6 mm on the concrete slabs (ceilings)	<i>m</i> 2	2 991,00				0,00				
		item total	<i>m</i> 2	2 991,00			0,00	0,00				
60.ai		Interior painting, ceilings, 2 coats emulsion	m2	3 766	#N/D!	#N/D!			0,00	 Χ		
6,9	S1	matt white emulsion paint 2 coats on gypsum coating (plaster in the ceilings)	<i>m</i> 2	2 991,00				0,00				
6,9	S2	white synthetic enamel paint 2 coats on plaster for sanitation quarters.	m2	272,00				0,00				
6,9	<b>S</b> 3	painting 2 coats emulsion on the concrete slabs in the basement	<i>m</i> 2	503,00				0,00				

		item total	<i>m</i> 2	3 766,00 TOTAL 6		#N/D!	0,00	0,00	0,0		
		7.1 Sanitary Equipment		TOTAL		#11/0:		1	0,0	<u> </u>	
71.aa		Hot & cold water and sewage connections to communal system; if not included in each equipment price, distribution columns inside the house; common assumption: 7 columns	Nr	1	#N/D!	#N/D!			0,0	0	x
7,11	S1	Connection to communal system (work, not taxes)	Nr	1,00				0,00			
7,11	52	Central cold water columns to be connected on, total length 20 m each, delivery, fitting and insulation, valves and meters included.	Nr	11,00				0,00			
7,11	53	Central hot water columns to be connected on, total length 20 m each, delivery, fitting and insulation, valves and meters included.	Nr	11,00				0,00			
7,11	S4	Sewage column to be connected on, total length 20 m each, delivery, fitting, insulation and valve all included.	Nr	11,00				0,00			
		item total	Nr	1,00			0,00	0,00			
71.ab		Vitreous clay WC and cistern including connections and fittings	Nr	78	#N/D!	#N/D!	0,00	0,00	0,0	0	X
7,12	S1	Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold water and drain, common assumption: 2 m from distribution column.	Nr	78,00				0,00			
7,12		Standard wall mounted ceramic toilet bowl, white with hidden cistern & wooden plain white seat.	Nr	78,00				0,00			
71.ac		item total Vitreous clay wash basin, mixer tap, incl. connections and fittings	Nr Nr	78,00 117	#N/D!	#N/D!	0,00	0,00	0,0	0	Х

7,13	S1	Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold & hot water and drain, common assumption: 2 m from distribution column.	Nr	117,00				0,00			
7,13	S2	Standard <b>ceramic</b> wash basin, dimensions about 60/48 cm, white	Nr	117,00				0,00			
7,13	S3	Wash-hand basin hot and cold water single-lever mixer tap (chrome plated)	Nr	117,00				0,00			
		item total	Nr	117,00			0,00	0,00			
71.ad		Vitreous clay shower tray 900 x 900mm, mixer tap, incl. connections and fittings	Nr	39	#N/D!	#N/D!			0,00	X	
7,14	S1	Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold & hot water and drain, common assumption: 3m from distribution column.	Nr	39,00				0,00			
7,14	S2	Shower tray in <b>enamelled steel</b> , white, dimensions <b>about</b> 80 x 80 x 6.5 cm	Nr	39,00				0,00			
7,14	<b>S</b> 3	Shower fixture and trap cover	Nr	39,00				0,00			
7,14	S4	Shower <b>single-lever</b> mixer tap, chrome-plated, <b>rail and</b> slide 90 cm, 3-Spray Handheld Shower, hose160 cm	Nr	39,00				0,00			
		item total	Nr	39,00			0,00	0,00			
71.ae		Bath, mixer tap, incl. connections and fittings	Nr	39	#N/D!	#N/D!			0,00	X	
7,15	S1	Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold & hot water and drain, common assumption: 3m from distribution column. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00			
7,15	S2	Bath-tub in <b>enamelled steel</b> , white, dimensions about 180 X 80 X 43 cm	Nr	39,00				0,00			
		Bath-tub sump, trap and drain set	Nr	39,00				0,00			
7,15	S3	(e.g. GEBERIT PE)									
7,15 7,15		(e.g. GEBERIT PE) Bath-tub <b>single-lever</b> mixer tap, chrome-plated	Nr	39,00				0,00			

		item total	Nr	39,00			0,00	0,00		
			٦	FOTAL 7.1		#N/D!			0,00	
		7.2 Central heating								
72.aa		120kW gas boiler, flue, 2500l water storage, all fittings	Nr	1	#N/D!	#N/D!			0,00	X
7,21	S1	Gas heat generation facility PW 120 KW	Nr	1,00				0,00		
7,21	S2	Chimney for gas exhaust, stainless steel insulated, Ø 12 cm interior, with outlet on the roof (common assumption: total length 26m)	Nr	1,00				0,00		
7,21	S3	Hot water storage isolated tank (Boiler) Capacity 2,500 Litres with heat exchange system	Nr	1,00				0,00		
7,21	S4	Floor heating circuit - 1 distributor column (up and down, totally 40 m) per 6 apartments.	Nr	7,00				0,00		
		item total	Nr	1.00			0,00	0.00		
72.ab		Underfloor heating 15mm flexible tube, 4m per 1m2	m2	3 811	#N/D!	#N/D!		0,00	0,00	<b>X</b>
7,22	S1	Floor heating through coils in the floor screed. Flexible monotube about 1/2 inch (10 -12 mm), average of 4 m of serpentine coils per 1 m2. This item includes supplying, placing and fitting of the coils, but not the floating screed (see position 6.2 with drawing Z1)	m2	3 811,00				0,00		
7,22	S2	Distribution box with thermostat at the inlet for each apartment fed from the distribution columns, to connect 6 serpentines.	Nr	39,00				0,00		
7,22	S3	One thermostatic control per	Nr	39,00				0,00		
		item total	<i>m</i> 2	3 811,00			0,00	0,00		
				FOTAL 7.2		#N/D!	5,00	5,00	0,00	
		7.3 Ventilation								
73.aa		Wall mounted extractor fan (130 m3/hr) in each sanitary room	Nr	117	#N/D!	#N/D!			0,00	X
7,31	S1	Wall mounted single duct ventilation system and fan (130 m3/hr in each sanitary room). Ventilation by mechanical air suction with tight valves. Exhaust on the roof, biconical cap.	Nr	117,00				0,00		

									1				
		item total	Nr	117,00			0,00	0,00					
73.ab		Kitchen ventilation hood; wall mounted single duct ventilation system (600 m3/hr)	Nr	39	#N/D!	#N/D!				0,00	Χ		
7,32	<b>S1</b>	Wall mounted single duct ventilation system (600 m3/hr). Kitchen hood. Exhaust on the roof, biconical cap.	Nr	39,00				0,00					
		item total		39,00			0,00	0,00					
				TOTAL 7.3		#N/D!			l	0,00			
		7.4 Lift											
74.aa		Electric lift 630kg/8 persons serving all floors	Nr	2	#N/D!	#N/D!				0,00	Χ	Note rate is per lift serving 8 floors	
7,41	S1	Installation of an elevator 630 kg, 8 people, (handicapped standards), speed 0.60 m/s, 8 automatic doors with side opening, steel to be painted. Dim. Lg 1.40 X width 1.10 m, 90 cm door, cabin finish - handrail and mirror to 3 sides, illuminated ceiling, artificial stone flooring. Price per lift	Nr	2,00				0,00					
		item total	Nr	2,00			0,00	0,00					
				TOTAL 7.4		#N/D!				0,00			
				TOTAL 7		#N/D!				0,00			
		8.1 Power and lighting		TOTAL	<u> </u>				l.	0,00			
	D01	All items fitted and connected with all cabling. Subpositions allow to build up your price if you start from single elements. Global prices can be entered into the dark yellow cells to replace the sum up formula in column I otherwise. In											
81.aa		this case, also distribution must be proportionally comprised. Electrical mains connection of the house to the supplier	Nr	1	#N/D!	#N/D!				0,00	Х		
8.11	50	Including complete connection to communal system (work, not taxes).	Nr	1,00				0,00					

			-						-			
8.11 S01	Each item price has to include connection between main panel and apartment panels (tubing, conductors, fitting all included). Common assumption if priced here: average distance between main and apartment panel: 20 m. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00					
8.11 S1	Main electrical panel (total)	Nr	1,00				0,00					
8.11 S2	Apartments and service quarters panels	Nr	41,00				0,00					
	item total	Nr	1,00			0,00	0,00					
	Power and lighting to entrance hall in the apartment	Nr	39	#N/D!	#N/D!			0,00		X		
8.12 S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 6 m. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00					
8.12 52	Switch controlled light fixture in the ceiling (switch to be included here, fitted and connected)	Nr	39,00				0,00					
8.12 S3	230V three pin switched socket outlet	Nr	39,00				0,00					
8.12 S4	Overall control switch for lighting	Nr	39,00				0,00					
	item total	Nr	39,00			0,00	0.00					
	Power and lighting to living, dining room, kitchen		39	#N/D!	#N/D!			0,00		Χ		
8.13 S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 40 m. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00					
8.13 S2	Triple 230V three pin switched socket outlets	Nr	156,00				0,00					
	Light fixtures on the ceiling controlled by 1 switch (switch included here)	Nr	117,00				0,00					
									I			

		item total	Nr	39,00			0,00	0,00		
31.ad		Kitchen equipment power to appliances and cooker	Nr	39	#N/D!	#N/D!			0,00	X
8.14	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 20 m. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00		
8.14	S2	Ordinary 230V sockets for refrigerator, dishwasher microwave.	Nr	117,00				0,00		
8.14	S3	230V supply to fit ventilator (Pos 7.32) for kitchen hood.	Nr	78,00				0,00		
8.14	S4	Separate 3-phase power supply (380V) for the cooker oven.	Nr	78,00				0,00		
		item total	Nr	39,00			0,00	0,00		
31.ae		Power and lighting to toilet, bath, shower rooms	Nr	117	#N/D!	#N/D!			0,00	X
8.15	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 6 m. (If all this is included in your item price, enter zero here)	Nr	117,00				0,00		
8.15	S2	Light fixture as a wall-lamp above the wash-hand basin controlled by 1 switch (Switch to be included)	Nr	117,00				0,00		
8.15	S3	FI protected Razor 230V socket near the wash-hand basin	Nr	117,00				0,00		
8.15	S4	230V supply to fit ventilator (Pos 7.31).	Nr	117,00				0,00		
		item total	Nr	117,00			0,00	0,00		
81.af		Power and lighting to bedrooms	Nr	120	#N/D!	#N/D!			0,00	X
8.16	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 20 m. (If all this is included in your item price, enter zero here)	Nr	120,00				0,00		

