



MASONRY WALL COST GUIDE

2007

The 2007 Masonry Wall Cost Guide is intended to provide users with an in-place wall square footage cost for 141 wall assemblies for six cities in Michigan: Ann Arbor, Detroit, Flint, Grand Rapids, Lansing and Saginaw. The 846 listed costs are provided as an aid to assist decision-makers in utilizing masonry economically.

The figures represent total masonry cost including labor, material, overhead and profit. All masonry wall costs were based on a straight run wall with no openings. The cost will be greater when considering openings, corners, site conditions, material handling conditions and weather. Wall heights vary and were based on applicable design methodologies as noted.

Material costs were based on MIM member masonry suppliers' average cost to the mason contractor.

Units selected for costing include six clay masonry extruded and sand-mold units; 16 non-color concrete masonry units (CMU); two glass masonry units; and four color and non-white burnished CMU. For designs incorporating other than those shown in the Cost Guide, the Masonry Institute of Michigan, Inc. will provide costs upon request. 734-458-8544, dan@mim-online.org

**Tradesmen's Master
Estimator 4.0 was
used to compute
the wall cost
per square foot.**



Interior Single Wythe Nonloadbearing

Unreinforced Concrete Masonry

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
6" CMU	\$9.65	\$9.66	\$8.94	\$7.82	\$8.74	\$8.11
8" CMU	9.62	9.63	8.92	7.82	8.73	8.11
10" CMU	11.01	11.02	10.25	9.04	10.02	9.36
12" CMU	11.33	11.34	10.54	9.28	10.31	9.60
8" Burnished	14.48	14.49	13.58	12.15	13.31	12.53
10" Burnished	15.99	16.00	14.97	13.37	14.68	13.79
12" Burnished	16.21	16.22	15.19	13.59	14.89	14.01

Interior single wythe non-loadbearing unreinforced concrete masonry walls were designed empirically. Walls are assumed to have top and bottom lateral support spanning vertically. Walls are not a part of the lateral force resisting system for a structure. Typical wall consists of concrete masonry units, mortar, horizontal joint reinforcement, bond beam, anchors and control joints.

Exterior Single Wythe Loadbearing

Unreinforced and Insulated Concrete Masonry

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" CMU	\$11.31	\$11.30	\$10.58	\$9.42	\$10.36	\$9.75
10" CMU	12.54	12.53	11.77	10.52	11.53	10.87
12" CMU	12.87	12.85	12.08	10.83	11.84	11.18
8" Split	13.44	13.44	12.68	11.46	12.45	11.80
12" Split	14.85	14.84	14.01	12.69	13.77	13.06
8" Flute	13.78	13.78	12.99	11.74	12.75	12.09
12" Flute	15.14	15.14	14.29	12.93	14.03	13.31
8" Score	11.99	11.97	11.24	10.04	11.01	10.38
12" Score	13.66	13.65	12.85	11.56	12.61	11.92
8" Striate	12.52	12.52	11.76	10.53	11.52	10.87
12" Striate	14.32	14.31	13.48	12.13	13.23	12.51

Exterior single wythe loadbearing unreinforced concrete masonry walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of concrete masonry units, mortar, horizontal joint reinforcement, bond beam, flashing, weepholes, loose fill insulation and control joints.

Exterior Single Wythe Loadbearing

Unreinforced and Uninsulated Concrete Masonry

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" CMU	\$10.44	\$10.43	\$9.75	\$8.62	\$9.54	\$8.94
10" CMU	11.40	11.39	10.65	9.46	10.42	9.79
12" CMU	11.39	11.37	10.65	9.47	10.42	9.80
8" Split	12.64	12.63	11.89	10.71	11.67	11.04
12" Split	13.31	13.31	12.52	11.28	12.30	11.63
8" Flute	13.07	13.07	12.31	11.10	12.08	11.43
12" Flute	13.72	13.72	12.92	11.63	12.68	12.00
8" Score	11.17	11.17	10.44	9.29	10.23	9.62
12" Score	12.12	11.71	11.35	10.15	11.13	10.49
8" Striate	11.72	12.11	10.97	9.78	10.74	10.11
12" Striate	12.78	12.77	11.99	10.72	11.75	11.07

Exterior single wythe loadbearing unreinforced concrete masonry walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of concrete masonry units, mortar, horizontal joint reinforcement, bond beam, flashing, weepholes and control joints.

