

ICC Evaluation Service, Inc.
www.icc-es.org

Business/Regional Office ■ 5360 Workman Mill Road, Whittier, California 90601 ■ (562) 699-0543
Regional Office ■ 900 Montclair Road, Suite A, Birmingham, Alabama 35213 ■ (205) 599-9800
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

DIVISION: 07—THERMAL AND MOISTURE PROTECTION
Section: 07210—Building Insulation
Section: 07485—Annular Space Protection

REPORT HOLDER:

HILTI, INC.
5400 SOUTH 122ND EAST AVENUE
TULSA, OKLAHOMA 74146
(800) 879-8000
www.us.hilti.com

EVALUATION SUBJECT:

CF 810 CRACK AND JOINT FOAM

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2003 *International Building Code*® (IBC)
- 2003 *International Residential Code*® (IRC)

Properties evaluated:

- Surface-burning characteristics
- Annular space protection

2.0 USES

CF 810 Crack and Joint foam is an aerosol foam plastic sealant used to fill cracks and voids in construction and the annular space created by the penetration of wood fireblocking by pipes and conduits. The foam plastic is recognized for use as an alternative to the methods prescribed by the code for maintaining the integrity of penetrations of fireblocking.

3.0 DESCRIPTION

CF 810 Crack and Joint foam is a single-component, polyurethane foam plastic sealant that expands to take the shape of cracks and voids. The foam has a flame-spread index of less than 25 and a smoke-developed index of less than 450 when tested in accordance with ASTM E 84. The packaging consists of an aerosol delivery configuration. The foam has been tested in accordance with ASTM E 814 (modified) to establish that the integrity of the fireblocking is maintained when penetrated.

4.0 INSTALLATION

Installation of CF 810 Crack and Joint foam must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions are to be available at the jobsite at all times during installation. The foam must be installed to completely fill the annular space around the penetrations for full depth of

the plate that has been penetrated. Use of the foam plastic to fill the annular space or cracks must observe the following limitations:

- a. The maximum width of exposed foam or the annular space of penetrations to be sealed is not to exceed $1\frac{5}{16}$ inches (33 mm) and the nominal foam thickness is not to exceed 1.5 inches (38 mm).
- b. The maximum area of exposed foam must not exceed 8.2 square inches per square foot ($568 \text{ cm}^2/\text{m}^2$) of wall area.

5.0 CONDITIONS OF USE

The CF 810 Crack and Joint foam plastic sealant described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** Materials and methods of installation must comply with this report and the manufacturer's published installation instructions. In the event of a conflict between the installation instructions and this report, this report governs.
- 5.2** The sealant must not be used in applications where exposed to sunlight or weather.
- 5.3** A thermal barrier is not required when installation complies with Section 4.0 of this report.
- 5.4** Use of CF 810 Crack and Joint foam must be limited to Type V-B construction under the IBC and to construction permitted under the IRC.
- 5.5** CF 810 Crack and Joint foam is produced in Oitti, Finland, under a quality control program with inspections by Underwriters Laboratories Inc. (AA-668).

6.0 EVIDENCE SUBMITTED

- 6.1** Manufacturer's descriptive literature.
- 6.2** Report containing results of testing performed in accordance with ASTM E 84.
- 6.3** Reports containing results of comparative testing performed in accordance with ASTM E 814 (modified).
- 6.4** Report containing results of testing performed in accordance with UL 1715.
- 6.5** A quality control manual.

7.0 IDENTIFICATION

The CF 810 Crack and Joint foam plastic sealant described in this report is identified by a stamp bearing the manufacturer's name (Hilti, Inc.), the product type, the name of the inspection agency (Underwriters Laboratories Inc.) and the evaluation report number (ESR-2179).