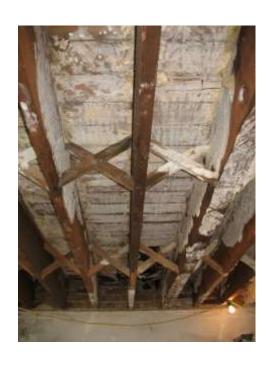


Code of Practice

Remedial Timber Treatment



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1. INTRODUCTION

This Code of Practice is issued by the Property Care Association herein after referred to as "the Association".

This Code is based on current "best practice" and provides guidance on the in-situ treatment of common wood destroying beetles and fungal decay, for contractors specialising in remedial treatment. It does not constitute or provide a work specification. Whilst detail may vary, the methods used should be substantially the same as those set out in this document which are designed to achieve satisfactory performance in properly maintained structures.

Note:

Information is given on associated matters and, where appropriate, reference is made to other documents, legislation etc.

In all cases the requirements of the Building Regulations and/or any local Building Bye-laws must be observed, and where necessary the advice of the Local Authority Building Inspector should be taken.

2. DEFINITIONS

2.1 Wood Preservatives/Biocides

Formulations approved under the Control of Pesticides Regulations (COPR) 1986 and/or EU Biocidal Products Regulation 528/2012 (EU BPR) for UK use for the eradication or control of wood-destroying organisms.

2.2 Precautionary Notices

Notices providing warnings and precautions about the hazards and risks associated with the use of wood preservatives and any associated chemicals must be observed by the applicator, other trades, clients and the public.

3. HEALTH & SAFETY

3.1 General Measures

3.1.1 The Health & Safety at Work etc. Act 1974 and its subsequent amendments requires every employer to be responsible, in so far as is reasonably practicable, for the provision of a safe working environment, appropriate safety equipment and instruction, training and information on the safe use of plant, equipment and materials necessary for the job.

Employees in turn have an obligation to make proper use of the safety equipment provided and to act upon the information and training given to ensure their own safety and that of others who may be affected by their acts or omissions.

- 3.1.2 All wood preservatives/biocides must be approved under the Control of Pesticides Regulations (COPR) 1986 and/or Biocidal Products Regulation (BPR) for use in the UK. Specialist contractors should comply with the conditions of approval and directions of use given on the label and in suppliers' safety and technical information sheets. In order to select the correct treatments and methods of application for each job, a suitable and sufficient risk assessment should be undertaken by the surveyor.
- 3.1.3 The selection and use of wood preservatives fall within the scope of the Control of Substances Hazardous to Health Regulations (COSHH Regulations as amended 2002). The Approved Code of Practice: The safe use of pesticides for Nonagricultural Purposes provides guidance the on application of the COSHH regulations to the use of wood preservatives. Employers have an obligation to prepare risk assessments for products and procedures that they adopt.

Employers and employees should act in accordance with the specific duties placed upon them by these assessments, codes and regulations.

3.1.4 Precautionary notices should be displayed at the commencement of, during treatment and following its completion. The date and time of treatment should be clearly indicated when warning notices are left on site following the treatment.

3.2 Fire Precautions

- 3.2.1 Appropriate measures should be taken at all times to reduce fire risks to a minimum. Such measures should include the provision of fire extinguishers of a suitable size and type, which must be available to and within easy and safe reach of the operators. All such appliances should be maintained in accordance with the manufacturer's instructions.
- 3.2.2 All electrical tools and equipment should comply with the current edition of the IEE Regulations. They should be properly maintained and handled with care to avoid damage. Portable electrical tools and equipment should be subject to in-service inspections and testing (Portable Appliance Inspections PAT testing).
- 3.2.3 Electrical circuits and installations must be properly and adequately safeguarded as deemed necessary and as detailed in paragraph 7.2.2 (below).

