Thorough Examination and Test Report (TExT)

LOCAL EXHAUST VENTILATION (LEV) PLANT

Thorough examination and test - COSHH Regulation 9

SUMMARY OF ASSESSMENT OF CONTROL

PASS

SATISFACTORY

Report no. 1004. In the examiner's opinion, on the date of examination, the LEV plant examined was in an efficient state, in efficient working order, in good repair and in a clean condition.

Refer to next page for Defects & Recommendations

SITE DETAILS & SYSTEM ID

Client/Duty Holder Name	Quillmere Joinery Ltd	**System ID**	J-01
Site Address	Workshop, Mill Lane, Wydebrook WX2 3AB	**Location of LEV**	Panel saw, spindle moulder and sanding booth
Date of TExT	03/11/2026	**Date Next TExT Due**	03/11/2027
Brief Description of Process	Woodworking dust extraction	**Hazardous Substances Used or Produced**	Hardwood and softwood dust

TExT EXAMINER/COUNTERSIGNATORY

Examiner Name	Designation	Date	Signature
Jamie Rowe	LEV examiner	03/11/2026	

Qualifications	Certificate No(s)
P601, P604	SAMPLE-P601-0412, SAMPLE-P604-0412

Countersignatory	Title	Date	Signature

Site representative present	Title	Date	Signature
			Not available - The workshop manager was called away before the test finished.

1. EXECUTIVE SUMMARY

The dust extraction serving the panel saw, spindle moulder and sanding booth was examined and tested. Smoke showed good capture at each hood, and the duct velocities are above the transport minimum.

2. CRITICAL DEFECTS, REPAIRS & RECOMMENDATIONS

None recorded.

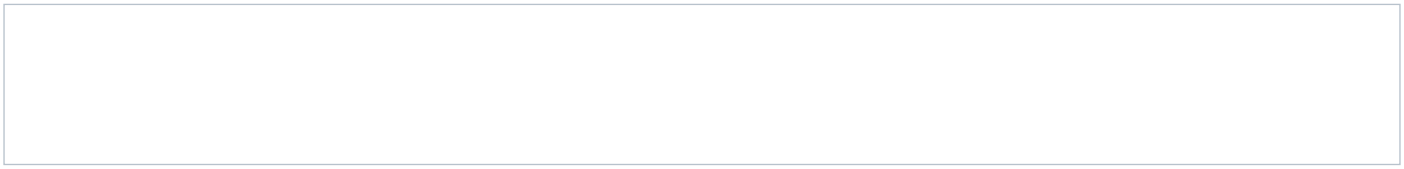
3a. GENERAL DESCRIPTION OF LEV SYSTEM

General Description of LEV System	

3b. PHOTOGRAPHS

None recorded.

3c. SCHEMATIC LAYOUT OF LEV SYSTEM



4. DESCRIPTION OF TExT METHODOLOGY USED

Description of TExT Methodology Used	Visual inspection, smoke test and quantitative measurement.

5a. ASSESSMENT of CONTROL

TExT Undertaken with Plant/Process & LEV Operating Normally?	Yes
If NOT Normal Operations etc – System Test & Evaluation Method(s).	
Description of Hood Types & Arrangement	
Hoods Suitable for the Process BENCHMARK?	
Number of Hoods on System	
Max No to be used/open at any one time	
Description of Alarms/Indicators/Gauges Fitted?	
Description of How Controls Were Observed Being Used by Operators	

5b. ASSESSMENT of CONTROL - VISUAL/QUALITATIVE TEST REPORT

Visual Inspection Report	
Qualitative Test Undertaken?	
Description of Technique(s) Use	
Were Process Emissions Visibly Controlled?	Yes

Instruments Used in TExT	Serial No	Last Calibration Date	Certificate No
Digital micromanometer	DM-0412	03/06/2026	SAMPLE-0412
Vane anemometer	VA-2290	03/03/2026	SAMPLE-2290
Smoke generator	SG-07	Calibration not required	

6. TExT FREQUENCY

Interval between TExTs	12 months
Next TExT Due:	03/11/2027

7. DOCUMENTATION AVAILABLE

Commissioning Report	
LEV System Manual	
LEV Logbook	
CoSHH Risk Assessment	
DSEAR Risk Assessment	

8a. OCCUPATIONAL HYGIENE

Substances USED in Process

None recorded.

Substances PRODUCED by Process

None recorded.

8b. OCCUPATIONAL HYGIENE MONITORING

Has Exposure Monitoring been undertaken in this area?	
If “Yes” insert Date of Survey:	
Survey Findings - Summary	

9. FAN SPECIFICATION & TEST RESULTS

Fan Manufacture and Type	
Model/Size	
Serial Number	
Design Duty Flowrate (m³/s)	
Drive Type	
Measured Fan Shaft Speed (RPM)	
Motor Rating (KW)	
Impellor Type	
Intended Direction of Rotation (as viewed from motor side of fan)	
Confirmed Fan Rotating in Correct Direction	
Method Used to Determine Direction	
Fan INLET Static Pressure (Pa)	
Fan OUTLET Static Pressure (Pa)	
General Comments	

10a. FILTER/AIR CLEANER SPECIFICATION

If no Air Cleaner – go to Section 11

Filtration Arrangement	
Filter Make and Model	
Serial Number	
Manufacturer's Duty Flowrate (m³/s)	
Design Pressure Loss (state if Range) (Pa)	
Filter Cleaning Method	
Differential Pressure Gauge Fitted?	
Prefilter Installed (If 'Yes' add Type and Grade)	
Primary Filter Type	
HEPA Filter (if 'Yes' add Grade)	
General Comments	

