

Hardcost and Efficiency Comparison - Large Slab vs Small Point Tower



Project - 1001 King St E, Kitchener (King Ottawa Charles - Tower A)
GCA (SF) - 611,854 Both buildings have the same area
Number of Suites - 522 Both buildings have the same number of suites
Date - March 14, 2024 Site plan approved, building permit submission in April, currently being tendered
Structural Description CIP Structure / Precast
 Mix / 40% Energy Improvement Seismic, wind, soils, dewatering, hoisting, weather delays considered

Summary of Construction Divisions 1-16

		As Approved - Slab Tower 29 Floors (30 Months)			Point Tower Equivalent (35 Months)			Notes
Description		QTY	Unit Cost	Total Direct Cost	QTY	Unit Cost	Total Direct Cost	
01	- General Requirements Totals		\$25.05	\$15,330,600		\$30.06	\$18,396,720	
01.1001	Project Staff	612,000	\$8.80	\$5,385,600	612,000	\$10.56	\$6,462,720	
01.1002	Labour	612,000	\$7.50	\$4,590,000	612,000	\$9.00	\$5,508,000	
01.1003	Construction Equipment	612,000	\$4.00	\$2,448,000	612,000	\$4.80	\$2,937,600	
01.1004	Project Overhead	612,000	\$3.10	\$1,897,200	612,000	\$3.72	\$2,276,640	Extend the project by 5 months
01.1006	Temp. Power	612,000	\$0.50	\$306,000	612,000	\$0.60	\$367,200	
01.1007	Weather Expense	612,000	\$1.00	\$612,000	612,000	\$1.20	\$734,400	
01.1008	Other	612,000	\$0.15	\$91,800	612,000	\$0.18	\$110,160	
02	- Site Construction Totals		\$13.04	\$7,980,480		\$13.24	\$8,102,880	
02.2000	Excavation & Backfill	612,000	\$4.00	\$2,448,000	612,000	\$4.00	\$2,448,000	
02.3000	Shoring & Caissons	612,000	\$3.50	\$2,142,000	612,000	\$3.50	\$2,142,000	
02.4000	Dewatering	612,000	\$1.00	\$612,000	612,000	\$1.20	\$734,400	Schedule increase
02.4500	Under slab Drainage/ Site Services	612,000	\$1.04	\$636,480	612,000	\$1.04	\$636,480	
02.5000	Landscaping	612,000	\$3.50	\$2,142,000	612,000	\$3.50	\$2,142,000	
03	- Concrete Totals		\$72.81	\$44,559,720		\$83.61	\$51,167,668	
03.1000	Formworks	612,000	\$39.60	\$24,235,200	612,000	\$50.29	\$30,778,704	
03.1100	Precast Stairs	612,000	\$0.39	\$238,680	612,000	\$0.50	\$303,124	
03.2000	Reinforcement- Supply	612,000	\$8.75	\$5,355,000	612,000	\$8.75	\$5,355,000	
03.2100	Reinforcement - Accessories	612,000	\$0.98	\$599,760	612,000	\$0.98	\$599,760	Smaller tower footprint wants to punch through poor soils generally found in Kitchener, much more reinforcing required through entire tower to support additional top floors, shear wall capacity increased to resist topple etc
03.2300	Reinforcement - Place	612,000	\$5.76	\$3,525,120	612,000	\$5.76	\$3,525,120	
03.3000	Concrete- Supply	612,000	\$12.00	\$7,344,000	612,000	\$12.00	\$7,344,000	
03.3100	Concrete- Accessories	612,000	\$0.53	\$324,360	612,000	\$0.53	\$324,360	
03.3200	Concrete- Place	612,000	\$4.00	\$2,448,000	612,000	\$4.00	\$2,448,000	
03.3300	Concrete- Floor Levelling	612,000	\$0.80	\$489,600	612,000	\$0.80	\$489,600	
03.4000	Precast Panels							
04	- Masonry Totals		\$1.10	\$673,200		\$1.40	\$854,964	
04.2000	Unit Masonry	612,000	\$1.10	\$673,200	612,000	\$1.40	\$854,964	
05	- Metals Totals		\$2.66	\$1,627,920		\$2.66	\$1,627,920	
05.1000	Structural Metal Framing	612,000	\$0.43	\$263,160	612,000	\$0.43	\$263,160	
05.2000	Miscellaneous Metals	612,000	\$2.23	\$1,364,760	612,000	\$2.23	\$1,364,760	
06	- Carpentry Totals		\$5.74	\$3,512,880		\$6.14	\$3,758,782	
06.1000	Rough Carpentry	612,000	\$0.40	\$244,800	612,000	\$0.43	\$261,936	
06.2000	Finish Carpentry	612,000	\$1.10	\$673,200	612,000	\$1.18	\$720,324	
06.2100	Wood Doors & Frames	612,000	\$1.00	\$612,000	612,000	\$1.07	\$654,840	
06.5000	Cabinetry- Common Area	612,000	\$0.04	\$24,480	612,000	\$0.04	\$26,194	Hoisting premium for all materials
06.5100	Cabinetry- Suite Kitchen and Bath	612,000	\$2.00	\$1,224,000	612,000	\$2.14	\$1,309,680	
06.6000	Stone Countertops- Suite Kitchen and Bath	612,000	\$1.20	\$734,400	612,000	\$1.28	\$785,808	
07	- Thermal & Moisture Totals		\$9.48	\$5,801,760		\$9.19	\$5,624,586	
07.1000	Waterproofing	612,000	\$1.60	\$979,200	612,000	\$1.60	\$979,200	
07.1500	Traffic Topping	612,000	\$1.61	\$985,320	612,000	\$1.61	\$985,320	
07.2000	Thermal Insulation	612,000	\$0.95	\$581,400	612,000	\$1.09	\$668,610	More exterior wall area per interior sq ft area
07.3000	Roofing	612,000	\$3.00	\$1,836,000	612,000	\$2.57	\$1,571,616	Larger roof on slab tower but hoisting premium
07.4000	Metal Panels & Siding	612,000	\$1.26	\$771,120	612,000	\$1.26	\$771,120	
07.5000	Sealants and Caulking	612,000	\$0.51	\$312,120	612,000	\$0.51	\$312,120	

