

# SPECIFICATION GUIDE

for Non-Residential Pressure Treated Wood Products Agricultural

Commercial

Industrial







Wood Preservation Canada Préservation du bois Canada

### **CANADIAN WOOD COUNCIL**

The Canadian Wood Council (CWC) represents the wood products industry through a national federation of associations. The CWC provides technical and knowledge transfer services related to building codes, standards and regulations. With its technical expertise, the CWC is present in all branches of the regulatory system, including: building codes, design standards, product standards, testing standards, and market development.

The Wood WORKS! Program plays a very important role in developing the use of wood in the construction industry by working closely with the construction industry and governments. Learn more at cwc.ca, wood-works.ca, cecobois.com.

### **WOOD PRESERVATION CANADA**

Wood Preservation Canada (WPC) is the industry association that represents the treated wood industry in Canada. WPC operates under Federal Charter and serves as a forum for those concerned with all phases of the pressure treated wood industry, including research, production, handling/use and the environment. WPC members are committed to producing safe, quality products in an environmentally sound and progressive manner. Visit woodpreservation.ca to learn more.

### INTRODUCTION

Wood is the only renewable building material within the three major building material types. In exterior applications, wood is subject to deterioration from natural elements and biological attack, but when properly protected, its service life can be extended for many years. The most effective way of protecting exposed wood is the use of wood preservatives. Preserved wood products can have 5 to 10 times the service life of untreated wood. This extension of life saves the equivalent of 12.5% of Canada's annual log harvests (source **durable-wood.com**).

The preservation of the wood is important, especially when it is specified for use in critical infrastructure applications such as railway ties, bridge timbers, utility poles and guardrail posts for highways. Pressure treated wood ensures that these critical structures remain strong and safe for the duration of their service lives. Pressure treated wood products are also commonly used in agricultural applications such fence rails, posts and building poles, as well as in commercial decks, fences, and other heavy duty outdoor applications. Depending on the required application and the level of protection needed for the wood products, there are a variety pressure treatment methods and approved preservatives that are available in Canada.

Pressure treatment is a process that forces preservatives into the wood to protect against fungal decay and destructive insects such as termites and marine borers. In Canada, wood preservatives are registered with Health Canada's Pest Management Regulatory Agency (PMRA). Individual treating facilities undergo regular environmental assessments and follow the recommendations for the design and operation of wood preservative facilities as outlined in Environment Canada's Technical Recommendation Document (TRD).

# **ENVIRONMENTAL BENEFITS OF PRESSURE TREATED WOOD**

Pressure treated wood offers many environmental benefits. It is the only major construction material made from a sustainable, renewable resource. The addition of preservatives increases the in-service life of exposed wood products. The results are lower replacement costs, prolonged carbon storage, and a reduction on the demands of the forest resources – as an increased service life provides time for a mature tree to grow in the forest and be harvested.

Assessing the environmental benefits of any building product requires a more systematic, science-based approach rather than the subjective and sometimes misleading claims that are often promoted. The wood preservation industry commissioned a series of life cycle studies using internationally recognized life cycle impact assessment methods, including relative science and life cycle inventory data, to provide an objective basis to determine environmental benefits.

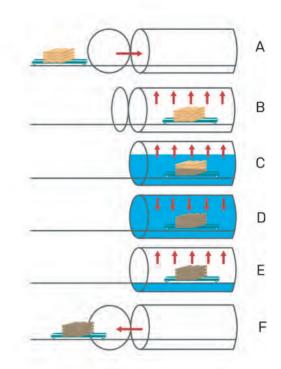
### Life Cycle Assessments (LCAs)

The process of conducting a Life Cycle Assessment (LCA) considers the full cradle-to-grave analysis of a product. The LCAs for pressure treated wood products were conducted in accordance with the International Organization for Standardization (ISO) ISO 14044 Standard and have been subject to scientific peer review to confirm the results.

In recent years, the US Treated Wood Council has undertaken life cycle assessment of pressure treated wood compared to other materials used in the same product category. Visit **woodpreservation.ca** to view the life cycle reports.

