

SOP: Forecasting Raw Material Prices (Cement, Steel, Gravel)

1. Objective

To create a standardized process for forecasting monthly average prices of key construction materials (Cement, Steel, Gravel) using Excel's FORECAST.ETS function and visualizing trends through line charts.

2. Scope

This SOP applies to the forecasting phase of the procurement analytics project. It is intended for use by supply chain analysts and procurement planners creating monthly material price forecasts.

3. Tools Required

- Microsoft Excel (desktop version)
- Historical price data for at least 7 months
- Basic knowledge of Excel formulas and charting tools

4. Procedure

Follow the steps below for each material:

1. Step 1: Prepare the Data Table

- Column A: Month (e.g., 01/01/2025 to 01/12/2025)
- Column B: Average Market Price (historical, up to July)
- Column C: Company Spend Price (Optional)
- Column D: Forecast Price (to be generated)

2. Step 2: Apply the Forecast Formula

- Use the formula: =FORECAST.ETS(A9, B2:B8, A2:A8)
- Drag it down to fill future months (August to December)
- Ensure only the date reference changes (A9 to A10, etc.)

3. Step 3: Insert the Chart

- Highlight columns A, B, and D
- Insert a Line Chart with markers
- Customize chart title, legend, and colors

4. Output

- - One line chart per material (Cement, Steel, Gravel)
 - Forecasted values for each remaining month in 2025
 - Optional visual marker indicating forecast start point or use a text box to annotate 'Forecast Starts'

5. Notes

- Do not adjust the historical data range unless updating the full dataset
- Marker height should be close to the average price for visibility
- Forecast should be reviewed monthly and updated as new data comes in