



Construction Survey 2024

Select your country



[Contact the PLANCO team](#)

Basic heading	Nr of items to price	Project Code	Project	General total	Fee total	Total price (incl fees - excl VAT)	% change
n.a.	7	Fees	Professional fees				
	7	Labour	Labour rates				
Residential buildings	95	E.01.2.1.0.01.a	Detached house	-	-		
	49	E.01.2.1.0.01.d	Renovation of detached house	-	-		
	70	E.01.2.1.0.02.a	Apartment	-	-		
Non-residential buildings	129	E.01.2.2.0.01.a	Light industrial	-	-		
	98	E.01.2.2.0.02.a	Office	-	-		
Civil engineering works	27	E.01.2.3.0.01.a	Asphalt road	-	-		
	18	E.01.2.3.0.01.b	Road resurfacing	-	-		
Total	500						

Select your country
 Select your country
 Select your country
 Select your country
 Select your country
 Select your country
 Select your country
 Select your country

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 and Profesional fees for each BQ.

Prices should be mid 2024 (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 2024 Construction Survey folder at:

<https://circabc.europa.eu/ui/group/0ba7164e-e25d-4a78-ab4e-1a51ab2c6fde/library/008fe764-1b3f-4421-ae8b-7b1eee5ffdcf>

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.

Real time validation

We have added a column to each project sheet as well as the labour rates and profesional fees sheets to show the percentage changes from the previous survey.

Changes will be highlighted if

negative
>50%
>100%

A new 'Item Summary' sheet is provided which allows all item price changes to be compared.

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 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

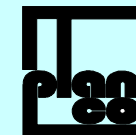
(dataset PPP_CNSTR_A, reference year 2024)

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.



Professional fees (Percentage additions)



Professional Fees

Note: Professional fees reflect architects' fees and engineers' fees and are estimated as percentage additions. The fees are to cover both the realisation of the project and the supervision of works. The list below details the services which the fees should normally cover though these may be subject to some variation in line with standard practice in your country.

Project	2023	2024	Change
Detached house			
Renovation of detached house			
Apartment			
Light industrial			
Office			
Asphalt road			
Road resurfacing			

Insert professional fees
 Insert professional fees
 Insert professional fees
 Insert professional fees
 Insert professional fees
 Insert professional fees
 Insert professional fees

Coverage of architects' and engineers' fees

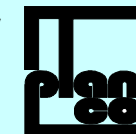
Work stage	Activities
A: Inception	<ul style="list-style-type: none"> • Discuss the client's requirements including timescale and any financial limits; assess these and give general advice on how to proceed; agree the architect's services. • Obtain from the client information on ownership and any lessors and lessees of the site, any existing buildings on the site, boundary fences and other enclosures, and any known easement, encroachments, underground services, rights of way, rights of support and other relevant matters. • Visit the site and carry out an initial appraisal. • Advise on the need for other consultants' services and on the scope of these services. • Advise on the need for specialist contractors, sub-contractors and suppliers to design and execute part of the works to comply with the architect's requirements. • Advise on the need for site staff. • Prepare where required an outline timetable and fee basis for further services for the client's approval.
B: Feasibility	<ul style="list-style-type: none"> • Carry out such studies as may be necessary to determine the feasibility of the client's requirements; review with the client alternative design and construction approaches and cost implications; advise on the need to obtain planning permissions, approvals under building acts or regulations, and other similar statutory requirements.
C: Outline proposals	<ul style="list-style-type: none"> • With other consultants where appointed, analyse the client's requirements; prepare outline proposals and an approximation of the construction cost for the client's preliminary approval.
D: Scheme design	<ul style="list-style-type: none"> • With other consultants where appointed develop a scheme design from the outline proposals taking into account amendments requested by the client; prepare a cost estimate; where applicable give an indication of possible start and completion dates for the building contract. The scheme design will illustrate the size and character of the project in sufficient detail to enable the client to agree the spatial arrangements, materials and appearance. • With other consultants where appointed, advise the client of the implications of any subsequent changes on the cost of the project and on the overall programme. • Make where required application for planning permission. The permission itself is beyond the architect's control and no guarantee that it will be granted can be given.
E: Detail Design	<ul style="list-style-type: none"> • With other consultants where appointed, develop the scheme design; obtain the client's approval of the type of construction, quality of materials and standard of workmanship; co-ordinate any design work done by consultants, specialist contractors, sub-contractors and suppliers; obtain quotations and other information in connection with specialist work. • With other consultants where appointed, carry out cost checks as necessary; advise the client of the consequences of any subsequent change on the cost and programme. • Make and negotiate where required applications for approvals under building acts, regulations or other statutory requirements.
F&G: Production information and BQs	<ul style="list-style-type: none"> • With other consultants where appointed, prepare production information including drawings, schedules and specification of material and workmanship; provide information for bills of quantities, if any, to be prepared: all information complete in sufficient detail to enable a contractor to prepare a tender.

H: Tender action	<ul style="list-style-type: none"> • Arrange, where relevant, for other contracts to be let prior to the contractor commencing work. • Advise on and obtain the client's approval to a list of tenderers. • Invite tenders from approved contractors; appraise and advise on tenders submitted. Alternatively, arrange for a price to be negotiated with a contractor.
I: Project planning	<ul style="list-style-type: none"> • Advise the client on the appointment of contractor and on the responsibilities of the client, contractor and architect under the terms of the building contract; where required prepare the building contract and arrange for it to be signed by the client and the contractor; provide production information as required by the building contract.
J: Operations on site	<ul style="list-style-type: none"> • Administer the terms of the building contract during operations on site. • Visit the site as appropriate to inspect generally the progress and quantity of the work. • With other consultants where appointed, make where required periodic financial reports to the client including the effect of any variations on the construction cost.
K: Completion	<ul style="list-style-type: none"> • Administer the terms of the building contract relating to the completion of the work. • Give general guidance on maintenance. • Provide the client with a set of drawings showing the building and the main lines drainage; arrange for drawings of the services installations to be provided.



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	2023	2024	% change
General labourers, unskilled			
Bricklayer, skilled			
Plumber, skilled			
Carpenter, skilled			
Structural steel worker, skilled			
Electrician, skilled			
Machine (equipment) operator, skilled			

Insert labour rate
 Insert labour rate
 Insert labour rate
 Insert labour rate
 Insert labour rate
 Insert labour rate

	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 workbench 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	



E.01.2.1.0.01.a

Provided by RICS 2019

Estimate for a detached house



Preamble

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

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

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

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

Item ref	Item specification	Unit	Quantity	2023		2024		% 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	Extruded polystyrene (XPS) insulation; 150mm thick laid horizontally over 300mm wide, (0.13W/m2 K)	m2	62	#N/D!	#N/D!		-		X
20.af	Extruded 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

2024 Expanded polystyrene changed to extruded polystyrene.
2024 Expanded polystyrene changed to extruded polystyrene.

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
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
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
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

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
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
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
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
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
51.ac	Treated sawn softwood; grade GS; 25 x 100mm wind bracing to trusses	m	110	#N/D!	#N/D!	-	X
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
51.ae	Treated sawn softwood; grade GS; 50 x 200mm solid strutting at mid-span of joists	m	14	#N/D!	#N/D!	-	X

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
51.ag	Treated sawn softwood; grade GS; 50 x 100mm; studwork in partitions; horizontally every 400mm and three times vertically (noggin) per floor	m	253	#N/D!	#N/D!		-		X
51.ah	Glass fibre insulation quilt; vertical; to void in partition walls; 100mm thick	m2	134	#N/D!	#N/D!		-		X
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
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
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

51.an	Supply and install MDF white standard quality cupboards (base units) 800mm height, comprising 1Nr 1000mm sink base unit, 1Nr 1000mm corner base unit, 4Nr 600mm single base units and 1Nr 600mm base unit for oven. All cupboards to include standard quality finishings: ironmongery, white glossy surface doors and brushed steel handles	Nr	1	#N/D!	#N/D!	-	X	<p>2024 "Standard quality square edge" added.</p> <p>2024 Gloss paint finish added and more specification provided.</p>
51.ao	Supply and install (wall mounted on bracket) 4Nr 600 x 800mm single MDF white cabinets including standard quality finishings: ironmongery, white glossy surface doors and brushed steel handles (total width of cabinets 2.4m)	Nr	1	#N/D!	#N/D!	-	X	
51.ap	Supply and install new standard quality square edge 640mm wide, 38mm thick white laminate faced kitchen worktop, including cutting, jointing and sealing with mastic sealant	m	6	#N/D!	#N/D!	-	X	
51.aq	Supply and install standard proprietary softwood pattern staircase; unfinished; straight flight; 13 riser; 2.6m total rise; balustrades in softwood; 25 x 25mm balusters housed at 100mm centres; 50 x 75mm moulded handrail; 25 x 75mm string capping; 100 x 75/100mm newels; 1000mm high raking and horizontal	Nr	1	#N/D!	#N/D!	-	X	
51.ar	Supply and install skirtings; wrought softwood; plain square edge: 25 x 145mm or equivalent, gloss paint finish	m	117	#N/D!	#N/D!	-	X	
51.as	Window boards; wrought softwood; nosed and tongued: 25 x 225mm	m	8	#N/D!	#N/D!	-	X	
		TOTAL 5.1			#N/D!	-		
5.2 Metalwork								

52.aa	Supply and install 3 sections Aluminium loft ladder 12 rungs 1302mm; including anti-slip feet & treads; max. static vertical load: 150kg; fixed to loft hatch to provide access (loft hatch priced separately (51.ak))	Nr	1	#N/D!	#N/D!	-	X
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
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 frame, linings, ironmongery and the like: 1200 x 1050mm	Nr	8	#N/D!	#N/D!	-	X
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 frame, 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 frame, linings, ironmongery and security (5 locking points); pointing frame externally with coloured mastic sealant; 900 x 2050 x 44mm overall size	Nr	1	#N/D!	#N/D!	-	X

