

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			
Bricklayer, skilled			
Plumber, skilled			
Carpenter, skilled			
Structural steel worker, skilled			
Electrician, skilled			
Machine (equipment) operator, skilled			

Insert labour rate
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	Trade						
	General labourers, unskilled	Bricklayer, skilled	Plumber, skilled	Carpenter, skilled	Structural steel worker, skilled	Electrician, 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 and other structures	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	Installs, maintains and 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	(a) laying stone, brick and similar building blocks to construct or repair walls, partitions, fireplaces and other structures such as smokestacks, furnaces, converters, kilns and ovens, piers and abutments	(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	(a) installing, maintaining and repairing electrical wiring systems and related equipment in various buildings such as schools, hospitals, commercial establishments, residential buildings and other structures	(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) laying footpaths, kerbs and pavements	(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) examining blueprints, wiring diagrams and specifications to determine sequences and methods of operation	(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 to form sewers, drains or water mains, or for other purposes	(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	(c) planning layout and installation of electrical wiring, equipment and fixtures, based on job specifications and relevant standards	(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	



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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 ref	Item specification	Unit	Quantity	2022		2023		% chang	Items to be	Pricing notes	Expert's comments
				Unit price	Total price	Unit price	Total price				
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!		-		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	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 item was estimated using a grossing factor.

30.ac	Hyload pitch polymer; 0.9mm thick; horizontal damp proof course; not exceeding 225mm wide	m2	8	#N/D!	#N/D!		-		X	
30.ad	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	161	#N/D!	#N/D!		-		X	
30.ae	Internal partition walls of 100mm 4KN thermal blockwork	m2	18	#N/D!	#N/D!		-		X	
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!		-		X	
			TOTAL 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										
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.
51.ad	Treated sawn softwood; grade SC3; 50 x 200mm joists at 400mm centres; doubled up under partitions as support	m	167	#N/D!	#N/D!				X	In 2022 this item was estimated using a grossing factor.

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 400mm 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/m²k; 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	

52.ab	30 x 5 x 1000mm galvanised heavy duty mild steel restraint straps; fixing to woodwork and masonry	Nr	28	#N/D!	#N/D!		-		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 was estimated using a grossing factor.
52.ac	Galvanised steel truss clips; fixing to woodwork; to suit trussed rafter construction at plate; width: 38mm	Nr	30	#N/D!	#N/D!		-		X	
52.ad	Galvanised steel joist hangers; build in to masonry: size: 50 x 200mm; as support to ends of floor joists	Nr	40	#N/D!	#N/D!		-		X	
		TOTAL 5.2			#N/D!		-			
5.3 Joinery - Windows										
53.aa	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), including frames, linings, ironmongery and the like: 1200 x 1050mm	Nr	8	#N/D!	#N/D!		-		X	In 2022 this item was estimated using a grossing factor.
53.ab	Install new pre-finished PVCu casement triple glazed frosted window with two 16mm argon filled cavity (4-16-4-16-4 providing 0.6W/m2 K), including frames, linings, ironmongery and the like: 1200 x 1050mm	Nr	2	#N/D!	#N/D!		-		X	
53.ac	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	Nr	1	#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!		-		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 - Sanitary Installation 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	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
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

In 2022 this item was estimated using a grossing factor.

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	
71.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	
71.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	
71.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.
71.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.
71.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	
71.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.
71.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.
		TOTAL 7.1		#N/D!		-		
7.2 Mechanical Installations - Heating and hot water supply								

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!		-		X		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.
		TOTAL 7.2			#N/D!		-				
7.3 Mechanical Installations - Ventilation											
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		#N/D!		-			
				TOTAL 7		#N/D!		-			
8. Electrical Installations											
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!			-		X	
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)	Nr	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	#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		#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 0.135m ³ pea shingle per m)	m	25	#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	#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	-
ARCHITECT'S AND ENGINEER'S FEES (% of general total)	#ARG!		-
TOTAL PRICE	#ARG!	TOTAL PRICE	

Insert FEES percentage

Check unpriced items marked 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 loose 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 the specified item is finished to a professional level leaving no visible imperfections and may include provision like filling voids created by installation and touching up paintwork if necessary.

