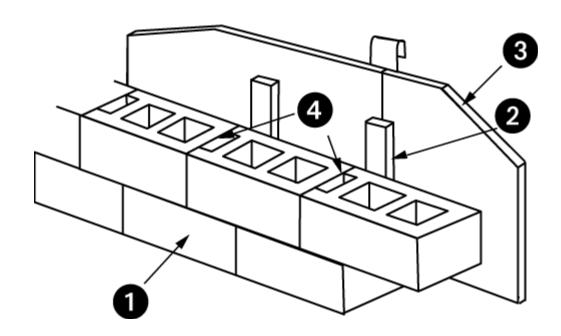


3-Hour Fire Rating

10" C.M.U.

Fire Rating: 3 Hour No. 10-3-910005D



Assembly Information

- 1. Preferred product 910005 c.m.u. 10" x 8" x 16" nominal
- 2. Wood or steel furring members 16" o.c. maximum.
- 3. Gypsum wallboard, $\frac{1}{2}$ " thick, long dimension parallel to furring members all joints finished.
- 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. 10-3-910005D

Concrete Masonry Unit

Section 721.3.2 of the Florida Building Code

Unit Description	Size WxHxL Nominal	Equivalent Thickness Inches	Fire Rating Minutes
910005	10x8x16	5.0	171.6*

^{*} 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	5.0	171.6*		
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: 3 Hour No. 10-3-910005D

Nonfire-exposed side

Side 1

Section 721.3.2.1 of the Florida Building Code

Finish	
3/8 inch thick Gypsum Wallboard	.375
Multiplying factor Table 721.2.1.4(1)	1
Adjusted Thickness	.375
Concrete Masonry Unit	
Unit Description	910005
Size WxHxL Nominal	10x8x16
Equivalent Thickness	5.0
Fire Rating Minutes	171.6
Total Thickness, CMU + Finish	5.37
Fire Resistance Rating of CMU & Finish, Table 721.3.2	196.5*

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

Section 721.3.2.1 of the Florida Building Code

Finish	
None	0
Multiplying factor Table 721.2.1.4(1)	N/A
Adjusted Thickness (inches)	0
Concrete Masonry Unit	
Unit Description	910005
Size WxHxL Nominal	10x8x16
Equivalent Thickness (inches)	5.0
Fire Rating Minutes	171.6
Total Thickness, CMU + Finish (inches)	5.0
Fire Resistance Rating of CMU & Finish, Table 721.3.2	171.6*

^{*} 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. 10-3-910005D

Fire-exposed side

<u>Side 1</u>

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	196.5
Table 721.3.2	
Assembly Fire-Resistance Rating	196.5
Max. allowable assembly Fire Resistance Block + finishes	343
Total Assembly Fire-Resistance Rating	196.5

Side 2
Section 721.3.2.2 of the Florida Building Code

Finish	
3/8 inch thick Gypsum Wallboard	
Time assigned to finish materials Table 721.2.1.4(2)	10
Fire Resistance of CMU and Nonfire-exposed side Finish	171.6
Table 721.3.2	
Assembly Fire-Resistance Rating	181.6
Max. allowable assembly Fire Resistance Block + finishes	343
Total Assembly Fire-Resistance Rating	181.6

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	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	4.00 115.5	4.42 136.8	4.83 161.4	5.24 187.5	5.65 210.8
1.97	30.4	2.38 46.1	2.79 61.5		3.61 96.0	4.02 116.5	4.43 137.4	4.84 162.0	5.25 188.3	
1.98	31.1	2.39 46.5	2.80 61.9	3.20 77.2 3.21 77.6	3.62 96.5	4.03 117.0	4.43 137.4	4.85 162.6	5.26 189.0	5.66 211.5 5.67 212.3
1.99	31.5	2.40 46.9	2.81 62.3	3.21 77.6	3.62 96.5	4.04 117.5	4.44 138.6	4.86 163.2	5.27 189.8	5.68 213.0
2.00	31.9	2.40 40.9	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	2.41 47.5	2.83 63.0		3.65 98.0	4.06 118.5	4.47 139.8		5.29 191.3	5.70 214.5
										5.70 214.5
2.02	32.6 33.0	2.43 48.0	2.84 63.4	3.25 79.4 3.26 79.9	3.66 98.5	4.07 119.0 4.08 119.5	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		4.49 141.0	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

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	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	