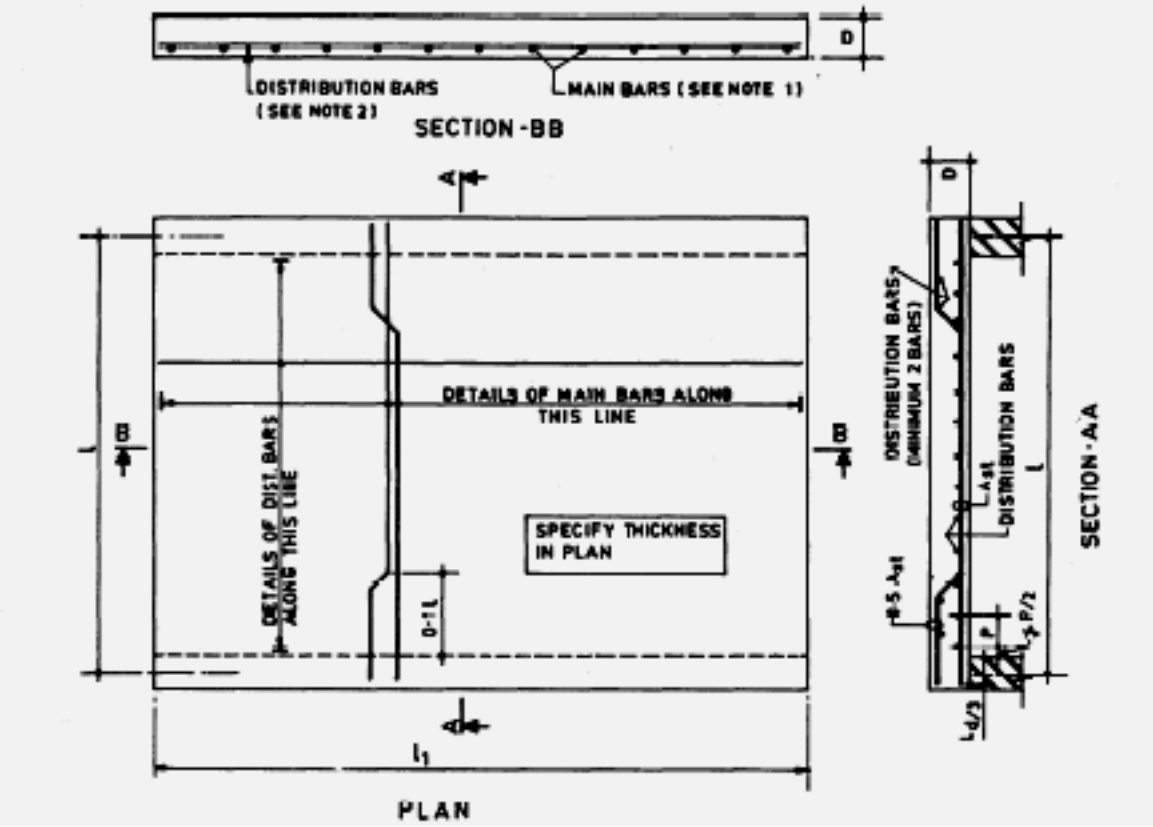
FAQs

1. **Give reinforcement detailing of one way simply supported slab as per SP:34**



Reinforcement detailing – One way simply supported slab

2. **Explain the provisions for detailing of reinforcement for slab as per IS 456-2000.**

   Slabs are considered as divided in each direction into middle and end strips

   The maximum moments obtained using equations are apply only to middle strip.

   50% of the tension reinforcement provided at midspan in the middle strip shall extend in the lower part of the slab to within 0.25l of a continuous edge or 0.15l of a discontinuous edge and the remaining 50% shall extend into support.

   50% of tension reinforcement at top of a continuous edge shall be extended for a distance of 0.15l on each side from the support and atleast 50% shall be provided for a distance of 0.3l on each face from the support.

