



Piazza Grande, Arezzo



E.L.F. MAGNETIC SHIELD

SHIELDING APPLICATION FIELDS

HEALTHCARE AND RESEARCH CENTERS

St. Chiara Hospital Cisanello – Pisa –2025

Electromagnetic shielding system for the substation to protect teaching rooms from magnetic induction exposure



Target:

- $B \leq 3 \mu T$ Quality Objective (Italian Law 8th July 2003)

Stevanato Pharmaceutical Plant (Latina) – 2022/2025

Shielding system for two substations in adjacent lots



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Milan University, TEM-STEM Room - 2024

Shielding system to ensure correct operation of the Termofisher TEM “Spectra 300”



Target:

- $B < 50\text{nT}$ Thermofisher «Spectra 300» TEM immunity specifications

Chiesi Pharmaceuticals (Parma) - 2023

Shielding of the electrical rooms and risers



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Meyer Pediatric Hospital (Florence) - 2023

Shielding system to protect patients and medical staff



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

San Raffaele, «The Iceberg» (Milan) – 2021/2023

Shielding system for switchboards and secondary distribution, with later shielding of a medium voltage room



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 1 \mu\text{T}$ – more precautionary level than the Electromagnetic Compatibility Standard Level 1 (EN IEC 61000: 4-8)

San Marco Hospital (Catania) – 2016 and 2023

Shielding system for transformer rooms and secondary distribution to comply with EU and Italian Regulations



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 1.26 \mu\text{T}$ Electromagnetic Compatibility Level 1 (EN IEC 61000: 4-8)

New «Galeazzi» (Milan) - 2021

Shielding system for transformer rooms for the protection of both people and electronic equipment



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 1 \mu\text{T}$ – more precautionary level than the Electromagnetic Compatibility Standard Level 1 (EN IEC 61000: 4-8)

Human Technopole (Arexpo, Milan) – 2020 *in progress for a new HQ building*

Shielding system to ensure correct operation of TEM



Target:

- **B < 50nT** TEM immunity specifications

Humanitas Hospital (Catania) - 2019

Shielding system for transformer rooms and secondary distribution to comply with the EU and Italian Regulations



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 1.26 \mu\text{T}$ Electromagnetic Compatibility Level 1 (EN IEC 61000: 4-8)

«Clinique La Rose» (Tunisy) - 2018

Installation of G-iron® shielding system for MRI



Target:

- $B \leq 5 \text{ G}$ to protect employees and patients in the areas nearby the MRI room

National Research Council (Bologna) - 2015

Installation of G-iron® shielding system to protect
a near- by Scanning Electron Microscope and its operators



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

DATA CENTERS

Data 4 Italy (Milan) – 2023/2024/2025/2026

Design, supply, turnkey installation and on-site commissioning for building DC07, DC09 and DC08.2. DC0801, DC11, DC15