07.6000	Firestopping and Smoke Seals	612,000	\$0.55	\$336,600	612,000	\$0.55	\$336,600	
08	Doors & Windows Totals		\$34.33	\$21,009,960		\$39.65	\$24,267,061	
08.1000	Metal Doors and Frames	612,000	\$0.53	\$324,360	612,000	\$0.57	\$347,065	
08.2000	Sliding Doors, Mirrors & Shelves	612,000	\$0.06	\$36,720	612,000	\$0.06	\$39,290	
08.3000	Overhead Doors	612,000	\$0.23	\$140,760	612,000	\$0.25	\$150,613	
08.4000	Aluminium Windows	612,000	\$27.28	\$16,695,360	612,000	\$32.11	\$19,650,439	
08.6000	Glazed Railings & Privacy Dividers	612,000	\$3.66	\$2,239,920	612,000	\$3.92	\$2,396,714	
08.7000	Hardware	612,000	\$1.27	\$777,240	612,000	\$1.36	\$831,647	
08.9000	Miscellaneous & Interior Glazing	612,000	\$1.30	\$795,600	612,000	\$1.39	\$851,292	
09	Finishes Totals		\$21.32	\$13,047,840		\$22.81	\$13,961,189	
09.1000	Drywall & Acoustics	612,000	\$14.00	\$8,568,000	612,000	\$14.98	\$9,167,760	
09.3000	Tiling	612,000	\$2.00	\$1,224,000	612,000	\$2.14	\$1,309,680	
09.5000	LVT Flooring	612,000	\$2.39	\$1,462,680	612,000	\$2.56	\$1,565,068	
09.6000	Carpeting	612,000	\$0.51	\$312,120	612,000	\$0.55	\$333,968	
09.9000	Painting/Wall Coverings	612,000	\$2.31	\$1,413,720	612,000	\$2.47	\$1,512,680	
09.9900	Rubber Flooring	612,000	\$0.11	\$67,320	612,000	\$0.12	\$72,032	
10	Specialties Totals		\$1.15	\$703,800		\$1.15	\$703,800	
10.4000	Signage	612,000	\$0.20	\$122,400	612,000	\$0.20	\$122,400	
10.5000	Lockers/ Bike Racks/ Wire Mesh Partitions/ Closet Shelving	612,000	\$0.50	\$306,000	612,000	\$0.50	\$306,000	
10.8000	Washroom Accessories	612,000	\$0.20	\$122,400	612,000	\$0.20	\$122,400	
10.9000	Miscellaneous Specialties	612,000	\$0.25	\$153,000	612,000	\$0.25	\$153,000	
11	Equipment Totals		\$3.99	\$2,441,880		\$5.07	\$3,101,188	
11.0500	Fall Protection Systems	612,000	\$0.41	\$250,920	612,000	\$0.52	\$318,668	
11.1000	Kitchen Equipment/ Appliances	612,000	\$3.48	\$2,129,760	612,000	\$4.42	\$2,704,795	
11.2000	Waste Handling Equipment	612,000	\$0.10	\$61,200	612,000	\$0.13	\$77,724	
12	Furnishings Totals		\$0.88	\$538,560		\$0.88	\$538,560	
12.5000	Window Coverings	612,000	\$0.88	\$538,560	612,000	\$0.88	\$538,560	
13	Special Construction Totals		\$0.05	\$30,600		\$0.05	\$30,600	
13.8000	Vibration Control Floating Floor	612,000	\$0.05	\$30,600	612,000	\$0.05	\$30,600	
14	Conveying Tools		\$3.76	\$2,301,120		\$5.01	\$3,068,544	
14.2000	Conveying Systems	612,000	\$3.76	\$2,301,120	612,000	\$5.01	\$3,068,544	
15	Mechanical Tools		\$37.00	\$22,644,000		\$39.59	\$24,229,080	
15.1510	Plumbing	612,000	\$27.00	\$16,524,000	612,000	\$28.89	\$17,680,680	
15.1511	Fire Protection	612,000	\$4.00	\$2,448,000	612,000	\$4.28	\$2,619,360	
15.1570	HVAC	612,000	\$6.00	\$3,672,000	612,000	\$6.42	\$3,929,040	
16	Electrical Tools		\$15.22	\$9,314,640		\$16.29	\$9,966,665	
16.1610	Electrical Tools	612,000	\$13.50	\$8,262,000	612,000	\$14.45	\$8,840,340	
16.1620	Lighting Fixtures	612,000	\$1.15	\$703,800	612,000	\$1.23	\$753,066	
16.1650	Security Systems	612,000	\$0.57	\$348,840	612,000	\$0.61	\$373,259	

TOTAL Hard Cost Per SF
TOTAL Hard Cost Per Suite

Base Case
Base Case

\$43
\$37,666
112%

Incremental Point Tower Cost
Incremental Point Tower Cost

NOT considered

Construction loan interest (3.75% ACLP) >>>>>
Builder's Risk and Wrap Up Insurance
Consultant Costs
Etc

\$5,375
1.8%

Incremental Point Tower Cost