Item ref	Item specification	Unit	Quantity	2022		2023		% chang	Items to be	Pricing notes	Expert's comments
				Unit price	Total price	Unit price	Total price				
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								X	X	X	
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!		-				
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!		-				
TOTAL 4				#N/D!			-				
5.1 Joinery - Carpentry								X	X	X	
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!		-				
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!		-				
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!		-				

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	

51.aj	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		
		TOTAL 5.1			#N/D!		-				
5.3 Joinery - Windows											
53.aa	Take up, remove and dispose of in skip on-site (not including disposal offsite); timber casement windows in 1200mm x 1050mm with frames, linings, ironmongery and the like	Nr	9	#N/D!	#N/D!		-		X		
53.ab	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), including frames, linings, ironmongery and the like: 1200 x 1050mm	Nr	8	#N/D!	#N/D!		-				
53.ac	Install new pre-finished PVCu casement triple glazed frosted window with two 16mm argon filled cavity (4-16-4-16-4 providing 0.6W/m2 K), including frames, linings, ironmongery and the like: 1200 x 1050mm	Nr	2	#N/D!	#N/D!		-		X		
		TOTAL 5.2			#N/D!		-				
		TOTAL 5			#N/D!		-				
6. Finishings											
60.aa	Take up, remove and dispose of in skip on-site (not including disposal offsite); 2mm thick linoleum floor; including adhesive	m2	36	#N/D!	#N/D!		-		X		
60.ab	Take up, remove and dispose of in skip on-site (not including disposal offsite); 10mm thick clay wall tiles including sealants and adhesives	m2	15	#N/D!	#N/D!		-				
60.ac	Take up, remove and dispose of in skip on-site (not including disposal offsite); carpet and underlay including tack strips	m2	83	#N/D!	#N/D!		-				

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	#N/D!	#N/D!		-		X					
		TOTAL 7.1			#N/D!		-							
7.2 Mechanical Installations - Heating and hot water 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 - Ventilation														
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!		-							

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			#N/D!		-						
		TOTAL 7			#N/D!		-						
8. Electrical Installations													
80.aa	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				
80.ab	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!		-						
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!		-						
80.ad	Supply and install new shaving socket to en-suite, creating new routes and 3m of wiring to electrics	Nr	1	#N/D!	#N/D!		-						
80.ae	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!		-						
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!		-						
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!		-						
		TOTAL 8			#N/D!		-						
Please complete details below for Fees													
Chapter										2022	Chapter	2023	%

Chapter	Total	Chapter	Total	Change
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!	<input type="text"/>	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

Insert FEES percentage

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, NOT included in Project Total - see Preliminaries note above.

Item ref	Item specification	Unit	Quantity	Unused columns	2023			
					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 meshes, 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		
		<i>item total</i>	m	170			0,00	0,00	
0,2	D0	Access roads, site compounds	m2	100					0,00
0,2	S1	Access roads, building site compounds (excavation of soil by 50cm layer + supply and placing of pit gravel by 50cm layer)	m2	100			0,00		
		<i>item total</i>	m2	100			0,00	0,00	
0,3	D0	Site office for clerk of works	Nr	1					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		
		<i>item total</i>	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		
		<i>item total</i>	Nr	1			0,00	0,00	
0.5	D0	Front scaffolding (0.6m width)	m2	2 576					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 .	m2	2 576			0,00		

0.5	S2	Front scaffolding rental (quantity = m2 x 6 months)	m2 / month	15 465				0,00		
		<i>item total</i>	m2	2 576				0,00	0,00	
0.6	A	GENERAL EXPENSES								
0.6	D0	Cleaning of the building (prior to client handover)	m2	4 229						0,00
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		
		<i>item total</i>	m2	4 229				0,00	0,00	
		<i>Additional items</i>	Nr	1						0,00
		<i>item total</i>	Nr	1,00				0,00	0,00	
		TOTAL								0,00
Total project cost excluding fees from below										0,00
Preliminaries / (project cost - preliminaries) <u>not included</u> in the rates below Please include this built up percentage or another suitable percentage for Preliminaries + Contractor's overheads and profit in the item unit rates below.										

The table above is unprotected and not included in the Validation Tool

Item ref	Item specification	Unit	Quantity	2022		2023				% change	Items to be priced	Pricing notes	Expert's comments
				Unit price	Total price	Sub-component Rate	Sub-component price	Unit price	Total price				
D00	1. Earthworks										70	70 items in total	

