Underwriters Laboratories Inc.®

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October 8, 2003

Rectorseal
Mr. Randy Clark
2601 Spenwick Dr.
Houston, TX 77055

Our Reference: File R14546, Project 03NK15148

Subject: Movement Cycling of Penetrants in Through-Penetration Firestop System C-AJ-1481 and C-AJ-5253

Dear Mr. Clark:

Project 03NK15148, File R14546 was established to evaluate the fire resistive performance of various types of firestop systems for use in concrete floor or wall assemblies. The purpose of this investigation was to determine the hourly F and T Ratings of the firestop systems when subjected to a fire exposure and hose stream test in accordance with the Standard, "Fire Tests of Through-Penetration Firestops," ANSI/UL 1479.

As part of this investigation, various size holes were core-drilled through a 48 by 48 by 4-1/2 in. thick lightweight concrete floor slab. A penetrating item was positioned within each through-opening. The annular space between the penetrating item and the periphery of the opening was sealed with a fill material manufactured by Rectorseal. After the fill material reached constant weight, the test assembly was subjected to a fire exposure and hose stream test in accordance with the Standard, ANSI/UL 1479.

Based on the results of the investigation, we have established Through-Penetration Firestop System Nos. C-AJ-1481 and C-AJ-5253 in the Fire Resistance Directory. Attached for your information is the description of the systems.

As requested, prior to the fire exposure and hose stream tests, the penetrants were movement cycled 500 times each in the horizontal and vertical directions. The movement distance was ¼ in. in each direction and the rate was 35 cycles/min.

Feel free to contact the writer if you have any questions.

Very truly yours,

KARL AITTANIEMI (Ext. 42719)
Sr. Project Engineer
Fire Protection Division

Reviewed by:

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Fire Protection Division