

ARCHITECTURAL AND STRUCTURAL USE OF GLASS

Abstract

Glass has been used in buildings and architecture applications for centuries, although historically it has not been considered a material engineers use for design. Recently, several notable building projects incorporated significant use of glass in applications beyond windows, e.g. a glass spiral staircase. Currently, engineers and architects rely on project specific testing to assess the load resistance of the glass elements used, as a national glass design standard does not exist in the United States or elsewhere in the world. The current methods used for determining load resistance of windows and window constructions will be reviewed with a brief overview of the underlying theory and challenges facing the innovation window construction and structural use of glass will be discussed.





By Stephen M Morse Ph.D., PE

Structural Glass

Use of the current code (ASTM E1300)

When and where?

Click here to Join online via Zoom

Or copy the link below

https://michigantech.zoom.us/i/927433322

Dow 642 Michigan Technological University

February 27th, 2020

Time - 4:00 - 5:00 PM EST

About The Presenter



Dr. Stephen Morse is an assistant professor at Michigan Tech University in the Department of Civil and Environmental Engineering. He has extensive experience in model scale and full scale testing, numerical modeling and software development related to window glass strength. For the past twelve years Dr. Morse has served as a technical adviser on the ASTM subcommittee responsible for maintaining and updating the national window glass standard, ASTM E1300. He contributed and authored key provisions to the E1300 standard including the addition of a generalized analytical procedure, expanded NFL charts and updated examples. Dr. Morse also serves as the Convener of Work Group 1 of ISO TC 160/SC 2 Strength of Glass in Buildings and a member of the US Technical Advisory Group.