3.3 Obligations to other persons, the environment and other properties at risk:

Neighbours/owners of adjoining or nearby properties must be notified if the risk assessment has identified that there may be a hazard to their health from wood preservation treatment works being carried out. They should be informed of the type of hazard, method of application, any potential risk and precautions to be taken before, during and after treatment has been completed including details of adequate ventilation and minimum property reentry time.

This is particularly important if roof voids or subfloors are continuous between properties or if party walls/voids are connected such that a wood preservative/biocide may travel between properties

4. TRAINING

All staff must have received training commensurate with their duties. Training in safe and effective use of wood preservatives should be given in accordance with PCA Guidance.

Note: General advice on training and training courses for surveyors and technicians is available from the Association.

5. INSPECTIONS

5.1 General

Inspections should not normally exceed the instructions received from the client. However, a note should be made of any other relevant problems/defects which are observed, and these should be reported in writing (if deemed appropriate) under separate cover.

- 5.1.1 Inspections should only be undertaken by staff that have been adequately trained in the identification of insect and fungal attack, and are competent to specify the correct remedial measures. Such staff must have a good working knowledge of all types of building construction. Thus, staff should have an adequate level of training and competence. One such standard of training and competence that is recognised is the level achieved by passing the Certificated Remedial Treatment Surveyor (CSRT) examinations.
- 5.1.2 Particular emphasis is to be placed on the role of dampness in initiating and sustaining fungal decay and in influencing insect infestation. Staff must be capable of identifying the types and causes of dampness and specifying the appropriate remedial measures.
- 5.1.3 The timber preservation surveyor should be adequately equipped. Adequate equipment normally includes portable ladder (with safety provision for peripatetic working), floor lifting tools, torch, mirror, moisture content measuring equipment and notebook. Additional surveying aids may be required in accordance with the company's practice and any special features of individual surveys. Further information is available in BR 453 "Recognising wood rot and insect damage in buildings"
- 5.1.4 The timber preservation surveyor must have and use appropriate personal protective equipment identified in the risk assessment carried out under the Management of Health and Safety at Work Regulations 1992 and, if necessary, under the COSHH regulations.
- 5.1.5 Irrespective of the scope of the inspection, adequate site notes (preferably including plans) are of prime importance and should be retained. Where appropriate, the following should be recorded:-

- The nature of construction e.g. hardwood, softwood, tongued and grooved floorboards, etc.
- The likelihood of concealed or built-in timbers.
- The type, extent and current nature of insect and fungal attacks and where these are located, and the type and scale of treatment to be specified.
- The extent of deterioration and the repairs required as assessed at the time of the inspection.
- Note: If the structure being surveyed is considered to be dangerously unstable, immediate action must be taken to ensure public safety and to notify the owners or their agents.
- In the event of fungal decay, the source or sources of moisture ingress and the necessary remedial measures.
- The opening up required to give adequate access for treatment and/or other preparatory works, e.g. the removal of roof void insulation, covering of water tanks, lifting of floor coverings etc. (section 8.2 and 8.3).
- 5.1.6 Where symptoms can be attributed to extinct attack, innocuous insects or fungi, or some other agency not requiring treatment with wood preservatives, this should be carefully noted for inclusion in the report.
- 5.1.7 Where there is a risk of causing damage by so doing, fitted carpets, laminate flooring and other flooring materials should not be lifted without the permission of the owner. Similar considerations apply to joinery timbers

Note: Lack of accessibility to areas suspected to be at risk should be advised to the client and clearly stated in the report.

5.2 External

5.2.1 Note should be taken of any factors which are likely to lead to water ingress.

Examples may include, cracking in masonry walls, defective rainwater goods, damaged roof coverings, poor pointing or defective render, vegetation, shrubs, blocked drains, obstructed air bricks, inappropriate ground levels or design details that restrict drainage or ventilation.

The type and number of airbricks should be noted, marked on a plan where necessary and reviewed to determine the necessity for additional airbricks.

