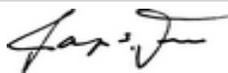




COMPLIANCE TESTED by berkeley analytical

VOC Emission Test Certificate

Product Name: CFS BTS - Bottom Track Seal 1-1/4"

Product Sample Information		Certificate Information	
Company:	Hilti Inc.	Certificate No:	230823-05
Company Website:	www.hilti.com	Certified By:	 Raja S. Tannous, Laboratory Director
Product Type:	Fire Stopping - Track Seal	Date:	August 23, 2023
Date Produced:	7/26/2023		

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

Sample Coverage⁵: 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/m³, effective Jan 1, 2012; previous limit was ≤16.5 µg/m³ (*ibid.*)
4. Informative only; predicted TVOC Range in three categories, i.e., ≤0.5 mg/m³, >0.5 – 4.9 mg/m³, and ≥5.0 mg/m³
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)

- USGBC LEED Version 4/4.1, BD&C, ID&C, Residential BD&C Multifamily
- The WELL Building Standard, WELL v2, Feature X06
- ANSI/GBI 01-2019 Green Globes Assessment Protocol

Narrative: Hilti Inc. selected a sample representative of its CFS BTS - Bottom Track Seal 1-1/4" product and submitted it on 7/28/2023 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, 1031-016-01A-Aug2323.

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 7,2023

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-BTS Bottom Track Seal

How Product is Used in Buildings: Preformed firestop solution for bottom-of-wall drywall joints. Product is used as firestop, smoke, and sound seal for the bottom of wall joints between bottom track and drywall to flat concrete slabs.

Basis for Determining Typical or Realistic Worst-case Product Use: The values were determined by using the specified dimensions (i.e. joint length, joint width, & drywall depth).

Typical or Realistic Worst-case product areas for CDPH Standard Method V1.2 modeling:

		Exposed Surface Area [in ²]	Exposed Surface Area [m ²]	Volume [in ³]	Volume [m ³]	NOTES - Typical classroom size 40ft x 24ft (per CDPH Standard Test Method V1.2)
5/8 BTS	5/8" Joint (TYP)	960	0.6193536	642.519685	0.010530898	
	3/4" Joint (MAX)	1152	0.74322432	771.023622	0.012637077	
1 1/4 BTS	5/8" Joint (TYP)	960	0.6193536	1247.244094	0.020442331	
	3/4" Joint (MAX)	1152	0.74322432	1496.692913	0.024530797	

		Exposed Surface Area [in ²]	Exposed Surface Area [m ²]	Volume [in ³]	Volume [m ³]	NOTES - Typical office size 12ft x 10ft (per CDPH Standard Test Method V1.2)
5/8 BTS	5/8" Joint (TYP)	330	0.2129028	220.8661417	0.003619996	
	3/4" Joint (MAX)	396	0.25548336	265.0393701	0.004343995	
1 1/4 BTS	5/8" Joint (TYP)	330	0.2129028	428.7401575	0.007027051	
	3/4" Joint (MAX)	396	0.25548336	514.488189	0.008432461	



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 joint openings listed below, the amount of Hilti CFS-BTS Bottom Track Seal required would be as follows:

	Exposed Surface Area	Volume
	[in ²]	[in ³]
1 ¼" BTS 5/8" Joint (Typical)	960	1247.24
1 ¼" BTS ¾" Joint (Max)	1152	1496.69

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 joint openings listed below, the amount of Hilti CFS-BTS Bottom Track Seal required would be as follows:

	Exposed Surface Area	Volume
	[in ²]	[in ³]
1 ¼" BTS 5/8" Joint (Typical)	330	428.74
1 ¼" BTS ¾" Joint (Max)	396	514.49

Best Regards,

Joshua Close
Marketing | Product Manager – Fire Protection

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