

EB 331 Poles—Fire Protection

Scope

This standard provides information and material identification for pole fire protection.

General

There may be poles installed in areas where annual field or brush burning could damage distribution pole to a degree which it may not be strong enough for the structure. To prevent pole fire damage, engineering recommends the following methods.

1. Fire-Guard

Osmose wood pole fire guard is a heavy-duty coating (SI# 8004292) applied by an airless spraying equipment helps protect distribution wood poles from fire damage. It is recommended to hire osmose crew to apply a heavy duty coating of this material on designated poles. This method should prevent pole damage due to fire for up to five years.

2. Aluminum Butt Wrap

Four sheets of aluminum, 0.019" × 36" × 72", purchased at a local hardware store can be installed as it is shown in Figure 1. Aluminum roofing nails, screw shank of 1¾", or monel staple of ½" size can be used to fasten these aluminum sheets.

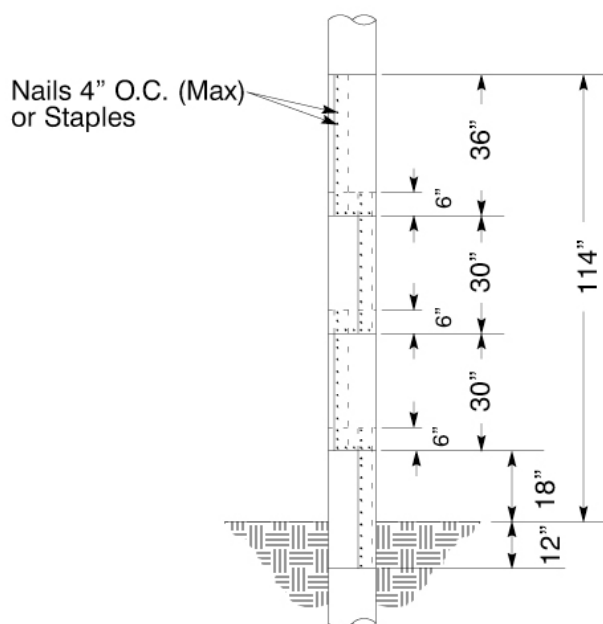


Figure 1—Aluminum Butt Wrap

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3. Fire-Guard Wrap

Fire-Guard Wrap should be applied to a clean surface. Remove loose surface debris and excess preservative material. Excess vegetation should also be removed at pole base. Excavate 2" of dirt from around the pole prior to applying Fire-Guard Wrap. Fire-Guard Wrap should be applied from 1"–2" below ground line to at least two feet (2') above surrounding vegetation. Typical application height is 36" – 54" or higher. Horizontal and vertical seams should overlap by approximately 2". Off-set vertical seams.

Fire-Guard Wrap should be applied as snugly to the pole as possible. Each wrap is 20" wide and 36" (SI# 8004375), 48" (SI# 8004275) or 60" (SI# 8004276) long. Exposed vertical and horizontal seams should be secured with 1 ½" or longer galvanized, aluminum, or stainless steel roofing nails every 6". The product should be installed from the top down, allowing approximately 2" overlap on the vertical seam.

Successively lower pieces should overlap the higher piece by approximately 2", resulting in a reverse roofing effect. The lower most piece should overlap the upper piece by approximately 2" and extend approximately 2" below grade, see Figure 2.



Figure 2—Example of Finished Application

4. Genics WFS Wire Net

Genics WFS wire net (SI# 8004438) can be used as an alternate to the Fire-Guard Wrap and is installed in a similar manner.

Installation Instructions

Step 1: Clear the area and remove loose surface debris. Make sure the substrate is cleaned off with no debris.

Step 2: Dig about 2" below the ground line. Excavate about 2" of dirt from around the pole.

Step 3: Measure the circumference of the pole or wooden substrate.

Step 4: Cut the wire mesh/net using tin snips (easiest to cut) accordingly.

Step 5a: When wrapping a piling or pole, start from the bottom and bury it about 2" below the ground line. Leave the top lap/seam unstapled until the second piece is slid into place (refer to 5b).

Step 5b: Wrap the bottom wood substrate with the Genics WFS wire net; make sure it is tightly wrapped (no air pockets). Slide the top, second piece, into the bottom piece of the WFS wrap and overlap 2"–3".

Step 6: Wrap the substrate using the Genics WFS wire net; make sure it is tightly wrapped (no air pockets).

Step 7: Use a staple gun to fasten and secure the Genics WFS wire net to the wooden substrate. Every 4"–8" on the seams is recommended. Vertical seams should be offset.



Figure 3—Example of WFS Wire Net Application

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