

# Wood Protection Association Benchmark Quality Approval Scheme: Approved Flame Retardant Formulation



**APPROVED PRODUCT:** Zeroignition Technologies Inc Zi-20

**Formulation Type:** WPA Type INT1 (Interior dry), INT2 (Interior humid)

**Application Method:** Vacuum pressure impregnation with kiln drying of treated wood and wood-based board materials.

**Approval Holder:** Zeroignition Technologies Inc. Unit 6, 130 Glacier Street Coquitlam V3K 5Z6, Canada  
Tel: +1 604 256 5399 Email: info@zeroignition.com

**Approval Scope:** This Certificate of Approval applies to **Zi-20** flame retardant and **Zi-20** treated wood and wood-based board materials for which suitable evidence of performance has been accepted by the independent Approval Panel for Flame Retardant Formulations operated by the WPA.

**Zi-20** is only approved for use in conjunction with a pressure impregnation process operating within the scope of a recognised quality assurance scheme (QAS) such as the WPA Benchmark scheme.

**Period of Validity:** Approval lasts for five years from the date of this Certificate of Approval.

**Materials Certified:** **Zi-20** flame retardant is approved to achieve Euroclass B level of performance on the materials listed in [Table 1](#)

**Characteristics:** [Table 2](#) of this certificate sets out the characteristics of **Zi-20** treated wood/wood-based materials.

## Certificate of Approval

### Zeroignition Zi-20



**Table 1: Euroclass B Performance**

Zi-20 is approved for treatment of the following materials† to Euroclass B\*

MATERIAL	THICKNESS
Douglas fir	14mm and thicker
Larch	14mm and thicker
Pine	14mm and thicker
Spruce	14mm and thicker

\* Contact the manufacturer (info@zeroignition.com) for further details if the material or thickness is not included in the table or the full classification (e.g. B-s1,d0) is required.

† Specifiers and users of other wood species should contact Zeroignition for advice on treatment.

**Table 2: Characteristics of Zi-20 treated material(s)**

Hygroscopicity:	Type INT2 classification in accordance with EN 16755 Maximum loading for INT2 classification: 178.4 kg/m <sup>3</sup>
Strength of treated timber:	Contact Zeroignition Technologies Inc (info@zeroignition.com) for advice on design value adjustments (if any).
Smoke emission:	Not relevant in the UK for exterior use. Classified typically as smoke classification s1 or s2 according to EN 13501-1. Check with manufacturer (info@zeroignition.com) if smoke class is to be specified.

Approval Certificate no.  
**WPA/PAS/FR/202001**

Date of first issue:  
**1 June 2020**

Date of this issue:  
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Approval lasts for five years from the date of issue after which it will lapse unless the Approval Holder applies for a renewal review.

### About the Wood Protection Association (WPA)

The WPA is a technical and advisory organisation concerned with the products and processes that improve the value and performance of wood as a sustainable, cost effective construction material – mainly through preservation, wood modification and flame retardant treatment.

The association provides guidance to specifiers, contractors, engineers and architects on the best ways to ensure wood is fit for its intended purpose. The WPA is a leading body in the UK on all matters relating to wood protection and has a respected voice with many British and European Standards setting agencies. The WPA's technical publications set the specification guidelines in the UK for industrial pre-treatment processes and are widely referenced by major architectural, building standards and landscaping bodies.

See the WPA Flame Retardant Specification Manual and many other useful Guidance Notes – available free to download from the Resource Centre of the Association's web site: [www.thewpa.org.uk](http://www.thewpa.org.uk).

### Benchmark Quality Approval Schemes - providing valid independent assessment and verification

The WPA administer three interlocking approval schemes which cover every stage in the production and distribution of flame retardant wood based materials. In each scheme, assessments and audits are conducted by independent experts.

The **WPA Benchmark Approved Formulation (FR)** scheme provides independent verification of the efficacy of a flame retardant formulation. It must be applied or added to wood based materials by a factory controlled process monitored under a recognised quality assurance scheme.

The data to be supplied in support of an application is clearly defined in a Scheme Document and is submitted to the WPA for assessment by an independent Efficacy Panel, which is drawn from leading organisations like Exova, BRE and private consultancy. The assessment includes: examination of fire test certificates and classification reports and; other characteristics that affect performance in service such as wood strength and smoke emission. The decision to approve a flame retardant is the responsibility of the Panel.

Approval lasts for five years from the date of issue on the Certificate of Approval after which it will lapse unless the Approval Holder applies to WPA for a renewal review.



Wood Protection Association

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