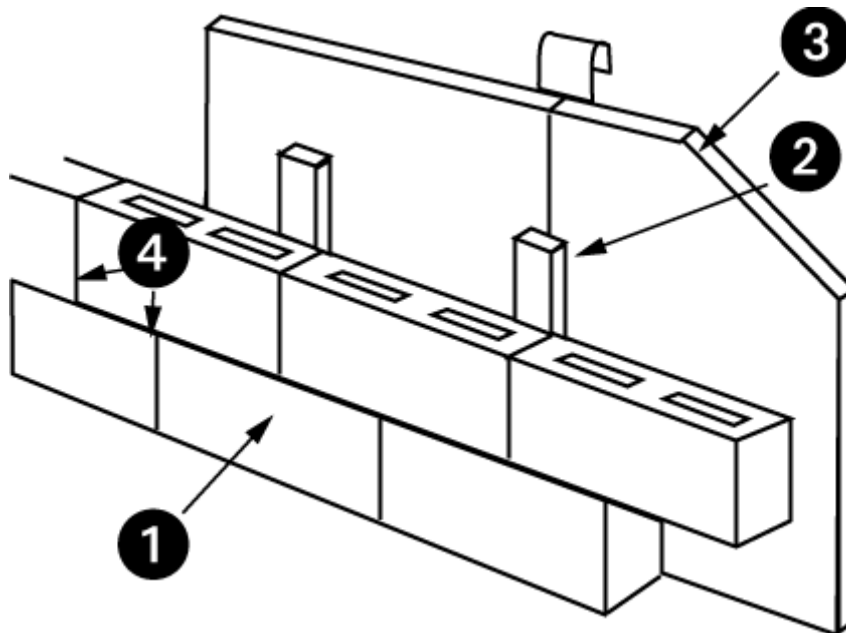


1.5-Hour Fire Rating

4" C.M.U.

Fire Rating: 1.5 Hour No. 4-1.5-910275D



Assembly Information

1. Preferred Product 910275 c.m.u. 4" x 8" x 16" nominal.
2. Wood or steel furring members - 16" o.c. maximum.
3. Gypsum wallboard - Type "X", 5/8" thick, long dimension parallel to furring members - all joints finished.
4. ASTM C270 Masonry Mortar, Type M, S, or N. Face shell or full mortar bedding as required. Use Type N only in interior, non-load bearing partition walls.
5. 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: 1.5 Hour No. 4-1.5-910275D

Concrete Masonry Unit

Section 721.3.2 of the Florida Building Code

Unit Description	Size WxHxL Nominal	Equivalent Thickness Inches	Fire Rating Minutes
910275	4x8x16	2.9	65.6*

** 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	2.9	65.6*
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: 1.5 Hour No. 4-1.5-910275D

Nonfire-exposed side

Side 1

Section 721.3.2.1 of the Florida Building Code

Finish	
5/8 inch thick Gypsum Wallboard Type X	.625
Multiplying factor Table 721.2.1.4(1)	1
Adjusted Thickness	.625
Concrete Masonry Unit	
Unit Description	910275
Size WxHxL Nominal	4x8x16
Equivalent Thickness	2.9
Fire Rating Minutes	65.6
Total Thickness, CMU + Finish	3.52
Fire Resistance Rating of CMU & Finish, Table 721.3.2	91.5*

* 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	
None	0
Multiplying factor Table 721.2.1.4(1)	NA
Adjusted Thickness (inches)	0
Concrete Masonry Unit	
Unit Description	910275
Size WxHxL Nominal	4x8x16
Equivalent Thickness (inches)	2.9
Fire Rating Minutes	65.6
Total Thickness, CMU + Finish (inches)	2.9
Fire Resistance Rating of CMU & Finish, Table 721.3.2	65.6*

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

Fire Rating: 1.5 Hour No. 4-1.5-910275D

Fire-exposed side

Side 1

Section 721.3.2.2 of the Florida Building Code

Finish	
None	
Time assigned to finish materials Table 721.2.1.4(2)	0
Fire Resistance of CMU and Nonfire-exposed side Finish Table 721.3.2	91.5
Assembly Fire-Resistance Rating	91.5
Max. allowable assembly Fire Resistance Block + finishes	131.2
Total Assembly Fire-Resistance Rating	91.5

Side 2

Section 721.3.2.2 of the Florida Building Code

Finish	
5/8 inch thick Gypsum Wallboard Type X	
Time assigned to finish materials Table 721.2.1.4(2)	40
Fire Resistance of CMU and Nonfire-exposed side Finish Table 721.3.2	65.6
Assembly Fire-Resistance Rating	105.6
Max. allowable assembly Fire Resistance Block + finishes	131.2
Total Assembly Fire-Resistance Rating	105.6