8.16	S2	Light fixture in the ceiling controlled by 2 switches (one at the entrance, one at bedside). (2 switches to be included)	Nr	120,00				0,00			
8.16		Three pin 230V socket outlet on each side of the bed.	Nr	198,00				0,00			
8.16		Socket on switch	Nr	120,00				0,00			
		item total	Nr	120,00			0,00	0,00			
81.ag		Power and lighting to terrace- balcony	Nr	39	#N/D!	#N/D!			0,00	Χ	
8.17	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 10 m. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00			
8.17		Water proof 230V socket outlet	Nr	39,00				0,00			
8.17	S3	One interior switch for the 2 outside wall-lamps.	Nr	39,00				0,00			
8.17	S4	Outside light fixture as a wall-lamp.	Nr	78,00				0,00			
		item total	Nr	39.00			0,00	0.00			
81.ah		Light points and 230V sockets in stairwell, entrance, service quarters, laundry, cellar and basement	Nr	1	#N/D!	#N/D!			0,00	x	
8,18	SO	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 100 m. (If all this is included in your item price, enter zero here)	Nr	1,00				0,00			
8,18	S1	Light fixture in the ceiling controlled by 1 switch	Nr	36,00				0,00			
8,18	S2	230V switched socket outlet	Nr	56,00				0,00			
8,18	S3	Supplying and fitting chandelier elements, accessories for stair-well, entrance, service quarters, laundry, cellar		36,00							
8,18		Motion Sensor	Nr	16,00				0,00			
8.18	S5	3-phase (380V) sockets for washing machines and dryers, totally	Nr	8,00				0,00			

		item total		<u>1,00</u> FOTAL 8.1		#N/D!	0,00	0,00	0.00	
		8.2 Telecomm and security		IOTAL 8.1		#N/D!			0,00	
82.aa		Telecommunication cabinet, network, TV & Telephone outlets	Nr	1	#N/D!	#N/D!			0,00	X
8.21	SO	Each item price has to include conductors (phone cable and co-axial cable), in tubing embedded in masonry. Common assumption if priced here: average cabling length from distributor boxes 20 m each. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00		
8.21	S1	TT cabinet in the utility room connected to supplier	Nr	2,00				0,00		
8.21	S2	Telecommunication distributor box connected to supplier	Nr	2,00				0,00		
8.21	S3	Telephone socket	Nr	78,00				0,00		
8.21	S4	TV socket	Nr	78,00				0,00		
		item total	Nr	1,00			0,00	0,00		
82.ab		Intercom with video at the 2 entrances connected to the 39 apartments	Nr	1	#N/D!	#N/D!			0,00	X
8.22	S0	Item price has to include conductors (2 wires low voltage), in tubing embedded in masonry. Common assumption if priced here: average cabling length from entrance 20 m. (If all this is included in your item price, enter zero here)	Nr	39,00				0,00		
8,22	S1	Intercom with video at the entrance connected to the apartments - station per apartment and base station at each entrance completely fitted and connected.	Nr	41,00				0,00		
		item total		1,00			0,00	0,00		
			-	TOTAL 8.2		#N/D!			0,00	
		9. Drainage system		TOTAL 8		#N/D!		l	0,00	
								[		
90.aa		Excavation to drainage trenches; theoretical volume; loose ground, with 25% breaking up	m3	250	#N/D!	#N/D!			0,00	X
9,1	S1	Machine trench excavations. Down to 1.50 m in depth and 0.50 m wide.	m3	250,00				0,00		

	item total	<i>m</i> 3	250,00			0,00	0,00		
	Disposal of uncontaminated excess spoil from site, loading and transporting, distance 5km (excluding tipping fees)	m3	250	#N/D!	#N/D!			0,00	X
9,2 S1	Disposal of uncontaminated excess spoil from site, loading and transporting, distance 5km (excluding tipping fees)	т3	250,00				0,00		
	item total	<i>m</i> 3	250,00			0,00	0,00		
90.ac	Backfilling trenches	m3	230	#N/D!	#N/D!			0,00	Χ
9,3 S1	Trench backfilling, by 20 cm layer, compacted, same material.	<i>m</i> 3	230,00				0,00		
	item total	<i>m</i> 3	230,00			0,00	0,00		
	Drainage PVCu pipes, beds and coverings	m	250	#N/D!	#N/D!			0,00	Χ
0.4 0.1	4.1 Peripheral draining. Supply and place PVC pipes perforated Ø 160, including, 10 special parts, posed, in excavation bottom, on bed of concrete, pellet backfilling Ø 50mm up to a height of 30 cm + barrier felt (+ ordinary backfill measured in item 9.3).	m	100,00				0,00		
	4.2 Waste water and clear water pipelines. Supplying and fitting PVC pipes Ø 125 with welded sleeves, including 15 special parts, fitted, in excavation bottom, with concrete coating + (+ ordinary backfill measured in item 9.3).	m	150,00				0,00		
	item total	т	250,00			0,00	0,00		
			TOTAL 9		#N/D!			0,00	

Please complete details below for Fees	Chapter	2022 Total	Chapter	2023 % Total Change
	1	#N/D!	1	-
	2	#N/D!	2	-
	3	#N/D!	3	-
	4	#N/D!	4	-
	5	#N/D!	5	-
	6	#N/D!	6	-

	7 8 9	#N/D! #N/D! #N/D!	7 8 9		
	General Total	-	General Total	-	
ARCHITECT'S AND ENGINEER'S FEES (% of general total )		#ARG!		-	Insert FEES percentage
	TOTAL PRICE	#ARG!	TOTAL PRICE		Check unpriced items marked X above



# E.01.2.2.0.01.a Provided by Ireland - 2015 Estimate for a light industrial building



#### Preamble

Surface dimensions of the factory are 53m x 30m, with a height of 6.3 m. There is no provision for a basement. Piping and cable are to be suspended from the roof trusses.

The building is virtually windowless to ensure uniform lighting. Background lighting is to be 200 lux, with supplementary lighting in the machining areas.

Annexes such as offices, facilities outside the building, exterior works, etc., are not included in this price quotation.

## a) Sanitary installations

Water is distributed from a sub-station.

### b) Heating and ventilation

Heating will be by an air system using air heaters supplied with hot water at 90/70°C. Capacity is based on 20°C interior and -15°C exterior temperature. Air renewal rate: 2.5 volumes/hour.

#### c) Electrical installations

10kV electrical current will be stepped down to 400V by one 500kVA transformers. The high voltage cells and metering cells are behind the transformers. Low voltage distribution will be from the same location. Secondary distribution boards are to be located in the building

Item	ltere en elfication	Uni	Quantit	20	22	20	)23	%	Items to	Pricing notes	
ref	Item specification	t	у	Unit price	Total price	Unit price	Total price	chang	be	Pricing notes	Expert's comments
	1. Earthworks								129	129 items in total	
10.aa	Excavation from hardcore level in soft ground; depth not exceeding 2.0m	m3	118	#N/D!	#N/D!		-		x	In 2022 this item was estimated using a grossing factor.	
10.ab	Additional payment for transport of excess spoil to tip 5km away. Not including tip charges	m3	118	#N/D!	#N/D!		-		x	In 2022 this item was estimated using a grossing factor.	
	Filling; granular material type B to clause 804; compacted in layers not exceeding 225 mm thick										
10.ac	Filling; type B; 20/40mm single size aggregate; granular material, 225mm thick including compacting	m3	334	#N/D!	#N/D!		-		X		
	Surface treatments										
10.ad	Blinding filling; sand; 50mm thick	m2	1 527	#N/D!	#N/D!		-			In 2022 this item was estimated using a grossing factor.	

			TOTAL 1		#N/D!	-		
	2. Concrete							
	2.1 Floors in substructure							
	2.1.1 In-situ concrete							
20.aa	Reinforced insitu concrete, grade C32/40; beds; 250mm thick; as described	m3	313	#N/D!	#N/D!	-	Х	Only concrete - reinforcement as item 20.af. See detailed drawing
	2.1.2 Sundries							
	Design joints; 200 mm thick reinforced concrete floor slab							
20.ab	Isolation joint 20mm compressible filler full depth of slab; 20 x 20mm polysulphide sealant	m	163	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor. See detailed drawing.
20.ac	Formed longitudinal joint; plastic joint strip stuck onto hardened edge before pouring second bay to form 30 x 5mm wide surface groove, sealed; 900mm long T16mm dowel bars at 300mm centres	m	239	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.
20.ad	Formed contraction joint; 400mm long T20mm dowel bars at 300mm centres	m	88	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor. See detailed drawing.
	Surface finishes							
20.ae	Powerfloating to level concrete surface leaving ready for epoxy floor	m2	1 527	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	2.1.3 Reinforcement							
	Reinforcement fabric; to BS 4483; 50mm cover							
20.af	Fabric reinforcement, A393 mesh, horizontal, a described	m2	1 527	#N/D!	#N/D!	-	Х	In 2022 this item was estimated using a grossing factor.
	2.1.4 Formwork							

0.bb	Reinforced insitu concrete, grade C32/40; foundations; exceeding 150mm thick; poured on or against earth or unblinded hardcore	m3	90	#N/D!	#N/D!	-	x	
	Concrete; Grade C40							
20.ba	Concrete blinding; grade C12/15; foundations; n.e. 150mm thick; poured on or against earth or hardcore	m3	37	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	Concrete; Grade C15							
	2.2.1 In-situ concrete							
	2.2 Foundations & Rising Walls							
20.aj	Expanded Polystyrene insulation; for ground bearing industrial applications; 50mm thick; horizontal; over 300mm wide	m2	1 527	#N/D!	#N/D!	-	x	
	Insulation; for ground bearing industrial applications; 50mm thick							X7L by Cellecta Ltd. or approved equivalent; u-value 0.16w/m2k; compressive strength 500kPa; laid on membrane; butt jointing slabs.
	2.1.6 Woodwork: Ironmongery, Accessories and Sundries							
	Hyload pitch polymer; 0.9mm thick; horizontal damp proof course; exceeding 225mm wide	m2	1 584	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	Damp proof / slip membrane; 1200 gauge polythene							
	2.1.5 Roofing, Cladding and Waterproofing: Mastic Asphalt, Waterproof and Gas Proof Non-Metal Flexible Sheet Coverings							See detailed drawing.
	Formwork; plain finish; step in surface; height n.e. 250; 700 wide x 80 deep (recess for door)	m	22	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
20.ag	Formwork; plain finish; edges of beds; height n.e. 250mm (doors)	m	28	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	Formwork; finish as per Specification; plain finish							

	2.2.2 Reinforcement							
	Reinforcement bar; to BS 4449;							
20.bc	Bar reinforcement as described; straight or bent; 12 - 25mm dia	Kg	6 463	#N/D!	#N/D!	-	Χ	
	Reinforcement fabric; to BS 4483;							
20.bd	Fabric reinforcement, A393 mesh (6.16 kg/m2), horizontal, with one width mesh size laps on both ends	m2	64	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	2.2.3 Formwork							
	Formwork; plain finish							
20.be	Formwork; plain finish; sides of foundations; height 250 - 500mm	m	169	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. One sided.
20.bf	Formwork; plain finish; sides of pad foundations; height exceeding 500mm	m2	116	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	2.2.4 Brickwork and Blockwork							
	Solid concrete blocks; low thermal conductivity							Standard: IS 20 and BS6073-1; 10.5N/mm2; 440 x 215 x 100mm; bedding and jointing in cement / sand mortar (1:3); flush struck joints as work proceeds.
20.bg	Solid concrete blocks; walls in trenches; 100mm thick	m2	172	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.
20.bh	Solid concrete blocks; walls in trenches; 215mm thick	m2	12	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.
								Ĭ
			TOTAL 2		#N/D!	-		

	3. Masonry								
	3.1 Structure to External Walls								
	3.1.1 Precast Concrete						_		
	Precast concrete lintels; prestressed								BS 5977-2; bedded and jointed in gauge mortar; propping at centre span / 1.2m centres until overlaying construction is complete.
).aa	Precast concrete lintels; prestressed; 65 x 215 x 1300mm long	Nr	31	#N/D!	#N/D!	-		x	In 2022 this item was estimated using a grossing factor. See detailed drawing.
	3.1.2 Brickwork/Blockwork								Ű
	Solid concrete blocks; fairfaced quality								IS 20 and BS6073- 1; 10.5N/mm2; 440 x 215 x 100mm; bedding and jointing in cement / sand mortar; bucket handle joint pointing as work proceeds.
.ab	Solid concrete blocks; fairfaced quality walls; 100mm thick (internal leaf)	m2	762	#N/D!	#N/D!	-		x	ĺ
	3.1.3 Ancillaries to Blockwork								See detailed drawing.
	Forming cavities; stainless steel wall ties at 600mm horizontal and 450mm vertical centres; between concrete walls & blockwork walls;								Ĵ
).ac	Forming cavities; stainless steel wall ties at 600mm horizontal and 450mm vertical centres; 130mm wide; between new concrete & blockwork walls	m2	375	#N/D!	#N/D!	-		x	In 2022 this item was estimated using a grossing factor.
	Damp proof courses; 2000 gauge Hiload polyethylene; 150mm laps; bedded in gauged mortar								

- 30.ad	Hyload pitch polymer; 0.9mm thick; 150mm laps; bedded in gauged mortar; including cavity trays;	m2	76	#N/D!	#N/D!	-	Х	In 2022 this item was estimated using a grossing	
	exceeding 225mm wide							factor. See detailed drawing.	
	3.1.4 Woodwork: Ironmongery, Accessories and Sundries								
	Wall insulation; 90mm thick;							Kingspan Kooltherm K8 cavity insulation board or equal and approved; placed securely against face of inner leaf; 40mm residual cavity.	
30.ae	Wall insulation; Kingspan Kooltherm K8 cavity insulation board or equivalent; placed securely against face of inner leaf; 40mm residual cavity; 90mm thick to cavities	m2	301	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
	3.2 Structure to Int. Walls & Partitions							arannig.	
	3.2.1 Precast Concrete								
	Precast concrete lintels; prestressed; bedded and jointed in gauge mortar; propping at centre span / 1.2m centres until overlaying construction is complete								
30.ba	Precast concrete lintels; prestressed; bedded and jointed in gauged mortar; propping at centre span; 1.2m centres until overlaying construction is complete; 65 x 100 x 1300mm long	Nr	15	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
			TOTAL 3		#N/D!	-			
	5. Joinery								
	5.1 Structure to Floors Galleries								
	5.1.1 Woodwork: Structural and First Fixings								
	Carcassing; ceiling; pressure treated softwood							Strength class C16; general structural grade; visually graded to IS 127.	

