

THE UNIVERSITY OF WESTERN ONTARIO
SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES

CERTIFICATE OF EXAMINATION

Supervisor



Dr. Maged Youssef

Co-Supervisor/Joint Supervisor

Examiners



Dr. Ashraf El Damatty



Dr. Anthony Straatman



Dr. Wenxing Zhou

The thesis by

Robert KUEHNEN

entitled:

**Performance-Based Design of Fire-Exposed
Reinforced Concrete Elements using an Equivalent
Standard Fire**

is accepted in partial fulfillment of the
requirements for the degree of
MESc

18/APRIL/2019

Date



Professor Jonathon Southen
Chair of the Thesis Examination Board