

**(Effective until July 1, 2023)**

**WAC 51-11C-40223 Section C402.2.3—Above-grade walls.**

**C402.2.3 Above-grade walls.** The minimum thermal resistance (*R*-value) of materials installed in the wall cavity between the framing members and continuously on the walls shall be as specified in Table C402.1.3, based on framing type and construction materials used in the wall assembly. The *R*-value of integral insulation installed in concrete masonry units (CMU) shall not be used in determining compliance with Table C402.1.3 except as otherwise noted in the table. In determining compliance with Table C402.1.4, the use of the *U*-factor of concrete masonry units with integral insulation shall be permitted.

"Mass walls" where used as a component in the thermal envelope of a building shall comply with one of the following:

1. Weigh not less than 35 psf (170 kg/m<sup>2</sup>) of wall surface area.
2. Weigh not less than 25 psf (120 kg/m<sup>2</sup>) of wall surface area where the material weight is not more than 120 pounds per cubic foot (pcf) (1,900 kg/m<sup>3</sup>).
3. Have a heat capacity exceeding 7 Btu/ft<sup>2</sup> x °F (144 kJ/m<sup>2</sup> x K).
4. Have a heat capacity exceeding 5 Btu/ft<sup>2</sup> x °F (103 kJ/m<sup>2</sup> x K) where the material weight is not more than 120 pcf (1900 kg/m<sup>3</sup>).

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40223, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40223, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40223, filed 2/1/13, effective 7/1/13.]

**(Effective July 1, 2023)**

**WAC 51-11C-40223 Section C402.2.3—Floors.**

**C402.2.3 Floors.** The thermal properties (component *R*-values or assembly *U*- or *F*-factors) of floor assemblies over outdoor air or unconditioned space shall be as specified in Table C402.1.3 or C402.1.4 based on the construction materials used in the floor assembly. Floor framing cavity insulation or structural slab insulation shall be installed to maintain permanent contact with the underside of the subfloor decking or structural slabs.

"Mass floors" where used as a component of the thermal envelope of a building shall provide one of the following weights:

1. Thirty-five pounds per square foot of floor surface area;
2. Twenty-five pounds per square foot of floor surface area where the material weight is not more than 120 pounds per cubic foot.

EXCEPTIONS: 1. The floor framing cavity insulation or structural slab insulation shall be permitted to be in contact with the top side of sheathing or continuous insulation installed on the bottom side of floor assemblies where combined with insulation that meets or exceeds the minimum *R*-value in Table C402.1.3 for "Metal framed" or "Wood framed and other" values for "Walls, Above Grade" and extends from the bottom to the top of all perimeter floor framing or floor assembly members.  
2. Insulation applied to the underside of concrete floor slabs shall be permitted an air space of not more than 1 inch where it turns up and is in contact with the underside of the floor under walls associated with the *building thermal envelope*.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapters 19.27A and 19.27 RCW. WSR 22-14-091, § 51-11C-40223, filed 7/1/22, effective 7/1/23. Statutory Authority: RCW 19.27A.020,

19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40223, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-40223, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40223, filed 2/1/13, effective 7/1/13.]