

Q24a. Identify and nominate a supplier/s and schedule the materials and cost the internal and external timber wall framing

Supplier - Boral

Materials -

70 x 35mm MGP10 Untreated Pine Timber Framing - 2.7m	\$7.74
90 x 35mm MGP10 Untreated Pine Timber Framing - 2.7m	\$8.51

Timber Required @ 450mm Centres -

Lower Floor Internal Walls	
55.16m / 0.45 =	123
Upper Floor Internal Walls	
42.98m / 0.45 =	96
Lower Floor External Walls	
69.76m / 0.45 =	156
Upper Floor External Walls	
53.08m / 0.45 =	118

Total Cost -

Upper Floor Studs - 70 x 35
Lower Floor Studs - 90 x 35

Lower Floor Cost -		
	123 + 156 x \$8.51 =	\$1,450.14
Upper Floor Cost -		
	96 + 118 x \$7.74 =	\$1,008.49
Total Cost -		<u>\$2,458.62</u>

Q24b. Identify and nominate a supplier/s and schedule the materials and cost the foundations and lower floor concrete slab incl. the schedule and costing for reinforcement

Supplier - Hansen

Total Floor Area

Lower Floor -	
275.2 m ² x 0.1 =	27.52 m ³
Perimeter -	
85.1 m x 0.35 x 0.65 =	19.36 m ³
Slab Thickening Areas -	
117.8 m x 0.3 x 0.3 =	10.30 m ³

Total Cubic Meters of Concrete Required -

27.52 + 19.36 + 10.30 =	<u>57.18 m³</u>
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Reinforcement - ARC

F82 - 6m x 2.4m Trench Mesh	\$ 112.13	Per Sheet
F11 - 6m x 0.2m Trench Mesh	\$ 24.15	Each

Foundation (F82)-

Total Floor Area -	275.2 m ²
Area of Mesh -	14.4 m ²
Sheets Required -	19.11 = 20 Sheets Required
Cost of sheets -	<u>20 x \$112.13</u>
	<u>\$ 2,242.60</u>

Perimeter & Thickening (F11)-

Total Length -	202.6m x 2 =	= 405.2m
Sheets Required -	405.2m / 6m =	68 Sheets Required
Cost of sheets -	68 x \$24.15 =	<u>\$ 1,642.20</u>

Q24c. Identify and nominate a supplier/s and schedule the materials and cost for the sub-floor framing and the flooring for the upper floor plan

Beams		Qty	Cost per meter	Total Cost
310 UB 32 -	9.75 m	1	\$ 93.00	\$ 906.75
150 PFC Beam -	9.28 m	1	\$ 50.00	\$ 464.00
	2.10 m	1	\$ 50.00	\$ 105.00
	7.21 m	1	\$ 50.00	\$ 360.50
	7.08 m	1	\$ 50.00	\$ 354.00
300x65 Tasman Beam-	4.83 m	1	\$ 73.76	\$ 356.26
Costs				<u>\$ 2,546.51</u>
Joists	170 x 63 Treated Timber Joists			
\$14.85/Meter from Timber Building Supplies			Total Meters	Total Cost
Lengths Required	0.80 m	4	3.2	\$ 47.52
	3.05 m	33	100.65	\$ 1,494.65
	2.00 m	13	26	\$ 386.10
	1.20 m	5	6	\$ 89.10
	3.90 m	17	66.3	\$ 984.56
	7.43 m	16	118.88	\$ 1,765.37
Costs				<u>\$ 4,767.30</u>
Total Cost for Sub-Flooring				<u>\$ 7,313.81</u>

Q24d. Calculate the architrave and skirting required for the fit out of the upper floor only in lineal meters.