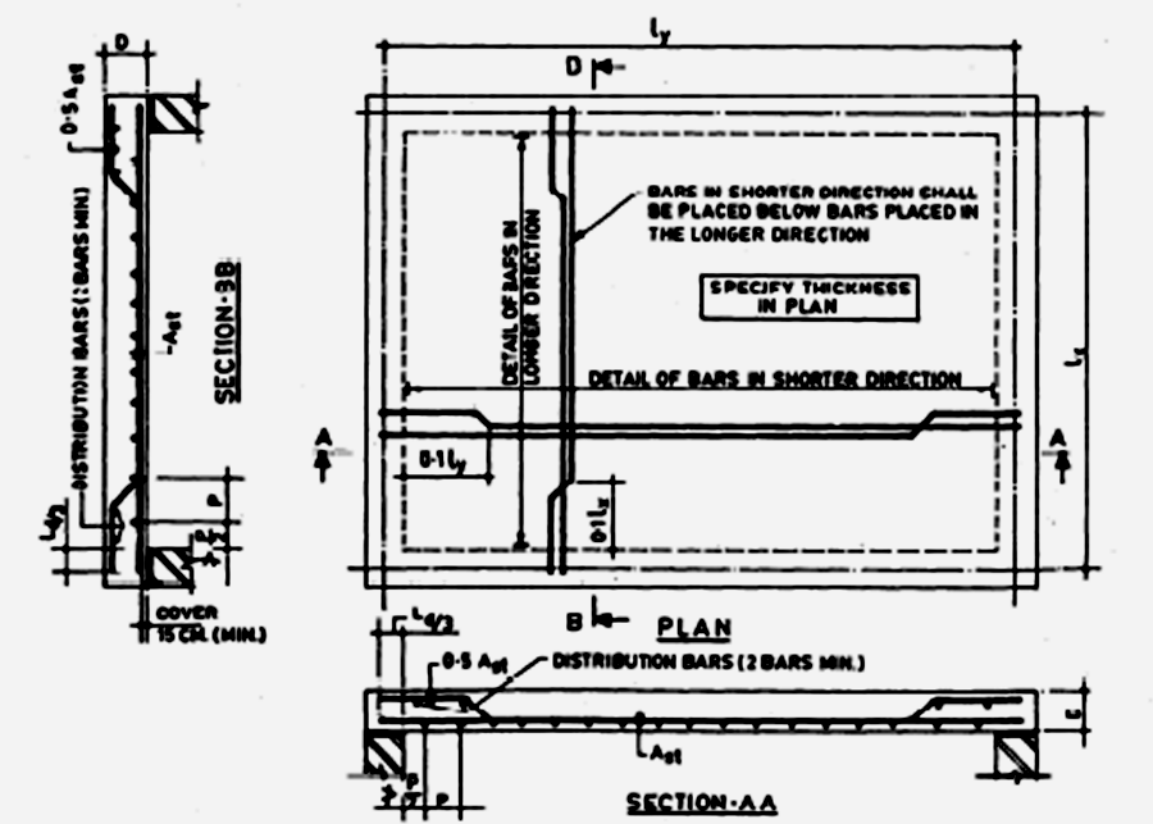
   At discontinuous edge, negative moment may arise, in general 50% of mid span steel shall be extended into the span for a distance of 0.1l at top.

   Minimum steel can be provided in the edge strip

   Tension steel shall be provided at corner in the form of grid (in two directions) at top and bottom of slab where the slab is discontinuous at both the edges.

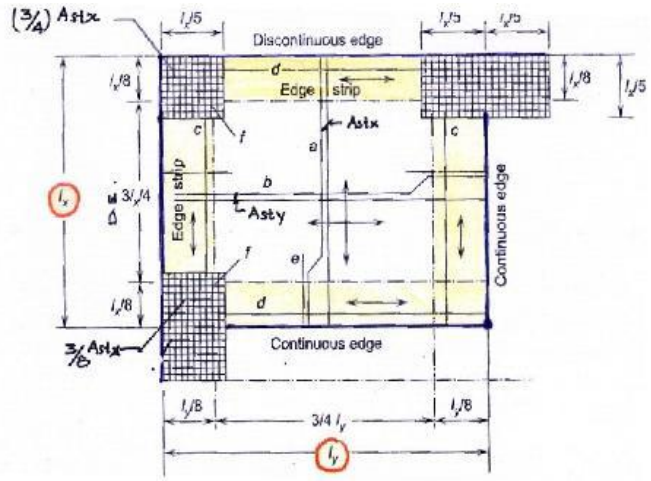
This area of steel in each layer in each direction shall be equal to ¾ the area required (A_{st}) for maximum mid span moment. This steel shall extend from the edges for a distance of $l_x/5$. The area of steel shall be reduced to half (3/8 $A_{st}x$) at corners containing edges over only one edge is continuous and other is discontinuous.

