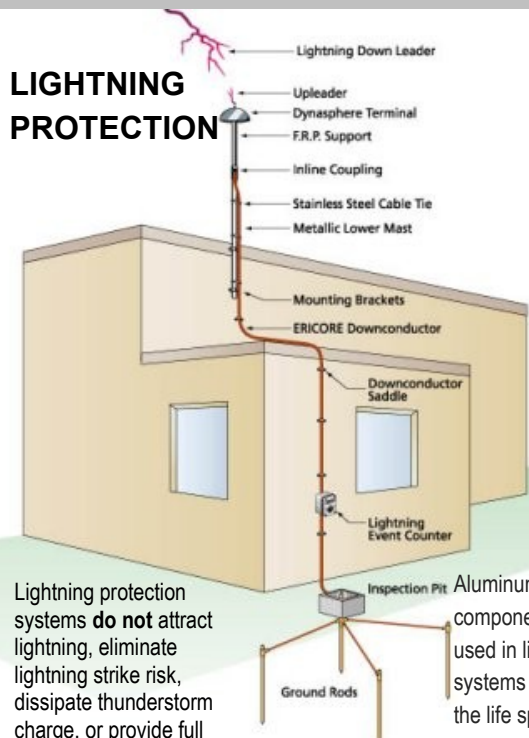


## LIGHTNING PROTECTION



Lightning protection systems **do not** attract lightning, eliminate lightning strike risk, dissipate thunderstorm charge, or provide full

Aluminum conductors and components should not be used in lightning protection systems since they will shorten the life span of the system.

### LIGHTNING RODS

#### Ridge Strap Lightning Rod and Mount

With 12" Solid Rod.

Copper or aluminum strap mount with cable clamp for use on ridge, flat or sloping roof's.—Shipped flat but may be easily formed to fit any roof slope.

Copper:  
Catalog #C-4-12 with 12" Rod \$27.00  
With 18" Rod #C-4-18 \$33.00

Aluminum:  
#A-4-12 with 12" Rod \$18.00  
With 18" Rod #A-4-18 \$21.00  
Longer length rods add \$1.00 per inch



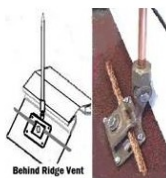
#### Swivel Lightning Rod with clamp base

With 12" solid Rod.

Heavy cast copper or aluminum. For use on back side of roof to hide mount from view.

Copper:  
Catalog #C-16-12 with 12" Rod \$34.50  
With 18" Rod #C-16-18 \$40.50

Aluminum:  
Catalog #A-16-12 with 12" Rod \$24.50  
With 18" Rod #A-16-18 \$27.50  
Longer length rods add \$1.00 per inch



#### Deluxe Bolted Metal Bonding Lug

Heavy cast copper or aluminum lug with stainless steel bolts for connecting to metal objects. Note: If connecting copper to aluminum, a stainless steel washer can be inserted between the two metals to avoid corrosion.

Copper: # C-20 \$ 8.00

Aluminum: # A-20 \$ 6.25

Bolted connectors allow for easy removal when re-roofing.



### Lightning Conductor Cable's

Class 1—Standard of the industry for buildings under 75' high (Other sizes available).

#### Copper Conductor Cable:

Catalog #C-1 Copper \$2.35 per ft.  
Braided approx., 7/16" diameter Copper Cable in smooth Basket weave configuration.



#### Economy Crimp Double Cable Splicer

Fingers are crimped over the cable with pliers or hammered over the cable. (For a better bolted splicer see #10-Z at right)

Copper: Catalog # C-6 \$2.90

Aluminum: #A-6 \$1.90



#### Economy Crimp TEE Splicer

Fingers are crimped over the cable with pliers or hammered over the cable. (For a better bolted splicer, see #19 at right)

Copper: Catalog # C-8 \$2.90

Aluminum: #A-8 \$1.90



### GROUNDING RODS

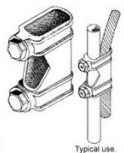
#### Ground Rods and Ground Rod Clamps

LEFT: Ground Rod is 1/2" x 8' long made of copper clad hardened steel. Long life corrosion resistant. Note: Never connect aluminum underground.

8' Ground Rod (Left) #22 \$19.00 (Note: Additional shipping due to high shipping costs, ground rods may be available locally at less cost).

