

Proposed Amendment to energy code proposal Env020-2018

According to RS means, vermiculite insulation is higher cost than the foam board insulation. If there is a wall cavity in the assembly, the foam board should be used.

Also, this a prescriptive code exception. As such it should not be traded off. Part 5 covers this.

Based on RS Means 2017

Vermiculite, 50% of Cores (RSM p. 229)	\$1.02
R-9.5 CI Interior* (RSM page 226)	\$0.66
R-11.2 Interior* (RSM page p.187)	\$0.84
Furring - 1-58, wide metal non-loadbearing	\$0.83
1/2 Gypsum board	\$0.97

*The foam board insulation installation cost are included in the drywall and furring install cost.

Revise Table C402.1.3 footnote 'c' as follows:

c. Exception: ~~Integral insulated concrete block walls complying with ASTM C90 with all cores filled and meeting both of the following:~~

Single wythe concrete block walls complying with ASTM C90 meeting all of the following:

1. The single wythe concrete block wall must be exposed both sides. There are no interior or exterior wall coverings.
- ~~2. All cores must be filled and at At least 50 percent of cores must be filled with vermiculite or equivalent fill insulation. and~~
3. The concrete block must have a nominal thickness of 8 inches or greater.
- ~~4. The building thermal envelope encloses one or more of the following uses: Warehouse (storage and retail), gymnasium, auditorium, church chapel, arena, kennel, manufacturing plant, indoor swimming pool, pump station, water and waste water treatment facility, storage facility, storage area, motor vehicle service facility. Where additional uses not listed (such as office, retail, etc.) are contained within the building, the exterior walls that enclose these areas may not utilize this exception and must comply with the appropriate mass wall R-value from Table C402.1.3/ factor from Table C402.1.4.~~
5. Where the area enclosed by the building thermal envelope is heated, the heating system output capacity does not exceed 10 Btu/h-ft².
6. This exception may be used for prescriptive code compliance only.

Revise Table C402.1.4 footnote 'd' as follows:

d. Exception: ~~Integral insulated concrete block walls complying with ASTM C90 with all cores filled and meeting both of the following:~~

Single wythe concrete block walls complying with ASTM C90 meeting all of the following:

1. The single wythe concrete block wall must be exposed both sides. There are no interior or exterior wall coverings.
2. All cores must be filled and at At least 50 percent of cores must be filled with vermiculite or equivalent fill insulation. and
3. The concrete block must have a nominal thickness of 8 inches or greater.

~~2. 4.~~ The building thermal envelope encloses one or more of the following uses: Warehouse (storage and retail), ~~gymnasium, auditorium, church chapel, arena,~~ kennel, manufacturing plant, indoor swimming pool, pump station, water and waste water treatment facility, storage facility, storage area, motor vehicle service facility. Where additional uses not listed (such as office, retail, etc.) are contained within the building, the exterior walls that enclose these areas may not utilize this exception and must comply with the appropriate mass wall ~~R-value from Table C402.1.3/~~U-factor from Table C402.1.4.

5. Where the area enclosed by the building thermal envelope is heated, the heating system output capacity does not exceed 10 Btu/h-ft².

6. This exception may be used for prescriptive code compliance only. To apply this prescriptive measure when using section C402.1.5 Component performance alternative, the Proposed U-value x Area shall equal the UA Table U-factor x Area for this assembly. When demonstrating compliance using Section C407 Total Building Performance, this exception does not apply.