

# Lightning Protection

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A bolt of lightning has 10,000 times the power of the electric chair. You don't want to get hit by lightning. For your house, its a numbers game. If there are a lot of houses around you, you probably won't get hit by lightning, especially if there are taller buildings and trees around that would take the hit first. If your house is alone in a field, the chances of getting hit are much higher.

You may have seen lightning rods on a farm roof from a distance, but they are only the tip of the system. They stand up above the roof to "catch" the lightning before it hits the roof. Actually, instants before a strike, electricity will move up from the item to be hit and down from the clouds. These two currents "flirt" with each other and then establish a connection, and then the power comes crashing down. Lightning rods help to direct this power away from the house and its electrical wiring.

In the photo you see three electrical conductor. The very small one on the top is a standard electrical wire used to take power to outlets in your house, even a fairly large one. The two below, very much bigger, are lightning conductors.

About half the lightning arrestor installations in cottage country are done by homeowners, because it costs too much for a pro to travel all the way to the cottage. You start by giving your house plan and landscaping layout to the lightning rod company. They then give you all the proper supplies and explicit instructions on where to put everything. It is not a hard job, but you need to follow professional directions to assure proper protection.

The installation we visited was done by the Dominion Lightning Rod Co. Ltd. in Toronto.

That is all about individual house protection. When lightning hits the power lines anywhere near your house that can cause a major surge of electricity, for fraction of a second, to flow right into the wires in your house. If that surge is allowed to reach appliance, especially electronic equipment, it can cause real damage. That is why we often install surge protection, ranging from plug strips or buss bars with surge protection to whole house surge protection at the electrical panel. Follow this link for more information on surge protection.

**Keywords:**

Lightning, Surge Protection, Environmental, Security, Safety, Electrical