

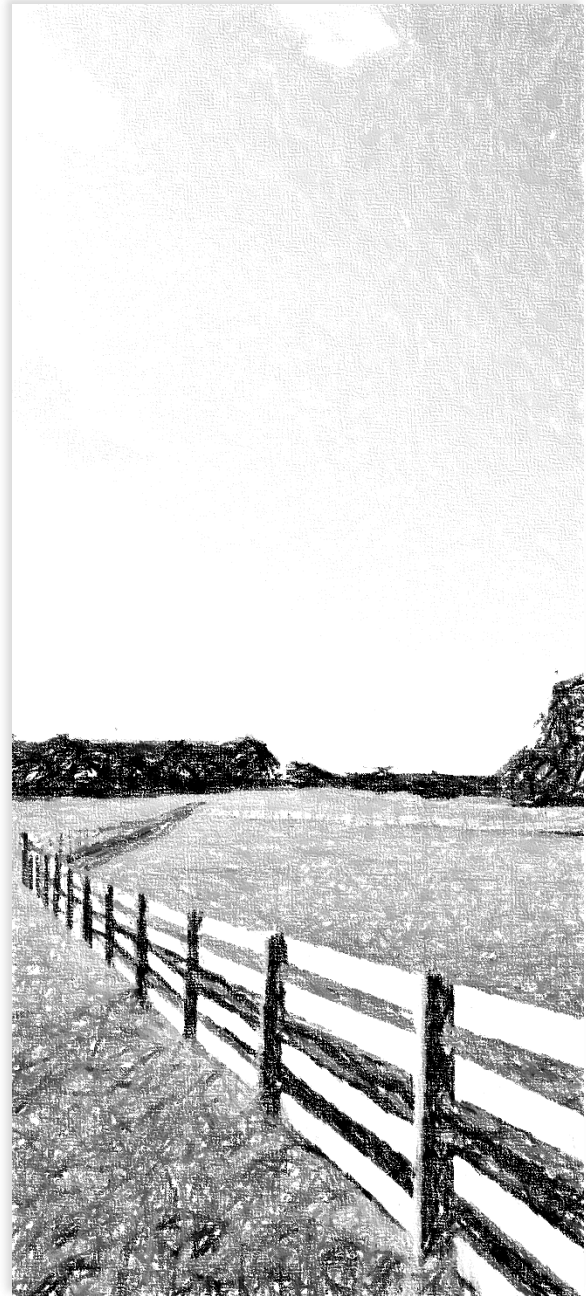


Wood Preservation Canada
Pr servation du bois Canada

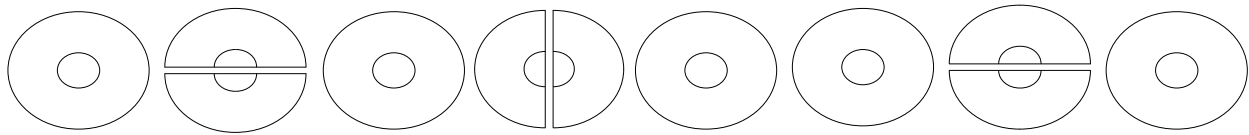
SPECIFIER GUIDE

No. WPC – 08-2025

Structural Posts and Building Poles



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SPECIFYING POSTS – Round, Half-round and Quarter Round

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Product Introduction

Pressure treated posts can be used in wide variety of applications such as agricultural buildings, highway construction, general farm fencing as well some residential general use applications. These products are strong, cost effective, attractive, easy to install, low maintenance and durable and are the preferred choice for these applications.

Posts

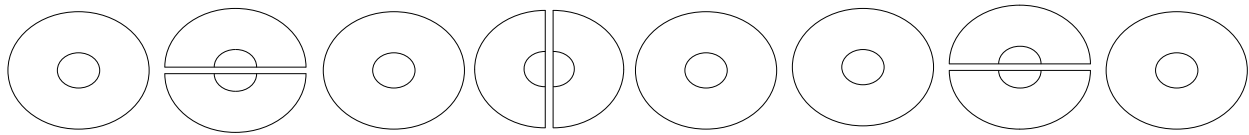
Posts are defined as being round, half-round or quarter-round posts and have a length of less than 4.75m (<15 ft). Round posts that are less than 4.75m are pressure treated for general, highway (including highway lighting), farm, agriculture, playground, residential and building use including buildings for road salt or fertilizer storage. Half-round and quarter-round posts that are less than 4.75m long and are pressure treated for general, farm, agricultural, fence and highway use.