10b. FILTER EXAMINATION & TEST RESULTS

Measured Flowrate (m³/s)	
Pressure Drop at TExT (Pa)	
Filter Media Condition	
Evidence of Breakthrough into clean area?	
Recirculation Filter on System?	
Recirc Filter – Breakthrough Measured? (If "No" …. Explanation)	
Recirculation Filter - Technique for Measuring Breakthrough	
Results of Breakthrough Test	
Cleaning Mechanism Operating Correctly?	
Condition of Door/Panel Seals	
General Comments	

11. DSEAR/ATEX

If no applicable – go to Section 12

Do DSEAR/ATEX Regulations Apply to this Process? IF "NO" – Go to Section 12.	No
If Filtered – Explosion Relief Fitted?	
If "Yes" – Does it Vent to a Safe Place?	
Comments on Suitability of Installation	
Rotary Valve on Filter Discharge to Bin?	
Non-Return Valve on Ducting?	
Earth Bonding on System?	
Other DSEAR/ATEX Comments	

12. DUCT SPECIFICATIONS

Ducting Type(s)	Galvanised spiral duct
Inspection Hatches Fitted?	
Internal Inspection Carried Out?	
Explanation of Method Used	
Ducting Balanced/Re-Balanced	
Duct Condition Report (Internal & External)	

13. STACK/TERMINATIONS

If not applicable – go to Section 14

Description of Discharge Arrangement	
Stack Height (from roof level) – (m)	9
Sufficient to Ensure Dispersal?	
Type Weatherproof Termination?	
Comments on Discharge Arrangements:	

14. DUCT QUANTITATIVE MEASUREMENTS

Atmospheric Barometric Pressure (mB)	

TP ID	Duct Temp (°C)	Duct Shape	Duct Diameter (mm)	Duct Width (mm)	Duct Height (mm)	Duct Area (m^2)	Static Pressure (Pa)	Av Velocity Pressure (Pa)	Measured Vel (m/s)	Transport Vel (m/s)	Duct Vol Flow (m^3/s)
TP1	20	Round	200			0.0314		325	23.3	10	0.731
TP2	20	Round	150			0.0177		70	10.8	10	0.191

15a. PARTIAL ENCLOSURES - QUANTITATIVE MEASUREMENTS

Hood ID	LARGE dim (mm)	small dim (mm)	Hood Area (m²)	Face Velocity Average (m/s)#	Reason for typed average (no C1 grid)	Min Face Velocity Requ'd (m/s)	Static Pressure (Pa)	Volume Flow (m³/s)
H3	900	500	0.45	0.43 #		0.4		0.195

H3: average face velocity from the C1 grid - see Appendix 1 C1.

= Use "Partial Enclosure Appendix" to calculate Average Face Velocity (attach copy of Appendix for each hood)

15b. CAPTOR HOOD QUANTITATIVE MEASUREMENTS

Hood ID	Hood Shape	LARGE dim (mm)	small dim (mm)	Hood Area (m²)	Average Velocity (m/s)#	Static Pressure (Pa)	Captor Distance (mm)*	Captor distance confirmed by smoke?	Volume Flow (m³/s)
H1	Circle	300		0.0707	11.6				0.820
H2	Circle	250		0.0491	12.4				0.609

* = Use Fletcher (Excel or App) to Calculate Captor Captor Distance (mm)

"Effective Captor Distance Labels" attached to each Hood?	

15c. RECEIVING HOODS - QUANTITATIVE MEASUREMENTS

None recorded.

16. REFERENCES

HSG258; Controlling Airborne Contaminants at Work, A Guide to Local Exhaust Ventilation; 2017, ISBN 978 0 7176 6613 3
L5 The Control of Substances Hazardous to Health Regulations (CoSHH) 2002, Approved Code of Practice and Guidance (6th Ed), 2013, ISBN 978 0 7176 6582 2
The Management of Health & Safety at Work Regulations 1999; 2007, ISBN 978 0 7176 2488 1
The Dust Lamp – A Simple Tool for Observing the Presence of Airborne Particles, MSE MDHS 82/2, 2015
Workplace Exposure Limits HSE EH40/2005, 4th Edition 2020 ISBN 978 0 7176 6703 1
Industrial Ventilation; A Manual of Recommended Practice for Design, 31st Edition, ACGIH 2023, ISBN 978 1 6072 6161 2

Appendices

APPENDIX 1 - PARTIAL ENCLOSURES

C1 FACE VELOCITY MEASUREMENTS - Hood H3

Size of Opening:	
Cell Size Chosen:	
No. Readings:	

Measured Individual Face Velocities (m/s)

0.40	0.46	0.39	0.36
0.42	0.45	0.43	0.51
0.39	0.38	0.40	0.48
0.51	0.47	0.46	0.44

Average Face Velocity	0.43 m/s
High Limit (+20%)	0.52
Low Limit (-20%)	0.35

0 readings outside the limits, shaded.

Comment on Airflow Distribution	

Calculations - formula version 1

The figures in this report were worked out with formula version 1 and checked again on the server after the report was issued, before this PDF was produced. Its assumptions:

- Barometric pressure is recorded but not used. The sums assume standard air; 0.0754 equals about 1010 mB.
- One averaged velocity pressure per test point, as read from the manometer.
- Duct temperature is entered for each test point.
- Hood shape must be chosen. The app never assumes a circle.
- Captor distance is entered from the Fletcher tool.
- Readings within 5% of a pass/fail line are shown to the examiner on site as advice; the report does not flag them.
- Formula version 1 is printed on every report and frozen when the report is issued.

Duct velocities are corrected for the duct temperature recorded at each test point. Earlier reports may have used a fixed air density (1.29 x $\sqrt{VP}$), so figures can read up to about 1% lower.