5.3 Roofing Timbers

- 5.3.1 All accessible timbers should be inspected and particular attention paid to items in contact with or built into brickwork and masonry such as wall-plates, rafter and purlin ends.
- 5.3.2 Particular attention should be paid to the areas below parapets, valley gutters, chimney stacks etc.
- 5.3.3 The possibility of condensation in the roof space (and subsequent risks associated with elevated timber moisture content) should also be considered.
- 5.3.4 Adequate ventilation of the roof space via the soffits should be confirmed and blocking by insulation should also be assessed.

5.4 Flooring Timbers

- 5.4.1 Inspection of ALL flooring timbers should be made wherever possible, particularly to allow the investigation of those timbers in contact with or built into brickwork or masonry. Any restrictions must be adequately and clearly identified.
- 5.4.2 Fungal decay is more likely to be widespread at ground floor level. Additional opening up may be necessary to allow an adequate inspection and assessment to be made. The inspection will need to take account of oversite/solum conditions, and the efficacy of sub-floor ventilation.

5.5 Staircase and Joinery Timbers

- 5.5.1 Where the majority of the timber is concealed by soffit linings and paint finish, inspections will be of a limited nature. However, particular attention must be paid to the condition of the strings adjacent to any external wall and exposed timbers in any understairs cupboard.
- 5.5.2 Internal joinery must be included in the survey since often the only evidence of fungal decay is the distortion or discoloration of skirting's, window frames or door linings.

5.6 Bats

5.6.1 If during the course of the inspection evidence of the presence of bats is found in areas deemed to require treatment, the client should be made aware of this fact.

Legislation that protects bats and their roosts:

In England and Wales:

The Wildlife and Countryside Act 1981 (WCA) as amended;

The Countryside and Rights of Way Act 2000; The Natural Environment and Rural Communities Act (NERC 2006):

The Conservation of Habitats and Species Regulations 2010:

In Scotland:

The Conservation (Natural Habitats & Conservation) Regulations 1994 (as amended).

In Northern Ireland:

Conservation (Natural Habitats etc.) Regulations Northern Ireland 1995.

5.6.2 Before treating a property or carrying out any potentially disturbing operation in any structures used by bats you must consult Natural England, Scottish Natural Heritage, the Countryside Council for Wales, or Department of the Environment for Northern Ireland.

Note: Further information is available from the Government website. www.gov.uk
Bats: Protection and Licences (8 October 2014)

6. REPORTS

6.1 General

- 6.1.1 Following the inspection, a report should be submitted to the client or his/her representative confirming the client's instructions, and describing accurately the conditions discovered at the time of the inspection. This must clearly state all areas to which access was restricted or could not be gained.
- 6.1.2 Any factors that may affect the present or future condition of timbers should be reported, e.g.:-
 - The location of the building.
 - The form of construction.
 - The nature of structural materials and previous history of the building.
 - The potential risk of further decay due to residual moisture retained within the fabric.
- 6.1.3 A report need not be provided where all that is required by the client is an estimate for treatment against a given specification.
- 6.1.4 Where a specification supplied by others calls for the use of a wood preservative/biocide in areas which may appear to be free of infestation or which may have old apparently inactive evidence of infestation, then it is a matter for the individual applicator to

carry out the necessary assessments and to justify any treatment that has been requested to be applied.

6.1.5 The company issuing the report and/or estimates should retain copies of the report, the quotation, the client's written instructions and all other relevant documents. This should be retained for up to seven years where no work is undertaken or for the total period of any guarantee period where works are undertaken by the company.

Note: Where a company is acquired by another company, every effort should be made to ensure that the documents listed above are passed to the entity acquiring the liabilities.

6.1.6 The location of all insect and fungal attack detected should be described. Specific identification of the insect(s) infesting the wood should be stated where possible. In the case of fungal decay the true dry rot fungus must always be identified when found. Wet rots should be identified to species where possible.