		<i>item total</i>	m2	200,00			0,00	0,00			
10.ad		Backfilling against walls below ground level	m3	280	#N/D!	#N/D!				0,00	
1,4	S1	<i>Reclaiming the soil disposed of, through 30 cm layer compaction. (Reclaiming, loading, placing)</i>	m3	200,00				0,00			
1,4	S2	<i>Supplying, transporting and setting clean materials, crusher-run aggregate size 16 to 32 mm for backfilling.</i>	m3	80,00				0,00			
		<i>item total</i>	m3	280,00			0,00	0,00			
		TOTAL 1			#N/D!					0,00	
2. Concrete											
20.aa		Raft foundation or ground slab, reinforced concrete 300mm thick	m2	570	#N/D!	#N/D!				0,00	
2,1	D1	<i>Foundation raft, 30 cm thick concrete, steel = 90 kg/m3 including form-work, steels and additives</i>									
2,1	D2	<i>- thickness 0.3 m</i>									
2,1	D3	<i>- Concrete volume (total) 171 m3</i>									
2,1	D4	<i>- Concrete surface (total) 570 m2</i>									
2,1	S1	<i>peripheral formwork (banks) 30 cm high</i>	m2	37,00				0,00			
2,1	S2	<i>Concrete B35/25 2)</i>	m3	171,00				0,00			
2,1	S3	<i>Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)</i>	kg	15 390,0				0,00			
2,1	S4	<i>Lean concrete blinding 10 cm thick</i>	m2	570,00				0,00			
2,1	S5	<i>Surface treatment, floated finish (mechanical treatment to have constant thickness and smooth surface)</i>	m2	570,00				0,00			
2,1	S6	<i>Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)</i>	%	0,00				0,00			
		<i>item total</i>	m2	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	
2,2	D1	<i>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.</i>									
2,2	D2	<i>- thickness 0.25 m</i>									
2,2	D3	<i>- Concrete volume (total) 62 m3</i>									

X

X

X

2,2	D4	- Concrete surface (total) 246 m2											
2,2	S1	High standard formwork Type 4 3), (architectural concrete, ready to paint surface)	m2	246,00					0,00				
2,2	S2	Concrete B35/25 2)	m3	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)	m2	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	m2	246,00					0,00	0,00			
20.ac		Floor slabs reinforced concrete 210mm deep	m2	3 534	#N/D!	#N/D!					0,00		
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	D3	- 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)	m2	3 534,00					0,00				
2,3	S2	Concrete B35/25 2)	m3	742,00					0,00				
2,3	S3	Reinforcement steel S 500 1)	kg	96 460,0					0,00				
2,3	S4	Surface treatment (floated clean)	m2	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	m2	3 534,00					0,00	0,00			
20.ad		Slabs balconies reinforced concrete 210mm deep	m2	890	#N/D!	#N/D!					0,00		
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)	m2	890,00					0,00				
2,4	S2	Concrete B35/25 2)	m3	187,00					0,00				
2,4	S3	Reinforcement steel S 500 1)	kg	24 310,0					0,00				

X

X

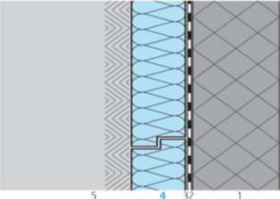
2.4	S4	Surface treatment (floated clean)	m2	890,00				0,00			
2.4	S5	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00			
		item total	m2	890,00				0,00	0,00		
20.ae		Insulation under slab	m2	572	#N/D!	#N/D!				0,00	
2.5	S1	Styropor (or similar) insulation under slab 80 mm thick, 40 g/ms density mechanical fastening by PVC cleat.	m2	572,00				0,00			
		item total	m2	572,00				0,00	0,00		
20.af		Roof slabs reinforced concrete 210mm, roof on 5th floor and top-floor	m2	895	#N/D!	#N/D!				0,00	
2.6	D1	Formwork, reinforced concrete, framework, surfaces treatment, 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									
2.6	S1	High standard formwork Type 4 3), (architectural concrete, ready to paint surface)	m2	895,00				0,00			
2.6	S2	Concrete B35/25 2)	m3	188,00				0,00			
2.6	S3	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)	m2	895,00				0,00			
2.6	S5	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00			
		item total	m2	895,00				0,00	0,00		
20.ag		Round reinforced concrete pillars, 300mm dia; reinforcement 325kg/m3	m	126	#N/D!	#N/D!				0,00	
	D1	Circular formwork, reinforced concrete, framework. No additives.									
2.7	S1	Standard formwork 4 3), round, 300mm (architectural concrete, ready to paint surface) diameter	m	126,00				0,00			
2.7	S2	Concrete B35/25 2) cast on site	m3	3,00				0,00			
2.7	S3	Reinforcement steel S 500 1) (bent all Ø 6 to 14 mm)	kg	975,00				0,00			

