



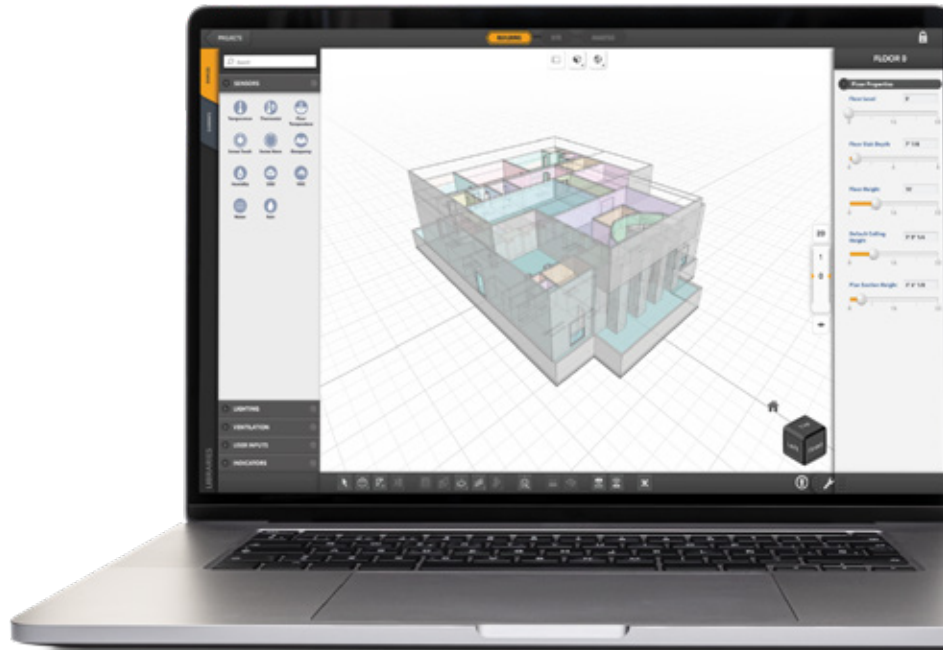
Functional Digital Twins. One Tool for Building Design and Simulation.

PassiveLogic Designer

PassiveLogic® Designer™ simplifies the process of architectural building design, simulation, and site analysis using generative AI and physics-based digital twins. Every Designer project is built on a Quantum™ digital twin, the open standard for the built environment. As a user designs their building, a physics-based Quantum model is generated that defines the building's geometry, material, spaces, solar path, and surroundings. This digital twin represents building data that can be queried, simulated, analyzed, and controlled. In just minutes, you can create a building, add surrounding site context, run a climate simulation, generate load calculations, simulate ESG performance, and run deeper energy analysis. With the full integration of Qortex, you are able to automatically build your 3D model from floor plans, describe a building to generate from scratch, or revise your models with natural language commands. Finally realize true operational Building Information Modeling (BIM) and carry the design through your entire building lifecycle using our suite of software.

Easy to Design. Complete Projects 10x Faster.

In addition to Qortex, you have other ways to easily create your digital twin—quickly scan a whole building with our Lens™ mobile app, import a CAD or BIM file from another tool, trace, or draw from scratch. Users can switch between 2D and 3D views to sketch precise floor plans and visualize rooms and objects in space. The Designer app empowers anyone to design with an architect's approach and ask, "What spaces do I want to create?" Instead of adding walls one at a time, users simply draw the rooms while the software's generative design produces the walls and other building features. These include nominal wall thickness, the number of standard doors that fit a space, window paning, and more. Need to update the model later? Simply adjust it as needed in Designer, or use Lens to scan the changes.



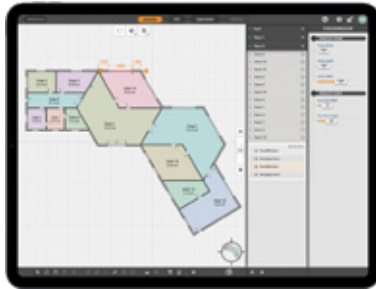
Site Generation + Simulation. In Just a Few Clicks.

Place your building model anywhere in the world and instantly simulate energy usage in accordance with sun path dynamics, local shading, and climate physics. The Designer app uses open-source data and physics-based Quantum technology to accurately simulate the effect of weather, climate, topography, and surrounding city building terrain models, orders of magnitude faster than market benchmarks. Digital twin models update instantaneously as you adjust a building's physical location. The simulation can run on historical climate data from anywhere in the world to assess potential site conditions.

PassiveLogic Designer

Generative Design. Your Personal Building Engineer.

As a building design comes together, generative support in the Designer app takes care of the details, such as how many doors can fit in a space or how thick the surrounding walls should be. Using the built-in Qortex™ features, it can produce entire building designs based on natural language prompts regarding location, use case, and size. For example, you could type, "Design a building with two central, connected hexagon spaces with two rectangular wings on opposite ends," and get back an automatically generated digital twin that meets the design criteria.



Quantum Digital Twins. Data for Everything.

Every Designer project is built on Quantum—the open digital twin standard—so any app in the PassiveLogic suite can open and edit it. For example, when windows are added to a building, the Quantum model captures the number installed, their dimensions, and the total square footage of window surface. This level of data insight is available for everything within the model and updates as your design progresses.

Operational Real-Time BIM. Finally Possible.

Others offer BIM models that are rendered obsolete even before building construction is completed, due to their traditionally static nature. The Designer app, along with the PassiveLogic ecosystem, fixes this problem. It enables a Quantum-based digital twin building to function as a self-updating asset for the entire life cycle of the building it represents. The model viewed in the Designer app always reflects the most up-to-date information, as the PassiveLogic ecosystem continually syncs in real-time. It's time to disrupt the business of BIM.



Speed of Sketching
Emergent BIM Detail



Terrain and City Analysis



Digital Twins
From the Ground Up



Ultra Fast
Rendering Engine

Site Analysis



Generative Design



Vegetation Design



Interactive Terrain Excavation



AI-Physics Driven Design



Speech to Architecture



Solar Shading Analysis



QuantumSync Team Collaboration

Digital Twins across the Life Cycle



Parcel Utilization and Planning



Zero Setup
1-Click Simulation

Simulate any Building in 1 Second



Climate
Automatic Synthesis

Historical or Typical Meteorological Year

End-to-End Site Management



Live BIM
Real-Time Updates



Operational
Insights and Controls

Thermal Load Calculations



Physical Simulation



World's Fastest Simulator

700 Million
Times Faster than Real Time



Inference Engine
Physics-Driven AI Queries



ESG
Made Real



Performance
Optimization