

3e.) Budget-Concrete Slab on Metal Deck

- In this exercise your Team will complete the Concrete Slab on Metal Deck estimate for inclusion in the Conceptual Estimate Summary where noted.
- Some information in the Concrete SOMD worksheet has been provided and you may assume this information is correct.
- Using the drawings and other supplemental information provided, obtain quantities for the various line items of work in the SOMD worksheet.
- Apply the appropriate unit rates for labor, material and equipment/subcontract to complete the estimate for this phase of work.
- Drawing References
 - S1.21-TYPICAL STEEL METAL DECK DETAILS
 - S2.06-2ND LEVEL FRAMING PLAN
 - S2.07-3RD LEVEL FRAMING PLAN
 - S2.08-4TH LEVEL FRAMING PLAN
 - S2.09-5TH LEVEL FRAMING PLAN
 - S2.10-ROOF PENTHOUSE FRAMING PLAN
 - S2.11-MECHANICAL PENTHOUSE ROOF FRAMING PLAN
- Other Information
 - Use D-1 steel decking mark everywhere deck is required on typical floors
 - Use D-1 and/or D-4 steel decking mark on the roof as indicated on the drawings
 - Effective SOMD place/finish ranges from 10,000sf to 16,000sf per day.
 - Budget 3000 psi hardrock concrete delivered at \$90/cy
 - Budget 3000 psi lightweight concrete delivered at \$110/cy
 - Concrete pump is \$220/hr + \$3.00/cy + \$100/day move in/out
 - Assume concrete pump averages 50cy/hr production
 - Based upon your pour cycle, figure the average cost/cy for pumping and use this average rate in the SOMD worksheet for concrete pumping
 - Concrete placing labor crew rate is \$52.00/mh, fully burdened
 - Assume a Laborer places 1.67cy of concrete per hour
 - Cement finishing labor crew rate is \$55.78/mh, fully burdened
 - Assume a Finisher trowel finishes 1000 sf of slab per day
 - Assume a Finisher broom finishes 1333 sf of slab per day