# **PRESSURE TREATING PROCESS**

In a typical pressure treatment process, wood is placed in a large horizontal cylinder ranging in size from 18 to 62 metres (60' to 200') in length and 1.8 to 3.0 metres (6' to 10') in diameter. The preservative solution is introduced into the cylinder and is forced into the wood through cycles of vacuum and pressure. This forms a protective envelope of preservative protection in the wood. Preservatives protect the wood from attack by wood ingesting insects, such as termites, and wood rot caused by fungal decay. The pressure treatment process is an effective method to extend the service life of wood products.



# THE CANADIAN WOOD PRESERVATION CERTIFICATION AUTHORITY (CWPCA) PROGRAM

In 1999, Wood Preservation Canada (WPC) and its members voluntarily entered into Environment Canada's Strategic Options Process (SOP). The SOP was a multi-stakeholder process implemented and designed to ensure operational best practices at wood preservation facilities while identifying meaningful and lasting improvements in environmental stewardship and worker health and safety. The SOP resulted in the development of Environment Canada's Technical Recommendation Document (TRD) for the "Design and Operation of Wood Preservation Facilities". The TRD consists of comprehensive guidelines that are recognized worldwide as the most rigorous and stringent for wood preservation facility operations and worker health and safety.

To ensure that the SOP remains a success for generations, WPC created the Canadian Wood Preservation Certification Authority (CWPCA) program. CWPCA is a voluntary industry program that is enforced by WPC and governed by a set of requirements outlined by Environment Canada's TRD for the design & operation of wood preservation facilities. Treating facilities are certified under the CWPCA program by third party experts and are re-certified annually by trained plant personnel upon the completion of a successful audit.

# **REGULATORY REQUIREMENTS**

The Pest Management Regulatory Agency (PMRA) is the federal agency responsible for managing registrations of heavy-duty wood preservatives in Canada. Under the Pest Control Products Act (PCPA), wood preservatives must be registered and meet the labelling requirements. The labelling requirements include updated scientific data on occupational exposure, human toxicology and environmental chemistry, and toxicology associated with wood preservatives. PMRA has also amended the labelling requirements for wood preservatives to include a condition that the users of the wood preservatives shall comply with the technical recommendation document (TRD) published by Environment Canada. Once on the market, PMRA monitors the use of pesticides through a series of education, compliance, and enforcement programs. Preservatives are reviewed every fifteen years, or sooner, as new information is discovered and as science evolves. PMRA also requires companies to report any incident(s) they receive about their products. Consumers are also encouraged to report any incident(s) to the supplier company through an Incident Reporting Program. For more information, visit **canada.ca** and search 'PMRA'.

# **WOOD PRESERVATIVES IN CANADA**

End users and specifiers of pressure treated wood products in Canada have a variety of PMRA registered wood preservatives to select from that offer their own unique durability-related properties (e.g. resistance to moisture, resistance to termites, etc.) and performance (e.g. service life) for various applications.

There are two categories of preservatives available: waterborne and oilborne. A variety of waterborne preservatives are used for residential, agricultural, commercial and industrial applications. Oilborne preservatives are used in exterior non-residential applications.

# WATERBORNE PRESERVATIVES

- **CCA** Chromated Copper Arsenate
- ACQ Alkaline Copper Quaternary
- ACZA Ammoniacal Copper Zinc Arsenate
- CA-B Copper Azole, Type B
- MCA Micronized Copper Azole
- SBX also known as (DOT) or Disodium Octoborate Tetrahydrate

# **OILBORNE PRESERVATIVES**

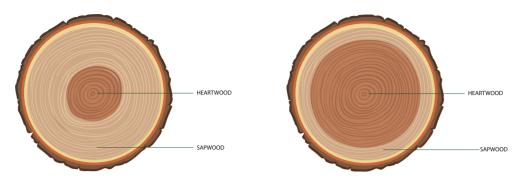
**Creosote** – Creosote

Penta or PCP - Pentachlorophenol

# SPECIES USED FOR PRESSURE TREATED WOOD PRODUCTS

Trees are grouped into two primary categories: Deciduous and Coniferous. Within these two categories there are many species. Deciduous, which are commonly referred to as 'Broadleaf' or 'Hardwoods', include species such as oak and birch that are used in the production of pressure treated marine pilings, railway ties, and highway bridges. Coniferous trees are also known as conifers or evergreens. In the lumber industry, this group of trees is referred to as 'Softwoods'. Canada is fortunate to have an abundance of softwood resources across the country. 'Softwoods' that share commonalities such as strength characteristics and growth regions are combined into species grouping to eliminate confusion for supliers. To ensure proper selection of treatable species for a given application, refer to CSA 080.1.7.

