

UMGUZA K9 TRAINING SCHOOL - STAFF COTTAGE BUILDER'S WORKS BOQ

BILL NO.2

FOUNDATIONS (PROVISIONAL)

(For Preambles see General Specification)

Note: Foundations have been measured to top of surface bed.

SITE CLEARANCE

A	Clear site of all rubbish, bushes, shrubs, undergrowth, hedges, small trees, stumps, roots, etc.	m ²	284
B	Cut down and remove tree exceeding 500 and not exceeding 1000 mm girth measured 1000 mm above ground level including grubbing up roots and filling in holes.	no.	4
C	Ditto tree exceeding 1000 mm and not exceeding 2000 mm ditto.	no.	4

EXCAVATION

Pumping and bailing

D	Allow for the keeping excavations free of storm, surface and mud by pumping and bailing.	item	1
E	Excavate over site to remove vegetable soil average 150 mm deep and deposit on site not exceeding 100 metres.	m ²	179
F	Disposal of topsoil	m ³	27

Carried to collection

<u>Excavate in pickable earth for</u>			
A	Reduced levels not exceeding 2 metres deep.	m ³	27
B	Surface trenches not exceeding 2 metres deep.	m ³	81
C	Allow for searching and excavation all ants' nests below ground level, treating with "Shelldrite Ant Poison" fill in and well ram selected excavated material and consolidate.	m ³	4
D	Extra over excavation in pickable material for excavation in hard pickable material.	m ³	17
E	Ditto excavation in rock.	m ³	11
<u>Planking and strutting</u>			
F	Allow for maintaining and supporting sides of all excavations and making good all slips.	m ²	278
<u>Disposal</u>			
G	Redig from spoil heap, return, fill and well compact selected excavated material around foundations to 95% L.C.E. density.	m ³	
H	Redig from spoil heap and cart off site.	m ³	27
Carried to collection			

	<u>Formation</u>			
A	Scarify ground to a depth of 150 mm and compact to 95% L.C.E. density.	m ²	179	
B	Selected and approved clean, hard, non-expansive granular filling supplied and brought onto site by the contractor well watered and mechanically compacted under ground slabs in layers of 150 mm thick to 90% HCE density	m ³	54	
	<u>SUNDRIES</u>			
C	250 Micron black polythene sheeting well lapped at joints including all cutting and waste (measured nett) laid over filling to receive concrete.	m ²	179	
	<u>TERMITES</u>			
D	Termite treatment as described to top of filling and foundation walls with "Shelldrite Ant Poison" by a specialist company and provide a written 10 year guarantee.	m ²	179	
	<u>PLAIN CONCRETE</u>			
	<u>Concrete (Grade 25MPa) in</u>			
E	Footings.	m ³	22	
F	Ground floor slabs.	m ³	16	
	<u>Sundries</u>			
G	Strike off and cure top of concrete.	m ²	179	
	Carried to collection			

Welded fabric reinforcement of approved manufacture including all cutting, tying, placing in position with necessary temporary supports and minimum 300 mm laps both ways (measured nett)

A	Ref. S193 (mass of 1.93 kg/square metre) in top reinforcement to slab.	m ²	154
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BRICKWORK

Brickwork in approved common bricks in cement mortar as described

B	Half brick wall.	m ²	28
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C	One brick wall.	m ²	125
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Reinforcement

Brickforce lapped at joints and junctions and building in as the work proceeds (measured nett)

D	Ref. C1 in half brick walls.	m	111
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E	Ref. C2 in one brick walls.	m	493
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Carried to collection

COLLECTION

20
21
22
23

BILL NO.2: FOUNDATIONS (PROVISIONAL)
CARRIED TO SUMMARY

BILL NO.3

CONCRETE, FORMWORK AND REINFORCEMENT

(For Preambles see General Specification)

STRUCTURAL CONCRETE

Vibrated reinforced concrete Grade 25 Mpa in

A	Beams	m ³	2
	<u>Formwork Class A as described to</u>		

B	Soffit of beams, lintels.	m ²	10
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C	Sides of beams, lintels.	m ²	16
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REINFORCEMENT

Steel bar reinforcement

D	High yield deformed steel reinforcement bars all sizes.	kg	280
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Sundries

E	Strike off and cure top of concrete.	m ²	10
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Carried to collection

PRECAST CONCRETE

Lintels

A	115 x 170 x 1360mm long	no	4
B	230 x 170 x 1480mm long	no	8

Dripstones

C	Rainwater dripstone 450 mm wide and 650 mm thick and 800 mm long with segmental channel formed in top and place in position.	no.	16
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Precast concrete apron

