



Wood Protection Association

**WPA Benchmark FR**  
**Quality scheme for wood treated with flame retardant chemicals**  
**(“the Scheme”)**

**SCHEME DOCUMENT**

**SCOPE**

This quality scheme relates specifically to wood and wood-based materials whose reaction to fire classification has been enhanced by treatment with flame retardant chemicals in a process in factory-controlled conditions.

Requirements relating to the visual quality/grade of wood and wood-based materials, machining, preservative treatment and moisture content at the time of delivery/collection are not covered and, if relevant to the application of the treated commodity, should be specified separately by the customer.

**1. PRINCIPLES OF THE SCHEME**

**1.1 Confidence in performance**

Wood and wood-based materials treated with flame retardant chemicals in compliance with the Scheme and which are covered by a Benchmark FR certificate and carry or are associated with the Benchmark FR logo deliver the declared protection against fire.

**1.2 Marking**

**1.2.1 Traceability**

Wood and wood-based materials treated in accordance with the Scheme must be traceable to treatment plant records at pack level by marking, pack labeling or accompanying documents complying with clause 2.5.

**1.2.2 Identification**

Wood and wood-based materials treated in accordance with the Scheme must be visibly marked to identify them as Benchmark FR.

**1.4 Scheme name and visual identity**

The Scheme shall be known as the Benchmark FR treated wood quality scheme and this will be represented visually by the design (“Scheme logo”) in Figure 1.

The Benchmark name and logo are the property of the WPA and shall not be used without the prior written consent of the WPA. Colour and black only versions of the logo may be used by treaters certificated under this scheme. Artwork versions of the logo designs will be supplied by the WPA to Scheme members who may use the logo only in accordance with the Scheme rules published by WPA from time to time.

Figure 1. Benchmark FR scheme logo



Fig 1(a). Colour version



Fig.1(b) Black, single colour, version

## 2. OPERATION OF THE SCHEME

### 2.1 Eligible treaters

Organisations that operate industrial wood treatment plants using vacuum/pressure impregnation or other factory-controlled application methods under a third party quality management system (the “Treater”) are eligible to apply to join the Scheme.

Note: ISO 9001 certification including the flame retardant treatment process in its scope is normally required but other accredited third party quality management systems may be accepted at the discretion of the WPA.

### 2.2 Requirements for wood preservation plants

Plants and application equipment must:

- a) Be capable of maintaining (where appropriate) positive and negative pressure sufficient to ensure treatment of wood in accordance with the flame retardant chemical manufacturer’s requirements.
- b) Be equipped with devices to measure and record the process.
- c) Be equipped with systems to measure, record and maintain the correct flame retardant solution strength.
- d) Be maintained and tested in accordance with WPA Quality Guidance Note FR.

### 2.3 Requirements for plant operatives

Plant operatives must:

- a) Be competent to operate the plant or equipment they are employed to operate.
- b) Be competent to implement flame retardant treatment appropriate to the wood type and condition, dimensions and end use.
- c) Be competent to operate relevant equipment and record results from tests of wood moisture content and flame retardant treatment quality control systems.
- d) Have written evidence of refresher training at intervals of no more than five years.

*Notes:*

*Requirements 2.3 a), b) and c) are deemed to be satisfied by either:*

1. Operative(s) having written evidence of training in plant operation provided by a person or organisation approved by WPA with a statement by the employer that he is satisfied the named operative is competent or
2. Operative(s) holding the NVQ Level 2 Diploma in Wood Preserving – Industrial Pre-treatment (Edexcel ref 500/9393/9) and registered with the WPA.

## 2.4 Treatment

2.4.1 The treatment must comply with the chemical manufacturer's flame retardant specification for each wood type relevant to each charge of wood or wood-based materials being treated by achieving the minimum charge loading of solution as demonstrated by written records of analysis of samples from each charge

2.4.2 Be carried out in compliance with the Treater's quality management system and WPA Quality Guidance Note FR.

2.4.3 The flame retardant chemicals used must be supported by appropriate classification reports and/or extended application reports issued by a Notified Body (for BS EN 13501 classifications) or fire test reports (for BS 476 classifications) confirming that the wood or wood-based material being treated (species, thickness, and if wood-based material, material type (e.g. birch plywood)) achieves the purchaser's requirements or treater's description of flame retardant treated wood for reaction to fire (RTF) performance (RTF BS EN 13501 class B or C/BS 476 part 7 Class or Building Regulations Class 'O') when the loading of flame retardant chemical recommended by the manufacturer is achieved.