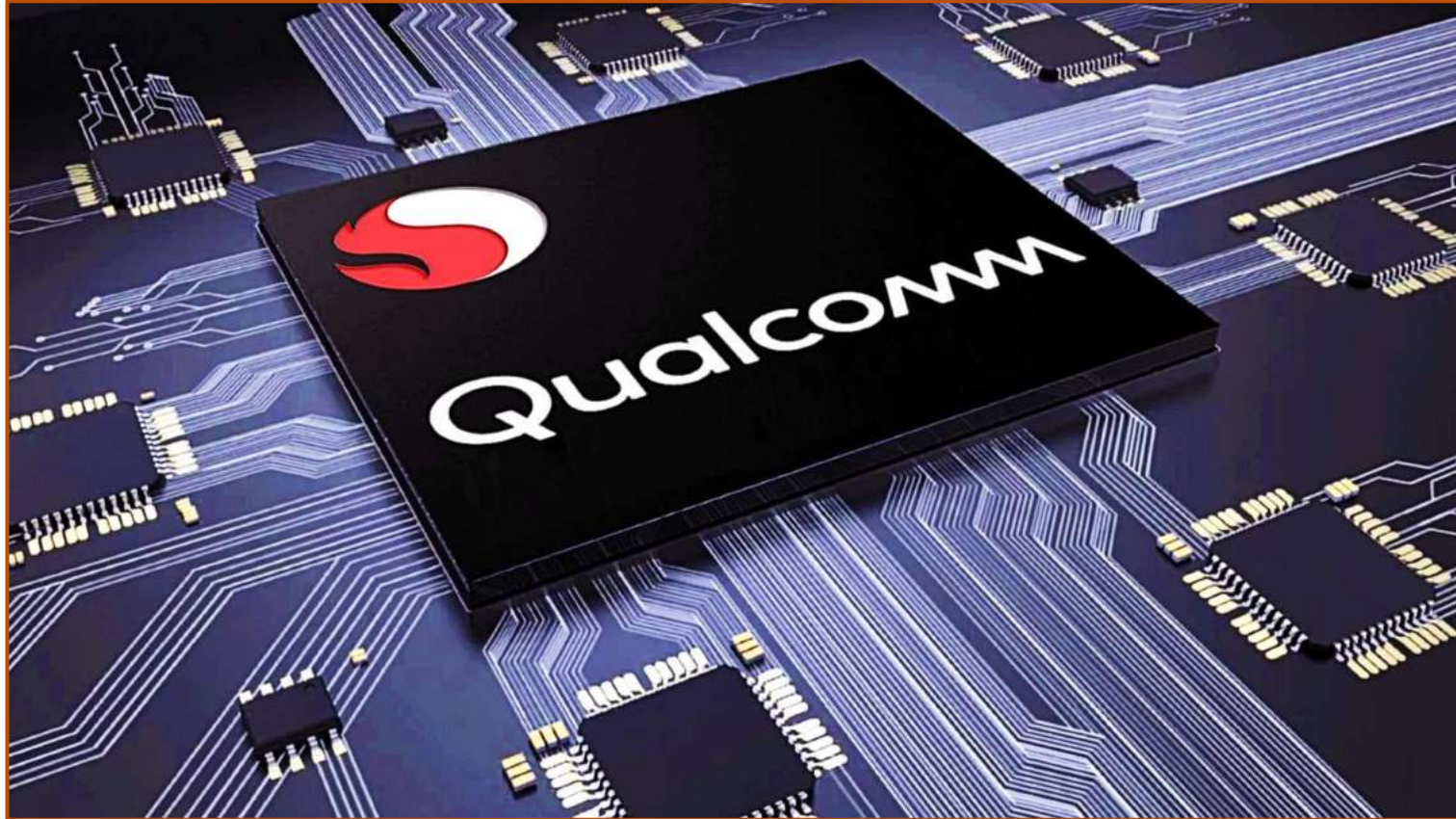


Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Qualcomm Thermofisher TEM (Singapore) - 2025

Mitigating the electromagnetic interference in the area where a TEM will be installed, to ensure correct operation of the device



Target:

- $B < 50\text{nT}$ Thermofisher TEM immunity specifications

Italia Land 4 - Data Center Vellezzo Bellini (Pavia) - 2025

Design and supply of a shielding solution aimed at protecting occupied areas of the data center



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Vellezzo Bellini HV Substation (Pavia) - 2025

Consultancy, modelling, architectural survey, design, supply of a shielding solution aimed at protecting the area neighboring the HV Substation



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Pasqal Quantum Computers (Canada) - 2023

Consultancy, modelling, design, supply and on-site supervision to install a shielding solution aimed at protecting the quantum computers placed in three adjacent rooms



Target:

- $B \leq 1.26 \mu\text{T}$ Electromagnetic Compatibility Level 1 (EN IEC 61000: 4-8)

Etisalat (Dubai) - 2018

Shielding system for LV and HV rooms to protect the data center



Target:

- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

EDUCATIONAL

Polytechnic University of Milan Aerospace Building Tower- 2025

Shielding system for one substation to protect adjacent areas



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Pisa University – Polo Fibonacci- 2025

Shielding system for transformer room to protect Auditorium area, staff and students



Target:

- $B \leq 3 \mu T$ Quality Objective (Italian Law 8th July 2003)

Fusinato Student Housing (Padua) – 2023

Shielding system for substation, low voltage switchboard room and adjacent electrical room to protect student housing above



Target:

- $B \leq 3 \mu T$ Quality Objective (Italian Law 8th July 2003)

The Student Hotel (Rome) – 2023

Shielding system for substation and distribution to protect both living quarters and data racks



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

Humanitas University (Milan) - 2023

Shielding system for transformer rooms to protect students, staff and electronic equipment



Target:

- $B \leq 1.26 \mu\text{T}$ Electromagnetic Compatibility Level 1 (EN IEC 61000: 4-8)

LAUSD (Los Angeles) – 2022

Supply of shielding system for school developments to protect students, teachers and school staff



Los Angeles Unified School District headquarters building in Los Angeles.

Columbia University (New York)

High-power wireless charging



CONFIDENTIAL

University of Oslo (Oslo)

On-site survey, production of certified trays to shield Siemens busbars



Target:

- Shielded induction value lower than **0.1 μT at 1 m** from the busbar

International School Bergamo - 2019

Shielding system for transformer rooms to protect the children in compliance with the W.H.O.'s recommendations



Target:

- $B \leq 0.4 \mu\text{T}$ (4 mG) inside the shielded classrooms
- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

«E. Toti» Primary School (Pisa) - 2012

Retrofitting a school building to protect pupils from a nearby HV overhead power line



Target:

- $B \leq 0.3\mu T$ (3 mG) – (Italian Law 8th July 2003), inside the shielded classroom to protect the children

