

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-647-0000**

Non-Bearing Masonry Foundation Curtain Walls

Code: 2018 Residential Code

Date: April 10, 2019

Section: R404.1.5

Question:

Is it possible to construct a nonload-bearing masonry foundation wall of 4" nominal width masonry without meeting the requirements of Paragraph R404.1.5.1 for pier and curtain wall construction?

Answer:

Yes. Because the wall is not load-bearing it is possible to use Table R606.6.4 – Spacing of Lateral Support for Masonry Walls. According to this table the wall could be as much as 6' tall as a 4" width equates to 72" (18 x 4") lateral support spacing. The wall must however meet the following requirements:

1. The building must be a townhouse in Seismic Design Categories A or B or a detached one- and two-family dwelling.
2. The height of the wall is limited to 6 feet. This limit is imposed by Table R606.6.4.
3. The footing for the curtain wall must meet the depth requirements of Paragraph R403.1.4.
4. The minimum size of the footing is 6" thick (in depth) x 8" wide based on Paragraph R403.1.1.
5. The top of the wall must be in substantial contact with or attached to the structure above a minimum of every 2 linear feet. Continuous contact would be preferred but is not required. The purpose of the contact or attachment is to meet the requirements of Table R606.6.4 for lateral support.
6. The contact or attachment at the top of the foundation curtain wall must meet the requirements of Table R301.5 for guard rails. This will insure adequate resistance at the top of the wall to consider the wall laterally supported at the top.
7. The curtain wall can not be used to resist uplift or shear forces of the building.
8. The curtain wall can not be used to support a masonry veneer wall or any other dead or live load above it.