Thomas Auer

CEO
Transsolar Energietechnik GmbH

Thomas started his career shortly after Transsolar was founded and his outstanding engineering aptitude and leadership qualities quickly brought him onto the management board of the company. Based on his deep understanding of integrated building systems and energy efficiency in buildings, Thomas has developed energy and building service concepts for projects around the world noted for their innovative design and energy performance. His concepts are an integral part of signature architecture. His projects have become milestones in the history of the company. Thomas has collaborated with world known architects on numerous international design projects and competitions. Manitoba Hydro, an office tower in downtown Winnipeg Canada, is considered one of the most energy efficient high rise buildings in North America. Thomas has also developed strategies for carbon neutral urban developments such as the Toronto Lower Don.

Education

Diplom Ingenieur
M.S. Process Engineering
University of Stuttgart
Germany

At Transsolar

2006 Partner and CEO
2000 Partner and Principal
1996 Project leader
1994 Junior Engineer

Teaching

Yale University School of Architecture, UCLA, ESA in Paris, University of Sassari

Prizes

2010 Best Engineer
Treehugger Award

Languages

German (native)
English (fluent)

Art Gallery of Saskatchewan,
Saskatoon, Canada

The 120,000 sf, CAD 51 million building fulfilling highest requirements conserving art exhibits the energy reduction scheme uses over-flowing air of galleries to condition central atrium saving 2/3rd of air handling units. Sensors measure the visitors present to enable conditioning systems to react accordingly. Optimizing artificial lighting leads to further reduction of loads.

with KPMB Architects

Musée des Beaux-Arts de Dijon (FR)
Dijon, France

Renovation of historic museum from the 16th century: Cooling loads are minimized using highly efficient artificial lighting system, air conditioning system of gallery rooms runs according to requirements of exhibited objects, allowing a decrease of air change rate. By reducing loads and through flexibility of the system overall energy demand is reduced.

with Ateliers Lion, Paris

Ski Resort
Park City, UT

Ski resort includes hotel and multi-service building. Major energy saving measure developed: use of geothermal system to serve snow melting common system for the 96,000 sf with additional use of waste heat from chillers cooling the 10,700 sf ice rink in the middle of the compound.

with Hart Howerton, Park City, UT

Offices for the KfW Banking Group
Frankfurt, Germany

540.000 sf high-rise building uses less than 100 KWh/a/sqm primary energy. Double-layered wind-pressurised façade offers natural ventilation independent of external conditions, high insulation values and efficient solar protection. Radiant slabs and geothermal heating energy reduction.

with Sauerbruch Hutton, Berlin

Manitoba Hydro Downtown Office
Winnipeg, MB, Canada

64,800 m², CAD 188 million tower with 140 kWh/m²/year primary energy use for building operation is the most energy efficient office tower in North America, 60% below standard. All workstations have access to façade providing highest level of thermal and visual comfort,.

with KPMB, Toronto

Lycée Charles de Gaulle
Damascus, Syria

60,000 sf, $6.3 million new school building. Project partner and lead design for low-technology solution for ventilation and conditioning using local materials.

with Atelier Lion, Paris

Bad Aibling Spa Baths
Bad Aibling, Germany

89,000 sf new spa with indoor and outdoor swimming pools and sauna. Concept with spatial configuration providing usage-dependent climatic zones to maximize the thermal comfort of the guests and to achieve high energy performance

with Behnisch Architects, Stuttgart

Allston Science Complex
Harvard University, Allston, MA

1,000,000 sf was planned as a new laboratory research building. As project partner responsible for lead design development of climate and energy concept with the goal of 60% energy reduction.

with Behnisch Architekten, Boston

Riverparc Development
Pittsburgh, PA, USA

Estimated $ 460 million for flexible, mixed-use buildings on six acres. Concept includes basic orientation optimizing daylighting, indoor and outdoor comfort to overall energy supply strategies.

with Behnisch Architekten, Boston

Village on Lulu Island
Abu Dhabi

For the 170,500 sf “Village” on building design and urban development embodies the ethic of sustainable development. The challenging climatic problems are solved by passive means, utilizing complimentary aspects of the climate to our advantage.

with Hart Howerton, Park City, UT

Novartis Institute for Biomedical Research
Shanghai, China

Energy efficiency displacement ventilation is used combined with floor slab heating in the 130,000 sf Tech Center. Ventilation system with heat recovery system has variable frequency drive which allows the unit to operate based on occupancy level. Neutral sun protection glazing with a very low U-value reduces transmission losses.

With Kengo Kuma & Associates, Tokyo

Phoenix Biomedical Center
Phoenix, AZ

$320 million new science and laboratory building Project leader and lead design for complete climate concept with 60% energy reduction

with CO Architects, Los Angeles

Library Hamburg Rechtshaus, Berlin
Berlin, Germany

64,500 sf, $17.5 million library is naturally ventilated driven by thermal ascending force in the atria as well as wind.

with Medium Architekten, Hamburg

Office for Foreign Affairs, Berlin (DE)
Architectural Biennale 2010

540,000 sf, $111.6 million extension has high security demands for the office space serving 700 employees. One public space entrance atria serves as cafeteria. German public buildings are not air-conditioned, which led to large-surface natural aeration of the atriums. Night air flushing prevents overheating of the offices in summer.

with Müller Reimann Architekten, Berlin

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