50.aa	Carcassing; ceiling; pressure treated softwood joists; cross-section 225 x 38mm at 400mm centres	m	256	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
50.ab	Carcassing; ceiling; pressure treated softwood; solid bridging; cross- section 200mm x 38mm	m	51	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
50.ac	Carcassing; ceiling; pressure treated softwood; wall plate; cross-section 100 x 75mm; bolted to top of blockwork wall	m	51	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	5.1.2 Woodwork: Boarding and Second Fixings								
	Plywood sheeting; 18mm thick; butt jointing; screw fixed at 300mm centres to joists								
50.ad	Plywood sheeting; 18mm thick; butt jointing; screw fixed at 300mm centres to joists	m2	101	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Plasterboard; 12.5mm thick; fixed to back of joists							Gyproc Fireline or equal and approved.	
50.ae	Plasterboard; fixed to back of joists 325 x 12.5mm	m2	25	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
	Fascia board; MDF; painted to selected colour; fixed to end of joists and packers;								
50.af	Fascia board; MDF; painted to selected colour; fixed to end of joists and packers; 325 x 20mm	m2	59	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
	Soffit board; MDF; painted to selected colour; fixed to end of joists and packers;								
50.ag	Soffit board; MDF; painted to selected colour; fixed to end of joists and packers; 100 x 20mm	m	29	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
	5.1.3 Woodwork: Ironmongery, Accessories and Sundries							Ĵ	

								-	
	Thermal insulation; mineral wool insulation rolls to BS EN 13162; 150mm thick; cut between joists							Rockwool or equal and approved.	
50.ah	Thermal insulation; mineral wool insulation rolls to BS EN 13162; 150mm thick; cut between joists; horizontal between joists	m2	101	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Accessories; joist hangers							Expamet' or equal and approved.	
50.ai	Joist hangers; heavy duty; to suit joists sized 225 x 38mm	Nr	128	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Accessories; holding down straps;							Expamet' or equal and approved.	
50.aj	Holding down straps; mild steel; fixed to joists and blockwork at every second joist; 20 x 2.5 x 1000mm	Nr	64	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	5.2 Roof Structure								
	5.2.1 Structural: Steelwork								
	Fabricated weldable steel; Grade S275; hot rolled sections BSC								
50.ba	Fabricated members; weldable steel; Grade S275; hot rolled sections BSC; beams; 533 x 210 x 92mm UB; 50 - 100kg/m	Kg	37 114	#N/D!	#N/D!	-	X		
	Fittings								
50.bb	Ridge gusset; 2300 x 600mm x 6mm thick; weld to portal beam and Z10 fillet weld to plate; including protective coatings, intumescent paint & paint finish	Nr	40	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
50.bc	Plates; 201 x 386 x 25mm thick; 6Nr M20 holes; Z10 fillet weld to eaves beam; including protective coatings, intumescent paint & paint finish	Nr	108	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Cold formed sections; hot dipped galvanised steel; grade of steel FE E 350g (Z35); zinc coating - total average weight 275g/m2 giving an average coating thickness of 0.02mm to each side							Manufactured by Kingspan or equal approved; to BS EN 10147:1992 and BS EN 10143:1993; minimum yield stress of 350N/mm2.	

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50.bd	Cold rolled members; cold formed sections; hot dipped galvanised steel; grade of steel FE E 350g (Z35); zinc coated; average weight 275g/m2 giving an average coating thickness of 0.02mm to each side; purlins; 0- 25kg/m; fixing to roof portal beams	Kg	13 556	#N/D!	#N/D!	-	X	
50.be	Cold rolled members; fittings; bolt-on double cleat KCD23B; supplied with galvanised finish	Nr	344	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
50.bf	Cold rolled members; fittings; Multibeam rafter stays; compatible with 230mm purlin section; length 450mm; including associated bracket fixed to rafter	Nr	200	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
50.bg	16mm Rods; anti-sag quicklock ties; bridging purlins at mid span end bays only; purlin centres 1500mm	Nr	40	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	Prepare steel surface by blast cleaning; one coat of 2 pack epoxy zinc phosphate primer; one coat of 2 pack high build zinc phosphate epoxy primer							
50.bh	Protective coatings; shot blasting and priming; prepare steel surface by blast cleaning; one coat of 2 pack epoxy zinc phosphate primer; one coat of 2 pack high build zinc phosphate epoxy primer	Kg	63 298	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	Intumescent paint to steelwork; shop applied; 60 minute fire rating; compatible with primer							
50.bi	2 coats of intumescent paint to steelwork to provide 1hr fire rating; compatible with primer	m2	1 415	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	5.2.2 Painting and Decorating: Painting							
	Structural Steelwork; one coat of 2 pack aliphatic polyurethane top coat; one coat of finish paint							
50.bj	Finish to structural steelwork; one coat of 2 pack aliphatic polyurethane top coat; one coat of finish paint; general surfaces; girth exceeding 300mm	m2	1 415	#N/D!	#N/D!	-	X	

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	5.3 Structural Frame								
	5.3.1 Stone Faced Concrete Panels								
50.bk	Stone faced concrete panels; encasing gable columns ; 750 x 350 x 500mm high	Nr	47	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
	5.3.2 Structural: Steelwork								
	Fabricated weldable steel; Grade S275; hot rolled sections BSC							Welded fabrication and bolted site connections in accordance with BS 5135 and BS 5950.	
50.ca	Fabricated members; beams, various dimensions, 25 - 50kg/m; fabricated weldable steel; Grade S275; hot rolled sections BSC	Kg	30 967	#N/D!	#N/D!	-	x		
	Fittings;								
50.cb	Steel base plates; 750 x 350 x 25mm thick; grade S355 with 4Nr 28mm dia holes and grouting hole	Nr	59	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
50.cc	L & Fin plates; L-plate: 450 x 160 x 10mm thick & Fin-plate: 143 x 153 x 10mm; 4Nr M20 holes	Nr	40	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
50.cd	Plates; 290 x 120 x 10mm thick; 3Nr M20 holes; Z10 fillet weld to PFC	Nr	48	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
50.ce	Supports; 150 x 90 x 24mm thick; PFC; Z10 fillet weld to web of beam; 430mm long	Nr	25	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
	Extra Over; purlins								
50.cf	Extra Over; purlins; multichannel combined blockwork restraint	m	142	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor. See detailed drawing.	
	Holding down assembly;							Ŭ	

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50.cg	Holding down assembly comprising; 4Nr 400mm long M20 grade 8.8mm holding down bolts with 100 x 100 x 16mm thick washer plates; 4Nr tapered bolt boxes each of 40mm minimum dia; including supply of templates	Nr	59	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	Grouting to holding down bolts; non- shrinkable grade 12 pourable cement grout to the Engineer's approval							
50.ch	Grout to hold-down assembly with 4Nr nonshrink M24 bolts; bolt length 400mm	Nr	31	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
50.ci	Base plates with plan dimensions 500 x 250mm; grout thickness 25mm	Nr	59	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	5.4 External Walls Completion							
	5.4.1 Non Structural							
	Electrically operated insulated fire resistant roller shutter door by ; comprising: interlocking galvanised steel laths; vertical opening; powdercoated to RAL 7038; with fall back manual operation; linked to fire alarm system; including associated steel frame							Doorfix Ring-Gard or approved equivalent.
50.da	Electrically operated insulated fire resistant roller shutter door; comprising interlocked galvanised steel laths; vertical opening; powder coated to RAL7038; linked to fire alarm system; including associated steel frame; 3.5m wide x 4m high; 4 hour fire protection	Nr	6	#N/D!	#N/D!	-	x	
	Steel louvered boiler house doorset; comprising: louvre door; including associated steel door frame; 150mm kickplate							
50.db	External single leaf steel door and frame set; steel doorset; comprising: insulated door panel; 150mm kickplate; FD60s; size 1 x 2.05m	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.

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	Steel doorset; comprising: insulated door panel; 150mm kickplate								
50.dc	External single leaf steel door and frame set; steel doorset; comprising: insulated door panel; 150mm kickplate; FD60s; size 1 x 2.05m	Nr	2	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
50.dd	External single leaf steel door and frame set; steel doorset; comprising: insulated door panel; 150mm kickplate; FD60s; size 1 x 2.05m	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Steel fire exit doorset; comprising: insulated door panel								
50.de	External single leaf steel door and frame set; steel doorset; comprising: insulated door panel; 150mm kickplate; FD60s; size 1 x 2.05m	Nr	4	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Windows; polyester powder coated; thermally broken aluminium framed; double glazed clear glass argon filled; 6.4mm laminated glass units								
50.df	Casement window; polyester powder coated; thermally broken aluminium framed; double glazed clear glass argon filled; 6.4mm laminated glass units; FD30s; to fit structural open size 1.5 wide x 1m high; 2Nr side hung opening casement and 1Nr fixed pane	Nr	5	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	Composite Item; external louver; c/w rodent/insect screen; polyester powder coated RAL 7038							To fit Kingspan or approved equivalent cladding.	
50.dg	External louver c/w rodent/insect screen; polyester powder coated RAL 7038; size 1 x 1m	Nr	3	#N/D!	#N/D!	-	Х	In 2022 this item was estimated using a grossing factor.	
	5.4.2 Mastic Asphalt, Waterproof and Gas Proof Non Flexible Metal Sheet Coverings								
	Gas Proofing; between window frame and blockwork with proprietary airtight seal and tapes; clamped to back of window lug adaptors and bonded to existing structure								

50.dh	Mastic Asphalt, waterproof and gas proof; between window frame and blockwork with proprietary airtight seal and tapes; clamped to back of window lug adaptors and bonded to existing structure; non flexible metal sheet coverings; reveals; n.e. 300mm 5.5 Internal Walls Completion	m	64	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
	5.5.1 Woodwork								
	Composite Item; single leaf flush door with associated frame set; laminated solid core door leaf; hardwood lipping; 400 x 200mm vision panel with 6mm thick Pyro factory fitted glazing; hardwood frame; painted colour to be selected; including intumescent fire seals to door and frame; fire rated mastic and intumescent strips to applicable rating as necessary; including stainless steel ironmongery							In 2022 this item was estimated using a grossing factor.	
50.ea	Single leaf flush door with associated frame set; laminated solid core door leaf; hardwood lipping; 400 x 200mm vision panel with 6mm thick Pyro factory fitted glazing; hardwood frame; painted colour to be selected; including intumescent fire seals to door and frame; fire rated mastic and intumescent strips to applicable rating as necessary; including stainless steel ironmongery; FD60s; overall size 1 x 2.05m; ironmongery	Nr	7	#N/D!	#N/D!	-	x		
	Composite Item; glazed timber screens; 1nr fixed panes; double glazed; 6mm pyro toughened glass; solid hardwood frame and hardwood beading; intumescent seals applicable fire rating; including fire rated mastic and intumescent strips to applicable fire rating as necessary								