Where activity has clearly ceased (e.g. when caused by forest insects, where the cause of fungal decay is historical, or by standing tree fungi (which do not survive in seasoned timber) this must be stated. If it is suspected that activity by damaging domestic wood-borers or fungi has ceased, this should be indicated.

6.1.7 The extent of the resultant damage and weakening as assessed at the time of the inspection should be indicated in the report. If this has a bearing on wood preservative/biocide selection it should be pointed out to the client.

Note: Where there are doubts as to the stability of the structure the client should be advised to seek the advice of a structural engineer.

6.1.8 In the case of fungal decay, the observed or suspected source(s) of entry of moisture must be described and attention should be drawn to the risk to timbers adjacent to suspect building features. The importance of the prompt repair of defects and future maintenance, together with immediate measures to dry out moisture which has already entered the building, must be emphasised. The implication of not undertaking such repairs should ALWAYS be brought to the client's attention. Repair and maintenance MUST be reported, stating clearly any items which, if omitted, will be deemed to compromise the property or invalidate any guarantee or warranty.

6.1.9 The client shall be put on notice in writing of the potential risk of recurrence of true dry rot due to residual moisture retained within the structure following repairs.

6.2 Essential information in all written reports

- 6.2.1 The address of the property with the name and address of the client.
- 6.2.2 The name of the inspecting company, the name of the surveyor, the date of the inspection and the date the report was written.
- 6.2.3 Confirmation of the client's instructions stating whether they were oral or written and the date of that instruction.
- 6.2.4 Adequate points of reference to identify specific rooms or areas. Sketch plans are recommended, particularly in cases of fungal decay.
- 6.2.5 If applicable, clear instruction defining who is to be responsible for any preparatory work and when that must be undertaken.
- 6.2.6 A clear statement, with justification, for the use of chemical preservatives.
- 6.2.7 The report and associated documents should detail the area for chemical treatment, preparation and cleaning of surfaces and the method and type of the wood preservative(s) (insecticidal, and/or fungicidal) to be used.

Note: In specifying remedial treatments it should always be borne in mind that a statutory duty exists to avoid unnecessary use of wood preservatives/ biocides.

- 6.2.8 The report or associated documents submitted should give clear warning to the client of his/her responsibilities and of any risk to furniture, fixtures and fittings that may occur due to the treatments that are specified.
- 6.2.9 Any quotations or estimates provided should be free from ambiguity, and should relate clearly to the specifications detailed in any report.

7. TREATMENT

7.1 General

7.1.1 All active fungal decay and most insect infestation result from the presence of excess moisture within the building. It is the responsibility of the surveyor to understand this and to apply their knowledge and understanding when formulating a remedial strategy.

When considering remedial strategies for both insect infestation and fungal decay, the identification and rectification of the causes of the dampness and the drying out of existing dampness must be regarded as a fundamental part of a successful overall treatment.

- 7.1.2 All remedial strategies that are recommended and subsequently undertaken to control insect infestation or fungal decay should be planned to provide effective control of the infestation detailed in the surveyors report. The use of chemical timber preservatives may form part of any remedial treatment strategy.
- 7.1.3 Where inadequate ventilation to sub floor voids has been identified, additional airbricks should be specified to ensure all areas are ventilated.
- 7.1.4 The client shall be put on notice in writing of any potential risks from residual moisture retained within the structure following repairs/drying.

7.2 Preparation

- 7.2.1 Prior to wood preservative treatment, it will usually be necessary to carry out certain preparatory works:-
 - To provide access to the timber to be treated.
 - To protect the property and its occupants.

Such preparatory work is likely to include the removal of all floor coverings and removal or effective protection of furniture, soft furnishings etc. Safe cleaning down of timber surfaces. Water tanks must be protected against entry of wood preservatives/biocides, dust etc.

7.2.2 Electrical circuits within the treatment area should be isolated. All cables, cable ends and junction boxes should be protected against ingress of treatment fluids.

