



HOW WE WORK.

CULTURE OF INNOVATION

Innovation, to us, means leveraging technology and our collective ideas to drive results. Our approach to innovation is thoughtful and methodical, a fine balance between the practical and the imaginative. Our goal is to develop the next-generation design toolkit by investigating new ideas and approaches and applying them in ways that lead to increased efficiency, client satisfaction, and exceptional performance. We believe that our industry is at an inflection point of amazing new technologies, unprecedented levels of data, and a changing mindset of how to do business, and we are ready to do the work.

CURRENT INITIATIVES

Uniform Control Systems Design

With a focus on the data-driven design of open and interoperable control systems that enhance the functionality of the built environment, we believe there is a huge opportunity to build a better world through more effective and efficient building system control. By enhancing the functionality of the built environment through control of the building systems, we unlock the potential to save energy, create more comfortable environments, and gain insights into building system health.

Design for Manufacturing and Assembly (DfMA)

Simple doesn't have to mean boring. We believe that intelligent, beautiful system design can be achieved through a thoughtful and intentional application of this mindset. Designing with a modular, kit-of-parts mindset removes complexity and provides opportunities to affect quality, efficiency, cost, and time - all in a positive way.

Machine Learning

We've been in the building systems design business for over 50 years and believe that making better decisions by leveraging project data can benefit all our clients. Applying machine learning to that data provides an opportunity to gain insights, make better decisions, and even challenge the status quo - all in the name of delivering quality, world-class client experience.

Building a Culture

Great ideas can come from anywhere. It's critical that innovation is infused into every part of our business and not outsourced to a single entity. Whether it's the client experience, the way we design, or some yet-to-be-discovered approach, innovation is everyone's responsibility.

EXPLORING NEW OPPORTUNITIES

Innovation is about looking to the future. Sometimes this means exploring ideas that may not seem connected to understand how they might be. Sometimes it means risking sounding like a dreamer. We're OK with all of that and then some. With the ever-changing landscape of technology and its impact on the industry, we're constantly researching and digging into new trends and technologies to find use cases and applications that serve our clients. Below are some things we are researching.

- Structured data storage/data architecture
- Data security/Data privacy
- Low/no code platforms
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- Data security/Data privacy
- Low/no code platforms
- Integrated data ecosystem
- Sensor networks (IoT)
- BIM
- APIs
- Purchased/Public data
- Generative design (computational thinking)
- Automation
- AI/ML
- Data visualization
- Metaverse
- Digital twins
- Physical scanning - point clouds/mesh
- AR/VR
- Immersive/interactive building occupant experiences
- Geofencing/geolocation

SEAN TURNER PE

Innovation & Research Director



Sean is synonymous with energy, drive, and outside-the-box perspective. An associate, professional engineer, and Henderson's director of innovation & research, Sean is an enthusiastic blend of creative thinking and highly technical experience. He thrives in finding new ways to approach building systems design to provide high-performance, optimized projects while also making the process more efficient and engaging for the project team. He believes there's always a way to improve the status quo and his vision is to get people's great ideas out of their heads and into their work. Under his leadership, we have no doubt that's exactly what happens.