NACE CODE F42, J62

ANTISEISMIC PROTECTION SYSTEMS FOR STRATEGIC BUILDINGS

Innovations and Benefits - Development, design and validation of innovative antiseismic devices, systems and technologies.
Resilience analysis of buildings, also through on-site software-aided campaigns: building inventories, georeferenced databases and 3D modelling.

Uses - Numerical analyses and intervention proposals for seismic securing of strategic structures.
Possible collaborations during emergencies in synergy with Civil Protection and local administrations.

Past and Present Activities - Arsita's reconstruction plan;
FEM analyses of the roofing structures of an historical building in Cento (FE);
feasibility study for the seismic securing of the church complex in Reno Finalese, Finale Emilia (MO); feasibility study for the seismic securing of the Oratory of San Pietro Capofiume, in Molinella (BO);
analysis of seismic vulnerability and consultancy for the restauration of the architectonic complex of Montorio's Tower (BO);
numerical analyses on the restauration intervention made on Torre dell'Orologio in Gemona del Friuli;
vibration analyses of the ground and roofing structures of Pompeii's Villa of the Mysteries;
preliminary analyses of the seismic behavior of some building typologies of Pompeii's archaeological area; numerical analyses of the dynamic soil-structure interaction in Generation IV nuclear reactors seismically isolated under Project EU ESNII plus.

RESEARCH TO PROVE FEASIBILITY | TECHNOLOGY DEMONSTRATION | SYSTEM TEST, LAUNCH & OPERATIONS

BASIC TECHNOLOGY RESEARCH | TECHNOLOGY DEVELOPMENT | SYSTEM/SUBSYSTEM DEVELOPMENT

TRL 1 | TRL 2 | TRL 3 | TRL 4 | TRL 5 | TRL 6 | TRL 7 | TRL 8 | TRL 9

TECHNOLOGY READINESS LEVEL

Italian National Agency for New Technologies, Energy and Sustainable Economic Development
www.enea.it

Territorial and Production Systems Sustainability Department
Models and Technologies for Risks Reduction Division
Seismic Engineering and Prevention of Natural Risks Laboratory
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