SYNCHRO™ 4D
The Proven, Industry-leading 4D Digital Construction Management Solution

SYNCHRO 4D is designed and tailor-made for construction modeling, planning and scheduling, visualization, simulation, and project controls. All construction team members can build digital projects on the screen and extend the value of 3D models by adding time, the fourth dimension. Serving as the real-time source of truth, SYNCHRO 4D can help solve the time-cost conundrum, increase safety, and reduce both employee and project risks.

EXTEND THE MODEL’S VALUE
SYNCHRO 4D provides a wholistic and purpose-built construction solution, enabling projects to construct, plan, and track projects based on a construction model. Users can easily communicate and present the construction plan and schedule, allowing for trade partner collaboration and commitment with confidence, on-time execution and delivery, and quicker approval for payment. The web and mobile applications extend the value of the 4D construction model by exchanging and managing 2D, 3D, and 4D models with geolocated, rich data in the project context. Teams can efficiently access and author data to make more informed decisions.

PLAN, CONSTRUCT, AND TRACK FROM MODELS
Slice and dice your design into a construction model with auto-calculated quantities while keeping original design intent. Display both 3D models and the schedule in one environment to perform model-based scheduling. Add construction equipment and paths to schedule activities to visualize conflicts and resolve them before construction. Perform “what-if” analysis to reduce risks and delays by reviewing time-lapsed construction sequences. Identify areas that are ahead or behind schedule through a planned-versus-actual visualization.

CONNECT OFFICE AND FIELD SEAMLESSLY
Extend the value of the 4D model into field workflows for status checks, work planning, review, and inspections within the SYNCHRO portfolio. With connected applications and workflows, a project team can review, validate, and communicate in one complete digital and interactive visual environment that includes documents, forms, and models.

ENABLE DIGITAL TWINS
SYNCHRO 4D, powered by Bentley’s iTwin® technology, enables 4D construction models and reality data models to be accessible by stakeholders as a single source of truth. It empowers users to navigate and author construction models from gathered design models. The application also features best-in-class interoperability with a variety of third-party modeling and scheduling capabilities.

Slice and dice your design into constructible components.

SYNCHRO 4D augments construction projects with 4D digital information throughout the project’s construction.
DELIVER PROJECTS ON TIME
Partnering with Microsoft means that you are working with best-in-class cloud technology. Plan, manage, construct, track, and review your construction projects in 4D, providing the entire project team with real-time progress updates.

ELIMINATE REWORK AND PROTECT YOUR BUDGET
Identify schedule problems in advance, saving you and your team both time and money. Your data will be secure, up-to-date, and accessible from a range of devices based on roles and permissions.

FOCUS ON SAFETY
Understand what you are building before you build it, to avoid all the potential risks involved. Ensure that the entire team is engaged by inviting the supply chain to participate.

ENSURE QUALITY
Everyone performs at a higher level when they can review, communicate, and cooperate in a digital and interactive visual environment. Validate and optimize your project plan before you start on site.