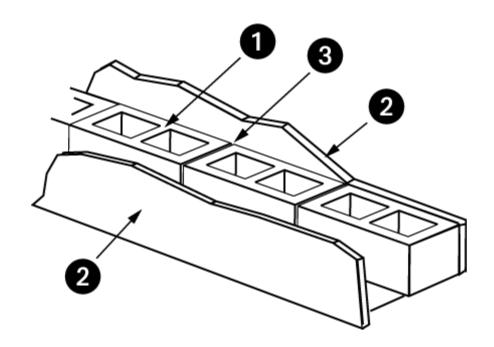


3-Hour Fire Rating

8" C.M.U.

Fire Rating: 3 Hour No. 8-3-910655S2



Assembly Information

- 1. Preferred product 910655 c.m.u. 8" x 8" x 16" nominal
- 2. Portland cement stucco 1/2" thick, both sides, applied directly to C.M.U.
- 3. ASTM C-270 Masonry Mortar, Type M or S. Face shell or full mortar bedding as required.
- 4. Masonry grout, reinforcing steel, joint reinforcement, anchors, ties and accessories (Not depicted above optional). Use where specified.

Preferred Materials Inc. accepts no responsibility for proper application of the rated wall assembly above, or responsibility for the construction of such assemblies.

Fire Rating: 3 Hour No. 8-3-910655S2

Concrete Masonry Unit

Section 721.3.2 of the Florida Building Code

Unit Description	Size WxHxL Nominal	Equivalent Thickness Inches	Fire Rating Minutes
910655	8x8x16	4.0	120*

^{*} Direct interpolation from Table 721.3.2 of the Florida Building Code for Stucco/Sand Finish Mix – 100% limestone aggregates.

Section 721.3.1.3 and 721.3.1.4 of the Florida Building Code

Solid Grouted construction and/or cells filled with loose-fill materials

Included	Equivalent Thickness Inches	Fire Rating Minutes		
No	4	120		
Yes	N/A	N/A		

^{*} Direct interpolation from Table 721.3.2 of the Florida Building Code for Stucco/Sand Finish Mix – 100% limestone aggregates.

Fire Rating: 3 Hour No. 8-3-910655S2

Nonfire-exposed side

Side 1

Section 721.3.2.1 of the Florida Building Code

Finish	
1/2 inch thick Portland cement-sand Stucco	.5
Multiplying factor Table 721.2.1.4(1)	1
Adjusted Thickness	.5
Concrete Masonry Unit	
Unit Description	910655
Size WxHxL Nominal	8x8x16
Equivalent Thickness	4.0
Fire Rating Minutes	120
Total Thickness, CMU + Finish	4.5
Fire Resistance Rating of CMU & Finish, Table 721.3.2	150*

^{*} Direct interpolation from Table 721.3.2 of the Florida Building Code for Stucco/Sand Finish Mix – 100% limestone aggregates.

Side 2
Section 721.3.2.1 of the Florida Building Code

Finish	
1/2 inch thick Portland cement-sand Stucco	.5
Multiplying factor Table 721.2.1.4(1)	1
Adjusted Thickness (inches)	.5
Concrete Masonry Unit	
Unit Description	910655
Size WxHxL Nominal	8x8x16
Equivalent Thickness (inches)	4.0
Fire Rating Minutes	120
Total Thickness, CMU + Finish (inches)	4.5
Fire Resistance Rating of CMU & Finish, Table 721.3.2	150*

^{*} Direct interpolation from Table 721.3.2 of the Florida Building Code for Stucco/Sand Finish Mix – 100% limestone aggregates.

Fire Rating: 3 Hour No. 8-3-910655S2

Fire-exposed side

<u>Side 1</u>

Section 721.3.2.2 of the Florida Building Code

Finish	
1/2 inch thick Portland cement-sand Stucco	
Time assigned to finish materials Table 721.2.1.4(2)	0 0.5
Fire Resistance of CMU and Nonfire-exposed side Finish	0
Table 721.3.2	4.5
Accombly Fire Reciptonee Bating	180
Assembly Fire-Resistance Rating	5.0
Max. allowable assembly Fire Resistance Block + finishes	240
Total Assembly Fire-Resistance Rating	180