Note: Above figures are furnished and installed cost per wall square foot based on a straight run wall with no openings. Cost per wall square foot will be greater when considering openings, corners, site conditions, material handling conditions and weather.



Exterior Single Wythe Loadbearing

Reinforced and Insulated Concrete Masonry

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" CMU	\$11.12	\$11.11	\$10.39	\$9.25	\$10.17	\$9.57
10" CMU	12.68	12.67	11.89	10.63	11.64	10.98
12" CMU	13.12	13.11	12.32	11.03	12.08	11.40
8" Split	13.27	13.27	12.52	11.31	12.30	11.65
12" Split	14.88	14.87	14.04	12.72	13.80	13.09
8" Flute	13.57	13.57	12.79	11.56	12.56	11.90
12" Flute	15.30	15.29	14.43	13.05	14.17	13.44
8" Score	11.79	11.78	11.05	9.88	10.84	10.22
12" Score	13.89	13.89	13.07	11.76	12.82	12.12
8" Striate	12.37	12.37	11.61	10.40	11.39	10.73
12" Striate	14.51	14.50	13.65	12.29	13.39	12.67

Exterior single wythe loadbearing reinforced concrete masonry walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of concrete masonry units, mortar, steel reinforcement, grout, horizontal joint reinforcement, bond beam, flashing, weepholes, loose fill insulation and control joints.

Exterior Single Wythe Loadbearing

Reinforced and Uninsulated Concrete Masonry

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" CMU	\$11.12	\$10.22	\$9.64	\$8.54	\$9.43	\$8.85
10" CMU	11.63	11.62	10.88	9.68	10.65	10.01
12" CMU	11.79	11.78	11.02	9.81	10.80	10.15
8" Split	12.51	12.50	11.78	10.62	11.56	10.95
12" Split	13.54	13.54	12.75	11.49	12.51	11.84
8" Flute	12.91	12.91	12.16	10.96	11.93	11.29
12" Flute	14.07	14.06	13.24	11.92	12.99	12.30
8" Score	11.02	11.02	10.32	9.19	10.10	9.50
12" Score	12.55	12.54	11.77	10.53	11.54	10.88
8" Striate	11.61	11.60	10.88	9.70	10.65	10.03
12" Striate	13.17	13.17	12.36	11.06	12.11	11.43

Exterior single wythe loadbearing reinforced concrete masonry walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of concrete masonry units, mortar, steel reinforcement, grout, horizontal joint reinforcement, bond beam, flashing, weepholes and control joints.

Note: Above figures are furnished and installed cost per wall square foot based on a straight run wall with no openings. Cost per wall square foot will be greater when considering openings, corners, site conditions, material handling conditions and weather.



Exterior Multi-Wythe Loadbearing 4" Concrete Masonry Veneer/Unreinforced Concrete Masonry Back-Up

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
6" CMU BACK-UP						
Split CMU	\$19.34	\$19.33	\$18.20	\$16.35	\$17.84	\$16.88
Flute CMU	20.20	20.19	18.99	17.05	18.62	17.61
Score CMU	18.21	18.18	17.03	15.15	16.67	15.68
Striate CMU	18.54	18.52	17.36	15.46	16.99	16.00
Burnished CMU	20.70	20.68	19.48	17.54	19.11	18.09
8" CMU BACK-UP						
Split CMU	\$18.35	\$18.33	\$17.29	\$15.61	\$16.97	\$16.09
Flute CMU	19.21	19.19	18.09	16.30	17.75	16.82
Score CMU	17.20	17.19	16.13	14.41	15.80	14.89
Striate CMU	17.53	17.51	16.46	14.72	16.13	15.21
Burnished CMU	19.73	19.71	18.61	16.82	18.27	17.33
10" CMU BACK-UP						
Split CMU	\$19.52	\$19.50	\$18.41	\$16.65	\$18.08	\$17.16
Flute CMU	20.38	20.36	19.22	17.35	18.86	17.88
Score CMU	18.38	18.36	17.25	15.45	16.91	15.96
Striate CMU	18.70	18.69	17.57	15.76	17.23	16.28
Burnished CMU	20.86	20.85	19.70	17.83	19.34	18.36
12" CMU BACK-UP						
Split CMU	\$19.63	\$19.61	\$18.52	\$16.74	\$18.17	\$17.24
Flute CMU	20.49	20.47	19.31	17.43	18.96	17.97
Score CMU	18.50	18.47	17.36	15.54	17.01	16.05
Striate CMU	18.82	18.81	17.68	15.85	17.33	16.48
Burnished CMU	20.95	20.95	19.80	17.91	19.44	18.45

