

X RADIANCE

Robotic, Automated and Digital solutions for improving building renovation and New Construction Efficiency

RENOVATION, REINVENTED

WHAT IS RADIANCE?

RADIANCE is a Horizon Europe project developing an integrated suite of **robotic, digital, and AI-based technologies** to support the full renovation process, from inspection and diagnosis to repair, safety, planning, and sustainability assessment.

Through three real-life validation scenarios in European buildings, the project aims to accelerate renovation workflows, support workers with advanced tools, improve safety, and reduce the environmental footprint of construction activities.



VALIDATION SCENARIOS



Inspection, diagnosis & renovation

Testing drones, NDE probes, cable-robot systems, and AI assessment tools to automate early-stage inspection, detect defects, and support repair operations.



Human-robot collaboration & safety

Validating AR/VR tools, worker-assistance systems, predictive safety mechanisms, and human-robot interaction workflows in real renovation environments.



Construction optimisation & logistics

Deploying the digital twin platform, quadruped robots, and planning/optimisation tools to enhance site monitoring, resource efficiency, and renovation scheduling.

14
partners

8
countries

4M€
in EU funded

4
years of duration

PARTNERS

Aerolab
Universidade de Vigo



Université Gustave Eiffel

Łukasiewicz
Poznański Instytut Technologiczny



contactica

tecnal:a
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

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SINTEF

PROBOT

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SKANSKA

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