Side 2
Section 721.3.2.2 of the Florida Building Code

Finish	
1/2 inch thick Portland cement-sand Stucco	
Time assigned to finish materials Table 721.2.1.4(2)	0 0.5
Fire Resistance of CMU and Nonfire-exposed side Finish	0
Table 721.3.2	4.5
Accombly Fire Resistance Reting	180
Assembly Fire-Resistance Rating	5.0
Max. allowable assembly Fire Resistance Block + finishes	240
·	
Total Assembly Fire-Resistance Rating	180

Assembly	y Fire-Resistance Rating	180 Minutes

Fire Resistance Rating, minutes per inches of equivalent thickness Linear Interpolation from table 721.3.2 of the 2007 Florida Building Code Exposed Finish Block Mix – 55% Limestone & 45% Siliceous Aggregates

et	min	et min	et	min	et	min	et	min	et	min	et	min	et	min	et	min	et	min
1.95	30.0	2.36 45.4			3.18	76.3	3.59	95.0	4.00	115.5	4.41	136.2	4.82	160.8	5.23	186.8	5.64	210.0
1.96	30.4	2.37 45.8	2.7		3.19	76.8	3.60	95.5	4.01	116.0	4.42	136.8	4.83	161.4	5.24	187.5	5.65	210.8
1.97	30.8	2.38 46.1	2.79	61.5	3.20	77.2	3.61	96.0	4.02	116.5	4.43	137.4	4.84	162.0	5.25	188.3	5.66	211.5
1.98	31.1	2.39 46.5	2.80		3.21	77.6	3.62	96.5	4.03	117.0	4.44	138.0	4.85	162.6	5.26	189.0	5.67	212.3
1.99	31.5	2.40 46.9	2.8		3.22	78.1	3.63	97.0	4.04	117.5	4.45	138.6	4.86	163.2	5.27	189.8	5.68	213.0
2.00	31.9	2.41 47.3	2.82		3.23	78.5	3.64	97.5	4.05	118.0	4.46	139.2	4.87	163.8	5.28	190.5	5.69	213.8
2.01	32.3	2.42 47.6			3.24	79.0	3.65	98.0	4.06	118.5	4.47	139.8	4.88	164.4	5.29	191.3	5.70	214.5
2.02	32.6	2.43 48.0	2.84		3.25	79.4	3.66	98.5	4.07	119.0	4.48	140.4	4.89	165.0	5.30	192.0	5.71	215.3
2.03	33.0	2.44 48.4	2.8		3.26	79.9	3.67	99.0	4.08	119.5	4.49	141.0	4.90	165.6	5.31	192.8	5.72	216.0
2.04	33.4	2.45 48.7	2.80		3.27	80.3	3.68	99.5	4.09	120.0	4.50	141.6	4.91	166.2	5.32	193.5	5.73	216.8
2.05	33.8	2.46 49.1	2.8		3.28	80.7	3.69	100.0	4.10	120.5	4.51	142.2	4.92	166.8	5.33	194.3	5.74	217.5
2.06	34.1	2.47 49.5			3.29	81.2	3.70	100.5	4.11	121.0	4.52	142.8	4.93	167.4	5.34	195.0	5.75	218.3
2.07	34.5	2.48 49.9	2.89	65.2	3.30	81.6	3.71	101.0	4.12	121.5	4.53	143.4	4.94	168.0	5.35	195.5	5.76	219.0
2.08	34.9	2.49 50.2	2.90		3.31	82.1	3.72	101.5	4.13	122.0	4.54	144.0	4.95	168.6	5.36	196.0	5.77	219.8
2.09	35.2	2.50 50.6			3.32	82.5	3.73	102.0	4.14	122.5	4.55	144.6	4.96	169.2	5.37	196.5	5.78	220.5
2.10	35.6	2.51 51.0	2.92		3.33	82.9	3.74	102.5	4.15	123.0	4.56	145.2	4.97	169.8	5.38	197.0	5.79	221.3
2.11	36.0	2.52 51.4	2.93		3,34	83.4	3.75	103.0	4.16	123.5	4.57	145.8	4.98	170.4	5.39	197.5	5.80	222.0
