

Concrete Form Masonry Units - the **OneStep Building System**

RE: Fire Rating Certification

This letter is to certify that the OneStep Concrete Form Masonry Unit (CFMU) building system offers a 4hour fire rating based on the criteria as established in the *ANSI/ACI-216.1-97 Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies.* The National Concrete Masonry Association in accordance with their Technical Note 7-4 *Fire Resistance of Concrete Masonry* has verified this fire rating.

The minimum equivalent thickness of OneStep/CFMU material and concrete fill required to provide this rating is determined by linear interpolation based on the percent of volume of each aggregate used in the manufacturer and installation of the OneStep CFMU system. The OneStep building system provides 5-1/2 inches of solid concrete fill material combined with 1-7/8" of concrete masonry face block material, which is manufactured with cement, fly ash, and limestone aggregates. Therefore, the total equivalent thickness of continuous concrete materials within a 12 inch wide OneStep CFMU wall is 7-3/8". The minimum required thickness of concrete material to provide a four-hour fire rating is 5.9 inches. Therefore the OneStep CFMU building system exceeds the minimum required equivalent thickness needed to provide the 4-hour rating.

Questions concerning this certification or the equivalent thickness methodology for determining fire resistance ratings of masonry assemblies should be directed to OneStep Building System's technical department.

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