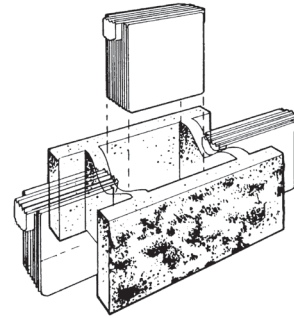


EnerBlock™

Our exclusive insulated-concrete masonry system, EnerBlock™ offers all the traits of a masonry wall — fire resistance, sound dampening and durability — with the added benefit of effective thermal performance.

EnerBlock™



TECHNICAL DATA

R-Values

Calculated by the Series-Parallel Method (Required by the Minnesota Energy Code)

HEAVYWEIGHT CONCRETE UNITS *(132 pounds per cubic foot density)*

Details of Construction — <i>UngROUTED</i>	8"	10"	12"
1. No insulation or grout	2.1	2.2	2.2
2. Grouted cores without insulation	n/a	n/a	n/a
3. EnerBlock™ continuous polystyrene inserts			
a. 4" thickness	4.9	5.5	5.9
b. 2½" thickness	4.6	5.0	5.2
c. 2" thickness (grouted and ungrouted)	3.8	4.2	4.5
d. 1¼" thickness (grouted and ungrouted)	3.7	4.0	4.1
4. Cores filled with perlite loose fill	4.0	4.5	5.1
5. Cores filled with urea-formaldehyde or plastic foam	4.0	4.7	5.2
6. Added R-Value to any of the above walls:			
a. 2" x 2" wood furring (24" o.c.) with 1½" thick molded polystyrene and ½" gypsum board	5.5	5.5	5.5
b. 2" x 2" wood furring (24" o.c.) with 1½" thick extruded polystyrene and ½" gypsum board	6.5	6.5	6.5
c. 2" x 2" wood furring (24" o.c.) with 1½" thick cellular polyisocyanurate, gas permeable face, and ½" gypsum board	7.6	7.6	7.6

EnerBlock™ is a trademark owned by West Materials, Inc. Manufactured by Anchor Block Company.

anchorblock.com

R-Values

Calculated by the Series-Parallel Method (Required by the Minnesota Energy Code)

LIGHTWEIGHT CONCRETE UNITS *(100 pounds per cubic foot density)*

Details of Construction — <i>UngROUTED</i>	8"	10"	12"
1. No insulation or grout	2.6	2.8	2.8
2. Grouted cores without insulation	n/a	n/a	n/a
3. EnerBlock™ continuous polystyrene inserts			
a. 4" thickness	7.9	8.7	9.0
b. 2½" thickness	7.1	7.5	7.7
c. 2" thickness (grouted and ungrouted)	5.7	6.1	6.3
d. 1¼" thickness (grouted and ungrouted)	5.3	5.6	5.7
4. Cores filled with perlite loose fill	6.7	7.9	9.2
5. Cores filled with urea-formaldehyde or plastic foam	7.1	8.4	9.7
6. Added R-Value to any of the above walls:			
a. 2"x 2" wood furring (24" o.c.) with 1½" thick molded polystyrene and ½" gypsum board	5.5	5.5	5.5
b. 2"x 2" wood furring (24" o.c.) with 1½" thick extruded polystyrene and ½" gypsum board	6.5	6.5	6.5
c. 2"x 2" wood furring (24" o.c.) with 1½" thick cellular polyisocyanurate, gas permeable face, and ½" gypsum board	7.6	7.6	7.6

NOTES

1. EnerBlock™ walls designated with (a) has 2" thick inserts in grouted cores; with (b) has 1¼" inserts; with (c) has 2½" inserts.
2. For integrally insulated masonry. Series-Parallel calculations are the method mandated by the U.S. Department of Energy; most State Energy Codes (including Minnesota and Wisconsin); the American Society of Heating, Refrigeration and Air-conditioning Engineers ASHRAE STANDARD 90.1; and the National Concrete Masonry Association (NCMA). The only acceptable alternative is testing according to the ASTM C-236 "Guarded Hot-Box" by an independent accredited laboratory at specific densities and properties.
3. Concrete thermal resistivity values (R per inch) are from NCMA TEK 6-2A, resistivity high range (protected from moisture). Perlite loose fill thermal resistivity (R per inch) is taken from NCMA TEK 6-2A=3.13; polystyrene loose fill is assumed the same as it is processed from various unknown scrap sources. Foam thermal resistivity value R = 4.46 (average from literature of three companies).
4. EnerBlock™ R-values are from published NCMA Concrete Masonry R-Value Evaluation reports.
5. R-values include inside air film (.68) and outside air film (.17) coefficient totaling R = .85.
6. All R-values are steady-state values to be used in the "ENVSTD," "COMcheck" and "MNcheck" computer programs which allow for mass of walls; for other applications, a mass adjustment is allowed according to the 1989 Model Energy Code, Table No, 502.1.2c.