

Grounding Doesn't Turn You Into an Antenna for Electromagnetic Fields (EMFs)

One of the most often-repeated bogus warnings against Earthing is that when you are grounded you become an antenna for man-made voltage that then enters your body and does you harm.

The statement is false, yet frequently made by EMF consultants. Any electrical engineer or physicist knows that a grounded antenna doesn't work!!!!

For an antenna to work, it cannot be grounded. A grounded antenna does not work because it becomes an extension of the Earth's potential and the electrons within it will not respond to external EMFs. The antenna is shielded and EMFs are reflected.

When you are grounded, you become like a Faraday cage and the Faraday cage effect prevents EMFs generated by the electric wires of your home from penetrating your body. A Faraday cage is a metal enclosure used to block electromagnetic fields, like the one shown in this picture.



Another common variation of the antenna nonsense is that when you are grounded your body pulls in EMFs from the environment, and could be harmful to you.

Since the body is a conductor, just like an antenna, it will act as an antenna (a receiving antenna, not an emitting one) when NOT grounded.

As far as "pulling in" of EMFs is concerned, such a phenomenon does not exist. An object, whether a conductor or a non-conductor, does not pull in EMFs. That's because EMFs do not have electric charges. They cannot be attracted to anything. They simply radiate outward to infinity from an emitting source, such as electric wires, appliances, and cell phone towers. An antenna, to work properly, needs first to be ungrounded and, second, to be directly in the path of EMFs. The antenna will respond to EMFs only if these fields come in actual contact with it and not because of any "pulling" force generated by the antenna.

Some of the confusion about antennas relates to the fact that masts and metal structures supporting large antennas are grounded, giving the impression that the antenna itself is grounded. That is not the case. The masts and supporting structures of antennas are grounded to protect against lightning. The U.S. National Electric Code is quite clear on this point: **810.15** **Grounding.** Masts and metal structures supporting antennas shall be grounded in accordance with 810.21.