53.ad	Install new pre-finished PVCu pair external glazed French doors and frame, safety double-glazed units with one argon filled cavity (5-18-5, providing 1.1/m2 K), including frame, linings, ironmongery and security (5 locking points); pointing frame externally with coloured mastic sealant; 1200 x 2050 x 44mm overall size	Nr	1	#N/D!	#N/D!			-		X
		TOTAL 5.3			#N/D!			-		
		TOTAL 5			#N/D!			-		
6. Finishings										
60.aa	Cement and sand (1:3); trowelled finish to floors 65mm thick, float finish; incorporating mesh reinforcement	m2	62	#N/D!	#N/D!			-		X
60.ab	Cement and sand (1:3) to walls in render coats, overall 10mm thick; finish with 5mm thick coat of plaster	m2	186	#N/D!	#N/D!			-		X
60.ac	Plasterboard linings to ceilings; 12.5mm wallboard to woodwork backgrounds; Thistle plaster finish; one coat for scrimming joints and filling nail holes	m2	123	#N/D!	#N/D!			-		X
60.ad	Plasterboard linings to walls; 12.5mm wallboard to woodwork backgrounds; Thistle plaster finish; one coat for scrimming joints and filling nail holes	m2	112	#N/D!	#N/D!			-		X
60.ae	Supply and install medium quality Polypropylene carpet; pile height 10mm and 10mm recycled PU foam underlay; 2.9 tog rating; including gripper, excluding door bars (measured separately)	m2	79	#N/D!	#N/D!			-		X
60.af	Supply and install 8mm thick 'standard quality' laminate floor; oak imitation; dimensions c. width 200mm; length 1380mm. Cost to include 5mm underlay	m2	41	#N/D!	#N/D!			-		X
60.ag	Paint internal wall; two coats vinyl silk emulsion paint white	m2	283	#N/D!	#N/D!			-		X

2024 Door bars excluded

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	Supply and install stainless steel; top single bowl sink with drainer, 864 x 514mm (bowl: 360 x 420 x 190mm), Franke NEX211 or equivalent with Stainless steel mixer tap with a single lever; plumbing and waste drainage connections to 1.5m	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

2024 More specification provided

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
71.aj	Hot water plumbing pipework; surface mounted 15mm copper including associated fittings; 3Nr stop valves	m	30	#N/D!	#N/D!	-	X
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
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
		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
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
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
		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!		-	
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!		-	
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!		-	
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!		-	
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!		-	
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!		-	
			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!		-	
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
X
X
X
X
X
X
X
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	
		TOTAL 9		#N/D!			-			

Please complete details below for Fees

Chapter	2023 Total	Chapter	2024 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!	0,0%	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

see FEES sheet

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	2023		2024		% 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 standard quality square edge 640mm wide, 38mm thick white laminate faced kitchen worktop, including cutting, jointing and sealing with mastic sealant	m	6	#N/D!	#N/D!		-		X	2024 "Standard quality square edge" added.
		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 frame, 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 frame, 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 frame, 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 in skip on-site (not including disposal offsite); carpet and underlay including tack strips	m2	83	#N/D!	#N/D!		-		X	2024 Door bars now excluded.
60.ad	Supply and install medium quality Polypropylene carpet; pile height 10mm and 10mm recycled PU foam underlay; 2.9 tog rating; including gripper, excluding door bars (measured separately)	m2	79	#N/D!	#N/D!		-		X	
60.ae	Supply and install 8mm thick 'standard quality' laminate floor; oak imitation; dimensions c. width 200mm; length 1380mm. Cost to include 5mm underlay	m2	41	#N/D!	#N/D!		-		X	
60.af	Paint internal wall; two coats vinyl silk emulsion paint white	m2	283	#N/D!	#N/D!		-		X	
60.ag	Paint new plaster walls internally; one coat primer, two coats vinyl silk emulsion paint, white	m2	5	#N/D!	#N/D!		-		X	
60.ah	Paint skirting (height 145mm), one coat undercoat alkyd-based paint, white and one coat gloss, standard quality	m	117	#N/D!	#N/D!		-		X	
60.ai	Paint plaster ceiling one coat primer, two coats white vinyl silk emulsion	m2	125	#N/D!	#N/D!		-		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	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

2023

Chapter

2024

%

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!	0%	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

see FEES sheet

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	2024		
					Sub-component Rate	Sub-component price	Unit 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	
		Additional items	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	2023		2024				% 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	

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

X

X

		<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

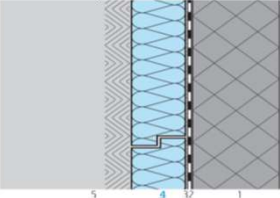
2.4	S4	Surface treatment (floated clean)	m2	890,00				0,00			
2.4	S5	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00				0,00			
		item total	m2	890,00				0,00	0,00		
20.ae		Insulation under slab	m2	572	#N/D!	#N/D!				0,00	
2.5	S1	Styropor (or similar) 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

X

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	

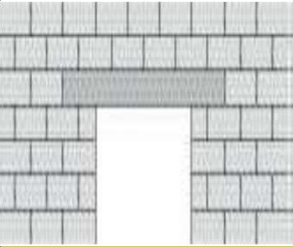
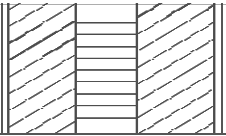
X

X

X

2.91	D1	Reinforced concrete walls, formwork, framework, edges and seals, incl. miscellaneous. No additives.											
2.91	D2	- thickness 0.25 m											
2.91	D3	- Concrete volume (total) 366 m3											
2.91	D4	- Concrete surface (total) 1463 m2											
2.91	S1	Standard formwork 2 3), (architectural concrete, ready to paint surface) diameter	m2	2 926,00						0,00			
2.91	S2	Concrete B35/25 2)	m3	366,00						0,00			
2.91	S3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	47 580,0						0,00			
2.91	S4	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00						0,00			
		item total	m2	1 463,00						0,00	0,00		
20.ak		Reinforced concrete interior walls 180mm thick	m2	653	#N/D!	#N/D!						0,00	
2.92	D1	Reinforced concrete walls, formwork, framework, edges and seals, incl. miscellaneous. Without additives											
2.92	D2	- thickness 0.18 m											
2.92	D3	- Concrete volume (total) 118 m3											
2.92	D4	- Concrete surface (total) 653 m2											
2.92	S1	Standard formwork 2 3) (normally to receive one layer of cement cm 1)	m2	1 306,00						0,00			
2.92	S2	Concrete B35/25 2)	m3	118,00						0,00			
2.92	S3	Reinforcement steel S 500 1) (bent all Ø mm 6 to 14)	kg	8 260,00						0,00			
2.92	S4	Miscellaneous (edges, seals) (typically between 5 - 10 % of all the other sub-components)	%	0,00						0,00			
		item total	m2	653,00						0,00	0,00		
		TOTAL 2				#N/D!						0,00	
3. Masonry													

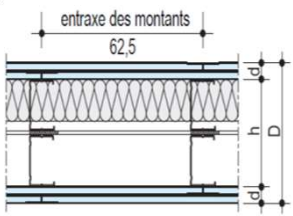
X

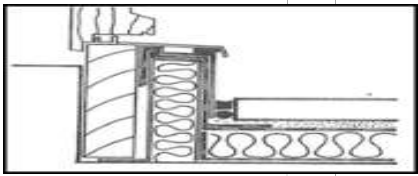
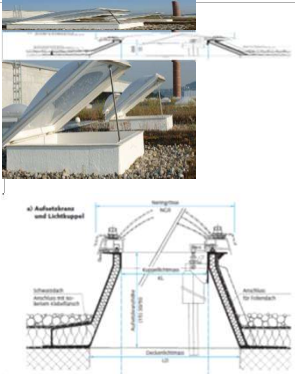
30.aa		Silico-calcareous brickwork, 150mm thick, non load bearing, for separations in the basement, for separations in the basement, bricks c. 250 x 140mm, (for replacements: unplastered masonry with smooth surface not needing any other coating or treatment, typically Heidelberger Kalksandstein sand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

X

<http://www.heidelberger-kalksandstein.com>

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	Z4											
			<i>item total</i>	<i>m2</i>	895,00			0,00	0,00			
40.ab		Dome roof window incorporating roof hatch; electrically operated 24V	Nr	2	#N/D!	#N/D!					0,00	
4,2	D1	Square dome roof windows: dimensions 1.0 x 1.0 m, day.										
4,2	S1	Translucent polycarbonate glass dome with triple walls, U-value 1.65W/m2K. Day cm 100 X 100. Anti-yellowing protection applied to polycarbonate. Luminous transmission 67%.	Nr	2,00					0,00			
4,2	S2	Synthetic square roof curb reinforced with glass fibres, on roof edge. Thickness of walls 6 cm, U-value 0.44 W/m2K. Wall height 30 cm. Insulated joining flange. Thickness 14 cm.	Nr	2,00					0,00			
4,2	S3	Opening device and mobile frame. Power driven, V24.	Nr	2,00					0,00			
4,2	Z1											
			<i>item total</i>	<i>Nr</i>	2,00			0,00	0,00			
				TOTAL 4	#N/D!						0,00	

X


2024 Window confirms its electrically operated

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

5,14	S2	Locking device: stainless steel mat pommel	Nr	117,00				0,00			
5,14	Z1										
		<i>item total</i>	<i>nr</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 bowl/s 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, heigh 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

X

X

X

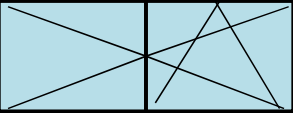
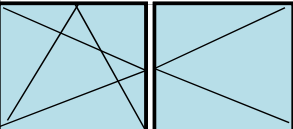

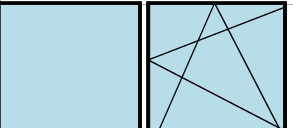
This is the key system, with one key for all functions and a protection plan to keep them compatible with the master key

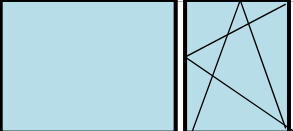
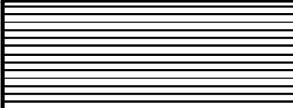
5,25	Z1										
			<i>item total</i>	Nr	2,00			0,00	0,00		
52.af		Glass canopy	m2	18	#N/D!	#N/D!				0,00	
5,26	S1	<i>Roof prefabricated, dimension 2 units x 4.0 m x 2.5 m, type: glass mm 8 with a anti-hail layer, put on silicon, canopy on a steel construction including iron work in 50 mm T section.</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

