

GG161-14

408.2.4

Proponent: Jason Thompson, representing NCMA/MACS (jthompson@ncma.org)

Revise as follows:

408.2.4 Pervious pavement and permeable unit pavement. Pervious pavement and permeable unit pavements including open grid paving systems and open-graded aggregate systems shall have an infiltration ~~percolation~~ rate not less than 2 gallons per minute per square foot (100 L/min × m²). The infiltration rate for pervious pavement shall be determined by testing in accordance with ASTM C1701/C1701M. The infiltration rate for permeable unit pavement shall be determined by testing in accordance with ASTM C1781/C1781M. Pervious pavement and permeable unit pavement shall be permitted where the use of these types of hardscapes does not interfere with fire and emergency apparatus or vehicle or personnel access and egress, utilities, or telecommunications lines. Aggregate used shall be open-graded to allow the pavement to comply with the infiltration rate of uniform size.

Add new standard(s) as follows:

ASTM

C1701/C1701M-09, Standard Test Method for Infiltration Rate of In Place Pervious Concrete

C1781/C1781M-13, Standard Test Method for Surface Infiltration Rate of Permeable Unit Pavement Systems

Reason: This modification 1) defines the testing procedures to be used when evaluating the infiltration rate of pervious and permeable pavements for consistent evaluation and qualification; 2) corrects terminology that the test is used to determine an "infiltration rate" instead of a "percolation rate" as infiltration rate is a more accurate method of evaluating a pavement's surface; and 3) requires aggregate used for these pervious and permeable unit pavements to be "open-graded" instead "of uniform size." Open-graded aggregate is the term commonly used for aggregates in pervious and permeable unit pavements. Some open-graded aggregate include more than one size stone or aggregate. For instance, a common base material for permeable unit pavement is washed No. 57 "stone" or aggregate which consists primarily of two (2) stone or aggregate sizes approximately ½ to 1 in. (13 to 25 mm) in size. As long as the aggregate are open-graded to the extent that they allow the pavement system to comply with the pavement infiltration rate, they should be permissible for use with pervious and permeable unit pavement systems.

Cost Impact: Will not increase the cost of construction.

Analysis: The International Energy Conservation Code section C402.3 referenced in the text of this proposal are section numbers for the 2012 Edition. Due to significant changes approved for the 2015 IECC, the section number for the 2015 Editions will be C402.4.

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