AMERICAN WOOD-PRESERVERS' ASSOCIATION
STANDARD

(This Standard is under the jurisdiction of AWPA Committees T-2, T-3 and T-8)

C18–90

STANDARD FOR PRESSURE TREATED MATERIAL IN MARINE CONSTRUCTION

1. SPECIFIC REQUIREMENTS

1.1 Piles and timbers in marine construction shall be treated in accordance with the requirements of American Wood-Preservers' Association Standard C1, "Standard for Preservative Treatment by Pressure Processes—All Timber Products," except as supplemented herein.

1.5 Framing.—Pile cutoffs, bolt holes, and field cuts shall be protected in accordance with AWPA Standard M4.

1.51 The lower bracing timbers shall be attached to the piles at a minimum height of 3.5 feet above mean low water for marine structures at sites where the tide range is 6 feet or less, and at middle elevation for tidal ranges exceeding 6 feet.

1.6 Incising.—Required of all species sawn four sides as listed in AWPA Standard C2. See Note D.

1.8 Marking.—All products shall be marked or branded in accordance with AWPA Standard M1.

1.82 Piles.—Each pile shall be branded at points 5 feet and 10 feet from the butt end of the pile unless other measurements are specified by the customer. The standard brand shall be used except that only the length shall be shown on the bottom line of the brand.

3. Results of Treatment

3.1 Retention—pcf. The minimum retentions are listed in the table below. Preservative retention shall be determined by assay method.

Section 1.11—In those areas where *Teredo* and pholad attack are expected or known and where *Limnoria tripunctata* are not prevalent, creosote or creosote solution treatment will provide adequate protection.

Section 1.12—In those areas where *Teredo* and *Limnoria tripunctata* are expected or known and where pholad attack is not prevalent, either dual treatment or high retentions of ACA, ACZA or CCA treatment will provide adequate protection.

Section 2.13—In those areas where *Sphaeroma terebrans* or where *Limnoria tripunctata* and pholad attack are expected or known, the dual treatment provides the maximum protection known at present.

Marine Piling—Specific Requirements of Use for Treated Wood Subject to Exposure of Marine Borers

Marine Boring Organism	Type of Treatment: Creosote and Creosote Solution	Waterborne Preservatives (ACA, ACZA, CCA)	Dual[A]
Teredo	[B]S	S	S
Pholads	S	[C]X	S
Limnoria tripunctata	X	S	S
Sphaeroma trebrans	X	X	S

[A] Method as defined in paragraph 2.13 of C1.

[B] (S) Satisfactory for use where the particular boring organism is present.

[C] (X) Maximum service life will not be obtained when waterborne preservatives are used where *Sphaeroma terebrans* or pholads are known to attack and when creosote and creosote solutions are used where *Sphaeroma terebrans* or *Limnoria tripunctata* are known to attack.

Round Timber Piles Exposed to Moderate or Severe Marine Borer Hazard

	Southern Pine, Red Pine	Coastal Douglas-fir	Oak	AWPA Standard
Moderate Borer Hazard				
Creosote[1]	20.0	20.0	10.0	C3
Creosote solution [1]	20.0	NR	10.0	C3
Severe Borer Hazard				
***Limnoria tripunctata* only**				
ACA[2]	2.50 and 1.50	2.50	NR[3]	C3
ACZA	2.50 and 1.50	2.50	NR[3]	C3
CCA[2]	2.50 and 1.50	NR	NR	C3
Sphaeroma terebrans, or ***Limnoria tripunctata* and *Pholads***				
(Dual treatment)				
First treatment				
ACA	1.00	1.00	NR	C3
ACZA	1.00	1.00	NR	C3
CCA	1.00	1.00	NR	C3
Second treatment				
Creosote[4]	20.0	20.0	NR	C3
Creosote solution [4]	20.0	NR	NR	C3

See footnotes page 2.