X

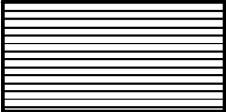
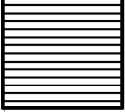

X

53.aa		Supply and install pre-finished powder-coated aluminium windows; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like	m2	1 076	#N/D!	#N/D!				0,00	X	2024 Window frames changed from PVCu to powder-coated aluminium and thermal performance improved		
5,31	D1	<i>* Bill of quantities mode: measured between the finished embrasements.</i>												
5,31	D2	<i>**Cost assignment: The whole surface of the windows or French windows, window surround, opening, glass and metal fittings included.</i>												
5,31	S1	<i>Windows and French windows, white frame, including handle, split hinges, one opening tilt and turn window by part. Measure the bay empty space:</i>	m2	1 076,00						0,00				
		<i>Price overall above or individually below</i>												
5,31	Z1	<i>type 1**: dimension 40 units x 1.3 x 2 m</i>	Nr	40,00						0,00				
5,31	Z2													
5,31	Z3	<i>type 2**: dimension 60 units x 2.4 x 2 m</i>	Nr	60,00						0,00				
5,31	Z4													
5,31	Z5	<i>type 3**: dimension 30 units x 2.4 x 4.5 m</i>	Nr	30,00						0,00				
5,31	Z6													
5,31	Z7	<i>type 4**: dimension 40 units x 2.4 x 2.0 m</i>	Nr	40,00						0,00				
5,31	Z8													
5,31	Z9	<i>type 5**: dimension 20 units x 2.4 x 3.5 m</i>	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	Main building entrance doors, glazing safety film, with steel sections, dimensions 150x220, with 1 fixed part and a single leaf door with a door lock, including handle, split hinges, door-lock with key, 3 X split hinges and electric striker remote controlled by intercom.	m2	7,00						0,00		
			<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	* Bill of quantities mode: measured between the finished embrasements.										
5,41	D2	**Cost assignment: The whole surface of the fabric blinds, metal fittings included.										
5,41	S1	Outside fabric roller blinds for blackout, acrylic fibre, customized dye according to standard range, with outside winder, side slides assembled on aluminium tubes, oscillating rod for manual operation.	m2	1 038,00						0,00		
		Price overall above or individually below										
5,41	Z1	type 1**: dimension 40 units x 1.2 x 1.8 m	Nr	40,00						0,00		
5,41	Z2											

X

X

5,41	Z3	type 2***: dimension 90 units x 2.2 x 1.8 m	Nr	90,00					0,00		
5,41	Z4										
5,41	Z5	type 3***: dimension 80 units x 2.2 x 0.9 m	Nr	80,00					0,00		
5,41	Z6										
5,41	Z7	type 4***: dimension 30 units x 2.2 x 3.1 m	Nr	30,00					0,00		
5,41	Z8										
		<i>item total</i>	<i>m2</i>	<i>1 038,00</i>					<i>0,00</i>	<i>0,00</i>	
		TOTAL 5.4			#N/D!						0,00
		TOTAL 5			#N/D!						0,00

6. Finishings (floors, walls and ceilings)

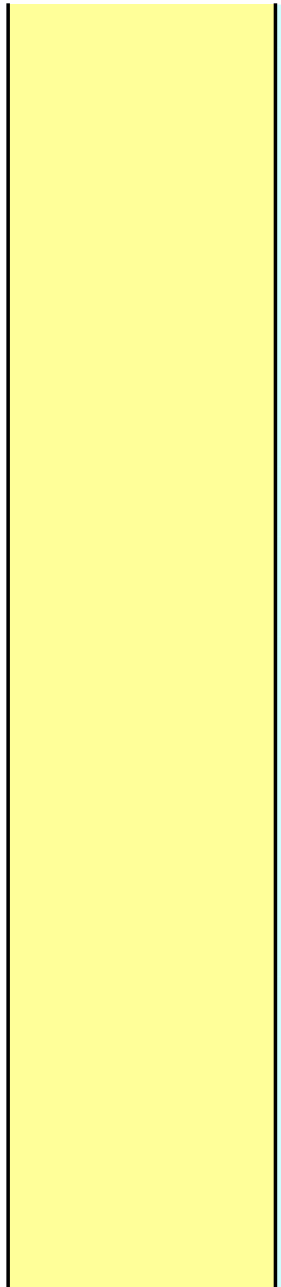
60.aa		External 140mm wall insulation, rough cast render finish	m2	1 463	#N/D!	#N/D!					0,00
6,1	S1	Peripheral expanded polystyrene insulation, about 90kg/m3, 140 mm thick, stuck on concrete surface or on masonry work	m2	1 463,00					0,00		
6,1	S2	Finish mineral rough-cast coating, structured surface, 1.5mm thick. Including reinforcement with synthetic band to edges, fittings and openings.	m2	1 463,00					0,00		
		<i>item total</i>	<i>m2</i>	<i>1 463,00</i>					<i>0,00</i>	<i>0,00</i>	
60.ab		Floating screed, insulation, vapour barrier	m2	3 291	#N/D!	#N/D!					0,00
6,2	D01	Floating screed embedding floor heating . CP 400kg/m3 thickness 70 mm, for soundproofing, floor covering thickness 20 mm, density, 20kg/m3 + heat insulation 20 mm + perimeter strip, with preparation. Heating coils delivered and mounted separately, see 7.22 .									
6,2	S1	Floating screed 70 mm for floor heating	m2	3 291,00					0,00		

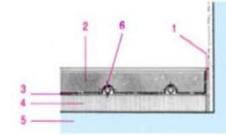
X

X

External insulation

Similar to a thick reinforced textured paint



6.2	S2	Rough surface cleaning, incl. removals	m2	3 291,00				0,00			
6.2	S3	Soundproofing panels, thickness 20 mm (type EPS)	m2	3 291,00				0,00			
6.2	S4	Heat insulation panels, thickness 20 mm (type XPS)	m2	3 291,00				0,00			
6.2	S5	Perimeter strip thickness 5 mm, high 15 cm, incl cutting and removal.	m	3 000,00				0,00			
6.2	S6	Barrier sheet EP 0,2 mm	m2	3 291,00				0,00			
6.2	Z1	 <p>1 Perimeter strip 2 Floating screed 3 Barrier sheet EP 0,2mm 4 Soundproofing panels / heat insulation panels 5 Floor slab reinforced concrete 6 Heating coils delivered and mounted -> see 7.22 Heat distribution</p>									
		<i>item total</i>	m2	3 291,00				0,00	0,00		
60.ac		Floor ceramic tiling 300mm x 300mm and skirting tiles; average quality	m2	1 757	#N/D!	#N/D!				0,00	
6.3	S1	Primer coat (clamping coat) to prepare floor tiling	m2	1 757,00				0,00			
6.3	S2	Supplying and fitting stoneware floor tiles, laundry and clearance in front of the cellars, dimensions 30 x 30 cm	m2	120,00				0,00			
6.3	S3	Supplying and fitting non-skid stoneware tiles, dimensions 30 x 30 cm to staircase steps + risers.	m2	208,00				0,00			
6.3	S4	Supplying and fitting stoneware floor tiles, dimensions 30 x 30 cm for balconies and terraces by double gluing.	m2	1 157,00				0,00			
6.3	S5	Supplying and fitting stoneware tiles, dimensions 10 x 30 cm for bathroom, toilets and kitchen.	m2	272,00				0,00			
6.3	S6	Tile plinths (skirting) identical to the floor tiles, including cutting and jointings	m	1 500,00				0,00			
		<i>item total</i>	m2	1 757,00				0,00	0,00		
60.ad		15mm engineered oak floor; board dimensions 180 x 2200mm; 15mm engineered oak; solid 4mm wear layer with hardwood multi-ply core; tongue and grooved	m2	3 015	#N/D!	#N/D!				0,00	

X

X

6.4	S1	<i>15mm engineered oak floor; board dimensions 180 x 2200mm; 15mm engineered oak; solid 4mm wear layer with hardwood multi-ply core; tongue and grooved</i>	m2	3 015,00											
		<i>item total</i>	<i>m2</i>	<i>3 015,00</i>							<i>0,00</i>	<i>0,00</i>			
60.ae		Gypsum plaster to walls, rough cast, 2 coats, 10mm and 5mm	m2	5 790	#N/D!	#N/D!							0,00		
6.5	S1	<i>Gypsum coating (application, not with plates) of the walls thickness 10mm</i>	m2	2 083,00									<i>0,00</i>		
6.5	S2	<i>synthetic rough coat floated, grain 5 mm</i>	m2	3 707,00									<i>0,00</i>		
		<i>item total</i>	<i>m2</i>	<i>5 790,00</i>									<i>0,00</i>	<i>0,00</i>	
60.af		Ceramics covering of the walls	m2	1 424	#N/D!	#N/D!							0,00		
6.6	S1	<i>Supplying and fitting ceramic tiles for bathroom, toilets and kitchen, including waterproof adhesive and grouting.</i>	m2	1 424,00									<i>0,00</i>		
		<i>item total</i>	<i>m2</i>	<i>1 424,00</i>									<i>0,00</i>	<i>0,00</i>	
60.ag		Paint internal wall; two coats vinyl silk emulsion paint white	m2	4 151	#N/D!	#N/D!							0,00		
6.7	S1	<i>painting 2 coats emulsion on rough cast plaster</i>	m2	3 707,00									<i>0,00</i>		
6.7	S2	<i>painting 2 coats emulsion on concrete or brick walls in the basement</i>	m2	444,00									<i>0,00</i>		
		<i>item total</i>	<i>m2</i>	<i>4 151,00</i>									<i>0,00</i>	<i>0,00</i>	
60.ah		Gypsum plaster to concrete ceilings, 6mm	m2	2 991	#N/D!	#N/D!							0,00		
6.8	S1	<i>Gypsum coating (plaster) 6 mm on the concrete slabs (ceilings)</i>	m2	2 991,00									<i>0,00</i>		
		<i>item total</i>	<i>m2</i>	<i>2 991,00</i>									<i>0,00</i>	<i>0,00</i>	

