



Concrete Masonry & Hardscapes Association
 13750 Sunrise Valley Drive
 Herndon, VA 20171
 703.713.1900
 MasonryAndHardscapes.org

Adam Wildhaber
 Stockman Stoneworks Inc.
 3918 Stockman Lane
 Jefferson City, MO 65109

August 16, 2023

Enclosed is the fire resistance test report conducted in accordance with ACI/TMS 216.1-14, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, that we performed at your request on the following concrete masonry unit that you supplied to the CMHA Research and Development Laboratory:

CMHA Project Number: 23-282-1B
 8x8x16 inch CMU
 Mark "HW"

Aggregate Information as Reported by the Producer:

Aggregate Description	Aggregate Batch Weight (lb)	Aggregate Density (lb/ft ³)	Aggregate Batch Volume (ft ³)	Aggregate Batch Volume (%)
Limestone	3050	90	33.9	38.5%
Sand	5405	100	54.1	61.5%
Totals	8455		88	100%

Unit Properties

Standard Specification: ASTM C90-22

Average Width (in.): 7.62

Average Height (in.): 7.59

Average Length (in.): 15.63

Minimum Face Shell Thickness (in.): 1.25

Minimum Web Thickness (in.): 0.99

Normalized Web Area (in.²/ft²): 30.19

Unit Gross Volume (ft³) = 0.523

Unit Net Volume (ft³) = 0.271

Unit Percent Solid = 51.8%

Unit Equivalent Thickness (in.) = 3.95

Unit Density (lb/ft³) = 129.1



Calculated Fire Resistance

Unit Fire Resistance Calculated in Accordance with ACI/TMS 216.1-14 = 1.9 Hours

Please note that the contents of this report are not to be reproduced, except in full, without the written approval of the CMHA Research and Development Laboratory. We take pride in meeting your product evaluation requirements and look forward to continuing to service your testing needs for years to come. Thank you for choosing CMHA's Research and Development Laboratory. Please feel free to contact me directly with any comments or questions at: 571-224-0924 or tjones@ncma.org.

Sincerely,

Timothy Jones
 Manager, Research and Development Laboratory

Fire Resistance Rating

Certificate Number: 23-282-1B

Certificate Validation Period
August 16, 2023 through August 15, 2024

Stockman Stoneworks Inc.

certifies that concrete masonry units in the shipment are representative of those evaluated by the Concrete Masonry & Hardscapes Association for fire resistance in accordance with ACI/TMS 216.1-14, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*.

The concrete masonry units submitted by the manufacturer listed have been evaluated by the Concrete Masonry & Hardscapes Association Research and Development Laboratory for fire resistance in accordance with ACI/TMS 216.1-14, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, based upon information provided by the producer regarding the type(s) of aggregate(s) and their properties and proportions used to manufacture the concrete masonry units.

Concrete masonry assemblies constructed in accordance with the governing building code using units representative of those submitted for evaluation has the following fire resistance rating:

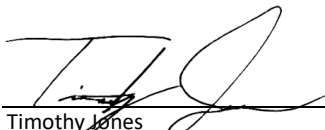
Fire Resistance Rating = 1.9 Hours


The above fire resistance rating can be used to demonstrate compliance with the 2012 through 2021 editions of the International Building Code (IBC).

Manufacturer: Stockman Stoneworks Inc.
Plant: Jefferson City, MO 65109
Unit Description: 8x8x16 inch CMU
Mark "HW"

Equivalent Thickness: 3.95 inches
Aggregate Types: Limestone
Sand

Standard Specification: ASTM C90-22


Timothy Jones
Manager, Research and Development Laboratory


Nicholas R. Lang
Vice President of Engineering, Masonry



Shipment/Project Information: _____

Manufacturer Representative: _____

Signature: _____

Title: _____

Date: _____



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CMHA Project Number: 23-282-2B
 8x8x16 inch CMU
 Mark "LW"

Aggregate Information as Reported by the Producer:

Aggregate Description	Aggregate Batch Weight (lb)	Aggregate Density (lb/ft ³)	Aggregate Batch Volume (ft ³)	Aggregate Batch Volume (%)
Expanded Shale	2560	54	47.4	51.8%
Limestone	804	90	8.9	9.8%
Sand	3510	100	35.1	38.4%
Totals	6874		91	100%

Unit Properties

Standard Specification: ASTM C90-22

Average Width (in.): 7.62

Average Height (in.): 7.59

Average Length (in.): 15.64

Minimum Face Shell Thickness (in.): 1.25

Minimum Web Thickness (in.): 1.01

Normalized Web Area (in.²/ft²): 30.39

Unit Gross Volume (ft³) = 0.523

Unit Net Volume (ft³) = 0.268

Unit Percent Solid = 51.3%

Unit Equivalent Thickness (in.) = 3.90

Unit Density (lb/ft³) = 101.9



Calculated Fire Resistance

Unit Fire Resistance Calculated in Accordance with ACI/TMS 216.1-14 = 2 Hours

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Sincerely,

Timothy Jones
 Manager, Research and Development Laboratory

Fire Resistance Rating

Certificate Number: 23-282-2B

Certificate Validation Period
August 16, 2023 through August 15, 2024

Stockman Stoneworks Inc.

certifies that concrete masonry units in the shipment are representative of those evaluated by the Concrete Masonry & Hardscapes Association for fire resistance in accordance with ACI/TMS 216.1-14, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*.

The concrete masonry units submitted by the manufacturer listed have been evaluated by the Concrete Masonry & Hardscapes Association Research and Development Laboratory for fire resistance in accordance with ACI/TMS 216.1-14, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, based upon information provided by the producer regarding the type(s) of aggregate(s) and their properties and proportions used to manufacture the concrete masonry units.

Concrete masonry assemblies constructed in accordance with the governing building code using units representative of those submitted for evaluation has the following fire resistance rating:

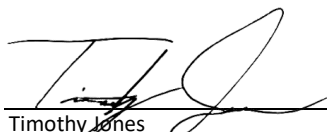
Fire Resistance Rating = 2 Hours

The above fire resistance rating can be used to demonstrate compliance with the 2012 through 2021 editions of the International Building Code (IBC).


Manufacturer: Stockman Stoneworks Inc.
Plant: Jefferson City, MO 65109
Unit Description: 8x8x16 inch CMU
Mark "LW"

Equivalent Thickness: 3.9 inches
Aggregate Types: Expanded Shale
Limestone
Sand

Standard Specification: ASTM C90-22



Timothy Jones
Manager, Research and Development Laboratory



Nicholas R. Lang
Vice President of Engineering, Masonry



Shipment/Project Information: _____

Manufacturer Representative: _____

Signature: _____

Title: _____

Date: _____