EJMProject-SQL overview

The **EJM System** is a comprehensive system designed for the unique requirements of the construction industry. It consists of various subsystems that can be used as stand-alone applications but forms a powerful management tool when used together.

The **EJMProject-SQL** subsystem is used for estimating, certificates and planning. It integrates seamlessly the EJM SQL Accounting, Payroll and Tool & Equipment subsystems.

The actual costs from the various sub systems are then compared to the allowable costs generated in EJMProject-SQL in the Variance Report. This enables the user to take action as soon as unacceptable variances occur during the execution of the project.



The EJM System

Estimate overview

Resource library

- > The estimate is done in terms of resources
- Costs are captured against resources in the accounting and sub-systems compared in the Variance Report.
- > There are 9 major headings such as P&G, Plant, Labour, Material, Subcontractors.
- > Each of the 9 major headings can have up to 26 subheadings numbered A to Z
- Resources are entered under the subheadings, e.g. 3B for Artisan and given a unique code such as 3B0010

1 P&G	2 Plant	3 Labour	4 Material	5 Material	6 Pipes	7Roads	8 Subby	9 Provision
1A Establish 1B Running	2A Scaffold 2B Vehicles	3A Supervise 3B Artisan	4A Reinforce 4B Aggregates	5A Cement 5B Additives	6A uPVC 6B mPVC	7A Stabilise 7B Bitumen	8A Lab. only 8B Supply,Fit	9A Provision
	2C Small	3C Operator	4C Brick, block	5C Readymix	6C PVC	7C Signs		
	2D Fuel Oil 2G Concrete 2I Loaders 2J Compress 2K Tractor 2P Excavator	3D Skilled	4E Window,dr 4G Plumbing 4H Waterprf 4I Ceiling 4K Ironmngr	5D Shuttering 5E GeoTextile 5F Fasteners 5G Box	6D HDPE 6E Polyprop 6G SolilDrain 6N Channels 6O OG pipe	7D Gabions 7E Guardrail		

Click here to download sections from a Housing, Building and Civils resource library.

Example	of resources:			
Code	Description	Unit Defa	ault Rate	Rate's Date
3B	Labour / Artisans			
3B0010	Carpenter	Hour	50.00	2019-12-18
3B0020	Bricklayer	Hour	50.00	2019-12-18
3D	Labour / Skilled			
3D0010	Skilled	Hour	40.00	2019-12-18
3D0020	Steelfixer	Hour	40.00	2019-12-18

Cost centres

- Cost centres are a way to link bill of quantity (BoQ) items together
- > All BoQ items to do with Earthworks will be assigned to cost centre C and all those to do with concrete to cost centre F
- Together with the Project and Resource codes, Cost centres are also used when capturing costs in the Costing & Accounting system as well as the Payroll and Tool & Equipment that feeds into the cost ledger.
- Number refers to an internally generated number. Code can be changed and is used in the assigning and reporting. It must be unique. Accounting refers to the cost centre's code in the accounting system.

Number	Code	Description	Accounting
1	А	PRELIMINARY & GEN	A
2	В	SITE & DEMOLITION	В
3	С	EARTHWORKS	С
4	D	FORMWORK & JOINTS	D
5	E	REINFORCEMENT	E
6	F	CONCRETE & WATERPRF	F
7	G	BRICKWORK	G
9	I	PLASTERING	I
10	J	CARPENTRY AND JOINER	J
11	К	ROOFING	К
12	L	CEILING & PARTITION	L
13	Μ	PLUMBING & DRAINAGE	Μ
14	Ν	IRONMONGERY	Ν
15	0	WINDOWS AND DOORS	0

MasterBill

- > The MasterBill is a standard list of recipes that the estimator builds up to rapidly price a new Bill of Quantities.
- In its build-up it can consist of two or more resources and or MasterBills with a lower code (use MasterBill A1001 in pricing MasterBill B1001 but not vice versa.)
- A MasterBill can used to price an item if it is similar to a MasterBill item. For example, if there is a BoQ item for the excavation in soft material per m3 and there is a MasterBill items B1001 that has been priced to do it, price the BoQ item by linking and copying it from the MasterBill B1001
- In pricing a MasterBill, any resource and any MasterBill item lower down (towards the base of the pyramid) can be used.

Build up more complex MasterBills. MasterBills can use resources and other Masterbills lower in the pyramid. Mortar (G00020) consisting of resources sand (4B3010) cement (5A0030), MasterBills Mixing Team (@Ht070) and Concrete Mixer (@PC019) can be used in a one-brick wall (G42039)

MASTERBILL (hierarchical with increasing complexity from @ to Z)

MasterBill Items

In building up a MasterBill you usually start with the basic building blocks that will be used in more complex build-ups later

MasterBill	Description	Unit	Rate
@HT	LABOUR TEAMS		
@HT050	Excavation team 1 + 4 unskilled	Day	1 170.00
@HT060	Concrete Team 2 + 6 unskilled	Day	2 070.00
@HT110	Carpentry Team 1 + 2 (small boxes, slab edges, columns, stairs)	Day	1 170.00
@HT150	Pipe laying Team 1 + 3	Day	1 440.00
@HT160	Brick laying team 1 + 1	Day	810.00
@HT220	Painting team 1 + 2	Day	1 170.00
@P	PLANT, EQUIPMENT & TOOLS CLUSTERS		
@PB	BACKHOE/ LOADERS		
@PB010	Backhoe Loader:2 X D: 7-8 t: (40Kw)	Hour	435.00
@PB020	Backhoe Loader:4*4 D: 7-8 t: (50Kw)	Hour	437.91
@PC	CONCRETE EQUIPMENT		
@PC030	Con Mixer: Diesel/Petrol: 400 I w/o labour	Day	2 030.00
@PC110	Con Trowel/Power Float: Walk Behind	Day	380.80
@PC125	ConCrete Vibrators: Diesel/Petrol Drive plus poker w/o labour	Day	380.80
@PC130	Concrete Saw:Manual Propelled 9.5 kW/13HP w/o labour	Day	417.50
@PD	BULLDOZERS		
@PD010	Bdozer :17-20t125kW: Cat D6	Hour	937.99
@PD030	Bdozer :30-35 t:200W:CatD9	Hour	1 395.18
@PE	EXCAVATORS & LOADERS		
@PE010	Traxc:25t (120kW) Cat963	Hour	905.11
@PE040	Traxc:35t rock bucket (160kW) Cat330	Hour	1 109.00

These are then used in more complex MasterBill items:

MasterBill	Description	Unit	Rate
C000	Trench excavation		
C00010	Excavate trench (excavator) - intermediate material. Trim	M ³	55.38
C00020	Excavate trench (TLB) - soft. Hand trimming	M ³	54.00
C00030	Excavate trench (hand) 2.4m3/day/worker	M ³	93.75
C001	Trench bedding		
C00110	Bedding with material from trench	М³	97.29
C00120	Bedding with material from commercial sources	M ³	422.29
C002	Trench backfill		
C00230	Backfill by hand	M ³	64.86
C00240	Backfilling from excavations compact to 90% Mod AASHTO	M ³	69.52

<u>Click here to download</u> for items from a Housing, Building and Civils MasterBill.

