

## LABORATORIO ISPC

### NAME OF THE INSTRUMENT

Infrared camera FLIR B425

### GENERAL DESCRIPTION:

The passive IR thermography is performed using a FLIR B425, for the following purposes:

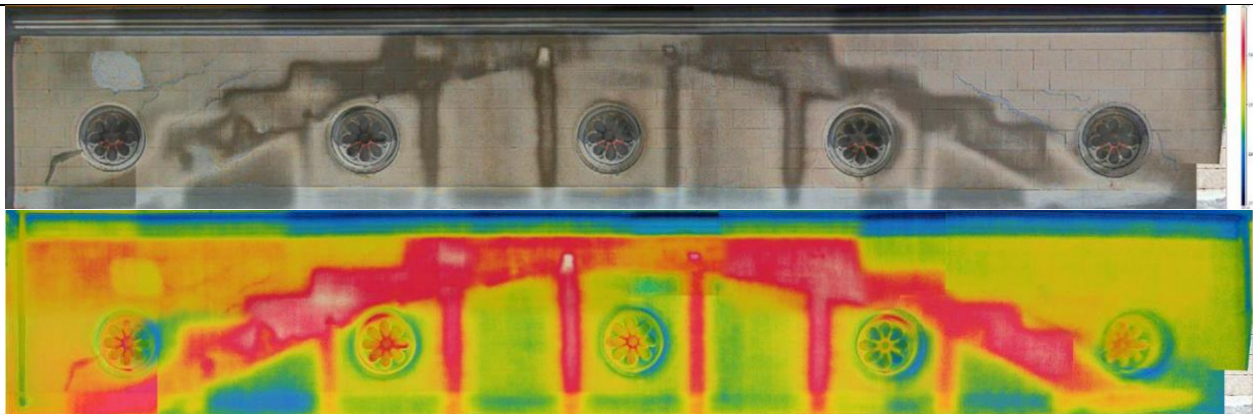
- Detection of defects / structural anomalies in architectural structures
- Thermal maps related to the presence of humidity (capillary rise and infiltration of various nature)
- Detection of detachment of plaster, or defects of architectural walls

The integration of the IR Thermography maps with measurements of the moisture content allows to obtain a “real” map of the surface distribution of humidity.

### TECHNICAL DESCRIPTION:

The infrared camera model B425 (FLIR) has an IR image resolution of  $320 \times 240$  pixels resolution and an accuracy of  $\pm 0.5$  ° C. It allows you to create thermal maps once the temperature and relative humidity of the environment, the distance from the shooting surface and the emissivity of the surface are known.

The IR images can be analyzed and processed using ThermaCAM QuickReport 1.1 software.



### FURTHER INFORMATION:

- S. Bracci, et al. 2015. A multi-analytical approach to monitor three outdoor contemporary artworks at the Gori Collection (Fattoria di Celle, Santomato, Pistoia, Italy). *Microchemical Journal* (Available online 21 July 2015)
- V. Raimondi et al. 2015. An integrated multi-media approach to cultural heritage conservation and documentation: from remotely sensed lidar imaging to historical archive

data. SPIE 9644, Earth Resources and Environmental Remote Sensing/GIS Applications VI,  
96440C (October 20, 2015)

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