D	900 x 900mm Precast concrete pavers	m ²	95
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Precast concrete Coping

E	Precast concrete coping as per Architects's design and Engineer's specification on top of parapet walls.	m	56
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TESTING

F	Allow for carrying out slump tests when directed as described.	item	1
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Carried to collection

COLLECTION

25
26

BILL NO.3: CONCRETE, FORMWORK AND
REINFORCEMENT CARRIED TO SUMMARY

BILL NO.4**BRICKWORK**

(For Preambles see General Specification)

SAMPLES

A	Allow for providing samples of all bricks as described	item	1
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BRICKWORK

Brickwork in approved common bricks in cement mortar as described

B	Half brick wall.	m ²	67
C	Half brick in beam filling.	m ²	7
D	One brick wall.	m ²	298

SUNDRIES

E	Bed wall plate in cement mortar.	m	39
F	1,25 mm Galvanised hoop iron tie 25 mm wide and 1000 mm long one end built into brickwork or cast into concrete and other end wrapped around and spiked to wall plate and foot of truss.	no.	51
G	230 x 150 mm Terra Cotta louvred and gauze backed external air brick and building into brick wall.	no.	32
H	230 x 150 mm cast plaster internal air brick and building into opening in plastered wall.	no.	32

WINDOW CILLS

I	Brick on edge cills with dpc under (elsewhere measured). All mortar joints and holes exposed at side ends of cill to be plugged with crushed brick and cement mixture to match colour of cill bricks.	m	12
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Carried to collection

DAMP PROOF COURSE

One layer of three ply bituminous felt sheeting as damp proof course as described, well lapped at joints and junctions (measured nett)

A	On half brick walls.	m ²	3
B	On one brick walls.	m ²	26
C	Under cills.	m ²	2
D	Under precast concrete copings.	m ²	13

REINFORCEMENT

Brickforce lapped at joints and junctions and bedding in as the work proceeds (measured nett)

E	Ref. C1 in half brick walls.	m	197
F	Ref. C2 in one brick walls.	m	877

BUILDING IN

G	Set up in position, cross brace and build in steel door frame not exceeding 5 square metres.	no.	8
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Leave or form opening through one brick wall including temporary centering to flat soffits of brickwork complete with all strutting, shoring not exceeding 5 metres high, bolting, wedging easing, striking and removing

H	Opening for Purpose made aluminium doors exceeding 5 square metres in area	no.	4
I	Opening for Purpose made aluminium windows not exceeding 5 square metres in area	no.	12

Carried to collection

COLLECTION

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BILL NO.4: BRICKWORK
CARRIED TO SUMMARY

BILL NO.5

ROOF COVERINGS

(For Preambles see General Specification)

"Harvey" concrete roof tiles in approved colour laid on sawn softwood battens to be fixed in strict accordance with the Manufacturers printed instructions including all square cutting (measured nett) to be fixed by an approved firm of specialits.

A	Interlocking concrete tiles laid on softwood battens (elsewhere measured).	m ²	251
B	Half round ridge or hip tile with and including three ply bituminous felt soaker bedded and pointed in cement mortar.	m	20

BILL NO.5: ROOF COVERINGS
CARRIED TO SUMMARY

BILL NO.6

CARPENTRY

(For Preambles see General Specification)

PREFABRICATED ROOF TRUSSES

The trusses are to be "Gangnail" Hydronail or other equal and approved prefabricated timber trusses with all members in the same plane and jointed together with steel plate nails. All timbers are to be sw.

The roof is to be created in accordance with the drawings.

Prices are to include for all necessary trusses and bracing, and for hoisting and fixing in position.

The roof is designed to carry concrete roofing tiles and, plasterboard ceilings with trusses spaced at approximately 750 mm centres and the contractor will be required to produce all design calculations for checking, notwithstanding which, he will be held responsible for the sufficiency of the design.