Should obviously defective electrical circuits be noted, this fact should be reported to the client, circuits switched off and an inspection by a qualified electrician recommended. A generator should be used, or connection to a separate circuit remote from the area to be treated.

When using 'low-flash point' type materials such as those containing solvent or materials with a similar flammable hazard, it is necessary to use approved spark proof lighting and equipment.

- 7.2.3 Before treatment commences precautionary notices shall be posted giving adequate warning that preservative treatments are being applied. Care shall also be taken when necessary to ensure that all naked lights (including pilot lights on gas appliances) are extinguished.
- 7.2.4 Persons not engaged in carrying out treatment should be excluded from the immediate vicinity during and for a period after application of wood preservatives in accordance with the conditions of approval on the product label.

8. WOOD-BORING INSECTS

8.1 General

- 8.1.1 Wood-boring insects dealt with in this section are Anobium punctatum (common furniture beetle), Xestobium rufovillosum (death watch beetle), Hylotrupes bajulus (house longhorn beetle) and Lyctus spp (lyctus powderpost beetle).
- 8.1.2 Lyctus powderpost beetle has become more widespread in recent years due to the increased use of imported hardwood timber (containing high starch content to the sapwood) for flooring. Treatment normally involves applying an organic solvent insecticide to sapwood surfaces however this can be ineffective due to lack of access and finish coatings. As treatment is often impossible or uneconomic it may be necessary to request replacement of the timber material from the supplier.
- 8.1.3 Wood-boring weevils (though common) are restricted in their activities to damp and at least partially decayed timber. Thus they are normally brought under control by the measures taken to deal with outbreaks of wet rot (Section 9.3).
- 8.1.4 For information on other less common insects such as *Ernobius*, wood wasp etc. please refer to PCA Guidance Leaflet: Preservative Treatment against Wood Borers.
- 8.1.5 Surveyors should be aware that imported non-native species of insects are becoming a concern to the UK timber industry affecting both forestry and the built environment.

8.2 Control of common furniture beetle, death watch beetle and house longhorn beetle.

It is essential that the surveyor identifies, quantifies and understands the type and extent of any insect infestation that is to be controlled. Control strategies for wood-boring insects will be determined by these factors.

8.3 Roofing Timbers

- 8.3.1 Remove debris and clear obstructions (such as floorboards or insulation materials) sufficiently to ensure access for the cleaning of dust etc., and effective inspection and treatment of timbers.
- 8.3.2 Check the timbers by probing, and in the case of heavy death watch beetle infestation in large section timbers, check the internal condition of the timber by drilling or other means.
- 8.3.3 Where necessary, expose the built-in ends of structural timbers for investigation and treatment.
- 8.3.4 Carry out all repairs and replacements. Replacement timbers should be pre-treated in accordance with BS8417: 2011 (as amended) or, when this is not possible or practical, timbers should be treated on site with a wood preservative/biocide recommended by the manufacturer as meeting the requirements of BS8417: 2011 when applied as a surface treatment. If cutting to size, notching etc. is required, any freshly-cut surfaces should be treated on site as detailed above. It is desirable for replacement timbers to be protected against dampness especially where they are in contact with masonry walls.
- 8.3.5 Timbers scheduled for treatment should be cleaned sufficiently, properly and safely prior to treatment. This is essential to:-
 - Allow thorough inspection.
 - Ensure adequate treatment.
 - Minimise the absorption of active ingredients into the dust particles, so as to prevent contaminated material becoming a health risk.
 - Reduce the risk of slips, trips and falls during the treatment.

Note: One method of cleaning which ensures the above risks are controlled is by the use of suitable industrial vacuum cleaners.

- 8.3.6 Apply the wood preservative/biocide specified in the survey report, in the manner and at the rate specified by the manufacturer.
- 8.3.7 Preservative formulations commonly used for the control of wood destroying insects currently include:-
 - Water based emulsion/micro-emulsion type insecticides.
 - Solvent based insecticides.

