

Benjamin Wernike



Dipl.-lng. Arch. **Benjamin Wernike** LEED AP BD+C, Estidama PQP V/B/C

"Innovation starts in between specialties."

Raising the bar and setting the course for integrated project deliveries. Providing profound and multidisciplinary expertise to build sustainable and maximize project bottom line rewards.



Personal Information:

German, in business since 1998, 10+ years international work, born 1977, married, two kids

Personal Skills:

creativity paired with practical experience, holistic thinking outside the box, inventive talent, precision, determination, endurance, sense of responsibility, team leadership & team play

Focus Areas:

- entrepreneurial action and business development
- sustainability project management for design, construction, operation and retrofitting
- benefitting projects through efficient implementation of general sustainability principles, but also addressing systematic approaches for Zero-Energy-Buildings, LEED, WELL, Al Safat / Dubai Green Building Regulations, Estidama, Masdar KPIs, Multi-Comfort, EnEV
- use categories: infrastructure, industrial, commercial, office and residential buildings
- planning categories: master plans, high-rise buildings, detached houses, exhibitions
- design studies & simulations: energy modeling, thermodynamics, daylight analysis, CFD analysis, FEM analyses, structural calculations & other applied physics / math
- design documentation, project planning and permits
- life-cycle assessment, life-cycle cost analysis and project cost tuning (advanced VE), BIM
- industrial designs, machine engineering, parametric modeling, CAD/CAE/CAM
- deep technical expertise of industrial production methods and environmental impacts
- structural design and construction of special and high span constructions
- research & development of building systems

Education:

- 2012 LEED Accredited Professional for Building Design and Construction
- 2010 Estidama Pearl Qualified Professional for villas, buildings and communities
- 2005 several post-graduate management courses for junior entrepreneurs
- 2004 "Diplom-Ingenieur für Architektur" graduation, Bauhaus-University Weimar, (German university master degree before Bologna Process finalization in 2010)
 - 2003 -2004 excursion studies at faculty of mechanical engineering, University of Applied Sciences Jena
 - 2000 2003 main studies of architecture, Bauhaus-University Weimar
 - 1999 2000 excursion studies at faculty of design, Berlin University of the Arts
- 1997 1999 "Vordiplom Architektur" (undergraduate degree), Bauhaus-University Weimar
- 1996 1997 civilian service for conscientious reasons as social worker for disabled children and elder people in need, Volkssolidarität Gardelegen
- 1984 -1996 "Abitur" (German high-school diploma)

Professional Affiliations:

- Member of the Economic Advisory Council of Bavaria
- Affiliate Member Architect at the Society of Engineers U.A.E.
- LEED AP BD+C at the U.S. Green Building Council
- Estidama PQP for master plans, buildings & villas at Urban Planning Council Abu Dhabi

Track Record:

01/06/2023 - today

Arcadis Germany GmbH, Germany

Senior Project Manager

- project management to meet goals in design, quality, sustainability, budget and schedule
- consulting clients in best practice for sustainability and in synergies of various building systems

BMW factory Irlbach-Starßkirchen -

- consulting client in a 100 ha factory for high voltage car batteries: guiding consultants, tendering, change management, budget control, authorities approvals etc.

27/11/2018 - 31/05/2023

AECOM Deutschland GmbH, Germany

PM/CM Team Lead South Germany & Switzerland, Senior Project Manager

- project management to meet goals in design, quality, sustainability, budget and schedule
- growing the business and coordinating proposals, evaluating joint venture partners, negotiating, preparing and submitting technical and commercial proposals
- interviewing and recruiting proper resources, organizing tasks and assigning responsibilities to team members, consultants and contractors, monitoring compliance, setting KPIs and controlling the performance
- consulting clients in best practice for sustainability and in synergies of various building systems

P3 Logistic Parks Ansbach - BREEAM very good rating

- consulting client in a 30,000m² GFA logistics park: ensuring main contractor meets project owner requirements, coordinating authorities, consultants, sub-tenders and managing construction, claims, commissioning and hand-overs

Shell Catalysts & Technologies Leuna

leading 7 EPC contracts in plant engineering and construction, i.e. a customizable
production line, a laboratory and several plant refurbishments: managing a team of 5
engineers and construction managers, 6 subconsultants, multiple subcontractors &
suppliers, steering designs and permitting processes, planning/scheduling, procurement,
accounting, coordinating construction management, commissioning and hand-overs

