



# Bor8 Rods Internal Treatment

Bor8 Rods are solid, easy-to-handle glass-like rods containing 96.65% water diffusible borate wood preservative. Borate-based wood preservatives are recognized as being highly diffusible and known for their ability to help control wood destroying fungi and insects.

When the wood moisture content approaches levels thought to support decay - about 25% - Bor8 Rods will dissolve and diffuse following the path of moisture to provide a pattern of protection against future decay.

Bor8 Rods are designed to be installed in pre-drilled holes concentrated in the locations where decay control is required. For utility poles, the areas most prone to decay are the groundline zone – typically defined as 6" above grade to 18" below grade – and the pole top.

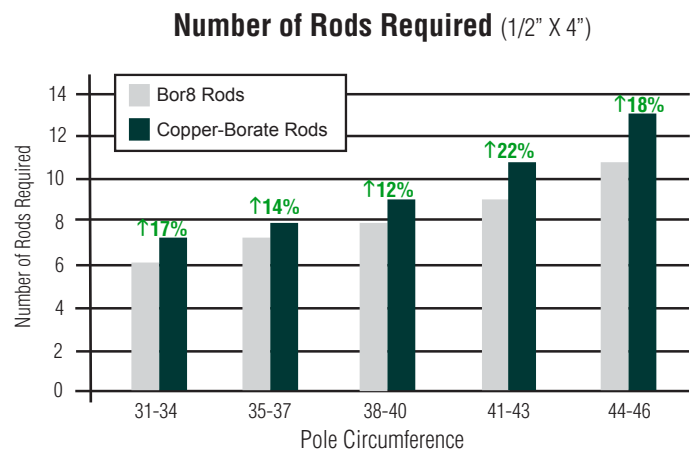
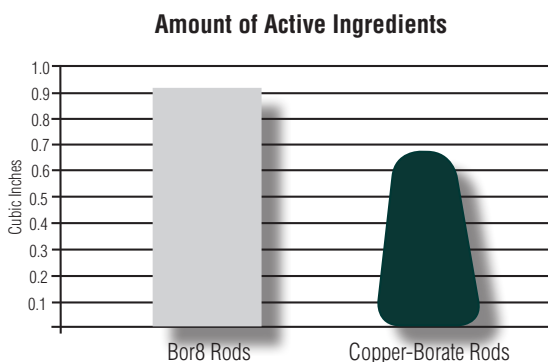
Bor8 Rods can be used as an internal treatment for wood utility poles or to help protect open bolt holes, pole tops, and cross arms. Bor8 Rods can be installed by utility personnel and are particularly well-suited for use in transmission spar arms and X-braces.



## Borate (Bor8) Rods vs. Copper-Borate Rods

Copper is an excellent preservative when applied to the surface of wood. However, it only penetrates a few millimeters into the wood; it does not diffuse through wood like boron. According to the Oregon State University Utility Pole Research Cooperative (Annual Report, 2007), "Copper levels in poles treated with four rods {copper-borate} were slightly elevated at groundline in the inner zones of poles treated using both the 90 and 120 degree patterns two years after treatment, but even these levels were well below the threshold for wood protection. Copper was barely detectable away from these zones.

The addition of copper to borate-based rods adds little, if any, protection. Instead, the copper takes up valuable space that would be better served with boron. Furthermore, copper-borate rods are tapered which further reduces the size of the rod and the amount of active ingredients available to protect against decay.



↑Increase in cost to treat poles with copper-borate rods vs Bor8 Rods

## Recommended Application Rates for Bor8 Rods

Pole Diameter @ Groundline (inches)	Pole Circ. @ Groundline (inches)	Approx. Volume Cu. Ft.	Remedial Treatments (6 oz. BAE/CF)				Preventive Treatments (2 oz. BAE/CF)			
			1/2" X 4" (1.22 oz BAE)	No. of Holes	3/4" X 3" (2.13 oz BAE)	No. of Holes	1/2" X 4" (1.22 oz BAE)	No. of Holes	3/4" X 3" (2.13 oz BAE)	No. of Holes
8	25-27	0.70	4	2	2	2	2	2	NR	NR
9	28-30	0.88	5	3	3	3	2	2	NR	NR
10	31-34	1.09	6	3	3	3	2	2	NR	NR
11	35-37	1.32	7	3	4	3	3	3	NR	NR
12	38-40	1.57	8	3	5	3	3	3	2	2
13	41-43	1.84	9	3	6	3	3	3	2	2
14	44-46	2.14	11	4	6	3	4	4	2	2
15	47-49	2.45	12	4	7	3	4	4	3	3
16	50-52	2.79	14	4	8	3	5	4	3	3
17	53-56	3.15	16	4	9	3	6	4	3	3
18	57-59	3.53	NR	NR	10	4	6	4	4	4
19	60-62	3.94	NR	NR	11	4	7	4	4	4
20	63-65	4.36	NR	NR	13	4	8	4	4	4
21	66-68	4.81	NR	NR	14	4	8	4	5	4
22	69-71	5.28	NR	NR	15	4	9	4	5	4
23	72-74	5.77	NR	NR	17	4	10	4	6	4
24	75-78	6.28	NR	NR	18	4	11	4	6	4

### Recommended Installation of Bor8 Rods

Drill holes to a depth that allows for the application of the appropriate number of rods and the installation of the plug. Allow a minimum of 1/8" of space between the rods and the plug for expansion.

- 1/3" diameter rods require a 3/8" diameter application hole.
- 1/2" diameter rods require a 9/16" diameter application hole.
- 3/4" diameter rods require a 13/16" diameter application hole.

#### Two-Hole Application

- Drill the first hole at or below groundline.
- Drill the second hole 180 degrees from and 6" higher than the first hole.

#### Three-Hole Application

- Drill the first hole at or below groundline.
- Drill the second hole 120 degrees from and 6" higher than the first hole.
- Drill the third hole 120 degrees from and 6" higher than the second hole.

#### Four-Hole Application

- Drill the first hole at or below groundline.
- Drill the second hole 90 degrees from and 6" higher than the first hole.
- Drill the third hole 90 degrees from and 6" higher than the second hole.
- Drill the fourth hole 90 degrees from and 6" higher than the third hole.

For more information on Bor8 Rods or to place an order:

**CALL** 770.632.6700 Opt. 3

**EMAIL** [products@osmose.com](mailto:products@osmose.com)

### Ordering Information

Product	Unit / Quantity
1/2" X 4"	Pail - 750 rods
3/4" X 3"	Pail - 500 rods
1/3" X 1"	Box - 350 rods; Pail - 2,000 rods