



**Professional Service Industries, Inc.**  
**Pittsburgh Testing Laboratory Division**

April 8, 1993

Flaherty-Wick, Incorporated  
110 Fifth Street  
West Elizabeth, Pennsylvania 15088-0624

Attention: Mr. Jim Flaherty

Re.: Concrete Test Batch Specifications

On August 10, 1992, our laboratory designed two mix designs that were used in the tests specified below.

MIX DESIGN #1

564 lbs. Medusa Type I per ASTM C-150  
1400 lbs. Manufactured Greer Sand per ASTM C-33  
1640 lbs. #67 Limestone - Davison Stone Co. per ASTM C-33  
310 lbs. Water - City of Pittsburgh (.55 water/cement ratio)

Cured at laboratory temperature of 73 degrees F.  
No air entrainment.  
No forced cure.

MIX DESIGN #2

564 lbs. Medusa Type I per ASTM C-150  
1400 lbs. Manufactured Greer Sand per ASTM C-33  
1640 lbs. #67 Limestone - Davison Stone Co. per ASTM C-33  
254 lbs. Water - City of Pittsburgh (.45 water/cement ratio)

Cured at laboratory temperature of 73 degrees F.  
No air entrainment.  
No forced cure.

Mix Design #1 was used in the ASTM C-42 Compressive and Flexure Tests as described in my October 14, 1992 letter to you. Mix design #1 also was used in the PermaCrete Test for Penetration into Concrete as described in my separate letter of October 14, 1992 to you.

Flaherty-Wick, Incorporated  
April 8, 1993  
Page 2 of 2

Mix Design #2 was used in the Carbonation Test for PermaCrete Treated Concrete as described in my October 14, 1992 Letter and in my February 3, 1983 letter to you that detailed the test methodology. Mix Design #2 was also used in the ASTM C-666 Freeze / Thaw Test for PermaCrete Treated Concrete as described in my November 16 1992 Letter to you.

Very truly yours,

PITTSBURGH TESTING LABORATORY DIVISION



C. A. Sherman  
Department Manager  
Construction Services

CAS/mb