Problem 1: (Similar to Example Problem 12-1)

Design the formwork for 5” structural concrete floor slab. Use ¾” class I plyform for the sheathing and #2 Douglas-fir-larch for the rest of the lumber. The maximum deflection for bending members is taken as 1/360 of the span. Based on end conditions, the effective unbraced length of shores may be taken as 15 ft. Assume that the slab will to be 100 ft x 120 ft and placed in one operation.

The following conditioned for design have been established:

1. Joists and stringers will be designed based on adequate lateral bracing.
2. Joists, stringers, and shores are used under dry condition.
3. The formwork will be used one time for short duration.