

THESIS INFORMATION

- **PhD Student:** DINH LE KHANH QUOC
- **Title:** Behaviour of infilled reinforced concrete frames under lateral loading
- **Major:** Civil & Industrial engineering
- **Major code:** 62582001
- **Training institute:** Ho Chi Minh City University of Technology, VNU-HCM
- **Scientific supervisors:** Associate Prof. Dr. Bui Cong Thanh
Associate Prof. Dr. Nguyen Van Yen

- **The aim of thesis:**
 - To study the behaviour of infilled reinforced concrete frames with various interface conditions by F.E.M. modeling and experiments.
 - The object of study is infilled reinforced concrete frames using Autoclaved Aerated Concrete Blocks (AAC).
- **Thesis's contribution:**
- ✓ **From the scientific viewpoint:**
 - Proposing and developing a modified equivalent mono-strut model with varying sections for the elastic range.
 - Proposing and developing a multi-strut model for estimating the ultimate load and plotting the load – lateral deflection curve of the infilled frame in the plastic range.
- ✓ **From the reality-application viewpoint:**
 - Proposal of considering the infilled masonry stiffness in the calculation to reduce the investment cost.
 - Proposal of a type of infilled masonry to improve lateral load capacity of reinforced concrete frames.

Scientific supervisors

Associate Prof. Dr. Bui Cong Thanh
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