Siemens Campus Erlangen Module 2 - LEED Gold rating

- first carbon-neutral Siemens branch, innovative wood-concrete hybrid construction system for 5 office buildings including a conference center (80,000m² GFA + 3 car park structures): managing a team of 11 engineers and construction managers, managing the contractors through all stages of design and construction including performance evaluation and accounting control for the client, (anti-) claim management, checking of drawings for permitting processes, implemented BIM model checking in the cloud
- contract management: successfully extended the PM/CM contract with the client

Novartis/Alcon The Bird Geneva - Minergie rating

- 6,000m² office and venue fit out: commissioning and hand-over

20/11/2016 - 27/10/2018

Obermeyer Middle East GmbH, United Arab Emirates

Sustainability Manager, Senior Architect

 implementing the requirements of multiple sustainability systems in projects by taking advantage of most efficient synergies

- succeeding in the simultaneous permit processes and ratings also through multi-target design solutions that bridge sophisticated and initially contradicting requirements of multiple authorities and project approaches
- set-up and running Obermeyer's sustainability department in UAE: interviewing and recruiting proper resources, evaluating subconsultants, organizing tasks and assigning responsibilities to team members, subconsultants and contractors, monitoring compliance, setting KPIs and controlling the performance
- developing the business further and coordinating proposals, evaluating joint venture partners, negotiating, preparing and submitting technical and commercial proposals
- representing Obermeyer (partially together with the client) at WETEX, World Future Energy Summit and meetings related to the German Expo Pavilion

New DEWA HQ - AI Sheraa Building, Dubai, simultaneous ratings & approaches: Net-Zero-Energy, LEED Platinum, AI Safat/DGBR Platinum, WELL, Smart Building

- Worldwide largest Net-Zero-Energy Building (at the time, 100,000m² GFA + 100,000m² car park), MENA Green Building Award Winner as the "Sustainable Design Project of the Year 2020": spearheaded UAE's first façade integrated photovoltaic system and an optimized solar roof that achieves the maximum area for solar energy harvesting while providing safe access for operation/maintenance/emergency, an electric wiring system and a storm water drainage system hidden in structural columns, gardens that survive with fine-tuned amounts of daylight under transparent PV, successfully coordinated this multi-target design with the teams of energy, photovoltaic, MEP, structural engineering, landscape and fire-life-safety, steered the meetings with Dubai Civil Defense and obtained their permissions
- LEED Platinum (targeted here 104 points: all LEED credits and 10 additional pilot credits, except permanent installation of reused materials), WELL and Al Safat / Dubai Green Building Regulations Platinum (also all applicable regulations): successfully implemented all sustainability requirements in the design, reviewed the design and compliance documentation, consulted all related departments and subconsultants (architecture, façade, energy, MEP, structural engineering, interior, acoustics, landscape, traffic, vertical transportation, waste management planner, cost consultant, commissioning agent, environmental assessor, HSE, smart building controls, project planner)
- Smart Building: harnessed smart building controls and developed an alternative compliance solution that bridges the contrary requirements of LEED's thermal comfort control & verification versus the HVAC energy demand reduction for Net-Zero-Energy
- sustainability management during construction: prepared documents and action plans
 and successfully integrated them in construction stages, reported construction status and
 progress to client, reviewed contractor submittals (contractor plans, material submittals,
 sustainability reports, construction compliance documentation), monitored sustainability
 compliance on-site, issued non-compliance reports as necessary

Saint Gobain's Multi-Comfort-House, Masdar City, Abu Dhabi, simultaneous ratings: LEED Gold, Estidama 3 Pearls, Masdar KPIs, Multi-Comfort

- matched the best applicable sustainability requirements of the 4 ratings in a matrix
- implemented the requirements in the concept design and in the permit process
- consulted the client who is at the same time a world-famous building material supplier on applicable standards and timely scheduling of his manufacturer's required material certifications
- evaluated applicable renewable energy concepts on-site

Sustainability Manager & Estidama PQP of record (at Urban Planning Counsil Abu Dhabi, the Estidama authority) for the main contractor of the

Midfield Terminal Building, Abu Dhabi International Airport rating: Estidama 3 Pearls

