

GILES ENGINEERING ASSOCIATES, INC.
CONCRETE MASONRY UNIT TESTING

Project No. 1M-9912024

Date 1/11/00

Results of tests on 8" SOUND CELL; Concrete Block
 Nominal size and type 8"x 8"x 16"

IDENTIFICATION OF SPECIMENS

Units manuf. by Best Block - Lilly Road Date Made -
 Brand Mark - Material Crushed Limestone
 Specimens selected by AW Title - Date 12/20/99
 Sampled from Plant Stock Quantity Represented -
 Job WCMA Certification Type of Work -
 Identification Marks or Seals CMU 24-3 (SOUND CELL)

Date Received at Lab 1/5/00

ABSORPTION TEST

Specimen No.	24-3A	24-3E	24-3F			Average
Sampled weight (lbs.)	43.95	43.45	43.80			43.73
Immersed weight (lbs.)	25.30	25.25	25.50			25.35
Wet weight (24 hr.) (lbs.)	45.15	44.60	44.95			44.90
Oven dry weight (lbs.)	42.85	42.60	42.65			42.70
Weight per cu. ft. (dry) (lbs.)	134.7	137.4	136.8			136.3
Absorption (%)	5.4	4.7	5.4			5.2
Moisture content (% of abs.)	47.83	42.50	50.00			46.78
Absorption (lbs./cu. ft.)	7.2	6.4	7.4			7.0

COMPRESSION TEST

Test date	Age			Condition		
Specimen No.	24-3B	24-3C	24-3D			Average or Variation
Air-dry weight (lbs)	43.40	43.60	43.40			43.47
Height (in.)	7.65	7.68	7.65			7.66
Width (in.)	7.66	7.66	7.66			7.66
Length (in.)	15.56	15.56	15.56			15.56
Gross area (sq. in.)	119.19	119.19	119.19			119.19
Gross volume (cu. ft.)	0.53	0.53	0.53			0.53
Net area (sq.in.)	71.90	69.82	70.45			70.72
Net volume (cu. ft.)	0.3181	0.3101	0.3117			0.3133
Ultimate load (lbs)	295,630	315,865	301,685			304,393
Compress. Strength	Gross area (psi)	2480	2650	2530		2550
	Net area (psi)	4110	4520	4280		4310
Type of fracture						
Equivalent thickness (in.)	4.6	4.5	4.5			4.5
Equiv. web thickness (in.)	2.95	2.94	2.94			2.94

GENERAL DATA

Face shell thickness (in., min. ave.)	<u>1.53</u>	Web Thickness (in., min. ave.)	<u>1.21</u>
Cells		Ave. Cell Space (%)	<u>40.89</u>
Test Method	<u>ASTM C140 - 98</u>		

SPECIFICATIONS (ASTM C90)

Compressive strength (min., psi)	Gross area Net area	Ind.	Ave.	Absorption (max.)	(%)- (lbs/cu. ft.)	Ind.	Ave.
		1700	1900				13

Remarks _____

Report to _____

 Charles S. Gresser P. E.
 REVIEWING ENGINEER