A	Trusses, necessary hips, jack rafters, bracing, purlins etc fixed complete as per drawings	item	1
	<u>Sawn softwood</u>		
B	38 x 114 mm wall plate.	m	39
	<u>EAVES AND VERGES</u>		
C	225 x 12 mm cement fibre fascia board	m	40

**BILL NO.6: CARPENTRY
CARRIED TO SUMMARY**

BILL NO.7

JOINERY AND IRONMONGERY

(For Preambles see General Specification)

CEILINGS

A	6 mm plasterboard ceiling boarding (plaster finish elsewhere measured) and fixing to and including 50 x 25 mm sawn softwood bandering at 400mm centres one way next wall and at end joints, skew nailed in opposite directions to roof timbers (elsewhere measured) including covering all joints with and including 75 mm wide strip of scrim planted on including all square cutting and waste	m ²	154
B	Extra over for forming trap door with 750 x 750mm clear opening comprising 20mm blockboard door size 775 x775mm hardwood lapped all round fitted loose with 38 x 38mm planted on (provisional) softwood rebated frame all round and 20 x 25mm cover heads	no	4

Cornices

C	75mm Rhino coved cornice including mitres, etc.	m	183
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DOORS

Semi-solid core internal quality flush doors with veneer suitable for painting both sides.

D	44 mm Door. Size 813 x 2030 mm.	no.	4
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Solid core external quality fire rated flush doors with veneer suitable for painting both sides

E	44 mm Door. Size 813 x 2030 mm.	no.	4
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Carried to collection

IRONMONGERY

A	Union No. CZ682 - 24 - 95CH two lever mortice lockset.	no.	4
B	Union No. CZ682 - 24 - 77CH three lever mortice lockset.	no.	4

BUILT IN CUPBOARDS (PROVISIONAL)

C	Provide a sum for the supply, delivery and installation of kitchen cupboards, polished granite vanity worktops executed complete as per Architect's drawings and specifications.	item	1
D	Provide a sum for the supply, delivery and installation of bedroom built-in cupboards executed complete as per Architect's drawings and specifications.	item	1

Carried to collection

COLLECTION

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BILL NO.7: JOINERY AND IRONMONGERY
CARRIED TO SUMMARY

BILL NO.8

METALWORK

(For Preambles see General Specification)

STANDARD DOOR FRAMES

Standard full profile pressed steel door frames with chromium plated striking plates where appropriate

(building in elsewhere measured)

To suit half brick wall (P.B.S.) for

A	44 mm Door size 813 x 2030 mm.	no.	4
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To suit one brick wall (P.B.S.) for

B	44mm Door size 832 x 2030 mm.	no.	4
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PURPOSE MADE ALUMINIUM WINDOWS, DOORS AND FRAMES AS DESCRIBED (BUILDING IN ELSEWHERE MEASURED) INCLUDING 4mm EXTERNAL GLAZING WITH U-VALUE OF 5.73 AND SHGc OF 0.6.

The whole to be executed by an approved firm of specialists. (Refer to the Window and Door Schedule for type in parenthesis)

C	Window type AC2F size 1020 x 950 mm high with and including 4mm obscure glass.	no.	4
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D	Window type AC2F size 1020 x 950 mm high with and including 4mm clear glass.	no.	4
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E	Window type AAW2 size 900 x 1800 mm high with and including 4mm clear glass.	no.	4
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F	Sliding door size 2510 x 2180 mm high with and including 8mm clear laminated glass.	no.	1
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BILL NO.8: METALWORK CARRIED TO SUMMARY

BILL NO.9

PLASTERING AND WALL LININGS

(For Preambles see General Specification)

EXTERNALLY

One coat cement plaster (1:4) as described including all labours with a fine woodfloat finish on

A	Walls.	m ²	298
B	Ditto in narrow widths.	m ²	1

INTERNALLY

One coat cement/sand plaster (1:4) and set in rhinaset plaster with woodfloat finish on to the following surfaces

C	Walls.	m ²	306
D	Ditto in narrow widths.	m ²	2

Two coats "Rhinobond" plaster and one skimming coat of "Rhinaset" plaster applied with an approved flicking machine to give a tyrolean finish to an even thickness to the Architect approval on plasterboard

E	Ceilings	m ²	154
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Carried to collection

A	Extra for 50 mm wide steel trowelled margin to edge of ceiling	m	183	
	<u>WALL TILING</u>			
	<u>6 x 600 x 300 mm "Porcelain" or other equal approved glazed wall tiles with continuous horizontal and vertical joints fixed with and including approved adhesive on and including cement sand screed (1:4) and point in coloured cement, on completion cleandown to approval, on:</u>			
B	Walls.	m ²	174	
C	Walls, reveals, etc in narrow widths.	m ²	1	
	<u>Sundries</u>			
D	150 x 150 mm recessed type toilet roll holder with spring loaded removable wood spindle and building into plastered brickwork.	no.	4	
E	"Varese" chrome plated shower soap dish.	no.	4	
F	"Varese" chrome plated double towel rail.	no.	4	
G	"Roma" chrome plated tumbler holder.	no.	4	
	Carried to collection			

COLLECTION

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BILL NO.9: PLASTERING AND WALL LININGS
CARRIED TO SUMMARY

BILL NO.10

PAVINGS, FLOOR COVERINGS, PLASTIC LININGS, ETC

(For Preambles see General Specification)

SCREEDS

Cement and sand screed (1:4) finished to a true and even surface

A	40 mm thick screed to receive ceramic tiles.	m ²	24
B	40 mm thick screed to receive non-slip porcelain tiles.	m ²	130

CERAMIC FLOOR TILES

300 x 300mm Ceramic tiles with non-slip surface, as in "Samca Tiles" or similar approved, colour from manufacturer's standard colour range, on adhesive to manufacturer's recommendation and 3mm wide arout ioints.

