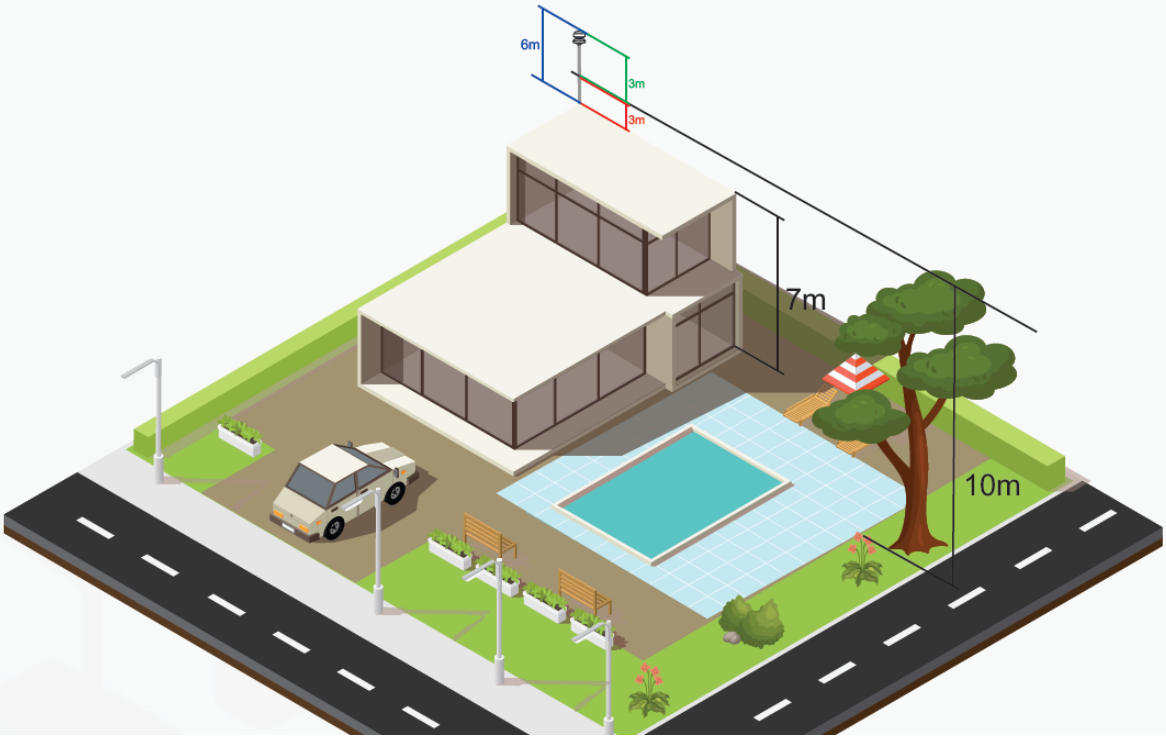
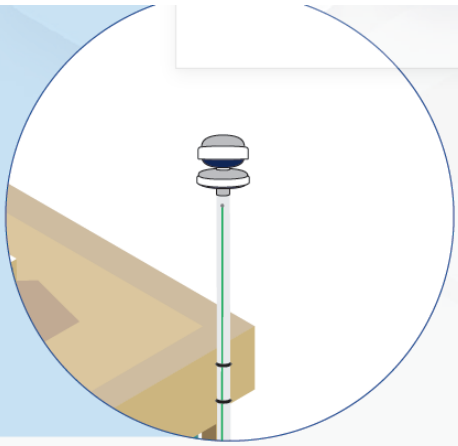
Simple CMCE device Installation

**The height that the CMCE SERTEC must exceed, with respect to the tallest structure within the coverage area, must be at least 3 meters above it, in order to avoid the spike effect that could be caused by any element attracting lightning if said element were higher than the CMCE.**

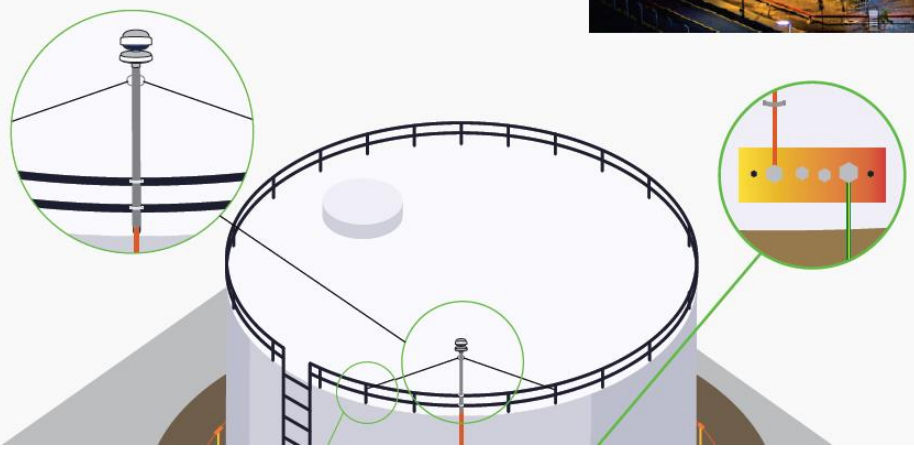



The fixing of the CMCE can vary according to the type of structure to which it must be fixed or according to the internal requirements of the industry. But in each case, it must be guaranteed that this fixing is the safest possible capable of supporting the weight of the equipment plus the mast and winds of up to 150 km/h.

The external and environmental factors that surround the environment such as; places of high vibration, temperature, contamination, explosive chemicals, etc. For the correct choice of materials to be used for fixing the CMCE.



- Storage tanks: The resistance to ground must be taken into account beforehand.
- Exceed the highest point of the tank.
- It can be used as a mounting structure to the tank itself by fixing the CMCE mast or an external post can be installed close to the tank to be protected.
- Generally, this type of structure already has a perimeter grounding system.
- Direct coupling to the existing ground system can be made, as long as the cathodic protection of the tank is not by current injection.
- If there is cathodic protection by current injection, it is advisable to add at least 3 electrodes to the same system and that these be for referencing the CMCE.



If the site already has an SPT, the state of the rods, conductors and joints must be verified (state of corrosion, state of welds or connectors if they do not have welding, etc.).

- Check the section of the conductor and the rods.
- Verify quantity of existing rods.
- Measure the ohmic resistance of the SPT.

If all these points mentioned above are satisfactory and approved by SERTEC SRL, the interconnection of the CMCE down conductor can be made directly to the existing system, without the need to add more rods.

If the conductors and rods are in acceptable (not optimal) conditions, as many rods must be added as the system requires.

## Measure the value of the grounding system

After grounding with the corresponding number of rods for the installation, interconnection of the rods, etc., the resistance of the ground mesh must be measured using a tellurometer or tellurometer in order to verify if managed to decrease the resistance initially measured, to a value less than 5Ω.