



SATISHIELDING

SHOPPING MALL SHIELDING (PR)

Description of the problem

A new shopping mall in Parma was built under a double overhead pylon, which needs to be replaced by an underground line. The excavation works are delayed while the shopping mall is growing quickly.

It is therefore necessary to inaugurate the shopping mall with the line still in operation, and therefore the induction values need to be brought down to below the limits that guarantee the protection of the people who work at the shopping mall and the customers.



Solution

The considerable proximity of the overhead line requires a mitigation solution with a high shielding factor. The shielding solution must also be limited to the roof of the building.

Thanks to the combined application of a solution to the overhead line, by bringing the phases closer together, and a conductive type of shield installed on the roof of the building, we were able to achieve induction values well below the quality objective.

The work was carried out in collaboration with the Alfa Firm of Parma.



Results

The implemented solution fulfilled the compulsory functional and architectural requisites, it met the quality limits (the magnetic induction measurement prior to implementation had a median value of 5.7 μT , whereas after implementation it was less than 0.8 μT) and the overall cost containment of the solution.