2.12	36.4	2.53 51.7	2.9		3.35	83.8	3.76	103.5	4.17	124.0	4.58	146.4	4.99	171.0	5.40	198.0	5.81	222.8
2.13	36.7	2.54 52.1	2.9		3.36	84.3	3.77	104.0	4.18	124.5	4.59	147.0	5.00	171.6	5.41	198.5	5.82	223.5
2.14	37.1	2.55 52.5	2.90		3.37	84.7	3.78	104.5	4.19	125.0	4.60	147.6	5.01	172.2	5.42	199.0	5.83	224.3
2.15	37.5	2.56 52.9	2.9		3.38	85.1	3.79	105.0	4.20	125.5	4.61	148.2	5.02	172.8	5.43	199.5	5.84	225.0
2.16	37.9	2.57 53.2			3.39	85.6	3.80	105.5	4.21	126.0	4.62	148.8	5.03	173.4	5.44	200.0	5.85	225.8
2.17	38.2	2.58 53.6			3.40	86.0	3.81	106.0	4.22	126.5	4.63	149.4	5.04	174.0	5.45	200.5	5.86	226.5
2.18	38.6 39.0	2.59 54.0	3.00		3.41	86.5	3.82	106.5	4.23	127.0	4.64	150.0	5.05	174.6 175.2	5.46	201.0	5.87	227.3 228.0
2.19	39.4	2.60 54.4 2.61 54.7	3.0		3.42 3.43	86.9 87.3	3.83	107.0 107.5	4.24 4.25	127.5 128.0	4.65 4.66	150.6 151.2	5.06 5.07	175.2	5.47 5.48	201.5 202.0	5.88 5.89	228.8
2.21	39.4	2.62 55.1	3.0		3,43	87.8	3.84	107.5	4.25	128.5	4.67	151.8	5.07	175.6	5.49	202.5	5.99	229.5
2.22						88.2			4.27				5.09					
2.23	40.1 40.5	2.63 55.5 2.64 55.9	3.0		3.45 3.46	88.7	3.86	108.5 109.0	4.27	129.0 129.5	4.68 4.69	152.4 153.0	5.10	177.0 177.6	5.50 5.51	203.0 203.5	5.91 5.92	230.3 231.0
2.24	40.9	2.65 56.2	3.0		3.47	89.1	3.88	109.0	4.29	130.0	4.70	153.6	5.11	178.2	5.52	204.0	5.93	231.8
2.25	41.2	2.66 56.6	3.0		3.48	89.6	3.89	110.0	4.30	130.5	4.71	154.2	5.12	178.8	5.53	204.5	5.94	232.5
2.26	41.6	2.67 57.0			3,49	90.0	3.90	110.5	4.31	131.0	4.72	154.8	5.13	179.4	5.54	205.0	5.95	233.3
2.27	42.0	2.68 57.4	3.09		3.50	90.5	3.91	111.0	4.32	131.5	4.73	155.4	5.14	180.0	5.55	205.5	5.96	234.0
2.28	42.4	2.69 57.7	3.10		3.51	91.0	3.92	111.5	4.33	132.0	4.74	156.0	5.15	180.8	5.56	206.0	5.97	234.8
2.29	42.7	2.70 58.1	3.1		3.52	91.5	3.93	112.0	4.34	132.5	4.75	156.6	5.16	181.5	5.57	206.5	5.98	235.5
2.30	43.1	2.71 58.5	3.12		3.53	92.0	3.94	112.5	4.35	133.0	4.76	157.2	5.17	182.3	5.58	207.0	5.99	236.3
2.31	43.5	2.72 58.9	3.13		3.54	92.5	3.95	113.0	4.36	133.5	4.77	157.8	5.18	183.0	5.59	207.5	6.00	237.0
2.32	43.9	2.73 59.2	3.14		3.55	93.0	3.96	113.5	4.37	134.0	4.78	158.4	5.19	183.8	5.60	208.0	6.01	237.8
2.33	44.2	2.74 59.6	3.19		3.56	93.5	3.97	114.0	4.38	134.5	4.79	159.0	5.20	184.5	5.61	208.5	6.02	238.5
2.34	44.6	2.75 60.0	3.10		3.57	94.0	3.98	114.5	4.39	135.0	4.80	159.6	5.21	185.3	5.62	209.0	6.03	239.3
2.35	45.0	2.76 60.4	3.1		3.58	94.5	3.99	115.0	4.40	135.6	4.81	160.2	5.22	186.0	5.63	209.5	6.04	240.0

