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8.7.5.3 Bonded longitudinal reinforcement required by Eq. (8.6.2.3(c)) shall be placed in the top of the slab, and shall be in accordance with (a) through (c):

(a) Reinforcement shall be distributed between lines that are **1.5*h*** outside opposite faces of the column support.
(b) At least four deformed bars, deformed wires, or bonded strands shall be provided in each direction.
(c) Maximum spacing ***s*** between bonded longitudinal reinforcement shall not exceed 300 mm.

8.7.5.4 *Termination of prestressed reinforcement*

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

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

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

8.7.5.5.1 Length of deformed reinforcement required by 8.6.2.3 shall be in accordance with (a) and (b):

(a) In positive moment areas, length of reinforcement shall be at least $\ell_n/3$ and be centered in those areas
(b) In negative moment areas, reinforcement shall extend at least $\ell_n/6$ on each side of the face of support

8.7.5.6 *Structural integrity*

8.7.5.6.1 Except as permitted in 8.7.5.6.3, at least two tendons with 12.7 mm diameter or larger strand shall be placed in each direction at columns in accordance with (a) or (b):

(a) Tendons shall pass through the region bounded by the longitudinal reinforcement of the column.
(b) Tendons shall be anchored within the region bounded by the longitudinal reinforcement of the column, and the anchorage shall be located beyond the column centroid and away from the anchored span.

8.7.5.6.2 Outside of the column and shear cap faces, the two structural integrity tendons required by 8.7.5.6.1 shall pass under any orthogonal tendons in adjacent spans.

COMMENTARY

loads in accordance with 22.3.2, or by tensile stresses at service load in accordance with Eq. (8.6.2.3(b)).

R8.7.5.5 *Termination of deformed reinforcement in slabs with unbonded tendons*

R8.7.5.5.1 The minimum lengths apply for bonded reinforcement required by 8.6.2.3, but not required for flexural strength in accordance with 22.3.2. Research (Odello and Mehta 1967) on continuous spans shows that these minimum lengths provide adequate behavior under service load and factored load conditions.

R8.7.5.6 *Structural integrity*

R8.7.5.6.1 Prestressing tendons that pass through the slab-column joint at any location over the depth of the slab suspend the slab following a punching shear failure, provided the tendons are continuous through or anchored within the region bounded by the longitudinal reinforcement of the column and are prevented from bursting through the top surface of the slab (ACI 352.1R).

R8.7.5.6.2 Between column or shear cap faces, structural integrity tendons should pass below the orthogonal tendons from adjacent spans so that vertical movements of the integrity tendons are restrained by the orthogonal tendons. Where tendons are distributed in one direction and banded in the orthogonal direction, this requirement can be satisfied by first placing the integrity tendons for the distributed tendon direction and then placing the banded tendons. Where tendons are