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50.eb	Timber glazed screen; 1Nr fixed panes; double glazed; 6mm pyro toughened glass; solid hardwood frame and hardwood beading; intumescent seals applicable fire rating; including fire rated mastic and intumescent strips to applicable fire rating as necessary; FD30s; overall size 1.5 x 1m	Nr	5	#N/D!	#N/D!		-		X	In 2022 this item was estimated using a grossing factor.	
	5.5.2 Woodwork: Boarding and Second Fixings										
	Second fixings; architraves; softwood; mitred angles; bevelled edge - 1Nr; plugged screwed & pellated at 300mm c/c;										
50.ec	Architraves; softwood; mitred angles; bevelled edge 1Nr; plugged screwed & pelleted at 300mm c/c; size 100 x 19mm	m	71	#N/D!	#N/D!		-		X	In 2022 this item was estimated using a grossing factor.	
	Second fixings: window boards; softwood; bullnose edges; 35mm wall projection over plaster; returned 50mm at ends; fixing by plugging, screwing, countersinking and flush pellating; fixed to and including 2Nr. 50 x 25mm treated softwood ground supports;										
50.ed	Window boards; softwood; bullnose edges; 35mm wall projection over plaster; returned 50mm at ends; fixing by plugging, screwing, countersinking and flush pelleting; fixed to and including 2Nr 50 x 25mm treated softwood ground supports; 100mm wide	m	8	#N/D!	#N/D!		-		X	In 2022 this item was estimated using a grossing factor.	
	5.5.3 Painting and Decorating: Painting										
	Knot; stop; sand down; prepare and apply one coat of primer;										
50.ee	Internal painting; knot; stop; sand down; prepare and apply one coat of primer; second fixings; girth n.e. 300mm (backs of boards, frames & architraves)	m	115	#N/D!	#N/D!		-		x	In 2022 this item was estimated using a grossing factor.	
	Knot; stop; sand; apply one base coat and two full coats of washable paint to selected colour										

		-		_	_	_				
50.ef	Internal painting; knot; stop; sand; apply one base coat and two full coats of washable paint to selected colour; second fixings; girth n.e. 300mm (boards, frames & architraves)	m	115	#N/D!	#N/D!		-	x	In 2022 this item was estimated using a grossing factor.	
	Knot; stop; sand; apply one base coat and two full coats of washable paint to selected colour									
50.eg	Internal painting; knot; stop; sand; apply one base coat and two full coats of washable paint to selected colour; general surfaces; screens and doors	m2	44	#N/D!	#N/D!		-	X	In 2022 this item was estimated using a grossing factor.	
	5.6 Roof Completion									
	5.6.1 Metalwork: Non Structural									
50.fa	Fall arrest system; Kingspan Safetraxx System or approved equivalent which meets BS EN 795: 2012	m	98	#N/D!	#N/D!		-	X	In 2022 this item was estimated using a grossing factor. Kingspan Safetraxx System or approved equivalent. See detailed drawing.	
			TOTAL 5		#N/D!		-			
	6. Finishings							 1		
	1	1						1		
	6.1 External Wall Finishes									
	6.1.1 Roofing, Cladding and Waterproofing: Rigid Sheet Coverings								See detailed drawing.	
	Composite insulated cladding panels; vertical; 80mm insulation core thickness; U value 0.25 W/m2k; External facing material: Galvalloy hot-dip ZA255 coated steel to BS EN 10212; finish colour grey; internal								Kingspan KS1000RW Trapezoidal wall system or equal and approved	
									ar	

60.aa	Composite insulated cladding panels; vertical; 80mm insulation core thickness; U value 0.25 W/m2k; external facing material: Galvalloy hot-dip ZA255 coated steel to BS EN 10212; finish colour grey; internal colour white; walls; exceeding 300mm wide	m2	713	#N/D!	#N/D!	-	x		
	Metal drip flashings; 0.7 gauge; powder coated grey; 9 x 3mm butyl rubber sealant							Kingspan metal drip flashings or equal approved material.	
60.ab	Metal drip flashing, 4.5mm thick; powder coated grey; 9 x 3mm butyl rubber sealant; girth 225mm; (base of cladding)	m	191	#N/D!	#N/D!	-		In 2022 this item was estimated using a grossing factor.	
	6.1.2 Floor, Wall and Ceiling Finishings: In-Situ Finishes							See detailed drawing.	
	Scud coat 3mm thick in cement: sand (1:3); scratch coat 7mm thick in cement: lime: sand (1:1:6); apply finish coat 12mm thick in cement: lime: sand (1:1:6) to achieve and overall thickness of 20mm; selected nap finish; include approved waterproofer;								
60.ac	Scud coat 3mm thick in cement: sand (1:3); scratch coat 7mm thick in cement: lime: sand (1:1:6); apply finish coat 10mm thick in cement: lime: sand (1:1:6) to achieve an overall thickness of 20mm; selected nap finish; include approved waterproofer; walls; width exceeding 300mm (below cladding)	m2	300	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
60.ad	Plinths; girth 150-300mm; recessed; smooth finish; forming bellcast projection	m	138	#N/D!	#N/D!	-		In 2022 this item was estimated using a grossing factor.	
	6.1.3 Painting and Decorating: Painting								
	Prepare surfaces; apply one dilute coat and 2Nr. Full coats of grey matt exterior quality emulsion paint to cement and sand nap finished rendered walls								

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60.ae	Prepare surfaces; apply one dilute coat and 2Nr full coats of grey matt exterior quality emulsion paint to cement and sand nap finished rendered walls; widths exceeding 300mm; (below cladding)	m2	300	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
60.af	Prepare surfaces; apply one dilute coat and 2Nr full coats of grey matt exterior quality emulsion paint to cement and sand nap finished rendered walls; plinths; girth 300mm	m	138	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	6.2 Internal Walls Finishes								
	6.2.1 Floor, Wall and Ceiling Finishings: In-Situ Finishes								
	Plastering; concrete block background; scud in sand/cement; apply bonding plaster to thickness recommended by manufacturer; finish in 3mm skim coat plaster; steel trowelled; including bonding agent								
60.ba	Plastering; concrete block background; scud in sand/cement; apply bonding plaster to thickness recommended by manufacturer; finish in 3mm skim coat plaster; steel trowelled; including bonding agent; walls; exceeding 300mm wide	m2	222	#N/D!	#N/D!	_	x	In 2022 this item was estimated using a grossing factor.	
	6.2.2 Painting								
	Prepare and apply one coat of sealer followed by one coat of thinned quick dry acrylic eggshell paint; two finish coats of quick dry acrylic eggshell paint; smooth plastered background							Hempel or equal and approved.	
60.bb	Painting to internal walls; prepare and apply one coat of sealer followed by one coat of thinned quick dry acrylic eggshell paint; two finish coats of quick dry acrylic eggshell paint; smooth plastered background; width exceeding 300mm	m2	166	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	

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	Prepare walls as per Specification Section; apply one coat of suitable primer sealer followed by one coat of thinned vinyl matt emulsion; two finish coats of vinyl matt emulsion; colour - white; fairface blockwork background							Hempel or equal and approved.
60.bc	Painting to internal walls; prepare walls and apply one coat of suitable primer sealer followed by one coat of thinned vinyl matt emulsion; two finish coats of vinyl matt emulsion; colour - white; fairfaced blockwork background; width exceeding 300mm	m2	374	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	6.3 Floor coverings on Baseslabs							
	6.3.1 Floor, Wall and Ceiling Finishings: In-Situ Finishes							
	Two component solvent based epoxy resin coating system with anti-slip grains for anti-slip finish; including primer; to powerfloated concrete floor; all in accordance with manufacturer's instructions; colour - silver							Fosroc Nitoflor FC140 or equal and approved.
60.ca	Self levelling screed finish 3mm; two component solvent based epoxy resin coating system with anti-slip finish; including primer; to power floated concrete floor; all in accordance with manufacturer's instructions; colour silver; floors exceeding 300mm wide	m2	1 428	#N/D!	#N/D!	-	x	
	Achieving required moisture content in concrete floors prior to laying floor finish						-	
60.cb	Moisture content as per manufacturer's instructions; epoxy resin floor finishes achieving required moisture content in concrete floors prior to laying floor finish	m2	1 428	#N/D!	#N/D!	-	x	
	6.3.2 Floor, Wall and Ceiling Finishings: Flexible Sheet Finishes							
	Linoleum floor sheet; 2.5mm sheet thickness; colour - grey; seam welded joints; primer if required; laying strictly in accordance with manufacturer's instructions							Armstrong Marmorette or equal and approved.

			-					
60.cc	Linoleum floor sheet; 2.5mm sheet thickness; colour - grey; seam welded joints; primer if required; laying strictly in accordance with manufacturer's instructions; to floors; exceeding 300mm wide	m2	78	#N/D!	#N/D!	-	х	In 2022 this item was estimated using a grossing factor.
	6.4 Ceiling Finishes to Upper Floors							
	6.4.1 Board Finishes							
	Plasterboard ceilings; 12.5mm plasterboard; fixed to timber joists at 300mm centres; filled, taped and jointed; 3mm thick hardwall skim coat							
60.da	Plasterboard ceilings; 12.5mm plasterboard; fixed to timber joists at 300mm centres; filled, taped and jointed; 3mm thick hardwall skim coat; exceeding 300mm wide	m2	93	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	6.4.2 Painting							
	Painting; prepare and apply 1No. primer coat, 1No. undercoat and 2No. finish coats of paint							Sterilux or approved equivalent antimicrobial paint.
60.db	Painting; prepare and apply 1Nr primer coat, 1Nr undercoat and 2Nr finish coats of paint; ceilings; exceeding 300mm wide	m2	115	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
	6.5 Roof Coverings							
	6.5.1 Roofing Cladding and Waterproofing: Rigid Sheet Coverings							
	Roof system; 120mm insulation core thickness; U value 0.16 W/m2k; external facing material: hot-dip ZA255 coated steel; end laps minimum 150mm							KS1000RW Trapezoidal Roof system or equal and approved sheeting material.
60.ea	Roof system; 120mm insulation core thickness; U value 0.16 W/m2k; external facing material: hot-dip ZA255 coated steel; end laps minimum 150mm; horizontal; exceeding 300mm wide	m2	1 548	#N/D!	#N/D!	-	x	

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	Polycarbonate rooflight units; U value 1.64 W/m2K; non fragile								Kingspan Polycarbonate rooflight units or equal; light transmission 63% to EN410 or similar
60.eb	Transparent rooflights; Polycarbonate rooflight units; U value 1.64 W/m2K; non fragile; size 1 x 3.6m; 36Nr	m2	130	#N/D!	#N/D!		-	x	approved. In 2022 this item was estimated using a grossing factor.
			TOTAL 6		#N/D!		-		
	7.1 Sanitary fittings								
	7.1.1 Galvanised steel hot and cold water piping incl. insulation (aluminum backed mineral wool, 25mm):								
71.aa	Galvanised steel hot and cold water piping incl. insulation (aluminium backed mineral wool, 25mm); 75mm dia	m	100	#N/D!	#N/D!		-	x	In 2022 this item was estimated using a grossing factor.
71.ab	Hot water tanks, 200l, electric immersion heater, incl. safety valves and connections to electricity, drain and water supply	Nr	2	#N/D!	#N/D!		-	x	In 2022 this item was estimated using a grossing factor.
	7.5 Water treatment plant, capacity 5m³/h, consisting of								
71.ac	Water treatment plant, capacity 5m3/h, consisting of metering pump	Nr	1	#N/D!	#N/D!		-	x	In 2022 this item was estimated using a grossing factor.
	7.6 PVC drainage pipes, surface- mounted								
71.ad	PVCu drainage pipes; surface mounted 100mm dia	m	90	#N/D!	#N/D!		-	x	In 2022 this item was estimated using a grossing factor.
71.ae	White ceramic WC pan with close coupled plastic cistern, standard quality, plastic seat and lid, including connections to cold water and downpipe	Nr	3	#N/D!	#N/D!		-	х	In 2022 this item was estimated using a grossing factor.
71.af	Wall mounted urinals, medium quality, including taps and cold water and downpipe connections	Nr	2	#N/D!	#N/D!		-	X	In 2022 this item was estimated using a grossing factor.