Wood is composed of a combination of sapwood and heartwood. Sapwood is the living, outer portion of a log and heartwood is the dead, inner wood. Sapwood is commonly lighter in colour. Typically, the sapwood of most species is receptive to wood preservative penetration whereas the heartwood is not.



A complete list of allowable wood species and their associated Use Categories can be found in the CAN/CSA 080.1-21, General Requirements for Wood Preservation, Table 6. The CSA 080 Series – Wood Preservation Standard, is an essential document for architects, engineers, builders and specifiers of pressure treated wood products in Canada and can be purchased online at **csagroup.ca**.

The treatability of wood is dependent on many factors, such as: wood species, pretreatment wood conditioning, the depth of incising, type of preservative, and wood permeability.

# PRETREATMENT WOOD CONDITIONING

### **Characteristics of Lumber and Timber**

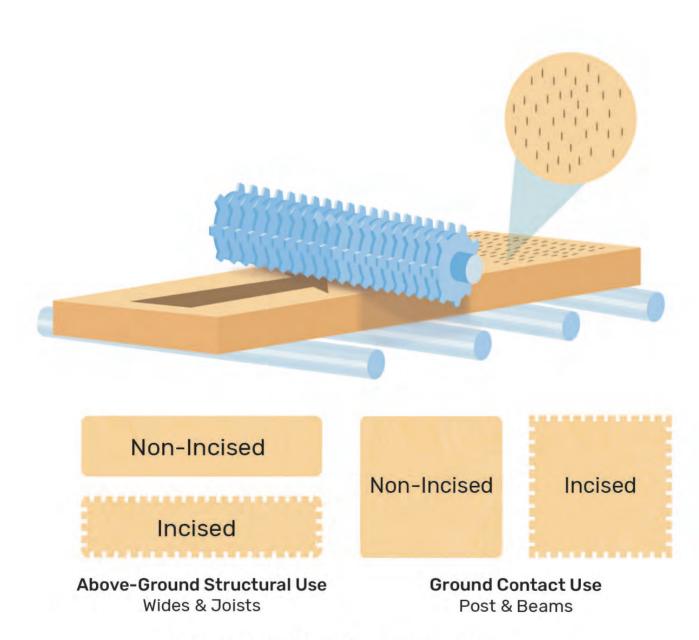
A living tree contains a large amount of water. As wood dries and the moisture is removed, the wood's moisture content will stabilize with the surrounding air. This condition is known as the Equilibrium Moisture Content (EMC). During any drying process wood will shrink. These dimensional changes produce forces in the wood that can cause checking, splitting, and warping. Correct drying, handling, storage, design and installation will help to minimize major dimensional changes of a wood structure. Protective coatings are often used to limit these dimensional changes, but do not prevent them. Wood is a natural material and checking, splitting, and warping are naturally occurring characteristics and very rarely have any effect on the strength of the product. Deep checks could be significant if they occur at a point of high shear stress. Checks in columns are not of structural importance, unless the check develops into a through split that will increase the slenderness ratio of the column.

### **Preparing Wood for Treatment**

In order for lumber and timbers to be treated they must be prepared properly to be receptive to preservatives. As much as half the weight of a living tree is water, therefore one of the most important steps is to ensure that the wood is dry. To ensure proper penetration and retention of the preservative, most of this water must be removed. There are a variety of commercial techniques to achieve this result including air seasoning, kiln drying, steam conditioning and boultonizing.

### Incising

Wood products used in structural applications such as joists, beams and square posts are required to be incised prior to the application of a preservative treatment. Sharp teeth on rollers are pressed into the wood on all sides and along the length of each board, resulting in tiny incisions in the wood. Incising is a requirement for structural and ground contact products and is done to increase the preservatives' depth of penetration and retention value. While incising increases the depth of penetration, it does have a slight effect on the strength, which is accounted for in the relevant wood design standard on lumber 89 mm or less. Refer to CSA 086 – Table 6.11 Treatment factor ( $K_T$ ) for strength differential due to incising.