- Oil and glycol based pastes and gels.
- Paste, spray or fog applied formulations using disodium octaborate as the active ingredient.
- 8.3.8 Each formulation may have different properties, modes of action, ability to penetrate timber and safety risks associated with their use. Application methods and choice of preservative formulations will be influenced by the insect being treated, the accessibility of the timber and indeed the type of timber that is being treated. These factors must be considered by the surveyor when formulating and undertaking treatments to control wood-boring insects.
- 8.3.9 Reinstate or make arrangement for the reinstatement of any materials that have been removed prior to treatments.
- 8.3.10 Special care must be taken to deal effectively with death watch beetle and house longhorn beetle infestation. Any control strategy should take into account the inherent difficulty of treating such infestations and the limitations of the chemical treatments that are available.

Note: If it is not possible to inspect or treat all the surfaces of timber infested by wood-boring insects, or where other factors may limit the effectiveness of a control strategy, the client should be informed and the risk of continued infestation must be made clear, preferably in writing.

8.4 Flooring Timbers

- 8.4.1 Except where adequate access exists (e.g. in subfloor voids at ground level and cellars) or where access is not required for effective application of the specified wood preservative, it will be necessary to open up to clean and treat joists and wall-plates. This consists of lifting sufficient floorboards at intervals across the room and floorboards adjacent to the walls to give access to joist ends.
- 8.4.2 Carry out all repairs and replacements, ensuring that all replacement timbers are adequately treated after cutting to size. Such replacement timbers must be protected against dampness especially where they are in contact with masonry walls (See 8.3.4).

Carry out treatment as previously outlined above under roofing timbers (8.3 et seq).

8.4.3 Reinstate lifted floorboards. Ensure that any timber or other organic debris is removed from the oversite/solum beneath suspended ground floors.

8.5 Staircase Timbers

8.5.1 These items are usually painted and the undersides are often lined with plaster or boarding. Treatment normally consists of application of wood preservative to bare timber surfaces, together with (a) injection into the flight holes as an overall control measure and (b) if the underside is otherwise inaccessible, drilling holes through the riser and using a back spray nozzle to apply the wood preservative/biocide.

8.6 Joinery Timbers

8.6.1 Effective treatment of infested items would necessitate the stripping of paint or temporary removal from the wall. The treatment of existing skirting boards and internal joinery timbers can be problematic and removal and replacement may often be the most practical option.

9. FUNGAL DECAY

9.1 General

Fungal decay affecting building timbers can be divided into two categories:-

- Dry rot this applies only to the true dry rot fungus (*Serpula lacrymans*).
- Wet rots applies to a wide range of fungi, the most common of which are Coniophora puteana and Fibroporia vaillantii.

All active fungal decay results from the presence of excess water within the fabric of a building. The identification and rectification of this water ingress and the removal or control of existing water within the structure must be regarded as the most important element of a successful long term treatment for fungal decay.

9.2 Dry Rot

9.2.1 Obtain indications of the possible extent of the outbreak by testing timbers in the vicinity by prodding, preferably with a tool with a screw-driver type point.

Note: Guidance as to the possible extent and direction of spread of fungus within walls can sometimes be obtained by observations aided by the use of an electronic moisture meter. Alternatively, moisture content measurement can be made by inserting timber dowels into holes set into damp masonry. These must be left in the wall

for a period to ensure that they reach equilibrium with the surrounding masonry.

9.2.2 The extent of growth of dry rot mycelium should be determined in order to ascertain the extent of risk of infection of adjacent timbers. This usually requires opening up the affected area by removal of joinery, stripping of plaster and lifting of floors.

Note: In those buildings in which it is known from previous experience that no woodwork is embedded in walls, it may not be necessary to strip large areas of such plaster even though it may be thought to overlie fungus strands. It may then suffice to remove plaster for some 300mm adjacent to woodwork at risk to confirm that no fungus has reached it. Alternatively, the spread of fungus can be determined by removal of plaster samples at intervals. Special consideration must be given to areas of solid flooring which are in contact with dry rot attack.