71.ag	White ceramic wash basins, pedestal mounted, 400 x 500mm including mixer taps and connections to hot and cold water and downpipe	Nr	3	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
71.ah	Framed cubicle partitions; Armells or other equal and approved; standard colours and ironmongery; assembling and screwing to floor and wall; standard cubicle set 800mm x 1500mm x 1980mm high per cubicle; 19mm melamine-faced chipboard divisions and doors. Range of 2 cubicle sets; 2nr panels; 2 doors	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
71.ai	Handheld fire extinguishers (3kg CO2)	Nr	5	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
		τοτα	L 7.1		#N/D!	-			
	7.2 Heating and ventilation								
	7.2.1 District heating:								
72.aa	Steam heat exchangers, 130°/90° C, 6 bar, c. 1500kW, including taps and fittings	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
72.ab	Local heating substation, output 130°/90° C, c. 3000kW, including taps and fittings	Nr	1	#N/D!	#N/D!	-	X		
72.ac	Air heaters suspended from roof trusses, throughput 7000m3/h, c. 80kW, including roof inlet	Nr	8	#N/D!	#N/D!	-	X		
72.ad	Frost protection system, including sensor, adjustable control valve and electrical wiring	Nr	8	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
72.ae	Extractor fans, throughput 7000m3/h	Nr	8	#N/D!	#N/D!	-	Χ		
72.af	Factory painted fluted steel radiators, including thermostatic valves and control taps, rated 3kW	Nr	10	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.	
	7.2.2 Black steel heating pipe including painting with rustproof primer:								

	Black steel heating pipe including painting with rustproof primer; 100mm dia 7.2.3 Heat insulation – mineral fibre	m	300	#N/D!	#N/D!	-	X	
	insulation, foil faced, 40mm thick:							
72.ca	Heat insulation; foil faced mineral fibre; 40mm thick; for pipe 100mm dia	m	300	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
72.cb	Circulating pumps, flow rate 10m3/h, pressure 0.6 bar, including 2Nr 70mm dia cut-off valves and expansion joint	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
72.cc	Expansion chambers, volume 900l, including accessories	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
72.cd	Outside temperature controlled regulator, including 2 probes (water output and outside temperature); powered stop tap 80mm dia, 24Hr programme and water and electrical connections	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.
			TOTAL 7.2	2	#N/D!	-		
			TOTAL 7		#N/D!	-		
	8. Electrical Installations							
	8.1 High voltage							
	The various cells are to have single- leaf doors with lock and safety glass inspection panel. Protective covers behind the doors are to prevent accidental contact with live equipment. The connection panels are to be equipped with a set of flat aluminium bars. The commutator bars will be attached to the							
	equipment by means of flexible connectors							

							 _	-	-
80.aa	Supply cell - bar set 250A - isolating switch, manually-operated, 250A - one load-breaking isolating switch, 250A - circuit connection and earth switch, interlocking with load breaking switch - earth bus bar and earth lead for removable socket - neon tube voltage indicator	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
80.ab	Metering cell - bar set 250A - isolating switch 250A - 3 fuses 6.3A - 3 voltage transformers, ratio 10000/V- 3/100/V-3, 50VA	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
80.ac	Transmission cell - bar set 250A - load-breaking isolating switch 250A - 3 current transformers, 50/50 A, 15VA	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
80.ad	Protective cell for each transformer - bar set 250A - load-breaking isolating switch, 250A, lever-operated, automatic triggering by fuses - 3 fuses, 20A	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
80.ae	standby cell (bar set 250A)	Nr	1	#N/D!	#N/D!	-	x	In 2022 this item was estimated using a grossing factor.	
80.af	Transformers 500 kVA, 10000/400 V, with all fittings, including cabling, terminal boxes, insulating supports lightning conductor, etc.	Nr	1	#N/D!	#N/D!	-	x		
80.ag	Principal low voltage distribution unit, comprising: 1 armoured distribution cabinet in painted sheet steel 1 three- phase bar system, 800A, in copper with neutral 2 three phase + N circuit breakers, 400A, with supply trips 4 3P + N circuit breakers, 250A, with trips as output to sub-distributors 1 400A isolating switch as coupling for second transformer 1 400A circuit- breaker for coupling 1 three phase 4000A (capacitors) 1 set of measuring equipment	Nr	1	#N/D!	#N/D!	-	x		

_			-				_	-	
	Each supply set will contain: 3 0-500V voltmeters								
	3 ammeters and 400/5A current								
	transformers								
	1 wattmeter for power consumed 1 cosphimeter								
	input indicators								
	alarm indicators								
	Each output including the coupling								
	system is to contain:								
	3 ammeters with commutator and								
	750/5A current transformer								
	3 warning lamps							In 2022 this item	
	Automatic correction equipment, 320kVA, 8 steps, condenser							was estimated	
80.a	protection, batteries, etc., with all	Nr	1	#N/D!	#N/D!	-	X	using a grossing	
	fittings							factor.	
	Steel meter cabinet fitted with watt-								
	hour meter, reactive volt-ampere-								
80.a	hour meter, contact timer, overload	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item	
	monitor with automatic adjustment,		' '	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			was estimated	
	overload cut out, digital print out, timers, cabling and all fittings							using a grossing factor.	
	Sheet steel distribution cabinets, type								
	IP54 protection, for heavy and								
80.a		Nr	4	#N/D!	#N/D!	-	X		
	(height: c. 2.2m, depth: c. 0.8m,								
	width: c. 2.5m)					 			
	copper bars, 250 A, 5 conductors								
	Items fitted:								
	12 three-pole knife switch circuit-								
	breakers for cartridge size 0-3,								
	including 100-500A cartridges;								
	12 three-pole sockets or 25A-63A fuses complete with fuses								
	and other fittings								
	1 three-pole switch, 250A, for power								
	supply;								
	10 one-pole circuit-breakers, 16A, for								
	lighting;								
	7 three-pole circuit breakers, 25A, for								
	heavy current;								
	1 voltmeter 0-500V, with voltage								
	selector					 			
	Provision of cable clamps as follows:								
	- one 4 x 240 mm² cable								
	<ul> <li>- 30 cables up to 5 x 2.5mm<sup>2</sup></li> <li>- 30 cables up to 4 x 70mm<sup>2</sup></li> </ul>								

			TOTAL 8		#N/D!	-		
0.db	Switches, push button, 16A surface mounted	Nr	12	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
0.da	Sockets, 16A, 250V, Schuko type (side earth contacts), surface mounted	Nr	42	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	8.4 Supplementary fittings							
0.ca	Fluorescent 2m ceiling lights with reflector, 2 x 215W, 380V	Nr	44	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	8.3 Lighting							
0.be	Power supply box (output): rating 100A	Nr	5	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
0.bd	Couplers (junction boxes): current: 40A with cartridges	Nr	2	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
0.bc	Prefabricated electrical conduits current 100A, circuits: 4 conductors + earth (5 x 27 mm2)	m	40	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
0.bb	NYM cabling, 5 x 16 mm2, including cable grips	m	250	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
0.ba	Fittings; cable 7 x 1.5mm2	m	650	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.
	8.2 Fittings							
0.ak	Sheet steel distribution cabinet, IP54 protection, for air heater control unit and central heating pump controls. To be fitted and cabled: all relays, contactors, fuses, switches, pilot lights, 1 time switch programmable for day/night/week, 10 switches for the three-speed ventilator assemblies	Nr	1	#N/D!	#N/D!	-	X	In 2022 this item was estimated using a grossing factor.

Please complete details below for Fees	Chapter	2022 Total	Chapter	2023 % Total Change	
	1	#N/D!	1	-	
	2	#N/D!	2	-	
	3	#N/D!	3	-	
	5	#N/D!	5	-	
	6	#N/D!	6	-	
	7	#N/D!	7	-	
	8	#N/D!	8	-	
	General Total	-	General Total	-	1
ARCHITECT'S AND ENGINEER'S FEES (% of general total		#ARG!		-	Insert FEES percentage
	TOTAL PRICE	#ARG!	TOTAL PRICE		Check unpriced items marked X abo



E.01.2.2.0.02.a Provided by RICS 2020 Estimate for an office building



#### Preamble

The building is a three-storey office of GIFA 3,678 m2, built in England, UK, in 2018, and located on the outskirts, and within a suburb, of a large city. There is to be no interference with road traffic. The building time is limited to 24 months, with work to start in April and occupation two years later.

Construction comprises reinforced concrete foundations supporting external wall generally of brick and concrete blockwork with insulated cavity, some external construction with outer leaf of insulated metal cladding, all within a steel fabricated structure with reinforced concrete ground floor and suspended reinforced concrete flooring and roofing slabs spanning between steel beams supported by steel columns erected off concrete pads.

Lift shaft and staircase enclosure constructed in concrete blockwork housing main concrete staircase and two passenger lifts; colour-through waterproofed render externally with hollow core structural roofing slabs finished with flat roofing finish as main structure.

Flat roofs consist of proprietary waterproof roofing system such as RubberBond or similar with EPDM membrane on vapour control layer and bonded to concrete covering to falls over concrete hollow core floor units; fascia and soffits in formed aluminium; roof drainage to colour coated aluminium gutters and downpipes.

Two secondary and fire escape staircases in fire protected enclosures, each set serving all three floors, are located internally at two corners of the building, staircases in reinforced concrete with handrails and balustrades in metal.

Windows, external doors and spandrels in toughened double glazed pre-finished aluminium frames secured to main structure and fitted with all necessary ironmongery and ancillaries.

Heating and air conditioning by gas-fired unit for ducted heating and air source heat pump conditioning systems with zoning and switching between systems; ducted air by semi-rigid aluminium pipework complete with speed controllers and mixed flow in-line fans, with louvred vents.

Internal partitions generally of lightweight concrete blockwork with plastered wall finish and similar wall finish to internal faces of external wall inner leaf.

Roof top enclosure of metal powder coated louvred panelling 3m high to plant area and incorporating louvred door access. Provision of 50m2 of Solar PV panels.

Soil and waste disposal is limited to services within internal floor area only, no requirement for external works; landscaping or similar such works.