X

Typically one layer sprayed and smoothed with a large aluminium slat

X

Use tiles of average quality and size as appropriate

X

2024 Emulsion specified as "vinyl silk"

X

60.ai		Paint plaster ceiling one coat primer, two coats white vinyl silk emulsion	m2	3 766	#N/D!	#N/D!				0,00	
6.9	S1	<i>matt white emulsion paint 2 coats on gypsum coating (plaster in the ceilings)</i>	m2	2 991,00					0,00		
6.9	S2	<i>white synthetic enamel paint 2 coats on plaster for sanitation quarters.</i>	m2	272,00					0,00		
6.9	S3	<i>painting 2 coats emulsion on the concrete slabs in the basement</i>	m2	503,00					0,00		
		<i>item total</i>	m2	3 766,00					0,00	0,00	
				TOTAL 6		#N/D!				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	
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>	Nr	1,00					0,00	0,00	
71.ab		Vitreous clay WC and cistern including connections and fittings	Nr	78	#N/D!	#N/D!				0,00	
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		

X

2024 Emulsion specified as "vinyl silk" and now includes for one coat of primer which previously wasn't included.

X

X

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>	Nr	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		
7,13	S1	<i>Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold & hot water and drain, common assumption: 2 m from distribution column.</i>	Nr	117,00				0,00				
7,13	S2	Standard ceramic wash basin, dimensions about 60/48 cm, white	Nr	117,00				0,00				
7,13	S3	Wash-hand basin hot and cold water single-lever mixer tap (chrome plated)	Nr	117,00				0,00				
		<i>item total</i>	Nr	117,00				0,00	0,00			
71.ad		Vitreous clay shower tray 900 x 900mm, mixer tap, incl. connections and fittings	Nr	39	#N/D!	#N/D!				0,00		
7,14	S1	<i>Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold & hot water and drain, common assumption: 3m from distribution column.</i>	Nr	39,00				0,00				
7,14	S2	Shower tray in enameled steel, white, dimensions about 80 x 80 x 6.5 cm	Nr	39,00				0,00				
7,14	S3	Shower fixture and trap cover	Nr	39,00				0,00				
7,14	S4	Shower single-lever mixer tap, chrome-plated, rail and slide 90 cm, 3-Spray Handheld Shower, hose 160 cm	Nr	39,00				0,00				
		<i>item total</i>	Nr	39,00				0,00	0,00			
71.ae		Bath, mixer tap, incl. connections and fittings	Nr	39	#N/D!	#N/D!				0,00		

X

X

X

7,15	S1	Each item price has to include supplying and fitting incl. piping, insulation. Otherwise price it here: Cold & hot water and drain, common assumption: 3m from distribution column. (If all this is included in your item price, enter zero here)	Nr	39,00					0,00			
7,15	S2	Bath-tub in enamelled steel , white, dimensions about 180 X 80 X 43 cm	Nr	39,00					0,00			
7,15	S3	Bath-tub sump, trap and drain set (e.g. GEBERIT PE)	Nr	39,00					0,00			
7,15	S4	Bath-tub single-lever mixer tap, chrome-plated	Nr	39,00					0,00			
7,15	S5	Hand shower 1 spray, hose 125 cm, bracket, chrome plated	Nr	39,00					0,00			
		<i>item total</i>	<i>Nr</i>	<i>39,00</i>					<i>0,00</i>	<i>0,00</i>		
				TOTAL 7.1								0,00
7.2 Central heating												
72.aa		120kW gas boiler, flue, 2500l water storage, all fittings	Nr	1	#N/D!	#N/D!						0,00
7,21	S1	Gas heat generation facility PW 120 KW	Nr	1,00					0,00			
7,21	S2	Chimney for gas exhaust, stainless steel insulated, Ø 12 cm interior, with outlet on the roof (common assumption: total length 26m)	Nr	1,00					0,00			
7,21	S3	Hot water storage isolated tank (Boiler) Capacity 2,500 Litres with heat exchange system	Nr	1,00					0,00			
7,21	S4	Floor heating circuit - 1 distributor column (up and down, totally 40 m) per 6 apartments.	Nr	7,00					0,00			
		<i>item total</i>	<i>Nr</i>	<i>1,00</i>					<i>0,00</i>	<i>0,00</i>		
72.ab		Underfloor heating 15mm flexible tube, 4m per 1m2	m2	3 811	#N/D!	#N/D!						0,00
7,22	S1	Floor heating through coils in the floor screed. Flexible monotube about 1/2 inch (10 -12 mm), average of 4 m of serpentine coils per 1 m2. This item includes supplying, placing and fitting of the coils, but not the floating screed (see position 6.2 with drawing Z1)	m2	3 811,00					0,00			
7,22	S2	Distribution box with thermostat at the inlet for each apartment fed from the distribution columns, to connect 6 serpentes.	Nr	39,00					0,00			

X

X

7.22	S3	One thermostatic control per apartment (thermostatic conductor from simple control box in the living-room)	Nr	39,00					0,00		
			item total	m2	3 811,00				0,00	0,00	
TOTAL 7.2						#N/D!					0,00
7.3 Ventilation											
73.aa		Wall mounted extractor fan (130 m3/hr) in each sanitary room	Nr	117		#N/D!	#N/D!				0,00
7.31	S1	Wall mounted single duct ventilation system and fan (130 m3/hr in each sanitary room). Ventilation by mechanical air suction with tight valves. Exhaust on the roof, biconical cap.	Nr	117,00						0,00	
			item total	Nr	117,00				0,00	0,00	
73.ab		Kitchen ventilation hood; wall mounted single duct ventilation system (600 m3/hr)	Nr	39		#N/D!	#N/D!				0,00
7.32	S1	Wall mounted single duct ventilation system (600 m3/hr). Kitchen hood. Exhaust on the roof, biconical cap.	Nr	39,00						0,00	
			item total	Nr	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	Installation of an elevator 630 kg, 8 people, (handicapped standards), speed 0.60 m/s, 8 automatic doors with side opening, steel to be painted. Dim. Lg 1.40 X width 1.10 m, 90 cm door, cabin finish - handrail and mirror to 3 sides, illuminated ceiling, artificial stone flooring. Price per lift	Nr	2,00						0,00	
			item total	Nr	2,00				0,00	0,00	
TOTAL 7.4						#N/D!					0,00
TOTAL 7						#N/D!					0,00

X

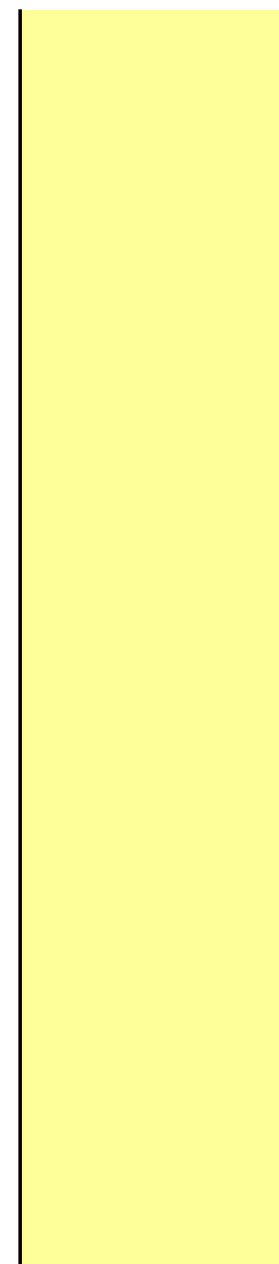
X

X

Note rate is per lift serving 8 floors

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	X
8.11	S0	<i>Including complete connection to communal system (work, not taxes).</i>	Nr	1,00										0,00	
8.11	S01	<i>Each item price has to include connection between main panel and apartment panels (tubing, conductors, fitting all included). Common assumption if priced here: average distance between main and apartment panel: 20 m. (If all this is included in your item price, enter zero here)</i>	Nr	39,00										0,00	
8.11	S1	<i>Main electrical panel (total)</i>	Nr	1,00										0,00	
8.11	S2	<i>Apartments and service quarters panels</i>	Nr	41,00										0,00	
		<i>item total</i>	Nr	1,00										0,00	0,00
81.ab		Power and lighting to entrance hall in the apartment	Nr	39	#N/D!	#N/D!								0,00	X
8.12	S1	<i>Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 6 m. (If all this is included in your item price, enter zero here)</i>	Nr	39,00										0,00	
8.12	S2	<i>Switch controlled light fixture in the ceiling (switch to be included here, fitted and connected)</i>	Nr	39,00										0,00	
8.12	S3	<i>230V three pin switched socket outlet</i>	Nr	39,00										0,00	
8.12	S4	<i>Overall control switch for lighting</i>	Nr	39,00										0,00	
		<i>item total</i>	Nr	39,00										0,00	0,00
81.ac		Power and lighting to living, dining room, kitchen	Nr	39	#N/D!	#N/D!								0,00	X



8.13	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 40 m. (If all this is included in your item price, enter zero here)	Nr	39,00						0,00				
8.13	S2	Triple 230V three pin switched socket outlets	Nr	156,00						0,00				
8.13	S3	Light fixtures on the ceiling controlled by 1 switch (switch included here)	Nr	117,00						0,00				
		item total	Nr	39,00						0,00	0,00			
81.ad		Kitchen equipment power to appliances and cooker	Nr	39	#N/D!	#N/D!						0,00		
8.14	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 20 m. (If all this is included in your item price, enter zero here)	Nr	39,00						0,00				
8.14	S2	Ordinary 230V sockets for refrigerator, dishwasher microwave.	Nr	117,00						0,00				
8.14	S3	230V supply to fit ventilator (Pos 7.32) for kitchen hood.	Nr	78,00						0,00				
8.14	S4	Separate 3-phase power supply (380V) for the cooker oven.	Nr	78,00						0,00				
		item total	Nr	39,00						0,00	0,00			
81.ae		Power and lighting to toilet, bath, shower rooms	Nr	117	#N/D!	#N/D!						0,00		
8.15	S1	Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 6 m. (If all this is included in your item price, enter zero here)	Nr	117,00						0,00				
8.15	S2	Light fixture as a wall-lamp above the wash-hand basin controlled by 1 switch (Switch to be included)	Nr	117,00						0,00				
8.15	S3	FI protected Razor 230V socket near the wash-hand basin	Nr	117,00						0,00				
8.15	S4	230V supply to fit ventilator (Pos 7.31).	Nr	117,00						0,00				