The MasterBill screen and pricing

In order to price a MasterBill item, **double-click** on the item's **Cost Rate** cell.

:	Save Save	And Close 👻							
	Header Ty	be .	Row Index	Item Code	Description	Unit	Cost Centre	Cost Rate	Notes
7	-		-	RBC	e C C	RBC	=	=	RBC
	🖻 Su	b Header	0	C00	TRENCHING				
	Θ.	Sub-Sub Header	0	C000	Trench excavate clusters				
		Markup Value	0	C00010	Excavate trench (excavator) - intermediate material. Trim	M3	EARTHWORKS	28.88	EM 19/12
>		Markup Value	1	C00020	Excavate trench (TLB) - soft. Hand trimming	M3	EARTHWORKS	55.00 🌲	EM 19/12
		Markup Value	2	C00030	Excavate trench (hand) 2.4m3/day/worker	M ³	EARTHWORKS	93.75	EM 19/12
		Markup Value	3	C00040			EARTHWORKS		

The pricing screen will be displayed:

- > On the top left is the summary of the costs under the (9) resource cost headings
- > Towards the right is a list of the Global Variables. Refer to the next section for a detailed discussion
- > Centre right is the Local Variables. These are variables that only apply to this MasterBill item
- > On the right-hand top left is a list box for the resources and underneath it the MasterBill list box
- > The body of the pricing screen consist of the following columns:
 - Code This will be either a MasterBill or a Resource code.
 - Type This will be automatically populated depending on whether the code is a MasterBill (MB) or a Resource R
 - Rate it will be inherited from the code. It cannot be changed here
 - Quantity Formula is a string expression to calculate the quantity. The arithmetic rules of precedence apply.
 - Quantity the calculated result of the Quantity Formula
- Production/ This can also be a string expression similar to the Quantity Formula The sum of the cost lines will be divided by the value of the string.

P	roject Mas	ter Bill Def	ailed Cost																	
	ile Navi	gation																		
	Accept A	ccept And	Close Ne	xt Item Previous Item 👻																
Γ	Category		Valu	ue	1	Global						Loc	cal					Res	ources	
	Fastener	Sundry		0.00	^	Nar	me		Formula	-	1		Name	Fo	rmula	1			Code 🔺	Description
	Labour			15.50		*		Click here t	o add a new row	^		*	Cl	ick here to add a	a new row		~	7	R C	# C
	Material			0.00		> [Gf	foaml		0	=		F						>	1A0000	SITE ESTABLISHMENT
	P&G			0.00		[GH	- -IrDay]		9		<u> </u>					l			1A0010	Erect site fencing
1	Plant			39.50		[GI	intBag]		0										1A0020	Erect site store / tool shed
	Prov sum			0.00		[GI	intCill]		1										1A0030	Erect site toilet flushable
	Subby			0.00	▼	ſGI	intClav1		1	-		_							1A0040	Provide and erect name board
	Code	Туре	Description		Ur	it	Rate	Quar	ntity Formula						Quantity	Amount			1A0050	Transport caravans to site and from site
1	@PB010	MB	Backhoe Lo	ader:2 X D: 7-8 t: (40Kw)	Ho	our	4	1 'TL	B with labour to trim						1.00000	435.0000	00		1A0060	Transport containers to and from site
	3F0010	R	Section lead	der	Ho	our		40.00 1							1.00000	40.00000	00		1A0070	Site Office - provide for duration of contract
	3G0030	R	Labour - ca	sual	Ho	ur		25.00 3							3.00000	75.00000	00		1A0080	Car port - provide for duration of contract
																			1A0100	1A0100
																			180000	SITE RUNNING
																		Mas	ster Bills	
																			Item 🔺	Description
																		7	8 <mark>0</mark> C	a B C
																		>	#Z_	
																		0	@HP010	Site Agent
																			@HP020	Foreman
																			@HP030	Technician
																			@HP040	
																			@HT030	Demolition team 1+ 2 unskilled
																			@HT040	Excavation team 1 + 1 unskilled
		_																	@HT050	Excavation team 1 + 4 unskilled
	roduction /	10												Total	10.0000000	55.00			@HT060	Concrete Team 2 + 6 unskilled
	nit• M3	Item	C00020	Description: Excavate tr	ench	(TI B) -	soft Ha	nd trimming										-	@HT070	Concrete mixing & wheelbarrow team 1 + 5
	ing his	atem.	000020	Descriptions Excavate u	chich	(100) -	3016 116	na amining											(¤H) 100	Carbentry leam 1 + 1

Say we do not want to build up rigid formulas for fixed size teams working a fixed number of hours per day, or where the length of the workday differs from site to site and/ or the composition of the teams, we can use variables.

There can be either Global Variables (starting with a G) that applies over the whole project or Local Variables (starting with an L) that applies to only this project

Pi	oject Master	Bill Det	ailed Co	ost											
	ile														
	<u>A</u> ccept <u>A</u> cce	pt And	Close	*											
	Category			Value		Glob	pal				L	ocal			
>	Fastener/Sun	dry		28.60		N	Name		Formula		1	Name	For	mula	
	Labour			273.12		*	C	lick h	here to add a new row	^	*	Click here to	add a	new row	A
	Material			386.90		[[GHrDay]		9			[Lwidth]	0.4	00	
	P&G			0.00		[[GIntBag]		0			[Lheight]	0.6	00	
	Plant			2.22		[[GIntCill]		1		>) [Larea]	[Lw	idth] * [Lheight]	
	Prov sum			0.00		> [[GIntClay]		1						
	Subby			9.90		ſ	[GIntMaxi]		n	-					
	Code	Туре	Descrip	ption	Un	nit	Rate		Quantity Formula					Quantity	Amount
	4E3110	R	Alumini	ium window 400w 600h	Ea	ch	0	.00	1					1.00000	0
	O00010	MB	Align a	nd fix window frame to wall	ea	1	61	.00	1					1.00000	61.0000000
>	4C1010	R	Concre	ete Lintel 100mm x 0.9m	Ea	ch	37	.00	[GIntClay] ' at least 1 lintel					1.00000	37.0000000
	4C1010	R	Concre	ete Lintel 100mm x 0.9m	Ea	ch	37	.00	[GXClay] ' Additional lintel if plaste	red outside				1.00000	37.0000000
	130050	MB	Plaster	& paint not exceeding 150mm	М		36	. 17	2* [Lheight] 'internal sides of win	ndow				1.20000	43.4008800
	140040	MB	Plaster	* &paint soffit of window openin	М		52	.62	[Lwidth] ' Internal soffit					0.40000	21.0482100
	140030	MB	Plaster	* & paint not exceeding 150mm	М		30	.68	[Lwidth] 'Plaster internal window (cill				0.40000	12.2732100
	G90170	MB	Interna	al terazo cill	М		135	.61	[GIntCill] * [Lwidth]					0.40000	54.2450083

Importing the Bill of Quantities

5

Import the Bill of Quantities from a file such as Excel or WinQs If you import from Excel, match the columns in the Excel sheet with the fields in the Bill Columns that turn green has been successfully matched. Those in pink will not be imported.