Note: non-incised shown for comparison purposes

# SPECIFYING PRESSURE TREATED WOOD – GETTING THE RIGHT PRODUCT FOR THE JOB

### Agricultural - Commercial - Industrial

The majority of pressure treated wood products sold at local building material retailers are for residential applications such as decks, fences, pergolas, etc. Pressure treated wood for commercial/industrial applications such as railway ties, utility poles, guardrail posts and building posts for structural applications such as pole barns, etc. must be purchased through special order, either at a local lumberyard/home centre or directly from the treating facility. The wood must be custom treated based on the specification requested.

There is a big difference between residential and commercial/industrial products and specifying the right product is important!



The Use Category System shows the service conditions that the wood will be exposed to and helps to determine what preservative and/or wood species is required, as well as the preservative penetration and retention needed to achieve the desired results.

# CANADIAN STANDARDS ASSOCIATION (CSA) SERIES OF STANDARDS AND THE USE CATEGORY SYSTEM (UCS)

The CSA 080 Series of Standards specifies the requirements for the preservation and fire protection<sup>‡</sup> of treated wood by means of pressure or non-pressure (thermal) methods. These Standards provide a thorough set of requirements for the use and application of pressure treated wood under Canadian conditions.

The CSA Series of Standards utilizes a Use Category System (UCS) based on the UCS developed by the American Wood Protection Association (AWPA). The CSA 080 UCS system has made changes to account for differences in treated wood production and use in Canada and to align the standard more closely with the International Organization for Standardization (ISO).

The CSA 080 UCS system places all pressure treated wood products into one of five major use categories based on the pressure treated wood's exposure condition in-service. For example, wood used in an above-ground application will not need as much protection in the form of preservative retention and penetration as a product in ground contact exposed to extreme weather cycles. The UCS system is designed with specifiers and product users in mind to assist them in identifying the appropriate clauses of the CSA Standard for the specific product needed. The five primary use categories are broken down into sub-categories and there is a separate sixth category for fire retardants. The specifier or user should first identify the appropriate Use Category (Table 1) for the intended or expected service conditions.

Use Category and Associated Service Conditions* Table 1									
USE CATEGORY	SERVICE CONDITIONS	USE ENVIRONMENT	COMMON AGENT(S) OF DETERIORATION	TYPICAL APPLICATION(S) Interior construction and furnishings					
UC1	Interior construction - above ground - dry	Protected against weather and other sources of moisture	Insects						
UC2	Interior construction - above ground - damp	Protected against weather but can be exposed to moisture	Decay fungi and insects	Interior construction					
UC3.1	Exterior construction - above ground - coated and rapid water run-off	Protected against weather by coating or cladding and not subject to prolonged wetting	Decay fungi and disfiguring fungi, and insects	Coated millwork, siding, and trim					
UC3.2	Exterior construction – above ground – uncoated or poor water run-off	Exposed to all weather cycles; including prolonged wetting	Decay fungi, disfiguring fungi, soft-rot fungi, and insects	Decking, deck joists, railings, fence pickets, and uncoated millwork					
UC4.1	Ground contact or freshwater. Above ground - critical, or potential soil or freshwater contact	Exposed to all weather cycles; normal exposure conditions, including salt water splash <sup>†</sup>	Decay fungi, disfiguring fungi, soft-rot fungi, and insects	Fence, deck and guardrail posts, bridge beams, crossties, and utility and building posts and poles (low decay areas)					
UC4.2	Ground contact or freshwater – high decay hazard or critical structural components or difficult replacement	Exposed to all weather cycles, high potential for decay	Decay fungi, disfiguring fungi, soft-rot fungi, and insects (with increased potential for biodeterioration)	Land, freshwater, and foundation piles, permanent wood foundations, building poles, horticultural posts, crossties, and utility poles (high-decay areas)					
UC5A	Coastal waters – brackish water or salt water and adjacent mud zone	Continuous salt water exposure	Salt water organisms	Piles, bulkheads, and bracing					
UCF.1 <sup>‡</sup>	Fire protection as required by codes – interior construction – above ground	Protected against weather and sources of moisture	Fire	Roof sheathing, roof trusses, studs, joists, lumber, and paneling					
	er splash is included in UC4.2. otection products listed in CSA 080	Series							
, ,	es-21 Wood preservation. © 2021 Ca								

The following table summarizes the preservative systems and the allowable Use Categories for non-residential pressure treated wood products.