Fire Resistance Rating, minutes per inches of equivalent thickness Direct Interpolation from table 721.3.2 of the 2007 Florida Building Code Stucco/Sand Finish Block Mix – 100% Limestone

et min	et min	et min	et min	et min	et min				
1.90 30.0	2.31 45.4	2.72 60.8	3.13 76.5	3.54 97.0	3.95 117.5	4.36 139.5	4.77 163.5	5.18 193.5	5.59 216.8
1.91 30.4	2.32 45.8	2.73 61.1	3.14 77.0	3.55 97.5	3.96 118.0	4.37 140.3	4.78 164.0	5.19 194.3	5.60 217.5
1.92 30.8	2.33 46.1	2.74 61.5	3.15 77.5	3.56 98.0	3.97 118.5	4.38 141.0	4.79 164.5	5.20 195.0	5.61 218.3
1.93 31.1	2.34 46.5	2.75 61.9	3.16 78.0	3.57 98.5	3.98 119.0	4.39 141.8	4.80 165.0	5.21 195.5	5.62 219.0
1.94 31.5	2.35 46.9	2.76 62.3	3.17 78.5	3.58 99.0	3.99 119.5	4.40 142.5	4.81 165.8	5.22 196.0	5.63 219.8
1.95 31.9	2.36 47.3	2.77 62.6	3.18 79.0	3.59 99.5	4.00 120.0	4.41 143.3	4.82 166.5	5.23 196.5	5.64 220.5
1.96 32.3	2.37 47.6	2.78 63.0	3.19 79.5	3.60 100.0	4.01 120.5	4.42 144.0	4.83 167.3	5.24 197.0	5.65 221.3
1.97 32.6	2.38 48.0	2.79 63.4	3.20 80.0	3.61 100.5	4.02 121.0	4.43 144.8	4.84 168.0	5.25 197.5	5.66 222.0
1.98 33.0	2.39 48.4	2.80 63.7	3.21 80.5	3.62 101.0	4.03 121.5	4.44 145.5	4.85 168.8	5.26 198.0	5.67 222.8
1.99 33.4	2.40 48.8	2.81 64.1	3.22 81.0	3.63 101.5	4.04 122.0	4.45 146.3	4.86 169.5	5.27 198.5	5.68 223.5
2.00 33.8	2.41 49.1	2.82 64.5	3.23 81.5	3.64 102.0	4.05 122.5	4.46 147.0	4.87 170.3	5.28 199.0	5.69 224.3
2.01 34.1	2.42 49.5	2.83 64.9	3.24 82.0	3.65 102.5	4.06 123.0	4.47 147.8	4.88 171.0	5.29 199.5	5.70 225.0
2.02 34.5	2.43 49.9	2.84 65.2	3.25 82.5	3.66 103.0	4.07 123.5	4.48 148.5	4.89 171.8	5.30 200.0	5.71 225.8
2.03 34.9	2.44 50.3	2.85 65.6	3.26 83.0	3.67 103.5	4.08 124.0	4.49 149.3	4.90 172.5	5.31 200.5	5.72 226.5
2.04 35.3	2.45 50.6	2.86 66.0	3.27 83.5	3.68 104.0	4.09 124.5	4.50 150.0	4.91 173.3	5.32 201.0	5.73 227.3
2.05 35.6	2.46 51.0	2.87 66.4	3.28 84.0	3.69 104.5	4.10 125.0	4.51 150.5	4.92 174.0	5.33 201.5	5.74 228.0
2.06 36.0	2.47 51.4	2.88 66.7	3.29 84.5	3.70 105.0	4.11 125.5	4.52 151.0	4.93 174.8	5.34 202.0	5.75 228.8
2.07 36.4	2.48 51.7	2.89 67.1	3.30 85.0	3.71 105.5	4.12 126.0	4.53 151.5	4.94 175.5	5.35 202.5	5.76 229.5
2.08 36.7	2.49 52.1	2.90 67.5	3.31 85.5	3.72 106.0	4.13 126.5	4.54 152.0	4.95 176.3	5.36 203.0	5.77 230.3
2.09 37.1	2.50 52.5	2.91 67.9	3.32 86.0	3.73 106.5	4.14 127.0	4.55 152.5	4.96 177.0	5.37 203.5	5.78 231.0
