



**BESHIELDING**  
BUSBAR | ENGINEERING | SHIELDING



## SHIELDING OF A SHOPPING MALL (PR)

### Description of the problem

In Parma, Italy, a new shopping mall is being built below a double overhead circuit that is to be replaced by an underground line. The underground work is seeing delays while the shopping mall is growing rapidly. Thus, the centre will have to be inaugurated with the line still in operation; therefore the induction values must be brought down to below limits able to safeguard mall workers and customers.



### Solution

The close proximity of the overhead line requires mitigation with a high shielding factor. At the same time, the shielding intervention must be limited to the building roof alone. Thanks to a combined intervention on the overhead line, bringing the phases close together, and by positioning the conductive shielding on the roof of the building, it was possible to obtain an induction value well below the quality objective. The work was conducted in collaboration with Alfa Studio of Parma.



### Results

This intervention made it possible to a) meet the functional and architectural requirements and quality limits (the pre-intervention magnetic induction measurement was an average  $5.7 \mu\text{T}$  while the post-intervention value was below  $0.8 \mu\text{T}$ ) and b) contain the overall costs of the intervention.