Import Import And Close					
Select Excel file to Import :	C:\Users\Ernst Marais\Desktop_EJM de	mo\Examples\SQL Project met Level.xlsx			
Import File Setup :					
BoQ					
Import Settings					
Import Sheet :					
Level	Item	Description	UNIT	QUANTITY	RATE
HEADER TYPE	ITEM CODE	DESCRIPTION	UNIT	QUANTITY	IGNORE
> 1		BILL 1:			
2		PAVING CRACK REPAIRS WITHIN			
6	1	Removal of concrete Paving	m3	1170.4	
6	2	Concrete class 35MPa/38mm laid	m3	1292	
3		Excavation item:			
6	3	Excavations not exceeding 2m de	m3	462	
6	4	Rip and recompact insitu material	m2	3400	
6	5	G2 materials compacted to 98%	m3	622	
6	6	G5 materials compacted to 98%	m3	150	
6	7	Sawcut 107mm deep and 3mm wid	m	1800	
6	8	Coating of joints	m2	471	
6	9	Curing of concrete surfaces	m2	3400	
6	10	Variation in rate of application of c	1 Contraction of the second se	300	
6	11	Broom finish	m2	3400	

The Bill of Quantity screen

der	Туре	Row Index	Copy MB	Item	Description	Unit	Cost Centre	Bill Quantity	Detail Price	Cost Rate	Sell Rate	Cost Amount	Markup	Sell Amount	Notes	Fin
		-	-	RBC	s C	RBC	=	=		=	-	=	-	-	RBC	[
Θ.	Sub	2			EARTHWORKS											
	- Ма	0	C10040	n 10 10	Excavate in soft for strip footing, use as backfill. Trim excavation	Mз	EARTHWORKS	6.85		136.43	156.89	934.13	15.00%	1 074.23		[
	Ма	2	C10420	p1010	150 mm G7 selected layer compacted to 93% Mos AASHTO (Min CBR 15%)	Mз	EARTHWORKS	5.30		445.32	512.11	2 360.17	15.00%	2 714.18		[
φ.	Sub	3			FORMWORK & MOVEMENT JOINTS											
	L. Ma	0	D70050	n1010	Formwork to edge of slabs 300mm high	M2	FORMWORK	29.02	V	258.90	297.74	7 514.57	15.00%	8 641.90		ſ
φ.	Sub	4			REINFORCEMENT											
	Ma	0	E10050	p2040	Type reference 193	M2	REINFORCE	124.59		35.14	40.41	4 378.04	15.00%	5 034.78		
	Ма	1	E30110	n1010	SCBF High Tensile Bars: Y12mm	Ton	REINFORCE	0.77		15 962.50	18 356.88	12 370.42	15.00%	14 225.99		ſ
	Ma	2	E40030	q1100	4mm dia wire roof tie blt into brickwork 1600mm long	NO	REINFORCE	3.00	V	15.10	17.36	45.30	14.97%	52.08		
6 -	Sub	5			CONCRETE & WATERPROOFING											
	Ma	0	F01130	p2040	Power floated finish.	M2	CONCRETE	124.59	V	19.73	22.69	2 458.25	15.00%	2 827.00		
	- Ма	1	F11055	n1010	20MPa/19mm concrete in footing, cast against excavated surface	Мз	CONCRETE	19.68		1 641.03	1 887.18	32 300.07	7 15.00%	37 145.03		
	Ma	2	F51020	p2040	250 Micron Waterproofing Sheeting under Floors	M²	CONCRETE	124.59		11.80	13.58	1 470.77	15.04%	1 691.97		
ф- I	Sub	6			BRICKWORK											
	- Ма	0	G43010	r 10 10	Half daybrick wall in super-structure	M2	BRICKWORK	73.84	V	214.61	246.80	15 847.93	15.00%	18 224.92		
	- Ма	1	G43030	h5050	Brick on edge wall in sides to bath	M2	BRICKWORK	1.21		384.48	442.16	465.23	15.00%	535.01		
	- Ма	2	G43110	q1010	One daybrick wall in super structure ind wire ties	M2	BRICKWORK	136.19		427.02	491.08	58 155.69	15.00%	66 879.68		
	- Ма	3	G43120	q1060	One daybrick wall in beam- fill exe 250mm n/e 300mm h	м	BRICKWORK	58.05		176.63	203.12	10 253.20	15.00%	11 791.12		[
	— Ма	4	G70010	b3110	Ground preparation for paving	M2	BRICKWORK	50.00	V	15.75	18.11	787.50	14.98%	905.50		[
	Ма	5	G70020	b3110	Brick pavers on 50mm riversand on approved weedkiller	M2	BRICKWORK	50.00		247.19	284.26	12 359.27	15.00%	14 213.00		ľ
Θ.	Sub	7			PLASTERING											
	Ma	0	130020	h5050	18mm internal plaster to vertical brick surfaces	M2	PLASTERING	285.39		89.41	102.82	25 516.29	15.00%	29 343.67		
											Tot	al Cost: 73	0 618.99	Total Sell:	840 88	2.36

Pricing the Bill of Quantities

This is similar to pricing the MasterBill.



