

Washington Christian Academy

Detailed Structural Systems Estimate for Material, Labor, and Equipment

A project cost breakdown by Material, Labor, and Equipment Costs

Substructure

Concrete Footings & Piers

Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Total (per CY)	Cost
Wall Footing 1	123.00	\$ 17,861.60	51.50	\$ 7,478.64	0.31	\$ 45.02	174.80	\$ 25,383.81
Wall Footing 2	133.00	\$ 2,837.33	85.50	\$ 1,824.00	0.51	\$ 10.88	219.01	\$ 4,672.21
Wall Footing 3	128.00	\$ 7,537.78	68.50	\$ 4,033.89	0.41	\$ 24.14	196.91	\$ 11,595.81
Wall Footing 4	130.50	\$ 3,818.33	77.00	\$ 2,252.96	0.46	\$ 13.46	207.95	\$ 6,084.46
Column 1	192.00	\$ 1,366.65	95.50	\$ 679.77	0.57	\$ 4.06	288.07	\$ 2,050.47
	128.00	\$ 78.38	68.50	\$ 41.95	0.41	\$ 0.25	196.91	\$ 120.58
Column 2	192.00	\$ 1,366.65	95.50	\$ 679.77	0.57	\$ 4.06	288.07	\$ 2,050.47
	128.00	\$ 78.38	68.50	\$ 41.95	0.41	\$ 0.25	196.91	\$ 120.58
Column 3	192.00	\$ 968.02	95.50	\$ 481.49	0.57	\$ 2.87	288.07	\$ 1,452.38
	128.00	\$ 78.38	68.50	\$ 41.95	0.41	\$ 0.25	196.91	\$ 120.58
Column 4	192.00	\$ 1,191.96	95.50	\$ 592.88	0.57	\$ 3.54	288.07	\$ 1,788.38
	128.00	\$ 78.38	68.50	\$ 41.95	0.41	\$ 0.25	196.91	\$ 120.58
Column 5	192.00	\$ 533.33	95.50	\$ 265.28	0.57	\$ 1.58	288.07	\$ 800.19
	128.00	\$ 78.38	68.50	\$ 41.95	0.41	\$ 0.25	196.91	\$ 120.58
Column 6	173.00	\$ 320.37	146.00	\$ 270.37	0.88	\$ 1.63	319.88	\$ 592.37
	128.00	\$ 52.25	68.50	\$ 27.96	0.41	\$ 0.17	196.91	\$ 80.39
		\$ 38,246.19		\$ 18,796.73		\$ 112.66		\$ 57,153.84
		\$ 3,824.62		\$ 1,879.67		\$ 11.27	10% WF	\$ 5,715.38
		\$ 42,071		\$ 20,676		\$ 124	Total cost	\$ 62,869

Superstructure

Concrete Slabs

Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (per CY/sf)	Cost
Slab on Grade	119.50	\$ 50,201.39	45.50	\$ 19,114.34	0.34	\$ 142.83	165.34	\$ 69,458.56
2nd Floor Slab	1.03	\$ 20,806.00	0.73	\$ 14,746.00	0.28	\$ 5,656.00	2.04	\$ 41,208.00
3rd Floor Slab	1.03	\$ 20,806.00	0.73	\$ 14,746.00	0.28	\$ 5,656.00	2.04	\$ 41,208.00
		\$ 91,813.39		\$ 48,606.34		\$ 11,454.83		\$ 151,874.56
		\$ 9,181.34		\$ 4,860.63		\$ 1,145.48	10% WF	\$ 15,187.46
		\$ 100,995		\$ 53,467		\$ 12,600	Total cost	\$ 167,062

Welded Wire Fabric

Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (per csf)	Cost
2nd Floor Slab	13.25	\$ 2,676.50	19.65	\$ 3,969.30	n/a	n/a	32.90	\$ 6,645.80
3rd Floor Slab	13.25	\$ 2,676.50	19.65	\$ 3,969.30	n/a	n/a	32.90	\$ 6,645.80
		\$ 5,353.00		\$ 7,938.60				\$ 13,291.60
		\$ 535.30		\$ 793.86			10% WF	\$ 1,329.16
		\$ 5,888		\$ 8,732			Total cost	\$ 14,621

Steel Beams

Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (per lf)	Cost
W 8x10	12.10	\$ 1,161.60	3.91	\$ 375.36	2.61	\$ 250.56	18.62	\$ 1,787.52
W 8x18	21.83	\$ 4,191.36	3.91	\$ 750.72	2.61	\$ 501.12	28.34	\$ 5,441.28
W 8x21	25.50	\$ 3,060.00	3.91	\$ 469.20	2.61	\$ 313.20	32.02	\$ 3,842.40
W 10x15	18.15	\$ 3,267.00	3.91	\$ 703.80	2.61	\$ 469.80	24.67	\$ 4,440.60
W 14x22	29.00	\$ 17,226.00	2.26	\$ 1,342.44	1.50	\$ 891.00	32.76	\$ 19,459.44
W 14x30	36.50	\$ 3,942.00	2.60	\$ 280.80	1.74	\$ 187.92	40.84	\$ 4,410.72
W 16x31	37.50	\$ 16,875.00	2.60	\$ 1,170.00	1.74	\$ 783.00	41.84	\$ 18,828.00
W 16x50	60.50	\$ 7,260.00	2.93	\$ 351.60	1.96	\$ 235.20	65.39	\$ 7,846.80
W 16x57	70.75	\$ 5,518.50	3.01	\$ 234.78	2.01	\$ 156.78	75.77	\$ 5,910.06
W 16x67	81.00	\$ 12,636.00	3.08	\$ 480.48	2.06	\$ 321.36	86.14	\$ 13,437.84

