DESIGN ASSUMPTIONS

GENERAL NOTES

SCALE

DESIGN LOADING: SM1600.

THE MAXIMUM GAP BETWEEN PSC PLANKS: 320mm.

DECK: 180mm.

THE NOMINAL THICKNESS OF CAST-IN-PLACE REINFORCED CONCRETE IS 300mm.

EACH END.

UPRIGHT POSITION AND SUPPORTED AT NOT MORE THAN 600mm FROM DURING STORAGE, TRANSPORT AND HANDLING, PLANK SHALL BE IN AN

MASS OF PLANK IS APPROXIMATELY 8.3 TONNES.

-NONE LOADS EXCEPT PLANK SELF WEIGHT

TEMPERATURE AND RELATIVE HUMIDITY IN RANGE 50% - 75%

STORAGE IN OPEN AIR, AFTER STEAM CURING, AT 20 deg C AVERAGE

- STEAM CURING AT 70 deg C FOR 8 HOURS AFTER CASTING

- ELASTIC MODULUS AT TRANSFER = 32 800 MPa

- DENSITY = 2550 kg/cu m

AND IS 18mm AT 28 DAYS, ASSUMING:

CALCULATED HOG OF PLANK AT TRANSFER IS 11mm

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

BE 138 kN.

THE FORCE IN EACH 12.7mm DIA STRAND AT THE MID-SPAN OF THE PLANK

FORCE OF 184 kN.

STRENGTH 1870 MPa, RELAX 2, TO AS/NZS 4672.1 WITH MINIMUM BREAKING

STRANDS SHALL BE 7-WIRE, ORDINARY, DIAMETER 12.7mm, TENSILE

TABLE OR FORM VIBRATORS.

STEELFORMWORK MOULD WITH INTENSE COMPACTION USING A VIBRATING

THE COVER SPECIFIED IS BASED ON THE PLANK BEING CAST IN A RIGID

SURFACE SHALL BE 35mm UNLESS SPECIFIED OTHERWISE.

NOMINAL COVER TO REINFORCEMENT NEAREST TO THE CONCRETE

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT TRANSFER

MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 50 MPa.

CONCRETE EXPOSURE CLASSIFICATION: ...

S

X

STANDARD BAR SHAPES DIAGRAM

DIMENSIONS SHOWN ON BAR SHAPES DIAGRAM ARE MEASURED FROM THE OUTSIDE FACES OF THE BARS AND ARE IN MILLIMETRES. BAR SIZE IS THE NOMINAL DIAMETER IN MILLIMETRES. THE INCLUDED ANGLE OF ANY BEND SHALL BE A RIGHT ANGLE.

ALL BENDS SHALL BE FITMENT BENDS IN ACCORDANCE WITH AS 5100.5.13.

DESIGN ASSUMPTIONS

THE NOMINAL THICKNESS OF CAST-IN-PLACE REINFORCED CONCRETE DECK IS 180mm.

THE MAXIMUM GAP BETWEEN PSC PLANKS IS 320mm.

DESIGN LOADING: SM1600.