Exterior multi-wythe loadbearing 4" concrete masonry veneer with unreinforced concrete masonry back-up walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of concrete masonry units, mortar, horizontal joint reinforcement, adjustable ties, bond beam, flashing, weepholes, rigid insulation, air space and control joints.

Exterior Multi-Wythe Loadbearing 4" Clay Masonry Veneer/Unreinforced Concrete Masonry Back-Up

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
6" CMU BACK-UP						
Face Brick	\$24.32	\$24.30	\$22.83	\$20.43	\$22.38	\$21.11
Sand Mold Brick	25.12	25.10	23.60	21.15	23.12	21.85
Engineer Brick	22.45	22.43	21.10	18.95	20.69	19.56
Closure Brick	23.23	23.18	21.90	19.79	21.50	20.40
Norman Brick	23.89	23.87	22.47	20.18	22.02	20.83
Utility Brick	21.88	21.86	20.61	18.57	20.21	19.15
8" CMU BACK-UP						
Face Brick	\$23.34	\$23.31	\$21.94	\$19.70	\$21.51	\$20.34
Sand Mold Brick	24.14	24.11	22.70	20.41	22.26	21.06
Engineer Brick	21.46	21.43	20.21	18.22	19.83	18.79
Closure Brick	22.23	22.21	21.01	19.05	20.64	19.61
Norman Brick	22.90	22.88	21.57	20.47	21.17	20.05
Utility Brick	20.89	20.87	19.72	17.83	19.35	18.37
10" CMU BACK-UP						
Face Brick	\$24.50	\$24.48	\$23.05	\$20.73	\$22.60	\$21.39
Sand Mold Brick	25.30	25.26	23.82	21.43	23.36	22.12
Engineer Brick	22.61	22.59	21.32	19.24	20.93	19.84
Closure Brick	23.39	23.37	22.12	20.09	21.74	20.67
Norman Brick	24.06	24.04	22.69	20.47	22.26	21.10
Utility Brick	22.05	22.02	20.82	18.87	20.45	19.43
12" CMU BACK-UP						
Face Brick	\$24.61	\$24.59	\$23.15	\$20.81	\$22.71	\$21.49
Sand Mold Brick	25.41	25.39	23.92	21.53	23.46	22.21
Engineer Brick	22.73	22.71	21.42	19.33	21.03	19.93
Closure Brick	23.52	23.49	22.23	20.18	21.84	20.76
Norman Brick	24.18	24.16	22.79	20.57	22.37	21.21
Utility Brick	22.17	22.15	20.94	18.96	20.56	19.52

Exterior multi-wythe loadbearing 4" clay masonry veneer with unreinforced concrete masonry back-up walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of clay masonry units, concrete masonry units, mortar, horizontal joint reinforcement, adjustable ties, bond beam, flashing, weepholes, rigid insulation, air space, control joints and expansion joints.

Note: Above figures are furnished and installed cost per wall square foot based on a straight run wall with no openings. Cost per wall square foot will be greater when considering openings, corners, site conditions, material handling conditions and weather.



