

CONTENTS

Chapters	Page
Chapter 1: INTRODUCTION	
1.1. Importance of Sustainable Cost Effective Rural Structures in India	
1.2. Scope of the Design.	
1.3. Advantages of Use of Steel in Frame of Structure over RCC	
Chapter 2: MAJOR DESIGN CONSIDERATION	
2.1 Methodology	
2.1.1 Collection of data for Planning	
2.1.2 Conceptualization & Preparation of Design Basis	
2.1.3 Consideration for Stability	
2.1.4 Consideration for Stability	
2.1.5 Design & Engineering of Typical Rural Housing Units	
2.2 Salient Features of Design & Engineering	
2.2.1 Steel in Frame	
2.2.2 Ferro-Cement Cladding	
Chapter 3: DESIGN OF STEEL INTENSIVE BUILDING	
3.1 Some of the Building Components for Rural Houses	
3.1.1 Roofing	
3.1.1 Structural Framework	
3.1.3 Flooring	
3.1.4 Doors and Windows	
Chapter 4: STRUCTURAL DRAWING & SKETCHES	
4.1 Architectural Plan of 350 sq. ft Floor Area of Unit Housing Under IAY	
4.2 Typical Detail of Unit Housing – Foundation Plan	
4.3 Typical Detail of Unit Housing – Plan at Tie Beam Level	

- 4.4 Typical Detail of Unit Housing – Foundation Details
- 4.5 Typical Detail of Unit Housing – Elevation Sheet 1
- 4.6 Typical Detail of Unit Housing – Elevation Sheet 2
- 4.7 Typical Detail of Unit Housing – Elevation Sheet 3
- 4.8 Typical Detail of Unit Housing – Miscellaneous Details
- 4.9 Architectural Plan of 400 sq. ft Floor Area of Anganwadi Centre
- 4.10 Typical Detail of Anganwari Centre – Foundation Plan
- 4.11 Typical Detail of Anganwari Centre – Foundation Details
- 4.12 Typical Detail of Anganwari Centre – Elevation Sheet 1
- 4.13 Typical Detail of Anganwari Centre – Elevation Sheet 2
- 4.14 Typical Detail of Anganwari Centre – Elevation Sheet 3
- 4.15 Typical Detail of Anganwari Centre – Elevation Sheet 4
- 4.16 Typical Detail of Anganwari Centre – Miscellaneous Details
- 4.17 Architectural Plan of 1500 sq. ft Floor Area of Meeting Hall
- 4.18 Typical Detail of Meeting Hall – Foundation Plan
- 4.19 Typical Detail of Meeting Hall – Plan at Tie Beam Level
- 4.20 Typical Detail of Meeting Hall – Foundation Details
- 4.21 Typical Detail of Meeting Hall – Elevation Sheet 1
- 4.22 Typical Detail of Meeting Hall – Elevation Sheet 2
- 4.23 Typical Detail of Meeting Hall – Elevation Sheet 3
- 4.24 Typical Detail of Meeting Hall – Plan at Eaves Level
- 4.25 Architectural Plan of 2300 sq. ft Floor Area of School Building
- 4.26 Typical Detail of School Building – Foundation Plan
- 4.27 Typical Detail of School Building – Plan at Tie Beam Level

- 4.28 Typical Detail of School Building – Foundation Details
- 4.29 Typical Detail of School Building – Elevation Sheet 1
- 4.30 Typical Detail of School Building – Elevation Sheet 2
- 4.31 Typical Detail of School Building – Elevation Sheet 3
- 4.32 Typical Detail of School Building – Elevation Sheet 4
- 4.33 Typical Detail of School Building – Plan at Eves Level

Chapter 5: QUANTITY ESTIMATION

- 5.1 Introduction
- 5.2 Item Rates
- 5.3 Quantities
- 5.4 Methodology of a the Typical Rural house
- 5.5 Bill of Quantities for Different Unit of Rural Buildings with General Civil & Structural Work

Chapter 6: CONCLUSION

REFERENCES