ENCORE
LAND AND SEA

CMCE LIGHTNING SUPPRESSOR

INSTALLATION MANUAL

Commercial Roof Mount Guide

CMCE Commercial Roof Mounting

Be sure to document the installation with photos of each step

STEP 1:

Identify a desired grounding wire on the rooftop, ideally near the CMCE mounting point. Test the desired grounding wires to identify a resistance of less than 5 ohms. An old traditional ground rod wire may be used. Resistant must be >5 ohms. The main conductor and secondary conductors will tie into the identified ground wire.

STEP 2:

Create the CMCE support frame by attaching three pieces of strut, one feet in distance, horizontally and linearly.. Anchor the strut channel to the wall. Attach the clamps to the strut frame.

STEP 3:

The 1.5" ID aluminum pipe used as a mast for the CMCE must exceed the highest point by a minimum of 6'; therefore, the mast will need to be cut accordingly. Align the CMCE with the top of the mast and identify where a hole is to be drilled for CMCE and mast connection. Drill a hole into the mast so that the CMCE can be placed inside the mast and the set screw can conjoin the two.

STEP 4:

Tinn the 1/0 jacketed wire, run the wire through the mast, and cover the end with Nolox, insert into the CMCE, and ensure connection of the CMCE and mast. Finally, insert the set screw and secure.

STEP 5:

Attach the mast to the CMCE support frame using a 1 7/8" strut clamp, attached to the top strut. A secondary clamp connects the secondary conductor, #6 jacketed wire, connected to the base of the mast, and connected to the bottom strut.

STEP 6:

Connect the main conductor and secondary conductors to the roof grounding wire. Connect with acorn ground clamps.

TESTING FUNCTIONALITY

Always test as close to the end of the grounding wire as possible, always testing the primary conductor, connected to the CMCE.

As a general rule, it is known that the lower the grounding resistance, the better and more effective operation of the CMCE device will be obtained.

It is imperative that the mast is bonded. If reading 0L or 0.0 m/A, typically adding a second conductor, bonded to the mast, corrects both the ohms and mA readings. The mA drainage verifies that the CME is drawing in ionic charge and properly dissipating. Document the readings and also take photos of the readings. We seek an oscillation of mA draining along with a >5 ohms resistance.