Exterior Multi-Wythe Loadbearing

4" Concrete Masonry Veneer/Reinforced Concrete Masonry Back-Up

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" CMU BACK-UP						
Split CMU	\$19.39	\$19.36	\$18.27	\$16.47	\$17.92	\$16.98
Flute CMU	20.24	20.22	19.06	17.17	18.70	17.71
Score CMU	18.21	18.23	17.10	15.27	16.75	15.78
Striate CMU	18.57	18.56	17.42	15.58	17.07	16.10
Burnished CMU	20.73	20.71	19.55	17.65	19.19	18.19
10" CMU BACK-UP						
Split CMU	\$20.70	\$20.69	\$19.53	\$17.64	\$19.17	\$18.17
Flute CMU	21.57	21.55	20.33	18.34	19.94	18.91
Score CMU	19.56	19.54	18.36	16.44	18.00	16.98
Striate CMU	19.89	19.87	18.68	16.75	18.32	17.31
Burnished CMU	22.01	21.99	20.77	18.78	20.39	19.35
12" CMU BACK-UP						
Split CMU	\$20.95	\$20.93	\$19.76	\$17.84	\$19.40	\$18.39
Flute CMU	21.81	21.80	20.56	18.55	20.17	19.12
Score CMU	19.81	19.79	18.59	16.64	18.22	17.20
Striate CMU	20.14	20.12	18.92	16.95	18.54	17.51
Burnished CMU	22.23	22.23	20.99	18.98	20.61	19.56

Exterior multi-wythe loadbearing 4" concrete masonry veneer with reinforced concrete masonry back-up walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of concrete masonry units, mortar, steel reinforcement, grout, horizontal joint reinforcement, adjustable ties, bond beam, flashing, weepholes, rigid insulation, air space and control joints.

Exterior Multi-Wythe Loadbearing

4" Clay Masonry Veneer/Reinforced Concrete Masonry Back-Up

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" CMU BACK-UP						
Face Brick	\$24.36	\$24.34	\$22.89	\$20.54	\$22.45	\$21.22
Sand Mold Brick	25.16	25.14	23.66	21.26	23.20	21.95
Engineer Brick	22.48	22.46	21.17	19.06	20.77	19.67
Closure Brick	23.26	23.24	21.97	19.90	21.58	20.49
Norman Brick	23.93	23.91	22.53	20.30	22.11	20.94
Utility Brick	21.91	21.90	20.68	18.68	20.30	19.25
10" CMU BACK-UP						
Face Brick	\$25.68	\$25.66	\$24.16	\$21.71	\$23.69	\$22.41
Sand Mold Brick	26.48	26.44	24.92	22.42	24.44	23.13
Engineer Brick	23.79	23.77	22.43	20.22	22.00	20.86
Closure Brick	24.57	24.55	23.23	21.07	22.81	21.68
Norman Brick	25.24	25.22	23.78	21.46	23.34	22.13
Utility Brick	23.23	23.20	21.93	19.85	21.53	20.44
12" CMU BACK-UP						
Face Brick	\$25.93	\$25.90	\$24.38	\$21.91	\$23.91	\$22.63
Sand Mold Brick	26.71	26.69	25.15	22.63	24.66	23.35
Engineer Brick	24.04	24.02	22.66	20.43	22.23	21.07
Closure Brick	24.82	24.80	23.45	21.28	23.04	21.90
Norman Brick	25.48	25.46	24.02	21.66	23.57	22.34
Utility Brick	23.47	23.45	22.16	20.06	21.76	20.66

Exterior multi-wythe loadbearing 4" clay masonry veneer with reinforced concrete masonry back-up walls were engineered. Walls are assumed to have top and bottom lateral support spanning vertically. Typical wall consists of clay masonry units, concrete masonry units, mortar, steel reinforcement, grout, horizontal joint reinforcement, adjustable ties, bond beam, flashing, weepholes, rigid insulation, air space, control joints and expansion joints.

Note: Above figures are furnished and installed cost per wall square foot based on a straight run wall with no openings. Cost per wall square foot will be greater when considering openings, corners, site conditions, material handling conditions and weather.



Exterior 4" Concrete Masonry Veneer

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
Split CMU	\$11.03	\$11.02	\$10.44	\$9.48	\$10.26	\$9.76
Flute CMU	11.90	11.88	11.24	10.18	11.03	10.49
Score CMU	9.89	9.88	9.27	8.28	9.09	8.57
Striate CMU	10.23	10.22	9.60	8.60	9.41	8.89
Burnished CMU	12.67	12.65	11.99	10.90	11.78	11.22

Exterior 4" concrete masonry veneer walls were designed by prescriptive requirements. They are assumed to have proper backing, not included in the cost. Typical veneer consists of concrete masonry units, mortar, horizontal joint reinforcement, adjustable anchors, flashing, weepholes, air space and control joints.

