Section R402.2.8 Basement Walls (Residential Energy Code)

R402.2.8 Basement walls. Walls associated with conditioned basements shall be insulated from the top of the basement wall down to 10 feet (3048 mm) below grade or to the top of the footing, whichever is less. Foundation insulation shall be installed according to the manufacturer’s installation instructions. Walls associated with unconditioned basements shall meet the requirements of this section unless the floor overhead is insulated in accordance with Sections R402.1.1 R402.1.1 and R402.2.7 and the following requirements:

a. R-15 insulation for concrete and masonry foundations shall be installed according to R402.1.1 R402.1.1.1 to R402.1.1.8 R402.1.1.8 and a minimum of a R-10 shall be installed on the exterior of the wall. Interior insulation, other than closed cell spray foam, shall not exceed R-11. Foundations shall be waterproofed in accordance with the applicable provisions of the International Residential Code (IRC).

Exception: R-10 continuous insulation on the exterior of each foundation wall shall be permitted to comply with this code if the tested air leakage rate required in Section R402.4.1.2 does not exceed 2.6 air changes per hour and the total square feet between the finished grade and the top of each foundation wall does not exceed 1.5 multiplied by the total lineal feet of each foundation wall that encloses conditioned space. Interior insulation, other than closed cell spray foam, shall not exceed R-11. See footnote c to Table R402.2.1 R402.1.1.

b. Minimum R-19 cavity insulation is required in wood foundation walls. See footnote 4 i to Table R402.2.1 R402.1.1.