



# COMPLIANCE TESTED by berkeley analytical

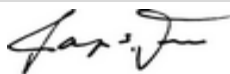
## VOC Emission Test Certificate

Product Name: CFS CID U

### Product Sample Information

Company:	Hilti, Inc.
Company Website:	www.hilti.com
Product Type:	Firestop Cast-In Device
Date Produced:	8/25/2023

### Certificate Information

Certificate No:	230920-02
Certified By:	 Raja S. Tannous, Laboratory Director
Date:	September 20, 2023

**Reference Standard & Modeling Scenario:** California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017 (Emission testing method for CA Specification 01350); Section 4.3.6, Company defined application, see attached Company statement

### Acceptance Criteria and Results Demonstrating Compliance of Product Sample to Referenced Standard:

Exposure Scenario <sup>1</sup>	Individual VOCs of Concern <sup>2</sup>		Formaldehyde <sup>3</sup>		TVOC <sup>4</sup> Range
	Criterion	Compliant?	Criterion	Compliant?	
School Classroom	≤½ Chronic REL	YES	≤9.0 µg/m <sup>3</sup>	YES	≤ 0.5 mg/m <sup>3</sup>
Private Office	≤½ Chronic REL	YES	≤9.0 µg/m <sup>3</sup>	YES	≤ 0.5 mg/m <sup>3</sup>

Sample Coverage<sup>5</sup>: Not applicable

1. Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 – 4-5 (CDPH Std. Mtd. V1.2-2017)
2. Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (*ibid.*)
3. Maximum allowable formaldehyde concentration is ≤9 µg/m<sup>3</sup>, effective Jan 1, 2012; previous limit was ≤16.5 µg/m<sup>3</sup> (*ibid.*)
4. Informative only; predicted TVOC Range in three categories, i.e., ≤0.5 mg/m<sup>3</sup>, >0.5 – 4.9 mg/m<sup>3</sup>, and ≥5.0 mg/m<sup>3</sup>
5. Informative and applicable only to tests of wet-applied products; grams of sample applied per square meter of substrate

### Standards & Codes Recognizing CDPH Standard Method V1.2 (partial list)

- IISGRC IFED Version 4/4 1 RD&C ID&C Residential RD&C Multifamily
- The WFI Building Standard, WFI v2, Feature X06
- ANSI/GRI 01-2019 Green Globes Assessment Protocol

**Narrative:** Hilti Inc. selected a sample representative of its CFS CID U - product and submitted it on 8/28/2023 for testing. Berkeley Analytical measured and evaluated the emissions of VOCs from this sample following CDPH/EHLB/Standard Method V1.2-2017. The results of the test are presented in Berkeley Analytical report, 1031-017-01A-Sep2023.

**Berkeley Analytical** is an independent, third-party laboratory specializing in the analysis of organic chemicals emitted by and contained in building products, finishes, furniture, and consumer products. We are an ISO/IEC 17025 accredited laboratory (IAS, [TL-383](#)); all standards used in performing this test are in Berkeley Analytical's scope of accreditation.

**DISCLAIMER:** THIS CERTIFICATE OF COMPLIANCE AFFIRMS THAT: 1) A SAMPLE OF THE LISTED PRODUCT WAS TESTED ACCORDING TO THE REFERENCED STANDARD; 2) THE MEASURED VOC EMISSIONS FROM THE SAMPLE WERE EVALUATED FOR THE DEFINED EXPOSURE SCENARIO(S); AND 3) THE RESULTS MEET THE ACCEPTANCE CRITERIA OF THE REFERENCED STANDARD(S). BERKELEY ANALYTICAL IS NOT RESPONSIBLE FOR ANY CLAIMS REGARDING A PRODUCT OR PRODUCTS ENTERED INTO COMMERCE THAT MAY BE BASED ON THIS TEST. BERKELEY ANALYTICAL PROVIDES THIS CERTIFICATE OF COMPLIANCE "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.



**Date:** September 20, 2023

**RE:** Statement of product quantities to be used to model and determine compliance of test results with VOC emission guidelines in CDPH Standard Method V1.2 (see Section 4.3.6)

**Company Name:** Hilti, Inc

**Location:** Hilti, Inc Plano, Texas USA

**Contact:** William Chapman Jr Product Care Manager

**Name/Number of Product Sample:** CFS-CID U

**How Product is Used in Buildings:** Preformed firestop device for floor penetrations. Product is used as firestop, smoke, and sound seal for the concrete floor assemblies covering a wide variety of pipes and materials.

**Basis for Determining Typical or Realistic Worst-case Product Use:** The cast in devices are not typically used in a standard classroom or office environment. The cast in firestop devices are usually located in the bathroom, kitchen, laundry room and other wet areas.

***Standard School Classroom (CDPH Standard Method, Table 4-2)***

The dimensions of a typical classroom are given by the CDPH Standard as 40 x 24ft. Using the exposed surface area listed below, the amount of Hilti CFS-CID U required would be as follows:

***Standard School Classroom: 40 ft x 24 ft = 3 Cast-In Devices***

***Standard Private Office (CDPH Standard Method, Table 4-4)***

The dimensions of a typical office are given by the CDPH Standard as 12 ft x 10 ft. Using the exposed surface area listed below, the amount of Hilti CFS-CID U required would be as follows:

***Standard Private Office: 12 ft x 10 ft = 3 Cast-In Device***

Best Regards,

*James Barton*