Assembly Fire-Resistance Rating	91.5 Minutes
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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

1.95	30.0	2.36	45.4	2.77	60.8	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	2.78	61.1	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	61.9	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	2.81	62.3	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	62.6	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	2.83	63.0	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	63.4	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	2.85	63.7	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	2.86	64.1	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	2.87	64.5	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	2.88	64.9	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	65.6	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	2.91	66.0	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	66.4	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	66.7	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	2.94	67.1	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	2.95	67.5	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	2.96	67.9	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	2.97	68.2	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	2.98	68.6	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	2.99	69.0	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	2.59	54.0	3.00	69.4	3.41	86.5	3.82	106.5	4.23	127.0	4.64	150.0	5.05	174.6	5.46	201.0	5.87	227.3
2.19	39.0	2.60	54.4	3.01	69.7	3.42	86.9	3.83	107.0	4.24	127.5	4.65	150.6	5.06	175.2	5.47	201.5	5.88	228.0
2.20	39.4	2.61	54.7	3.02	70.1	3.43	87.3	3.84	107.5	4.25	128.0	4.66	151.2	5.07	175.8	5.48	202.0	5.89	228.8
2.21	39.7	2.62	55.1	3.03	70.5	3.44	87.8	3.85	108.0	4.26	128.5	4.67	151.8	5.08	176.4	5.49	202.5	5.90	229.5
2.22	40.1	2.63	55.5	3.04	70.9	3.45	88.2	3.86	108.5	4.27	129.0	4.68	152.4	5.09	177.0	5.50	203.0	5.91	230.3
2.23	40.5	2.64	55.9	3.05	71.2	3.46	88.7	3.87	109.0	4.28	129.5	4.69	153.0	5.10	177.6	5.51	203.5	5.92	231.0
2.24	40.9	2.65	56.2	3.06	71.6	3.47	89.1	3.88	109.5	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	3.07	72.0	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	3.08	72.4	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	72.7	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	73.1	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	3.11	73.5	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	73.9	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	74.2	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	74.6	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	3.15	75.0	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	3.16	75.4	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	3.17	75.9	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

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	3.00	71.2	3.41	90.5	3.82	111.0	4.23	131.5	4.64	157.0	5.05	183.8	5.46	208.0	5.87	237.8
2.19	40.9	2.60	56.2	3.01	71.6	3.42	91.0	3.83	111.5	4.24	132.0	4.65	157.5	5.06	184.5	5.47	208.5	5.88	238.5
2.20	41.2	2.61	56.6	3.02	72.0	3.43	91.5	3.84	112.0	4.25	132.5	4.66	158.0	5.07	185.3	5.48	209.0	5.89	239.3
2.21	41.6	2.62	57.0	3.03	72.4	3.44	92.0	3.85	112.5	4.26	133.0	4.67	158.5	5.08	186.0	5.49	209.5	5.90	240.0
2.22	42.0	2.63	57.4	3.04	72.7	3.45	92.5	3.86	113.0	4.27	133.5	4.68	159.0	5.09	186.8	5.50	210.0		
2.23	42.4	2.64	57.7	3.05	73.1	3.46	93.0	3.87	113.5	4.28	134.0	4.69	159.5	5.10	187.5	5.51	210.8		
2.24	42.7	2.65	58.1	3.06	73.5	3.47	93.5	3.88	114.0	4.29	134.5	4.70	160.0	5.11	188.3	5.52	211.5		
2.25	43.1	2.66	58.5	3.07	73.9	3.48	94.0	3.89	114.5	4.30	135.0	4.71	160.5	5.12	189.0	5.53	212.3		
2.26	43.5	2.67	58.9	3.08	74.2	3.49	94.5	3.90	115.0	4.31	135.8	4.72	161.0	5.13	189.8	5.54	213.0		
2.27	43.9	2.68	59.2	3.09	74.6	3.50	95.0	3.91	115.5	4.32	136.5	4.73	161.5	5.14	190.5	5.55	213.8		
2.28	44.2	2.69	59.6	3.10	75.0	3.51	95.5	3.92	116.0	4.33	137.3	4.74	162.0	5.15	191.3	5.56	214.5		
2.29	44.6	2.70	60.0	3.11	75.5	3.52	96.0	3.93	116.5	4.34	138.0	4.75	162.5	5.16	192.0	5.57	215.3		
2.30	45.0	2.71	60.4	3.12	76.0	3.53	96.5	3.94	117.0	4.35	138.8	4.76	163.0	5.17	192.8	5.58	216.0		