# INTUITIVE SELF-INSPECTION TECHNIQUES

using Augmented Reality for construction, refurbishment and maintenance of energy-efficient buildings made of prefabricated components

## **SUMMARY**

Insiter is a research project within the EU research programme "Horizon 2020". The key innovation of INSITER is the intuitive and cost-effective Augmented Reality (AR) for self-inspection. The use of AR –that connects virtual and physical buildings in their environments at real-time— will ensure that the targeted performance in the design model is realised. INSITER will thus eliminate the gaps in quality and energy-performance between design and realisation of energy-efficient buildings made of prefabricated components.

Through new self-inspection techniques, INSITER will fully leverage the energy-efficiency potentials of buildings based on prefab components, from design to construction, refurbishment and maintenance. It will scale-up the use of BIM for standardised inspection and commissioning protocols, involving all actors in the value-chain.

## COORDINATOR

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WEBSITE

www.insiter-project.eu

DURATION

48 months

PROGRAM AREA

Energy-efficient Buildings (EeB)





## **OBJECTIVES**

INSITER has 3 major scientific and technological objectives:

To eliminiate the gaps in quality and energy-performance between design and realisation of energy-efficient buildings by connecting the virtual model and the physical building through Augmented Reality (AR).

## 2.

To develop a set of intuitive, robust and cost-effective hardware and software for self-inspection during off-site and on-site working processes.

### 3.

To develop innovative protocols and guidelines for self-inspection and self-instruction of involved actors in the building process.



more information on the website

# **CONSORTIUM / PARTNERS**



The consortium consists of 13 partners:

- Large companies
- SME's
- Research organisations

DEMO Consultants	NL
AICE Consulting	IT
3L Architects and Industrial Designers	DE
DWA	NL
Ipostudio Architetti	IT
RDF	BG
ISSO	NL
Universita Politecnica delle Marche	IT
Fraunhofer IPA	DE
DRAGADOS	S
Hochtief Vicon	DE
Siemens Industry Software	BE
CARTIF	ES

