X

<http://www.plasticsportal.com/products/styropor.html>

X

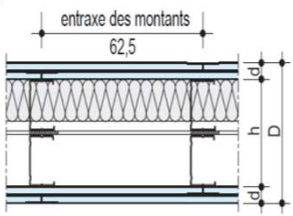
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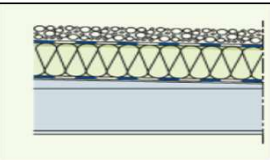
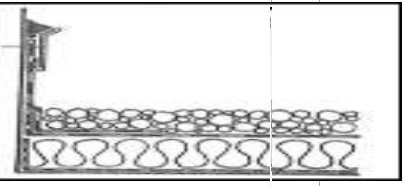
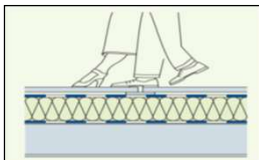
2.7	S4	Miscellaneous (typically between 5 - 10 % of all the other sub-components)	%	0,00					0,00				
		<i>item total</i>	<i>m</i>	126,00					0,00	0,00			
20.ah		Below ground perimeter and lift pit walls in reinforced waterproof concrete 250mm thick	m2	346	#N/D!	#N/D!						0,00	
2.8	D1	Reinforced concrete walls, formwork, framework, edges and seals, incl. miscellaneous. Additive for waterproofing.											
2.8	D2	- thickness 0.25 m											
2.8	D3	- Concrete volume (total) 87 m3											
2.8	D4	- Concrete surface (total) 346 m2											
2.8	S1	Standard formwork 2 3), (architectural concrete, ready to paint surface) diameter	m2	692,00						0,00			
2.8	S2	Concrete B35/25 2)	m3	87,00						0,00			
2.8	S3	Additive for waterproofing (per m3 concrete)	Nr	87,00						0,00			
2.8	S4	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			
		<i>item total</i>	<i>m2</i>	346,00						0,00	0,00		
20.ai		Insulation below ground level on external walls	m2	346	#N/D!	#N/D!						0,00	
2.9	S1	Single layer bituminous proof treatment trowel applied	m2	346,00							0,00		
2.9	S2	Insulation EPS, 80mm thick, perimeter draining panels below ground level on external walls, up to one metre depth	m2	120,00							0,00		
2.9	Z1												
		<i>item total</i>	<i>m2</i>	346,00						0,00	0,00		
20.aj		Reinforced concrete exterior wall 250mm thick	m2	1 463	#N/D!	#N/D!						0,00	


X

X

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	m2	823,00					0,00			
3.3	S2	precast concrete lintels height = brick HT	m	100,00					0,00			
		item total	m2	823,00				0,00	0,00			
30.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.	m2	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	m2	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.	m2	929,00					0,00			
3.5	Z1											
		item total	m2	929,00				0,00	0,00			
		TOTAL 3				#N/D!				0,00		
4. Roofing												
40.aa		Roof covering, 40mm screed, ballast, bitumen sheet	m2	895	#N/D!	#N/D!				0,00		X

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															
4,1	S2	Raised edges type E.1.A (see detail E.1.A) 50 cm expansion	m	153,00															
4,1	S3	Raised edges type E.1.C (see detail E.1.C) 100 cm expansion	m	120,00															
4,1	S4	closed edges type E.1.B (see detail E.1.B)	m	80,00															
4,1	S5	closed edges type E.1.D (see detail E.1.D)	m	100,00															
4,1	S6	Hard foam insulation made of extruded polystyrene, 140 mm thick	m2	895,00															
4,1	S7	Two layers bituminous sheet, 3 mm + 5 mm, stuck hot with overlapping strips on 15 cm strips, double layered, fittings included	m2	895,00															
4,1	S8	protection matting	m2	895,00															
4,1	S9	ballast (gravel), 80 mm, washed, dimension maximum Ø 32 mm	m2	628,00															
4,1	S91	a cement slab coating, 40 mm thick, 40 X 40 cm, plastic bracket included	m2	267,00															
4,1	S92	sealing small fittings on roof	Nr	10,00															
4,1	S93	sealing joints on roof if not included above	m2	887,00															
4,1	Z1																		
4,1	Z2																		
4,1	Z3																		