X**X**

		<i>item total</i>	<i>Nr</i>	117,00				0,00	0,00		
81.af		Power and lighting to bedrooms	Nr	120	#N/D!	#N/D!				0,00	
8.16	S1	<i>Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 20 m. (If all this is included in your item price, enter zero here)</i>	Nr	120,00					0,00		
8.16	S2	<i>Light fixture in the ceiling controlled by 2 switches (one at the entrance, one at bedside). (2 switches to be included)</i>	Nr	120,00					0,00		
8.16	S3	<i>Three pin 230V socket outlet on each side of the bed.</i>	Nr	198,00					0,00		
8.16	S4	<i>Socket on switch</i>	Nr	120,00					0,00		
		<i>item total</i>	<i>Nr</i>	120,00				0,00	0,00		
81.ag		Power and lighting to terrace-balcony	Nr	39	#N/D!	#N/D!				0,00	
8.17	S1	<i>Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 10 m. (If all this is included in your item price, enter zero here)</i>	Nr	39,00					0,00		
8.17	S2	<i>Water proof 230V socket outlet</i>	Nr	39,00					0,00		
8.17	S3	<i>One interior switch for the 2 outside wall-lamps.</i>	Nr	39,00					0,00		
8.17	S4	<i>Outside light fixture as a wall-lamp.</i>	Nr	78,00					0,00		
		<i>item total</i>	<i>Nr</i>	39,00				0,00	0,00		
81.ah		Light points and 230V sockets in stairwell, entrance, service quarters, laundry, cellar and basement	Nr	1	#N/D!	#N/D!				0,00	

X

X

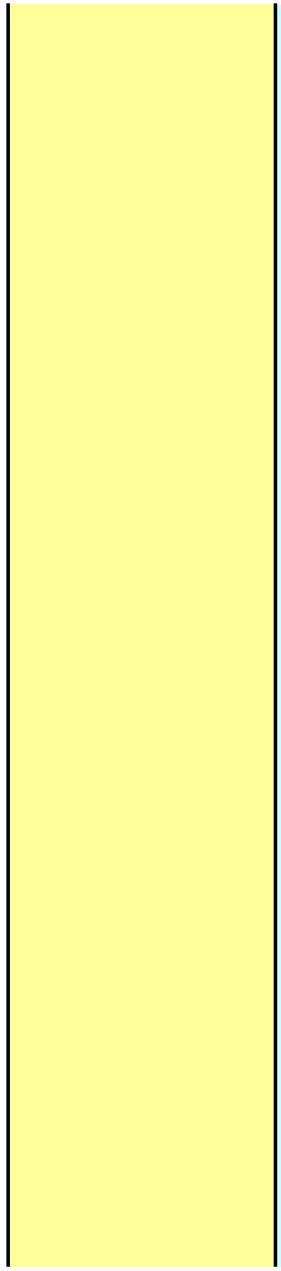
X

8,18	S0	<i>Each item price has to include conductors (3 wires including earth) under section jackets, in tubing embedded in masonry. Common assumption if priced here: total cabling length from distributor box 100 m. (If all this is included in your item price, enter zero here)</i>	Nr	1,00															
8,18	S1	<i>Light fixture in the ceiling controlled by 1 switch</i>	Nr	36,00															
8,18	S2	<i>230V switched socket outlet</i>	Nr	56,00															
8,18	S3	<i>Supplying and fitting chandelier elements, accessories for stair-well, entrance, service quarters, laundry, cellar</i>		36,00															
8,18	S4	<i>Motion Sensor</i>	Nr	16,00															
8,18	S5	<i>3-phase (380V) sockets for washing machines and dryers, totally</i>	Nr	8,00															
		<i>item total</i>	Nr	1,00															
				TOTAL 8.1															
				#N/D!															
8.2 Telecom 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															
8.21	S1	<i>TT cabinet in the utility room connected to supplier</i>	Nr	2,00															
8.21	S2	<i>Telecommunication distributor box connected to supplier</i>	Nr	2,00															
8.21	S3	<i>Telephone socket</i>	Nr	78,00															
8.21	S4	<i>TV socket</i>	Nr	78,00															
		<i>item total</i>	Nr	1,00															
82.ab		Intercom with video at the 2 entrances connected to the 39 apartments	Nr	1		#N/D!		#N/D!											0,00

X

X

8.22	S0	Item price has to include conductors (2 wires low voltage), in tubing embedded in masonry. Common assumption if priced here: average cabling length from entrance 20 m. (If all this is included in your item price, enter zero here)	Nr	39,00							0,00			
8.22	S1	Intercom with video at the entrance connected to the apartments - station per apartment and base station at each entrance completely fitted and connected.	Nr	41,00							0,00			
		<i>item total</i>	<i>m3</i>	<i>1,00</i>							<i>0,00</i>	<i>0,00</i>		
				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	X
9.1	S1	Machine trench excavations. Down to 1.50 m in depth and 0.50 m wide.	m3	250,00							0,00			
		<i>item total</i>	<i>m3</i>	<i>250,00</i>							<i>0,00</i>	<i>0,00</i>		
90.ab		Disposal of uncontaminated excess spoil from site, loading and transporting, distance 5km (excluding tipping fees)	m3	250	#N/D!	#N/D!							0,00	X
9.2	S1	Disposal of uncontaminated excess spoil from site, loading and transporting, distance 5km (excluding tipping fees)	m3	250,00							0,00			
		<i>item total</i>	<i>m3</i>	<i>250,00</i>							<i>0,00</i>	<i>0,00</i>		
90.ac		Backfilling trenches	m3	230	#N/D!	#N/D!							0,00	X
9.3	S1	Trench backfilling, by 20 cm layer, compacted, same material.	m3	230,00							0,00			
		<i>item total</i>	<i>m3</i>	<i>230,00</i>							<i>0,00</i>	<i>0,00</i>		
90.ad		Drainage PVCu pipes, beds and coverings	m	250	#N/D!	#N/D!							0,00	X



9,4	S1	4.1 Peripheral draining. Supply and place PVC pipes perforated Ø 160, including, 10 special parts, posed, in excavation bottom, on bed of concrete, pellet backfilling Ø 50mm up to a height of 30 cm + barrier felt (+ ordinary backfill measured in item 9.3).	m	100,00									
9,4	S2	4.2 Waste water and clear water pipelines. Supplying and fitting PVC pipes Ø 125 with welded sleeves, including 15 special parts, fitted, in excavation bottom, with concrete coating + (+ ordinary backfill measured in item 9.3).	m	150,00									
		<i>item total</i>	m	250,00									
		TOTAL 9					#N/D!					0,00	

Please complete details below for Fees

Chapter	2023 Total	Chapter	2024 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!	0,0%	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

see FEES sheet

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	2023		2024		% 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			
10.ab	Additional payment for transport of excess spoil to tip 5km away. Not including tip charges	m3	118	#N/D!	#N/D!		-		X			
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			
			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!																
	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!																
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!																
20.ad	Formed contraction joint; 400mm long T20mm dowel bars at 300mm centres	m	88	#N/D!	#N/D!																
	Surface finishes																				
20.ae	Powerfloating to level concrete surface leaving ready for epoxy floor	m2	1 527	#N/D!	#N/D!																
	2.1.3 Reinforcement																				
	Reinforcement fabric; to BS 4483; 50mm cover																				
20.af	Fabric reinforcement, A393 mesh, horizontal, as described	m2	1 527	#N/D!	#N/D!																
	2.1.4 Formwork																				
	Formwork; finish as per Specification; plain finish																				
20.ag	Formwork; plain finish; edges of beds; height n.e. 250mm (doors)	m	28	#N/D!	#N/D!																
20.ah	Formwork; plain finish; step in surface; height n.e. 250; 700 wide x 80 deep (recess for door)	m	22	#N/D!	#N/D!																
	2.1.5 Roofing, Cladding and Waterproofing: Mastic Asphalt, Waterproof and Gas Proof Non-Metal Flexible Sheet Coverings																				
	Damp proof / slip membrane; 1200 gauge polythene																				

X

Only concrete - reinforcement as item 20.af. See detailed drawing

X

X

X

X

X

X

X

See detailed drawing.

20.ai	Hyload pitch polymer; 0.9mm thick; horizontal damp proof course; exceeding 225mm wide	m2	1 584	#N/D!	#N/D!		-		X	
	2.1.6 Woodwork: Ironmongery, Accessories and Sundries									
	Insulation; for ground bearing industrial applications; 50mm thick									
20.aj	Extruded polystyrene (XPS) insulation; for ground bearing industrial applications; 50mm thick; horizontal; over 300mm wide	m2	1 527	#N/D!	#N/D!		-		X	
	2.2 Foundations & Rising Walls									
	2.2.1 In-situ concrete									
	Concrete; Grade C15									
20.ba	Concrete blinding; grade C12/15; foundations; n.e. 150mm thick; poured on or against earth or hardcore	m3	37	#N/D!	#N/D!		-		X	
	Concrete; Grade C40									
20.bb	Reinforced insitu concrete, grade C32/40; foundations; exceeding 150mm thick; poured on or against earth or unblinded hardcore	m3	90	#N/D!	#N/D!		-		X	
	2.2.2 Reinforcement									
	Reinforcement bar; to BS 4449;									
20.bc	Bar reinforcement as described; straight or bent; 12 - 25mm dia	Kg	6 463	#N/D!	#N/D!		-		X	
	Reinforcement fabric; to BS 4483;									
20.bd	Fabric reinforcement, A393 mesh (6.16 kg/m2), horizontal, with one width mesh size laps on both ends	m2	64	#N/D!	#N/D!		-		X	
	2.2.3 Formwork									
	Formwork; plain finish									

X7L by Collecta Ltd. or approved equivalent; u-value 0.16w/m2k; compressive strength 500kPa; laid on membrane; butt jointing slabs.

