

---

**Stephen R. Ternullo, P.E.** | District Manager / Senior Forensic Engineer

---

33955 Harper Avenue, Clinton Township, MI 48035

586.868.0220

[steve.ternullo@efiglobal.com](mailto:steve.ternullo@efiglobal.com)

### Professional Summary:

Stephen Ternullo investigates and prepares detailed reports for a wide variety of property casualty damage issues including; structural failures and defects, water intrusions, roof distresses, mechanical failures, electrical failures, and evaluating trip and fall conditions. He has over twenty years of active experience as a forensic engineer having personally investigated or supervised over 3,000 investigations, often being requested to determine a cause of distresses to structures, and to develop structural repair plans.

More than thirty-five years of experience in the construction and structural design of industrial, commercial, and residential projects utilizing; steel, concrete, wood, masonry, carbon fiber and other materials has provided a strong knowledge of construction techniques, principles and costs. The experience of thousands of diverse design projects and investigations provides the necessary expertise to assimilate data and evaluate to determine cause and origin analysis for a variety of losses, accident reconstruction, and evaluation of product defects, and when asked, develop cost effect solutions.

Many years of experience as a district manager, project manager, company administrator, mentor, teacher, and structural engineer has resulted in excellent communication skills with clients and design team members. Participation in continuing education engineering seminars insures the ability to implement modern up to date technology.

In addition to Investigative Engineering services, Mr. Ternullo continues to provide Structural Engineering services on projects with construction costs up to \$100 Million.

Mr. Ternullo's clients include; insurance companies, litigators, construction contractors, architects, building and property owners and managers. By not limiting the type of clients, any perceived biasness towards an investigation opinion is eliminated.

### Licenses and Certifications:

Professional Engineer, Michigan, # 6201032880

Professional Engineer, New Jersey, # 24GE05062400

Haag Certified Inspector, Residential & Commercial, #201504156

100-Ton Master (Captain) (2001 to 2010) – U.S. Coast Guard

### Project Experience:

#### **Inflatable Dome Collapse, Detroit, MI Determine Cause of Collapse and Extent of Damages**

Pressure Supported Tension Fabric structure partially collapsed was determined to be a result of a failure of mechanical equipment. Insured claimed, entire structure was damaged as a result of high winds, and the structure including foundations required replacement. Investigation established original construction was defective, partial collapse was not the result of wind, previous failures had occurred, previous repairs had been completed. It was determined the structure could be repaired to its pre-incident condition using techniques similar to previous repairs.

#### **Structural Renovation, Troy, MI Structural Design**

Design of a structural framing system to add chillers on top of an existing industrial type manufacturing building and the structural framing system to add a 20-ton overhead crane along with an in-floor pit inside the low headroom building.

#### **Industrial Building Roof, Lodi, NJ Evaluation of Roof Replacement**

Industrial flat roof building was replaced by contractor. After roof was replaced, leaks continued into building. Moderate winds displaced roof system at building edge. Insurance claim covered expenses for water damage and replacement of roof. Documents were reviewed for potential subrogation of loss to contractor that previously replaced roof. Investigation determined contractor did not adhere to industry standards and installed a roof system not in accordance with its intended use.

#### **Church School, Detroit, MI Determine Cause of Collapse and Develop Temporary Shoring Plan**

Basement wall of church school collapsed, determined to be caused by excessive soil pressure after heavy rain and inadequate original construction. Assignment included developing a complicated temporary shoring plan to prevent further damage of the above ground structure, and to facilitate repairs. Structural design services included developing a structural repair plan for the replacement of the collapsed wall.

### Professional Experience:

EFI Global/ Unified Investigations and Sciences, Inc., Unified Consulting, LLC, District Manager, Senior Structural & Forensic Engineer, June 2015 – Present  
Stephen Ternullo & Associates, Inc., President, CEO, Structural & Investigative Engineer, 1987 – June 2015  
Structural Steel, Inc., Engineering Department Head, 1978 - 1987  
Structural Steel, Inc., Structural Steel Detailer, 1978-1982

### Specialized Education:

ASCE, Investigation and Repair of Fire-Damaged Framing; 2018  
SunCam Continuing Education, Mechanically Stabilized Earth Structures; Part 2; 2018  
SunCam Continuing Education, Mechanically Stabilized Earth Structures; Part 1; 2018  
American Institute of Steel Construction (AISC), Design In Structural Steel: 2017  
Hilti North America, Anchoring Principles and Design, 2017  
Asbestos Operations & Maintenance Training, EKS Services, 2016  
The Euclid Chemical Company (RPM Performance Coating Group), Modern Concrete Technology Seminar, 2016  
National Council of Structural Engineers Associations, Fire Damage and Post-Fire Assessment of Structural Wood Members, 2016  
Hilti North America, Post-installed Rebar 101: Fundamentals of Post-Installed Reinforcing Bar Design Using Qualified Adhesive Anchor Systems, 2016  
SunCam Continuing Education, Ethics for U.S. Engineers; 2015  
Unified Investigations & Sciences, Inc. Forensic Investigations, 2015  
Investigative Engineers Association, 2014  
Investigative Engineers Association, 201  
Applied Technology Council, Safety Evaluation of Buildings after Windstorms and Floods – ATC – 45, Webinar, 2013  
Applied Technology Council (ATC), Safety Evaluation of Buildings after Windstorms and Floods – ATC – 45, Webinar, 2013  
Investigative Engineers Association, 2012  
Investigative Engineers Association, 2012  
Infrared Training Center, Thermography Basics, Webinar, 2012  
Vacant & Abandoned Buildings: Hazards & Solutions, Webinar, CFITrainer.net/IAAI, 2012  
Investigative Engineers Association, 2011  
Investigative Engineers Association, 2010  
Investigation Engineers Association, Fort Lauderdale, FL, Investigative and Forensic Engineering Training, 2010  
HILTI, Anchor Systems for Concrete and Masonry Applications, 2010  
Simpson Strong-Tie, Continuous Load Path, 2009

### Affiliations:

Selfridge Air National Guard – Base Community Council  
Structural Engineers Association of Michigan  
American Society of Civil Engineers

### Publications and Presentations:

When to utilize Thermal Imaging for Investigations (2013)  
Explosions and Determining Pre-existing Conditions (2013)  
A Homeowner's Guide to Foundation Repair (2011)  
I-ENG-A 2013 Convention – Processing and Reporting of Investigations