5,14	Z1											
		<i>item total</i>	<i>m</i>	39,00				0,00	0,00			
51.ae		Kitchen; basic equipment; 1 sink set into a worktop on a floor mounted double cupboard (delivery, assembly and all connections)	Nr	39	#N/D!	#N/D!					0,00	
5,15	S1	1 sink: 2 bowls with ordinary stainless drainer 2VA dimension about 115 x 51 cm	Nr	39,00					0,00			
5,15	S2	A hot and cold single lever water mixer tap (chrome plated)	Nr	39,00					0,00			
	S3	Hot and cold water supply and draining with dump siphon (distance from access point resp. collector: 5m)	Nr	39,00					0,00			
5,15	S4	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.	Nr	39,00					0,00			
5,15	S5	One of the leafs equipped with a dustbin bag stand 30 litres.	Nr	39,00					0,00			
		<i>item total</i>	<i>Nr</i>	39,00				0,00	0,00			
				TOTAL 5.1		#N/D!					0,00	
5.2 Metalwork												
52.aa		External metalwork to roof fittings, gutters, downpipes	m2	887	#N/D!	#N/D!					0,00	
5,21	D1	iron work: stainless steel including roof fittings and chimney block unit, gutters and downpipes (RW=rain water), small fittings and joints on proof treatment										
5,21	S1	roof fittings, round Ø 125 mm, heigth > 300 mm	Nr	6,00					0,00			
5,21	S2	roof fittings and chimney block unit, heigth > 200 mm, perimeter about 3 m	Nr	1,00					0,00			
5,21	S3	gutters, half-round section 300 mm, stub and expansion bend included	m	124,00					0,00			
5,21	S4	downpipes in stainless steel (RW=rain water) Ø 100 mm	m	76,00					0,00			

X

X

			<i>item total</i>	m2	887,00			0,00	0,00			
52.ab			External balcony railings, 1m high; standard quality	m	410	#N/D!	#N/D!				0,00	
5.22	S1		<i>Hot-dip galvanized metal railing (see photo), steel flat, height 1.0 m, maximum 11 cm between the lattice bars</i>	m	410,00				0,00			
5.22	Z1											
			<i>item total</i>	m	410,00			0,00	0,00			
52.ac			Staircase 33mm tubular handrail installed against walls	m	63	#N/D!	#N/D!				0,00	
5.23	S1		<i>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.</i>	m	63,00				0,00			
			<i>item total</i>	m	63,00			0,00	0,00			
52.ad			Safety cylinders, with master-key for doors & letterboxes	Nr	123	#N/D!	#N/D!				0,00	
5.24	S1		<i>for landing doors</i>	Nr	39,00				0,00			
5.24	S2		<i>building entrance doors</i>	Nr	2,00				0,00			
5.24	S3		<i>letter-boxes (half-cylinder)</i>	Nr	39,00				0,00			
5.24	S4		<i>cellars (half-cylinder)</i>	Nr	43,00				0,00			
			<i>item total</i>	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	
5.25	S1		<i>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.</i>	Nr	2,00				0,00			



X

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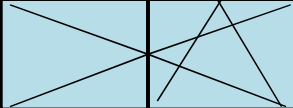
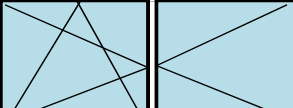



This is the key system, with one key for all functions and a protection plan to keep them compatible with the master key

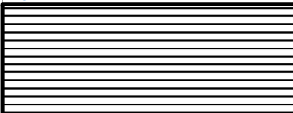
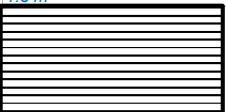
5,25	Z1										
			<i>item total</i>	Nr	2,00			0,00	0,00		
52.af		Glass canopy	m2	18	#N/D!	#N/D!				0,00	
5,26	S1	<i>Roof prefabricated, dimension 2 units x 4.0 m x 2.5 m, type: glass mm 8 with a anti-hail layer, put on silicon, canopy on a steel construction including iron work in 50 mm T section.</i>	m2	18,00					0,00		
5,26	Z1										
			<i>item total</i>	m2	18,00			0,00	0,00		
52.ag		Installation of lightning conductor	m2	887	#N/D!	#N/D!				0,00	
5,27	S1	<i>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.</i>	m2	887,00					0,00		
			<i>item total</i>	m2	887,00			0,00	0,00		
			TOTAL 5.2			#N/D!				0,00	
5.3 Windows											
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	
5,31	D1	<i>* Bill of quantities mode: measured between the finished embrasements.</i>									

X

X

X

5,31	D2	**Cost assignment: The whole surface of the windows or French windows, window surround, opening, glass and metal fittings included.											
5,31	S1	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	Z4												
5,31	Z5	type 3**: dimension 30 units x 2.4 x 4.5 m	Nr	30,00					0,00				
5,31	Z6												
5,31	Z7	type 4**: dimension 40 units x 2.4 x 2.0 m	Nr	40,00					0,00				
5,31	Z8												
5,31	Z9	type 5**: dimension 20 units x 2.4 x 3.5 m	Nr	20,00					0,00				
5,31	Z10												

