COMPLIANCE TESTED by berkeley analytical

VOC Emission Test Certificate

Product Name: Mesa

Product Sample Information	
Manufacturer:	Armstrong World Industries
Manf. Website:	www.armstrong.com
CSI Category & No.:	Acoustical Panel Ceilings (09 51 13)
Date Produced:	2/11/2013

Certificate Information	
Certificate No:	130305-04
Certified By:	Raja S. Tannous, Laboratory Director
Date:	March 5, 2013

Reference Standard: California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010 (Emission testing method for CA Specification 01350)

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

Exposure Scenario[1]	Individual VOCs of Concern[2]		Formaldehyde[3]	
	Criterion	Compliant?	Criterion	Compliant?
School Classroom	≤½ Chronic REL	YES	≤9.0 µg/m^3	YES
Private Office	≤½ Chronic REL	YES	≤9.0 µg/m^3	YES

1. Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 – 4-5 (CDPH Std. Mtd. V1.1-2010)
2. Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (*ibid.*)
3. Maximum allowable formaldehyde concentration is ≤9 µg/m^3, effective Jan 1, 2012; previous limit was ≤16.5 µg/m^3 (ibid.).

Potential Applications

- CALGreen, CA Code of Regulations Title 24, Part II, 2010, Section A5.504.4.9: Acoustical Ceilings & Wall Panels
- ANSI/ASHRAE/USGBC/IES Standard 189.1-2009, Section 8.4.2.6: Ceiling & Wall Systems
- USGBC LEED for Healthcare, 2009 (Feb 2011), IEQ Credit 4: LEM, Group 2 - Wall & Ceiling Finishes
- USGBC LEED for Schools, 2009, IEQ Credit 4.6: LEM - Ceiling & Wall Systems
- Collaborative for High Performance Schools (CHPS) rating system, 2009 Criteria EQ2.2.6: Ceiling & Wall Systems
- Green Guide for Healthcare, V2.2, 2007, EQ Credit 4.2: LEM - Wall & Ceiling Finishes

Narrative: Armstrong World Industries selected a sample representative of its Mesa product and submitted it for testing commencing on 2/13/2013. Berkeley Analytical measured and evaluated the emissions of VOCs from this sample following CDPH/EHLB/Standard Method V1.1-2010. The results of the test are presented in Berkeley Analytical report, 134-213-02A-Mar0513.

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.