Exterior 4" Clay Masonry Veneer

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
Face Brick	\$16.02	\$16.00	\$15.08	\$13.57	\$14.79	\$14.00
Sand Mold Brick	16.82	16.80	15.85	14.27	15.55	14.73
Engineer Brick	14.14	14.12	13.35	12.08	13.10	12.45
Closure Brick	14.91	14.89	14.15	12.93	13.92	13.28
Norman Brick	15.59	15.57	14.72	13.31	14.45	13.71
Utility Brick	13.57	13.56	12.85	11.71	12.64	12.04

Exterior 4" clay masonry veneer walls were designed by prescriptive requirements. They are assumed to have proper backing, not included in the cost. Typical veneer consists of clay masonry units, mortar, adjustable anchors, flashing, weepholes, air space and expansion joints.

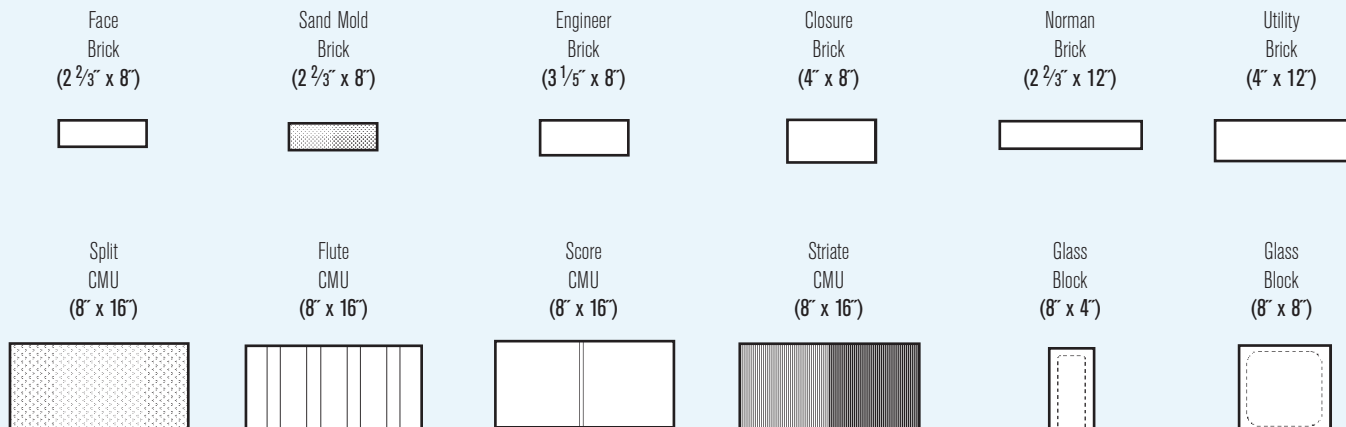
Exterior 4" Glass Masonry

	ANN ARBOR	DETROIT	FLINT	GRAND RAPIDS	LANSING	SAGINAW
8" x 4" Glass Block	\$57.38	\$56.05	\$53.07	\$47.90	\$52.03	\$49.48
8" x 8" Glass Block	32.60	31.87	30.19	27.26	29.60	28.16

Exterior 4" glass masonry maximum panel size was based on structural and performance considerations. Typical glass masonry panel consists of wavy faced glass masonry units, mortar, panel anchors, expansion joints and horizontal joint reinforcement.