		<i>item total</i>	m2	1 076,00				0,00	0,00		
53.ab		PVCu main entrance door, glazed, all ironmongery	m2	7	#N/D!	#N/D!				0,00	
5.32	S1	<i>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.</i>	m2	7,00					0,00		
		<i>item total</i>	m2	7,00				0,00	0,00		
TOTAL 5.3					#N/D!					0,00	
5.4 Shading											
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	
5,41	D1	<i>* Bill of quantities mode: measured between the finished embrasements.</i>									
5,41	D2	<i>**Cost assignment: The whole surface of the fabric blinds, metal fittings included.</i>									
5,41	S1	<i>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>	m2	1 038,00					0,00		
		<i>Price overall above or individually below</i>									
5,41	Z1	<i>type 1**: dimension 40 units x 1.2 x 1.8 m</i>	Nr	40,00					0,00		
5,41	Z2										
5,41	Z3	<i>type 2**: dimension 90 units x 2.2 x 1.8 m</i>	Nr	90,00					0,00		
5,41	Z4										

X

X

			<i>item total</i>	<i>m2</i>	3 766,00			0,00	0,00			
			TOTAL 6								0,00	
7.1 Sanitary Equipment												
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!					0,00	X
7,11	S1	<i>Connection to communal system (work, not taxes)</i>	Nr	1,00					0,00			
7,11	S2	<i>Central cold water columns to be connected on, total length 20 m each, delivery, fitting and insulation, valves and meters included.</i>	Nr	11,00					0,00			
7,11	S3	<i>Central hot water columns to be connected on, total length 20 m each, delivery, fitting and insulation, valves and meters included.</i>	Nr	11,00					0,00			
7,11	S4	<i>Sewage column to be connected on, total length 20 m each, delivery, fitting, insulation and valve all included.</i>	Nr	11,00					0,00			
			<i>item total</i>	<i>Nr</i>	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	X
7,12	S1	<i>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.</i>	Nr	78,00					0,00			
7,12	S2	Standard wall mounted ceramic toilet bowl, white with hidden cistern & wooden plain white seat.	Nr	78,00					0,00			
			<i>item total</i>	<i>Nr</i>	78,00			0,00	0,00			
71.ac		Vitreous clay wash basin, mixer tap, incl. connections and fittings	Nr	117	#N/D!	#N/D!					0,00	X

		<i>item total</i>	<i>Nr</i>	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	
7.32	S1	<i>Wall mounted single duct ventilation system (600 m3/hr). Kitchen hood. Exhaust on the roof, biconical cap.</i>	Nr	39,00				0,00			
		<i>item total</i>	<i>Nr</i>	39,00			0,00	0,00			
				TOTAL 7.3		#N/D!				0,00	
7.4 Lift											
74.aa		Electric lift 630kg/8 persons serving all floors	Nr	2	#N/D!	#N/D!				0,00	
7.41	S1	<i>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</i>	Nr	2,00				0,00			
		<i>item total</i>	<i>Nr</i>	2,00			0,00	0,00			
				TOTAL 7.4		#N/D!				0,00	
				TOTAL 7		#N/D!				0,00	
8.1 Power and lighting											
	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 this case, also distribution must be proportionally comprised.									
81.aa		Electrical mains connection of the house to the supplier	Nr	1	#N/D!	#N/D!				0,00	
8.11	S0	<i>Including complete connection to communal system (work, not taxes).</i>	Nr	1,00				0,00			

X

X

Note rate is per lift serving 8 floors

X

			<i>item total</i>	Nr	1,00			0,00	0,00			
			TOTAL 8.1			#N/D!					0,00	
8.2 Telecomm and security												
82.aa		Telecommunication cabinet, network, TV & Telephone outlets		Nr	1	#N/D!	#N/D!				0,00	
8.21	S0	<i>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)</i>		Nr	39,00				0,00			
8.21	S1	<i>TT cabinet in the utility room connected to supplier</i>		Nr	2,00				0,00			
8.21	S2	<i>Telecommunication distributor box connected to supplier</i>		Nr	2,00				0,00			
8.21	S3	<i>Telephone socket</i>		Nr	78,00				0,00			
8.21	S4	<i>TV socket</i>		Nr	78,00				0,00			
			<i>item total</i>	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	
8.22	S0	<i>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)</i>		Nr	39,00				0,00			
8.22	S1	<i>Intercom with video at the entrance connected to the apartments - station per apartment and base station at each entrance completely fitted and connected.</i>		Nr	41,00				0,00			
			<i>item total</i>	m3	1,00			0,00	0,00			
			TOTAL 8.2			#N/D!					0,00	
			TOTAL 8			#N/D!					0,00	
9. Drainage system												
90.aa		Excavation to drainage trenches; theoretical volume; loose ground, with 25% breaking up		m3	250	#N/D!	#N/D!				0,00	
9.1	S1	<i>Machine trench excavations. Down to 1.50 m in depth and 0.50 m wide.</i>		m3	250,00				0,00			

