

CLIENT: **SUNGHYUN CHEMICALS CO., LTD**
465 Chogeum-ro Geumwang-eup Eumseong-gun
Chungbuk, Korea

Test Report No: RJ3838P-4

Date: June 10, 2015

SAMPLE ID: Hicote ET Vermiculite SFRM SGS Korea File No; AYAA15-07869.

SAMPLING DETAIL: Test samples were submitted to the laboratory directly by the client. No special sampling conditions or sample preparation were observed by QAI.

DATE OF RECEIPT: Samples were received at QAI on March 26, 2015.

TESTING PERIOD: April 27 thru May 6, 2015.

AUTHORIZATION: QAI Test Proposal SP-2014-081803 Rev.2 dated February 19, 2015 signed by June Lee of SGS Korea Co., Ltd on February 23, 2015.

TEST REQUESTED: Cohesion/Adhesion Tests per ASTM E 736-00 (Reapproved 2006), *Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members*.

TEST PROCEDURE: The SFRM was applied to a 300 mm (12") x 300 mm (12") x 1.5 mm (16 gage) thick galvanized steel plate at a uniform thickness of 22 mm following the manufactures specification. The test specimens were conditioned to constant weight for a minimum of 8 days at a temperature of $20^{\circ} \pm 5^{\circ}\text{C}$ and a relative humidity of $50 \pm 5\%$ prior to testing.

TEST RESULTS:

Cohesive/Adhesive Strength (psi)	Density of SFRM (pcf)	Mode of Failure
7	20.7	100% cohesive failure within the SFRM

Tested By



David Royer
Laboratory Technician

**Signed for and on behalf of
QAI Laboratories, Inc.**



Larry Burmer
Project Leader-Physical Testing