

DIMENSIONAL TOLERANCES

The Prestressed Concrete Institute's recommended dimensional tolerances for Strescore plank are:

- A. Length: $\pm 1/2$ inch
- B. Width: $\pm 1/4$ inch
- C. Depth: $\pm 1/4$ inch
- D. Position of individual strands: $\pm 1/2$ inch
- E. Position of strand group: $\pm 1/4$ inch
- F. Squareness of ends: $\pm 1/2$ inch
- G. Position of openings: ± 2 inches
- H. Positions of plates: ± 2 Inches

CAMBER

Camber is the upward deflection of a prestressed member and resulting from the eccentricity between the prestressing force and the center of gravity of the cross section. Since both prestressing area and eccentricity are established by the required design load and span length, camber is a result of the design rather than a design parameter.

Camber and deflection will change with time due to concrete creep, prestress loss, and the amount of prestressing. The time dependant cambers and deflections are not predictable with any degree of accuracy, and any calculation of long term movement must be considered to be only an estimate.

Also, adjacent plank having different lengths, strand patterns or openings will have differential camber. This may be minimized by leveling during erection.



STRESCORE PLANK DESIGN CHECKLIST

This Strescore checklist has been developed to assist the Architect and/or Engineer in developing plans and specifications. Please contact Strescon Limited regarding your requirements.

1. FIRE RATINGS:

- A. What is the fire rating? If more than 2 hours is required, contact Strescon Limited.

2. LOADING CONDITIONS

- A. Are loads specified on the drawing?
- B. Are there line loads (such as masonry walls or face brick) supported on plank, in addition to specified uniform loads? If yes, capacity of plank should be checked.
- C. Are there concentrated loads (such as columns or mechanical equipment) supported on plank, in addition to specified uniform loads?
- D. Roof loads
 - 1. Are there vertical protrusions such as parapets, penthouses, stair wells, elevator shafts, adjacent buildings, etc.? If so, snow drift load must be factored into the design.
 - 2. Do higher roofs from this building or adjacent buildings deposit snow on this building? If so, special design is required for sliding snow.
 - 3. Will plank yield positive camber for adequate drainage? Is roof drainage system shown?
 - 4. Is there roof fill? Additional loads will result.
- E. Does plank support stairs?

3. TOPPINGS

- A. Is topping truly composite? Topping separated by a vapor barrier or insulation is not composite.
- B. If a level floor is required, 1" to 2" additional topping may be required at ends to compensate for camber.

4. EXPANSION JOINTS

- A. Do contract drawings show expansion joints? If building is greater than 200' long or has a floor plan shape such as L, Y, or H, expansion joints should be provided.

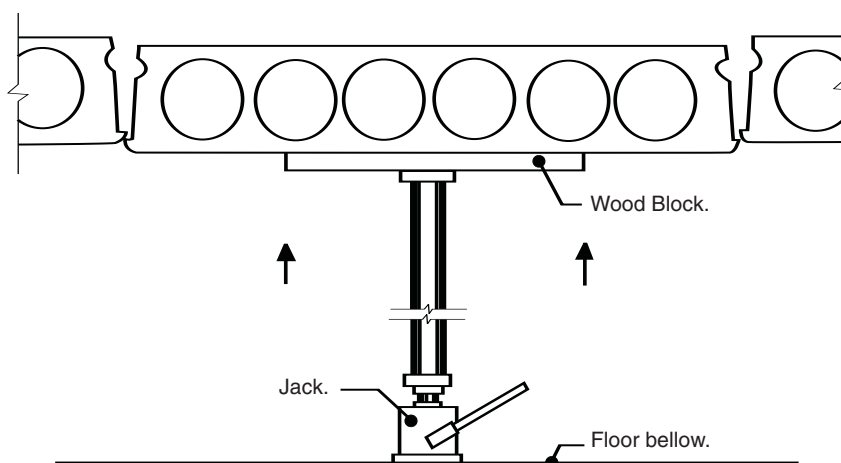
5. CAMBERS OR DEFLECTIONS

- A. Camber is inherent in most prestressed products. It is the result of the eccentric prestress force required to carry loads and the span over which the loads must be carried. Camber cannot be designed to an exact number.
- B. Plank of different spans and loadings will have different camber. Flash patching by others, to level floors will be required.



- C. Conditions requiring review of camber
1. Avoid heavy masonry wall loads parallel to span.
 2. Consult Strescon Limited for all non-uniform loading cases to ensure ultimate strength and deflection criteria can be met.

LEVELING OF PLANKS



- When Strescore planks are uneven, they can be leveled from the underside using jacks.
- Place the jacks near the center of the plank span. Gently lift until the bottom of the planks are even.
- Grout the joint and leave support under plank until grout is cured.
- If top joints are uneven, use Gyp-Crete or equivalent material for feathering and leveling.