W 18x35	42.50	\$ 30,600.00	3.53	\$ 2,541.60	1.77	\$ 1,274.40	47.80	\$ 34,416.00
W 18x97	116.00	\$ 30,624.00	3.77	\$ 995.28	1.89	\$ 498.96	121.66	\$ 32,118.24
		\$ 136,361		\$ 9,696		\$ 5,883	Total cost	\$ 151,939
Steel Columns								
Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (ea/lf)	Cost
HSS 8x8x5/8	645.00	\$ 3,870.00	47.00	\$ 282.00	31.50	\$ 189.00	723.5	\$ 4,341.00
HSS 8x8x1/2	645.00	\$ 3,870.00	47.00	\$ 282.00	31.50	\$ 189.00	723.5	\$ 4,341.00
HSS 8x8x3/8	645.00	\$ 3,870.00	47.00	\$ 282.00	31.50	\$ 189.00	723.5	\$ 4,341.00
HSS 8x8x3/8	645.00	\$ 3,870.00	47.00	\$ 282.00	31.50	\$ 189.00	723.5	\$ 4,341.00
HSS 8x8x3/8	645.00	\$ 1,935.00	47.00	\$ 141.00	31.50	\$ 94.50	723.5	\$ 2,170.50
W 10x45	59.50	\$ 119.00	4.26	\$ 8.52	2.85	\$ 5.70	66.61	\$ 1,865.08
		\$ 17,534		\$ 1,278		\$ 856	Total cost	\$ 21,400
K Series Joists								
Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (per lf)	Cost
2.5K1	3.85	\$ 831.60	2.83	\$ 611.28	1.53	\$ 330.48	8.21	\$ 1,773.36
10K1	3.78	\$ 49,941.36	2.83	\$ 37,389.96	1.53	\$ 20,214.36	8.14	\$ 107,545.68
14K1	4.53	\$ 11,388.42	2.26	\$ 5,681.64	1.22	\$ 3,067.08	8.01	\$ 20,137.14
16K2	4.65	\$ 1,897.20	2.07	\$ 844.56	1.12	\$ 456.96	7.85	\$ 3,202.80
16K3	4.76	\$ 15,393.84	1.88	\$ 6,079.92	1.02	\$ 3,298.68	7.66	\$ 24,772.44
18K3	5.50	\$ 18,018.00	1.76	\$ 5,765.76	0.96	\$ 3,144.96	8.30	\$ 27,190.80
18K4	5.80	\$ 5,881.20	1.70	\$ 1,723.80	0.92	\$ 932.88	8.42	\$ 8,537.88
18K6	6.10	\$ 39,088.80	1.88	\$ 12,047.04	1.02	\$ 6,536.16	9.00	\$ 57,672.00
20K7	6.10	\$ 24,741.60	1.70	\$ 6,895.20	0.92	\$ 3,731.52	8.72	\$ 35,368.32
22K7	7.45	\$ 3,576.00	1.70	\$ 816.00	0.92	\$ 441.60	10.10	\$ 4,848.00
		\$ 170,758		\$ 77,855		\$ 42,155	Total cost	\$ 291,048
CMU Block Walls								
Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (per sf)	Cost
8" CMU Block	2.27	\$ 134,715	3.62	\$ 214,833	n/a	n/a	5.89	\$ 349,547.94
		\$ 13,471.54		\$ 21,483.25			10 % WF	\$ 34,954.79
		\$ 148,187		\$ 236,316			Total cost	\$ 384,503
Steel Decking								
Item	Material	Material Cost	Labor	Labor Cost	Equip.	Equip. Cost	Cost (per sf)	Cost
Floor 2 Decking	1.07	\$ 21,614.00	0.35	\$ 7,070.00	0.03	\$ 606.00	1.45	\$ 29,290.00
Floor 3 Decking	1.07	\$ 21,614.00	0.35	\$ 7,070.00	0.03	\$ 606.00	1.45	\$ 29,290.00
Roof Decking	1.51	\$ 41,102.20	0.33	\$ 8,982.60	0.03	\$ 816.60	1.87	\$ 50,901.40
		\$ 84,330		\$ 23,123		\$ 2,029	Total	\$ 109,481
	<i>Material</i>		<i>Labor</i>		<i>Equip.</i>		<i>Total</i>	
Initial Totals	\$ 706,124		\$ 431,143		\$ 63,647		\$ 1,202,923	
Location Factor	0.92		0.92		0.92		0.92	
Grand Totals	\$ 649,635		\$ 396,652		\$ 58,555		\$ 1,106,689	