

Sees what others do not see: The **testo 883 thermal imager** with the highest image quality.



Gaming venue construction Eschig Innenarchitekten.

Founded in 1980 by Carl Eschig Dipl. Ing. as an office for interior architecture, "Eschig Innenarchitekten" soon became a specialist for industrial architecture with a focus on gaming venue construction. Since its founding, the company has built numerous new gaming arcades, casinos and restaurants or renovated and converted old buildings. Characteristic for the experienced architectural office is the interdisciplinary interaction of different areas of expertise: Interior designers, architects, electrical engineers and structural engineers work hand in hand here, covering the entire range of services required for demanding architectural projects, especially in the casino and gaming arcade segment.

Particularly in the case of renovation work on old buildings, the systematic detection of hidden damage in the building fabric is elementary - but also time-consuming and often inconvenient. That is why Carl Eschig is always open to solutions that promise greater efficiency. He is happy to test the new testo 883 thermal imager with excellent image quality, with an infrared resolution of 320 x 240 pixels, which can even be expanded to 640 x 480 pixels with the built-in testo SuperResolution technology. In addition, the thermal sensitivity of <math><40\text{ mK}</math> makes even the smallest temperature differences visible.

eschig
innenarchitekten

The challenge.

In addition to the development of new building projects, Carl Eschig is mainly involved in the refurbishment of old buildings and the conversion of older industrial buildings for future use as gaming venues. Before the fundamental renewal of building fabric of key components such as the roof, floor, façade or cellar, Eschig has to know what he is dealing with. Where do deficiencies in the thermal insulation lurk, where are thermal bridges or heating pipes hiding? Without a comprehensive analysis, old buildings can quickly become an adventure. The visual representation by means of thermography plays a central role in confirming assumptions or discovering unexpected damage, the causes of which may not be where they become visible. Carl Eschig most often deals with the following requirements:

- Detection of heating lines in screed before drilling tasks as well as heating lines in walls and ceilings
- Search for thermal bridges in the area of window and door joints before a building is plastered
- Monitoring of screed drying and detection of underfloor heating pipes
- Examination of external surfaces prior to conversions in order to make suspected weak points visible
- Determination of execution deficiencies in the thermal insulation.

Carl Eschig has been using IR or surface thermometers up to now. However, frequently the only thing that helps is opening walls, for example, to reveal defects in the pipes. He can very well imagine that quality, speed and efficiency, both in the planning of the necessary renovation steps and in the preparation of precise expert reports, can be significantly increased with a handy, powerful thermal imager. As a selected customer, the graduate engineer tests the new testo 883 thermal imager on the challenges posed by his current renovation project: A dilapidated old building with a highly polished granite floor under which hidden heating pipes run.

The solution.

The new thermal imager testo 883 is ideal for the requirements of old building renovation and conversion projects. It convinces especially with the ergonomic and handy pistol design as well as with the different interchangeable lenses. This means that even hard-to-reach places can be measured quickly and easily at any distance. Razor-sharp images are ensured by the infrared resolution of testo 883, which can be further enhanced thanks to the integrated testo SuperResolution technology. In addition, the high thermal sensitivity makes even the smallest temperature differences visible.

The automatic contrast adjustment testo ScaleAssist reliably prevents misinterpretations. In addition, the humidity mode can be used to visualize the risk of mould in the thermal image using traffic light colours. In this way, meaningful thermal images are recorded quickly and conveniently.

Creating reports is equally easy. The digital report assistant and numerous design templates make it very easy to summarize the measurement results and analyses in impressive reports.

“I recommend the thermal imager testo 883 absolutely unconditionally to all those who frequently have to deal with the peculiarities of old buildings and are involved in renovation work. Really an all around efficient reinforcement.”

Carl Eschig, owner
Design and construction
management





The test.

For Carl Eschig, increased efficiency over the entire construction process is crucial. That's why he appreciates the fact that the testo 883 thermal imager can be used immediately, is very light and relatively small, making it easy to handle. Despite the remarkably large number of display options, the display is clearly structured. In this way, suspected defects can be checked at any time in no time at all, especially if facts are needed immediately for a discussion with the building owner.

Eschig first tests the testo 883 thermal imager in outdoor thermography. The expert ensures that there is a difference of 10 to 15 degrees between the outside and inside temperatures, in order to be able to take meaningful pictures. The thermal imager testo 883 shows even the smallest temperature differences and thus makes weak points clear at a glance. The real stress test, however, is the task of finding hidden heating pipes under a highly polished granite floor. Up to now, Eschig has used an elaborate procedure for such challenges, which includes anti-reflection coating, the use of various thermometers and chalk marking of the measurement results. The surface must also be anti-reflective for a thermal image with the testo 883. For this purpose, Carl Eschig uses a thin mat that he lays on the granite floor, where it quickly takes on the floor temperature. With this method, the testo 883 masters even this difficult task and delivers meaningful measurement results in the form of thermal images and not just individual measurement values.

The advantages.

testo 883 thermal imager combines all advantages for top performance:

- Best image quality: IR resolution of 320 x 240 pixels (with SuperResolution 640 x 480 pixels)
- Exchangeable lenses: Quick exchange from the standard lens to the telephoto lens for high-precision thermography of even distant objects.
- Manual focus: Full control over the thermal image
- High thermal sensitivity: NETD of <40 mK visualizes smallest temperature differences
- testo ScaleAssist: Automatic contrast adjustment for comparable thermal images prevents misinterpretations
- testo IRSoft: Extensive analysis and documentation
- Humidity mode: The mould risk is indicated in the thermal image with traffic light colours.

The graduate engineer Carl Eschig summarizes:

“Absolutely convincing. testo 883 is a real turbo in the renovation and conversion of old buildings”



More information.

You can get more details on the thermal imager testo 883 and answers to all your questions on thermography in construction as well as renovation and conversion of old buildings and at www.testo.com.



