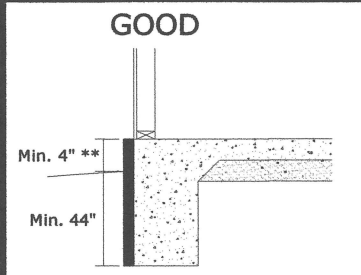
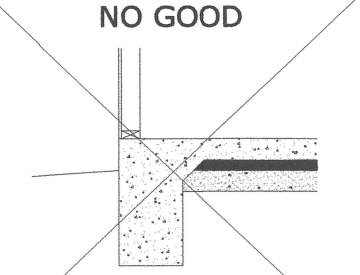
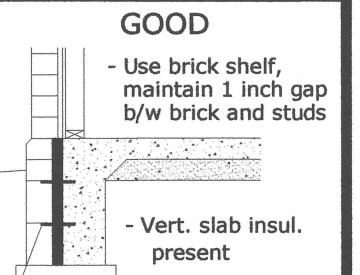
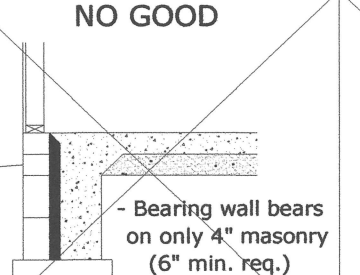
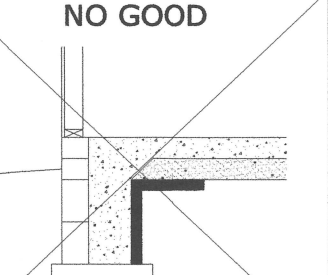
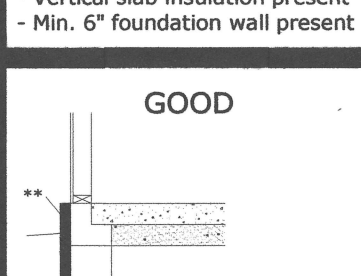
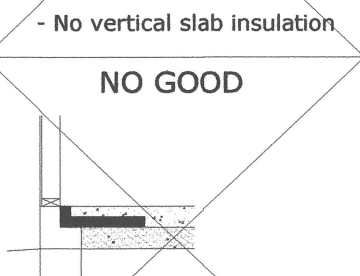
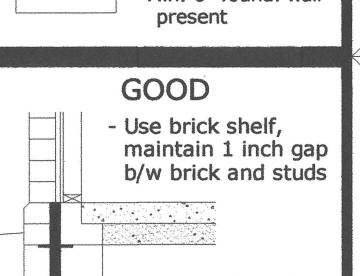

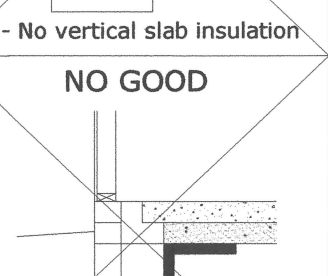
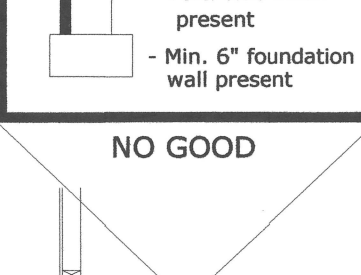