Preservative Systems and Use Categories for Non-Residential Pressure Treated Wood											
USE CATEGORY	ACQ*	ACZA	СА-В	CCA	CREOSOTE	МСА	мсq	РСР	SBX		
UC1	Yes	No	Yes	No	No	Yes	Yes	No	Yes		
UC2	Yes	No	Yes	No	No	Yes	Yes	No	Yes		
UC3.1	Yes	No	Yes	No	No	Yes	Yes	No	No		
UC3.2	Yes	No	Yes	No	No	Yes	Yes	No	No		
UC4.1	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No		
UC4.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
*ACQ – Includes	s Types A, C & D	1	1	1	1	1	1	1	1		

# To specify non-residential pressure treated wood under the Use Category system, three main parameters need to be specified:

- 1. Wood species and sizes
- 2. Use Category
- 3. Type of Preservative

### For example, the specification for a non-residential commercial deck/patio for a golf course:

- 1. Decking 2x6, LPP (lodgepole pine), UC3.2, CA-B
- 2. Joists/beams 2x6, WWS (western white spruce), UC3.2, CA-B
- 3. Posts 6x6, red pine, UC4.1, CA-B

# **BUILDING CODE REQUIREMENTS**

The National Building Code of Canada (NBC) contains requirements for pressure treated wood in both Part 4 (large buildings) and Part 9 (housing and small buildings).

In Part 4 of the Code, Subsection 4.2.3 addresses materials used in foundations. Article 4.2.3.1 mandates wood used in foundations to be structurally designed in accordance with CSA 086 and, where relevant, to be adequately protected when used in areas known to be infested by termites (see Part 9 termite provisions below). Article 4.2.3.2 mandates the use of pressure treated wood where any wood foundation element is exposed to the environment (i.e., soil or air).

In Part 9 of the Code, Article 9.3.2.9 addresses end-use conditions where termite and decay protection may be needed.

For termite protection, this is only required when the wood is used in localities where termites are known to occur. The Code provides a map [See NBC Figure A-9.3.2.9. (1)-A] showing areas in which specific locations with termites have been identified. In such cases, to limit impact of termite infestations, structural wood elements should be located not less than 450 mm above finished ground level. Where such clearance is not provided, or when the wood is supported with elements in contact with the ground, the wood element must be pressure treated using preservatives that are toxic to termites, conforming to CSA 080.

For decay protection, structural wood elements must be pressure treated with preservatives when:

- the vertical distance between finished ground level is less than 150 mm,
- the wood elements are not protected from precipitation/moisture accumulation, and
- the wood elements are used in retaining walls or cribbing supporting ground that is critical to the stability of building foundations or where the wall or crib is greater than 1.2 m in height.

Decay protection can also be required when ends of wood joists, beams and other members frame into masonry or concrete, unless separated by an air space. Protection against dampness may also require use of wood preservatives.

Part 9 also specifically references permanent wood foundations (PWFs) and requires the foundation to conform to CSA S406 "Specification of permanent wood foundations for housing and small buildings".

In respect to fire retardant treated wood (FRTW) products, the NBC contains a number of provisions in Part 3 that allow for or mandate the use of FRTW products. This includes:

- A definition of FRTW as being wood or a wood product that has had its surface-burning characteristics, such as flame spread, rate of fuel contribution and density of smoke developed, reduced by impregnation with fire-retardant chemicals.
- A requirement that all FRTW be pressure impregnated with fire-retardant chemicals and have a flame spread rating not more than 25 when tested in accordance with ULC-S102.
- Requirements for interior finishes, including wood products, to have a flame spread rating of 25 or less in high risks areas such as in exits, or on all ceilings in buildings required to be of noncombustible construction.
- Provisions that allow in small non-residential buildings roof assemblies constructed of FRTW that have been tested in accordance with ULC-S126 to be used in lieu of heavy timber roofs or (untreated) wood frame roofs with a 45-minute fire-resistance rating.
- Provisions that allow for a layer of FRTW to be used in lieu of fire-resistant gypsum board to protect solid wood and light wood frame partitions in buildings permitted to be of encapsulated mass timber construction.
- Provisions within the referenced National Fire Protection Association (NFPA) standard for sprinkler systems (NFPA 13) allows for avoiding having to install sprinklers in certain combustible concealed spaces when the exposed surfaces within the space are FRTW.

