

# **EFFECT OF BRICK INFILL IN RC FRAME BUILDING**

A DISSERTATION  
PRESENTED TO  
THE FACULTY OF  
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING  
DELHI TECHNOLOGICAL UNIVERSITY



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IN PARTIAL FULFILMENT  
OF THE REQUIREMENTS FOR THE  
DEGREE OF  
**MASTER OF TECHNOLOGY**  
**(STRUCTURAL ENGINEERING)**

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By  
**VIKAS KUMAR SINGH**  
**12/STR/2K10**

UNDER THE GUIDANCE OF

**MR. ALOK VERMA**  
**ASSOCIATE PROFESSOR**

## **CERTIFICATE**

This is to certify that the thesis work entitled “**EFFECT OF BRICK INFILL IN RC FRAMED BUILDINGS**” being submitted by me, is a bonafide record of my own work carried by me under the guidance and supervision of Mr. Alok Verma, Associate Professor in partial fulfilment of requirements for the award of the Degree of Master of Technology (Structural Engineering) in Civil Engineering.

The matter embodied in this project has not been submitted for the award of any other degree.

**VIKAS KUMAR SINGH**  
12/STR/2K10  
MTECH (STRUCTURE)

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

**ALOK VERMA**  
ASSOCIATE PROFESSOR  
DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING  
DELHI TECHNOLOGICAL UNIVERSITY

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**VIKAS KUMAR SINGH**  
**12/STR/2K10**  
**MTECH (STRUCTURE)**

## **ACKNOWLEDGEMENT**

I would like to sincerely and wholeheartedly thank my guide Mr. Alok Verma for his close guidance, kindness, encouragements, patience, and supervision throughout various stages of the dissertation. Without his help and encouragement, this dissertation would not be possible.

I wish to convey my sincere gratitude to Prof. A.K. Gupta (former H.O.D) and Prof. A. Trivedi (H.O.D.), and all the faculties of Civil Engineering Department, Delhi Technological University who have enlightened me during my project.

Most importantly, I would like thank my family for their unconditional support, love, and affection. Their encouragement and endless love made everything easier to achieve.

**VIKAS KUMAR SINGH**

**12/STR/2K10**

**MTECH (STRUCTURE)**

## TABLE OF CONTENTS

TITLE .....	i
CERTIFICATE .....	ii
DECLARATION .....	iii
ACKNOWLEDGEMENT .....	iv
TABLE OF CONTENTS .....	v
TABLE OF FIGURES .....	vii
LIST OF TABLE .....	ix
ABSTRACT .....	x
<b>Chapter 1 Introduction.....</b>	<b>1</b>
1.1 Introduction.....	2
1.2 Motivation of study.....	3
1.3 Specific points of study.....	7
1.4 Organization of dissertation .....	8
<b>Chapter 2 Objectives .....</b>	<b>9</b>
<b>Chapter 3 Literature review .....</b>	<b>10</b>
3.1 Literature review .....	10
3.2 Codal provisions .....	11
<b>Chapter 4 Programme of study .....</b>	<b>17</b>
4.1 Introduction.....	17
4.2 Input parameters.....	33
4.3 Earthquake lateral force analysis .....	35
4.4 Output parameters.....	38
4.5 Details of steps performed .....	40

<b>Chapter 5 Results and discussions.....</b>	<b>41</b>
<b>Conclusions.....</b>	<b>62</b>
<b>Scope of future study .....</b>	<b>62</b>
<b>References.....</b>	<b>63</b>
<b>Appendix 1.....</b>	<b>64</b>
<b>Appendix 2.....</b>	<b>101</b>
<b>Appendix 3.....</b>	<b>140</b>

## LIST OF FIGURES

FIGURE	PAGE
Figure – 1: reference of <a href="http://www.leightongeo.com/taiwan.htm">www.leightongeo.com/taiwan.htm</a> .....	4
Figure – 2: reference of <a href="http://www.eas.slu.edu/Earthquake_Center/TURKEY/">http://www.eas.slu.edu/Earthquake_Center/TURKEY/</a> .....	5
Figure – 3: Change in the lateral load transfer mechanism owing to inclusion of masonry infill walls .....	6
Figure – 4: Equivalent Diagonal Strut Model.....	11
Figure – 5: Details of equivalent strut .....	17
Figure – 6: Model 8.1: Bare frame .....	19
Figure – 7: Model 8.2: Masonry infill as diagonal strut .....	20
Figure – 8: Model 8.3: Masonry infill as surface element.....	21
Figure – 9: Model 6.1: Bare frame .....	22
Figure – 10: Model 6.2: Masonry infill as diagonal strut .....	23
Figure – 11: Model 6.3: Masonry infill as surface element .....	24
Figure – 12: Model 3.1: Bare frame.....	25
Figure – 13: Model 3.2: Masonry infill as diagonal strut .....	26
Figure – 14: Model 3.3: Masonry infill as surface element .....	27
Figure – 15: Model 8.3: Masonry infill as surface element – Rendered View .....	30
Figure – 16: Model 8.3: Masonry infill as surface element – 3D View .....	30
Figure – 17: Model 8.3: Masonry infill as surface element – Plan View .....	31
Figure – 18: Model 8.3: Masonry infill as surface element – Front View .....	31
Figure – 19: Comparison of Fundamental Natural Time Period of various structural System .....	40
Figure – 20: Comparison of Fundamental Natural Time Period of various structural System .....	41
Figure – 21: Comparison of Fundamental Natural Time Period of various structural System .....	41
Figure – 22: Comparison of Spectral acceleration & Design Seismic Coefficient of various structural System .....	42
Figure – 23: Comparison of Spectral acceleration & Design Seismic Coefficient of various structural System.....	43

