

	ACTUAL	DIMENSIONS	HOLE DIAMETER
DESIGNATOR	В	W	Н
PDP20	3½ [89]	3½ [89]	NO HOLES
PDP21	5½ [140]	3½ [89]	NO HOLES
PDP22	5½ [140]	3½ [89]	5½ [38]
PDP23	5½ [140]	5½ [140]	2 [51]
PDP24	7½ [184]	5½ [140]	3 [76]

# RECTANGULAR TIMBER SIGN POST

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#### **SPECIFICATIONS**

Posts of the following species and grades are acceptable as described in <u>American Softwood</u> Lumber Standard PS-20.

Species	Grade
Southern Pine	No. 2
Douglas Fir	No. 2
Western Hemlock	No. 1
Ponderosa Pine	No. 2
Red Pine	No. 2
Western Red Cedar	No. 1

Timber for posts shall be either surfaced four sides (S4S) with nominal dimensions indicated. All timber sign posts shall receive a preservation treatment suitable for ground contact exposure in accordance with AASHTO M133. The preservative shall be applied after the sign post is sawn, dressed and end-trimmed. When required, breakaway holes may be pre-drilled or drilled in the field. Inertial properties shown below are based on the actual dimensions of an S4S post through the breakaway holes.

Designator	Area $(10^3 \text{ mm}^2)$	$I_{\rm x} (10^6 {\rm mm}^4)$	$I_{\rm y} (10^6 \rm mm^4)$	$S_x$ $(10^3 \text{mm}^3)$	$S_y$ $(10^3 \text{mm}^3)$
PDP20	7.9	5.2	5.2	117.5	117.7
PDP21	12.5	20.4	8.2	290.7	184.8
PDP22	9.1	19.9	6.0	284.9	134.7
PDP23	12.5	30.5	20.4	435.2	290.7
PDP24	15.2	67.6	24.7	752.8	352.8

Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance and accepted manufacturing practices.

#### **INTENDED USE**

These posts are used in the direct burial wood post sign support system (SSF20a-b) and the rectangular wood in concrete small sign support system (SSF22a-b). The posts can be embedded directly in soil but some states prefer to embed the post in either soilcrete or concrete to enhance the breakaway performance.

### **REFERENCE**

L. A. Staron, "Breakaway Wood Posts," Geometric and Roadside Design Acceptance Letter SS-32, Federal Highway Administration, October 28, 1992.

## **RECTANGULAR TIMBER SIGN POST**

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