

State-of-the-Art of Masonry Retaining Walls

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Abstract:

New masonry retaining wall systems are gaining popularity in commercial and residential construction markets due to their flexibility in design, shape, and color. This modular block construction has been shown to be economical, and it is emerging as a technique of the 90's. These systems have a wide range of applicability, ease of construction, durability, and infinite design options. At present at least thirteen different masonry block systems are commercially available for use in retaining walls, foundations, highways, embankments, dwellings, parking structures, landscaping, etc.

This state-of-the-art report on masonry retaining walls addresses all the information gathered from retaining wall licensors at National Concrete Masonry Association (NCMA). The representatives for eleven systems responded to our survey and their systems are described in this report. Emphasis is on the basic components of the system, analysis, and durability aspects. A general construction procedure is presented here, though it varies slightly from one system to another. A brief economic study of the systems is made. Finally the advantages and disadvantages of the masonry retaining wall system are discussed.

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DOI: 10.70803/001c.140974

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