X

X

X

7	#N/D!	7	-
8	#N/D!	8	-
9	#N/D!	9	-
General Total		-	General Total
ARCHITECT'S AND ENGINEER'S FEES (% of general total)		#ARG!	-
TOTAL PRICE		#ARG!	TOTAL PRICE

Insert FEES percentage

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 ref	Item specification	Unit	Quantity	2022		2023		% chang	Items to be	Pricing notes	Expert's comments	
				Unit price	Total price	Unit price	Total price					
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.		
10.ac	Filling; granular material type B to clause 804; compacted in layers not exceeding 225 mm thick Filling; type B; 20/40mm single size aggregate; granular material, 225mm thick including compacting	m3	334	#N/D!	#N/D!		-		X			
10.ad	Surface treatments Blinding filling; sand; 50mm thick	m2	1 527	#N/D!	#N/D!		-		X	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!		-		X 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!		-		X In 2022 this item was estimated using a grossing factor.
	2.1.4 Formwork								

3. Masonry							
	3.1 Structure to External Walls						
	3.1.1 Precast Concrete						
	Precast concrete lintels; prestressed						
30.aa	Precast concrete lintels; prestressed; 65 x 215 x 1300mm long	Nr	31	#N/D!	#N/D!		-
	3.1.2 Brickwork/Blockwork						
	Solid concrete blocks; fairfaced quality						
30.ab	Solid concrete blocks; fairfaced quality walls; 100mm thick (internal leaf)	m2	762	#N/D!	#N/D!		-
	3.1.3 Ancillaries to Blockwork						
	Forming cavities; stainless steel wall ties at 600mm horizontal and 450mm vertical centres; between concrete walls & blockwork walls;						
30.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!		-
	Damp proof courses; 2000 gauge Hiloal polyethylene; 150mm laps; bedded in gauged mortar						

X

BS 5977-2; bedded and jointed in gauge mortar; propping at centre span / 1.2m centres until overlaying construction is complete. In 2022 this item was estimated using a grossing factor. See detailed drawing.

X

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.

See detailed drawing.

X

In 2022 this item was estimated using a grossing factor.

30.ad	Hyload pitch polymer; 0.9mm thick; 150mm laps; bedded in gauged mortar; including cavity trays; exceeding 225mm wide	m2	76	#N/D!	#N/D!					X	In 2022 this item was estimated using a grossing factor. See detailed drawing.
	3.1.4 Woodwork: Ironmongery, Accessories and Sundries										
	Wall insulation; 90mm thick;										
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										
	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										

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	

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.

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	m	64	#N/D!	#N/D!					X	In 2022 this item was estimated using a grossing factor.
	5.5 Internal Walls Completion										
	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										
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	In 2022 this item was estimated using a grossing factor.
	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										

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											
	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 colour white										Kingspan KS1000RW Trapezoidal wall system or equal and approved sheeting material.

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 Finishings											
	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.

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!					X	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										
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	Sterilux or approved equivalent antimicrobial paint. 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										
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	KS1000RW Trapezoidal Roof system or equal and approved sheeting material.

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.
		TOTAL 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!					X	
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:											

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	-
ARCHITECT'S AND ENGINEER'S FEES (% of general total	#ARG!	<input type="text"/>	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

Insert FEES percentage

Check unpriced items marked X above



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 ref	Item specification	Unit	Quantity	2022		2023		% change	Items to be	Pricing notes	Expert's comments
				Unit price	Total price	Unit price	Total price				
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	m3	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									
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 floor	m2	3678	#N/D!	#N/D!		-		X
20.ai	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									
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!		-		X
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

30.ag	Lift shaft walls of 215mm 7KN concrete blockwork	m2	201	#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.ai	Close cavity not exceeding 100mm wide at top of hollow wall with cement-based board bedded in gauged mortar (1:1:6)	m	80	#N/D!	#N/D!		-		X
30.aj	Hyload pitch polymer DPC; forming cavity trays; over 300mm wide	m2	42	#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.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.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.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.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.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.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.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.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
			TOTAL 3		#N/D!		-		

