Concrete Takeoff Sample

Representative sample project: 100' x 60' single-story commercial building (6,000 SF slab-on-grade)

Sample deliverable — prepared on a representative project to show format and level of detail. Not a client project. Quantities are computed from the sample project dimensions stated below; unit costs are illustrative (pricing basis: September 2026, national average, not a quote).

TAKEOFF LINE ITEMS	PRICED LINE ITEMS	DIRECT LABOR HOURS	SAMPLE TOTAL (ILLUSTRATIVE)	PER SF
27	21	548	$108,666	$18.11

Sample project description

Single-story commercial shell on a 20' x 20' column grid. Continuous perimeter footing with an 8" cast-in-place stem wall, isolated spread footings at the interior columns, and a 5" reinforced slab-on-grade over a vapor retarder and 4" granular base. Perimeter columns bear on the continuous footing in this sample. All dimensions are defined below; quantities are computed from them.

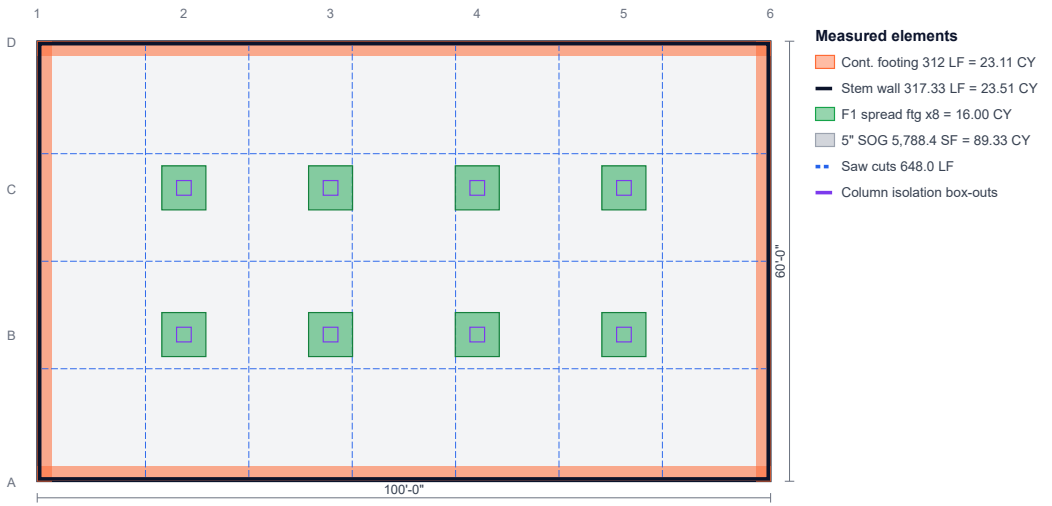
Scope included

- Continuous and spread footings: concrete, forms, reinforcing
- Stem walls: concrete, forms, reinforcing
- Slab-on-grade: granular base, vapor retarder, reinforcing, placement, finish, joints, cure
- Concrete pump for the slab pour

Exclusions / by others

- Excavation, backfill and subgrade preparation below the granular base (Div 31)
- Anchor bolts and embeds (by steel erector)
- Testing and inspection
- Winter protection / hot weather measures
- Building permit and engineering

Takeoff markup (sample plan)



Sample foundation plan S-101 with measured elements color-coded. Quantities shown before waste.

Assumptions & basis

Every quantity in this sample is computed from these inputs. The name column is the named range used by the Excel formulas.