TRANSPORT

Molo Bersaglieri Port of Trieste – 2025

Shielding of one conversion substation to protect offices and adjacent areas

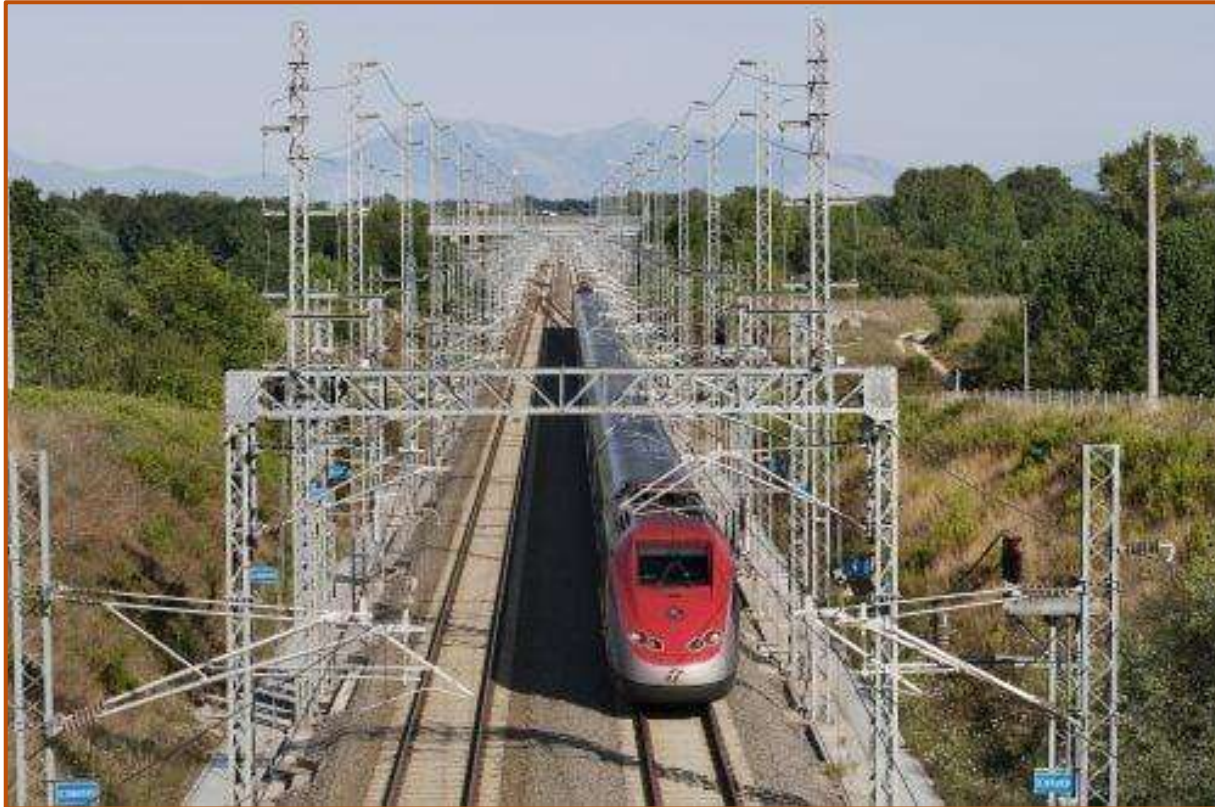


Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Brescia/Verona Railway Line– 2025

Shielding of underground cables ensuring correct operation train equipment.



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Bologna Tramway Green Line – 2025

Shielding solution of 2 substations to protect people from the electromagnetic induction



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Bologna Tramway Red Line – 2025/In progress

Shielding in seven individual substations (both underground and on ground level) and mitigation of induction generated by underground power lines with G-iron Pipe



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian MD 8th July 2003)

Solaris Bus & Coach – 2022/In progress

Design and steady supply of a shielding solution to install inside electric buses to mitigate induction generated by internal cabling



Target:

- Values compliant with ICNIRP 1998 Public

Hitachi – 2022/In progress

Design and steady supply of shielding elements for train components



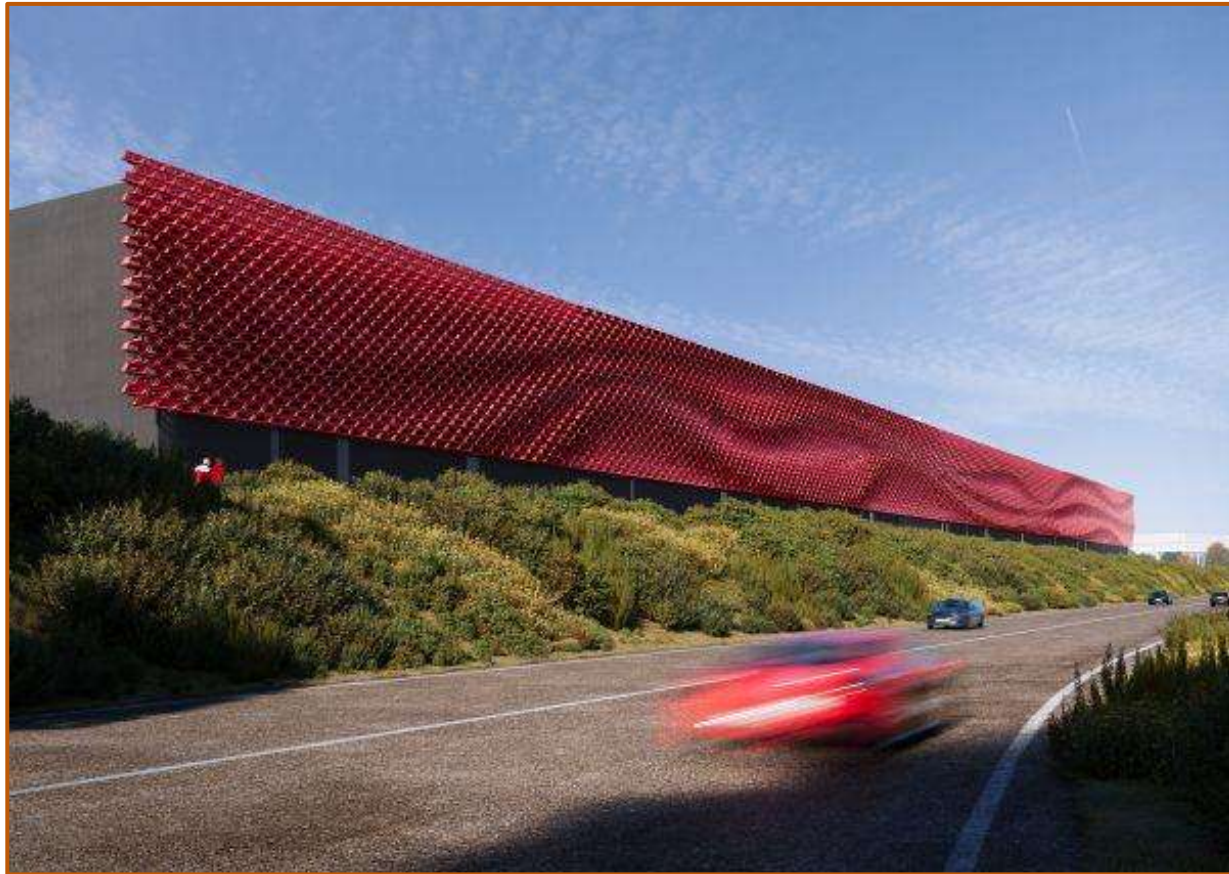
Target:

- Ensuring correct operation of train equipment

COMMERCIAL

Sports Car Factory In Maranello

Long-term (eight years) technical collaboration focused on EMF evaluation and mitigation



CONFIDENTIAL

De Nora Giga Factory Cernusco Sul Naviglio – 2025

Shielding system for 3 substations to protect production area and offices



Target:

- $B \leq 3 \mu T$ Quality Objective (Italian Law 8th July 2003)

St. Giulia Arena (Milan) – 2025

Shielding system for five transformer rooms to protect people and staff



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

The Wave (Milan) – 2025

Shielding system transformer room and risers for human health, additional “Nexi” lot in progress



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

New Alperia Headquarters (Bolzano) – 2025

Shielding system for transformer rooms to safeguard human health and avoid interference inside server room



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

Mind West Gate – Ex Expo Area Milan - 2025

Shielding system for transformer room to protect people inside the offices



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

A2A HQ Tower (Milan) - 2024/In progress

Shielding of substations and electrical risers to safeguard human



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Gioia 20 East and West (Milan) – 2023/2025

Shielding of substations and electrical risers in both towers
to safeguard human health



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Baker Hughes (Massa) – 2024-2025

Complete shielding of substations, including shielded doors and cables



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

SNAM HQ (Milan) – 2023-2024-2025

Shielding system for electrical risers throughout the building



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (DPCM 08/07/2003)

New Creative Hub, Former Tobacco Factory (Florence) – 2022/2024

Shielding system for transformer rooms to protect people inside the offices



Target:

- $B \leq 3 \mu T$ Quality Objective (Italian Law 8th July 2003)

Bulgari (Valenza) – 2016/2023

Floor shielding system inside the transformer rooms and shielding of underground cables to protect personnel both beneath and above the electrical sources



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (DPCM 08/07/2003)

ST Microelectronics Catania – from 2013 to 2024

Shielding system for transformer rooms and secondary distribution and production of custom shielding systems to comply with the EU and Italian Regulations and for the correct operation of the electronic devices



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 1.26 \mu\text{T}$ Electromagnetic Compatibility (EN IEC 61000: 4-8)

Ferretti Yachts Group (La Spezia) - 2022

Shielding system for transformer rooms inside the production facility



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

HQ Enel (Rome) - 2022

Shielding system for transformer rooms for the protection of employees



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Veronesi Industrial Plant (Verona) - 2021