- managed 64 subcontractors and their suppliers/manufacturers to successfully implement the sustainability requirements of the targeted Estidama 3 Pearl rating in the construction of the worlds' largest airport terminal (at the time) of 700,000m²
- successfully identified the strategically required changes & variation orders for the project through an in-depth design review: risk & gap analysis of client's Estidama design stage submissions towards UPC versus the contract, tender documents and IFC
- included findings in the consultant's energy model submissions towards UPC/Estidama in relation to the specified performance requirements of the building envelope
- fruitfully cooperated with the in-house contracts management & project management to follow-up with CMA, client and consultants to issue required design changes & variation orders (meetings, correspondences, requests for information, claims, delay notices etc.)
- integrated project delivery through multidisciplinary coordination with authorities, client, CMA, consultants, ensured that project requirements and sustainability goals could be met in compliance with the Estidama targets
- conducted detailed design consultations and sustainability trainings for the management, architects, engineers and subcontractors that resulted in successful meeting the project performance requirements on building envelope, MEP, architecture and interior designs (construction physics, thermodynamics, vapor control / mold prevention, indoor air quality, building equipment, appliances, building management systems, smart metering for water and electricity, material emissions, landscaping)
- managed the contractor's sustainability department: assigned tasks and responsibilities, interviewed and recruited proper resources, set KPIs and reported performance
- performed cost tuning (advanced type of value engineering) and implemented sustainable project requirements through efficient detail optimizations and detail corrections under consideration of regional material alternatives
- briefed, monitored, reported and followed-up subcontractors and suppliers: reviewed
 material submittals, issued documentation requests & reviewed the outcome, conducted
 successful on-site audits (partially with the local authorities/UPC), issued non-compliance
 reports, coordinated with QA/QC department and subcontracts management
- initiated academic relations of the whole project team (involving also the client and the lead consultant) with Masdar Institute (a local partner of the M.I.T.) through institute-wide project presentations, lectures and site-tours for student groups

20/06/2013 - 21/12/2013

Kling Consult, United Arab Emirates

Director of Kling Consult's Abu Dhabi branch

- managed the sustainability project (at a high level) **ADAC commercial building at T3 business park Abu Dhabi, RATING: Estidama 2 Pearls**
- prepared and issued technical and commercial proposals and followed-up on: *Abu Dhabi urban streetscaping, refurbishment & extension of Al Ain International Airport Terminal. Al Futtaim Motors showrooms in Dubai, shopping mall in Al Ghavathi*
- networked locally in Abu Dhabi and succeeded in business development with following projects under acquisition: extension of VIP stands at Abu Dhabi YAS Marina Formula 1 Circuit, residential tower in Abu Dhabi, façade upgrades for UAE embassies, university campus in Cambodia
- supervised the branch administration to timely renew company registrations and licenses

Sustainability Consultant, Senior Architect, Construction Manager

- design review and sustainability consulting for Mangrove Residents Al Reem, House of Germany, Local Villas
- construction management and quality control in the prefabrication of a steel construction for *Emirates Aluminium Industrial Complex in Khalifa Industrial Zone Abu Dhabi*

01/07/2009 - 13/01/2013

Dorsch Holding GmbH, United Arab Emirates

Head of Green Building, Senior Architect

- established the Dorsch Green Building Unit, future-proofed the company before Estidama
- introduced sustainability principles and technologies for buildings and master plans
- commenced integrated planning and initiated the use of building information modeling (BIM), life-cycle cost analysis, energy modeling and daylight analysis in the designs
- designed sustainable concept and schematic stages, wrote specifications, consulted for multiple Estidama ratings, energy modeling and cost tuning in the *Emirati Housing Development - Jebel Hafeet, Al Ain* (master plan, public buildings and 3,000 villas)
- consulting for Estidama in a Royal Villa Project, Al Ain
- consulting for LEED in the project "Heart of Europe | The World", Dubai
- designed sustainable concept and schematic stages including traffic planning and cost tuning for *Liwa Road Shops Project, Western Region* (Estidama 2 Pearls)
- designed concept and schematic stages including general sustainability requirements for Ghantoot Naval Base (master plan, operational buildings and residences)
- succeeded in master plan design competitions for waterfront developments in U.A.E.
- published sustainable development principles for in-house education and guidance
- organized Dorsch's exhibition participation at Arabian Construction Week 2010 and represented Dorsch Green Building Unit that benefitted business development
- gave sustainability lectures at Alhosn University Abu Dhabi to initiate academic relations

04/2009 - 06/2009

consulting Alhamy Metals, United Arab Emirates

Technical Consultant

Masdar Campus Building, Abu Dhabi, United Arab Emirates

- optimized and modularized the solar roof structure, planned the production and construction processes, billed the quantities and priced them for Alhamy Metal's bid

