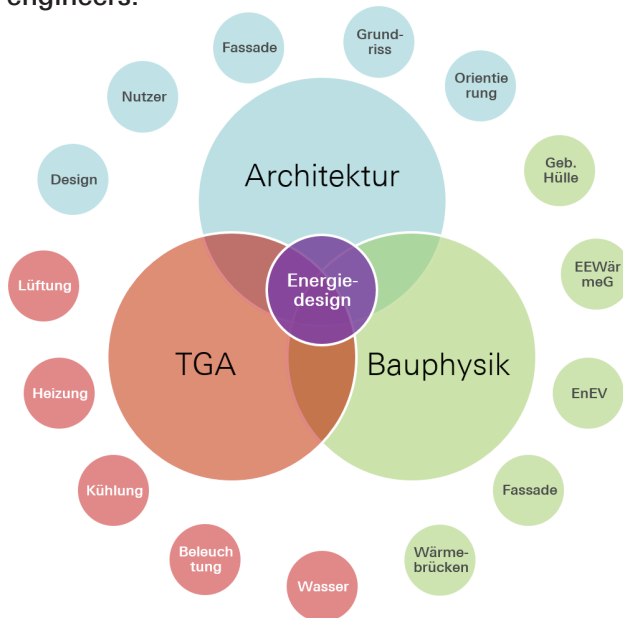


With our building physics engineering services we accompany the planning process from the start and develop an integrated energy design together with the architects and building services engineers.



Integrated energy design

In order to guarantee optimal results at an early stage in terms of **thermal, sound and humidity protection and acoustic comfort** we focus our services on the earliest design phases. Our thermal building physics services investigate and optimize a range of variants during the preliminary design phase in terms of their effects on comfort, energy demand and lifecycle costs and greenhouse gas potential (CO2 balance).

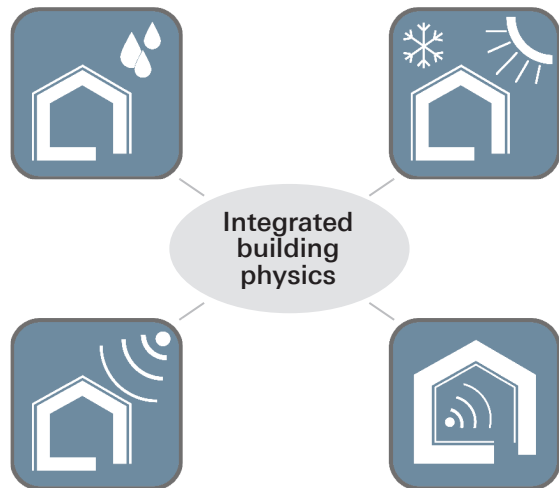
These initial calculations of variants, which go beyond basic building physics services, are based on a previously provided BIM 3D model (Building Information Modeling).

Advantages for clients and users

The ATP sustain concept of energy optimization in an early phase of the planning process enables clients to identify an economic overall solution with minimal environmental impact. In addition to this, users also benefit from increased thermal and acoustic comfort.

Thermal protection and energy design services:

- Drawing up of an energy concept
- Energy footprint in line with EnEV / OIB
- Optimization of energy efficiency
- Lifecycle cost calculation
- Energy consulting for existing buildings
- Verification of thermal protection in summer
- Climate-related humidity protection
- Warm bridge calculations
- Thermography and blower door measurements
- CO2 balance



Building physics via humidity, sound, thermal protection and spatial acoustics

Building and spatial acoustics services

- Measurement of sound emission protection
- Sound insulation against external noise
- Internal sound insulation
- Spatial acoustics

KEY FACTS

- Integrated energy design (buildings, technology, users and environmental quality)
- Optimization via the comparison of variants (lifecycle costs, ecology)
- High user comfort via early integration in the design
- Advice about energy efficiency funding (DE)

