

FINDING AIR LEAKS IN BUILDINGS WITH THE CAMIV64

The new energy efficiency regulation requires the building industry to prioritize sustainable and future-oriented construction. Airtightness improvements significantly reduce energy consumption and costs. Additionally, it promotes healthier indoor environments by blocking dust, pollen, and outdoor pollutants entering the building.

Unlike traditional methods like the blower-door-tests, smoke-tests, and thermal cameras - which are time-consuming and weather-dependent - Sorama offers a more efficient solution. Our approach allows to visualize leaks in façades (image 1) and indoor walls during construction (image 2), regardless of weather conditions, in a user-friendly manner.



Image 1 - How to visualize leaks on façades



Image 2 - How to visualize leaks on indoor walls during construction

Advanced air leak detection

The Sorama CAMiV64 employs proprietary algorithms to pinpoint leaks. It utilizes a Bluetooth speaker as the noise source. Since air leaks behave as acoustic leaks the Sorama CAMiV64 can visualize them. The results produce a color map image showing the exact leak location.

To demonstrate the Sorama CAMiV64 camera's performance, a compliance test is performed. Air leaks detected by the acoustic camera are compared with the results of traditional methods.

The thermal camera with the blow-door-test detects and shows cold areas in images (image 3). An experienced operator needs to accurately identify leaks from such visuals. According to the executive expert, the analysis of the images made with thermal camera reveals 3 significant leaks (image 3).

With the CAMiV64 the exact locations of the leaks A, B, and C in image 2, are identified and visualized with acoustic imaging instantly (images 4, 5 and 6).



Image 3 - labeled thermal camera airtightness leak visualization

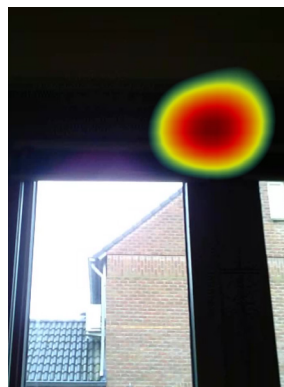


Image 4 - acoustic visualization of leak A

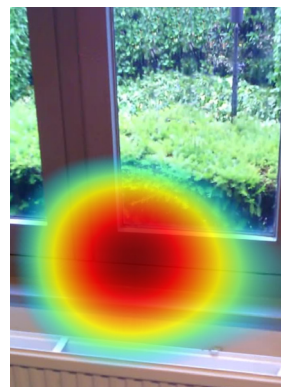


Image 5 - acoustic visualization of leak B



Image 6 - acoustic visualization of leak C