Autodesk Informed Design Unlocks Industrialized Construction to Connect Design and Make Workflows

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SAN FRANCISCO, Feb. 7, 2024 /PRNewswire/ -- Autodesk, Inc. (NASDAQ: ADSK) today unveiled Autodesk Informed Design, a cloud-based solution that connects design and manufacturing workflows to streamline the building design and construction process. Informed Design allows architects to work with customizable, pre-defined building products that yield valid results and manufacturers to share their products with design stakeholders. Informed Design unlocks industrialized construction – the application of manufacturing principles to the built environment – and will help transform the architecture, engineering, construction and operations (AECO) industry.

The AECO industry is facing rising pressure to accommodate growing populations, urbanization and a global housing crisis. For example, nearly 100,000 new affordable homes need to be built every day to house an estimated 3 billion people by 2030. Additionally, the industry faces pressure to improve its sustainability; construction is one of the most wasteful industries in the world and it's responsible for nearly 40% of global CO2 emissions.

"The way the AECO industry works today is not sustainable or scalable. For the industry to keep pace, it needs to build more, faster and more sustainably. The answer is industrialized construction," said Ryan McMahon, director and general manager, Informed Design at Autodesk. "Autodesk Informed Design connects design and make from day one and brings industrialized construction workflows to reality. Our solution is unique because it empowers architects to design with certainty and validate their plans in real-time, while product managers and engineers can share accurate manufacturing information with design teams. As a result, projects are completed quicker, with higher quality and generate less waste."

Informed Design is part of Autodesk's Design and Make Platform environment, which includes cloud-connected software solutions that unite teams, data and workflows across entire project lifecycles to deliver better, faster outcomes. With Informed Design, Autodesk is ushering the AECO industry towards an industrialized setup that embeds sustainability throughout. Informed Design is available globally as a free add-in for two of Autodesk's industry solutions:

**Autodesk Informed Design for Revit** allows design professionals to design with known-manufacturable building products for unparalleled certainty and quality. This add-in for Revit 2024 provides improved design quality, increases workload capacities and reduces errors and rework. Capabilities include:

- **Template discovery**: Explore building product templates to seamlessly incorporate manufacturing-level detail into your design files.
- **Customization**: Tailor building products to align with your building's requirements, enabling compliance with the manufacturers’ specifications.
- **Certainty**: Confirm design decisions are accurate and manufacturable to reduce project risk and prevent errors.

**Autodesk Informed Design for Inventor** enables product managers and product engineers to align their manufacturing capabilities with customer requirements. This add-in for Inventor 2024 provides a more streamlined design and manufacturing process. Capabilities include:

- **Seamless collaboration**: Collaborate with designers by creating parametric models of your building products and confirm that only compliant versions are used.
- **Powerful Building Information Modeling (BIM) content creation**: Define BIM content to confirm your building products meet project requirements and are compatible with other components and industry standards.
- **Streamlined product documentation**: Simplify the generation of product documentation at scale and generate the necessary outputs for fabrication.

Green Canopy NODE, a construction technology company tackling the housing and environmental crises, has been using early access versions of
Informed Design for Revit and Informed Design for Inventor to improve its building design and engineering processes:

“Autodesk Informed Design has shown that there’s a way to bring customized details, good aesthetics and quality engineering into a product that can be mass produced,” said Benjamin Hall, senior product manager, Green Canopy NODE. “Designing with constraints doesn’t curb my creativity – it gives me choices I know will work. And that is good for the planet, the building’s inhabitants and for the building industry.”

International Data Corporation (IDC), the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets, shared its perspective on the benefits of connecting workflows with Informed Design:

“Through a connected, bidirectional digital thread and sharing of data across the AECO ecosystem of partners, it is easier to optimize supplier performance and deliver quality products and services that complement the overall design of a building,” said Jeffrey Hojlo, Research Vice President, Future of Industry Ecosystems & Energy Insights. “With Informed Design, Autodesk enables AEC organizations to streamline the connection between asset design and the BIM process.”

To learn more and to bring the benefits of Informed Design to your team, visit Informed Design for Revit and Informed Design for Inventor.

We also encourage you to join the upcoming webinar, “Connect Design and Make with Autodesk Informed Design,” hosted by Engineering News-Record (ENR) in collaboration with Autodesk on February 20, 2024. For more information and to register, visit ENR’s website.

About Autodesk

The world’s designers, engineers, builders, and creators trust Autodesk to help them design and make anything. From the buildings we live and work in, to the cars we drive and the bridges we drive over. From the products we use and rely on, to the movies and games that inspire us. Autodesk’s Design and Make Platform unlocks the power of data to accelerate insights and automate processes, empowering our customers with the technology to create the world around us and deliver better outcomes for their business and the planet. For more information, visit autodesk.com or follow @autodesk, #MakeAnything

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