C	Tiles laid on floors.	m ²	24
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PORCELAIN FLOOR TILES

800 x 800mm "Porcelain" or equal approved non-slip ceramic tiles bedded and tight jointed in and including cement mortar and flush pointed in coloured cement and finished with two coats of wax polish.

D	To floors on screed (elsewhere measured).	m ²	130
E	75mm High skirting coved at junction with floor and fair edge and arris next to wall finish.	m	58
F	3 x 40mm Aluminium division strip set in position between different floor finishes.	m	24

BILL NO.10: PAVINGS, FLOOR COVERINGS, PLASTIC LININGS, ETC CARRIED TO SUMMARY

BILL NO.11

PLUMBING (PROVISIONAL)

(For Preambles see General Specification)

FLASHINGS

0.6 mm Galvanised sheet iron as described in:

A	Flashings and fixing to walls.	m ²	67
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RAINWATER DISPOSAL

PVC as described in

A	100 mm Diametre semi-circle section eaves gutter on brackets as described to fascia boards.	m	39
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B	100 mm Dia stop ends.	no.	8
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C	Extra for angle.	no.	8
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D	Ditto outlet with nozzle for and joint to 100 mm Dia rainwater down pipe.	no.	8
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E	100 mm Diameter rainwater pipe fixed 38 mm clear of wall with holderbats.	m	24
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F	Extra for shoe.	no.	8
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G	Ditto eaves offset.	no.	8
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SANITARY FITTINGS

H	510 x 405 mm white glazed vitreous china wash hand basin with concealed brackets, complete with integral overflow, chromium plated outlet, plug and chain, pair of 15 mm chromium plated colour coded pillar taps, bolt to brackets to wall and connect up.	no.	4
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Carried to collection

A	Approved low level W.C. Suite comprising white glazed vitreous china pan with "P" trap, plastic double flap seat , 9 litre cistern and white plastic flush pipe, bolt to cistern to wall, fix pan to concrete floor and connect up.	no.	4		
B	Citi Metal Series single bowl overlay stainless steel sink unit, size 750 x 535mm, complete with integral overflow, chromium plated waste outlet, plug, chain and backnut, with turndown at edge; tap set in position and including fixing one pair of Citi metal 25 x 25 mm galvanised mild steel gallowes, square fixing (code SGR)	no.	4		
C	980 x 920 x 1800mm high Shower set comprising aluminium framing, 8mm obscure toughened glass panels (one fixed and two sliding), fitted with top and bottom roller bearings, shower tray, waste outlet, 15 mm chromium colour coded undertile diverter, bridging piece, 900 mm copper riser with chromium plated arm and approved chromium plated rose including chasing into wall and joint one valve to copper pipes	no.	4		
	<u>Geysers</u>				
D	100 Litre solar geyser roof mounted with electric backup water heater, set up in position and connect up.	no.	4		
	<u>SANITARY PLUMBING</u>				
	<u>"Promat" or equal rigid P.V.C. waste piping with solvent cement and joints and fitting as described</u>				
E	110 mm diameter pipe laid in ground including excavating in trench not exceeding 2 metres deep and fill in and ram and cart off site surplus material.	m	6		
F	50 mm diameter pipe laid under floors	m	10		
G	50 mm diameter pipe fixed to walls.	m	12		
	Carried to collection				

Extra on P.V.C. piping for

A	50 mm bend.	no.	12
B	50 mm bend with inspection eye.	no.	12
C	110 mm bend.	no.	4
D	110 mm bend with inspection eye.	no.	3
E	110mm Inspection junction.	no.	4
F	110mm Reducing junction.	no.	4
G	110 mm Straight pan connector and joint to W.C. pan.	no.	4
H	110 mm P.V.C. vent cowl and fixing to top of 110 mm diameter pipe.	no.	4
I	Assembled gulley trap with 110 mm diameter outlet connected to drain and gulley head with universal back inlet and removable grate.	no.	4
J	Joint small pipe to gulley.	no.	4
K	Ditto large pipe to gulley.	no.	4

