Steel Intensive Building for Rural Application

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To work in unison with all the stakeholders in the steel industry so as to evolve ways and means for more efficient use of steel and provide optimum value to the customer

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Steel Intensive Building
For Rural Application

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PREFACE

For the last couple of years, INSDAG has been engaged in various types of project work specially related to effective and efficient use of steel in buildings both for urban and rural sectors. An analysis of the housing situation in India shows that more urgent need exists for bringing out designs of affordable housing to the people. This publication is an outcome of a detailed study, structural analysis and cost estimation of a few selected structures of rural sector like rural school building, rural houses, panchayat or meeting hall and anganwadi or health centre. The purpose is to find out an optimum solution which is sound in strength and cost-effective and also to increase awareness of use of steel buildings in rural sector.

With this objective, INSDAG has collected some typical plans of different rural buildings from different local block offices and pachayat samities keeping in view the comfort of the end users and energy conservation of human habitation. INSDAG has designed four types of steel intensive rural buildings namely Unit housing under IAY, Anganwadi Centre, Meeting Hall and School Building. The buildings have been conceived with steel Square Hollow Sections (SHS) or Rectangular Hollow Sections (RHS) in frame and thin low cost ferrocement panels as cladding material for walls. The basic cost estimation of all the above buildings are done on the basis of CPWD rate applicable to any local sites in Kolkata and have been vetted by reputed consultants/contractors in India.

It is hoped that this publication will serve the requirement of architects, practicing engineers and professionals to adopt steel intensive construction in the rural sector.

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