Autodesk Construction Solutions for Government Owners

From the trusted name of Autodesk, you now have Autodesk Construction Solutions that seamlessly connect data and supports collaboration through all phases of construction - from design to preconstruction, to site construction, turnover and operations. The Autodesk Construction Cloud is the most powerful and complete portfolio of construction management solutions in the world.

The Autodesk Construction Cloud

Building owners invest repeatedly in construction, and they expect to operate their assets and buildings efficiently for decades. While the cost of construction is only a small percentage of the total cost of building ownership, the data collected throughout the construction process sets the owner up for long term success.

The challenge is that building owners lack visibility into the construction of their capital projects. As a result, they forgo valuable insights about their own properties. Surrendering control during construction has repercussions long after handover. Owners who are not involved in the construction of their buildings are not set up to successfully own and operate their buildings profitably. These problems are compounded when owning and operating an entire portfolio of buildings, like district facilities or laboratories.

As an owner, they pay for all aspects of a project: the design, the engineering work, the construction, culminating in the responsibility of maintaining the asset. Our philosophy at Autodesk Construction Solutions is that there is tremendous value in owning that data, from the design phase all the way through operation.

The ACC enables owners to own, manage, view and use all of the data from the architects, engineers, general contractors, subcontractors, commissioning agents and various others into one centralized system. The advantage for owners with ACC is you have unprecedented insight into all projects from design & construction through handover to your facilities management system for operation of the asset.





How Owners Can Benefit with the ACC

Document Management: Teams must communicate and collaborate on data across the entire life of the building. And it is much easier when everyone is in same platform.

Insights: Owners need to view projects at a dashboard level, with insights & analytics, using visualization tools. This helps get stakeholders together to make more informed decisions, quicker

Design Collaboration: As the operator, it's necessary to have visibility into design and constructability. They maintain the building once it is complete, so they will influence the design.

Quality: Issue tracking and field reports are necessary for owner construction and facility teams. Quality management is used throughout lifecycle, including photos & progress tracking.

Project Management: Backup for litigation and transparency for tracking, cost, schedule adherence and risk control. Owners must also manage contractual communications like RFIs and Submittals.

Sustainability Management: Construction owners are increasingly working to reduce waste. Lean construction and automation at scale is central to sustainability efforts.

Digital Handover: Since they own the building, it's not just about turnover, but better data collection and tracking for ongoing operations.

Facilities Management: Sophisticated operators require ticketing for building management. They want to see assets with QR codes models with all info and documentation that goes with it.

Estimation/Takeoffs: Produce accurate estimates with integrated 2D and 3D construction takeoff software. The ACC allows users to combine sheet-based and model-based quantity takeoffs and empower estimators to provide accurate and clear scopes of work so teams can improve how they schedule and secure the costs for materials and labor.

What's In the Autodesk Construction Cloud

**These products are the first to be FedRamp approved

Autodesk Build

Build improves construction management and empowers all builders with connected teams, workflows and data. Build improves project, quality, safety, and cost management. It allows you to manage schedules and connect RFIs, and centralize issue management by connecting the field & the office.

Autodesk BIM Collaborate Pro**

BIM Collaborate Pro connects architecture, engineering, and construction teams on a single platform for improved project outcomes. Improve communication with easy feedback tools, accelerate timelines with live design co-creation, and reduce rework, RFIs and change orders with better construction documentation. Co-author designs, perform design reviews, and automate model coordination with trades. Collaborate in design tools anytime, from anywhere and improve design quality and constructability from the office to the field.

Autodesk Takeoff

Generate 2D takeoffs & 3D quantities from a single solution. Align estimators and construction teams with cloud-based data management that ensures everyone is working from a single source of truth. Capture the most detailed quantities to ensure the best project scope. Avoid rework by visualizing project scope in 3D, which allows a better understanding of design intent and constructability issues. Leverage a single inventory of 2D + 3D quantities throughout the construction process. Estimating teams get simplified access to relevant construction documents, drawings, and 3D models, resulting in improved collaboration.

Autodesk Pype

Reduce project risk and strengthen relationships by automating processes that are critical for owner satisfaction and contract compliance. Pype allows you to create and review submittal logs, collect closeout documentation and create dynamic document turnover packages while reducing risk and increasing accuracy.

Autodesk Docs**

Autodesk Docs is a centralized document management solution that acts as a single source of truth across the project lifecycle for all project teams.

- Manages 2D and 3D designs
- Links files as references
- Centralizes issue management
- Organizes turnover documentation

The Forge Platform offers APIs and services that help you access and use your design and engineering data via the cloud. Forge tools help organizations build applications that tap into their design and engineering data. Forge APIs can be combined with existing software systems to innovate how you work and get more from your data.

- Large GC reduces workflow by almost 24 hours a week with ACC benefits
- Large Design firm reacting to global pandemic by utilizing design, build and coordinate functions to not only build portable ICU pods, but also coordinate the collaboration from product line to construction.
- Large GC uses Docs, reduces design coordination time by 95%

Assemble

Assemble enables you to condition, query and connect your data to key workflows. These workflows include bid management, estimating, scheduling, project management, site management and finance.

Model-Based Takeoff: Instant access to complete project inventory to easily organize project data by user defined parameters such as bid-package, locations, phase, WBS or Work Activity codes.

Condition the Model: Easily create bids, scope, and views with your company's coding system.

Change Management: Visualize and quantify design changes throughout preconstruction efforts that affect costs and schedules.

Access Models & Views: Provide the entire project team with access to "Conditioned" BIM in the cloud.

Work in Place Tracking: Models leveraged in the field for work in place tracking and schedule sequencing and coordination discussions.

- A large airport recently deployed Assemble to control the budget, manage the construction schedule, and design changes for construction at Delta's terminal in John F. Kennedy International Airport.
- A large GC is using Assemble to work collaboratively with the architect, perform value engineering to meet budget requirements, evaluate design changes and perform rapid model takeoffs.
- Clients throughout the industry are using Assemble to expand the use of BIM, empowering multiple stakeholders to save time and reduce project risk.
- Assemble allows organizations to reach new levels of automation with faster workflows and improved communication.

Built to identify the right sub for each project by collaboratively managing the bidding process to choose the best sub, faster. It solves many problems/challenges, but most commonly, it provides immediate access to more subs, with the ability to compare bids side-by-side in an apples-to-apples fashion. It is the most widely used preconstruction bid management tool that can assist your organization when comparing quotes. BuildingConnected is used by more than 4,000 Owners/Developers/GCs and has a network of more than 1 million trade partners. One of the biggest benefits of BuildingConnected is that all of the subs contact information is up to date. It is often referred to as the "LinkedIn" of the construction industry.

Custom Bid Forms & Bid Leveling: Compare bids, plug numbers to easily edit values, and instantly collaborate

Bid Packages & Costs

Vendor Qualification: Qualify subs with automated risk assessments.

Unlimited Bid Invitations: Access the largest network in construction

Historical Cost Data: Easily keep track of historical costs

Relationship Tracking: Organize and track institutional knowledge

Open API: Securely pull qualification and contact data into your system (available for an extra charge)

Electronic Bidding

Integration with TradeTapp

Integration with PlanGrid

- Large GC began using BuildingConnected and increased their bids by 100% with BuildingConnected.
- After deploying BuildingConnected, another GC got rid of bottlenecks and improved its relationship with subcontractors.
- BuildingConnected enabled another large GC to improve their preconstruction processes, achieve more consistency across offices, and save much-needed time every day.

Watch the Autodesk Construction Cloud short video here.