Deutsche Sauna-Akademie®	**Deutsche Sauna-Akademie**
Titel	**What Makes a Good Sauna? 10 Quality Criteria That Matter More Than Design**
Subtitel	*How to evaluate sauna quality through function, physiology, construction and operation*
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Short answer: A good sauna is not defined by how expensive it looks, how much glass it has, or how high the thermometer reads. Its quality depends on whether the human body is positioned correctly within a stable thermal system in which room geometry, bench height, airflow, heater, materials, humidity, safety and operation work together.

A sauna can be visually impressive and still be technically mediocre. Expensive timber, indirect lighting, large glass fronts and powerful heaters can create a premium appearance without guaranteeing a good sauna climate. The decisive test comes only when the room is used: Does the heat reach the body coherently? Is the air pleasant to breathe? Are the feet warm enough? Does the Aufguss distribute predictably? Can the room be operated safely, hygienically and economically over time? [1]

This distinction matters particularly in growing sauna markets. Quality should not be reduced to style, temperature or individual components. A sauna is a thermal system in which the human body, air, heat, humidity, room proportions, materials, technology and operation interact. The following ten criteria translate that system into practical questions that architects, operators, builders, investors and demanding private clients can actually evaluate. [1]

1. The body must sit in the effective heat zone

The first quality question is not “How hot is the sauna?” but “Where is the body within the temperature field?” Hot air rises, creating a vertical temperature gradient. If the upper bench is too low, the head may be exposed to substantial heat while the trunk, legs and feet remain in cooler air. The room may display 90 °C / 194 °F and still feel thermally weak or unbalanced. Bench height is therefore a thermophysiological planning dimension, not merely a furniture decision. For classic commercial sauna rooms, a room height of roughly 2.00–2.40 m / 6 ft 7 in–7 ft 10 in and a distance of about 1.00 m / 39 in between the upper bench and ceiling are useful European-oriented planning values, subject to local requirements and the specific project. [1]

2. Room height and bench geometry must work together

A high ceiling is not automatically a premium feature. If the hottest air accumulates well above the users, valuable thermal space is wasted. Conversely, low lounge-style benches can look elegant while positioning the body outside the intended hot-air layer. The section of the room is therefore often more important than the floor plan. Bench depth, step height, distance between levels and safe access all contribute to both thermal effect and usability. The handbook uses orientation values such as a reclining bench depth of at least about 0.60 m / 24 in, a lower foot or step bench depth of at least about 0.40 m / 16 in and vertical differences between bench levels of no more than about 0.45 m / 18 in. [1]

3. Airflow must be designed as a system

Ventilation is not simply the presence of an inlet and an outlet. Fresh air must enter, mix with the heated air, move through the occupied zone and leave the room without creating a short circuit or destabilising the climate. Poor airflow may produce stuffy air, cold drafts, weak heat distribution or ineffective Aufguss circulation. In commercial classic saunas, approximately 5–10 air changes per hour can serve as an orientation range, but the correct solution depends on room volume, occupancy, heater concept, building system and local mechanical requirements. What matters is not maximum ventilation, but controlled airflow that supports heat, moisture transport and breathing comfort. [1,3]

4. Heater output is not enough - heater position matters

A more powerful heater cannot repair poor room geometry. Heater selection must consider room volume, glass proportion, insulation, ventilation, intended operating temperature, stone mass and expected Aufguss use. Position is equally important because it influences convection, thermal radiation, safety clearances and the movement of humid air after water is applied to the stones. A heater that is technically adequate in kilowatts can still produce an unsatisfactory sauna if it overheats one zone, leaves another weak, or disrupts the natural air path. [1]

5. Temperature must be measured where it means something

A single thermometer reading can be misleading. Sauna quality depends on the temperature profile across the actual user zone, not merely on the highest number measured near the ceiling. For classic sauna assessment, the handbook uses a defined orientation measuring position approximately 100 mm / 4 in below the ceiling and about 400 mm / 16 in in front of the wall opposite the heater, while professional evaluation may additionally examine temperatures in the foot, sitting, chest and head zones. Temperature therefore becomes meaningful only when the measuring position and the body position are known. [1]

6. Materials must be selected for function, not prestige

Wood, glass, metal, stone, seals, fittings and lighting all participate in the thermal environment. Suitable materials must tolerate heat, humidity, skin contact, cleaning and

repeated thermal cycling. Wood species differ in density, thermal conductivity, resin content, odour, surface behaviour and durability. Glass changes heat loss and radiant balance. Metal parts may create burn hazards if accessible. A “premium” material is therefore not one with a prestigious name or high price; it is one that behaves appropriately in the exact temperature and moisture zone where it is installed. [1]

7. Moisture and building physics must remain safe over time

Even a nominally dry sauna experiences substantial moisture loads from sweating, cleaning, temperature changes and especially Aufguss. Wall build-up, insulation, vapour control, junctions, penetrations, rear ventilation and connections to adjacent building components must therefore be planned as a coherent building-physics system. Some defects remain hidden for months or years before appearing as condensation, odour, deformation or moisture damage. A sauna that looks perfect at handover can still be poorly constructed if moisture cannot be safely controlled. [1]

