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Selection of the correct anchor

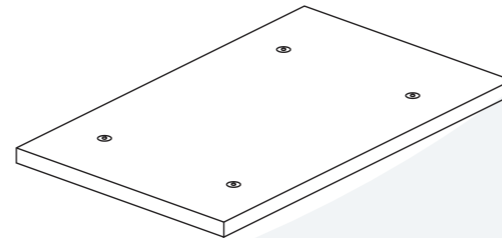
You must first determine if the anchor is to be used in the edge of walls as (1) or in slabs (2).

The allowable loads on each anchor are determined by several variable factors. These include concrete strength, anchor distance to edges and available reinforcement. For panels that are to be tilted from the horizontal to the vertical additional reinforcement must be applied to the anchor as shown on pages 2-5 to 2-8 inclusive.

1.



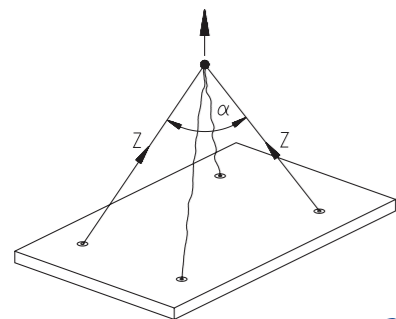
2.



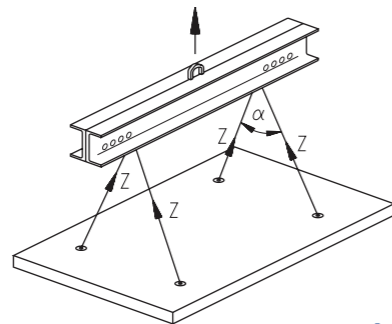
Design factors

1. weight of the unit
2. number of lifting points

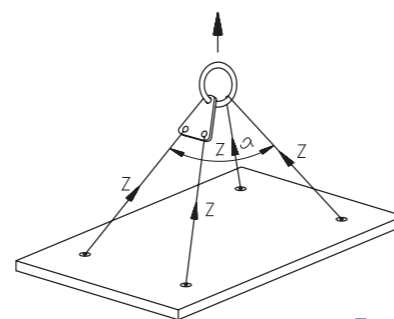
Two legged slings are statically determinate. Three legged slings are statically determinate provided the anchors are not in one line. Four legged slings are statically indeterminate. Spreader beam or tri-plate with four legged slings to make statically determinate.



3.



4.



5.

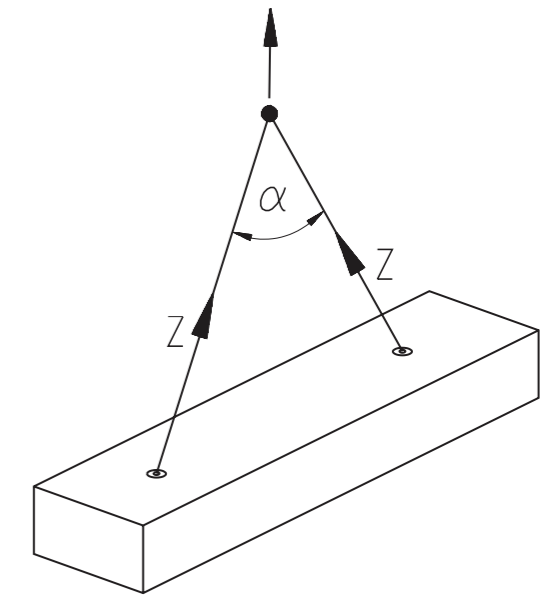
Lifting Systems Design Criteria

Chain Angles

The lower to the horizontal the chain angle, the greater the forces acting upon the anchors. The factors in the table below must be added to the weight of the unit.

Spread Angle

Angle α	Spread Angle Factor ω
0°	1
30°	1.04
60°	1.16
90°	1.41



Dynamic Factors

These are influenced by the length, type of the connecting cable or chain and hoisting speed. We recommend utilising the factors in the table on the right. If unsure as to which factor to apply please consult CFS.

Lift Equipment	Lifting Speed m/min.	Impact Factor ψ
Stationary Crane, Revolving Crane, Rail-mounted Crane	< 90	1.0
Stationary Crane, Revolving Crane, Rail-mounted Crane	≥ 90	≥ 1.3
Lifting and transporting with Excavator on even ground	-	≥ 1.65
Lifting and transporting with Excavator on uneven ground	-	≥ 2.0