

Lecture 4.31: Example of Mix design as per IS method for ordinary and standard grade of con...

Concrete Technology (DI04006011)

Civil Engineering Department

Lecture Agenda

- 1. Example of Mix design as per IS method for ordinary and standard grade of concrete without and with admixtures.
- 2. Summary and Q&A

4.5 Example of Mix design as per IS method f...

- Example without admixture: Given M25, slump 75mm, max aggregate 20mm. Calculate water 191 L, cement 382 kg/m³.
- Example with admixture (Superplasticizer): Reduces water requirement by 20%.
- Revised water content: 153 L. Revised cement content (for same w/c): 306 kg/m³ (Economical!).
- Check max cement limit (450 kg/m³) and min cement for exposure condition.
- Final mix proportions expressed as a weight ratio (e.g., Cement : Sand : Aggregate = 1 : 1.6 : 2.8).

Summary

- Recap of the specific material properties and methods discussed.
- Always refer back to the standard IS codes for parameter limits.