Traps

L	32 - 40 mm diameter "Flexitrap" or equal "P" trap and joint to fitting and P.V.C. pipe.	no.	12
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Carried to collection

HOT AND COLD WATER RETICULATION

Copper tubing as described

A	15 mm diameter pipe fixed to walls.	m	6
B	15 mm ditto to walls in and including chase.	m	30
C	20 mm diameter pipe fixed to walls.	m	6
D	20 x 15 mm reducer.	no.	4
E	15 mm elbow.	no.	12
F	20 mm elbow.	no.	4
G	20 x 15 x 20 mm tee.	no.	4
H	20 mm socket union.	no.	4
I	15 mm diameter bent connector	no.	12
J	15 mm swivel elbow.	no.	4
K	15 mm socket union.	no.	4

Carried to collection

Brasswork

A	15 mm diameter brass high pressure screw down stop cock and joints to copper pipe.	no.	12
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B	25 mm diameter brass or equal high pressure undertile stopcock, and joint to copper pipe.	no.	4
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PVC pipes as described

C	22 mm diameter pipe fixed to walls.	m	6
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D	22 mm ditto to walls in and including chase.	m	6
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E	22 mm diameter pipe underground.	m	12
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F	22 x 20 mm reducer.	no.	1
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G	22 mm elbow.	no.	1
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H	22 mm socket union.	no.	1
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Carried to collection

BUILDER'S WORK IN CONNECTION WITH
PLUMBING (PROVISIONAL)

A	Chase brickwork for small pipe and flush up in cement mortar (1:3).	m	30
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Hole for small pipe including making good through

B	Half brick wall.	no.	1
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C	One brick wall.	no.	4
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Hole for large pipe including making good through

D	One brick wall.	no.	4
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TESTING

E	Allow for the testing of all the Plumber's work to the satisfaction of the Engineers and for the retesting after making good defects.	item	1
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Carried to collection

COLLECTION

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BILL NO.11: PLUMBING (PROVISIONAL)
CARRIED TO SUMMARY

BILL NO.12

GLAZING

(For Preambles see General Specification)

Mirrors

A 6 mm clear float quality glass silvered and sealed mirror with bevelled edges sprayed on back with clear lacquer before fixing four times drilled for and plugged and screwed to plastered walls with and including chromium plated capped mirror screws and rubber washers size 600 x 600 mm no.

4

BILL NO.12: GLAZING
CARRIED TO SUMMARY

BILL NO.13**PAINTING**

(For Preambles see General Specification)

ON PLASTER, ETC

Prepare and apply three coats external quality
P.V.A. emulsion paint externally on

A Fine woodfloat plastered walls. m² 298

B Fine woodfloat plastered walls in narrow widths
ditto. m² 1

Prepare and apply three coats internal quality
P.V.A. emulsion paint internally on

C Steel trowelled plastered walls. m² 306

D Ditto in narrow widths. m² 2

Prepare and apply three coats internal quality
ceiling white PVA paint internally on

E Ceilings m² 179

ON METAL

Clean down, touch up priming coat and apply one
undercoat and two finishing coats high gloss
enamel paint on

F Pressed door frames. m² 15

ON WOOD, ETC

G Carbolineum saturate sawn softwood wall plate
before fixing. m² 12

Clean down, prime, stop and apply one undercoat
and two finishing coats high gloss enamel pain on

H General surfaces of doors. m² 31

LEAVE CLEAN

J Allow for touching up all work throughout, clean off
all paint, oil, cement or other stains or marks, floors,
ceilings, glass, etc. and leave all surfaces in full and
proper working order. item

BILL NO.13: PAINTING
CARRIED TO SUMMARY

BILL NO.14

SPECIALIST SERVICES

(For Preambles see General Specification)

PROVISIONAL SUMS

A	Provide a sum for the supply and delivery of iphone13 Pro Max, 128 GB, 6 GB Ram, 12 months warranty. iphone produced from an Apple authorised reseller.	no	8
B	Provide the sum of USD 7,000.00 (Seven thousand dollars) for Materials and Compaction Density Testing.	sum	1

PRIME COST SUMS

C	Air conditioning	sum	1
D	Add profit	%	
E	Add attendance	%	
F	Fire fighting equipment	sum	1
G	Add profit	%	
H	Add attendance	%	

**BILL NO.14: SPECIALIST SERVICES
CARRIED TO SUMMARY**

SUMMARY

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