بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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ASSESSMENT OF SEISMIC BEHAVIOR FOR ECCENTRIC BRACED FRAME WITH VERTICAL LINK

By

Nada Nasser Mohamed Sobhy

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
in
Structural Engineering

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Under the Supervision of

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Title of Thesis:
Assessment of Seismic Behavior for Eccentric Braced Frame with Vertical Link

Key Words:
Non-linear analysis; Pushover analysis; Time history analysis; Length of link, Response modification factor.

Summary:
This research is concerned with studying seismic behavior of steel eccentric braced frames with vertical link considering several parameters, such as: number of stories, number of bays, length of link, and ground accelerations. Through this study, Response Modification factor is investigated for these models considering two analysis methods: pushover analysis and time history analysis. The results show that short link gives more ductility compared with long link. Values of response modification factor increases as peak ground acceleration increases for the same height of building, number of stories, and number of bays. Finally, it is concluded that using one value for response modification factor is not acceptable for number of frames in different cases.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

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