



**PFS  
Test  
Report**

**PFS TEST REPORT #08-85**

**AIR QUALITY TESTING  
FOR  
TECTUM INC.  
NEWARK, OHIO**



By:  
PFS Corporation  
1507 Matt Pass  
Cottage Grove, WI 53527



# **PFS** Laboratory Services

Testing • Research • Consulting • Model Code Qualifications  
Quality Assurance • Design Calculations • Sampling • Witnessing

## **ENGINEERED WOOD PRODUCTS**

*MDF panels, I-Joists, Rim-board, LVL, Trusses*

## **WOOD-PLASTIC COMPOSITE LUMBER and GUARDRAIL SYSTEMS**

*Deck boards, Structural Elements, Guards, and Handrails*

## **BUILDING STRUCTURAL COMPONENTS**

*Load Bearing Performance*

## **STRUCTURAL INSULATED PANELS**

*Structural Performance and Adhesive Qualification*

## **STRUCTURAL and CONSTRUCTION ADHESIVES**

*Exterior Wet-Use, Building Materials Product Use, Sub-floor, and General Purpose*

## **ROOF COVERINGS and EXTERIOR SIDINGS**

*All types*

## **FASTENERS and CONNECTIONS**

*Nails, Screws, Staples, Bolts, Connector Plates, Joist Hangers*

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**PFS TEST REPORT #08-85  
 AIR QUALITY TESTING  
 FOR  
 TECTUM INC.  
 NEWARK, OHIO**

**GENERAL**

PFS Corporation, Cottage Grove, Wisconsin, performed client requested testing services for Tectum Inc. of Newark, Ohio. The testing was performed by Air Quality Sciences – Atlanta, Georgia. A PFS representative obtained a representative sample of Tectum manufactured cementitious wood fiber product for testing. The client determined that the sampled test material represents the final product for which recognition is sought. The sample was obtained on August 7, 2008. The sampling procedure and handling was according to the recommendations of Air Quality Sciences – Atlanta, Georgia. The testing occurred from September 3-17, 2008.

**TEST METHOD**

The Tectum cementitious 3-in. thick wood fiber product was monitored for emissions of total volatile organic compounds (TVOC), individual volatile organic compounds (IVOC), formaldehyde and other aldehydes over the test period. Air samples were collected following installation of the floor assembly in the chamber. Measurements were made and predicted exposures were calculated according to California's Section 01350 protocol. As specified in this protocol, results at 96 hours, after 10 days of conditioning, were compared to 1/2 (one-half) the current Chronic Reference Exposure Levels (Chronic RELs), as adopted from the California OEHHA list, February 2005 (3). All identified VOCs were also compared to the California-EPA OEHHA Proposition 65 list (4) and the California-EPA Air Resource Board list of Toxic Air Contaminants (TACs) (5).

Ventilation Rate	Room Volume	Surface Area Product Covers
<b>Classroom</b>		
0.90 air changes per hour (ach)	12.19 m x 7.32 m x 2.59 m = 231.07 m <sup>3</sup> (40 x 24 x 8.5 ft. = 8,160 ft. <sup>3</sup> )	94.6 m <sup>2</sup>

**TEST RESULTS**

Acetaldehyde Requirement 1/2 Chronic Inhalation REL (mg/m<sup>3</sup>): 9.0  
 Test Result: 7.5 (mg/m<sup>3</sup>)

Formaldehyde Requirement 1/2 Chronic Inhalation REL (mg/m<sup>3</sup>): 16.5  
 Test Result: 11 (mg/m<sup>3</sup>)

The Tectum cementitious wood fiber product meets the IAQ emission requirements of California's Section 01350 for the classroom.



**TEST REPORT DUPLICATION**

This test report shall not be reproduced, except in full, without the written approval of PFS Corporation, Cottage Grove, Wisconsin.

Report Reviewed by:



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Lab Administration Manager