Item	Item specification	Uni	Quantit	20	)22	2023			Items to	Pricing notes	Expert's comments
ref	nem specification	t	у	Unit price	Total price	Unit price	Total price	chang	be	Fricing notes	Expert s comments
	1. Earthworks								98	98 items in total	
10.aa	Machine excavation for site strip and foundations in soft ground, up to 1m deep below bottom of site excavation or ground level; load and dump on site stockpile, up to 100m distance		493	#N/D!	#N/D!		-		X		

10.ab	Granular material; type B (20-40mm); supply and place; 150mm thick as sub-base; levelled and compacted	m3	166	#N/D!	#N/D!	-		X
10.ac	Supply, spread and level 50mm layer of sand as blinding to sub-base	m3	66	#N/D!	#N/D!	-		X
10.ad	Disposal of uncontaminated excess spoil from site, loading and transporting, distance 5km (excluding tipping fees)	m3	493	#N/D!	#N/D!	-		X
10.ae	Machine excavation of foul and surface water drainage trenches; dispose of in spoil heap on-site (not including disposal offsite); 450mm wide; 1m deep	m	20	#N/D!	#N/D!	-		X
			TOTAL 1		#N/D!	-		
	2. Concrete						•	1
20.aa	Trench fill foundations under walls in C20/25 concrete; including steel rebar reinforcement (130kg/m3), tamped surface to levels	m3	81	#N/D!	#N/D!	-		X
20.ab	Ground floor slab in C25/30 concrete, including steel fabric mesh reinforcement (150kg/m3), levelled and tamped; 125mm thick	m3	171	#N/D!	#N/D!	-		X
20.ac	Filling to cavity of hollow walls to ground level in C12/15 concrete; cavity not exceeding 150mm wide	m3	4	#N/D!	#N/D!	-		X
20.ad	1200 gauge polythene damp proof membrane laid on sand blinding (priced separately), lapped joints; dressed up wall and into DPC course	m2	1298	#N/D!	#N/D!	-		x
20.ae	Expanded polystyrene (XPS) insulation; 150mm thick laid horizontally over 300mm wide, (0.13W/m2 K)	m2	1218	#N/D!	#N/D!	-		X
20.af	Expanded polystyrene (XPS) insulation; 25mm thick fixed vertically not exceeding 300mm wide	m	146	#N/D!	#N/D!	-		X
20.ag	Structural upper floors: Precast hollow core concrete units; 250mm thick supported on steel beams; ends filled to 600mm deep with concrete, T16 bars at 225mm centres	m2	3678	#N/D!	#N/D!	-		X

20.ah	Concrete topping layer 65mm thick of C25/30 strength laid over structural	m2	3678	#N/D!	#N/D!	-		Х
20.ai	floor Supply and install precast concrete staircase; half landing; 26 riser; 3.95m total rise; balustrades in steel; 25 x 25mm balusters and newels housed at 100mm centres; PVCu covered 50mm steel handrail	Nr	4	#N/D!	#N/D!	-		X
20.aj	Supply and install precast concrete staircase; two-quarter landings; 26 riser; 3.95m total rise; balustrades in steel; 25 x 25mm balusters and newels housed at 100mm centres; PVCu covered 50mm steel handrail	Nr	3	#N/D!	#N/D!	-		x
			TOTAL 2		#N/D!	-		
	3. Masonry	1				L	<u> </u>	a
30.aa	Foundation masonry of 100mm 7KN concrete block outer leaf; facing brickwork where exposed, 140mm 7KN concrete block inner leaf, with 100mm wide cavity; stainless steel wall ties at 5 per m2	m2	66	#N/D!	#N/D!	_		x
30.ab	Hyload pitch polymer; 0.9mm thick; horizontal damp proof course; not exceeding 225mm wide	m2	38	#N/D!	#N/D!	-		X
30.ac	Composite external wall of 100mm facing brickwork outer leaf, 140mm 4KN thermal block inner leaf, with 100mm cavity incorporating 100mm mineral wool insulation; stainless steel wall ties at 5 per m2	m2	517	#N/D!	#N/D!	-		x
30.ad	Composite external wall of 90mm thick Micro-Rib system or similar outer leaf, 140mm 4KN thermal block inner leaf, with 100mm cavity incorporating 100mm mineral wool insulation; galvanised steel wall ties at 3 per m2	m2	291	#N/D!	#N/D!	-		X
30.ae	Internal partition walls of 100mm 4KN thermal blockwork	m2	848	#N/D!	#N/D!	-		Χ
30.af	Internal partition walls at ground floor level of 105mm buff coloured facing brickwork face bonded to and including 4KN blockwork, galvanised steel wall ties at 5 per m2, brickwork pointed one face	m2	53	#N/D!	#N/D!	-		x

		Т	TOTAL 3		#N/D!	-	
30.as	Supply and install prestressed reinforced concrete lintel, 215 x 150mm high, in lift shaft walls; 1400mm long	Nr	6	#N/D!	#N/D!	-	X
30.ar	Supply and install prestressed reinforced concrete lintel, 150 x 150mm high, in external wall; 1200mm long	Nr	1	#N/D!	#N/D!	-	X
30.aq	Supply and install prestressed reinforced concrete lintel, 100 x 150mm high, in internal partition; 2100mm long	Nr	6	#N/D!	#N/D!	-	X
30.ap	Supply and install prestressed reinforced concrete lintel, 100 x 150mm high, in internal partition; 1900mm long	Nr	6	#N/D!	#N/D!	-	X
30.ao	Supply and install prestressed reinforced concrete lintel, 100 x 150mm high, in outer leaf, fair-faced two adjacent sides; 1200mm long	Nr	30	#N/D!	#N/D!	-	X
30.an	Supply and install prestressed reinforced concrete lintel, 140 x 225mm high, in inner leaf; 5300mm long	Nr	10	#N/D!	#N/D!	-	X
30.am	Supply and install prestressed reinforced concrete lintel, 140 x 225mm high, in inner leaf; 2700mm long	Nr	5	#N/D!	#N/D!	-	x
30.al	Supply and install prestressed reinforced concrete lintel, 100 x 225mm high, in outer leaf, fair-faced two adjacent sides; 5300mm long	Nr	10	#N/D!	#N/D!	-	X
30.ak	Supply and install prestressed reinforced concrete lintel, 100 x 225mm high, in outer leaf, fair-faced two adjacent sides; 2700mm long	Nr	5	#N/D!	#N/D!	-	X
30.aj	mortar (1:1:6) Hyload pitch polymer DPC; forming cavity trays; over 300mm wide	m2	42	#N/D!	#N/D!	-	Х
30.ai	Close cavity not exceeding 100mm wide at top of hollow wall with cement- based board bedded in gauged motter (1:1:6)	m	80	#N/D!	#N/D!	-	x
30.ah	Close cavity not exceeding 100mm wide between skins of hollow wall at ends, jambs or cills of openings, Manthorpe cavity closer or similar	m	194	#N/D!	#N/D!	-	X
30.ag	Lift shaft walls of 215mm 7KN concrete blockwork	m2	201	#N/D!	#N/D!	-	Χ

	4. Roofing						
40.aa	RubberBond or similar flat roofing system; comprising 18mm thick oriented strand board (OSB) substrate, a 0.25mm polyethylene vapour control layer (VCL), a 50mm mechanically-fastened glass-faced polyisocyanurate (PIR) insulation board, and fully-adhered 1.4mm RubberBond FleeceBack EPDM membrane. Bonded to concrete covering to top of hollow core structural floor units - main roof	m2	1 586	#N/D!	#N/D!	-	X
			TOTAL 4		#N/D!	-	
	5.1 Joinery - Carpentry						
51.aa	Framework; treated sawn softwood; to receive pipe casings; 25 x 38mm vertically; 25 x 25mm horizontally at 450mm centres; two sided; 300mm girth	m	36	#N/D!	#N/D!	-	X
51.ab	Far Eastern hardwood faced MR boarding ply; grade B/BB; 9mm; fixed to framework (exclude framework from price as priced separately); two sided to casings; 300mm girth	m2	11	#N/D!	#N/D!	-	x
51.ac	Skirtings; wrought softwood; plain square edge: 25 x 145mm	m	630	#N/D!	#N/D!	-	Χ
51.ad	Window boards; wrought softwood; nosed and tongued: 25 x 225mm	m	52	#N/D!	#N/D!	-	Χ
51.ae	Framed cubicle partitions; Armells or other equal and approved; standard colours and ironmongery; assembling and screwing to floor and wall; standard cubicle set 800mm x 1500mm x 1980mm high per cubicle; 19mm melamine-faced chipboard divisions and doors. Range of 6 cubicle sets; 5nr panels; 6 doors	Nr	3	#N/D!	#N/D!	_	x
51.af	Supply and install pre-finished internal softwood door and frame in white, 1hr fire check, 25 x 75mm softwood architrave both sides; including ironmongery (pair hinges, latch & lever handles); 826 x 2040 x 40mm; to internal door openings	Nr	13	#N/D!	#N/D!	-	X

51.ag	Supply and install pre-finished internal softwood door and frame in white, standard quality, 25 x 75mm softwood architrave both sides; including ironmongery (pair hinges, latch & lever handles); 826 x 2040 x 40mm; to internal door openings	Nr	14	#N/D!	#N/D!	-		x
		тс	DTAL 5.1		#N/D!	-		
	5.2 Joinery - Metalwork						-	
52.aa	Alucobond A2 or similar flat cladding to composite external walls; fixed through 75mm rigid insulation to 12mm sheathing ply, faced with vapour barrier, secured to 150mm metal stud wall, full blown insulated core; 18mm gypsum board internal face; finished in 5mm plaster skim coat	m2	185	#N/D!	#N/D!	-		x
52.ab	Colour-coated Aluminium eaves fascia and soffit assembly; 200mm fascia and 400mm soffit; stepped unit; total 800mm girth; including batten support fixed to external wall	m	159	#N/D!	#N/D!	-		x
52.ac	Colour-coated Aluminium soffit cladding; including batten support fixed to framework to underside of flat roof soffit	m2	110	#N/D!	#N/D!	-		x
52.ad	Rainwater goods; colour coated aluminium down pipes including shoes and offsets; fixing with standard clips to backgrounds: 75mm diameter	m	179	#N/D!	#N/D!	-		x
52.ae	Rainwater goods; colour coated half round aluminium gutter, including stop ends, running outlets and fittings; fixing with standard clips to backgrounds; 125mm dia	m	166	#N/D!	#N/D!	-		x
52.af	Balustrade to void, 25 x 25mm steel supports at 1350mm centres, toughened glazing panels complete with brackets; PVCu covered 50mm steel handrail; 1200mm high (balcony overlooking front foyer)	m	8	#N/D!	#N/D!	-		x
52.ag	Supply and install; universal columns; shot blasting and primed at works; 305 x 305 x 198 Kg/m	Fonne	78,8	#N/D!	#N/D!	-		X

-	1- · · · · · · · · ·				1				
52.ah	Supply and install; circular hollow sections; shot blasted and primed at works; colour coated; 323.9mm dia x 12.5mm x 96Kg/m	Tonne	2,8	#N/D!	#N/D!	-	X	Note: items 52ag, 52ah, 52ai include installation	
52.ai	Supply and install; universal beams; shot blasted and primed at works; 533 x 210 x 138 Kg/m	Γonne	174,3	#N/D!	#N/D!	-	X		
52.aj	Full depth end plates - beam to column; fillet welded to ends of beam; 550 x 225 mm x 16 mm thick steel; drilled 6 times	Nr	104	#N/D!	#N/D!	-	X		
52.al	Blast cleaning and wire brushing at works and surface treatment; zinc chromatic primer, one coat. Note: erecting the frame exposes the steel so it needs retreating to ensure protection.	m2	3 225	#N/D!	#N/D!	-	X		
		тс	DTAL 5.2		#N/D!	-			
	5.3 Joinery - Windows								
	1	I		1		1			
53.aa	Supply and install pre-finished powder-coated aluminium framed double glazed 2-light frames; grey tinted safety glazing units;18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 2500 x 2250mm	Nr	9	#N/D!	#N/D!	-	x		
53.ab	Supply and install pre-finished powder-coated aluminium framed double glazed 4-light frames; grey tinted safety glazing units;18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 5000 x 2250mm	Nr	18	#N/D!	#N/D!	-	X		
53.ac	Supply and install pre-finished powder-coated aluminium framed double-glazed 9-light frames; grey tinted safety glazing units;18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 11600 x 2250mm	Nr	6	#N/D!	#N/D!	-	X		

53.ad	Supply and install pre-finished powder-coated aluminium framed 3- light spandrel panel; opaque glazed units;18mm argon filled cavity (5-18- 5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 1200mm	Nr	1	#N/D!	#N/D!	-	x
53.ae	Supply and install pre-finished powder-coated aluminium framed 3- light spandrel panel; opaque glazed units;18mm argon filled cavity (5-18- 5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 1600mm	Nr	1	#N/D!	#N/D!	-	x
53.af	Supply and install pre-finished powder-coated aluminium framed 3- light frame; grey tinted safety glazing units;18mm argon filled cavity (5-18- 5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 2250mm	Nr	2	#N/D!	#N/D!	-	x
53.ag	Supply and install pre-finished powder-coated aluminium framed double glazed 3-light frame; grey tinted safety glazing unit;18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 1600mm	Nr	1	#N/D!	#N/D!	-	x
53.ah	Supply and install pre-finished powder-coated aluminium framed double-glazed entrance frame; grey tinted safety glazing units;18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; incorporating revolving door assembly and separate side door; including all linings, ironmongery and the like; overall frame size 6500 x 2250mm	Nr	1	#N/D!	#N/D!	-	x
53.ai	Supply and install pre-finished powder-coated aluminium framed double glazed 2-light frames; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 1800 x 1500mm	Nr	4	#N/D!	#N/D!	-	x

