

# CONCRETE MASONRY UNITS REPORT

Report Number: 95171280.0008  
Service Date: 07/09/20  
Report Date: 09/21/20 Revision 2 -

# Terracon

2501 E Loop 820 N  
Fort Worth, TX 76118-6978  
817-268-8600 Reg No: F-3272

## Client

Bilco Brick  
Attn: Randy Colen  
2116 N Lancaster-Hutchins Rd  
Dallas, TX 75134

## Project

Bilco Brick Testing  
2501 East Loop 820 North  
Fort Worth, TX

Project Number: 95171280

**Services:** Perform compressive strength, absorption and fire rating in accordance with ASTM 140, for compliance to ASTM C90, NCMA TEK and IBC specifications on concrete masonry units submitted to this facility.

**Sample ID:** Normal weight 12" X 8" X 16" CMU (as identified by weight)

Absorption:

Specimen	Received Weight (lbs)	Immersed Weight (lbs)	SSD Weight (lbs)	Percent Absorption	Absorption (lbs./cu. ft.)	Oven Dry Weight (lbs)	Oven Dry Wt. (lbs./cu. ft.)
1	59.40	35.68	60.85	5.42	7.76	57.72	143.10
2	59.60	35.83	60.98	5.25	7.54	57.94	143.76
3	59.05	35.43	60.41	5.15	7.39	57.45	143.51
<b>Average</b>	<b>59.35</b>	<b>35.65</b>	<b>60.75</b>	<b>5.27</b>	<b>7.57</b>	<b>57.70</b>	<b>143.45</b>

Compressive Strength:

Specimen	Gross Area (in. <sup>2</sup> )	Net Area (in. <sup>2</sup> )	Maximum Load (lbs.)	Gross PSI	Net PSI
4	98.95	53.63	215560	2180	4020
5	98.83	54.28	194590	1970	3590
6	99.56	53.64	201740	2030	3760
<b>Average</b>	<b>99.11</b>	<b>53.85</b>	<b>203960</b>	<b>2060</b>	<b>3790</b>

Average Length: 15.63 in.      Face Shell Thickness: 1.62 in.  
Average Width: 11.62 in.      Webb Thickness: 1.54 in.  
Average Depth: 7.75 in.      Equivalent thickness: 5.73 in.  
Normalized Web Area: 14.22 sq. in./sq. ft.

ASTM C90 specifications:

Absorption (lb./cu. ft.)      15 pcf individual/ 13 pcf average Maximum  
Oven Dry Weight (lbs./cu. ft.)      125 or more  
Net PSI      1800 individual/2000 average Minimum  
Face Shell (inches)      1.25 Minimum  
Web Thickness (inches)      0.75 Minimum  
Normalized Web Area (sq. in./sq. ft.)      6.5 Minimum

The above block comply with ASTM C90 specifications for normal weight block.

The above block comply with NCMA TEK 7-C and IBC (2018) fire resistance rating for up to 3.75 hours.

**Services:**

**Terracon Rep.:** Contractor

**Reported To:**

**Contractor:**

**Report Distribution:**

(1) Bilco Brick, Randy Colen

Reviewed By: 

Kregg Albritton

Laboratory Manager

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.