07 August 2026
Date of Issue

IGNIS INDICATIVE TESTING

Thermally Modified Hemlock

IGNL-100139-24-03L

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1 Introduction

Ignis Labs undertook an indicative test to determine the performance of the Thermally Modified Hemlock provided by Modinex Group. The testing was undertaken in accordance with AS/NZS 3837:1998 at an exposure irradiance level of 12.5 kW/m².

The test results were assessed with reference to the performance criteria for bushfire-resisting timber in Appendix F of AS/NZS 3959:2018. However, the exposure irradiance level of 12.5 kW/m² was selected at the request of the test sponsor and represents a variation from the Appendix F test arrangement associated with BAL-29.

The results presented in this letter provide an indication of the performance of the tested Thermally Modified Hemlock specimens under the specific test conditions and variation described herein. The results are intended for guidance purposes only and shall not be interpreted as demonstrating full compliance with Appendix F of AS/NZS 3959:2018 or classification as bushfire-resisting timber for BAL-29.

2 Summary

SPONSOR:	Modinex Group
ADDRESS:	150 Toongarra Road Wulkaraka, QLD 4305
SAMPLE IDENTIFICATION:	Thermally Modified Hemlock
DESCRIPTION OF MATERIAL:	The sponsor described the specimen as Thermally Modified Hemlock. It has a nominal composition of natural timber. It is symmetrical and has a nominal density of 460 kg/m^3. It has a nominal thickness of 12 mm, and it is natural in colour. The received specimens were natural-coloured blocks. They had an average measured length of 100.25 mm, an average width of 100.61 mm and an average measured thickness of 12.11 mm. Ignis Labs was not responsible for the sampling stage. All specimens were sampled and fabricated by the test sponsor. The test results apply to the specimens as received.
TEST METHOD:	Three (3) specimens were prepared and tested in accordance with AS/NZS 3837

with the exposure irradiance level of 12.5 kW/m², method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter. Prior to the test, the specimens were conditioned at an ambient temperature of 23 ±2 °C and a relative humidity 50 ±5 %.

The test results were assessed with reference to the performance criteria for bushfire-resisting timber in Appendix F of AS/NZS 3959:2018. The use of a 12.5 kW/m² exposure irradiance level was requested by the test sponsor and is recorded as a variation from the Appendix F test arrangement associated with BAL-29.

TEST DATE: 03.07.2026 and 06.07.2026

OBSERVATIONS: All specimens exhibited similar performances, and none ignited. Light smoke was observed at 511 to 515 seconds into the test. After the test, the specimens were slightly charred black.

TEST RESULTS: The averaged maximum heat release rate was 9.16 kW/ m² for the three tested specimens. None of the specimens were ignited. Therefore, the average rate of heat release for the 10 minutes following ignition was not applicable.

Based on the results obtained under the specific indicative test conditions described in this letter, the tested specimens **satisfied** the applicable performance criteria assessed with reference to Appendix F of AS/NZS 3959:2018. This assessment is subject to the recorded variation from the Appendix F test arrangement, namely the use of an exposure irradiance level of 12.5 kW/m² at the request of the test sponsor. The results shall not be interpreted as demonstrating full compliance with Appendix F of AS/NZS 3959:2018 or classification as bushfire-resisting timber for BAL-29.

Yours sincerely,

Jessica Ying
Technical Lead Engineer