The information in this guide focuses on the requirements for pressure treatment of posts as specified in the CAN / CSA – O80 Series – 21 Wood Preservation®.

Post End Uses and Related Use Categories

Use Categories – Examples of Post Uses and Exposures		
Posts – Round, half-round and quarter round	Exposure(s)	Use Category
Agricultural	Ground contact – severe environment	UC4.2
Agricultural used as round structural members	Ground contact or freshwater – moderate decay	UC4.2
Building construction or highway construction (guardrail posts, spacer blocks and lighting)	Ground contact, or freshwater – moderate decay	UC4.2
General, farm, fence, or highway construction (including guide, sign and sight)	Ground contact, or freshwater	UC4.1
Playground equipment ‡	Above ground, ground contact, or freshwater	UC4.1
Residential Use ‡	Ground contact, or freshwater	UC4.1
Road salt storage	Ground contact, or freshwater – moderate decay	UC4.2

‡ Treatment of Playground Equipment and Residential Use products are restricted to certain preservative systems



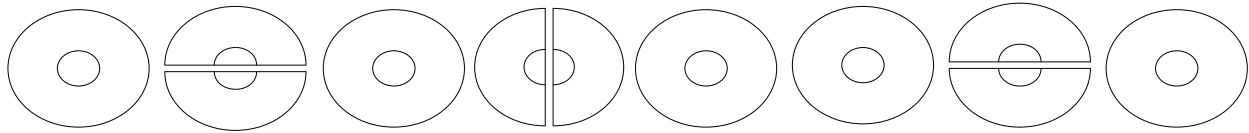
SPECIFYING POSTS – Round, Half-round and Quarter Round

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Preservative Systems Used in Treatment of Posts – General		
Chemical Name	Abbreviation	Allowable Use Categories
Alkaline Copper Quat Type A	ACQ – A	UC4.1, UC4.2
Alkaline Copper Quat Type C	ACQ - C	UC4.1, UC4.2
Alkaline Copper Quat Type D	ACQ - D	UC4.1, UC4.2
Ammoniacal Copper Zinc Arsenate	ACZA	UC4.1, UC4.2
Copper Azole Type B	CA-B	UC4.1, UC4.2
Chromated Copper Arsenate	CCA	UC4.1, UC4.2
Creosote	CR	UC4.1, UC4.2
Creosote - PS	CR-PS	UC4.1, UC4.2
Copper Naphthenate	CuN	UC4.1, UC4.2
Micronized Copper Azole	MCA	UC4.1, UC4.2
Micronized Copper Quat	MCQ	UC4.1, UC4.2
Pentachlorophenol	PCP-A / PCP-C	UC4.1, UC4.2

Preservative Treatments – Posts										
UC4.1 – Ground Contact or freshwater										
Species Group	Preservative System Retention - kg/m ³ *									
	ACQ†	ACZA	CA-B	CCA	CR	CR-PS	CuN	MCA	MCQ	PCP
Jack pine	NR	6.4	3.3	6.4	80	96	NR	NR	NR	6.4
Lodgepole pine	6.4	6.4	3.3	6.4	80	96	0.88	3.3	6.4	6.4
Ponderosa pine	6.4	6.4	3.3	6.4	80	96	0.88	3.3	6.4	6.4
Red pine	6.4	6.4	3.3	6.4	80	96	NR	3.3	6.4	6.4
Southern pine	6.4	6.4	3.3	6.4	80	96	0.88	3.3	6.4	6.4
Western hemlock‡‡	NR	6.4	NR	6.4	80	96	NR	NR	NR	6.4
Engelmann, red and western white spruce	NR	6.4	NR	6.4	80	96	NR	NR	NR	6.4
Coastal Douglas fir‡‡	NR	6.4	NR	6.4	80	96	0.88	NR	NR	6.4
Western larch‡‡	NR	6.4	NR	6.4	80	96	0.88	NR	NR	6.4
Poplar	NR	6.4	NR	6.4	80	96	NR	NR	NR	6.4
Red alder	NR	6.4	NR	6.4	80	96	NR	NR	NR	6.4