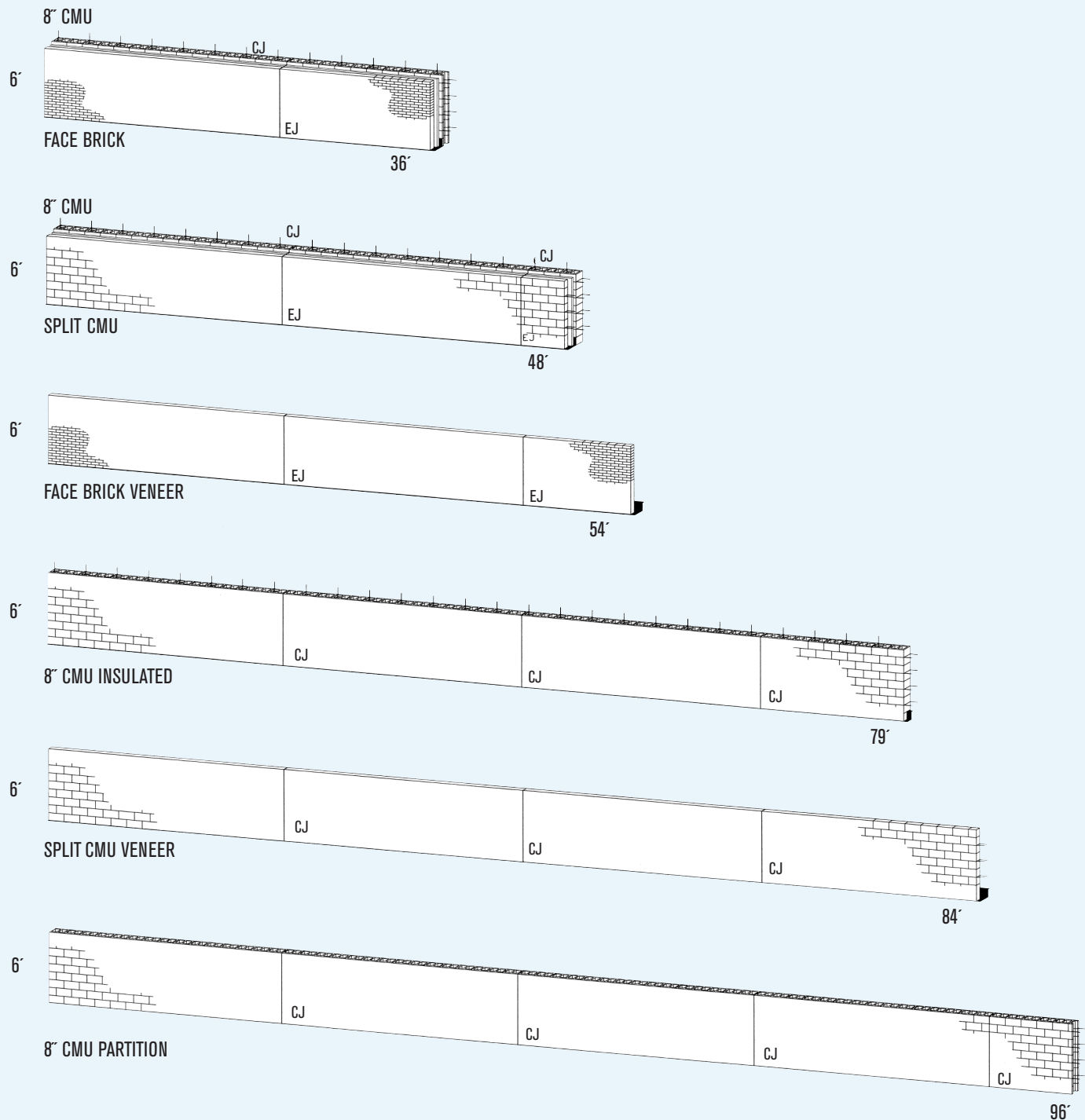
Note: Above figures are furnished and installed cost per wall square foot based on a straight run wall with no openings. Cost per wall square foot will be greater when considering openings, corners, site conditions, material handling conditions and weather.

Nominal Face Dimensions





Mason Crew Production Per Day*



* Crew: 4 bricklayers with 59% to 100% labor support

- All walls are flashed with weepholes except CMU partition.
- All walls are insulated except CMU partition and veneers.
- All walls are reinforced except CMU partition and veneers.
- All concrete masonry walls have horizontal joint reinforcement.
- All multi-wythe walls and veneers have adjustable ties.
- All walls have movement joints.