ARIZONA STATE UNIVERSITY

December 17, 2012

Navajo FlexCrete Building Systems
P.O. Box 1657
1950 Industrial Drive
Page, Arizona 86040

To Whom It May Concern:

My research team at Arizona State University School of Sustainable Engineering and the Built environment has been involved in studying the performance characteristics of fiber-reinforced aerated concrete blocks manufactured by the Navajo FlexCrete Building Systems for the past five years. During this period we have studied many of the physical, chemical, microstructural, and mechanics performance of these blocks and walls made of them. Several comprehensive reports have been issued in support of developing state of the art construction systems using these novel, energy efficient, and versatile aerated products.

Navajo FlexCrete produces lightweight fiber-reinforced concrete blocks with excellent thermal and ductility characteristics. These blocks are manufactured in a full-automated plant using Portland cement, fly ash, polymeric fibers, water, and admixtures for aerating the concrete. The fly ash used is classified as class-F according to ASTM C-618 "Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete". The major oxides of this fly ash includes SiO_2 (about 60%), Al_2O_3 (about 22%), Fe_2O_3 (about 5%), CaO (about 4%), MgO (about 1%), and Na2O (about 2%). Other oxides comprise less than 2% and include SO_3, K_2O, TiO_2, P_2O_5, SrO, and BaO. These are well within the currently permissible levels of chemicals in accordance with ASTM C-618 which is the primary set of specifications for use of fly ash in concrete products.

It is our strong belief based on extensive scientific studies that this fly ash does not include hazardous minerals or compounds beyond what is allowable industry limits, and is in full compliance with specifications for building products. It is further our opinion that as long as the fly ash meets the standard industry specifications such as ASTM C618 requirements it is completely safe for construction-related applications, especially when it is contained in a well hydrated cementitious product. Partial replacement of cement with fly ash is not only

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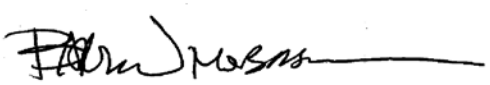
environmentally-friendly, it also improves the durability of concrete blocks against weathering and environmental degradation.

Given the facts that we seek to introduce the most green products and technologies into the field of construction materials and infrastructure, in addition to our desire to maintain and preserve our reputation as a world class research group addressing advanced research projects, I am very glad that we have been able to work with Navajo FlexCrete building systems as a young and energetic company to address the construction needs of the State of Arizona, City of Page and its communities in addition to the Navajo Nation. I support the continuous use of fly ash in the aerated concrete block production without any reservations and know that it is the technology that will grow faster and will be a very successful product in the near future. If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely yours,



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