

# ACCEPTABLE SLAB CONSTRUCTION DETAILS

## (FOR CONDITIONED FLOOR AREAS)

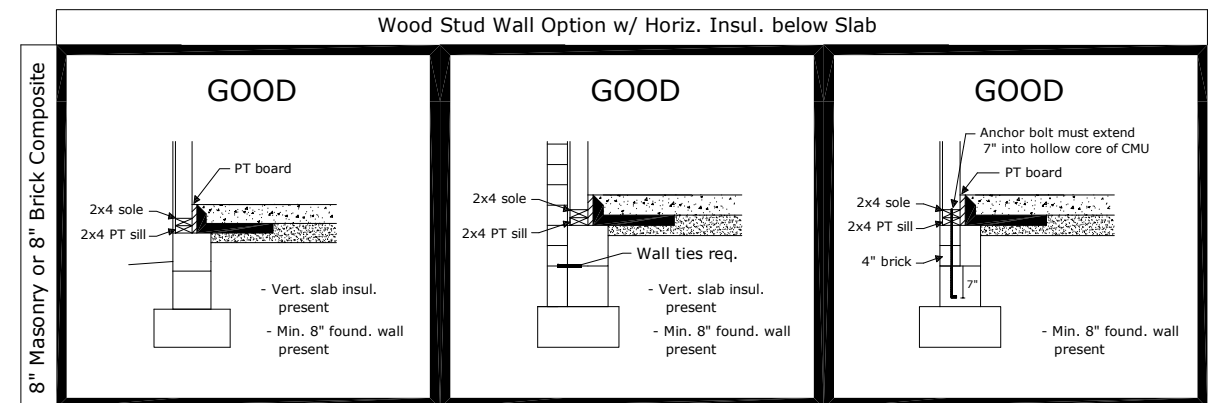
- NOTE: Min. 4" of vertical insulation is required at the slab's edge. Another 20" of insulation is required either vertically or horizontally under the slab. See \* below for examples.



**County of Henrico**  
**Building Inspections**

**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.)**

	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	<p><b>GOOD *</b></p> <p>Min. R-10 insulation Min. 4" ** Min. 20"</p> <p>- Vertical slab insulation present - Min. 8" foundation wall present</p>	<p><b>NO GOOD</b></p> <p>- No vertical slab insulation</p>	<p><b>GOOD</b></p> <p>- Use brick shelf, maintain 1 inch gap b/w brick and wall - Vert. slab insul. present - Min. 8" found. wall present Wall ties req.</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on only 4" masonry</p>	<p><b>NO GOOD</b></p> <p>- No vertical slab insulation</p>
Shoe Block	<p><b>GOOD</b></p> <p>** Foam requires protection from damage above grade</p> <p>- Vert. slab insul. present - Min. 8" foundation wall present</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry - 2 inch thick slab created (min. 4" req.)</p>	<p><b>GOOD</b></p> <p>- Use brick shelf, maintain 1 inch gap b/w brick and wall - Vert. slab insul. present - Min. 8" foundation wall present Wall ties req.</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>NO GOOD</b></p> <p>- No vertical slab insulation</p>
4" Masonry	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" slab</p>
8" Masonry	<p><b>GOOD</b></p> <p>** Foam requires protection from damage above grade</p> <p>- Vert. slab insul. present - Min. 8" found. wall present</p>	<p><b>GOOD *</b></p> <p>Insulation permitted to be cut at 45 degrees for carpet strip</p> <p>- Vert. slab insul. present - Min. 8" found. wall present</p>	<p><b>GOOD</b></p> <p>- Use brick shelf, maintain 1 inch gap b/w brick and wall - Vert. slab insul. present - Min. 8" found. wall present Wall ties req.</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>GOOD</b></p> <p>Anchor bolt must extend 7" into hollow core of CMU 4" brick</p> <p>- Vert. slab insul. present - Min. 8" composite wall present</p>
4" Masonry w/ Turned-Down Slab	<p><b>GOOD</b></p> <p>- Vert. slab insul. present - Min. 8" foundation wall present</p>	<p><b>NO GOOD</b></p> <p>- No vertical slab insulation</p>	<p><b>GOOD</b></p> <p>- Use brick shelf, maintain 1 inch gap b/w brick and wall - Vert. slab insul. present - Min. 8" foundation wall present Wall ties req.</p>	<p><b>NO GOOD</b></p> <p>- Bearing wall bears on 4" masonry (6" min req / 1 story or 8" min. / 2 story)</p>	<p><b>NO GOOD</b></p> <p>- No vertical slab insulation</p>



### Code references

- Brick veneer is non-structural - VRC R703.7.3
- VRC 2009 anchorage req - VRC R403.1.6
- Slab insulation requirements - VRC N1102.2.8
- Min. masonry widths for load-bearing walls - VRC R606.2.1
- Composite walls are fully grouted between brick and block/concrete with wall ties - ACI 530-05 2.1.5.2.1