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CODE

7.7.4.1 External tendons shall be attached to the member in a manner that maintains the specified eccentricity between the tendons and the concrete centroid through the full range of anticipated member deflections.

7.7.4.2 If nonprestressed reinforcement is required to satisfy flexural strength, the detailing requirements of 7.7.3 shall be satisfied.

7.7.4.3 *Termination of prestressed reinforcement*

7.7.4.3.1 Post-tensioned anchorage zones shall be designed and detailed in accordance with 25.9.

7.7.4.3.2 Post-tensioning anchorages and couplers shall be designed and detailed in accordance with 25.8.

7.7.4.4 *Termination of deformed reinforcement in slabs with unbonded tendons*

7.7.4.4.1 Length of deformed reinforcement required by 7.6.2.3 shall be in accordance with (a) and (b):

(a) At least $\ell_n/3$ in positive moment areas and be centered in those areas
(b) At least $\ell_n/6$ on each side of the face of support

7.7.5 *Shear reinforcement*

7.7.5.1 If shear reinforcement is required, transverse reinforcement shall be detailed according to 9.7.6.2.

7.7.6 *Shrinkage and temperature reinforcement*

7.7.6.1 Shrinkage and temperature reinforcement in accordance with 7.6.4 shall be placed perpendicular to flexural reinforcement.

7.7.6.2 *Nonprestressed reinforcement*

7.7.6.2.1 Spacing of deformed shrinkage and temperature reinforcement shall not exceed the lesser of $5h$ and 450 mm.

7.7.6.3 *Prestressed reinforcement*

7.7.6.3.1 Spacing of slab tendons required by 7.6.4.2 and the distance between face of beam or wall to the nearest slab tendon shall not exceed 1.8 m.

7.7.6.3.2 If spacing of slab tendons exceeds 1.4 m, additional deformed shrinkage and temperature reinforcement conforming to 24.4.3 shall be provided parallel to the tendons, except 24.4.3.4 need not be satisfied. In calculating the area of additional reinforcement, it shall be permitted to take the gross concrete area in 24.4.3.2 as the slab area

COMMENTARY

R7.7.4.4 *Termination of deformed reinforcement in slabs with unbonded tendons*

Requirements for termination of deformed reinforcement in one-way slabs with unbonded tendons are the same as those for beams. Refer to R9.7.4.4 for additional information.

R7.7.6 *Shrinkage and temperature reinforcement*

R7.7.6.3 *Prestressed reinforcement*

R7.7.6.3.2 Widely spaced tendons result in non-uniform compressive stresses near the slab edges. The additional reinforcement is to reinforce regions near the slab edge that may be inadequately compressed. Placement of this reinforcement is illustrated in Fig. R7.7.6.3.2.

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