9.2.3 At the discretion of the surveyor cut out and remove decayed timber.

Note 1: Whilst it is usually economic to cut away the full extent of even lightly affected building softwoods, there are special cases, for example durable timbers (both hard and soft woods) in which the removal of lightly affected members would be disproportionately costly or would destroy historically important features. In such cases clients should be advised of the possibilities of alternative in-situ treatments. Alternatives to complete removal may be particularly appropriate when the affected timbers are still structurally adequate and will readily dry out after being isolated from damp walls e.g. at first floor level and when effective ventilation can be arranged.

The suggested safety margin may be inadequate in the case, for example, of a wall plate or alternatively it can be excessive in the case of a floorboard where it should normally be necessary only to cut away to the next joist.

Note 2: The extent of the exposure work, strip out, chemical treatments and timber replacement will always be subject to variation and will be dictated by the prevailing site conditions and should ultimately be the responsibility of the surveyor.

9.2.4 Isolate existing sound timbers from dampness

Note: Isolation of timber in direct contact with damp and infected walls can be effected by means of physical isolation, for example for joist ends or removal of the ends embedded in the walls and resupporting independently. A variety of support

methods are available/suitable for a range of situations (e.g. sleeper walls at ground level, joist hangers, RSJ's, concrete lintels, cellar brackets, steel plates etc.). The choice will depend on the position of the timbers affected, space availability and, in some cases, providing continuity or lateral restraint to the wall in question.

- 9.2.5 Remove all identified built-in timbers, lintels, plates, bonding timbers etc. within the affected wall area and in areas where dampness may continue to be a risk. Replace with suitable alternative inert materials such as steel, concrete and/or brickwork in accordance with Building Regulations.
- 9.2.6 In order to reduce the risk of further decay, clean all wall surfaces and oversites/solum to remove visible surface fungal growth and other cellulose rich materials that may be at risk of decay or provide a food source. This may additionally require the removal of or lowering of soil levels, but must not include the surface application of a fungicide/biocide to the oversite
- 9.2.7 The surveyor must be aware that the long term solution to the eradication of decay in buildings is the elimination of excessive water in the buildings fabric. The use of masonry biocides must therefore be seen as a control that will allow rapid or cost effective reinstatement.

Wood preservatives/biocides should not be relied upon to provide long term protection against dry rot in conditions where timbers are persistently wet.

Unless otherwise recommended in the survey report and agreed by the client, treat exposed wall surfaces identified as showing evidence of mycelium by one of, or a combination of, the following:-

- Surface application of a masonry biocide.
- Localised treatment of specific areas by insertion of approved fungicidal plugs, pastes or gels into holes drilled in the masonry.
- Localised irrigation by the formation of a 'toxic box' surrounding the outbreak.
- Irrigation with a fungicidal solution via holes drilled in the wall.

Note: Use of wide-spread irrigation can rarely be justified. Although its use may result in a 'knockdown' effect on the dry rot fungus within the wall, it may also result in a flush of new growth and/or the production of fruiting-bodies. It will also extend the drying time for the wall, which is the primary control measure against dry rot. This can

therefore be seen as counter-productive.

Irrigation should not be used where brickwork has open mortar joints or in masonry walls with loose infill cores.

Contractors should be aware of the property owner's obligations under The Party Wall etc. Act 1996, when specifying irrigation treatments in party walls.

The use of controlled heat may be an alternative method of dry rot control. However, this form of treatment falls outside the scope of this document.

Carry out all repairs and replacements. Replacement timbers should be pre-treated in accordance with BS8417: 2011 (Use Class 2 or 3) or, when this is not possible or practical, timbers should be treated on site with a wood preservative recommended by the manufacturer as meeting the requirements of BS8417: 2011 when applied as a surface treatment. If cutting to size, notching etc. is required, any freshly-cut surfaces should be treated as detailed above. It is desirable for replacement timbers to be protected against dampness especially where they are in contact with masonry walls.

