



Edward di Girolamo, PE

CEO, Professional Structural Engineer

Summary. Mr. di Girolamo has 37 years of experience in building design, manufacturing, construction, demolition and structural analysis software development. His broad experience with structures includes nuclear plants, navy ships, bridges, and commercial and residential structures. To date, he is a named inventor on over twenty construction product patents. di Girolamo founded The Steel Network, Inc. (TSN), in 1994 and for the past 23 years has served as CEO. TSN designs and manufactures light gauge steel connections and structural products. In 2004, he formed Applied Science International, LLC (ASI) and serves as CEO. In 2016 di Girolamo founded Extivita, LLC a company focused on industrializing the hyperbaric oxygen industry allow its widespread use by the public at large.

Product Development. Mr. di Girolamo has led the R&D efforts for TSN since its founding in 1994. He is responsible for development of several cold-formed steel construction products and systems including deflection clip products, stud-plank / hollow-core mid-rise building system, and midrise load-bearing wall systems.

SteelSmart® Software Development. Mr. di Girolamo is responsible for the development and advancement of ASI's "SteelSmart", a family of structural engineering software tools. "SteelSmart" software products deal with the analysis and design of light steel framing structural components. They include SteelSmart® System, SteelSmart® Deck, and SteelSmart® Framers. . Employed by thousands of users, these software tools are the #1 design tools used for design and construction in the US within the light steel framing industry.

Extreme Loading® Software Development. Mr. di Girolamo managed the senior scientists who developed Extreme Loading® for Structures (ELS), an Applied Element Method- based structural engineering tool. The Applied Element Method (AEM) is a breakthrough development in time-history analysis simulating automatic crack initiation, separation of materials, and collision of materials. AEM more closely predicts structural stress than any other structural analysis technology. (ELS) is a one of a kind tool currently used for physical security assessments, advanced structural engineering applications including performance based design, progressive collapse and seismic analysis, forensic analysis, blast analysis and demolition planning and prediction. On July 31, 2008, ASI was awarded the SAFETY Act Designation by the Department of Homeland Security for Extreme Loading® for Structures.

Industrial Design. Mr. di Girolamo has worked as a design engineer for several years where he managed a team of engineers and designers doing structural analysis and design for Nuclear Power Plants.

Education:

- B.Sc., Civil Engineering, New York State University at Buffalo, Buffalo, New York, USA

Highlights:

- Trainer on cold-formed steel design and construction.
- Named inventor on more than 15 patents and several patent-pending for construction products
- Directs software development for various engineering analysis & design applications

Current and Previous Activities:

- Board Member for the Triangle Chapter for the American Red Cross
- Member of the Committee on the Specification and Design of Cold-Formed Steel for the American Iron and Steel Institute (AISI)
- SAME Sustaining Member
- ASCE Member
- NDIA Member
- TISP Member
- SFIA Board Member
- Travis Manion Foundation



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Training. Mr. di Girolamo has given numerous continuing education seminars on the Design of Cold-Formed Steel Framing Systems to engineering associations around the US and to engineers from around the world during the past 37 years. In 2002, he planned and produced a two-day, 10-hour seminar that was presented in 26 US cities by experts to teach practicing structural engineers methods and tools to perform design of Cold-Formed Steel Framing in buildings.

Inventions & Patents. Mr. di Girolamo is a building products' inventor with a specialty in products that facilitate safer and easier installation of structures. He also invented and engineered a mid-rise building system utilizing light steel framing as load-bearing walls and hollow-core precast concrete units as floor systems. He is named on more than 20 US patents and several others patent-pending applications. Below is a partial list:

- U.S. Patent #7,448,171 "Joist support structure adapted to be embedded into a foundation wall."
- U.S. Patent #7,299,593 "Metal half wall and a connector assembly for securing studs of a half wall to an underlying support structure."
- U.S. Patent #7,225,590 "Brick tie."
- U.S. Patent #7,104,024 "Connector for connecting two building members together that permits relative movement between the building members."
- U.S. Patent #7,073,299 06 "Circle wall track."
- U.S. Patent #6,941,718 "Wall structure."
- U.S. Patent #6,892,504 "Wall structure with corner connectors."
- U.S. Patent #6,735,919 "Modular I-beam."
- U.S. Patent #6,701,689 "Stud spacer."
- U.S. Patent #6,612,087 "Building member connector allowing bi-directional relative movement."
- U.S. Patent #5,906,080 "Bracket for interconnecting a building stud to primary structural components."
- U.S. Patent #5,904,023 "Steel stud stabilizing clip."
- U.S. Patent #5,402,612 "Structural system for supporting a building utilizing light weight steel framing for walls and hollow core concrete slabs for floors."
- U.S. Patent #5,195,293 "Structural system for supporting a building utilizing light weight steel framing for walls and hollow core concrete slabs for floors and method of making same."
- U.S. Patent #5,113,631 "Structural system for supporting a building utilizing light weight steel framing for walls and hollow core concrete slabs for floors and method of making same."