

Photographic views (special exhibition rooms)



Special exhibitions rooms on the ground floor of the KOG

[REDACTED]



Large special exhibitions hall on the ground floor of the KOG





## Heating and climate system

For both the Art Hall and the Gallery Building the climate values are controlled and supervised centrally from the maintenance office by the caretaker, using an automatic DDC system (digital data control). Climate values over time are recorded using thermohygrographs and data loggers. The caretaker also makes regular tours in the building, taking measurements of the climate values by hand. A considerable problem for conservation used to be cold areas on the surfaces of outer walls (Maria Ranacher), which are caused by the operation of warm water/convector, air heating, or complete central air systems because the hot air cannot uniformly interact with all surfaces. We have solved the problem of the cold outer wall in an exemplary fashion by means of a tempering system, directly compensating the building transmission losses of the outer walls. In contrast to museums with full air-conditioning, whose systems require circulation of masses of air in the rooms for heating and cooling purposes, our system requires comparatively minimal air circulation, with the result that dust pollution is kept very low. Humidification is carried out centrally via a humidifier (spray system) in the ventilation plant. The galleries are dehumidified in summer via a central dehumidifier and by mobile local units. In the Art Hall and the Gallery Building the climate values are constant, with only very minimal short-term fluctuations. The values are no longer based on the obsolete ICOM values, but follow the newest ASHRAE standard or the newest recommendations of the renowned Doerner Institute in Munich. The new standards no longer require the same constant temperature and relative humidity values for summer and winter (21 °C, 55 ±5% relative humidity), but values that are gradually adapted to the seasons with the lowest possible short-term fluctuations. We achieve a narrow band of climate fluctuations with a maximum of ±5 % per day for relative humidity for short-term fluctuation. Temperature fluctuations within one day are at a maximum of ± 1° C with correspondingly low temperature fluctuations per hour. This excellent climate stability was investigated through the European project EU 1383 PREVENT and documented in the publication "Climate in Museums and Historical Buildings. Tempering" see <https://www.kunstforum.net/museum/forschung-recherche/temperierung>. We can provide the research results upon request.