† Includes Type A, C & D
‡‡ Round posts only
* Retention levels vary by species and preservative system – Refer to CAN / CSA O80.1-21 Table 14 for complete details. Source: © 2021 Canadian Standards Association



SPECIFYING POSTS – Round, Half-round and Quarter Round

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Preservative Treatments – Posts									
UC4.2 – Ground Contact or freshwater – Moderate and /or Severe Decay									
Species Group	Preservative System Retention - kg/m ³ *								
	ACQ-C	ACQ-D	ACZA	CA-B	CCA	CR	CR-PS	CuN	PCP
Jack pine	NR	NR	9.6	5.0	9.6	145	145	NR	7.2
Lodgepole pine	9.6	9.6	9.6	5.0	9.6	192	192	1.5	9.6
Ponderosa pine	9.6	9.6	9.6	5.0	9.6	120	120	1.3	6.1
Red pine	9.6	9.6	9.6	5.0	9.6	160	160	NR	8.0
Southern pine	9.6	9.6	9.6	5.0	9.6	120	120	1.3	6.1
Western hemlock**	NR	NR	9.6	NR	9.6	145	145	NR	7.2
Engelmann, red and western white spruce	NR	NR	9.6	NR	9.6	240	240	NR	12.2
Coastal Douglas fir**	NR	NR	9.6	NR	9.6	145	145	1.5	7.2
Western larch**	NR	NR	9.6	NR	9.6	240	240	NR	12.2
Poplar	NR	NR	9.6	NR	9.6	NR	NR	NR	NR
Red alder	NR	NR	9.6	NR	9.6	NR	NR	NR	NR

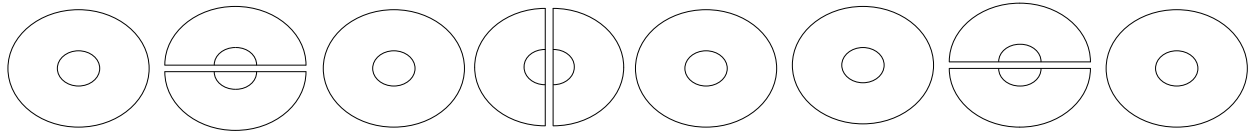
** Round posts only
 * Retention levels vary by species and preservative system – Refer to CAN / CSA O80.1-21 Table 14 for complete details. Source: © 2021 Canadian Standards Association

Playground and Residential Products

Pressure treated posts for use in playground or residential applications are restricted to Use Category UC4.1 and the following preservative systems.

Preservative Systems Used in Treatment of Playground Equipment and Residential Uses‡		
Chemical Name	Abbreviation	Allowable Use Categories
Alkaline Copper Quat Type A	ACQ – A	UC4.1
Alkaline Copper Quat Type C	ACQ - C	UC4.1
Alkaline Copper Quat Type D	ACQ - D	UC4.1
Copper Azole Type B	CA-B	UC4.1
Micronized Copper Azole	MCA	UC4.1
Micronized Copper Quat	MCQ	UC4.1

‡ Treatment of products for Playground Equipment and Residential Use are restricted to the above preservative systems



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Preservative Treatments – Posts Used in Playground Equipment and Residential Uses ‡						
UC4.1 – Ground Contact or freshwater						
Species Group	Preservative System Retention - kg/m ³ *					
	ACQ-A	ACQ-C	ACQ-D	CA-B	MCA	MCQ
Jack pine	NR	NR	NR	3.3	NR	NR
Lodgepole pine	6.4	6.4	6.4	3.3	3.3	6.4
Ponderosa pine	6.4	6.4	6.4	3.3	3.3	6.4
Red pine	6.4	6.4	6.4	3.3	3.3	6.4
Southern pine	6.4	6.4	6.4	3.3	3.3	6.4

‡ Treatment of products for Playground Equipment and Residential Use are restricted to the above preservative systems
 * Retention levels vary by species and preservative system – Refer to CAN / CSA O80.1-21 Table 14 for complete details.
 * Source: © 2021 Canadian Standards Association

Product registration

Wood preservatives and their uses are regulated by Health Canada’s Pest Management Regulatory Agency (PMRA).

Recommended Reference Standards

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