Effect of interface position with different concrete compressive strength and shear connector shapes on the behavior of one-way composite pre-slabs

BY

ENG. AHMED ADEL ALY AFIFI

A Thesis Submitted to the
Faculty of Engineering at Cairo University
In Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY

In

STRUCTURAL ENGINEERING

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Title of Thesis:

"Effect of interface position with different concrete compressive strength and shear connector shapes on the behavior of one-way composite pre-slabs"

Key Words: (Composite, Interface, Shear connector, Pre-slabs)

Summary:

Composite pre-slabs are one of the most common types of composite elements. There are many factors effected in the behavior of the pre-slab, the main governing factor is the shear transfer along the interface to achieve the composite action between the two layers. This research presents as investigation of one-way composite pre-slabs behavior for many specimens have a different interface positions with two alternative concrete compressive strengths and different shapes of shear connector.

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Finally, I dedicate this thesis to my **FATHER, MOTHER, BROTHER, SISTERS, SONS (ANAS AND ASER) AND FINALY MY WIFE** for their continuous encouragement and fruitful care.

TABLE OF CONTENTS

CHAPTER (3): EXPERIMENTAL PROGRAM

CHAPTER (4): ANALYSIS AND DISCUSSION OF TEST RESULTS

CHAPTER (5): ANALYSIS EXPERIMENTAL PROGRAM

CHAPTER (6): ANALYSIS CORRELATION BETWEEN THEORETICAL AND EXPERIMENTAL RESULTS

CHAPTER (7): CONCLUSION

LIST OF TABLES

LIST OF FIGURES

CHAPTER (2)

CHAPTER (3)

CHAPTER (4)