Figure – 24: Comparison of Spectral acceleration & Design Seismic Coefficient of various structural System.....	44
Figure – 25: Comparison of Peak Storey Shear of various structural System .....	45
Figure – 26: Comparison of Peak Storey Shear of various structural System .....	46
Figure – 27: Comparison of Peak Storey Shear of various structural System .....	47
Figure – 28: Comparison of Storey Displacement of various structural System .....	49
Figure – 29: Comparison of Storey Displacement of various structural System .....	50
Figure – 30: Comparison of Storey Displacement of various structural System .....	51
Figure – 31: Corner, Peripheral & Centre Column & its Connecting Beam .....	52
Figure – 32: Designed Columns & Beam .....	53



## LIST OF TABLES

TABLE	PAGE
Table 1: Structural data.....	32
Table 2: Earthquake data .....	32
Table 3: Dead Load.....	32
Table 4: Live Load.....	33
Table 5: Fundamental Natural Time period (sec.) of Various Structural systems.....	40
Table 6: Fundamental Natural Time period (sec.) of Various Structural systems .....	40
Table 7: Fundamental Natural Time period (sec.) of Various Structural systems .....	41
Table 8: Spectral acceleration & Design Seismic Co-efficient 8 <sup>th</sup> storey buildings for Mode 1 ...	42
Table 9: Spectral acceleration & Design Seismic Co-efficient 6 <sup>th</sup> storey buildings for Mode 1.....	43
Table 10: Spectral acceleration & Design Seismic Co-efficient 3 <sup>rd</sup> storey buildings for Mode 1.	44
Table 11: Peak Storey Shear of 8 <sup>th</sup> storey buildings .....	45
Table 12: Peak Storey Shear of 6 <sup>th</sup> storey buildings .....	46
Table 13: Peak Storey Shear of 3 <sup>rd</sup> storey buildings .....	47
Table 14: Base Shear of 8 <sup>th</sup> storey buildings .....	48
Table 15: Base Shear of 6 <sup>th</sup> storey buildings .....	48
Table 16: Base Shear of 3 <sup>rd</sup> storey buildings .....	48
Table 17: Storey Displacement of 8 <sup>th</sup> storey buildings.....	49
Table 18: Storey Displacement of 6 <sup>th</sup> storey buildings.....	50
Table 19: Storey Displacement of 3 <sup>th</sup> storey buildings .....	51
Table 20: Parameters considered for design.....	52
Table 21: Reinforcement required in corner column 3 Storey building .....	53
Table 22: Reinforcement required in Peripheral column 3 Storey building.....	54
Table 23: Reinforcement required in Internal Column 3 Storey building.....	54

Table 24: Reinforcement required in Corner Column 6 Storey building .....	54
Table 25: Reinforcement required in Peripheral Column 6 Storey building .....	55
Table 26: Reinforcement required in Internal Column 6 Storey building.....	55
Table 27: Reinforcement required in Corner Column 8 Storey building.....	56
Table 28: Reinforcement required in Peripheral Column 8 Storey building.....	56
Table 29: Reinforcement required in Internal Column 8 Storey building.....	57
Table 30: Peripheral Beam: Model 3.1 - Bare Frame Model.....	58
Table 31: Peripheral Beam: Model 3.2 - Masonry infill as Diagonal Strut.....	58
Table 32: Peripheral Beam: Model 3.3 - Masonry infill as surface element.....	58
Table 33: Internal Beam: Model 3.1 - Bare Frame Model.....	58
Table 34: Internal Beam: Model 3.2 - Masonry infill as Diagonal Strut.....	59
Table 35: Internal Beam: Model 3.3 - Masonry infill as surface element.....	59
Table 36: Peripheral Beam: Model 6.1 - Bare Frame Model.....	59
Table 37: Peripheral Beam: Model 6.2 - Masonry infill as Diagonal Strut.....	59
Table 38: Peripheral Beam: Model 6.3 - Masonry infill as surface element.....	59
Table 39: Internal Beam: Model 6.1 - Bare Frame Model.....	60
Table 40: Internal Beam: Model 6.2 - Masonry infill as Diagonal Strut.....	60
Table 41: Internal Beam: Model 6.3 - Masonry infill as surface element.....	60
Table 42: Peripheral Beam: Model 8.1 - Bare Frame Model.....	60
Table 43: Peripheral Beam: Model 8.2 - Masonry infill as Diagonal Strut.....	60
Table 44: Peripheral Beam: Model 8.3 - Masonry infill as surface element.....	61
Table 45: Internal Beam: Model 8.1 - Bare Frame Model.....	61
Table 46: Internal Beam: Model 8.2 - Masonry infill as Diagonal Strut.....	<b>61</b>
Table 47: Internal Beam: Model 8.3 - Masonry infill as surface element.....	61

## **ABSTRACT**

Nine RC framed building with brick masonry infill were designed for same seismic hazard in accordance with IS code taking in to consideration of effect of Masonry.

Generally these buildings are analysed as RC framed structures with regards to structural action of masonry infill walls present and investigation has been made to study the behaviour of RC frames with various arrangement of infill when subjected to dynamic earthquake (dynamic) loading. The result of bare frame and frame with infill effect are compared and conclusion are made in view of *IS -1893(2002)* code.

Based on the present study, it can be concluded that It the performance of fully masonry infill panels was significantly superior to that of bare frame. Brick infill walls present in RC frame building reduce the structural drift but increases strength and stiffness. Therefore it is essential for the structural systems selected, to be thoroughly investigated and well understood by Engineers.