53.aj	Supply and install pre-finished powder-coated aluminium framed double glazed 4-light frames; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 5000 x 1500mm	Nr	9	#N/D!	#N/D!	-	x
53.ak	Supply and install pre-finished powder-coated aluminium framed door frames providing 1.1W/m2 K; pair side-hung flush doors; including ironmongery and the like; frame size 1800 x 2250 x 44mm	Nr	2	#N/D!	#N/D!	-	X
53.al	Supply and install pre-finished powder-coated aluminium framed internal screen providing 1.1W/m2 K; toughened opaque glazing; including linings and the like; frame size 8000 x 2750mm	Nr	1	#N/D!	#N/D!	-	X
		тс	DTAL 5.3		#N/D!	-	
		-	TOTAL 5		#N/D!	-	
	6. Finishings			·			
60.aa	Cement and sand (1:3); trowelled finish to floors 65mm thick, float finish; incorporating mesh reinforcement	m2	1 205	#N/D!	#N/D!	-	x
	Cement and sand (1:3); trowelled finish to floors; 50mm thick, float						
60.ab	finish; incorporating mesh reinforcement; first and second floor	m2	2 358	#N/D!	#N/D!	-	X
60.ac	finish; incorporating mesh	m2 m2	2 358 2 227	#N/D! #N/D!	#N/D! #N/D!	-	x x

60.ae	Suspended ceilings; concealed galvanised steel suspension system; hangers plugged and screwed to soffit of concrete flooring units; 600 x 600 x 18mm mineral tiles	m2	3 504	#N/D!	#N/D!		-	x
60.af	Supply and install medium quality Polypropylene carpet; pile height 10mm and 10mm recycled PU foam underlay; 2.9 tog rating; including gripper and oak effect laminate 50mm door bars	m2	3 334	#N/D!	#N/D!		-	x
60.ag	Supply and install 2.5mm thick 'standard quality' linoleum sheeting	m2	399	#N/D!	#N/D!		-	X
60.ah	Aluminium anti slip stair nosing; profile 70 x 30mm; plugged and screwed to concrete	m	218	#N/D!	#N/D!		-	X
60.ai	Paint internal wall; two coats vinyl silk emulsion paint white	m2	2 227	#N/D!	#N/D!		-	X
60.aj	Paint skirting (height 145mm), one coat undercoat alkyd-based paint, white and one coat gloss, standard quality	m	630	#N/D!	#N/D!		-	x
60.ak	Glazed ceramic wall tiling 200 x 200 x 10mm white colour, fixing with adhesive	m2	70	#N/D!	#N/D!		-	X
			TOTAL 6		#N/D!		-	
	7.1 Mechanical Installations - Sanita	ary In	stallation	and plumbing		-		
71.aa	Supply and install urinal in white vitreous china; standard quality; complete with associated fittings; fixing in position including connecting to services n.e. 1.50m from unit	Nr	9	#N/D!	#N/D!		-	x
71.ab	Supply and install 500mm rectangular basin in white vitreous china with pedestal; standard quality; complete with mixer tap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	24	#N/D!	#N/D!		-	x

71.ac	Supply and install rectangular close coupled WC suite in white vitreous china; standard quality; complete with cistern, seat and flap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	21	#N/D!	#N/D!	-	x
71.ad	Supply and install white 900 x 900mm acrylic shower tray, 25mm high and 6mm thick glass quadrant (door); inclusive of waste, complete with associated fittings; fixing in position including connecting to services n.e. 1.5m from unit	Nr	5	#N/D!	#N/D!	-	x
71.ae	Supply and install exposed thermostatic bar mixer shower in chrome specification; Hansgrohe Croma 100 Showerpipe or similar; fixing in position; connecting to services not exceeding 1.5m from unit	Nr	5	#N/D!	#N/D!	-	x
71.af	Provision of cold water supply, 10m MDPE pipe 20mm dia; metre position to rising main position, including stop cock and non-return valve	Nr	1	#N/D!	#N/D!	-	x
		т	OTAL 7.1		#N/D!	-	
	7.2 Mechanical Installations - Heating	ng an	d hot wate	er supply			
72.aa	Supply, install and commission combined heat and power unit; gas fired engine; acoustic enclosure complete with exhaust fan and attenuators; exhaust gas attenuation includes 6m long pipe connections; dry air cooler for secondary water circuit to reject excess heat; controls and panel; commissioning electrical output 150kW; thermal output 208kW (e.g. Hoval PowerBloc 210). Assembled on site at roof top level.	Nr	1	#N/D!	#N/D!	-	x
72.ab	15mm Polyethylene (PE-X) piping from boiler hot and cold services to sanitary fixtures and fittings complete with all bends, couplers, brackets etc as appropriate and including 4nr valves in total	m	336	#N/D!	#N/D!	-	x

		Т	OTAL 7.2		#N/D!	-		
	7.3 Mechanical Installations - Ventil	ation	1				<u> </u>	
73.aa	Semi-rigid flexible aluminium ducting; 50% @ 100mm and 50% @ 150mm dia; complete with all bends, fixing plates, reducers, fire dampers, grilles etc. Pipe sections supported on brackets fixed to underside of structural flooring units and laid between suspended ceiling and concrete slab units over	m	480	#N/D!	#N/D!	-		X
		Т	OTAL 7.3		#N/D!	-		
	7.4 Mechanical Installations - Lifts							
74.aa	Passenger lifts - machine room over; electrically operated 8-person lift serving 3 levels, AC drive with controls; speed 1.6 m/s; maximum load: 630kg	Nr	2	#N/D!	#N/D!	-		х
		Т	OTAL 7.4		#N/D!	-		
	7.5 Mechanical installations - Fire p	rotec	tion					
75.aa	Supply, install and commission wet pipe fire sprinkler, including pipework, valve sets, booster pumps and automatic alarm; assume 1 sprinkler per 12m2	Nr	250	#N/D!	#N/D!	-		X
75.ab	Supply and install new smart smoke & Carbon Monoxide alarm (Nest S3000 Protect or equivalent); wire into electrics for fail-safe (assume 2m of wire required)	Nr	18	#N/D!	#N/D!	-		x
		Т	OTAL 7.5		#N/D!	-		
			TOTAL 7		#N/D!	-		
	8. Electrical Installations							
80.aa	Transformer; 11000/433v; oil filled; natural cooling; gauges and ancillaries; HV and LV terminations; 500kVA	Nr	1	#N/D!	#N/D!	-		Х

	Please complete details below for Fees				2022	2023	%		
			TOTAL 9		#N/D!	-			
90.ab	PVCu pipes; OsmaDrain or similar; 110mm dia soil waste pipework complete with accessories including connectors, bends, access doors, branches etc; fixing with standard clips	m	78	#N/D!	#N/D!	-		X	
90.aa	150mm bed and surround in pea shingle and 150mm covering of pea shingle to pipes; 110mm dia, 450mm wide (allow a total of 0.135m3 pea shingle per m)	m	20	#N/D!	#N/D!	-		X	
	9. Drainage System		TOTAL 8		#N/D!	-			
80.ai	Photovoltaics assembled on the roof; 400W monocrystalline; 1,754mm x 1,096mm x 30mm; Trina Vertex S or equivalent	m2		#N/D!	#N/D!	-		X	
80.ah	Surface mounted; modular luminaires 600 x 600mm; Philips CoreLine RC125b led panel, 4000K or similar; 300lx, set in ceiling grid	Nr	90	#N/D!	#N/D!	-		X	
80.ag	Plateswitches; box; surface mounted; 3-gang 2-way screwless; brushed stainless steel	Nr	30	#N/D!	#N/D!	-		Χ	
80.af	PVC insulated sheathed cable; 300/500-volt grade; drawn into conduit clipped to structure; 3 core 2.5 mm2	m	450	#N/D!	#N/D!	-		X	
80.ae	Cable trunking; twin compartment; PVC; white with cover and couplings in running length; including angles and end caps; 100 x 25mm	m	900	#N/D!	#N/D!	-		X	
80.ad	Busbar trunking with copper conductors; TP&N aluminium housing; earth continuity; insulation; trunking with ancillaries; fire barrier and tap-off unit; 400 amp	m	15	#N/D!	#N/D!	-		X	
80.ab	Stand-by generator; packaged unit; water cooled diesel engine; battery charge alternator and starter motor; 24-hour capacity storage tank; anti- vibration mountings; 150 kVA	Nr	1	#N/D!	#N/D!	-		X	

	onapter	Total	Oliaptei	Total Change	9
	1	#N/D!	1	-	
	2	#N/D!	2	-	
	3	#N/D!	3	-	
	4	#N/D!	4	-	
	5	#N/D!	5	-	
	6	#N/D!	6	-	
	7	#N/D!	7	-	
	8	#N/D!	8	-	
	9	#N/D!	9	-	
	General Total	-	General Total	-	
RCHITECT'S AND ENGINEER'S FEES (% of general total		#ARG!		-	Insert FEES percentage
	TOTAL PRICE	#ARG!	TOTAL PRICE		Check unpriced items marked X abo



## E.01.2.3.0.01.a Provided by RICS 2022 Estimate for a dual carriage way with a central reserve



#### Preamble

The project relates to a 100m section of road on a 5 km site. The construction works to be carried out on the same alignment as the existing road to an existing carriageway. The assumed speed for the carriageway is greater than 80kph. It is assumed that all excavations comprises of compact soil and gravel and shouldn't include any provision for earthwork support.

The road is a 14m wide bi-directional dual carriageway which will include a central reserve area between opposing lanes. It also features a vehicle restraint system for vehicle impact safety. The central reserve vehicle restraint system is continuous and a double rail system and there is a single rail system on the opposite side of the footway.

Use of hard strips adjacent to each lane at 1m widths has been applied and each carriageway has a cross-fall towards the verge area. Each verge side has been treated differently to allow for a cutting and embankment detail allowing for the use of different drainage types that may occur in road construction.

The construction type for the footway has been assumed that light-vehicles may mount the kerb line and park on the footway area. This assumption affects the depth of construction materials to be used. The width of the footway is 2m, excluding kerb and edging widths.

Unit prices should include for the following works: preparation of the site and use and removal of materials to license disposal sites including all levies.

