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**Problem: THE 3 PART AND 4 PART CHAIN/CABLES ARE USEFUL FOR LIGHT LOADS. WHAT CAN BE USED FOR BIGGER, HEAVIER LOADS?**

Fig. 4-3C and 4-3D show two types of lift bars that are used for large slabs or boxes. They consist of steel beams and lifting chains or cables. The steel beams are designed using "American Institute of Steel Construction" (AISC) formulas and guidelines. Calculations should be made by someone familiar with engineering design formulas.

The magnitude of the "rated load" for lifting depends on the size of the beam and chain. The lift bar with a 4 point pick (fig. 4-3D) can be designed to place a vertical load on the insert and cables. This system works well in a production facility where a large number of pieces of concrete have identical insert patterns.

Many precast concrete plants make products with different insert patterns and the lift bar with fixed ends is not practical. The 2 point lift bar (fig. 4-3C) can be designed to provide a variety of insert patterns by an adjustment scheme such as displayed in fig. 4-12A and 4-12B.

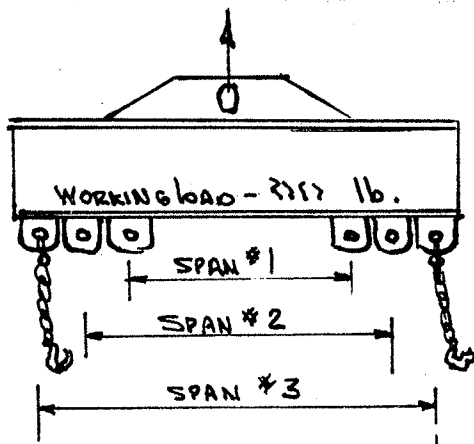


fig. 4-12A

Where headroom is not a problem, a steel beam can be used as a stiffener to spread two legs of a chain as shown in fig. 4-12C.

