

# Emission Test Certificate

Tuesday 05<sup>th</sup> September 2023

<b>Supplier</b>	Etex Australia Pty Ltd (31 Military Road, MATRAVILLE, NSW 2036, Australia).
<b>Manufacturer</b>	Siniat Australia (91-99 Ajax Road, Altona, VIC, 3018, Australia)
<b>Sample Description</b>	IntershielD Plasterboard – 25 mm thickness
<b>Date Tested</b>	August 2023 (Tested by FORAY Laboratories – NATA Accreditation 1231)
<b>Test Method</b>	CDPH Ver 1.2: 2017: Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.2: 2017 (Emission testing method for California Specification CA 01350)

Sample and Chamber conditions during the test period:

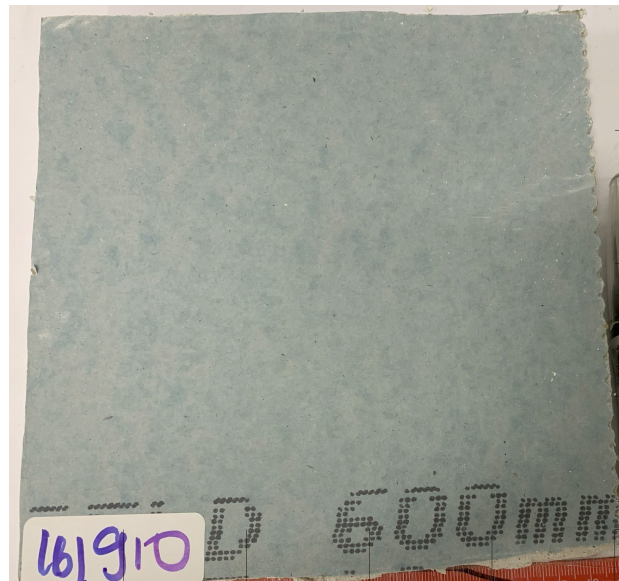
<b>Temperature</b>	23.4°C ± 0.3°C
<b>Humidity</b>	54% ± 3%
<b>Chamber Volume</b>	50 L
<b>Chamber Flow Rate</b>	0.829 L/min
<b>Chamber Pressure</b>	107.9 kPa
<b>Product Loading</b>	0.83 m <sup>2</sup> /m <sup>3</sup>
<b>Air Exchange Rate</b>	0.995 hr <sup>-1</sup>
<b>Emission Collection Time</b>	1380 min for formaldehyde and aldehydes and 115 min for Thermal Desorption tubes VOCs.
<b>Sample Surface Area</b>	0.042 m <sup>2</sup>
<b>Exposure of sample in chamber</b>	14 days (336 hours)

**Test summary:** The air samples were collected from the emission chamber at 336 hours for aldehydes and VOCs. The aldehyde gases were collected on DNPH-treated silica tubes (SKC 226-119) and analysed by Ultra High-Performance Liquid Chromatography (UHPLC). The VOC gases were collected on Tenax TA Thermal Desorption tubes and analysed by ATD-GC-MS as TO-17.

**Emission Data:**

<b>California Specification CA 01350</b>	<b>Intershield Plasterboard – 25 mm thickness</b>
TVOC Emission concentration Limit: <0.500 mg/m <sup>3</sup>	TVOC Emission Concentration*: 0.009 mg/m <sup>3</sup>
Formaldehyde Emission Concentration Limit: <9 µg/m <sup>3</sup>	Formaldehyde Emission Concentration*: <2 µg/m <sup>3</sup>
<p><b>All other Target CREL VOCs and their emission rate are well below the maximum allowable concentrations in accordance with Table 4-1 of the standard method (please see it in Annex 1 below).</b></p>	

\* The stated result was calculated from an emission rate applied to the Standard Private Office Model (Table 4-4) using 44.55 m<sup>2</sup> exposed wall and ceiling area, room volume of 30.6 m<sup>3</sup>, and ventilation rate of 0.68 hr<sup>-1</sup>.



Intershield Plasterboard



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**Annex 1: TVOC & Target VOC calculated concentration as Table 4-1 from Intershiel Plasterboard.**

Sample ID	CAS number	Calculated Concentrations* ( $\mu\text{g}/\text{m}^3$ )
Analyte		161910
TVOC (C <sub>5</sub> -C <sub>17</sub> )	-	9
Acetaldehyde	75-07-0	<2.0
Benzene	71-43-2	<2.0
Carbon disulfide	75-15-0	<2.0
Carbon tetrachloride	56-23-5	<2.0
Chlorobenzene	10-90-7	<2.0
Chloroform	67-66-3	<2.0
1,4-dichlorobenzene	106-46-7	<2.0
1,1-dichloroethene	75-35-4	<2.0
N, N-dimethylformamide	68-12-2	<2.0
1,4-dioxane	123-91-1	<2.0
Epichlorohydrin	106-89-8	<2.0
Ethylbenzene	100-41-4	<2.0
Ethylene glycol	107-21-1	<2.0
Ethylene glycol monomethyl ether	110-80-5	<2.0
Ethyleneglycol monomethyl ether acetate	111-15-9	<2.0
Ethyleneglycol monomethyl ether	109-86-4	<2.0
Ethyleneglycol monomethyl ether acetate	110-49-6	<2.0
Formaldehyde	50-00-0	<2.0
n-hexane	110-54-3	<2.0
Isophorone	78-59-1	<2.0
Isopropanol	67-63-0	<2.0
Methyl chloroform	71-55-6	<2.0
Methylene chloride	75-09-2	<2.0
Methyl t-butyl ether	1634-04-4	<2.0
Naphthalene	91-20-3	<2.0
Phenol	108-95-2	<2.0
Propylene glycol monomethyl ether	107-98-2	<2.0
Styrene	100-42-5	<2.0
Tetrachloroethene	127-18-4	<2.0
Toluene	108-88-3	9.0
Trichloroethylene	79-01-6	<2.0
Vinyl acetate	108-05-4	<2.0
Xylenes (m-, o- & p-)	108-38-3, 95-47-6, 106-42-3	<2.0

\* The stated result was calculated from an emission rate applied to the Standard Private Office Model (Table 4-4) using a 44.55 m<sup>2</sup> exposed wall and ceiling area, a room volume of 30.6 m<sup>3</sup>, and a ventilation rate of 0.68 hr<sup>-1</sup>.