

# Concrete Block Insulating Systems

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## TOTAL THERMAL RESISTANCE (R-values) OF UNGROUTED and GROUTED 8" HIGH, HI-R CONCRETE BLOCK

CORES INSULATED-NON Grouted	CMU DENSITY (lbs./cu. ft.)												
	80	95	100	105	110	115	120	125	130	135	140	145	
CMU SIZE													
8 x 8 x 16 HI-R	12.21	10.74	10.27	9.81	9.36	8.92	8.50	8.10	7.71	7.33	6.97	6.63	R-value
HI-R Insulation/NO Grout	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.14	0.14	0.15	U-value
10 x 8 x 16 HI-R	13.92	12.38	11.87	11.38	10.89	10.42	9.95	9.50	9.07	8.64	8.24	7.84	R-value
HI-R Insulation/NO Grout	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	U-value
12 x 8 x 16 HI-R	14.56	12.99	12.48	11.97	11.47	10.98	10.50	10.03	9.58	9.14	8.71	8.30	R-value
HI-R Insulation/NO Grout	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	U-value

CORES INSULATED & Fully Grouted	CMU DENSITY (lbs./cu. ft.)												
	80	95	100	105	110	115	120	125	130	135	140	145	
CMU SIZE													
8 x 8 x 16 HI-R	11.47	10.00	9.53	9.07	8.62	8.18	7.76	7.36	6.97	6.59	6.23	5.89	R-value
HI-R Insulation + Grout	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.17	U-value
10 x 8 x 16 HI-R	13.36	11.82	11.31	10.82	10.33	9.85	9.39	8.94	8.50	8.08	7.67	7.28	R-value
HI-R Insulation + Grout	0.07	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.14	U-value
12 x 8 x 16 HI-R	14.15	12.58	12.06	11.56	11.06	10.57	10.09	9.62	9.17	8.72	8.30	7.88	R-value
HI-R Insulation + Grout	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.13	U-value