2024 Expanded polystyrene changed to extruded polystyrene.

20.be	Formwork; plain finish; sides of foundations; height 250 - 500mm	m	169	#N/D!	#N/D!		-		X
20.bf	Formwork; plain finish; sides of pad foundations; height exceeding 500mm	m2	116	#N/D!	#N/D!		-		X
	2.2.4 Brickwork and Blockwork								
	Solid concrete blocks; low thermal conductivity								
20.bg	Solid concrete blocks; walls in trenches; 100mm thick	m2	172	#N/D!	#N/D!		-		X
20.bh	Solid concrete blocks; walls in trenches; 215mm thick	m2	12	#N/D!	#N/D!		-		X
			TOTAL 2		#N/D!		-		
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!		-		X
	3.1.2 Brickwork/Blockwork								

Standard: IS 20 and BS6073-1; 10.5N/mm2; 440 x 215 x 100mm; bedding and jointing in cement / sand mortar (1:3); flush struck joints as work proceeds.

BS 5977-2; bedded and jointed in gauge mortar; propping at centre span / 1.2m centres until overlaying construction is complete.

	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!								
		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												
50.aa	Carcassing; ceiling; pressure treated softwood joists; cross-section 225 x 38mm at 400mm centres	m	256	#N/D!	#N/D!								
50.ab	Carcassing; ceiling; pressure treated softwood; solid bridging; cross-section 200mm x 38mm	m	51	#N/D!	#N/D!								
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!								
	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!								
	Plasterboard; 12.5mm thick; fixed to back of joists												
50.ae	Plasterboard; fixed to back of joists 325 x 12.5mm	m2	25	#N/D!	#N/D!								

X

X

X

X

X

X

Strength class C16; general structural grade; visually graded to IS 127.

Gyproc Fireline or equal and approved.

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
	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
	5.3 Structural Frame								
	5.3.1 Stone Faced Concrete Panels								
50.bk	Stone faced concrete panels; encasing gable columns; 750 x 350 x 500mm high	Nr	47	#N/D!	#N/D!		-		X
	5.3.2 Structural: Steelwork								
	Fabricated weldable steel; Grade S275; hot rolled sections BSC								
50.ca	Fabricated members; beams, various dimensions, 25 - 50kg/m; fabricated weldable steel; Grade S275; hot rolled sections BSC	Kg	30 967	#N/D!	#N/D!		-		X
	Fittings;								
50.cb	Steel base plates; 750 x 350 x 25mm thick; grade S355 with 4Nr 28mm dia holes and grouting hole	Nr	59	#N/D!	#N/D!		-		X
50.cc	L & Fin plates; L-plate: 450 x 160 x 10mm thick & Fin-plate: 143 x 153 x 10mm; 4Nr M20 holes	Nr	40	#N/D!	#N/D!		-		X
50.cd	Plates; 290 x 120 x 10mm thick; 3Nr M20 holes; Z10 fillet weld to PFC	Nr	48	#N/D!	#N/D!		-		X
50.ce	Supports; 150 x 90 x 24mm thick; PFC; Z10 fillet weld to web of beam; 430mm long	Nr	25	#N/D!	#N/D!		-		X
	Extra Over; purlins								

Welded fabrication and bolted site connections in accordance with BS 5135 and BS 5950.

50.cf	Extra Over; purlins; multichannel combined blockwork restraint	m	142	#N/D!	#N/D!		-		X	<i>Doorfix Ring-Gard or approved equivalent.</i>
	Holding down assembly;									
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	
	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	
50.ci	Base plates with plan dimensions 500 x 250mm; grout thickness 25mm	Nr	59	#N/D!	#N/D!		-		X	
	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									
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	

60.ab	Metal drip flashing, 4.5mm thick; powder coated grey; 9 x 3mm butyl rubber sealant; girth 225mm; (base of cladding)	m	191	#N/D!	#N/D!		-		X	<i>See detailed drawing.</i>
	6.1.2 Floor, Wall and Ceiling Finishings: In-Situ Finishes									
	Scud coat 3mm thick in cement: sand (1:3); scratch coat 7mm thick in cement: lime: sand (1:1:6); apply finish coat 12mm thick in cement: lime: sand (1:1:6) to achieve and overall thickness of 20mm; selected nap finish; include approved waterproofer;									
60.ac	Scud coat 3mm thick in cement: sand (1:3); scratch coat 7mm thick in cement: lime: sand (1:1:6); apply finish coat 10mm thick in cement: lime: sand (1:1:6) to achieve an overall thickness of 20mm; selected nap finish; include approved waterproofer; walls; width exceeding 300mm (below cladding)	m2	300	#N/D!	#N/D!		-		X	
60.ad	Plinths; girth 150-300mm; recessed; smooth finish; forming bellcast projection	m	138	#N/D!	#N/D!		-		X	
	6.1.3 Painting and Decorating: Painting									
	Prepare surfaces; apply one dilute coat and 2Nr. Full coats of grey matt exterior quality emulsion paint to cement and sand nap finished rendered walls									
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	
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	
	6.2 Internal Walls Finishes									
	6.2.1 Floor, Wall and Ceiling Finishings: In-Situ Finishes									

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	
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	
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	
Polycarbonate rooflight units; U value 1.6 W/m2K; non fragile											
2024 units changed to 36 nr from 130 m2; Transparent changed to translucent and more specifications added.											
60.eb	Polycarbonate translucent rooflight; non fragile; 1m wide x 3.6m length; U value 1.6 W/m2K; Kingspan Day-Lite Trapezoidal Rooflight 1.6 (KS1000 DLTR) or equivalent	nr	36	#N/D!	#N/D!					X	
Kingspan Polycarbonate rooflight units or equal; light transmission 63% to EN410 or similar approved.											

			TOTAL 6		#N/D!		-		
7.1 Sanitary fittings									
	7.1.1 Galvanised steel hot and cold water piping incl. insulation (aluminum backed mineral wool, 25mm):								
71.aa	Galvanised steel hot and cold water piping incl. insulation (aluminium backed mineral wool, 25mm); 75mm dia	m	100	#N/D!	#N/D!		-		X
71.ab	Hot water tanks, 200l, electric immersion heater, incl. safety valves and connections to electricity, drain and water supply	Nr	2	#N/D!	#N/D!		-		X
	7.5 Water treatment plant, capacity 5m³/h, consisting of								
71.ac	Water treatment plant, capacity 5m³/h, consisting of metering pump	Nr	1	#N/D!	#N/D!		-		X
	7.6 PVC drainage pipes, surface-mounted								
71.ad	PVCu drainage pipes; surface mounted 100mm dia	m	90	#N/D!	#N/D!		-		X
71.ae	White ceramic WC pan with close coupled plastic cistern, standard quality, plastic seat and lid, including connections to cold water and downpipe	Nr	3	#N/D!	#N/D!		-		X
71.af	Wall-mounted urinals, white vitreous china, medium quality, including taps and cold water and downpipe connections	Nr	2	#N/D!	#N/D!		-		X
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
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

2024 "white vitreous china" added to increase clarity of material of urinal.

71.ai	Handheld fire extinguishers (3kg CO2)	Nr	5	#N/D!	#N/D!		-		X
			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
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
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
	7.2.2 Black steel heating pipe including painting with rustproof primer:								
72.ba	Black steel heating pipe including painting with rustproof primer; 100mm dia	m	300	#N/D!	#N/D!		-		X
	7.2.3 Heat insulation – mineral fibre insulation, foil faced, 40mm thick:								
72.ca	Heat insulation; foil faced mineral fibre; 40mm thick; for pipe 100mm dia	m	300	#N/D!	#N/D!		-		X
72.cb	Circulating pumps, flow rate 10m3/h, pressure 0.6 bar, including 2Nr 70mm dia cut-off valves and expansion joint	Nr	1	#N/D!	#N/D!		-		X
72.cc	Expansion chambers, volume 900l, including accessories	Nr	1	#N/D!	#N/D!		-		X
72.cd	Outside temperature controlled regulator, including 2 probes (water output and outside temperature); powered stop tap 80mm dia, 24Hr programme and water and electrical connections	Nr	1	#N/D!	#N/D!		-		X
			TOTAL 7.2		#N/D!		-		

			TOTAL 7		#N/D!		-	
8. Electrical Installations								
	8.1 High voltage							
	The various cells are to have single-leaf doors with lock and safety glass inspection panel. Protective covers behind the doors are to prevent accidental contact with live equipment. The connection panels are to be equipped with a set of flat aluminium bars. The commutator bars will be attached to the equipment by means of flexible connectors							
80.aa	Supply cell - bar set 250A - isolating switch, manually-operated, 250A - one load-breaking isolating switch, 250A - circuit connection and earth switch, interlocking with load breaking switch - earth bus bar and earth lead for removable socket - neon tube voltage indicator	Nr	1	#N/D!	#N/D!		-	X
80.ab	Metering cell - bar set 250A - isolating switch 250A - 3 fuses 6.3A - 3 voltage transformers, ratio 10000/V-3/100/V-3, 50VA	Nr	1	#N/D!	#N/D!		-	X
80.ac	Transmission cell - bar set 250A - load-breaking isolating switch 250A - 3 current transformers, 50/50 A, 15VA	Nr	1	#N/D!	#N/D!		-	X
80.ad	Protective cell for each transformer - bar set 250A - load-breaking isolating switch, 250A, lever-operated, automatic triggering by fuses - 3 fuses, 20A	Nr	1	#N/D!	#N/D!		-	X
80.ae	standby cell (bar set 250A)	Nr	1	#N/D!	#N/D!		-	X
80.af	Transformers 500 kVA, 10000/400 V, with all fittings, including cabling, terminal boxes, insulating supports lightning conductor, etc.	Nr	1	#N/D!	#N/D!		-	X

80.ag	Principal low voltage distribution unit, comprising: 1 armoured distribution cabinet in painted sheet steel 1 three-phase bar system, 800A, in copper with neutral 2 three phase + N circuit breakers, 400A, with supply trips 4 3P + N circuit breakers, 250A, with trips as output to sub-distributors 1 400A isolating switch as coupling for second transformer 1 400A circuit-breaker for coupling 1 three phase 4000A (capacitors) 1 set of measuring equipment	Nr	1	#N/D!	#N/D!		-		X
	Each supply set will contain: 3 0-500V voltmeters 3 ammeters and 400/5A current transformers 1 wattmeter for power consumed 1 cosphimeter input indicators alarm indicators								
	Each output including the coupling system is to contain: 3 ammeters with commutator and 750/5A current transformer 3 warning lamps								
80.ah	Automatic correction equipment, 320kVA, 8 steps, condenser protection, batteries, etc., with all fittings	Nr	1	#N/D!	#N/D!		-		X
80.ai	Steel meter cabinet fitted with watt-hour meter, reactive volt-ampere-hour meter, contact timer, overload monitor with automatic adjustment, overload cut out, digital print out, timers, cabling and all fittings	Nr	1	#N/D!	#N/D!		-		X
80.aj	Sheet steel distribution cabinets, type IP54 protection, for heavy and lighting current (380/220V, 50Hz) (height: c. 2.2m, depth: c. 0.8m, width: c. 2.5m)	Nr	4	#N/D!	#N/D!		-		X
	copper bars, 250 A, 5 conductors								

