



August 10, 2015

Mr. Paul Falco
Cellular Concrete Technologies
360 Wallingford Road
Cheshire CT 06410

Phone: 949.573.0509
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Subject: **Report of Cellular Concrete Testing - ASTM C869**
 Cellular Concrete Technologies
 TEC Services Project No. TEC 09-0774
 TEC Services Lab No. 15-684

Dear Mr. Falco:

Testing, Engineering and Consulting Services, Inc. (TEC Services) is an AASHTO R18, ANS/ISO/IEC 17025:2005, and Army Corps of Engineers accredited laboratory. TEC Services is pleased to present this report of the Cellular Concrete - ASTM C869-11 specification adherence testing. The work was performed in accordance with the terms and conditions of our Service Agreement (TEC-PRO-09-0774). The results of this testing pertain only to the samples tested.

Our testing was performed in accordance with ASTM C 796-04 *Standard Test Method for Foaming Agents for Use in Producing Cellular Concrete Using Preformed Foam*. Section 8.1 of ASTM C796-12 states that the foaming agent shall be mixed in accordance with the manufacturer's recommendations. The Cellular Concrete Technologies representative requested that the foaming agent be tested at a 100:1 (100 parts water to 1 part foaming agent, by volume) dilution ratio. A Type I Portland cement with a water to cement ratio of 0.58 was used for all tests performed. The results of our testing were compared to the requirements of ASTM C869-11 *Standard Specification for Foaming Agents Used in Making Preformed Foam for Cellular Concrete*. The results of our testing indicate that the Stabile Air foaming agent meets the requirements of ASTM C869 at a 100:1 dilution ratio.

Procedure

The Cellular Concrete technologies representative was onsite and produced the foam for the mixing operation. After the combination of cement and the Stable Air foaming admixture, the cellular concrete was then pumped approximately 50 feet, through a one inch line, using a commercially available line pump. Density tests and air content calculations were performed both prior to and after pumping, followed by the molding of specimens. Specific result for ASTM 869-11 are listed below

Test Results

Product: Stable Air Dilution Ratio: 100:1				
Property	ASTM	Test Result	ASTM C 869 Requirement	
Air content before pumping	C796-12	65.54 %	None	-
Air content after pumping	C796-12	61.60 %	None	-
Loss of Air Content	C796-12	3.9%	4.5% by volume (max)	Pass
Density after pumping	C796-12	41.2 lb/ft ³	40 +/- 3 lb/ft ³	Pass
Oven Dry Density	C796-12	32.6 lb/ft ³	30.4 +/- 2.5 lb/ft ³	Pass
Compressive Strength (28 day)	C495-12	220 psi	200 psi (min)	Pass
Tensile Splitting Strength (28 day)	C496-11	30 psi	25 psi (min)	Pass
Water Absorption	C796-12	15.66 %	25% by volume (max)	Pass

Testing, Engineering and Consulting Services, Inc. appreciates the opportunity to provide our professional services for this important project. If you have any questions regarding this report, or if we can be of further assistance please contact us at 770-995-8000.

Sincerely,

TESTING, ENGINEERING AND CONSULTING SERVICES, INC.



George H. Harrison
 Senior Project Manager



Steven J. Maloof
 Vice President