Pricing a BoQ item

It is similar to pricing the MasterBill

Category		Value	Glob	al		Local				R	esources	
Fastener/Su	indry	34.91		lame	Formula	Name	Forr	nula	1	1	Code 🔺	Description
Labour		387.19	*	Click	here to add a new row	*	Click here to add a	new row		5	7 R. C	n C
Material		1 115.23		GXPlast]		> D width1	0.60	າດ		5	1∆0000	SITE ESTABI ISHMENT
2&G		0.00		Gfoaml	0	[] height]	0.9		V	ŀ	140010	Frect site fencing
lant		3.34		GHrDav]	9	Lareal	Lwi	dth] * [Lheight]		IF	1A0020	Erect site store / tool shed
Prov sum		0.00		GIntBag]	0						1A0030	Erect site toilet flushable
Subby		14.85		GTntCill1	1						1A0040	Provide and erect name board
Code	Type	Description	Unit	Rate	Quantity Formula			Quantity	Amount	1	1A0050	Transport caravans to site and from site
E3220	R	Aluminium window 600w 900h	Each	695.00	1			1.00000	695.00		1A0060	Transport containers to and from site
00010	MB	Align and fix window frame to wall	ea	61.00	1			1.00000	61.00		1A0070	Site Office - provide for duration of contract
C 10 10	R	Concrete Lintel 100mm x 0.9m	Each	37.00	[GIntClay] 'at least 1 lintel			1.00000	37.00		1A0080	Car port - provide for duration of contract
C1010	R	Concrete Lintel 100mm x 0.9m	Each	37.00	[GXClay] ' Additional lintel if plastered outside			1.00000	37.00		1A0100	1A0100
30050	MB	Plaster & paint not exceeding 150mm	м	36.17	2* [Lheight] 'internal sides of window			1.80000	65.10		1B0000	SITE RUNNING
10040	MB	Plaster &paint soffit of window openin	М	52.62	[Lwidth] ' Internal soffit			0.60000	31.57	M	aster Bills	
Ю030	MB	Plaster & paint not exceeding 150mm	м	30.68	[Lwidth] 'Plaster internal window cill			0.60000	18.41	r	Item Co	Description
90170	MB	Internal terazo cill	м	135.61	[GIntCill] * [Lwidth]			0.60000	81.37	5	7 8 <mark>0</mark> 0	R C
0050	MB	Plaster & paint not exceeding 150mm	м	36.17	[GXPlast]* 2* [Lheight] 'External sides of wir	wobr		1.80000	65.10	5	M22160	50 mm Stop ends
6040	MB	Plaster &paint soffit of window openin	м	52.62	[GXPlast]* [Lwidth] 'External soffit			0.60000	31.57	ľ	M50130	
0030	MB	Plaster & paint not exceeding 150mm	м	30.68	[GXPlast]* [Lwidth] 'Plaster external window	cill		0.60000	18.41		010550	Steel window 2000w 1540h
40020	MB	Plaster external band 75mm wide aro	м	40.96	[GXBandW] * (2 *([Lwidth] + [Lheight]))			3.00000	122.88	F	050020	813w 2032h 38 x 38mm Timber Door Frame (
A0280	R	L/O subby Fix curtain track	Meter	24.75	[Lwidth]			0.60000	14.85		020100	
K5030	R	Curtain track-1.27m	Numbe	246.24	1			1.00000	246.24		V11160	110 mm Taper channels
00020	MB	Waterproof window or door along peri	М	10.00	2 *([Lwidth] + [Lheight])			3.00000	30.00		W31060	Headwall - 1200mm
											Y71080	300 x 130 mm High Kerbs (Fig 14)
											@00090	1 cost Wood Processative

Marking a block

7

A block can be marked for deletion, applying a mark-up, assigning to a cost centre etc.

Ctrl-Click the start of the block and Shift-Click the end

The section that you choose will turn blue.

In thus example, the block is marked up.

Hea	der	Туре	Row Index	Copy MB	Item	Description	Unit	Cost Centre	Bill Quantity	Detail Price	Cost Rate	Sell Rate	Cost Amount	Markup	Sell Amount	Notes	Final
? =			-	-	RBC	ROC	RBC	-	-		=	-	-	=	-	RBC	
	•	Sub	1			SITEWORKS & DEMOLITIONS											
		Ma	0	B00010	b2020	Setting out of house	Item	SITE & DEM	1.00		1 401.82	1612.0	9 1 401.82	15.00%	1 6 1 2.09		
		Ма	1		n 1005	Clear site of vegetation for free-standing house. Strip & stockpile on site. Site approx				V		Pr	oject BoQ Cost	A M	larkup	×	
		Ma	2	B80010	n2040	Soil poisoning under floor	M2	FADTHWORKS	174 59				P&G		ыкар	0.00%	
		Ma	3	B90030	b2030	Clean house and yard, level topsoil, dump rubbish		EARTHWORKS			1 388.75	15	Plant			10.00%	
	•	Sub	2			EARTHWORKS							Labour			15.00%	
		ма	0	C10040	n 10 10	Excavate in soft for strip footing, use as backfill. Trim excavation	Мз	EARTHWORKS	6.85		136.43	1	Material Fastener/Sundry			15.00% 15.00%	
		Ма	2		p1010	150 mm G7 selected layer compacted to 93% Mos AASHTO (Min CBR 15%)		EARTHWORKS		V		5	Pipes			15.00%	
	•	Sub	3			FORMWORK & MOVEMENT JOINTS						_	Roads			15.00%	
		Ма	0	D70050	n 10 10	Formwork to edge of slabs 300mm high	M2	FORMWORK	29.02	V	258.90	2	SUDDY			10.00%	
	0	Sub	4			REINFORCEMENT						Ű.	Prov sum			<u>%</u>	
		Ма	0	E10050	p2040	Type reference 193	M2	REINFORCE	124.59	✓	35.14						
		- Ма	1	E30110	n 10 10	SCBF High Tensile Bars: Y12mm	Ton	REINFORCE			15 962.50	18 3					
		Ma	2	E40030	q1100	4mm dia wire roof tie blt into brickwork 1600mm long	NO	REINFORCE	3.00	2	15.10					OK	
	-	Sub	5			CONCRETE & WATERPROOFING											
		Ма	0	F01130	p2040	Power floated finish.	M2	CONCRETE	124.59	V	19.73	22.6	9 2 458.25	15.00%	2 827.00		
		- Ма	1	F11055	n1010	20MPa/19mm concrete in footing, cast against excavated surface	Mз	CONCRETE	19.68	V	1 641.03	1 887.1	8 32 300.07	15.00%	37 145.03		
		Ma	2	F51020	p2040	250 Micron Waterproofing Sheeting under Floors	M2	CONCRETE	124.59	V	11.80	13.5	8 1 470.77	15.04%	1 691.97		
	ė.	Sub	6			BRICKWORK											
		Ма	0	G43010	r 10 10	Half claybrick wall in super-structure	M2	BRICKWORK	73.84	V	214.61	246.8	0 15 847.93	15.00%	18 224.92		
		- Ма	1	G43030	h5050	Brick on edge wall in sides to bath	M2	BRICKWORK	1.21	V	384.48	442.1	6 465.23	15.00%	535.01		
		- Ма	2	G43110	q1010	One claybrick wall in super structure incl wire	M2	BRICKWORK	136.19	V	427.02	491.0	8 58 155.69	15.00%	66 879.68		
												Т	otal Cost: 728	149.09	Total Sell:	839 28	.3.90
C	alcu	late	Apply Ma	sterBill	Set Marku	p						Т	otal Profit: 111	134.81	Total Mark	up: 15.26	%

Analysing the Bill of Quantities

Once you have priced the BoQ, click on Calculate to display the resources used. You can edit the rates as they apply to the project and then click Update to update all the calculations based on these rates.

