



MIROTONE

xerofire®

HIGH PERFORMANCE CLEAR INTUMESCENT COATING SYSTEM

A clear coat intumescent system designed to achieve **Group 1S** on timber and timber related products.

Mirotone the leading provider of wood coatings to the New Zealand market has formed a partnership with Morrells, the largest manufacturer of wood finishes in the UK to bring new intumescent coatings to New Zealand.

The **xerofire®** system comprises a 2K Waterborne Intumescent Basecoat together in combination with a 2K acid catalysed Clear Topcoat, providing a high quality and excellent aesthetic furniture grade finish. This system achieves **Group 1S** rating - the highest possible.

Interior use only

Spray application

Can be applied to MDF, plywood, solid timber, veneers

Available in 10% and 30% gloss finishes

Tested to EN.13501-1: 2007 + A1: 2009 'Euro'
Classification

Easy to use by professional applicators

Unrivalled clarity



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xerofire® has been tested to EN 13501-1:2007 + A1:2009 achieving a **B -s1, d0** classification in relation to its reaction to fire behaviour on 18mm Birch veneered plywood - a Type 2 substrate, with a density of 650kg/m³. From table A2, Appendix C/MM2, Section A1.6 (reproduced below) the Group Rating classification determined is applicable to all Type 2 substrates, being of 12mm thickness or greater and of equal or greater density.

A1.6 Selecting a substrate for testing materials or coatings usually applied to a substrate

Materials or coatings that are usually applied to a particular substrate shall be applied to the appropriate substrate. Where the material may be applied to a variety of substrates, the substrate selected for testing shall be one which most closely represents the end use condition. The choice shall be based on Table A2. A test result for material or coating tested on any one of the specified substrates may also be used when the material or coating is applied to any other substrate of the same type or a less reactive type and of equal or greater density.

However, Table A2 only applies where the substrate is not modified by the application of a surface coating or treatment. Where the substrate is modified by a surface coating or treatment, through significant absorption of material into it, the coating and substrate should be specifically tested. Notwithstanding the above, a surface coating on any nominated substrate may be tested and a Group Number assigned as described in A1.2 or A1.3.T.

Table A2: Selection of substrate:

Substrate Type	Substrate Material
1 (most reactive)	Timber, Standard grade plywood, hardboard, fibre/particleboard (where the substrate is less than 12mm thick).
2	Timber, Standard grade plywood, hardboard, fibre/particleboard (where the substrate is 12mm thick or greater).
3	Paper faced gypsum board products.
4 (least reactive)	Concrete/masonry, fibre-reinforced cement board, non-paper faced gypsum boards.

Based on the MBIE Guidance published March 2015 “The correlation of wall and ceiling surface finishes derived from Australian or European classifications to the Group Number requirements of NZBC Clause 3.4(a) can without the need for further testing be taken as described in the following table.”

New Zealand Group Number according to NZBC Clause C3.4(a) using ISO 9705:1993	Australian Group Number according to NCC Specification C1.10 Clause 4 using AS ISO 9705:2003	European Classification using to EN 13501-1:2007
Group Number 1S	Group 1 and smoke growth rate index not more than 100	Class A1, A2 or B and Smoke production rating S1 or S2
Group Number 1	Group 1	Class A1, A2 or B
Group Number 2S	Group 2 and a smoke growth rate index not more than 100	Class C and Smoke production rating S1 or S2
Group Number 2	Group 2	Class C

xerofire® coating system is a clear intumescent coating for upgrading wood-based substrates, meeting clause 3.4(a) and achieves a **Group 1S rating - the highest possible** - on timber and wood based products being of 12mm thickness or greater and density of 650kg/m³ or greater.

It is the responsibility of the user to ensure that their specific system/application achieves/maintains the required Fire Retardant rating.

SOURCE: MBIE CVM2 VERIFICATION METHOD, FRAME WORK FOR THE FIRE SAFETY DESIGN FOR NEW ZEALAND BUILDING CODE CLAUSES C1-C6 FROM FIRE.

SOURCE: MBIE GUIDANCE PRINTED MARCH 2015 - ACHIEVING NZBC GROUP NUMBERS FOR SURFACE FINISHES FROM TESTS TO OVERSEAS STANDARDS.