# **GOVERNING STANDARDS\***

The CAN / CSA 080 Series of Wood Preservation standards are the governing standards for wood preservation in Canada and are referenced in the National Building Code of Canada (NBC) where preserved wood is required. These standards are developed by a Technical Committee on Wood Preservation (TC-WP) that operates under the authority of the Canadian Standards Association's Strategic Steering Committee on Construction and Civil Infrastructure. The TC-WP is responsible for developing and maintaining standards for the preservative treatment of wood, including:

- a. requirements for wood preservation,
- b. requirements for analyses of materials,
- c. manufacturing practices for pressure and thermal treatment of chemicals for the preservation of wood,
- d. requirements for impregnation results,
- e. good utilization practices, and
- f. quality assurance and, when appropriate, conformity assessment.

**Note:** The scope of the TC-WP does not include the standards that cover the criteria for grading of and stamping of wood products.

The matrix of the TC-WP is represented by the following interest categories and assigned on the basis of the individual's predominant interest in the products or services:

- a. Producer Interest
- b. User Interest
- c. Regulatory and General Interest

\*Source – Canadian Standards Association – CSA-File No. A366-23, A350-13 (2020)

## **QUALITY CONTROL**

The quality control of pressure treated wood products is outlined by product type in the Canadian Standards Association's CAN /CSA 080 Wood Preservation Standard. These requirements are results-based tests that are measured by sampling the wood after the preservative treatment process. The CAN/CSA 080 Wood Preservation Standard provides instructions for the treating plants for sampling (quantity), analysis (methodology), and minimum depth of penetration and preservative retention (amount of preservative injected into the wood).

Following the preservative treatment, the 'charge' (wood that has been treated in the cylinder) is removed from the cylinder and a random sample of borings or core drillings are removed from different pieces of wood in the charge. The core borings are analyzed, at an on-site laboratory, to measure the depth of penetration and the preservative retention level. A pass is achieved if 80% of the samples meet the penetration requirements and the target retention is met for the specified Use Category.



# **HANDLING PRECAUTIONS & DISPOSAL**

The following precautions should be taken both when handling pressure treated wood and in determining where to use or dispose of the pressure treated wood:

When cutting and machining wood, wear goggles to protect eyes from flying particles. Wear gloves when working with wood. After working with the wood, and before eating, drinking, toileting, and use of tobacco products, wash exposed areas thoroughly.

Avoid frequent or prolonged inhalation of sawdust from pressure treated wood. When sawing, sanding, and machining pressure treated wood, wear a dust mask. Whenever possible, these operations should be performed outdoors to avoid indoor accumulations or airborne sawdust from pressure treated wood.

Because preservatives or sawdust may accumulate on clothes, they should be laundered before reuse. It is recommended that the clothes worn while cutting pressure treated wood be washed separately from other household clothing.

### **Site Precautions**

All sawdust and construction debris should be cleaned up and disposed of after construction.

Do not use pressure treated wood under circumstances where the preservative may become a component of food or animal feed. Examples of these would include animal bedding, structures or containers for storing animal feed or human food, cutting boards, counter tops and mulch from recycled pressure treated wood. Do not use pressure treated wood for construction of those portions of beehives which may come into contact with honey.

Only pressure treated wood that is visibly clean and free of surface residue should be used.

Pressure treated wood should not be used where it may come into direct or indirect contact with drinking water, except for uses involving incidental contact such as docks or bridges.

### Disposal

Pressure treated wood off cuts and other unused waste from agricultural, commercial, industrial projects must be disposed of in commercial or industrial incinerators or boilers in accordance with local, provincial, and federal regulations.

Pressure treated wood should not be burned in open fires or in stoves, fireplaces, or residential boilers. Burning breaks down the bond formed between the preservative and the wood. The fire consumes the wood and the concentrated components of the preservative remain and can be released in the form of ash and particulates, which can be harmful if inhaled or can contaminate water sources.