Item	Item specification	Uni	Quantit	20	)22	20	)23	<sup>70</sup> chang	be	Pricing notes	Expert's comments
ref	tem specification	t	У	Unit price	Total price	Unit price	Total price	chang	pricod	Fricing notes	Expert s comments
	1. Earthworks								27	27 items in total	
10.aa	Mechanical excavation of carriageway, depth 870mm, levelling and compacting to 95% simple Proctor. Transport 500m onsite	m3	1 740	#N/D!	#N/D!		-		x	Carriageway: depth = 870mm; width = 9m + 2m + 9m = 20m (1,740m3)	
10.ab	Mechanical excavation of sidewalk and shoulder, depth 400mm, levelling and compacting. Transport 500m onsite	m3	92	#N/D!	#N/D!		-		x	Sidewalk and shoulder: depth = 400mm; width = 2.3m (92m3)	
10.ac	Mechanical excavation of trenches and drainage chambers, depth 3m. Transport 500m onsite	m3	405	#N/D!	#N/D!		-		x	Trench and drainage chambers: trench for carrier and filter drain width = 0.6m each at a depth of 3m, use of ditch witch for fin drain width = 0.3m use a depth of 1.5m (405m3)	

		Т	TOTAL 1		#N/D!	 -		
	2. Concrete and Asphalt							
	Asphalt - Main Carriageway (incl. central reserve)							no capping used as kept mechanically stabilised work
20.aa	Gravel 0-90mm dia, thickness 450mm on the carriageway. 95% modified Proctor	m2	2 100	#N/D!	#N/D!	-	Χ	
20.ab	Mechanically stabilised crusher-run 0- 45mm dia, thickness 100mm on the carriageway. 95% modified Proctor	m2	2 100	#N/D!	#N/D!	-	X	Lime stabilise assuming a 1000m3 done in a day incl. establishment + imported fill not class 6F
20.ac	AC 32 dense base course 40/60 des, thickness 230mm	m2	2 100	#N/D!	#N/D!	-	Χ	
20.ad	AC 20 dense binder course 40/60 des, thickness 60mm	m2	2 100	#N/D!	#N/D!	-	Χ	
20.ae	Thin surface course, 10mm dia stone, thickness 30mm	m2	2 100	#N/D!	#N/D!	-	Χ	width = 1+3.5+3.5+1+2+1+ 3.5+3.5+1
	Asphalt - Footway							assumed light vehicle footway and cycle ways
20.af	Gravel 0-90mm dia, thickness 250mm on the sidewalk and shoulder. 95% modified Proctor	m2	200	#N/D!	#N/D!	-	Χ	reduced depth to suit light vehicle footway loads
20.ag	Mechanically stabilised crusher-run 0- 45mm dia, thickness 80mm. 95% modified Proctor	m2	200	#N/D!	#N/D!	-	X	Lime stabilise assuming a 1000m3 done in a day incl. establishment + imported fill not class 6F
20.ah	20mm dia dense base / binder course, thickness 50mm	m2	200	#N/D!	#N/D!	 -	Χ	used CD 239 spec
20.ai	6mm dia dense asphalt surface course, thickness 20mm	m2	200	#N/D!	#N/D!	-	Х	used CD 239 spec

20 ai	Precast concrete half battered kerb 125mm x 255mm, compliant to BS EN 1340, laid straight or curved exceeding 12m radius on a 150mm bed of GEN 0 / C7/8 / ST1 concrete (7.5N) including haunching	m	100	#N/D!	#N/D!	-	x	used CD 239 spec - front of footway	
20.ak	Precast concrete square edging 50mm x 150mm, compliant to BS EN 1340, laid straight or curved exceeding 12m radius on a 100mm bed of GEN 0 / C7/8 / ST1 concrete (7.5N) including haunching	m	100	#N/D!	#N/D!	-	x	used CD 239 spec - rear of footway	
		Т	OTAL 2		#N/D!	-			
	6. Finishings: Street furniture								
60.aa	Vehicle Restraint System or equivalent steel parapet restraint system; N2 normal containment highway safety fence; single side system; speed limit of 100km/h; compliant to BS EN 1317. 110 x 49mm Z post every 2.5m. Each post bedded in concrete foundation; ST5 or C40 grade	m	100	#N/D!	#N/D!	-	x	verge one side only	
60.ab	Vehicle Restraint System or equivalent steel parapet restraint system; N2 normal containment highway safety fence; double sided system; speed limit of 100km/h; compliant to BS EN 1317. 110 x 49mm Z post every 2.5m. Each post bedded in concrete foundation; ST5 or C40 grade	m	100	#N/D!	#N/D!	-	x	central reserve	
60.ac	Thermoplastic road marking compliant to BS EN 1871 & 1436; solid single edge line; 100mm wide to surface course	m	400	#N/D!	#N/D!	-	x	edge lines	
60.ad	Thermoplastic road marking compliant to BS EN 1871 & 1436; intermittent line; 100mm wide to surface course	m	200	#N/D!	#N/D!	-	x	lane lines	
60.ae	Installation of reflective road studs compliant to BS EN 1463 Pt. 1 & 2 to lane lines at 18m centres	Nr	34	#N/D!	#N/D!		X	studs to edge & lane lines	
		Т	OTAL 6		#N/D!	-			
	9. Drainage								

			TOTAL 9		#N/D!	-			
0.ah	Type B filter material, coarse aggregate (20-40mm dia) compliant to BS EN 13242 in drainage trenches, depth 2.5m	m3	150	#N/D!	#N/D!	-	 X	upper drainage material for filter drain height = 2.5m	
).ag	Type A filter material, fine and all-in aggregate (0-20mm dia) complaint to BS EN 13285 in drainage trenches, depth 500mm	m3	30	#N/D!	#N/D!	-	x	lower drainage material for bedding and haunch for filter drain bedding = 75+300+50 = 425mm say 500mm.	
90.af	Precast concrete chambers, compliant to BS 5911-3 & BS EN 1917, 1500mm dia; depth 2.5m, including cover slab, chamber steps to BS EN 13101, grade D400 frame and gratings compliant to BS EN 124, depth of frame 150mm	Nr	4	#N/D!	#N/D!	-	X	slightly oversized to cater for up to 2 connections on one side	
0.ae	Precast concrete trapped drainage gully, compliant to BS 5911-6, 450mm dia; height 0.9m including ST2 concrete bed & surround, cover slab, grade D400 frame and gratings compliant to BS EN 124, depth of frame 150mm	Nr	8	#N/D!	#N/D!	-	X		
).ad	Connection of drain pipes to concrete chambers	Nr	6	#N/D!	#N/D!	-	Χ		
0.ac	Filter drain - HDPE pipe compliant to BS EN 1266-1, 300mm dia in trench depth to invert 3.0m, including bed and surround in shingle and backfilling	m	100	#N/D!	#N/D!	-	X	filter drain in embankment drwg. has depth of 3m	
0.ab	Carrier drain - HDPE pipe compliant to BS EN 1266-1 , 375mm dia in trench depth to invert 3.0m, including bed and surround in shingle and backfilling	m	100	#N/D!	#N/D!	-	X	carrier drain in cutting drwg. has 3m depth, type S bed used	
).aa	Fin drains - Perforated PVCu pipes, compliant to BS 4962 & BS EN 1401- 1, 110mm dia. at a depth not greater than 1.5m, including bed and surround in shingle and backfilling	m	100	#N/D!	#N/D!	-	X	fin drain in cutting	

apter

2023 %

Total Change

	1 2 6 9	#N/D! #N/D! #N/D! #N/D!	1 2 6 9	-	
ARCHITECT'S AND ENGINEER'S FEES (% of general total	General Total	- #ARG!	General Total	-	Insert FEES percentage
	TOTAL PRICE	#ARG!	TOTAL PRICE		Check unpriced items marked X above



# E.01.2.3.0.01.b Provided by RICS 2022 Estimate for resurfacing a dual carriageway



### Preamble

The project relates to resurfacing a 100m section of road on a 5 km site. The construction works to be carried out on the same alignment as the existing road to an existing carriageway. The assumed speed for the carriageway is greater than 80kph.

The road is a 14m wide bi-directional dual carriageway which will include a central reserve area between opposing lanes. It also features a vehicle restraint system for vehicle impact safety. The central reserve vehicle restraint system is continuous and a double rail system and there is a single rail system on the opposite side of the footway. All vehicle restraint systems are to stay in place with no height adjustments and assumed section of existing vehicle restraint system requires replacement.

Use of hard strips adjacent to each lane at 1m widths has been applied and each carriageway has a cross-fall towards the verge area. Each verge side has been treated differently to allow for a cutting and embankment detail allowing for the use of different drainage types that may occur in road construction. All drainage and kerb systems are to stay in place as no adjustments and an allowance has been made for localised drainage repairs.

The construction type for the footway has been assumed that light-vehicles may mount the kerb line and park on the footway area. This assumption affects the depth of construction materials to be used. The width of the footway is 2m, excluding kerb and edging widths. Assumed for the removal of the upper surface course only.

Unit prices should include for the following works: preparation of the site and use and removal of materials to license disposal sites including all levies.

It is assumed that one side of the carriageway will remain open throughout and the majority of work will be undertaken during normal working hours.

Item	Itom operification	Uni	Quantit	20	22	20	)23	%	Items to	Pricing notes	Export's comments
ref	Item specification	t	у	Unit price	Total price	Unit price	Total price	chang	be	Pricing notes	Expert's comments
	1. Earthworks								18	18 items in total	
10.aa	Pavements; cold milling at 100mm depth; removal of surface and binder course	m2	1 440	#N/D!	#N/D!		-		x		
	Pavements; cold milling at 100mm depth; removal of base course	m2	720	#N/D!	#N/D!		-		x	This quantity has been assumed as 50% of the carriageway area, where pavement has failed.	
10.ac	Pavements; cold milling at 50mm depth; removal of surface course longitudinally at tie ins; assumed at 30mm inlay for longitudinal step at each end of the carriageway	m2	360	#N/D!	#N/D!		-		x		

			TOTAL 1		#N/D!	-		
	2. Concrete							
	Asphalt - Main Carriageway (incl. central reserve)							
20.aa	AC 32 dense base course 40/60 des, assumed only half of base layer to be replaced; thickness 100mm	m2	720	#N/D!	#N/D!	-	x	
20.ab	AC 20 dense binder course 40/60 des, thickness 60mm	m2	1 440	#N/D!	#N/D!	-	X	
20.ac	Thin surface course, 10mm dia stone, thickness 30mm	m2	1 440	#N/D!	#N/D!	-	Х	
20.ad	Surfacing course; inlay at tie ins, thickness 30mm	m2	360	#N/D!	#N/D!	-	Χ [	
20.ae	Pavements; tack coat applied by sprayer	m2	2 520	#N/D!	#N/D!	-	Х [	
	Asphalt - Footway							
20.af	6mm dia dense asphalt surface course, thickness 20mm	m2	200	#N/D!	#N/D!	-	X	
20.ag	Pavements; cold milling up to 50mm in depth; removal of surface course	m2	200	#N/D!	#N/D!	-	х	
		•	TOTAL 2		#N/D!	-		
	6. Finishings: Street furniture						-	
60.aa	Vehicle Restraint System or equivalent steel parapet restraint system; N2 normal containment highway safety fence; single side system; speed limit of 100km/h; compliant to BS EN 1317. 110 x 49mm Z post every 2.5m. Each post bedded in concrete foundation; ST5 or C40 grade; assumed section of existing vehicle restraint system requires replacement	m	50	#N/D!	#N/D!	-	x	
60.ab	Thermoplastic road marking compliant to BS EN 1871 & 1436; solid single edge line; 100mm wide to surface course	m	400	#N/D!	#N/D!	-	x	

	Thermoplastic road marking compliant to BS EN 1871 & 1436;									
ou.ac	intermittent line; 100mm wide to surface course	m	200	#N/D!	#N/D!		-	X		
60.ad	Installation of reflective road studs compliant to BS EN 1463 Pt. 1 & 2 to lane lines at 18m centres	Nr	34	#N/D!	#N/D!		-	x		
		Т	TOTAL 6		#N/D!		-			
	9. Drainage									
	Carrier drain - HDPE pipe compliant									
90.aa	to BS EN 1266-1 , 375mm dia in trench depth to invert 3.0m; including bed and surround in shingle and backfilling. Assumed localised pipe repair	m	20	#N/D!	#N/D!			x		
90.ab	Filter drain - HDPE pipe compliant to BS EN 1266-1, 300mm dia in trench depth to invert 3.0m; including bed and surround in shingle and backfilling. Assumed localised pipe repair	m	20	#N/D!	#N/D!		-	x		
00.00	Connection of drain pipes to concrete chambers	Nr	2	#N/D!	#N/D!		-	X		
90.ad	Precast concrete trapped drainage gully, compliant to BS 5911-6, 450mm dia; height 0.9m including ST2 concrete bed & surround, cover slab, grade D400 frame and gratings compliant to BS EN 124, depth of frame 150mm; assumed installation or / replacement of gullies due to failure or additional capacity	Nr	2	#N/D!	#N/D!		-	x		
		Т	FOTAL 9		#N/D!		-			
	Please complete details below for Fees			Chapter	2022	Chapter	2023 %			
				1	Total #N/D!	1	Total Chang	e		
				2	#N/D!	2	-			
				6	#N/D!	6	-			
				9	#N/D!	9	-			
				General Total	-	General Total	-			
	TECT'S AND ENGINEER'S FEES (% o	f gene	eral total		#ARG!		-	Insert FEES	S percentage	

TOTAL PRICE	TOTAL PRICE	Check unpriced items marked X above