2.10 37.5	2.51 52.9	2.92 68.2	3.33 86.5	3.74 107.0	4.15 127.5	4.56 153.0	4.97 177.8	5.38 204.0	5.79 231.8
2.11 37.9	2.52 53.2	2.93 68.6	3.34 87.0	3.75 107.5	4.16 128.0	4.57 153.5	4.98 178.5	5.39 204.5	5.80 232.5
2.12 38.2	2.53 53.6	2.94 69.0	3.35 87.5	3.76 108.0	4.17 128.5	4.58 154.0	4.99 179.3	5.40 205.0	5.81 233.3
2.13 38.6	2.54 54.0	2.95 69.4	3.36 88.0	3.77 108.5	4.18 129.0	4.59 154.5	5.00 180.0	5.41 205.5	5.82 234.0
2.14 39.0	2.55 54.4	2.96 69.7	3.37 88.5	3.78 109.0	4.19 129.5	4.60 155.0	5.01 180.8	5.42 206.0	5.83 234.8
2.15 39.4	2.56 54.7	2.97 70.1	3.38 89.0	3.79 109.5	4.20 130.0	4.61 155.5	5.02 181.5	5.43 206.5	5.84 235.5
2.16 39.7	2.57 55.1	2.98 70.5	3.39 89.5	3.80 110.0	4.21 130.5	4.62 156.0	5.03 182.3	5.44 207.0	5.85 236.3
2.17 40.1	2.58 55.5	2.99 70.9	3.40 90.0	3.81 110.5	4.22 131.0	4.63 156.5	5.04 183.0	5.45 207.5	5.86 237.0
2.18 40.5	2.59 55.9 2.60 56.2	3.00 71.2 3.01 71.6	3.41 90.5	3.82 111.0	4.23 131.5 4.24 132.0	4.64 157.0 4.65 157.5	5.05 183.8	5.46 208.0	5.87 237.8
2.19 40.9 2.20 41.2	2.60 56.2 2.61 56.6	3.01 71.6 3.02 72.0	3.42 91.0 3.43 91.5	3.83 111.5 3.84 112.0	4.24 132.0 4.25 132.5	4.65 157.5 4.66 158.0	5.06 184.5 5.07 185.3	5.47 208.5 5.48 209.0	5.88 238.5 5.89 239.3
2.21 41.6	2.62 57.0	3.02 72.0	3.44 92.0	3.85 112.5	4.26 133.0	4.67 158.5	5.08 186.0	5.49 209.5	5.09 240.0
2.22 42.0	2.63 57.4			3.86 113.0	4.27 133.5	4.68 159.0	5.09 186.8	5.50 210.0	5.50 240.0
2.22 42.0				3.87 113.5		4.69 159.5		5.51 210.8	
2.24 42.7	2.64 57.7 2.65 58.1	3.05 73.1 3.06 73.5	3.46 93.0 3.47 93.5	3.88 114.0	4.28 134.0 4.29 134.5	4.09 159.5	5.10 187.5 5.11 188.3	5.52 211.5	
2.25 43.1	2.66 58.5	3.00 73.5	3.48 94.0	3.89 114.5	4.29 134.5	4.70 160.0	5.11 100.3	5.53 212.3	
2.26 43.5	2.66 58.9	3.08 74.2	3.49 94.5	3.90 115.0	4.31 135.8	4.71 160.5	5.12 109.0	5.54 213.0	
2.27 43.9	2.68 59.2	3.00 74.2	3.50 95.0	3.91 115.5	4.31 135.6	4.72 161.0	5.13 109.0	5.55 213.8	
2.28 44.2	2.60 59.2	3.10 75.0	3.51 95.5	3.92 116.0	4.32 130.5	4.73 161.5	5.14 190.5	5.56 214.5	
2.29 44.6	2.70 60.0	3.10 75.0	3.52 96.0	3.93 116.5	4.33 137.3	4.74 162.0	5.16 192.0	5.57 215.3	
2.30 45.0	2.71 60.4	3.11 75.5	3.52 96.0	3.94 117.0	4.35 138.8	4.75 162.5	5.17 192.8	5.58 216.0	
2,30 43,0	2.11 00.4	J. 12 10.0	30.3	3134 11110	4133 13010	4.10 103.0	9.11 192.0	5.50 Z10.0	