ADVANCED CONSTRUCTION TECHNOLOGIES

RESULTS + BENEFITS

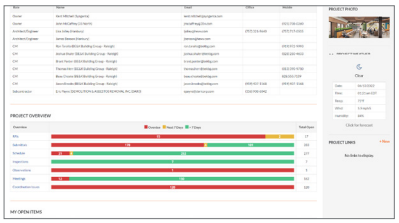
Technology enables a better way of delivering capital projects, making informed decisions, enhancing collaboration, and producing more accurate data. It brings clarity + certainty to the most demanding projects through:

- Faster precon cycles to better understand cost + schedule
- Visual planning to support communication
- Reduced field issues through comprehensive modeling
- Reduced schedules due to advanced planning + quality management
- Higher ROIs through technology

PROJECT DOCUMENTATION + PROJECT MANAGEMENT

PROCORE

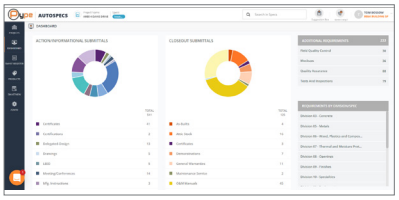
A construction management platform that provides project stakeholders with easy access to current information. Enhances collaboration by providing a central location for all drawings, RFIs, submittals, and documents, specific to safety, cost control, quality control, and schedule validation.



SPECIFICATION REVIEW

PYPE AUTOSPECS

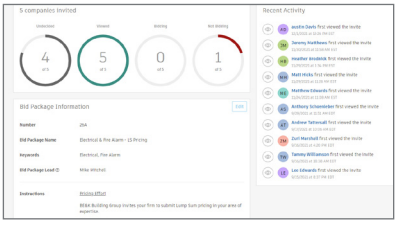
AI that digitally searches specifications to automatically create submittal logs. Uses versioning to track changes and compare specs. Provides a single portal for closeout management with powerful reporting dashboards and automation.



TRADE PARTNER SOLICITATION

BUILDINGCONNECTED + TRADETAPP

Centralized solution for comprehensive bid solicitation and bid management coupled with a trade partner prequalification tool providing benchmarked contractor financial, capacity, and safety performance reviews to mitigate risk.



AERIAL DRONE IMAGERY

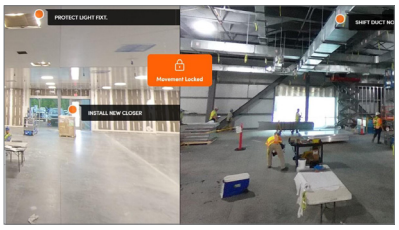
DJI + DRONEDEPLOY

From site selection to ribbon cutting, manage, measure, and monitor projects with drone imagery. Apply technology to create consumable and sharable drone maps, 3D models, and project photos. Utilize advanced aerial photogrammetry to create 3D topography maps providing volumetric analysis for accurate site condition evaluations and measurements.

JOBSITE PHOTO DOCUMENTATION

STRUCTIONSITE

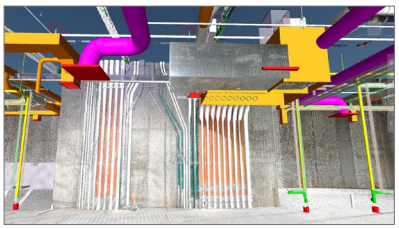
Use standard and 360° photography to capture jobsite progress photos, track installed work, and communicate with teams. Make meetings more efficient by reviewing up-to-date conditions. Walk the jobsite from your phone, iPad, or laptop. Know exactly what's been installed and where. Share PDFs of floor plans linked with respective progress photography that work completely offline.



REALITY CAPTURE (LASER SCANNING)

FARO

Capture an accurate point cloud to create exact 3D maps of existing conditions, installed work, and as-built conditions. Link point clouds to the project's coordination model to validate design, check floor flatness, verify locations of installed work and equipment, and identify variances. Efficiently correct any issues in the support of overall project quality. Assists with preconstruction, logistics, coordination, installation tracking, and as-built deliverables.

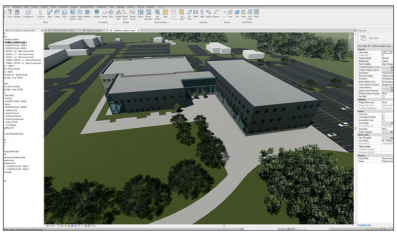


APPROACH

PEOPLE — We have a deep bench of industry-leading, technology-focused experts.

TECHNOLOGY — We provide hand-selected software applications customized for each project.

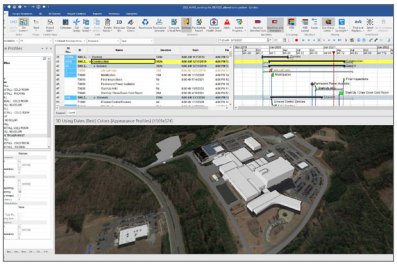
OPERATIONAL EXCELLENCE — From preconstruction through construction, we provide a collaborative environment to help plan and drive design and construction decisions through option analysis, financial modeling, and risk management. Throughout the project lifecycle, we provide technology specific to serve each project's unique requirements.



PROJECT 3D MODELING

REVIT + INFRAWORKS

Create 3D models for site logistics, planning, and communication. Generate highly detailed virtual mock-ups to test scope detail and validate installation sequences. Produces a detailed digital copy of the project to coordinate systems and resolve issues before field fabrication and installation.



VISUAL SCHEDULING + LOGISTICS PLANNING

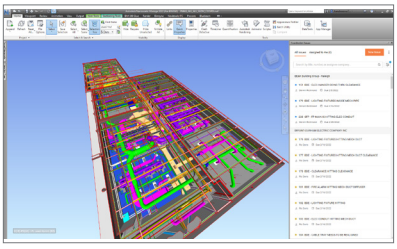
SYNCHRO

Use project models to create, manage, visualize, and track project schedules. Generate sequence animations, review construction plans, identify opportunities for improvement, simulate construction activities, and optimize project schedules.

AUGMENTED REALITY (AR) + VIRTUAL REALITY (VR)

ENSCAPE

Communicate design with greater clarity whether in the office or on a jobsite. Helps teams run QA/QC, find coordination issues, and validate designs through the use of immersive + photorealistic digital environments.



3D SYSTEMS COORDINATION + ISSUE MANAGEMENT

NAVISWORKS

Build your project virtually first, get it right, and then build it in the field. Manage the federated models from designers and subcontractors to identify, track, and report on constructability issues and clashes. Enhances the coordination effort through persistent collaboration focused on identifying real issues and working toward quick, iterative resolutions to safeguard the overall health of the project.

JOBSITE ENVIRONMENTAL MONITORING

MODEL-BASED QUALITY CONTROL (MBQC)

Full site, 24/7 monitoring for temperature, humidity, carbon monoxide, VOCs, particulates, noise, light, and pressure. Designed to detect unsafe environmental working conditions and potential risks to installed scope in real time. Drill into data by floor or area, customize reporting, and create custom alerts for your mobile device. Creates a historical record of the conditions of your project.