	Items fitted: 12 three-pole knife switch circuit-breakers for cartridge size 0-3, including 100-500A cartridges; 12 three-pole sockets or 25A-63A fuses complete with fuses and other fittings 1 three-pole switch, 250A, for power supply; 10 one-pole circuit-breakers, 16A, for lighting; 7 three-pole circuit breakers, 25A, for heavy current; 1 voltmeter 0-500V, with voltage selector									
	Provision of cable clamps as follows: - one 4 x 240 mm ² cable - 30 cables up to 5 x 2.5mm ² - 30 cables up to 4 x 70mm ²									
80.ak	Sheet steel distribution cabinet, IP54 protection, for air heater control unit and central heating pump controls. To be fitted and cabled: all relays, contactors, fuses, switches, pilot lights, 1 time switch programmable for day/night/week, 10 switches for the three-speed ventilator assemblies	Nr	1	#N/D!	#N/D!			-		
	8.2 Fittings									
80.ba	Fittings; cable 7 x 1.5mm ²	m	650	#N/D!	#N/D!			-		
80.bb	NYM cabling, 5 x 16 mm ² , including cable grips	m	250	#N/D!	#N/D!			-		
80.bc	Prefabricated electrical conduits current 100A, circuits: 4 conductors + earth (5 x 27 mm ²)	m	40	#N/D!	#N/D!			-		
80.bd	Couplers (junction boxes): current: 40A with cartridges	Nr	2	#N/D!	#N/D!			-		
80.be	Power supply box (output): rating 100A	Nr	5	#N/D!	#N/D!			-		
	8.3 Lighting									
80.ca	Fluorescent 2m ceiling lights with reflector, 2 x 215W, 380V	Nr	44	#N/D!	#N/D!			-		
	8.4 Supplementary fittings									

X

X

X

X

X

X

X

80.da	Sockets, 16A, 250V, Schuko type (side earth contacts), surface mounted	Nr	42	#N/D!	#N/D!		-		X X	
80.db	Switches, push button, 16A surface mounted	Nr	12	#N/D!	#N/D!		-			
			TOTAL 8		#N/D!		-			

Please complete details below for Fees

Chapter	2023 Total	Chapter	2024 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!	0,0%	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

see FEES sheet

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	2023		2024		% 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	Extruded polystyrene (XPS) insulation; 150mm thick laid horizontally over 300mm wide, (0.13W/m2 K)	m2	1218	#N/D!	#N/D!		-		X
20.af	Extruded polystyrene (XPS) insulation; 25mm thick fixed vertically not exceeding 300mm wide	m	146	#N/D!	#N/D!		-		X

2024 Expanded polystyrene changed to extruded polystyrene.

2024 Expanded polystyrene changed to extruded polystyrene.

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

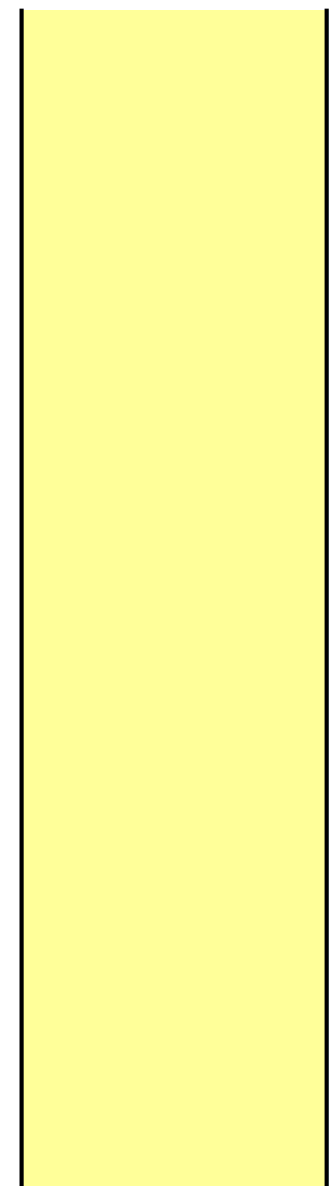
30.as	Supply and install prestressed reinforced concrete lintel, 215 x 150mm high, in lift shaft walls; 1400mm long	Nr	6	#N/D!	#N/D!		-		X
		TOTAL 3		#N/D!			-		
4. Roofing									
40.aa	RubberBond or similar flat roofing system; comprising 18mm thick oriented strand board (OSB) substrate, a 0.25mm 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!		-		X
		TOTAL 4		#N/D!			-		
5.1 Joinery - Carpentry									
51.aa	Framework; treated sawn softwood; to receive pipe casings; 25 x 38mm vertically; 25 x 25mm horizontally at 450mm centres; two sided; 300mm girth	m	36	#N/D!	#N/D!		-		X X X X <i>2024 Gloss paint finish added and more information provided.</i>
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	Supply and install skirtings; wrought softwood; plain square edge: 25 x 145mm or equivalent, gloss paint finish	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!		-		X
51.af	Supply and install pre-finished internal softwood door and frame in white, 1hr fire check, 25 x 75mm softwood architrave both sides; including ironmongery (pair hinges, latch & lever handles); 826 x 2040 x 40mm; to internal door openings	Nr	13	#N/D!	#N/D!		-		X
51.ag	Supply and install pre-finished internal softwood door and frame in white, standard quality, 25 x 75mm softwood architrave both sides; including ironmongery (pair hinges, latch & lever handles); 826 x 2040 x 40mm; to internal door openings	Nr	14	#N/D!	#N/D!		-		X
		TOTAL 5.1			#N/D!		-		
5.2 Joinery - Metalwork									
52.aa	Alucobond A2 or similar flat cladding to composite external walls; fixed through 75mm rigid insulation to 12mm sheathing ply, faced with vapour barrier, secured to 150mm metal stud wall, full blown insulated core; 18mm gypsum board internal face; finished in 5mm plaster skim coat	m2	185	#N/D!	#N/D!		-		X
52.ab	Colour-coated Aluminium eaves fascia and soffit assembly; 200mm fascia and 400mm soffit; stepped unit; total 800mm girth; including batten support fixed to external wall	m	159	#N/D!	#N/D!		-		X
52.ac	Colour-coated Aluminium soffit cladding; including batten support fixed to framework to underside of flat roof soffit	m2	110	#N/D!	#N/D!		-		X

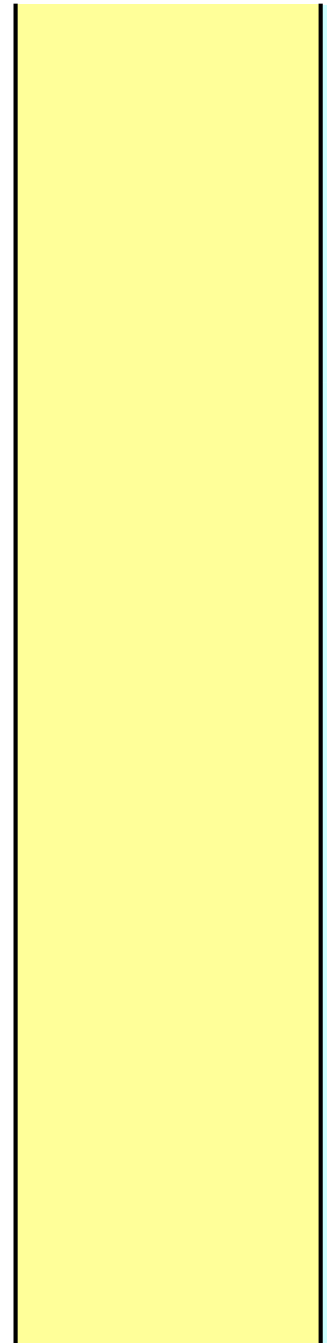
53.ab	Supply and install pre-finished powder-coated aluminium framed double-glazed 4-light (tilt and turn) frame; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 5000 x 2250mm	Nr	18	#N/D!	#N/D!		-		X
53.ac	Supply and install pre-finished powder-coated aluminium framed double-glazed 9-light frame; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 11600 x 2250mm	Nr	6	#N/D!	#N/D!		-		X
53.ad	Supply and install pre-finished powder-coated aluminium framed 3-light spandrel panel; opaque glazed units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 1200mm	Nr	1	#N/D!	#N/D!		-		X
53.ae	Supply and install pre-finished powder-coated aluminium framed 3-light spandrel panel; opaque glazed units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 1600mm	Nr	1	#N/D!	#N/D!		-		X
53.af	Supply and install pre-finished powder-coated aluminium framed 3-light frame; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 2250mm	Nr	2	#N/D!	#N/D!		-		X
53.ag	Supply and install pre-finished powder-coated aluminium framed double-glazed 3-light frame; grey tinted safety glazing unit; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 6500 x 1600mm	Nr	1	#N/D!	#N/D!		-		X

