Thomas E. Nehil, P.E.

Principal Emeritus

Mr. Nehil is Principal Emeritus and Co-Founder of Nehil•Sivak. He specializes in the evaluation and renovation of existing facilities in wood, masonry, steel and concrete, addressing the structural frame as well as the building envelope. He is a past member of the American Concrete Institute's Committee on Strength Evaluation of Existing Concrete Buildings. He is a member of the Timber Frame Engineering Council and Timber Framers Guild. He coauthored the *Guide to Structural Evaluation of Existing Timber Structures—TFEC 3* and co-edited the *Design Guide for Timber Trusses—TFEC DG 1.* He is the recipient of the Association for Preservation Technology's Preservation Engineering Technical Committee 2020 David Fischetti Award for his article *Determining Design Stresses from Strength Values* that appeared in *Timber Framing.* He is a regular instructor at Tillers International in Scotts, Michigan where he teaches wood species identification, timber framing, and traditional stone masonry.

Registrations

Registered Professional Engineer: Michigan

Education

B.S. Civil Engineering (Magna Cum Laude)
University of Michigan, 1978

Professional Affiliations

American Wood Council
Association for Preservation Technology
Michigan Barn Preservation Network
Michigan Historic Preservation Network
Timber Framers Guild
Timber Frame Engineering Council

Selected Publications

"Guide to Structural Evaluation of Existing Timber Structures" TFEC 3, Timber Frame Engineering Council, January 2019 (Principal Author)

"Determining Design Stresses from Strength Values," *Timber Framing,* March 2018

"Basic Design Issues in Timber Frame Engineering," *Timber Framing,* December 2007, March 2008

"Strength Evaluation by Load Testing," *Concrete International,* March 2007

"Test Load Magnitude and Acceptance Criteria for Strength Evaluation by Means of Load Testing: Current Recommendations of American Concrete Institute Committee 437 – Strength Evaluation," *Proceedings, 2nd fib Congress, Naples, Italy,* June 2006

Representative Experience

Klingman Lofts
Grand Rapids, MI

- Structural design for adaptive reuse of four-story industrial building
- Design of new deep foundation to underpin existing settlement-damaged superstructure; design structural two-way concrete slab-on-helical pier foundation system to address site soils problems
- Masonry restoration consulting for historic façade preservation including structural strengthening

Neuromuscular Center
Jackson, MI

- Structural design of new four-story medical office and rehabilitation building
- Design of structural two-way concrete slab-on-grade and stone vibropier foundation system to accommodate site soils problems

Brown Hall
Western Michigan University
Kalamazoo, MI

- New two-story lecture hall addition
- Structural renovations to existing building

Portage Central High School
Portage, Michigan

- Structural design of new $36M high school, including classroom wings, office and library spaces, and gymnasium
- Structural evaluation of existing auditorium, design for renovations and strengthening

Lowe Foundation Conference Center
Cassopolis, MI

- Structural design of new conference center including meeting areas, dining and kitchen facilities, decks and pedestrian bridges
- Consultation regarding split stone cladding installation and use of on-site timber resources

401 East Michigan (Food Dance)
Kalamazoo, Michigan

- Consulting to renovate existing historic downtown retail and boarding house structure, including structural strengthening and historic façade preservation
- Structural design of new steel-framed addition

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STRUCTURAL ENGINEERS