

Per foot of foundation wall length:						
	Unit	4'-0" Xi Plus	4'-8" Xi Plus	8'-2" Xi Plus	9'-0" Xi Plus	10'-0" Xi Plus
Rebar / Concrete Reinforcing Steel Institute [Industry Avg N.America] / #3	ft	4	4	4	4	4
Rebar / Concrete Reinforcing Steel Institute [Industry Avg N.America] / #4	ft	2	2.3333	4.0833	4.5	5
Steel studs - Non-loadbearing / Steel Recycling Institute / 20EQ gauge [Industry Avg, US+Can]	ft	2.4	2.8	4.9	5.4	6
EPS foam board / R 4.0/inch avg [BEAM Avg US & CA]	ft² - R 4.0	16.4656	19.4701	35.2434	38.9990	43.5056
Polyisocyanurate / Wall Boards / DuPont / Thermax / R 6.5/inch	ft² - R 3.25	2.7534	3.3023	6.1839	6.8700	7.6934
Concrete – 31-35 MPa, Canadian Benchmark Average / CRMCA [Industry Avg CA]	yd³	0.0415	0.0465	0.0730	0.0793	0.0868
Aggregate / US Average [Industry Avg]	yd³	0.0864	0.0864	0.0864	0.0864	0.0864
Example:						
Calculate the materials used for a 40' long section of Xi Plus wall that is 8'-2" tall						
1. Copy the column labeled with the height of your wall						
2. Multiply all numbers by the length of your wall in ft.						
3. Enter all the numbers into the BEAM calculator in the "Additional materials" section						
	Unit	8'-2" Xi Plus (per foot)	8'-2" Xi Plus (40 ft long)			
Rebar / Concrete Reinforcing Steel Institute [Industry Avg N.America] / #3	ft	4	160			
Rebar / Concrete Reinforcing Steel Institute [Industry Avg N.America] / #4	ft	4.0833	163.3333			
Steel studs - Non-loadbearing / Steel Recycling Institute / 20EQ gauge [Industry Avg, US+Can]	ft	4.9	196.0000			
EPS foam board / R 4.0/inch avg [BEAM Avg US & CA]	ft² - R 4.0	35.2434	1409.7365			
Polyisocyanurate / Wall Boards / DuPont / Thermax / R 6.5/inch	ft² - R 3.25	6.1839	247.3573			
Concrete – 31-35 MPa, Canadian Benchmark Average / CRMCA [Industry Avg CA]	yd³	0.0730	2.9190			
Aggregate / US Average [Industry Avg]	yd³	0.0864	3.4568			
Notes						
Rebar / Concrete Reinforcing Steel Institute [Industry Avg N.America] / #3	2 wall length pieces of #3 rebar in top beam and bottom beam (source https://youtu.be/6XZBkqAnrw @ 3:00)					
Rebar / Concrete Reinforcing Steel Institute [Industry Avg N.America] / #4	1 wall height piece of #4 rebar in each stud (source https://youtu.be/6XZBkqAnrw @3:00)					
Steel studs - Non-loadbearing / Steel Recycling Institute / 20EQ gauge [Industry Avg, US+Can]	Gauge is a best guess since the studs are not load bearing					
EPS foam board / R 4.0/inch avg [BEAM Avg US & CA]	Based on 3D CAD model using Superior Walls documents. 1 in thick EPS around stud, header, and footer. 4.5 in thick EPS in cavity					
Polyisocyanurate / Wall Boards / DuPont / Thermax / R 6.5/inch	Based on 3D CAD model using Superior Walls documents. 1/2 inch foil faced polyiso in cavity					
Concrete – 31-35 MPa, Canadian Benchmark Average / CRMCA [Industry Avg CA]	Based on 3D CAD model using Superior Walls documents. Assumed 31-35 MPA since it is the highest strength concrete in BEAM. Superior walls state they use 5000+ PSI concrete					
Aggregate / US Average [Industry Avg]	Assuming 48 Inch wide 7 inch deep crushed stone footer					