

**SUBJECT:**

Elevated High Temperature Test.

TESTED FOR:Tuck Hwa Fabrication (S) Pte Ltd.
4 Kwong Min Road
Singapore 628707**DATE OF TEST:**

02 Jan 2026

PRODCUT DESCRIPTION:**Product manufacturer**

Company Name	:	Tuck Hwa Fabrication (S) Pte Ltd.
Company Address	:	4 Kwong Min Road Singapore 628707
Country of Origin	:	Singapore
Brand Name	:	Tuck Hwa
Generic Product Name	:	High Temperature Ventilation Silencer
Model Reference	:	THF – HT Silencer
(mandatory for PLS listing)	:	

METHOD OF TEST:

The test was carried out to Elevated High Temperature test adopting BS EN 12101-3 2015: Smoke and heat control system – Part 3

Terms and conditions:

1. The result in this report applies to the sample as received from the client at the time of its testing. The result is not intended to be representative of other similar items. This test report may not be used to indicate or imply that Singapore Laboratory Services endorse the test sample mentioned in the report.
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4. This report may not be used in any publicity material without the written permission of Singapore Laboratory Services.
5. The tests were carried out at Singapore Laboratory Services 64, Tuas South Ave 2 unless otherwise stated.

**TEST RESULT:**

The High Temperature Ventilation Silencer was subjected to the heating conditions continuously for 120 minutes. (Refer to APPENDIX B)

Test Conditions	Observation of Structural Performance after test
Adopt Annex C.4.4 High temperature test with exposure to elevated temperature of 250°C for 120 minutes per client's request.	There was no permanent deformation/damage to the Ventilation silencer during and after the test. (Refer to APPENDIX A)

REMARKS:

The High Temperature Ventilation Silencer is deemed suitable for use at the temperature of 250 °C or lower when operated at the parameters and conditions as tested.


Joshua Lee
Senior Engineer
Chua Lee Choong Louis
Senior Manager**Terms and conditions:**

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**APPENDIX A:**

Front view



Back view

Photo 1. THF – HT Silencer, Before High Temperature Test



Front view



Back view

Photo 2. THF – HT Silencer, After High Temperature Test

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APPENDIX B:

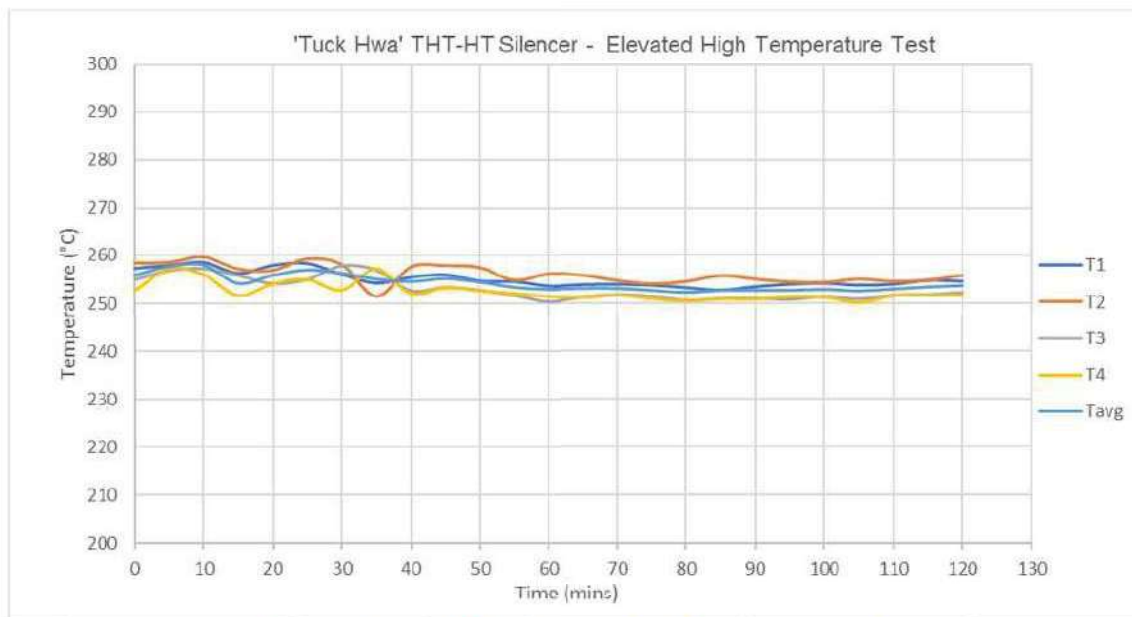


Figure 1: Elevated High Temperature Test – Time Graph

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APPENDIX B: CONT'D

Time (mins)	Temperature (°C)				
	T1	T2	T3	T4	T _{avg}
0	257.3	258.4	254.9	252.7	255.8
5	257.9	258.6	256.8	257.1	257.6
10	258.5	259.7	257.2	256.0	257.9
15	256.3	257.2	255.8	251.7	254.1
20	257.9	256.9	254.1	254.1	255.8
25	258.3	259.3	255.0	255.0	256.9
30	256.1	258.1	257.8	252.8	256.2
35	254.3	251.4	256.9	257.2	255.0
40	255.5	257.6	252.6	252.1	254.5
45	256.0	257.9	253.3	253.3	255.1
50	254.7	257.5	252.7	252.7	254.4
55	254.6	254.8	251.6	252.1	253.3
60	253.7	256.2	250.3	251.5	252.9
65	253.9	255.8	251.2	251.2	253.0
70	254.0	254.7	251.7	251.7	253.0
75	253.8	254.0	251.4	251.0	252.6
80	253.3	254.5	250.5	250.5	252.2
85	252.8	255.7	250.9	250.9	252.6
90	253.5	255.0	250.9	250.9	252.6
95	254.0	254.4	250.7	251.4	252.6
100	254.2	254.3	251.3	251.3	252.8
105	253.8	255.0	250.8	250.2	252.5
110	254.0	254.5	251.6	251.6	252.9
115	254.8	254.8	251.7	251.7	253.3
120	254.6	255.8	252.2	251.7	253.6

Figure 2: Elevated High Temperature Test Data

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