	Resource	Description	Unit	Quantity	Rate	Ammount	Date						
2	Plant						I						
	2D0010	Diesel	Liter	14.12	16.50	233.00	2019/09/08						
	2D	Fuel & oil				233.00							
	2G0120	Con Mixer : 400 1	Day	0.71	1,370.00	967.29	2016/10/27						
	2G	Concrete				967.29							
Total:	2	Plant				1,200.29							
3	Labour												
	3B0030	Concretor	Hour	6.35	50.00	317.72	2018/08/29						
	3B0040	Plasterer	Hour	185.87	50.00	9,293.59	2018/08/29						
	3B	Artisans				9,611.31							
	3F0020	Semi-skilled	Hour	371.74	40.00	14,869.74	2019/12/18						
	3F	Sem-skilled				14,869.74							
	3G0010	Unskilled - hour	Hour	31.77	25.00	794.31	2019/11/25						
	3G	Unskilled				794.31							
Total:	3	Labour				25,275.36							
4	Material	Material											
	4B3070	Plaster Sand	M³	13.95	445.00	6,208.63	2019/09/06						
	4B	Aggregates				6,208.63							
Total:	4	Material				6,208.63							
5	Fastener/Sundry												
	5A0030	Cement General Purpose 42.5N	50Kg	84.50	90.00	7,605.35	2019/09/08						
	5A	Cement, lime				7,605.35							
Total:	5	Fastener/Sundry				7,605.35							
Grand To	tal:	1				40 280 64							

	Му Сог	istructi	on Con	ipany 2	021											
	Project	: House	MRB	M 140N	12	Cost	Cent	re An	alysis 1	Based on	Billed qu	antity				
														AD	MIN 2021/0	4/08 17:35
Cos	t Centre	Sell	Cost	Profit	P&G	Plant	Labour	Material	Fastener/ Sundry	Pipes	Roads	Subby	Prov sum	Other	Markup 9	⁄o of Cost
А	PRELIMINARY & GEN	95,835	83,335	12,500	40,300	11,235	31,800	0	0	0	0	0	0	0	150	11.41%
в	SITE & DEMOLITION	1,612	1,402	210	0	0	1,402	0	0	0	0	0	0	0	15	0.19%
С	EARTHWORKS	9,125	7,935	1,189	0	2,688	2,727	2,520	0	0	0	0	0	0	75	1.09%
D	FORMWORK & JOINTS	8,642	7,515	1,127	0	0	4,023	0	3,492	0	0	0	0	0	15	1.03%
Е	REINFORCEMENT	19,313	16,794	2,519	0	0	2,190	14,604	0	0	0	0	0	0	45	2.30%
F	CONCRETE & WATERP	41,664	36,229	5,435	0	3,916	6,813	13,514	11,985	0	0	0	0	0	45	4.96%
G	BRICKWORK	112,549	97,869	14,680	0	770	42,369	43,277	9,915	0	0	1,538	0	0	90	13.40%
I	PLASTERING	46,332	40,290	6,043	0	1,200	25,275	6,209	7,605	0	0	0	0	0	30	5.51%
J	CARPENTRY AND JOIN	6,981	6,071	911	0	0	0	4,134	0	0	0	1,936	0	0	15	0.83%
ĸ	ROOFING	84,693	73,646	11,047	0	0	0	63,372	1,553	0	0	8,721	0	0	90	10.08%
L	CEILING & PARTITION	62,589	54,424	8,165	0	0	0	40,099	0	0	0	14,325	0	0	75	7.45%
м	PLUMBING & DRAINAG	62,297	54,171	8,126	0	0	0	20,125	0	0	0	34,046	0	0	300	7.41%
0	WINDOWS AND DOORS	63,372	54,525	8,848	0	91	11,410	40,367	774	0	0	1,883	0	0	212	7.46%
Ρ	ELECTRICAL WORK	24,308	21,137	3,171	0	0	0	0	0	0	0	21,137	0	0	165	2.89%
Q	TILING & GIAZING	62,065	53,969	8,096	0	0	0	33,886	75	0	0	20,008	0	0	75	7.39%
R	PAINTING, PAPERHAN	35,100	30,521	4,579	0	0	0	14,125	0	0	0	16,396	0	0	75	4.18%
S	PROVISIONAL SUMS	63,250	55,000	8,250	0	0	0	0	0	0	0	0	55,000	0	45	7.53%
Ζ	ROAD FINISHING	41,155	35,787	5,368	0	0	3,858	29,500	2,429	0	0	0	0	0	30	4.90%
	Grand Total:	840,882	730,619	110,263	40,300	19,900	131,869	325,732	37,828	0	0	119,990	55,000	0		
		Percentag	e of Cost:	15.09%	5.52%	2.72%	18.05%	44.58%	5.18%	0.00%	0.00%	16.42%	7.53%	0.00%		

This is followed by pie-charts presentation of the cost centres and major resource categories

8 |



Cost-rate breakdown

My Construction Company 2021

House MRBM 140M2

Project Code: 0001

Seq	Item	Description	Unit	Qty	Sell Rate	Cost	M/	P&G	Plant	Labour	Material	Fastener	Pipes	Roads	Subby	Prov sum	Other
· ·						Kate	Орр					/Sullary					
		BRICKWORK															
32	r1010	Half claybrick wall in super-structure	M²	73.84	246.80	214.61	0.15	-	150.07	6,557.21	8,306.46	834.19	-	-	-	-	-
33	h5050	Brick on edge wall in sides to bath	M²	1.21	442.16	384.48	0.15	-	2.60	313.86	134.30	14.46	-	-	-	-	-
34	q1010	One claybrick wall in super structure incl wire ties	M²	136.1 9	491.08	427.02	0.15		553.52	24,186.36	30,338.89	3,076.93		-	-	-	-
35	q1060	One claybrick wall in beam- fill exe 250mm n/e 300mm h	м	58.05	203.12	176.63	0.15		63.52	6,397.91	3,438.67	353.10			-	-	-
36	63110	Ground preparation for paving	M²	50.00	18.11	15.75	0.15	-	-	-	-	-	-	-	787.50	-	-
37	b 3110	Brick pavers on 50mm riversand on approved weedkiller	M²	50.00	284.26	247.19	0.15		-	4,914.00	1,059.00	5,636.27			750.00	-	-
		Subtotal BRICKWORK:						0.00	769.71	42,369.34	43,277.33	9,914.95	0.00	0.00	1,537.50	0.00	0.00
		PLASTERING															
39	h5050	18mm internal plaster to vertical brick surfaces	M²	285.3 9	102.82	89.41	0.15		808.60	15,926.64	4,286.18	4,494.87	-	-	-	-	-
40	q1010	18mm external plaster to vertical brick surfaces	M²	153.6 0	110.60	96.18	0.15	-	391.69	9,348.72	1,922.45	3,110.48	-	-	-	-	-
		Subtotal PLASTERING:						0.00	1,200.29	25,275.36	6,208.63	7,605.35	0.00	0.00	0.00	0.00	0.00

Sort the BoQ from the most to the least expensive item. The 80:20 principle usually applies My Construction Company 2021

