

# Technology Corner Profile

Low productivity and a low digitization rate have sparked an influx of new technology being developed, which has the potential to make a profound impact on the risks involved on construction projects and within asset management such as safety risk and design risk. Aon understands that this trend may be of interest to our clients and has created the Technology Corner to profile different construction technology and asset management companies. Each profile gives an overview of the technology, addresses its risk treatment potential, and identifies what insurance policies its implementation could impact. Our goal is multi-faceted to raise awareness about leading construction and asset management technologies that could help reduce risk on site for the purposes of educating our clients and the insurance markets.

## Product Description

**TGE Top Down<sup>SM</sup> Technology** specializes in systems integration focused on a revolutionary building process for the construction industry. Pioneering innovation in tall building construction; TGE is first to market, providing vertically integrated structural construction and technology-based solutions to mid/high-rise buildings. By reducing building weight and eliminating interior/exterior columns, TGE provides the ultimate design flexibility, maintaining the world's first principally manufactured building construction without the use of tower cranes erected entirely at ground level. The Top Down<sup>SM</sup> delivery model is dedicated to the advancement of improvements in construction efficiency and vehicle to assist our clients and industry to build better.

## Benefits

3 key benefits associated with TGE Top Down<sup>SM</sup> Technology include:



### Quality Control:

Overall quality control is improved, as hard to access inspection areas are now easily accessible from ground level access points throughout the project site.



### Increased Safety Performance:

By constructing each deck at ground level, tower crane operations and scaffolding risks are essentially eliminated, as workers no longer work from exterior/elevated positions.

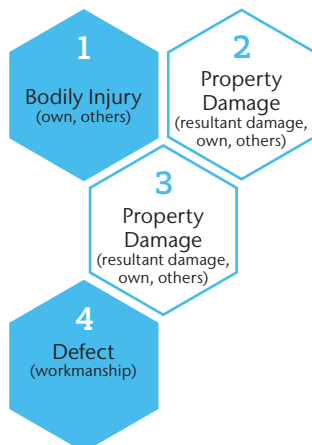


### Budget:

Through the integrated delivery method of building at ground level, costs are significantly reduced over conventional construction; specifically, lower overall material and labor costs.

## Risks Treated

Key risks mitigated by TGE Top Down<sup>SM</sup> Technology include:



TOP DOWN<sup>SM</sup> TECHNOLOGY  
LEAN IN - FUSED TEAMING

## Company Profile

**TGE Top Down<sup>SM</sup> Technology**  
16 West Dover Street,  
Maryland 21601

**CEO and President**  
Charles H. Thornton, Ph.D., P.E.

**Category**  
IoT, Artificial Intelligence,  
Integrated design and Remote  
Connectivity, BIM and ERP  
integration to manufacturing,  
Virtual Reality, Additive/Subtractive  
Manufacturing

**Website**  
[www.tgetopdown.com](http://www.tgetopdown.com)

**Location**  
U.S. & North America

## Impacted Insurance Policies

Insurance policies that will be positively impacted by TGE Top Down<sup>SM</sup> Technology include:

- ▶ Wrap-up / Workers Compensation / Employer Liability
- ▶ Construction All Risk / Builder's Risk
- ▶ Default Insurance
- ▶ General Liability
- ▶ Defect Insurances
- ▶ Cost Overrun & Liquid Damages

## Comments from the Founder

"Top Down<sup>SM</sup> Technology brings revolutionary change to the AEC space, specific to tall building construction. As construction costs per SF and project durations continue to escalate at an unsustainable rate, the TGE solution provides advantages never before realized for mid/high-rise structures. We have vertically integrated the supply chain to provide an end-to-end solution for Design and Construction; incorporating a Lean based manufactured process for mid/high-rise buildings. The Top Down<sup>SM</sup> Building and delivery model, is a technology driven platform that provides savings in construction cost, project schedules and improvements to quality, safety and structural efficiencies to each of our buildings. These advantages improve results over conventionally built projects at every stage of project development.." – **Charles H. Thornton, Ph.D., P.E.**

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empower results

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