8. A good sauna must handle Aufguss predictably

Aufguss is a useful functional test because it briefly changes the room climate. Water evaporated on hot stones increases absolute humidity and intensifies heat transfer to the skin. In a well-coordinated sauna, the resulting heat and humidity pulse develops predictably and can be distributed through the user zone without becoming chaotic or excessively concentrated around the head. Heater capacity, stone mass, airflow, room height and bench position all influence this response. Aufguss capability is therefore not simply a question of whether water may be poured onto the heater; it is a test of the room as a complete thermal system. [1]

9. Safety, cleaning and maintenance are part of quality

A sauna is not finished when it looks good on opening day. Users must be able to enter, sit, move and leave safely. Hot components need appropriate protection and clearance. Surfaces, bench undersides and floors must be cleanable. Ventilation, sensors, heaters, lighting and other technical parts must remain accessible for inspection and maintenance. In commercial facilities, hygiene and maintainability directly affect long-term operating quality. A design that hides all technology beautifully but makes maintenance impractical transfers an aesthetic decision into an operational problem. [1]

10. Quality must be verifiable in real operation

The final criterion is whether the sauna performs as intended under realistic use. A professional assessment combines measurements, visual inspection, functional testing and user experience. Relevant questions include temperature distribution, air quality, thermal comfort, material behaviour, safety, moisture management, Aufguss performance, maintainability and hygiene. The objective is not to declare one design style superior to another, but to determine whether the room functions as a stable thermal, structural and

operational system. A good sauna should be explainable: its quality should result from coordinated decisions, not from chance. [1]

Why design still matters

None of this means that design is unimportant. Light, proportion, materials, views, acoustics and atmosphere strongly influence how a sauna is experienced. The point is that design becomes high-quality only when it supports the thermal function. Large glass fronts may be excellent when their heat losses and surface effects are accounted for. High ceilings can work when bench levels are coordinated with them. Concealed technology can be elegant when inspection and maintenance remain possible. In a good sauna, form and function reinforce one another rather than compete. [1]

What should a buyer or planner ask?

Instead of asking only about wood species, heater power or maximum temperature, a purchaser can ask more informative questions: Where will the body sit within the temperature gradient? How are supply and exhaust air arranged? What happens during Aufguss? How are glass surfaces thermally compensated? Can the technology be inspected? How is moisture managed? Which surfaces can be cleaned? Which measurements will be taken during commissioning? These questions shift the discussion from sales language to verifiable qualification and performance. [1]

The central principle: A sauna is high-quality when physiology, physics, room geometry, materials, technology and operation are deliberately coordinated - and when this quality can be measured, checked and experienced in real use.

A note for the U.S. market

The dimensional and ventilation values mentioned above are European-oriented professional reference values, not universal legal requirements. For projects in the United States, the applicable federal, state, county and local building, electrical, mechanical, fire, accessibility, health and insurance requirements must be reviewed by appropriately licensed professionals and authorities having jurisdiction. Professional sauna quality and legal code compliance are related, but they are not the same thing: a project needs both. [1]

Conclusion

A good sauna is not recognised by a single feature. It is not good merely because it reaches a high temperature, uses expensive wood or looks impressive in photographs. It is good when the human body is correctly positioned in the heat, the air remains usable, the heater and airflow work together, materials suit their thermal and hygienic tasks, moisture is controlled, Aufguss behaves predictably and the facility remains safe and maintainable over time. Quality in sauna construction is therefore not an aesthetic promise. It is a system property that can be explained, tested and improved.

The photograph may attract attention. The bench reveals the quality.

References

[1] Gröning K. The Science of Sauna - Quality-Oriented Sauna Construction: Planning, Construction, and Evaluation of High-Quality Sauna Rooms. Deutsche Sauna-Akademie / International Sauna Academy, 2026. Chapters on sauna quality, thermophysiology, room geometry, ventilation, materials, building physics, assessment and operation.

[2] DIN EN 18164:2026. Wellness facilities for public use - Climatically controlled rooms - Requirements. Cited and discussed in Gröning, Quality-Oriented Sauna Construction.

[3] DIN EN 16798 series. Energy performance of buildings - Ventilation for buildings. Used as part of the regulatory and technical framework discussed in the handbook.

[4] DIN EN ISO 7730. Ergonomics of the thermal environment - Analytical determination and interpretation of thermal comfort. Referenced in the handbook as part of the broader thermal-comfort framework.

[5] DIN EN 60335-2-53 / VDE 0700-53. Particular requirements for sauna heating appliances and infrared cabins. Referenced in the handbook for heater and electrical safety.

[6] International Building Code (IBC), International Mechanical Code (IMC), International Fire Code (IFC), National Electrical Code (NEC), and applicable state and local requirements. Relevant to U.S. projects; applicability must be determined for the specific jurisdiction.

Editorial note: This article is intended for scientific, technical and educational information. Orientation values do not replace project-specific planning, manufacturer requirements, code review, approval or expert assessment by appropriately qualified professionals.