

LIGHTNING PROTECTION AND BONDING



Lightning protection is a subject often misunderstood in the construction industry. It requires a subjective decision based on an examination of the relative criticalness of the structure's location and its contents. Site specific lightning flash density is taken into consideration by architects and engineers to determine the required lightning protection.

When lightning protection is requested by any customer a Solar Innovations, Inc. structure can be designed to include a professionally designed lightning protection system by a third party lightning protection engineer with required two paths to ground and main size lightning conductors.

It is recommended by Solar Innovations, Inc. that even structures that do not directly require a full lightning protection system, customers should bond the metal structure to the it's own earth-ground or tie it directly to an existing building's grounding system.

Solar Innovations, Inc. can also integrate lightning protection and electrical bonding into various decorative accessories such as finials and ridge cresting. Connection components and main size grounding conductors as part of the system quote and package upon request.

Aluminum or copper can be used for grounding systems. Copper is normally considered the better choice for electrical grounding because it is a better conductor than aluminum, this allows for the use of a smaller cable. However, when installed in an aluminum structure there are concerns with dissimilar metal properties.

This can be avoided by using aluminum components within the Solar Innovations, Inc. system and then converting with the appropriate isolation component outside of the structure to copper and terminating it at a ground rod location

If you have any particular lightning or grounding questions do not hesitate to contact a Solar Innovations, Inc. sales representative at 800-618-0669.



**Bi-metal
Isolation Splice
(Copper to
Aluminum)**