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!		-
		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!		-
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!		-
51.ac	Skirtings; wrought softwood; plain square edge; 25 x 145mm	m	630	#N/D!	#N/D!		-
51.ad	Window boards; wrought softwood; nosed and tongued; 25 x 225mm	m	52	#N/D!	#N/D!		-
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!		-
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

X

X

X

X

X

X

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
52.ai	Supply and install; universal beams; shot blasted and primed at works; 533 x 210 x 138 Kg/m	Tonne	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
		TOTAL 5.2			#N/D!		-		
5.3 Joinery - Windows									
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

Note: items 52ag, 52ah, 52ai include installation

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
TOTAL 7.1				#N/D!			-		
7.2 Mechanical Installations - Heating and hot water 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

		TOTAL 7.2		#N/D!		-		
7.3 Mechanical Installations - Ventilation								
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!		-	
		TOTAL 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!		-	
		TOTAL 7.4		#N/D!			-	
7.5 Mechanical installations - Fire protection								
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!		-	
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!		-	
		TOTAL 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!		-	

X

X

X

X

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
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.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.af	PVC insulated sheathed cable; 300/500-volt grade; drawn into conduit clipped to structure; 3 core 2.5 mm ²	m	450	#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!			-		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.ai	Photovoltaics assembled on the roof; 400W monocrystalline; 1,754mm x 1,096mm x 30mm; Trina Vertex S or equivalent	m ²	50	#N/D!	#N/D!			-		X
			TOTAL 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 0.135m ³ pea shingle per m)	m	20	#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	78	#N/D!	#N/D!			-		X
			TOTAL 9		#N/D!			-		

Please complete details below for Fees

Chapter

2022

Chapter

2023

%

Chapter	Total	Chapter	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	-
ARCHITECT'S AND ENGINEER'S FEES (% of general total	#ARG!	<input type="text"/>	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

Insert FEES percentage

Check unpriced items marked X above



E.01.2.3.0.01.a

Provided by RICS 2022

Estimate for a dual carriageway 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 ref	Item specification	Unit	Quantity	2022		2023		% change	Items to be priced	Pricing notes	Expert's comments
				Unit price	Total price	Unit price	Total price				
1. Earthworks											
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	27 items in total Carriageway: depth = 870mm; width = 9m + 2m + 9m = 20m (1,740m3) Sidewalk and shoulder: depth = 400mm; width = 2.3m (92m3) 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)	
10.ab	Mechanical excavation of sidewalk and shoulder, depth 400mm, levelling and compacting. Transport 500m onsite	m3	92	#N/D!	#N/D!				X		
10.ac	Mechanical excavation of trenches and drainage chambers, depth 3m. Transport 500m onsite	m3	405	#N/D!	#N/D!				X		

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

20.aj	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
		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	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
		TOTAL 6			#N/D!					
9. Drainage										

90.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
90.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
90.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
90.ad	Connection of drain pipes to concrete chambers	Nr	6	#N/D!	#N/D!				X	
90.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	
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
90.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.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
			TOTAL 9		#N/D!					

Please complete details below for Fees

Chapter	2022 Total	Chapter	2023 Total	% Change
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1	#N/D!	1	-
2	#N/D!	2	-
6	#N/D!	6	-
9	#N/D!	9	-

General Total	-	General Total	-
ARCHITECT'S AND ENGINEER'S FEES (% of general total	#ARG!	<input type="text"/>	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

Insert FEES percentage

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 ref	Item specification	Unit	Quantity	2022		2023		% chang	Items to be	Pricing notes	Expert's comments
				Unit price	Total price	Unit price	Total price				
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		
10.ab	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!		-		X
20.ad	Surfacing course; inlay at tie ins, thickness 30mm	m2	360	#N/D!	#N/D!		-		X
20.ae	Pavements; tack coat applied by sprayer	m2	2 520	#N/D!	#N/D!		-		X
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!		-		X
		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

60.ac	Thermoplastic road marking compliant to BS EN 1871 & 1436; 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	
		TOTAL 6			#N/D!						
9. Drainage											
90.aa	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. 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	
90.ac	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	
		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	-	
6	#N/D!	6	-	
9	#N/D!	9	-	

General Total - **General Total** -

ARCHITECT'S AND ENGINEER'S FEES (% of general total) #ARG! - **Insert FEES percentage**

TOTAL PRICE

TOTAL PRICE

Check unpriced items marked X above