

INSPECT–PBEE: INelastic Seismic Performance Evaluation Computational Tool for Performance-Based Earthquake Engineering

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The *INSPECT–PBEE* program is designed to simplify the process of structural modeling as well Performance-Based Earthquake Engineering (PBEE) utilizing the IDARC-2D program. The creation of the input text file for IDARC-2D is facilitated by the GUI pre-processor, while running analyses and manipulating outputs are fully automated by the GUI post-processor in *INSPECT–PBEE*. The high-level handling and automation capabilities provided by *INSPECT–PBEE* liberate the structural/earthquake engineer from the distractions of maneuvering through the minute syntax details. Thus, transforming the PBEE from a tedious exercise into a streamlined and seamless experience without compromising its inherent rigor. *INSPECT–PBEE* would be found useful and appealing to structural/earthquake engineering students, researchers and practitioners alike. The freely distributed executable version of the IDARC-2D program [which is made free and publically available at this webpage: <http://civil.eng.buffalo.edu/idarc2d50/>], is included within the *INSPECT–PBEE* package. The redistribution of the IDARC-2D executable is done with the explicit written permission from the IDARC-2D copyright holders, represented by Prof. Andrei M. Reinhorn of the University at Buffalo-SUNY.

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 - AlHamaydeh, M., Najib, M., Alawnah, S. (2016). “INSPECT: A Graphical User Interface Software Package for IDARC-2D.” *SoftwareX*, 5, 243–251, DOI: 10.1016/j.softx.2016.10.004.
 - AlHamaydeh, M., Aly, N., Najib, M., Alawnah, S. (2016). “*INSPECT–PBEE*: A Performance-Based Earthquake Engineering GUI for IDARC-2D.” *SoftwareX Journal*, Vol. XX, Issue YY. doi:10.1016/Z.softx.2016.ZZ.ZZZ.
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