Section	Parameter	Name	Value	Unit	Note / basis
Building	Building length (outside face)	bldg_len	100	ft	Sample sheet S-101
Building	Building width (outside face)	bldg_wid	60	ft	Sample sheet S-101
Building	Gross building area	bldg_area	6,000 = bldg_len × bldg_wid	SF	
Building	Column bay spacing, length direction	bay_x	20	ft	5 bays
Building	Column bay spacing, width direction	bay_y	20	ft	3 bays
Building	Interior columns (spread footings)	n_colint	8 = (bldg_len/bay_x-1) × (bldg_wid/bay_y-1)	EA	Interior grid intersections
Footings	Continuous footing width	ftg_w	2	ft	24" wide, outside face flush with building line
Footings	Continuous footing depth	ftg_d	1	ft	12" deep
Footings	Continuous footing centerline length	ftg_cl	312 = 2 × (bldg_len+bldg_wid)-4 × ftg_w	LF	Perimeter less 4 x footing width at the corners
Footings	Spread footing plan size (square)	sf_size	6	ft	Type F1, 6'-0" x 6'-0"
Footings	Spread footing depth	sf_d	1.50	ft	18"
Stem wall	Stem wall thickness	stem_t	0.67 = 8/12	ft	8"
Stem wall	Stem wall height (top of footing to top of slab)	stem_h	3	ft	
Stem wall	Stem wall centerline length	stem_cl	317.33 = 2 × (bldg_len+bldg_wid)-4 × stem_t	LF	Outside face on building line
Slab	Slab-on-grade thickness	sog_t	0.42 = 5/12	ft	5"
Slab	Slab length (inside stem wall)	slab_len	98.67 = bldg_len-2 × stem_t	ft	
Slab	Slab width (inside stem wall)	slab_wid	58.67 = bldg_wid-2 × stem_t	ft	
Slab	Slab area	slab_area	5,788.44 = slab_len × slab_wid	SF	
Slab	Granular base thickness	base_t	0.33 = 4/12	ft	4" compacted aggregate
Slab	Saw-cut control joint spacing (max)	cj_sp	15	ft	Each way
Slab	Column isolation box-out side	box_side	2	ft	2'-0" square at each interior column
Slab	Max slab placement per day	pour_max	120	CY	Crew/pump assumption
Rebar	Stock bar length	bar_stock	20	ft	
Rebar	Lap splice #4	lap_4	2	ft	24" (48 bar diameters)
Rebar	Lap splice #5	lap_5	2.50	ft	30" (48 bar diameters)
Rebar	#4 bar weight	wt_4	0.67	lb/ft	ASTM A615 nominal
Rebar	#5 bar weight	wt_5	1.04	lb/ft	ASTM A615 nominal
Rebar	Continuous footing bottom bars	ftg_bars	3	EA	3 #5 continuous
Rebar	Corner L-bar length (each)	corner_len	5	ft	2'-6" legs, one per continuous bar per corner
Rebar	Stem wall vertical #5 spacing	stem_vsp	1.33 = 16/12	ft	#5 @ 16" o.c.

Section	Parameter	Name	Value	Unit	Note / basis
Rebar	Stem wall vertical bar length	vert_len	4.58 = stem_h-2/12+ftg_d-3/12+1	ft	Wall less 2" cover + footing less 3" cover + 12" hook
Rebar	Stem wall horizontal #4 rows	stem_rows	3	EA	3 #4 continuous
Rebar	Spread footing side cover	sf_cover	0.25	ft	3"
Rebar	Spread footing bar spacing	sf_sp	1	ft	#5 @ 12" o.c. each way
Rebar	Slab bar spacing	sog_sp	1.50	ft	#4 @ 18" o.c. each way on chairs
Rebar	Slab area per bar chair	chair_sf	16	SF	Chairs at 4'-0" o.c. each way
Rates	Concrete crew labor rate (burdened)	rate_conc	68	$/hr	Illustrative
Rates	Rodbuster labor rate (burdened)	rate_rebar	74	$/hr	Illustrative
Rates	Cement finisher labor rate (burdened)	rate_finish	70	$/hr	Illustrative
Markups	Sales tax on material	tax_rate	7.0%	%	Assumption; varies by state
Markups	Overhead	oh_pct	10.0%	%	Assumption
Markups	Profit	profit_pct	8.0%	%	Assumption

Sample drawing list

Sheets of the representative sample project (described here so the takeoff can be traced; not a real plan set).

Sheet	Title
S-001	General structural notes (sample)
S-101	Foundation plan, 100' x 60', 20' x 20' grid (sample)
S-201	Foundation sections: continuous footing / stem wall, F1 spread footing (sample)
S-301	Slab-on-grade joint layout (sample)

Quantity takeoff

Qty is computed from the assumptions; the formula column is the exact expression used (the workbook holds it as a live Excel formula).