53.ah	Supply and install pre-finished powder-coated aluminium framed double-glazed entrance frame; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; incorporating revolving door assembly and separate side door; including all linings, ironmongery and the like; overall frame size 6500 x 2250mm	Nr	1	#N/D!	#N/D!		-		X
53.ai	Supply and install pre-finished powder-coated aluminium framed double-glazed 2-light frame; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 1800 x 1500mm	Nr	4	#N/D!	#N/D!		-		X
53.aj	Supply and install pre-finished powder-coated aluminium framed double-glazed 4-light frame; grey tinted safety glazing units; 18mm argon filled cavity (5-18-5) providing 1.1W/m2 K; including linings and the like; frame size 5000 x 1500mm	Nr	9	#N/D!	#N/D!		-		X
53.ak	Supply and install pre-finished powder-coated aluminium framed door frame providing 1.1W/m2 K; pair side-hung flush doors; including ironmongery and the like; frame size 1800 x 2250 x 44mm	Nr	2	#N/D!	#N/D!		-		X
53.al	Supply and install pre-finished powder-coated aluminium framed internal screen providing 1.1W/m2 K; toughened opaque glazing; including linings and the like; frame size 8000 x 2750mm	Nr	1	#N/D!	#N/D!		-		X
		TOTAL 5.3			#N/D!		-		
		TOTAL 5			#N/D!		-		
6. Finishings									
60.aa	Cement and sand (1:3); trowelled finish to floors 65mm thick, float finish; incorporating mesh reinforcement	m2	1 205	#N/D!	#N/D!		-		X

71.aa	Supply and install urinal in white vitreous china; standard quality; complete with associated fittings; fixing in position including connecting to services n.e. 1.50m from unit	Nr	9	#N/D!	#N/D!		-		X
71.ab	Supply and install 500mm rectangular basin in white vitreous china with pedestal; standard quality; complete with mixer tap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	24	#N/D!	#N/D!		-		X
71.ac	Supply and install rectangular close coupled WC suite in white vitreous china; standard quality; complete with cistern, seat and flap and associated fittings; fixing in position including connecting to services; not exceeding 1.5m from unit	Nr	21	#N/D!	#N/D!		-		X
71.ad	Supply and install white 900 x 900mm acrylic shower tray, 25mm high and 6mm thick glass quadrant (door); inclusive of waste, complete with associated fittings; fixing in position including connecting to services n.e. 1.5m from unit	Nr	5	#N/D!	#N/D!		-		X
71.ae	Supply and install exposed thermostatic bar mixer shower in chrome specification; Hansgrohe Croma 100 Showerpipe or similar; fixing in position; connecting to services not exceeding 1.5m from unit	Nr	5	#N/D!	#N/D!		-		X
71.af	Provision of cold water supply, 10m MDPE pipe 20mm dia; metre position to rising main position, including stop cock and non-return valve	Nr	1	#N/D!	#N/D!		-		X
		TOTAL 7.1			#N/D!		-		
7.2 Mechanical Installations - Heating and hot water supply									



75.aa	Supply, install and commission wet pipe fire sprinkler, including pipework, valve sets, booster pumps and automatic alarm; assume 1 sprinkler per 12m2	Nr	250	#N/D!	#N/D!		-		X
75.ab	Supply and install new smart smoke & Carbon Monoxide alarm (Nest S3000 Protect or equivalent); wire into electrics for fail-safe (assume 2m of wire required)	Nr	18	#N/D!	#N/D!		-		X
		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
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 mm2	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	m2	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 0.135m3 pea shingle per m)	m	20		#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!			-		X	
			TOTAL 9		#N/D!			-			

Please complete details below for Fees

Chapter	2023 Total	Chapter	2024 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!	0,0%	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

see FEES sheet

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	2023		2024		% 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, compacted dense soil depth 870mm, levelling and compacting to 95% simple Proctor. Transport 500m onsite	m3	1 740	#N/D!	#N/D!				X	<p>27 items in total</p> <p>Carriageway: depth = 870mm; width = 9m + 2m + 9m = 20m (1,740m3)</p> <p>2024 "compacted dense soil" added to increase the clarity of excavated material.</p>	

10.ab	Mechanical excavation of sidewalk and shoulder, compacted dense soil depth 400mm, levelling and compacting. Transport 500m onsite	m3	92	#N/D!	#N/D!					X	Sidewalk and shoulder: depth = 400mm; width = 2.3m (92m3) 2024 "compacted dense soil" added to increase the clarity of excavated material.
10.ac	Mechanical excavation of trenches and drainage chambers, compacted dense soil depth 3m. Transport 500m onsite	m3	405	#N/D!	#N/D!					X	Trench and drainage chambers: trench for carrier and filter drain width = 0.6m each at a depth of 3m, use of ditch witch for fin drain width = 0.3m use a depth of 1.5m (405m3) 2024 "compacted dense soil" added to increase the clarity of excavated material.
			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	no capping used as kept mechanically stabilised work
20.ab	Mechanically stabilised crusher-run 0-45mm dia, thickness 100mm on the carriageway. 95% modified Proctor	m2	2 100	#N/D!	#N/D!					X	Lime stabilise assuming a 1000m3 done in a day incl. establishment + imported fill not class 6F

20.ac	AC 32 dense base course 40/60 des, thickness 230mm	m2	2 100	#N/D!	#N/D!		-		X	
20.ad	AC 20 dense binder course 40/60 des, thickness 60mm	m2	2 100	#N/D!	#N/D!		-		X	
20.ae	AC 10 surface course 70/100 des, thickness 30mm	m2	2 100	#N/D!	#N/D!		-		X	<p>width = 1+3.5+3.5+1+2+1 +3.5+3.5+1</p> <p>2024 This item now reflects "AC 10 surface course" when previously it was 10mm dia stone which isn't a surface course.</p> <p>assumed light vehicle footway and cycle ways</p>
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	<p>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</p>
20.ag	Mechanically stabilised crusher-run 0-45mm dia, thickness 80mm. 95% modified Proctor	m2	200	#N/D!	#N/D!		-		X	<p>used CD 239 spec</p>
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										
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	<p>used CD 239 spec - front of footway</p>
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	<p>used CD 239 spec - rear of footway</p>

		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	3mm thick 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 2024 Thickness of road marking provided.
60.ad	3mm thick 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 2024 Thickness of road marking provided.
60.ae	Installation of reflective road studs; 100 x 100mm square bi-directional with amber corner cube reflectors, 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 2024 Removed "assumed only half of base layer to be replaced; thickness 100mm" as this is already been accounted for in the quantity.
		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	<i>fin drain in cutting</i>
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	<i>carrier drain in cutting drwg. has 3m depth, type S bed used</i>
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	<i>filter drain in embankment drwg. has depth of 3m</i>
90.ad	Build in ends of pipes to existing precast concrete manhole chamber and make good with cement mortar (1:3); 4m below ground level; pipe nominal bore 300mm	Nr	6	#N/D!	#N/D!			X	<i>2024 Specification fundamentally rewritten to increase clarity.</i>
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	<i>slightly oversized to cater for up to 2 connections on one side</i>
90.ag	Type A filter material, fine and all-in aggregate (0-20mm dia) compliant to BS EN 13285 in drainage trenches, depth 500mm	m3	30	#N/D!	#N/D!			X	<i>lower drainage material for bedding and haunch for filter drain bedding = 75+300+50 = 425mm say 500mm.</i>
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	<i>upper drainage material for filter drain height = 2.5m</i>

		TOTAL 9		#N/D!		-			
--	--	---------	--	-------	--	---	--	--	--

Please complete details below for Fees

Chapter	2023 Total	Chapter	2024 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!	0,0%	-
TOTAL PRICE	#ARG!	TOTAL PRICE	

see FEES sheet

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	2023		2024		% 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	<i>This quantity has been assumed as 50% of the carriageway area, where pavement has failed.</i>	
10.ac	Pavements; cold milling at 50mm depth; removal of surface course longitudinally at tie ins	m2	360	#N/D!	#N/D!		-		X	<i>Assumed at 30mm inlay for longitudinal step at each end of the carriageway</i>	

			TOTAL 1		#N/D!			-	
2. Concrete									
Asphalt - Main Carriageway (incl. central reserve)									
20.aa	AC 32 dense base course 40/60 des, thickness 100mm	m2	720	#N/D!	#N/D!			-	
20.ab	AC 20 dense binder course 40/60 des, thickness 60mm	m2	1 440	#N/D!	#N/D!			-	
20.ac	AC 10 surface course 70/100 des, thickness 30mm	m2	1 440	#N/D!	#N/D!			-	
20.ad	Surfacing course; inlay at tie ins, thickness 30mm	m2	360	#N/D!	#N/D!			-	
20.ae	Pavements; tack coat applied by machine sprayer	m2	2 520	#N/D!	#N/D!			-	
Asphalt - Footway									
20.af	6mm dia dense asphalt surface course, thickness 20mm	m2	200	#N/D!	#N/D!			-	
20.ag	Pavements; cold milling up to 50mm in depth; removal of surface course	m2	200	#N/D!	#N/D!			-	
			TOTAL 2		#N/D!			-	
6. Finishings: Street furniture									

X

X

X

X

X

X

X

2024 Removed "assumed only half of base layer to be replaced; thickness 100mm" as this is already been accounted for in the quantity.

2024 This item now reflects "AC 10 surface course" when previously it was 10mm dia stone which isn't a surface course.

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	50	#N/D!	#N/D!					X	Assumed section of existing vehicle restraint system requires replacement
60.ab	3mm thick 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	2024 Thickness of road marking provided.
60.ac	3mm thick thermoplastic road marking compliant to BS EN 1871 & 1436; intermittent line; 100mm wide to surface course	m	200	#N/D!	#N/D!					X	2024 Thickness of road marking provided.
60.ad	Installation of reflective road studs; 100 x 100mm square bi-directional with amber corner cube reflectors, compliant to BS EN 1463 Pt. 1 & 2 to lane lines at 18m centres	Nr	34	#N/D!	#N/D!					X	2024 Dimensions and specification of reflective studs provided.
		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	m	20	#N/D!	#N/D!					X	Assumed localised pipe repair
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	m	20	#N/D!	#N/D!					X	Assumed localised pipe repair
90.ac	Build in ends of pipes to existing precast concrete manhole chamber and make good with cement mortar (1:3); 4m below ground level; pipe nominal bore 300mm	Nr	2	#N/D!	#N/D!					X	2024 Specification fundamentally rewritten to increase clarity.
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	Nr	2	#N/D!	#N/D!					X	Assumed installation or / replacement of gullies due to failure or additional capacity

		TOTAL 9		#N/D!		-			
--	--	---------	--	-------	--	---	--	--	--

Please complete details below for Fees

Chapter	2023 Total	Chapter	2024 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!	0,0%	-
TOTAL PRICE		TOTAL PRICE	

see FEES sheet

Check unpriced items marked X above