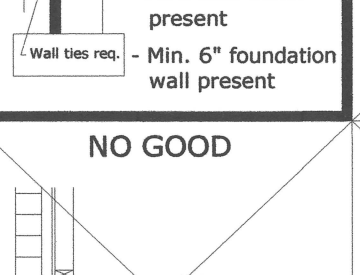
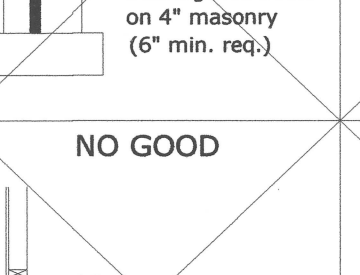
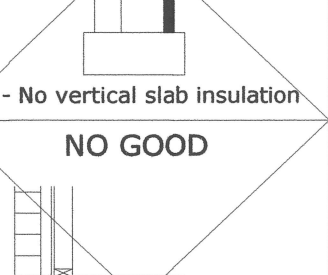
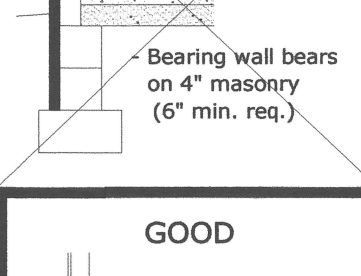
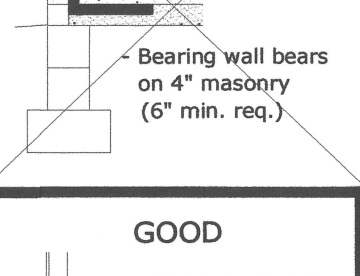
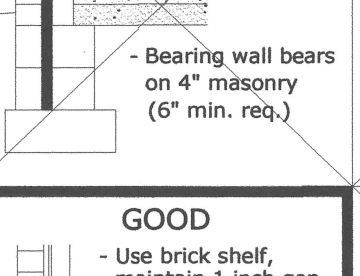
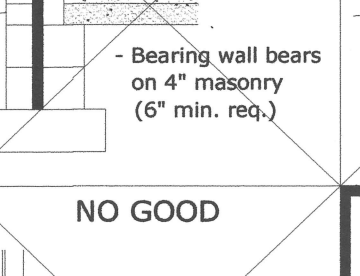
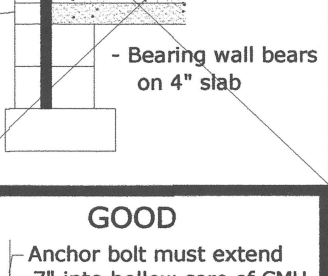
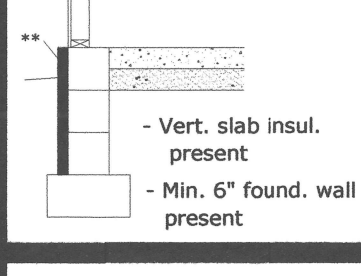
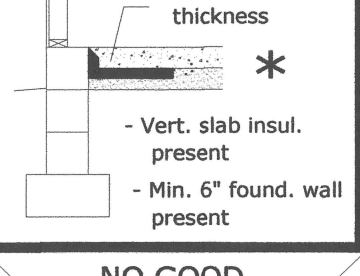
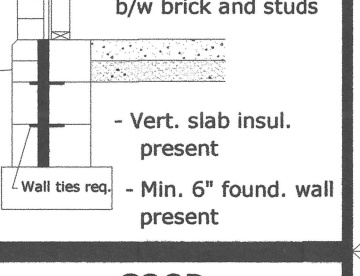
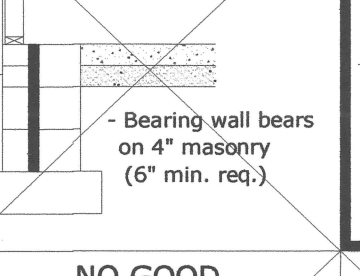
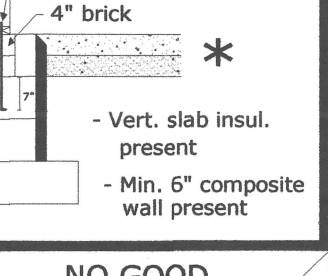


ACCEPTABLE SLAB CONSTRUCTION DETAILS  
(FOR CONDITIONED FLOOR AREAS)

