

- 1. Each element must be stable after erection and offer resistance to wind, accidental impact, and loads that may be imposed due to other construction operations, Fig (3.15).

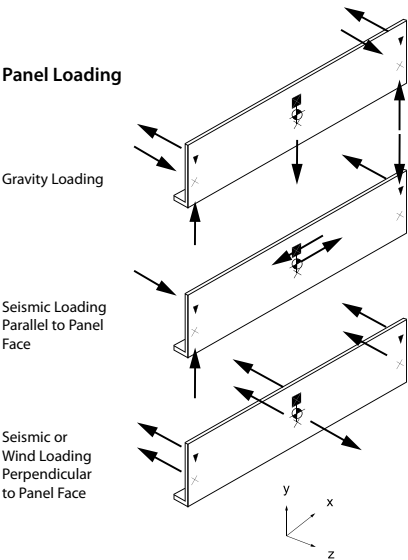


Fig. (3.15) Example of Precast panel with Earthquake loading

- 2. Surfaces shall intend to remain free of discernible cracks by limiting the flexural tension to the modulus of rupture modified by a suitable safety factor.
- 3. The arrangement of temporary bracing should not interfere with adjacent erection and other construction processes. Bracing must be maintained until permanent connections are completed.
- 4. Please refer to BS8110-1997 section 6.2.11 and PCI Section: 5.2.4.2.
- 5. The method used for transporting pre cast concrete products shall be considered in the structural design including size and weight limitations and the dynamic effects imposed by road conditions, Figs. (3.16 a,b & c).

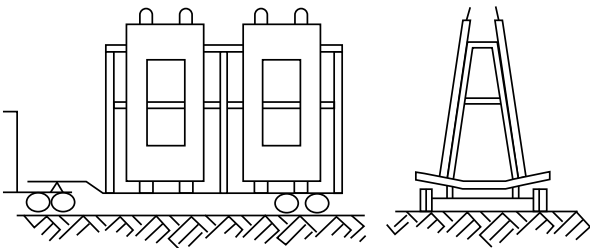


Fig. (3.16a) Transporting single-story panels

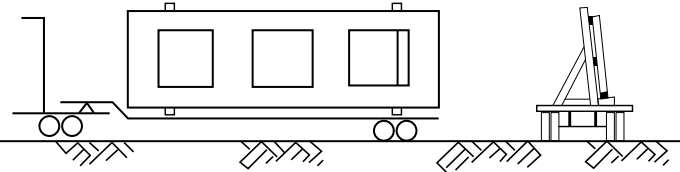
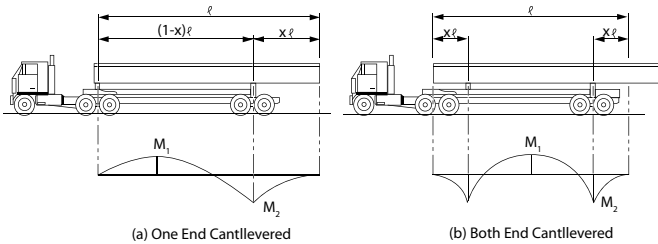


Fig. (3.16b) Transporting of long panels



$$x = \frac{1}{2} \left[1 + \sqrt{\frac{y_b}{y_t}} - \sqrt{1 + \frac{y_b}{y_t}} \right]$$

$$x = \frac{1}{2 \left[1 + \sqrt{1 + \frac{y_b}{y_t}} \right]}$$

Where:
 y_b = distance from the bending axis to the bottom fiber
 y_t = distance from the bending axis to the top fiber

Fig. (3.16c) Equations for Equal Tensile Stresses at top and bottom of member