What is Construction Sequencing?

Worksheet

Construction sequencing is the logical ordering of construction activities - such as foundations before framing, and framing before finishes - so each phase has what it needs to begin and the project runs efficiently.

Questions

1. A project has phases of 12, 30, 18, and 25 days run one after another. What is the total duration?

A) 55 days
B) 85 days
C) 60 days
D) 95 days

2. Why does construction sequencing matter?

A) It has no effect on cost or schedule
B) It prevents trades from blocking each other and avoids rework
C) It only matters for very small projects
D) It replaces the need for a foundation

3. Which phase must be complete before interior finishes typically begin?

A) Commissioning
B) MEP rough-in
C) Landscaping
D) Final handover

4. What best describes the building envelope phase?

A) Interior painting and flooring
B) Excavation and grading
C) Roof, exterior walls, windows, and waterproofing
D) Final punch-list inspection

5. A small commercial building has a foundation phase of 15 days, structural frame of 40 days, envelope of 20 days, and finishes of 30 days, all done sequentially. What is the total duration?

6. A contractor sequences a house build as: foundation 10 days, frame 25 days, envelope 15 days, finishes 20 days. Find the total project length if none of the phases overlap.

7. On a warehouse project, foundation takes 20 days and structural steel erection takes 35 days, running one after the other. How many days pass before the envelope phase can start?

8. Define: What is construction sequencing?

9. Define: Why must foundations come before framing?

10. Define: What is the building envelope?

Answer Key

1. B) 85 days - T = 12 + 30 + 18 + 25 = 85 days.

2. B) It prevents trades from blocking each other and avoids rework - A logical sequence keeps each trade's prerequisites ready, reducing delays and costly rework.

3. B) MEP rough-in - Rough-in of mechanical, electrical, and plumbing lines must be done before walls are closed with finishes.

4. C) Roof, exterior walls, windows, and waterproofing - The envelope phase closes in the structure to protect it from weather.

5. T = t1 + t2 + t3 + t4 = 15 + 40 + 20 + 30 = 105 days

6. T = 10 + 25 + 15 + 20 = 70 days

7. Envelope starts after foundation and frame are complete 20 + 35 = 55 days

8. The planned, logical order of construction activities from site prep to handover, so each phase has what it needs to start.

9. The structural frame needs a cured, load-bearing foundation to stand on and transfer its loads to the ground.

10. The exterior skin of a building - roof, walls, windows, and waterproofing - that separates inside from outside.