2.4.4 Flame retardant chemicals used must conform to purchaser's requirements or treater's description of flame retardant treated wood as to type in accordance with the type ID, HR or LR definitions in the WPA Flame Retardant Specification Manual: *Industrial Flame Retardant Treatment of Solid Timber and Panel Products* and, for Types HR and LR, conform with the requirements of Annex 1 of the manual.

2.4.5 Flame retardant chemicals incorporating preservative effect must be approved under the Control of Pesticides Regulations or authorised under the Biocidal Products Regulations.

## 2.5 Identification of wood treated under the Scheme (traceability and identification)

Wood treated with flame retardant chemicals under the Scheme must be identified with the Scheme logo and the Treater's name.

Scheme members may add additional information.

### Notes:

1. *Traceability: Benchmark FR marking may be applied to individual pieces or pack. Examples of pack marking include labels attached to batch packs or accompanying documents. Additional information may be added to piece labels or markings and/or be included in batch markings.*

2. *Identification: Units of wood and wood-based materials treated with flame retardant chemicals must where relevant conform with CEN harmonised standard CE marking rules in accordance with the Construction Products Regulation (EU 305/2011).*

*It should be noted that CE marking is not part of the scope of a WPA Benchmark FR audit – the reference to CE marking is for information only in the context of additional information.*

## 2.6 Audit

The following site verification audits shall be carried out by a WPA or WPA-appointed expert:

- a) An initial audit to establish if an applicant meets the criteria for membership of the Scheme.
- b) After admission, Scheme members will be required to demonstrate compliance by audit or other procedure approved by the WPA at intervals of no greater than 12 months.
- c) An extraordinary audit, at the sole discretion of the WPA, in the event of a complaint or if considered necessary for any other reason.

Note: Treater who hold BS EN ISO 9001 (or other WPA-approved third party quality assurance) certification for their treatment operations, which includes WPA Quality Guidance Note FR as a controlled document in their quality manual shall be eligible for reduced audit requirements under the Scheme, subject to prior agreement with the WPA in consultation with the WPA scheme auditor.

## 2.7 Non-compliance

The Scheme member is responsible for the treated wood and wood-based materials they produce. If a non-conformance is identified during an audit, the non-conformance shall be notified to the Treater with corrective measures. Corrections shall be implemented to the satisfaction of the auditor, within a stated time limit.

If, following an investigation by a panel including an independent person, a Scheme member is found to have:

- a) Misused the Scheme logo
- b) Supplied treated wood and wood-based materials under the Scheme that is improperly treated
- c) Refused to implement corrective action for audit non-conformances
- d) Acted in any other way that brings the Scheme and/or the WPA into disrepute

then the WPA may exclude or suspend a Treater from the Scheme. In all cases the Treater will be invited to provide reasons for such non-compliances. Treater will have the right of appeal against exclusion.

*Notes: 1. An independent person is a person with knowledge of industrial wood preservation practice but free of a commercial interest in the matter under consideration.*

*2. If an appeal against exclusion is made, a panel with an independent person, different from the investigating panel, will be convened by WPA. The decision of the appeal panel will be final and binding on the WPA and the scheme member.*

## 2.8 Withdrawal from the Scheme

A Treater may withdraw from the Scheme by giving 60 days notice by letter or e-mail to the WPA. All fees due to the WPA or any Scheme operator appointed by the WPA up to the date notice was given shall be paid in full

### 3. SCHEME SUPERVISION AND COSTS

#### 3.1 Supervision

The Scheme shall be supervised by the WPA Treated Wood Quality Committee (TWQC) which operates under Terms of Reference approved at the meeting of the TWQC on 27 April 2010.

**Operation of the Scheme is the responsibility of the Wood Protection Association, 5C Flemming Court, Castleford, West Yorkshire WF10 5HW.**

#### 3.2 Costs

All costs associated with membership of the Scheme, verification and surveillance audits, identification of components etc shall be borne by the Treater. Scheme membership costs may be varied depending on the time involved in travel or in compliance related activities in agreement with the individual member. The base fee for audits is set by, and is subject to, the approval of the TWQC. Detailed quotes will be provided on request – contact the WPA Benchmark FR scheme administrator on [info@wood-protection.org](mailto:info@wood-protection.org)

The Scheme member has sole responsibility for the treated wood and wood-based materials they produce and market under the Scheme.

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