

Open Cell Insulating Units

SHAPES AND SIZES



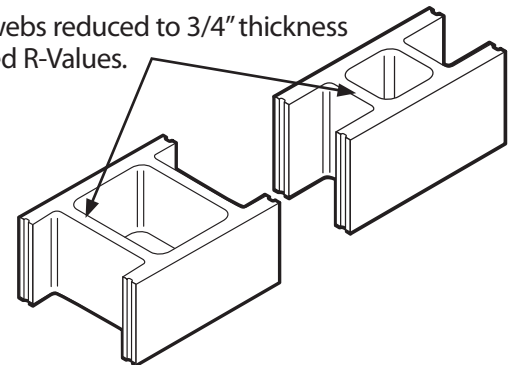
Block Type	Density - pcf	Weight lbs.	Percent Difference
8" Regular - (2) core	Normal Weight - 135 pcf	38	16%
8" Open Cell - (1) core	Normal Weight - 135 pcf	31.9	
12" Regular - (2) core	Normal Weight - 135 pcf	49	21%
12" Open Cell - (1) core	Normal Weight - 135 pcf	38.8	

OPEN CELL

Open Cell Single Core units installed with insulating core materials enhance R-values and result in better energy performance for CMU cavity wall construction. Open Cell units are manufactured with 3/4" webs that improve R-Values, increase occupant comfort levels, and lower energy and equipment costs over the life cycle of the building.

Open Cell units are NCMA & ASHRAE Approved Series Parallel (Isothermal Planes) R-Values

Now with webs reduced to 3/4" thickness for improved R-Values.



12 in. Open Cell	8 in. Open Cell
<p>Special Order Used for alignment of cores for rebar and grouting. Notches on the webs are available for rebar.</p> <p>12" available in smooth face, split face, or with scores (smooth or split face).</p>	<p>080400 Concrete Used for alignment of cores for rebar and grouting. Notches on the webs are available for rebar.</p> <p>8" available in smooth face, split face, or with scores (smooth or split face).</p>

Benefits:

- Reduced web thickness to 3/4"
- Improved R-Value
- Units pass energy code requirements
- Lower weight (see chart above) increases efficiency for masons and reduces injury potential
- Meets ASTM C90 requirement

Available in Decorative Finishes Split Face and Premier Ultra Burnished.

County Materials Corporation - Open Cell Unit with Reduced Webs Thermal R-Values, U-Values, and Heat Capacity (HC) Values													
Size Nominal width	Density lbs/cu.ft.	Core Material Makeup											
		Empty			Grouted Solid			Plastic Foam			Perlite		
		R	U	HC	R	U	HC	R	U	HC	R	U	HC
One Core; (1) 1-1/2" & (1) 1-1-4" Face Shells; (2) 3/4 " Webs (Equivalent Thickness = 3.1")													
12"	135	3.08	0.325	8.76	2.05	0.489	26.54	10.28	0.097	9.03	9.18	0.109	8.92
	115	3.35	0.298	7.53	2.22	0.451	25.31	14.26	0.070	7.80	12.15	0.082	7.69
	105	3.46	0.289	6.92	2.29	0.436	24.70	16.01	0.062	7.18	13.37	0.075	7.08
One Core; (2) 1-1/4" Face Shells; (2) 3/4 " Webs (Equivalent Thickness = 2.4")													
8"	135	2.24	0.447	7.34	1.64	0.610	23.01	6.40	0.156	7.58	5.76	0.174	7.48
	115	2.44	0.410	6.32	1.79	0.559	21.99	8.74	0.114	6.56	7.52	0.133	6.46
	105	2.53	0.396	5.81	1.85	0.539	21.48	9.77	0.102	6.05	8.25	0.121	5.95
Medium Weight Two Core: (2) 1 1/3" Face Shells, (3) 1" Webs (Equivalent Thickness = 4.8")													
12"	125	2.3	0.436	na	2.25	0.444	na	8.07	0.124	na	7.5	0.133	na
	115	2.2	0.455	na	2.16	0.463	na	6.87	0.146	na	6.47	0.155	na
Medium Weight Two Core: (2) 1 1/4" Face Shells, (3) 1" Webs (Equivalent Thickness = 3.9")													
8"	125	2.2	0.455	na	1.81	0.553	na	5.49	0.182	na	5.09	0.196	na
	115	2.09	0.478	na	1.73	0.579	na	4.72	0.211	na	4.45	0.225	na

All dimensions nominal.

Thermal Block Insulating Units

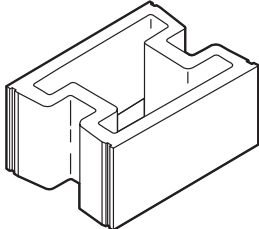
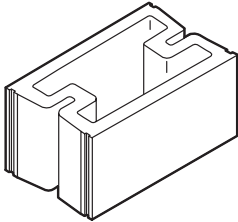
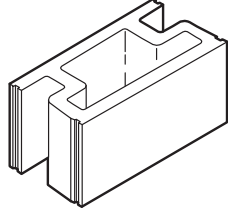
SHAPES AND SIZES



THERMAL BLOCK

THERMAL BLOCK have **rigid insulating inserts installed** in them during the manufacturing process to reduce jobsite labor. Additional thermal protection between units may be installed in the field. Note: *These units are available in Splitface / Fullface Split / Premier Ultra Burnished / or Smoothface.*



12 in. Thermal	10 in. Thermal	8 in. Thermal	
			
120030 Special Order Required	100030 Special Order Required	080030 Special Order Required	
			FACTORY INSTALLED INSERT SIZE $1\frac{7}{16}'' \times 7\frac{5}{8}'' \times 11\frac{15}{16}''$ – 152010 FIELD INSTALLED INSERT SIZE $1\frac{1}{2}'' \times 6'' \times 16''$ – 8" & 12" – 152040 $\frac{3}{4}'' \times 6'' \times 16''$ – 10" – Special Order *Insert sizes vary by location

U-Values & Fire Ratings	BLOCK SIZE					
	12"		10"		8"	
	CONCRETE U-VALUE	LIGHT WEIGHT U-VALUE	CONCRETE U-VALUE	LIGHT WEIGHT U-VALUE	CONCRETE U-VALUE	LIGHT WEIGHT U-VALUE
Unfilled	0.301	0.215	.0318	0.235	0.4	0.305
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	2 Hours	2 Hours
One Factory Installed Insulation Insert	0.281	0.184	0.292	0.205	0.355	0.25
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	2 Hours	2 Hours
Two Factory Installed Insulation Inserts	0.261	0.16	0.267	0.182	-	-
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	-	-
One Factory & One 1 1/2" Field Installed	0.236	0.176	0.269	0.182	0.32	0.212
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	2 Hours	2 Hours
Two Factory & One 1 1/2" Field Installed	0.223	0.144	0.25	0.164	-	-
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	-	-
EPS Loose Fill Only – Field Installed	0.21	0.134	0.255	0.166	0.324	0.217
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	2 Hours	2 Hours
One Factory & EPS Loose Fill – Field Installed	0.209	0.132	0.254	0.165	0.322	0.213
Fire Rating	3 Hours	4 Hours	2 Hours	3 Hours	2 Hours	2 Hours

Note: The chart above shows "U"-Values for concrete and lightweight Thermal Block using the "Series-Parallel Method," effective 4/1/97 for compliance with ASHRAE – IES Standard 90.1. State of Wisconsin Block Approval #930043-R

All dimensions nominal.