# **INSTALLATION INFORMATION - FASTENERS & HARDWARE**

### Connectors

Connectors used for ACQ, CA, CCA or MCA pressure treated wood must be manufactured from steel and be either hotdipped galvanized in accordance with ASTM A653, G185 designation, or hot-dipped galvanized after manufacture in accordance with ASTM A123. Stainless steel connectors (type 304 or 316) are recommended for maximum service life and/or severe applications.

For borate-treated wood (SBX) used inside buildings, the same connectors can be used as for untreated wood.

Pressure treated wood products should not be in direct contact with untreated wood or exposure to conditions under which the material could reasonably be expected to be colonized by mycelial growth of fungus directly from soil or via moisture wicking building materials. At a minimum, separation from these hazards should be a minimum separation by a layer of asphalt-impregnated building paper or equivalent.

### Fasteners

- 1. Fasteners for ACQ, CA, CCA or MCA pressure treated wood must be hot-dipped galvanized in accordance with ASTM A153. Stainless steel should be used for maximum service life and/or severe applications. Where appropriate, copper fasteners may also be used.
- 2. Fasteners used in combination with metal connectors must be the same type of metal to avoid galvanic corrosion caused by dissimilar metals. For example, stainless steel fasteners should not be used in combination with galvanized connectors.
- 3. For borate-treated wood used inside buildings, the same fasteners can be used as for untreated wood.

### Flashing

- 1. Flashing used in contact with pressure treated wood must be compatible with the pressure treated wood.
- 2. Copper and stainless steel are the most durable metals for flashing. Galvanized steel, in accordance with ASTM A653, G185 designation, is also suitable for use as flashing.
- 3. Flashing must also be of the same type of metal as any fasteners that penetrate through them to avoid galvanic corrosion.

### Aluminum

1. Refer to specific pressure treated wood preservative specification sheets for use recommendations with aluminum building products.

# **FIELD TREATMENT - END CUT PRESERVATIVES**

### Cut ends / Field cuts

When building outdoor projects with pressure treated wood, it is important to protect the cut ends, large drill holes, and other field cuts. Cutting or drilling into pressure treated wood has the potential to expose portions of the sapwood that are untreated with preservative. Two coats of a brush on end cut wood preservative should be applied to all saw cuts, large drill holes and other field cuts at the time of construction. Follow the manufacturer's directions for proper application.

There are two field treatment preservatives specified in the CSA 080 standard that can be used for cut ends / field cuts in both above ground and ground contact applications:

- 1. Creosote, a distillate derived from tar by carbonization of bituminous coal and meets AWPA P1/P13
- 2. Copper naphthenate, a solvent that meets AWPA P36 and contains Copper (present as Copper Naphthenate) 2%

**Note:** Whenever practicable, material to be treated should be manufactured in its final form before treatment to eliminate the need for subsequent cutting or boring.

### **Safety Practices**

The safety information website and toll-free phone number were created to help Canadian consumers when purchasing and using pressure treated wood products. Visit **ptw-safetyinfo.ca** (English) and **ptw-safetyinfo.ca/fr** (French) or call 1-866-679-0957 for more information.

# WHERE AND HOW TO ORDER NON-RESIDENTIAL PRESSURE TREATED WOOD PRODUCTS

Pressure treated lumber and timbers used in agricultural, commercial and/or industrial applications are generally "special order" products that must be purchased through a local lumberyard or home centres' contracting department. Special orders can be made directly at the local lumberyard through the home centres' contracting department, via a builder who has contacts in the pressure treated wood industry, or through an engineering firm who can relay the technical data to the supplier to ensure the appropriate product is specified. Note: most of the pressure treated wood sold at home centres and local lumber outlets is produced for residential applications such as decks, fences, pergolas, etc. and should not be used in agricultural, commercial or industrial applications.

Another consideration as part of the ordering process is a "Third Party" inspection of the products that are being ordered. Third party inspection agencies conduct on-site visits to test and verify that the products meet the Canadian Standards Association, CAN / CSA 080 Wood Preservation Standards and/or the Best Management Practices (BMPs), as specified. The inspection agency will mark the product with a unique "stamp" or provide the purchaser with a certificate of compliance.

To obtain a list of inspection agencies contact Wood Preservation Canada**info@woodpreservation.ca**. To learn more about the treated wood industry, please visit **woodpreservation.ca**. To learn more about wood, please visit **cwc.ca** and **durable-wood.com**.