

Development of Composite Plaster Using Mineral Additives & FGD Waste from desulphurisation Plant (SSP1074)

Period: 12 Months (January-2025 -December 2025)

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Sponsored by: M/S Hindalco Industry Limited, Mahan Unit Bargawan Singrauli, Madhya Pradesh

Objectives

- I. Plant visit, technical discussion and collection of FGD wastes/fly and other raw materials like OPC, Ground Granulated Blast-furnace Slag (GGBS) etc.
- II. II. Characterization of raw materials as per BIS methods
- III. III. Optimization of mix for development of composite plaster using FGD waste and mineral additives like fly ash and GGBS etc.
- IV. IV. Communication of inception report
- V. V. Evaluation of physical and mechanical properties of the trial mixes as per BIS methods and durability studies
- VI. Preparation of technical specifications of the optimized mix as composite plaster for various uses in construction sector in indoor as well as out applications
- VII. VII. Comparison of properties of developed product with various products available in market for similar application.
- VIII. Application Procedure for composite plaster in various uses.
- IX. Witness of laboratory and field trial of new developed product by Hindalco Ind. Ltd. representative.
- X. Communication of the interim report
- XI. Modifications of technical specifications based on Hindalco Ind. Ltd. representative feedback if any.
- XII. Testing procedure and acceptable limits of "Composite Plaster" plaster for future use.
- XIII. Training of Hindalco Ind. Ltd. personnel at plant site
- XIV. Writing and Submission of the final draft report
- XV. Submission of final report and presentation to Hindalco Ind. Ltd.
- XVI. Transfer of technology