ARCHITECTURE, ENGINEERING & CONSTRUCTION

FAÇADE DESIGN FOR FABRICATION

End-to-end 3D project modeling solution
CONNECT YOUR DESIGN DATA FROM CONCEPT THROUGH FABRICATION FOR THE CONSTRUCTION PROJECT

Architecture, Engineering & Construction (AEC) projects create formalized but temporary organizations that include many groups – design, construction, fabrication. Higher standards, tighter regulations, and owner demands to deliver attractive buildings that are on-time and at lower cost add to the pressure. Without strong collaboration, coordination, and consistency, a project can result in tremendous waste and cost overruns.

Dassault Systèmes Façade Design for Fabrication project modeling solution built on the cloud-based collaborative 3DEXPERIENCE® platform leverages the power of 3D to efficiently and consistently cover construction project requirements end-to-end from planning to fabrication.

INDUSTRIALIZING CONSTRUCTION

Construction projects involve many groups – from design, engineering, construction, fabrication – who must closely collaborate to bring a project to completion. Each one has software solutions that are optimized for their work, used for a long time, and not interoperable. With so many fragmented solutions, validating designs becomes difficult, multiple models get created independently, and changes are costly. There is less time to design as you deal with complexity and the multiple points where errors and omissions can occur.

AEC productivity has lagged over the past 50 years. Software providers implemented BIM (Building Information Modeling) and VDC (Virtual Design and Construction) to try and improve the process, but they simply automate the documents of a broken process. But what if we could capture and re-use data from design planning through fabrication and beyond, and leverage data from the conceptual design to panelized structures to fabricated components? Then we could open the opportunity of “industrialized construction” to help save time, lower cost, improve safety, reduce risk, and increase profit.

IMPROVING THE BUILDING DELIVERY PROCESS

Dassault Systèmes Façade Design for Fabrication provides an end-to-end enterprise solution for architects, contractors, and fabricators. You can develop conceptual models of buildings and then extend the façade through design, fabrication, and even into assembly. Dynamic tools help you plan the building, validate requirements, and then enable you to extend design model data into shop drawings and bills of materials (BOMs). Teams can collaborate to detail shape, pattern, and structure as they work concurrently using a single version of the truth.
INTEGRATED PLANNING
Quickly Conceptualize and Plan Your Building and Spaces

For architects and planners, the Integrated Planning process experience helps you quickly start developing your building design. Unlike other software, Integrated Planning is a purpose-built 3D conceptual design tool. Explore site selection, program requirements, and potential construction and operating costs while working in a realistic 3D environment. You can create conceptual building designs that will meet client needs for years to come, while you preserve your existing process workflows.

Integrated Planning enables architects, contractors, and building owners to make informed decisions during initial planning. Requirements go directly into 3D space planning for real-time analysis and validation. You can create new concepts and easily share them with your project team and stakeholders to make informed decisions during the process. Integrated Planning helps reduce the time to explore possibilities and present solutions to improve planning efficiency and win business.

FAÇADE DETAILING
Concept and Design of Building Façades on the Cloud

Façade Detailing process experience enables you to extend your conceptual and design data through to fabrication. After developing models, you can break them down into assemblies that convey the design intent. You define features in an intelligent environment and automate highly complex façades to easily respond to emerging issues, design changes, and on-site realities. The process enables detailing of each object into a fabrication-ready model and creation of shop models and drawings from the single source of truth. Façade Detailing helps reduce waste and rework found in traditional design and construction processes.

KEY BENEFITS FROM FAÇADE DESIGN FOR FABRICATION
• Better Buildings to Delight Customers
  You can save time, reduce process dead-ends, validate requirements in real time, and exceed customer expectations.

• Industrialized Construction
  Reduce waste by extending conceptual model data through to fabrication with scalability and collaboration on the cloud.

• Single 3D Version of the Truth
  “Same page” authoring tools provide a 3D Master version for collaborative work by the entire project team.

• The Power of 3DEXPERIENCE®
  Business experience platform creates a new class of collaborative, interactive environment on the cloud with a working dashboard to uniquely view project status and exchanges among project members, access applications, and integrate with existing processes.
**FAÇADE DESIGN FOR FABRICATION**

**Dassault Systèmes Façade Design for Fabrication** provides the power of 3D process solutions to help you create value and differentiating experiences for your customers. You can access applications in a cloud environment that helps build collaboration across the project team, and integrate with existing environments through the import/export of various types of CAD data, such as IFC data (based on Dassault Systèmes AEC Data Model).

**Façade Design for Fabrication** can help you quickly and efficiently conceptualize, plan, fabricate, and even construct your buildings and spaces with sophisticated design and construction. You can create better buildings that delight your customers, industrialize your construction process for higher efficiency and productivity, collaborate across your team working with a single 3D version of the truth, and use the full power of 3DEXPERIENCE®.

Learn More about Façade Design for Fabrication at [http://www.3ds.com/facade-design-for-fabrication/](http://www.3ds.com/facade-design-for-fabrication/)

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Dassault Systèmes, the 3DEXPERIENCE Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).