Copper Ground Clamp (Right) # C-23-A for 1/2" or 5/8" ground rods \$11.00  
# C-23-B for 3/4" ground rods \$12.00

Used for connecting copper cable to ground rod. Will fit 1/2" - 5/8" - 3/4" ground rods. Two stainless steel bolts with 2" contact length along axis of the grounding rod.



#### Copper Ground Plate with Clamp

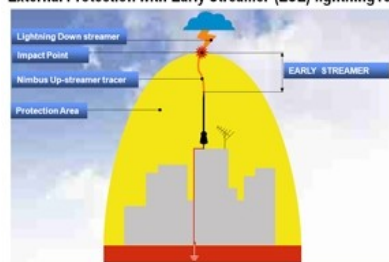
2 square foot x 0.032 thick copper flat plate. Comes complete with attached clamp for ground cable.

Copper: # C-24 \$ 62.00

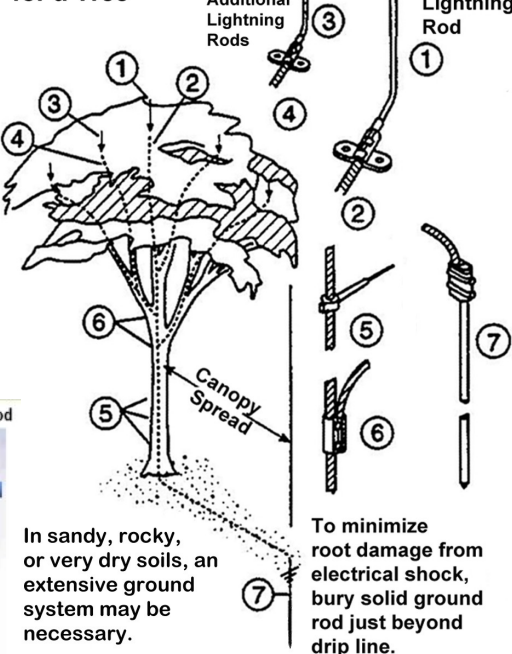
Use in place of Ground Rods where shallow top soil is encountered - For soil depths of 1 to 2 ft.



#### External Protection with Early Streamer (ESE) lightning rod



### Lightning Protection for a Tree

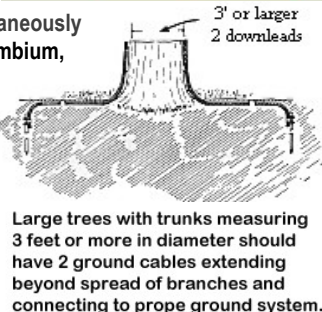


In sandy, rocky, or very dry soils, an extensive ground system may be necessary.

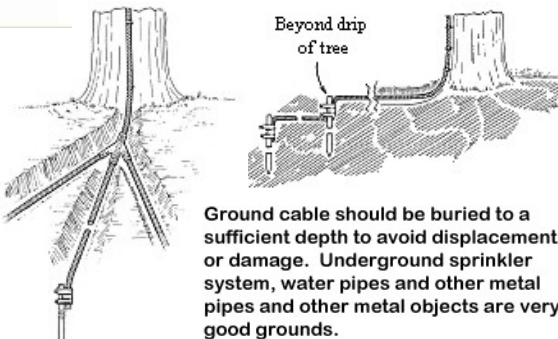
To minimize root damage from electrical shock, bury solid ground rod just beyond drip line.

When a tree is struck by lightning, water within the tree is instantaneously Vaporized. Steam is created usually in the outer sapwood and cambium, resulting in an explosion which strips off bark from the tree.

Installing a Lightning Protection System in a building provides a path of least resistance to ground and diverts most of the current from a strike away from electrical, plumbing, and structural systems which reduces the risk of fire, shock wave damage, side flash injuries, and minimizes electrical appliance and electronic destruction.



Large trees with trunks measuring 3 feet or more in diameter should have 2 ground cables extending beyond spread of branches and connecting to proper ground system.



Ground cable should be buried to a sufficient depth to avoid displacement or damage. Underground sprinkler system, water pipes and other metal pipes and other metal objects are very good grounds.

Tall trees do not protect. As a matter of fact, they could actually make things worse. Lightning usually jumps from the tree to the house because of all the grounded metal items inside and outside the house. Metal is a much better conductor of electricity than a tree. Consider installing lightning protection in tall trees next to a house.