House MRBM 140M2

Cost Bill sorted from High to Low

ADMIN Mon 05 Apr 2021 05:30:58 Project Code: 0001 Qty Cost Rate Item Description Unit Cost P&G Plant Labour Material Fastener Pipes Roads Subby Prov sum Other Seq /Sundry q1010 One claybrick wall in super structure incl 136.2 427.02 58,155.71 553.52 24.19 34 M² 30.34 3.08 107 p3020 Ceramic floor tiles on adhesive Type 1 M² 124.6 368.65 45,931.03 27.87 18,065.91 14,345.00 43,035.00 11,235.00 11 a2010 Contractor's supervision Month 3.0 31.80 n1010 20MPa/19mm concrete in footing, cast 11.50 29 M 19.7 1,641.03 32,300.03 3,442.00 5.10 12.26 against excavated surface m1010 Provisional sum by client for built in 30.000.00 30.000.00 116 Sum 1.0 30.000.00 cupboards 80 c3540 Aluminium window 1500w 1500h 6.0 4,752,54 28,515,26 40.49 4.51 23.41 0.33 222.75 ea 39 h5050 18mm internal plaster to vertical brick M² 285.4 89.41 25,516,30 808 60 15.93 4 29 4 4 9 urfaces 124.6 52 s1010 6.4mm gypsumboard ceiling fixed to M² 203.49 25,353.72 19.37 5,980,44 branders & h/strp 44 t3039 Rooftiles ludlow std complete M² 180.0 133.67 24.060.60 20.82 3.240.00 121 b3080 ClearVu mesh panel 3305w 1800h Panel 2 284 00 22,840.00 20.50 10.0 2.34 20,000.00 117 m1020 Provisional sum by client for kitchen 1.0 20,000.00 20,000.00 cupboards

Cost Rate of Items (Rate break down)

Mon 05 Apr 2021 05:15:52

ADMIN

My Construction Company 2021

House MRBM 140M2

Project Code: 0001

Sell Bill of Quantity

ADMIN Mon 05 Apr 2021 05:37:30

Item	Description	Unit	Quantity	Rate	Amount
	BRICKWORK				
r1010	Half claybrick wall in super- structure	M²	73.84	246.80	18,224.92
h5050	Brick on edge wall in sides to bath	M²	1.21	442.16	535.01
q1010	One claybrick wall in super structure incl wire ties	M²	136.19	491.08	66,879.69
q1060	One claybrick wall in beam- fill exe 250mm n/e 300mm h	м	58.05	203.12	11,791.12
ъ3110	Ground preparation for paving	M²	50.00	18.11	905.50
b 3110	Brick pavers on 50mm riversand on approved weedkiller	M²	50.00	284.26	14,213.00
	Subtotal BRICKWORK:				112,549.25
	PLASTERING				
h5050	18mm internal plaster to vertical brick surfaces	M²	285.39	102.82	29,343.68
q1010	18mm external plaster to vertical brick surfaces	M²	153.60	110.60	16,988.60
	Subtotal PLASTERING:				46,332.28

Supply and install (Electrical) lay-out

My Construction Company 2021

House MRBM 140M2

Sell Bill of Quantity (Including Material & Labour rates)

Project Co	ode: (0001			ADN	/IIN	Mon	05 Apr 2021 05:44:40
Seq.	Item	Description	Unit	Quantity	Material	Labour	Total Rate	Amount
-		BRICKWORK						
32	r1010	Half claybrick wall in super- structure	M²	73.84	125.81	88.80	246.80	18,224.92
33	h5050	Brick on edge wall in sides to bath	M²	1.21	125.09	259.39	442.16	535.01
34	q1010	One claybrick wall in super structure incl wire ties	M ²	136.19	249.43	177.59	491.08	66,879.69
35	q1060	One claybrick wall in beam- fill exe 250mm n/e 300mm h	м	58.05	66.41	110.21	203.12	11,791.12
36	b 3110	Ground preparation for paving	M²	50.00	15.75	0.00	18.11	905.50
37	b 3110	Brick pavers on 50mm riversand on approved weedkiller	M ²	50.00	148.91	98.28	284.26	14,213.00
		Subtotal BRICKWORK:						97,868.84
		PLASTERING						
39	h5050	18mm internal plaster to vertical brick surfaces	M ²	285.39	33.60	55.81	102.82	29,343.68
40	q1010	18mm external plaster to vertical brick surfaces	M²	153.60	35.32	60.86	110.60	16,988.60
		Subtotal PLASTERING:						40,289.64

Variance reports

This compares the Allowables from the Estimate/ Certificate interface to the actuals from the Accounting system

My Construction Company 2021

House MRBM 140M2

Cost centre Variance report (based on Cumulative)

Project Code	e: 0001			ADMIN	Ī	Sun 23 Ma	y 2021 04:48:30
Cost Centre	Description		Allowable	Actual (Cost ledger)	Variance	%Actual/ Allowabl e	%Variance/ Allowable
A	PRELIMINARY & GEN		65,541	58,354	7,187	89.0	11.0
в	SITE & DEMOLITION		1,402	4,434	-3,032	316.3	-216.3
с	EARTHWORKS		5,522	33,988	-28,465	615.5	-515.5
D	FORMWORK & JOINTS		7,515	0	7,515	0.0	100.0
E	REINFORCEMENT		16,748	23,198	-6,450	138.5	-38.5
F	CONCRETE & WATERPRF		36,229	49,410	-13,181	136.4	-36.4
G	BRICKWORK		97,869	85,411	12,458	87.3	12.7
I	PLASTERING		40,290	21,708	18,582	53.9	46.1
J	CARPENTRY AND JOINER		6,071	2,500	3,571	41.2	58.8
к	ROOFING		73,646	73,514	132	99.8	0.2
L	CEILING & PARTITION		54,424	0	54,424	0.0	100.0
м	PLUMBING & DRAINAGE		7,056	0	7,056	0.0	100.0
0	WINDOWS AND DOORS		53,079	40,937	12,142	77.1	22.9
Р	ELECTRICAL WORK		0	0	0	0.0	0.0
Q	TILING & GIAZING		0	0	0	0.0	0.0
R	PAINTING, PAPERHANG		0	9,016	-9,016	0.0	0.0
S	PROVISIONAL SUMS		0	0	0	0.0	0.0
Z	ROAD FINISHING		0	0	0	0.0	0.0
		Total:	465,392	402,470	62,922	86.5	13.5

My Construction Company 2021

House MRBM 140M2

Variance (based on Cumulative)

				(Cumulative	•		Actual			Variance	
	Resource	Description	Unit	Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt
	5J0010	* Clay Pavers (PA)	Thousa nd	2.5	2,277	5,636	3.0	2,277	6,832	-0.5	0	-1,196
	5J	Pavers				5,636			6,832			-1,196
Total:	5	Fastener/Sundry				35,306			33,618			1,689
8	Subby				I							
	8A0020	* L/O subby Labour soil/poison & weed/kill	M2	50.0	15	750	50.0	15	750	0.0	0	0
	8A0210	L/O subby Fix cornice	Meter	123.0	36	4,426	0.0		0	123.0		4,426
	8A0260	L/O subby Fix skirting	Meter	123.0	16	1,936	0.0		0	123.0		1,936
	8A0280	* L/O subby Fix curtain track	Meter	12.6	25	312	13.0	25	322	-0.4	0	-10
	8A0360	L/O subby Fit tr hold/soapdish	Number Of	0.0	68	0	0.0		0	0.0		0
	8A0370	L/O subby Lo glazed wall tiles	M^2	0.0	60	0	0.0		0	0.0		0
	8A0380	L/O subby Painting lab-1+2 pva	Meter	0.0	9	0	0.0		0	0.0		0
	8A0390	* L/O subby Painting lab-1+2enam	M2	13.5	23	304	14.0	23	315	-0.5	0	-11
	8A0400	* L/O subby Painting lab-varnish	M2	16.7	22	367	17.0	22	374	-0.3	0	-7
	8A0420	L/O subby Paint lab only pva	M²	0.0	27	0	0.0		0	0.0		0
	8A0490	* L/O subby Fit timber external door	Number Of	3.0	300	900	3.0	300	900	0.0	0	0
	8A0510	L/O subby Lay floor tiles	M^2	0.0	145	0	0.0		0	0.0		0
	8A0520	L/O subby Shower floor broken tiles	Number Of	0.0	203	0	0.0		0	0.0		0
	8A0590	L/O subby Fix bathroom accessories	Number Of	0.0	68	0	0.0		0	0.0		0
	8A0610	L/O subby Ceiling brander	M^2	124.6	18	2,243	0.0		0	124.6		2,243
	8A0620	L/O subby Fix ceiling	M ²	124.6	48	5,980	0.0		0	124.6		5,980