Shielding system for the B3 building below the power line
to protect people in the office area



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (DPCM 08/07/2003)

Porsche Experience Training Center – 2021

Shielding system for transformer rooms



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Ferrero Group (Alba) - 2020

Shielding system for transformer rooms to protect workers inside



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

City Life Milano: Isozaki, Hadid, Libeskind Towers (Milan)

2014/2018/2019

Shielding system for transformer rooms, switchboards and secondary distribution
to protect the office spaces



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Siemens HQ (Milan) - 2017

Shielding system inside the transformer rooms
to protect the employees working inside the premises



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (DPCM 08/07/2003)

AIRPORTS

«MARCO POLO» Airport (Venice) - 2025

Shielding system for transformer rooms for the protection of people



Target:

- $B \leq 3 \mu T$ Quality Objective (DPCM 08/07/2003)

EPUA 3 Tower – «Leonardo da Vinci» (Rome) - 2025

Shielding system for transformer rooms for the protection of offices above



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

«Leonardo Da Vinci» - Fiumicino (Rome) 2018/*In progress*

G-iron Shielding System and cable tray inside the Passengers' Terminal power room



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

«Guglielmo Marconi» (Bologna)



Target:

- $B \leq 0.4 \mu T$ (4 mG) to protect the offices above the substation
in compliance with W.H.O.'s recommendation

Oslo Gardemoen (Oslo) - 2017

Shielding system for transformer rooms to protect the offices above the substation in compliance with W.H.O.'s recommendation



Target:

- $B \leq 0.4 \mu T$ to protect the offices above the substation
in compliance with W.H.O.'s recommendation

HOSPITALITY

Garden Inn Milan Hotel (Bergamo) - 2025

Shielding system for substation to protect staff and hosts



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Hotel Baccarat (Rome) - 2025

Shielding system for substation to protect staff and hosts



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

W Florence – Marriott Group (Florence) - 2024

Shielding system for substation to protect data rack, staff and hosts



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

Bauer Hotel (Venice) - 2023

Shielding system for substation and UPS room to protect ironing and bottling rooms



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

OLM Kematen (Bolzano) - 2023

Shielding system for inverter room to protect both the hotel rooms above and the adjacent data rack



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian MD 8th July 2003)
- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

Tribe Hotel (Malpensa) - 2023

Shielding system for substation to protect hotel rooms above



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Hotel Bulgari (Rome) – 2022

Shielding system for transformer rooms



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Hotel «La Palma» (Capri) - 2022

Shielding system for transformer room



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Hotel des Etrangers (Siracusa, Sicily) - 2020

Shielding system for transformer rooms



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Excelsior Hotel Gallia (Milan) - 2012

Shielding system for transformer rooms to protect guests and personnel of the hotel



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

HISTORICAL

Embassy of Israel-Rome 2025

Shielding pipe for the mitigation of magnetic induction emitted by the main power supply line.



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Mantova City Hall (Mantova) - 2024

Shielding system for transformer room to mitigate induction in the classrooms above



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Palazzo Raggi (Rome) - 2024

Shielding system for transformer rooms to protect businesses



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)

Ex Poligrafico (Rome) - 2022

Shielding system for transformer rooms to protect employees and electronical equipment



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

German Historical Institute (Rome) - 2021

Shielding system for transformer room to protect employees,
guests and electronical equipment



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)
- $B \leq 3.78 \mu\text{T}$ Electromagnetic Compatibility Level 2 (EN IEC 61000: 4-8)

Villa Reale Monza (Monza) - 2014

Shielding system for transformer rooms to protect visitors and staff



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)
- $B < 100 \mu\text{T}$ Exposure Limit (Italian Law 8th July 2003)

Prada Foundation (Venice) - 2012

Shielding system for transformer rooms to protect visitors



Target:

- $B \leq 3 \mu\text{T}$ Quality Objective (Italian Law 8th July 2003)



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