#	CSI	Description	Qty	Unit	Waste	Qty w/ waste	Formula / basis
Continuous footings							
1	03 30 00	Continuous footing concrete, 3,000 psi, 24" x 12"	23.11	CY	5%	**24.27**	`ftg_cl × ftg_w × ftg_d/27`
2	03 11 13	Continuous footing edge forms, both sides	624	SFCA	0%	**624**	`2 × ftg_cl × ftg_d`
3	03 21 00	Footing #5 bottom bars incl. laps + corner bars (LF) Bars per run = ROUNDUP(run / (stock - lap)); one lap per bar on a closed loop	1,131	LF	0%	**1,131**	`ftg_bars × (ftg_cl+ROUNDUP(ftg_cl/(bar_stock-lap_5),0) × lap_5)+4 × ftg_bars × corner_len`
4	03 21 00	Footing rebar #5 (weight) 15 hr/ton placing	1,179.63	LB	5%	**1,238.61**	`cf_barlf × wt_5`
Stem walls							
5	03 30 00	Stem wall concrete, 3,000 psi, 8" x 3'-0"	23.51	CY	5%	**24.68**	`stem_cl × stem_t × stem_h/27`
6	03 11 13	Stem wall forms, both faces	1,904	SFCA	0%	**1,904**	`2 × stem_cl × stem_h`
7	03 21 00	Stem wall #5 verticals (count)	238	EA	0%	**238**	`ROUNDUP(stem_cl/stem_vsp,0)`
8	03 21 00	Stem wall #5 verticals (LF)	1,090.83	LF	0%	**1,090.83**	`stem_vn × vert_len`
9	03 21 00	Stem wall #4 horizontals incl. laps (LF)	1,060	LF	0%	**1,060**	`stem_rows × (stem_cl+ROUNDUP(stem_cl/(bar_stock-lap_4),0) × lap_4)`
10	03 21 00	Stem wall rebar #5 (weight)	1,137.74	LB	5%	**1,194.63**	`stem_vlf × wt_5`
11	03 21 00	Stem wall rebar #4 (weight)	708.08	LB	5%	**743.48**	`stem_hlf × wt_4`
Spread footings							
12	03 30 00	Spread footing F1 concrete, 6'-0" x 6'-0" x 18"	16	CY	5%	**16.80**	`n_colint × sf_size × sf_size × sf_d/27`
13	03 11 13	Spread footing forms, 4 sides	288	SFCA	0%	**288**	`n_colint × 4 × sf_size × sf_d`
14	03 21 00	Spread footing #5 each way (LF) Bars per direction = ROUNDUP(clear width / spacing) + 1	616	LF	0%	**616**	`n_colint × 2 × (ROUNDUP((sf_size-2 × sf_cover)/sf_sp,0)+1) × (sf_size-2 × sf_cover)`
15	03 21 00	Spread footing rebar #5 (weight)	642.49	LB	5%	**674.61**	`sf_barlf × wt_5`
Slab on grade							
16	31 23 23	Granular base 4", placed & compacted 15% compaction/grade allowance	71.46	CY	15%	**82.18**	`slab_area × base_t/27`
17	03 15 00	Vapor retarder 15 mil, taped laps 10% laps and waste	5,788.44	SF	10%	**6,367.29**	`slab_area`
18	03 21 00	Slab #4 @ 18" each way incl. laps (LF) LF/SF = 2 / spacing; lap factor = stock / (stock - lap)	8,575.47	LF	0%	**8,575.47**	`slab_area × 2/sog_sp × bar_stock/(bar_stock-lap_4)`
19	03 21 00	Slab rebar #4 (weight) 12 hr/ton placing	5,728.42	LB	5%	**6,014.84**	`sog_barlf × wt_4`
20	03 21 00	Bar chairs / supports	362	EA	0%	**362**	`ROUNDUP(slab_area/chair_sf,0)`
21	03 30 00	Slab concrete, 4,000 psi, 5" 7% for subgrade variation and pump waste	89.33	CY	7%	**95.58**	`slab_area × sog_t/27`
22	03 30 00	Concrete pump for slab placement	1	DAY	0%	**1**	`ROUNDUP(sog_cy_w/pour_max,0)`
23	03 35 00	Machine trowel finish	5,788.44	SF	0%	**5,788.44**	`slab_area`
24	03 15 00	Saw-cut control joints Joint lines = panels - 1 in each direction	648	LF	0%	**648**	`(ROUNDUP(slab_wid/cj_sp,0)-1) × slab_len+(ROUNDUP(slab_len/cj_sp,0)-1) × slab_wid`
25	03 15 00	Perimeter isolation joint, 1/2" filler	314.67	LF	5%	**330.40**	`2 × (slab_len+slab_wid)`
26	03 15 00	Column isolation box-outs	64	LF	5%	**67.20**	`n_colint × 4 × box_side`
27	03 39 00	Cure & seal	5,788.44	SF	5%	**6,077.87**	`slab_area`

Pricing

Illustrative unit costs and labor productivity, September 2026 national average. Not a quote.

