DESIGN ASSUMPTIONS

GENERAL NOTES

- Design loading: SM1600.
- Maximum gap between PSC planks: 320mm.
- Deck: 180mm.
- Nominal thickness of cast-in-place reinforced concrete: 300mm.
- Mass of plank is approximately 9.0 tonnes.
- During storage, transport, and handling, plank shall be in an upright position and supported at not more than 600mm from each end.
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- Temperature and relative humidity in range 50% - 75%.
- Storage in open air, after steam curing, at 20 deg C average temperature.
- Steam curing at 70 deg C for 8 hours after casting.
- Elastic modulus at transfer = 32 800 MPa.
- Density: 2550 kg/cu m.
- Calculated hog of plank at transfer is 12mm.
- By the application of epoxy resin.
- The end of plank and exposed strands sealed against corrosion.
- After transfer of prestress, strands shall be cut flush with the end of plank and exposed strands sealed against corrosion by the application of epoxy resin.
- Calculated hog of plank at transfer is 12mm.
- And 18mm at 28 days, assuming:
  - Density = 2550 kg/m3.
  - Elastic modulus at transfer = 32 800 MPa.
  - Steam curing at 20 deg C for 6 hours after casting.
  - Storage in open air, after steam curing, at 20 deg C average temperature and relative humidity in range 50% - 75%.
  - No loads except plank self weight.
  - Mass of plank is approximately 9 tonnes.
  - During storage, transport, and handling, plank shall be in an upright position and supported at not more than 600mm from each end.

STANDARD DRAWING

- PSC plank girder: 14m span.
- The maximum gap between PSC planks: 320mm.
- Design loading: SM1600.