

Utilizing Fluid Viscous Dampers in Retrofit Applications

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Synopsis:

Fluid Viscous Dampers (FVDs) are velocity dependent devices which can be used to dissipate seismic energy in structures through fluid flow and friction rather than through yielding of the structure. FVDs have qualities which are uniquely beneficial in retrofit applications where a well-planned design can avoid the need to retrofit deficient beam-column joints, existing foundations and maintain building operations with only localized work. This presentation will focus on the use of FVDs for retrofit applications and will include general information on damper behavior, examples of FVDs retrofit solutions, a discussion on preliminary design using dampers and a brief overview of some key code requirements for damper design.

Speaker Bio:



Dr. Nathan Canney is the Director of Structural Engineering at Taylor Devices. He joined Taylor in 2020 after working as a structural engineer at CYS Structural Engineers in Sacramento, CA and before that MKA in Seattle, WA. Nathan has earned Bachelor's degrees in Civil Engineering and Applied Mathematics at Seattle University, a Master's degree in Structural Engineering at Stanford University and a PhD at the University of Colorado Boulder. After completing his PhD in 2013, Nathan taught structural engineering undergraduate and graduate level courses for four years at Seattle University before returning to consulting work in 2017.