

# Appendix I Retention Required by AWWA

## 3.0 Sawn Products – UC4A

### Use Category 4A: Ground Contact or Fresh Water

Preservative retentions PCF (as active ingredients unless otherwise specified)

PCF (English units)	Pines						Spruce			Spruce-Pine-Fir West	Coastal Douglas-fir <sup>(a)</sup>	Hem-fir	Hem-fir North	Eastern Hemlock	Subalpine Fir	Redwood	White Oak	Red Oak <sup>(b)</sup>		Maple	Black & Red Gum
	Southern Mixed Southern Radiata, Patula Caribbean	Ponderosa Red	Eastern White	Scots Pine-Ger	Scots Pine-Swe	Jack Lodgepole	Western White Engelmann Sitka Spruce	<5"	≥5"												
Preservative																					
CR (as solution)	10.0	10.0	NR	10.0	10.0	NR	10.0	10.0	10.0	R	7.0	6.0	10.0	8.0							
CR-S (as solution)	10.0	10.0	NR	10.0	10.0	NR	10.0	10.0	10.0	R	7.0	6.0	NR	8.0							
CR-PS (as solution)	10.0	10.0	NR	10.0	10.0	NR	10.0	10.0	10.0	R	7.0	6.0	NR	8.0							
PCP-A	0.50	0.50	NR	0.40	0.40	NR	0.40	0.40	0.50	R	0.35	0.30	NR	0.40							
PCP-C	0.50	0.50	NR	0.40	0.40	NR	0.40	0.40	0.50	R	0.35	0.35	NR	0.40							
CuN (as Cu metal) <sup>(c)</sup>	0.06	0.06	NR	NR	0.06	NR	0.06	0.06	0.06	NR	NR	NR	NR	NR							
ACC <sup>(c)</sup>	0.50	0.50	NR	0.50	0.50	NR	0.50	0.50	0.50	0.50	0.50	NR	0.50	0.50							
ACZA <sup>(c)</sup>	0.40	0.40	NR	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	NR	0.40	0.40							
CCA <sup>(c)</sup>	0.40	0.40	NR	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	NR	0.40	0.40							
ACQ-B <sup>(c)</sup>	0.40	0.40	NR	NR	0.40	NR	0.40	0.40	NR	NR	NR	NR	NR	NR							
ACQ-C <sup>(c)</sup>	0.40	0.40	NR	0.40	NR	NR	0.40	0.40	NR	NR	NR	NR	NR	NR							
ACQ-D <sup>(c)</sup>	0.40	0.40	0.40	0.40	NR	NR	NR	0.40	NR	NR	NR	NR	NR	NR							
CA-B <sup>(c)</sup>	0.21	0.21	0.21	NR	NR	NR	0.21	0.21	NR	NR	NR	NR	NR	NR							
CBA-A <sup>(c)</sup>	0.41	0.41	0.41	NR	NR	NR	0.41	0.41	NR	NR	NR	NR	NR	NR							
CDDC	0.20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR							
CrN-W	0.11	0.11	0.11	0.11	NR	NR	0.11	0.11	NR	NR	NR	NR	NR	NR							

NR = Not Recommended

R = Treatment to Refusal

- a) Coastal Douglas-fir from a few geographical areas has been found suitable for treatment with ACC or CCA. However, it is generally recognized that most sawn products from Coastal Douglas-fir are extremely difficult to treat with the preservatives ACC and CCA to meet the penetration and retention requirements of this Standard even when incised.
- b) Where two retentions are included, these are for commodities less than 5" thick or 5" and thicker as indicated.
- c) Retentions are suitable for exposure in areas subject to Formosan subterranean termite activity.