	Vert. Insul. on Exterior Wall	Horiz. Insul. below Slab	Vert. Insul. b/w Brick and Found. Wall	Vert. Insul. and Stud Wall on Brick	Various Conditions
Turned-Down Slab	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Vertical slab insulation present</li><li>- Min. 6" foundation wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- No vertical slab insulation</li></ul></div>	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Use brick shelf, maintain 1 inch gap b/w brick and studs</li><li>- Vert. slab insul. present</li><li>- Min. 6" found. wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on only 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- No vertical slab insulation</li></ul></div>
Shoe Block	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Vert. slab insul. present</li><li>- Min. 6" foundation wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry</li><li>- 2 inch thick slab created (min. 4" req.)</li></ul></div>	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Use brick shelf, maintain 1 inch gap b/w brick and studs</li><li>- Vert. slab insul. present</li><li>- Min. 6" foundation wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- No vertical slab insulation</li></ul></div>
4" Masonry	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" slab</li></ul></div>
8" Masonry	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Vert. slab insul. present</li><li>- Min. 6" found. wall present</li></ul></div>	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Vert. slab insul. present</li><li>- Min. 6" found. wall present</li></ul></div>	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Use brick shelf, maintain 1 inch gap b/w brick and studs</li><li>- Vert. slab insul. present</li><li>- Min. 6" found. wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Anchor bolt must extend 7" into hollow core of CMU</li><li>- 4" brick</li><li>- Vert. slab insul. present</li><li>- Min. 6" composite wall present</li></ul></div>
4" Masonry w/ Turned-Down Slab	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Vert. slab insul. present</li><li>- Min. 6" foundation wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- No vertical slab insulation</li></ul></div>	<div>GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Use brick shelf, maintain 1 inch gap b/w brick and studs</li><li>- Vert. slab insul. present</li><li>- Min. 6" foundation wall present</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- Bearing wall bears on 4" masonry (6" min. req.)</li></ul></div>	<div>NO GOOD</div> <div></div> <div><ul style="list-style-type: none"><li>- No vertical slab insulation</li></ul></div>

NOTE: R-10 rigid insulation is required.  
A min. 4" of vertical insulation is required at the slab's edge. Another 44" of insulation is required either vertically or horizontally under the slab.

Where noted with (\*), foam insulation is permitted to be cut at the top of the slab at a 45 degree angle to allow for the installation of a carpet strip.

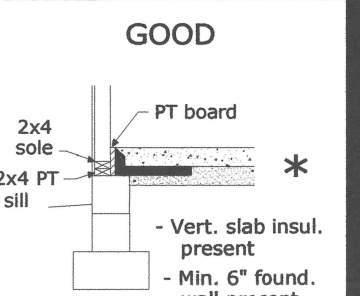
Where noted with (\*\*), foam insulation requires protection from damage when above grade.

NOTE: REScheck will no longer allow for slab insulation trade-offs. The U.S. Department of Energy now wants slab insulation to be installed in all applications (ie. new construction, additions, renovations, etc.)

Wood Stud Wall Option w/ Horiz. Insul. below Slab

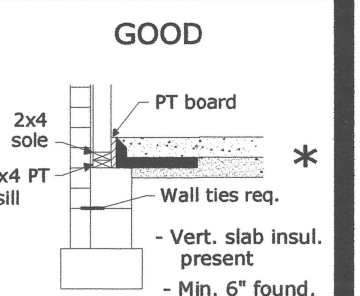
8" Masonry or 8" Brick Composite

GOOD



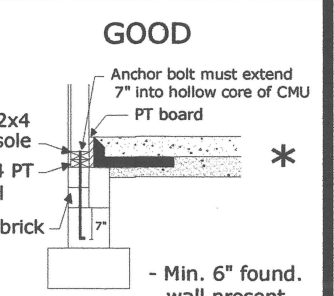
- Vert. slab insul. present
- Min. 6" found. wall present

GOOD



- Vert. slab insul. present
- Min. 6" found. wall present

GOOD



- Min. 6" found. wall present

Code references

- Foundation anchorage requirements - VRC R403.1.6
- Slab insulation requirements - VRC N1102.2.9
- Min. masonry widths for load-bearing walls - VRC Table R404.1.1(1)
- Composite foundation walls are a brick and CMU block (or concrete) wall with a fully grouted collar joint and masonry ties that tie the brick to the CMU block (or concrete) wall. Composite foundation walls can support building loads. Brick alone cannot support building loads.
  - ACI 530-05 2.1.5.2.1

Orig. [9/07] Rev. [2/09] [7/12] [7/19]  
[1/21] [4/23] [3/25]