Where no alternative solution exists and timbers are to be reinstated into a persistently damp area, only pre-treated timber should be used and these should be protected against dampness where in contact with wet masonry. In these circumstances the client shall be put on notice, preferably in writing, that the new timbers will continue to be at risk of decay.

9.2.9 Residual sound timbers in the vicinity of the outbreak should be thoroughly cleaned and treated with a fungicidal wood preservative. The limited value of surface application of preservative in the face of sustained damp conditions must be understood by the surveyor (and the client).

9.3 Wet Rots

9.2.8

- 9.3.1 Open up the affected area, cut out and discard structurally unsound timbers.
- 9.3.2 Replace removed timbers preferable with timbers pre-treated in accordance with BS8417: 2011 ensuring that any cut ends are retreated with a suitable wood preservative/biocide, and that there is adequate isolation from the damp walls.
- 9.3.3 When controlling dry rot and wet rots it is essential that the necessary steps to eliminate the source(s) of moisture causing the decay are carried out as part of the overall specification of repairs. This should ideally be carried out by the specialist contractor or

made the responsibility of others (e.g. a general builder) and clearly stated in the specialist contractors report. In either case, this work should be carried out concurrently or within a specified period. Particular emphasis should be laid on efficient ventilation, particularly of subfloors and roof voids.

10. AFTER-CONTRACT SERVICE

- 10.1 In the interests of the company concerned, and in pursuance of its duties to the Association, prompt attention must be given to any queries which may arise.
- 10.2 In the event of a dispute arising, the Association is willing to mediate between the member company and the client, with a view to effecting a settlement.

11. REFERENCES

11.1 Remedial Timber Treatment in Buildings – a guide to good practice and the safe use of wood preservatives. (HSE/DoE).

HSE Books 1991:

HMSO ISBN-10: 0118859870. HMSO ISBN-13: 978-0118859875

HMSO ISBN 0 118854135

- 11.2 HSE Guidance Note GS46. In-situ timber treatment using timber preservatives. Health, safety and environmental precautions.

 HSE Books 1989:
- The Institution of Electrical Engineers Regulations for Electrical Installations.
 Published as BS 7671: 2008 + A3: 2015
 Requirements for electrical installations.
- 11.4 PCA CSRT Module 2.
- 11.5 BS8417: 2011 + A1: 2014.
 Preservation of Wood Code of Practice.
- 11.6 BR453: Recognising wood rot and insect damage in buildings. 3rd Edition. ISBN 978-1-86081-603-1

12. LEGISLATION

The following legislation is referred to in this code:

- 12.1 The Health and Safety at Work etc. Act 1974.
- 12.2 The Control of Pesticides Regulations 1986.
- 12.3 EU Biocidal Products Regulation 528/2012 (EU BPR)

- 12.4 The Control of Substances Hazardous to Health Regulations as amended 2002.
- The Management of Health and Safety at Work Regulations 1992.HMSO ISBN 0-11-025051-6.
- 12.6 The Wildlife and Countryside Act 1981 (WCA) as amended.
- 12.7 The Countryside and Rights of Way Act 2000;
- 12.8 The Natural Environment and Rural Communities Act (NERC 2006).
- 12.9 The Conservation of Habitats and Species Regulations 2010 for England and Wales.
- 12.10 The Conservation (Natural Habitats & Conservation) Regulations 1994 (as amended) for Scotland.
- 12.11 Conservation (Natural Habitats etc.) Regulations Northern Ireland 1995 for Northern Ireland.

Employers should satisfy themselves that they have knowledge of the duties placed on them by all relevant legislation.

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The information contained in this leaflet is given in good faith and is believed to be correct. However, it must be stressed that of necessity it is of a general nature.

The precise conditions may alter in each individual case and the Association is therefore unable to accept responsibility for any loss howsoever arising from the use of the information contained therein.

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