Total Meters Architrave-	141.25 m
Gap in skirting for doors-	9.95 m
Total Meters Skirting-	<u>131.3 m</u>

Q24e.	Calculate the we area tiles for the upper floor only which are client chosen for both floors and walls with the wall times 250 x 100 and floor tiles 300 x 300.			
Total Floor Tiles m2 -	0.30 x 0.30 =	0.09	m ²	
Total Floor m2 for Wet Areas -				
Ensuite:	2.79 x 3 =	8.37	m ²	
Bathroom:	2.51 x 2.96 =	7.43	m ²	
WC:	2.36 x 1.02 =	2.41	m ²	
		<u>18.21</u>	<u>m²</u>	
Total Floor Tiles Required-	18.21/0.09 =	202.30		
Upper floor requires 203 Floor Tiles				
Total Wall Tiles m2 -	0.25 x 0.10 =	0.025	m ²	
Total Floor m2 for Wet Areas -				
Ensuite:	2.4 x 2 x 2.79 =	13.39	m ²	
	2.4 x 2 x 3 =	14.40	m ²	
Bathroom:	2.4 x 2 x 2.51 =	12.05	m ²	
	2.4 x 2 x 2.96 =	14.21	m ²	
WC:	2.4 x 2 x 2.195 =	10.54	m ²	
	2.4 x 1.02 =	2.45	m ²	
		<u>67.03</u>	<u>m²</u>	
Total Floor Tiles Required-	67.03/0.025 =	2681.20		
Upper floor requires 2682 Wall Tiles				

Q24f.	Estimate the Labour Only cost to tile all the wet areas only in the home. The tiler Charges labour only \$44.00 per square meter.			
Total Square Meter -				
Upper Floor:	18.21	m ²		
Lower Floor:	<u>11.542</u>	<u>m²</u>		
	<u>29.752</u>	<u>m²</u>		
Total Cost per square meter -				
	29.752	m ²		
x	<u>\$44.00</u>			
	<u>\$ 1,309.09</u>			
Labour only cost to tile all wet areas in the home will be \$1309.10.				

Q24g.	Determine the roofing material and number of square meters of it that are required.			
Roofing Material - Colourbond Trimdek	Zincalume steel Trimdek			
Main house area				
10.46 Width				
14.95 Length		156.377	m2	
Garage				
7.5 Width				
7.04 Length		52.8	m2	
Patio				
2.5 Width				
2.58 Length		6.45	m2	
Total Meters Squared		<u>215.627</u>	<u>m2</u>	
		<u>216</u>	<u>m2</u>	

Q24h. Complete the aluminium windows and doors schedule and other external doors schedule for the lower floor only.

Item	Location	Type	Size	Qty
Window	Patio	Sliding	2100 x 1500	2
Window	Patio	Sliding	2100 x 1600	1
Window	Lounge	Double Hung	1800 x 900	2
Window	Study	Sliding	1800 x 1800	1
Window	Hall/Porch	Sliding	1800 x 900	1
Window	Garage	Sliding	0900 x 1500	1
Window	Laundry	Sliding	0900 x 900	1
Window	Bathroom	Sliding	0900 x 600	1
Window	Rumpus	Sliding	1200 x 2100	1
Window	Kitchen	Sliding	1200 x 900	1
Door	Entry	Double Swing	2100 x 820	2
Door	Rumpus	Double Swing	2100 x 720	2
Door	Storage	Swing	2100 x 720	1
Door	Study	Swing	2100 x 820	1
Door	Storage 2	Swing	2100 x 820	1
Door	Garage	Swing	2100 x 870	1
Door	Garage	Swing	2100 x 820	1
Door	Laundry	Swing	2100 x 820	2
Door	Patio	Sliding	2100 x 3600	1
Door	Patio	Sliding	2100 x 3000	2

Q24i. Complete a full internal doors schedule for the lower floor only.

Item	Location	Type	Size	Qty
Door	Rumpus	Double Swing	2040 x 720	2
Door	Storage	Swing	2040 x 720	1
Door	Study	Swing	2040 x 820	1
Door	Storage 2	Swing	2040 x 820	1
Door	Garage	Swing	2040 x 870	1
Door	Laundry	Swing	2040 x 820	1
Door	Bathroom	Swing	2040 x 770	1
Door	Pantry	Swing	2040 x 620	1

Q24j.

Total Doors -	13
Time to Install Doors -	2
	<u>26 hrs</u>
Hourly Rate -	<u>\$ 27.80</u> Per Hour
Total Cost -	<u>\$ 722.80</u>
Add 20%	<u>\$ 867.36</u>

Labour only cost for hanging all doors on the lower floor will be \$867.36