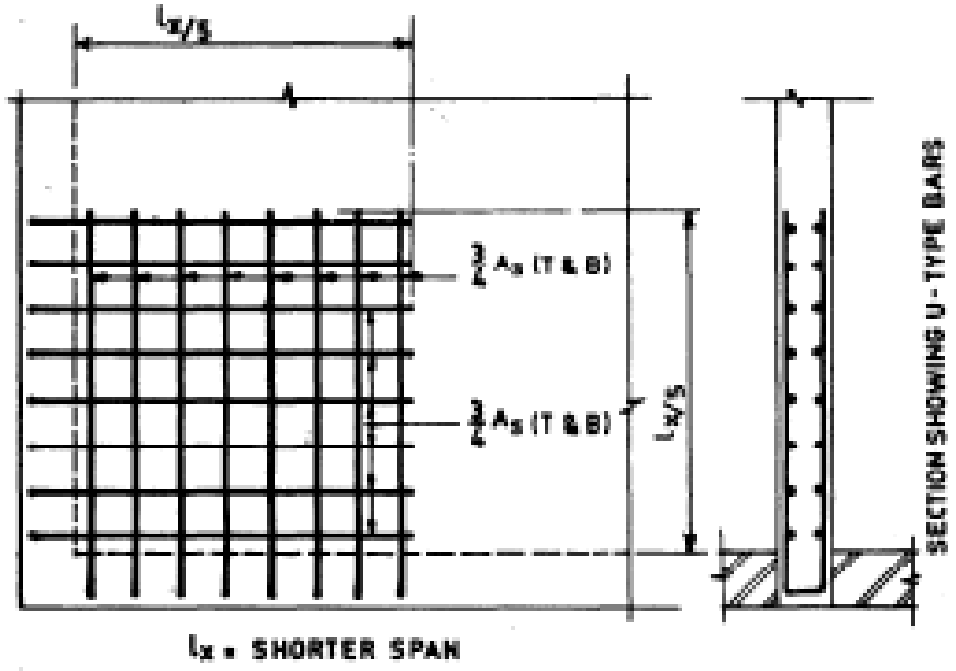
3. Give reinforcement detailing of two way simply supported slab as per SP:34



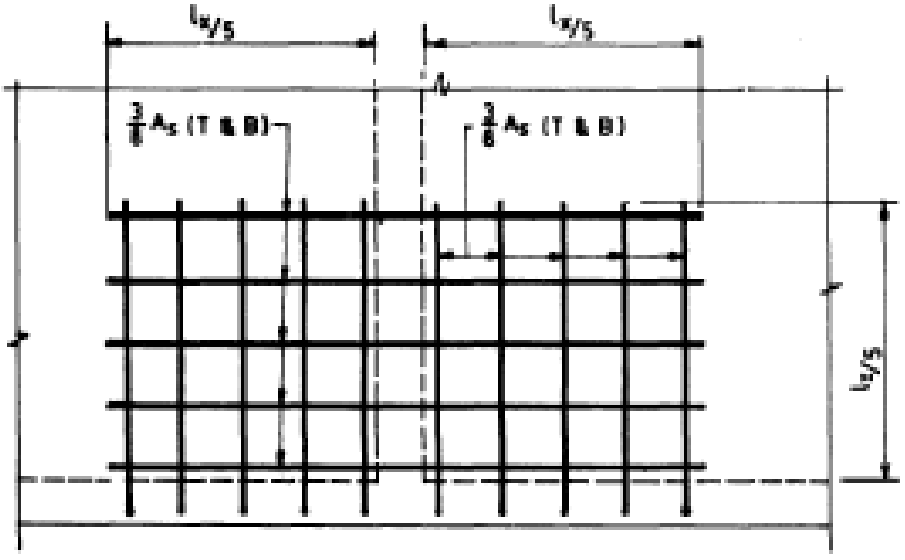
Reinforcement detailing – Two way simply supported slab

4. Give torsional reinforcement detailing of two way simply supported slab as per SP:34





9.4A Corner with Two Discontinuous Ends



9.4B Corner with One Discontinuous End

FIG. 9.4 TORSIONAL REINFORCEMENT IN SLABS

Torsional reinforcement detailing – Two way simply supported slab