#	Description	Qty	Unit	Mat $/unit	Material $	Hr/unit	Labor hrs	Rate	Labor $	Equip $	Total $
1	Continuous footing concrete, 3,000 psi, 24" x 12"	24.27	CY	$165.00	$4,004.00	0.4500	10.9	$68.00	$742.56	$0.00	**$4,746.56**
2	Continuous footing edge forms, both sides	624	SFCA	$1.40	$873.60	0.0700	43.7	$68.00	$2,970.24	$0.00	**$3,843.84**
4	Footing rebar #5 (weight)	1,238.61	LB	$0.95	$1,176.68	0.0075	9.3	$74.00	$687.43	$0.00	**$1,864.12**
5	Stem wall concrete, 3,000 psi, 8" x 3'-0"	24.68	CY	$165.00	$4,072.44	0.6000	14.8	$68.00	$1,007.00	$0.00	**$5,079.45**
6	Stem wall forms, both faces	1,904	SFCA	$1.60	$3,046.40	0.1000	190.4	$68.00	$12,947.20	$0.00	**$15,993.60**
10	Stem wall rebar #5 (weight)	1,194.63	LB	$0.95	$1,134.89	0.0070	8.4	$74.00	$618.82	$0.00	**$1,753.71**
11	Stem wall rebar #4 (weight)	743.48	LB	$0.95	$706.31	0.0070	5.2	$74.00	$385.12	$0.00	**$1,091.43**
12	Spread footing F1 concrete, 6'-0" x 6'-0" x 18"	16.80	CY	$165.00	$2,772.00	0.4500	7.6	$68.00	$514.08	$0.00	**$3,286.08**
13	Spread footing forms, 4 sides	288	SFCA	$1.40	$403.20	0.0900	25.9	$68.00	$1,762.56	$0.00	**$2,165.76**
15	Spread footing rebar #5 (weight)	674.61	LB	$0.95	$640.88	0.0075	5.1	$74.00	$374.41	$0.00	**$1,015.29**
16	Granular base 4", placed & compacted	82.18	CY	$38.00	$3,122.90	0.3500	28.8	$68.00	$1,955.92	$493.09	**$5,571.91**
17	Vapor retarder 15 mil, taped laps	6,367.29	SF	$0.22	$1,400.80	0.0020	12.7	$68.00	$865.95	$0.00	**$2,266.75**
19	Slab rebar #4 (weight)	6,014.84	LB	$0.95	$5,714.10	0.0060	36.1	$74.00	$2,670.59	$0.00	**$8,384.68**
20	Bar chairs / supports	362	EA	$0.35	$126.70	0.0000	0.0	$74.00	$0.00	$0.00	**$126.70**
21	Slab concrete, 4,000 psi, 5"	95.58	CY	$178.00	$17,013.38	0.3500	33.5	$68.00	$2,274.82	$0.00	**$19,288.20**
22	Concrete pump for slab placement	1	DAY	$0.00	$0.00	0.0000	0.0	$0.00	$0.00	$1,850.00	**$1,850.00**
23	Machine trowel finish	5,788.44	SF	$0.02	$115.77	0.0140	81.0	$70.00	$5,672.68	$173.65	**$5,962.10**
24	Saw-cut control joints	648	LF	$0.35	$226.80	0.0200	13.0	$70.00	$907.20	$162.00	**$1,296.00**
25	Perimeter isolation joint, 1/2" filler	330.40	LF	$0.85	$280.84	0.0200	6.6	$68.00	$449.34	$0.00	**$730.18**
26	Column isolation box-outs	67.20	LF	$0.85	$57.12	0.0400	2.7	$68.00	$182.78	$0.00	**$239.90**
27	Cure & seal	6,077.87	SF	$0.12	$729.34	0.0020	12.2	$70.00	$850.90	$0.00	**$1,580.25**
	Direct cost totals				**$47,618.17**		**547.7**		**$37,839.62**	**$2,678.74**	**$88,136.53**

Summary

Group	Lines	Material	Labor hrs	Labor	Equipment	Total
Continuous footings	3	$6,054.28	63.9	$4,400.23	$0.00	$10,454.52
Stem walls	4	$8,960.05	218.8	$14,958.15	$0.00	$23,918.19
Spread footings	3	$3,816.08	38.5	$2,651.05	$0.00	$6,467.13
Slab on grade	11	$28,787.75	226.5	$15,830.19	$2,678.74	$47,296.69
Direct cost subtotal		**$47,618.17**	**547.7**	**$37,839.62**	**$2,678.74**	**$88,136.53**
Sales tax on material — 7.0% of material (assumption)						$3,333.27
Overhead — 10.0% of running subtotal (assumption)						$9,146.98
Profit — 8.0% of running subtotal (assumption)						$8,049.34
SAMPLE TOTAL (illustrative)						**$108,666**
Cost per SF						$18.11

Sample deliverable on a representative project; not a client project. Unit costs illustrative (September 2026, national average, not a quote). Companion workbook sheets: Cover & Basis, Quantity Takeoff, Pricing, Summary.