08/2008 – 03/2009 consulting MERO International, Germany & United Arab Emirates

Construction Manager

Ferrari World on YAS Island, Abu Dhabi, United Arab Emirates

- optimized the team and accelerated the workflow on site which resulted in early handover
- coordinated MERO's subcontractor in the construction of the world's largest space frame structure (at the time) of 200,000m² that is roofing the Ferrari World

07/1999 - 08/2008

self-employed consultant, Germany & International

Business Developer

started my company Freigrad GmbH i.G., Weimar, Germany

- invented, researched and developed the Freigrad® space frame building system
- developed the business plan, mobilized equity, set-up and lead a team, marketed in EU

license agreement with SLM GmbH, Oebisfelde, Germany

- designed and prototyped "Agent Digital" furniture, marketed in EU & Canada

Project Manager

consulting Schulte-Frohlinde Architekten, Berlin, Germany

- urban project planning of Dresdner Straße 114, Berlin-Mitte, Germany
- offices & residences according to the German energy saving ordinance (EnEV)

Technical Consultant

consulting Schöner-inseln GmbH, Zinnowitz, Germany

- architectural & structural design of Seebrücke Zinnowitz, Baltic Coast, Germany
- pleasure pier & mall with retail, event & catering functionalities

consulting Schulte-Frohlinde Architekten, Berlin, Germany

 several residential designs in Berlin, Germany according to the German energy saving ordinance (EnEV)

Industrial Design Consultant

consulting ART-KON-TOR, Jena, Germany

- designed information terminals for Deutsche Bahn AG, Berlin, Germany

consulting Norbert Wangen, Vienna, Austria

- furniture, kitchens & bathrooms for Boffi s.p.a., Milan, Italy

Engineering Consultant

consulting Jacob & Nauman GbR, Jena, Germany

- clean room robot & equipment for chip manufacturer, Erfurt, Germany technical design, motion analysis, simulation
- design of several medical devices for different German manufacturers

Scientist / Academic, Germany

research associate at the professorship of structural design & engineering Berlin University of the Arts

teaching 2 seminars "Load Bearing Structures" and "3D Modeling / CAD"

research associate at the professorship of management Bauhaus-University Weimar

- developed an early BIM application based on parametric CAD, CAE & CAM
- research on the new possibilities for integrated project delivery on a single platform

Patents:

Freigrad® system (technical patent granted: WO2006027162A8, DE102004042905A1) Agent-Digital (design patent: 40111182.2)

Awards:

MENA Green Building Award, U.A.E.
Urban Waterfront Developments Competition, U.A.E.
Thuringia Business Plan Competition
GET UP Idea Contest
Chamber of Architects Mecklenburg-Vorpommern "Health Resorts of the Future"
PTC Design Award
INNEO Design Award
OFFISION Design Award

Exhibitions:

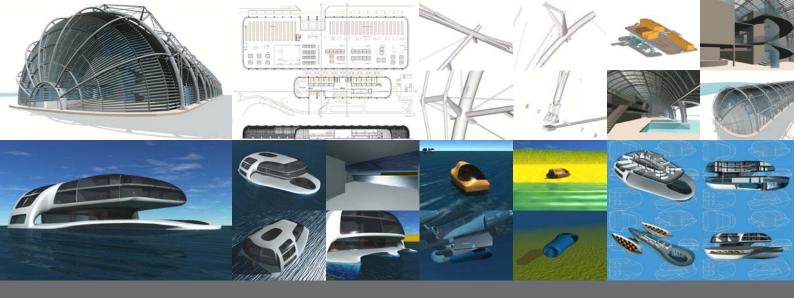
BAU 2019, Munich, Germany
WFES 2018, Abu Dhabi, United Arab Emirates
WETEX 2017, Dubai, United Arab Emirates
WFES 2017, Abu Dhabi, United Arab Emirates
ARABIAN CONSTRUCTION WEEK 2010, Abu Dhabi, United Arab Emirates
IIDEX/NEOCON 2004, Toronto, Canada
OFFISION 2002, Cologne, Germany

International Experience:

Austria, Azerbaijan, Canada, Czech Republic, Germany, Italy, Oman, Spain, Switzerland, United Arab Emirates

Languages:

fluent in German & English few basics in Arabic, Italian & Russian



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