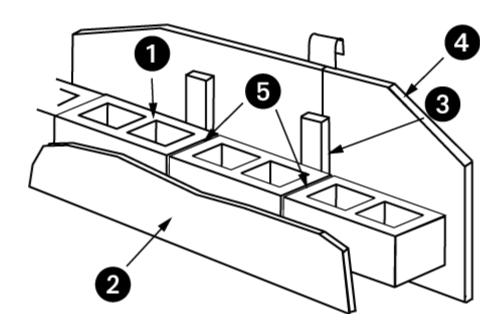


3-Hour Fire Rating

8" C.M.U.

Fire Rating: 3 Hour No. 8-3-910700SD



Assembly Information

- 1. Preferred product 910700 c.m.u. 8" x 8" x 16" nominal
- 2. Portland cement stucco 5/8" thick applied directly to C.M.U.
- 3. Wood or steel furring members 16" o.c. maximum.
- 4. Gypsum wallboard -1/2" thick, long dimension parallel to furring members all joints finished.
- 5. ASTM C-270 Masonry Mortar, Type M or S. Face shell or full mortar bedding as required.
- 6. 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. 8-3-910700SD

Concrete Masonry Unit

Section 721.3.2 of the Florida Building Code

Unit Description	Size WxHxL Nominal	Equivalent Thickness Inches	Fire Rating Minutes
910700	8x8x16	4.3	130.5*

^{*} Linear interpolation from Table 721.3.2 of the Florida Building Code for Exposed Finish Block Mix – 55% limestone & 45% siliceous 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	4.3	130.5*
Yes	N/A	N/A

^{*} Linear interpolation from Table 721.3.2 of the Florida Building Code for Exposed Finish Block Mix – 55% limestone & 45% siliceous aggregates.

Fire Rating: 3 Hour No. 8-3-910700SD

Nonfire-exposed side

Side 1

Section 721.3.2.1 of the Florida Building Code

Finish				
5/8 inch thick Portland cement-sand Stucco	.625			
Multiplying factor Table 721.2.1.4(1)	1			
Adjusted Thickness	.625			
Concrete Masonry Unit				
Unit Description	910700			
Size WxHxL Nominal	8x8x16			
Equivalent Thickness	4.3			
Fire Rating Minutes	130.5			
Total Thickness, CMU + Finish	4.92			
Fire Resistance Rating of CMU & Finish, Table 721.3.2	166.8*			

^{*} Linear interpolation from Table 721.3.2 of the Florida Building Code for Exposed Finish Block Mix – 55% limestone & 45% siliceous aggregates.

Side 2

Section 721.3.2.1 of the Florida Building Code

Finish	
1/2 inch thick Gypsum Wallboard Type X	.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)	4.3
Fire Rating Minutes	130.5
Total Thickness, CMU + Finish (inches)	4.8
Fire Resistance Rating of CMU & Finish, Table 721.3.2	159.6*

^{*} Linear interpolation from Table 721.3.2 of the Florida Building Code for Exposed Finish Block Mix – 55% limestone & 45% siliceous aggregates.

Fire Rating: 3 Hour No. 8-3-910700SD

Fire-exposed side

<u>Side 1</u>

Section 721.3.2.2 of the Florida Building Code

Finish	
1/2 inch thick Gypsum Wallboard Type X	
Time assigned to finish materials Table 721.2.1.4(2)	25
Fire Resistance of Block and Nonfire-exposed side Finish	166.8
Table 721.3.2	2
Assembly Fire-Resistance Rating	191.8
Max. allowable assembly Fire Resistance Block + finishes	261
Total Assembly Fire-Resistance Rating	191.8

Side 2 Section 721.3.2.2 of the Florida Building Code

Finish	
5/8 inch thick Portland cement-sand Stucco	
Time assigned to finish materials Table 721.2.1.4(2)	0 .625
Fire Resistance of Block and Nonfire-exposed side Finish	0
Table 721.3.2	4.8
Accombly Fire Posistance Poting	199
Assembly Fire-Resistance Rating	5.42
Max. allowable assembly Fire Resistance Block + finishes	261
·	
Total Assembly Fire-Resistance Rating	199

Assembly Fire-Resistance Rating 191.8 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	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	4.34 138.0	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	