-

Scheduling and cashflow overview

Gant	t Chart	
	Resorgante MRBM House 140m2 - Saseline	
Save	Save and Reload Close	Check Redo Add Drivert Delete Nove Down Up Screeze Set as Down Up Screeze Set as Schedule Note: Screeze Set as Schedule Screeze Set as Schedule Concurs Screeze Set as Schedule Concurs Screeze Set as Schedule Concurs Screeze Screeze Set as Schedule Concurs Screeze Schedule Concurs Schedule Concurs Screeze Schedule Concurs Screeze Schedule Concurs Schedule Co
	liek Bill of Quantitier Finish	2020-03-01 2020-03-08 2020-03-15 2020-03-22 2020-03-29 2020-04-05 2020-04-12 2020-04-19 2020-04-26 2020-05-03 2020-05-10 2020-05-1 S A C V C V S S A C V C V S S A C
3.	Fixed cost a1060 - Surety fe - 13-03-20	0 a1060 - Surety fees, a1030 - Contractors all risk https://civilsure.co.za/, a1080 - Site establishment (1A, a1050 - NHERC enrollment
2	Time related costs a3020 - Health ar124-04-20	0 a3020 - Health and safety time realteda2020
3	Site establishment -06-03-20	
- 4	Remove topsail, stockpili (06-03-20	ø 👘 📭
5	Set out house b2020 - Setting c:09-03-20	0 Betting out of house
6	Foundation excavation p2040 - Soil pois 16-03-20	10 page 10 - Soil poisoning under floor, n1010 - Excavate in soft for strip footing: use as bac, n1005 - Clear site of vegetation for free-standing hour
7	Inspection foundation ex (18-03-20	o 🄶
8	Foundation concrete n1010 - Formwor 19-03-20	10 em1010 - Formwork to edge of slabs 300mm high, n1010 - 20MPa/19mm concrete in footing: cast against ex., p2040 - 250 Micron Water
9	Build to floor level 25-03-20	o 📕 📕 🚽 🚽
10	Backfill .01-04-20	ο 💼 -
11	Inspection (03-04-20	o 🔶
12	Poison, membrane, mest -06-04-20	ο
13	First fit electrition, plume 08-04-20	o 💼 7
14	Floor slab 109-04-20	
15	External walls q1010 - One clay (30-04-20	.0 p1010 - One claybrick wall in super structure
16	Internal walls h5050 - 18mm in 23-04-20	.0
17	Put up roof strusses 04-05-20	۵ 🗂
18	Chase conduits in walls 27-04-20	0
Crea	ate the Gantt chart and	lependencies - similar to MS, Project Progress black, Critical Path is red, non-critical blue

Link the Bill to the Schedule.

A Bill of Quantity item can be allocated to more than one Bar. (e.g. concrete in slabs will be cast in three stages).

📾 Gan	itt Chart		σ×
	Description: MRBM House 140m2 -	Baseline 2021	
Save	Close	lect Print Screen Undo Redo Add Insert Delete Move Move Increase Decrease Setas Status Schedule Highlight Level Save XML Load XML sis print Down Up Indent Indent Baseline Critical Path Resources	
	Database	View Edit Tasks Tools Export (MS Project)	
	Task	Bill of Quantities Start Effort Dur	20
			S
7	Inspection foundation excavation	18-03-2021 0h 0d ^	
8		p2040 - Type reference 193, n1010 - SCBF High Ten 🕆 18-03-2021 52.5h 1.09	- Type
9	Build to floor level	▼ p2040 - Type reference 193 100% ^	
		p3020 - Ceramic floor tiles on adhesive Type 1	
10	Backfill	g1050 - Municipal connection	
11	Inspection	✓ n1010 - SCBF High Tensile Bars: Y12mm 100%	
12	Poison, membrane, mesh	L h5050 - Lay shower floor in broken tiles	
13	First fit electrition, plumer	□ n1010 - Excavate in soft for strip footing; use as bac	
	nise ne electricist, planter	L 53080 - Clearou tencing post supply and erect	
14	Floor slab	Store Store wall is cides to bath	
15	External walls	2010 Vict & 2d alos manel or sisting to 150mm airt.	
16	Internal walls	☑ n1010 - Formwork to edge of slabs 300mm high 100%	
17	Put up roof strusses	a 1005 Close site of upportation for free standing helds up 2021 100 - 20	
10	C I I I I I I		
18	Chase conduits in walls	20-04-2021 100 20	
19	Roof cladding	t3039 - 38°38mm batten @ 320mm c/c to receive concr\05-05-2021 144h 3d	
20	Beamfilling	11-05-2021 32h 4d	
21	Internal plaster	28-04-202180h 10d	
22	Evternal plaster	19.05-2021 725 94	
22			
23	Ceilings	c3220 - Aluminium window 600w 900h, s1040 - 75mm g 12-05-2021 160h 5d	
24	Floor tiling	h6070 - 3mm glazed tiles - wall Type 1, h6050 - White gl 19-05-2021 160h 5d 🗸	
<			>
			₽





Certificate overview

With the Certificate you can certify the amount of work already done on the project by quantity, % or worksheet

- The Certificate system is interlinked with the Estimating system. Once you have created the Bill (either by importing or typing it), you can create a Certificate.
- There is a facility to do your measurements on screen by double-clicking on Cumulative Quantity. You can use various in-built functions. Refer to the screen.
- > You can also enter as a percentage completed or for a cost centre such as Earthworks
- > The system also allows for variable retention, Materials on Site, Escalation and a cover page.
- Because of the link to the Estimate, one can print a report of Allowables based on the month or cumulative progress. There is also a provision for an internal quantity, should the actual progress differ from the claimed quantity.

