## Columbia University in the City of New York

DEPARTMENT OF CWLL ENGINEERING AND ENGINEERING MECHANICS

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<sub>DATE</sub> June 26, 1986

FOR <u>Radcon Industries, Inc.</u> <u>P.O. Box 15540</u> <u>Las Vegas, Nevada 89114</u>. 
 LAB TEST NO
 86-46

 TESTED BY
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 WITNESS
 H.S. Lew and L. Millstein

#### **REPORT OF TESTS**

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#### Test Samples

Three (3) stack bond brick prisms marked B, C and D made in this laboratory. Mortar type N, ASTM C270 was used. Prisms were cured 28 days. The prism B was treated by using RADCON FORMULA #7 supplied by Radcon Industries, Inc. Prisms C and D were left untreated.

#### Test

Bond Strength determined by the bond wrench method. This method is similar to ASTM C952 with a loading fixture shown schematically in Fig. 1.

#### Test Results

See attached table.

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## TABLE

## BOND STRENGTH

Prism No.	Strength (psi)	Joint No.
В	172	1
В	164	2
В	186	3
В	148	4
	Average: 167.5	
С	110	1
С	148	2
С	166	3
С	146	4
	Average: 140	
D	176	1
D	134	2
D	128	3
D	122	4
	Average: 140	

Notes: 1. Prism B - Treated by Radcon Formula #7 Prism C, D - Untreated





# BOND WRENCH TEST

### 4. Report "D"

Bond Strength Test - Columbia University

This test was commissioned together with the tensile strength test.

Again this test showed an increase in the strength of the substance treated.

Although not as startling as the tensile strength test, it did show an increase of 27.5 %.

Again this information is being utilised in the development of Radcon Formula #7 usage in the treatment of noncementious materials such as bricks.