

2021 Virginia Construction Code

CHAPTER 21 MASONRY

SECTION 2108 STRENGTH DESIGN OF MASONRY

2108.1 General.

The design of masonry structures using strength design shall comply with [Section 2106](#) and the requirements of Chapters 1 through 7 and Chapter 9 of [TMS 402](#), except as modified by [Sections 2108.2](#) through [2108.3](#).

Exception: AAC masonry shall comply with the requirements of Chapters 1 through 7 and Chapter 11 of [TMS 402](#).

2108.2 TMS 402, Section 6.1.5.1.1, development.

Modify the second paragraph of Section 6.1.5.1.1 as follows:

The required development length of reinforcement shall be determined by Equation (6-1), but shall be not less than 12 inches (305 mm) and need not be greater than $72 d_b$.

2108.3 TMS 402, Section 6.1.6.1.1, splices.

Modify Sections 6.1.6.1.2 and 6.1.6.1.3 as follows:

6.1.6.1.2 – A welded splice shall have the bars butted and welded to develop not less than 125 percent of the yield strength, f_y , of the bar in tension or compression, as required. Welded splices shall be of [ASTM A706](#) steel reinforcement. Welded splices shall not be permitted in plastic hinge zones of intermediate or special reinforced walls.

6.1.6.1.3 – Mechanical splices shall be classified as Type 1 or 2 in accordance with Section 18.2.7.1 of [ACI 318](#). Type 1 mechanical splices shall not be used within a plastic hinge zone or within a beam-column joint of intermediate or special reinforced masonry shear walls. Type 2 mechanical splices are permitted in any location within a member.