	inc.		beschpton	Offic	Diri Quarracy	Deirikate	ESCOLOGICION	contene	Current voide	r indi Cound	arrearrian og enn	The House da	canadave quartery	contaidure rerecentage	comolouve
		RBC	R C	ROC	-	-	-	-	-	-	-	=	=	=	-
÷. 5	Sub H	-	SITEWORKS & DEMOLITIONS												
	Mar	b2020	Setting out of house	Item	1.00	1 6 12.09	0	1.00	1 6 1 2.09	1.00	0.00		1.00	100.00%	1 6 1 2.0
	Mar	n 1005	Clear site of vegetation for free-standing ho	M2	450.00	6.00	0	450.00	2 700.00	450.00	0.00		450.00 🗘	100.00%	2 700.0
	Mar	p2040	Soil poisoning under floor	M2	124.59	8.34	0	125.00	1 042.50	124.59	0.00		125.00	100.33%	1 042.5
	Mar	b2030	Clean house and yard, level topsoil, dump ru	Item	1.00	1 597.06	0	0.00	0.00	1.00	0.00		0.00	0.00%	0.0
÷- 5	Sub H	-	EARTHWORKS												
	Mar	n 10 10	Excavate in soft for strip footing, use as bac	Mз	6.85	156.89	0	7.00	1 098.23	6.85	0.00		7.00	102.23%	1 098.2
	Mar	p1010	150 mm G7 selected layer compacted to 93%	Mз	5.30	512.11	0	3.00	1 536.33	2.00	0.00		3.00	56.60%	1 536.3
- s	Sub H		FORMWORK & MOVEMENT JOINTS												
	Mar	n 10 10	Formwork to edge of slabs 300mm high	M2	29.02	297.74	0	29.00	8 634.46	29.02	0.00		29.00	99.91%	8 634.4
÷- 5	Sub H	-	REINFORCEMENT												
	Mar	p2040	Type reference 193	M2	124.59	40.41	0	125.00	5 051.25	124.59	0.00		125.00	100.33%	5 051.2
	Mar	n 10 10	SCBF High Tensile Bars: Y12mm	Ton	0.77	18 356.88	0	0.70	12 849.82	0.77	0.00		0.70	90.33%	12 849.8
	Mar	q1100	4mm dia wire roof tie blt into brickwork 1600	NO	3.00	17.36	0	0.00	0.00	3.00	0.00		0.00	0.00%	0.0
- s	Sub H		CONCRETE & WATERPROOFING												
	Mar	p2040	Power floated finish.	M2	124.59	22.69	0	125.00	2 836.25	124.59	0.00		125.00	100.33%	2 836.2
	Mar	n 10 10	20MPa/19mm concrete in footing, cast again	Mз	19.68	1 887.18	0	20.00	37 743.60	19.68	0.00		20.00	101.61%	37 743.6
	Mar	p2040	250 Micron Waterproofing Sheeting under Fl	M2	124.59	13.58	0	125.00	1 697.50	124.59	0.00		125.00	100.33%	1 697.5
- 5	Sub H		BRICKWORK												
	Mar	r 10 10	Half claybrick wall in super-structure	M2	73.84	246.80	0	36.00	8 884.80	73.84	0.00		36.00	48.75%	8 884.8
	Mar	h5050	Brick on edge wall in sides to bath	M2	1.21	442.16	0	0.00	0.00	1.21	0.00		0.00	0.00%	0.0
	Mar	q1010	One daybrick wall in super structure incl wire	M2	136,19	491.08	0	136.00	66 786.88	136, 19	0.00		136.00	99.86%	66 786.8
	Mar	q1060	One claybrick wall in beam- fill exe 250mm n/	М	58.05	203.12	0	0.00	0.00	58.05	0.00		0.00	0.00%	0.0
	Mar	b3110	Ground preparation for paving	M2	50.00	18.11	0	0.00	0.00	50.00	0.00		0.00	0.00%	0.0
	Mar	b3110	Brick pavers on 50mm riversand on approved	M2	50.00	284.26	0	0.00	0.00	50.00	0.00		0.00	0.00%	0.0
													Prev Cumulative:	Current:	Cumulative
se C	vde												0.00	208 185.46	208 185.4

Setting up retention rules

Drag a column header here t	o group by that column	م
Percentage Retention	Base Retention	Retention Active Up To
*	Click here to add a new rov	N
> 10.00	0.00	500 000.00
0.00	50 000.00	1 500 000.00
Project Retention	Rules	_ = ×
File Navigation		
Accept New Acce	ept And Close Accept And New Next Item Previo	bus Item 👻
Percentage Retention) (%): Þ	
Base Retention (curre	ncy): 50 000.00	
Upper Limit (currency)): 1 500 000.00	

My Construction Company 2021

House MRBM 140M2

Materials on Site (MOS)

Project Code:	0001		ADMI	N	Tue 06 Apr 2021 07:59:58		
Resource	Description	Unit	Current Rate	Base Rate	Quantity	Amount @ Base Rate	
5A0020	Cement Portland-Composite 32.5N	50Kg	90.00	85.0000	20.00	1,700.00	
5A0030	Cement General Purpose 42.5N	50Kg	92.00	90.0000	50.00	4,500.00	
5 D 0150	50 * 152 rough sawn SAP	Meter	60.00	58.0000	100.00	5,800.00	
8C0020	Plumbing subcon. Gulley	Number Of	872.10	872.1000	3.00	2,616.30	
		l l	I	Total MOS a	t Base Rate	14,616.30	

Record the base rate (defaults to tender rate) current price of the material and quantity

My Construction Company 2021

House MRBM 140M2

Progress Claim (Certificate)

ct Code	e: 0001					ADMIN		Tue 06 Apr 2021 08:05:10	
	Description		Rate	Billed		Current		Cumulative	
Item		Unit		Quantity	Amount	Quantity	Amount	Quantity	Amour
	House MRBM 140M2								
	PRELIMINARIES AND GENERAL								
a1020	FEM (injury on duty) https://www.fema.co.za/	Sum	4,600.00	1.00	4,600.00	1.00	4,600.00	1.00	4,600.0
a1030	Contractors all risk https://civilsure.co.za/contractors-all-risk/	Sum	1,380.00	1.00	1,380.00	1.00	1,380.00	1.00	1,380.
a1040	SASRIA insurance https://www.sasria.co.za/	Sum	5,750.00	1.00	5,750.00	1.00	5,750.00	1.00	5,750.
a1050	NHBRC enrollment http://www.nhbrc.org.za/files/builder_info/Fee_structure.pdf	Sum	7,475.00	1.00	7,475.00	1.00	7,475.00	1.00	7,475.
	A. Max R500 000: 1.3%								
	B. Max R1 000 000: A + (1%(Value-500000))								
	C. Max R2 000 000: A + B + (0.75%(Value-1500000))								
	D. Max R5 000 000: A + B + C + (0.50%(Value-2000000))								
a1060	Surety fees	Sum	1,840.00	1.00	1,840.00	1.00	1,840.00	1.00	1,840.
a1080	Site establishment (1A)	Item	7,705.00	1.00	7,705.00	1.00	7,705.00	1.00	7,705
1090	Overhead plant and tools provision (1G)	Item	6,900.00	1.00	6,900.00	1.00	6,900.00	1.00	6,900
2020	Site running cost (1B)	Month	2,185.00	3.00	6,555.00	1.00	2,185.00	1.00	2,185
a2010	Contractor's supervision	Month	16,496.75	3.00	49,490.25	1.00	16,496.75	1.00	16,496.