## CODE

## COMMENTARY

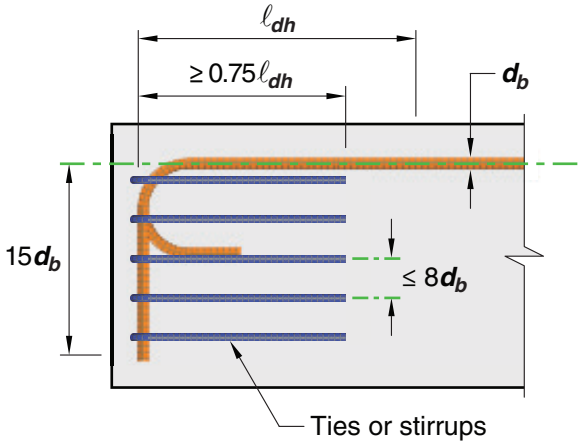


***Fig. R25.4.3.3a****—Confining reinforcement placed parallel to the bar being developed that contributes to anchorage strength of both 90- and 180-degree hooked bars.*

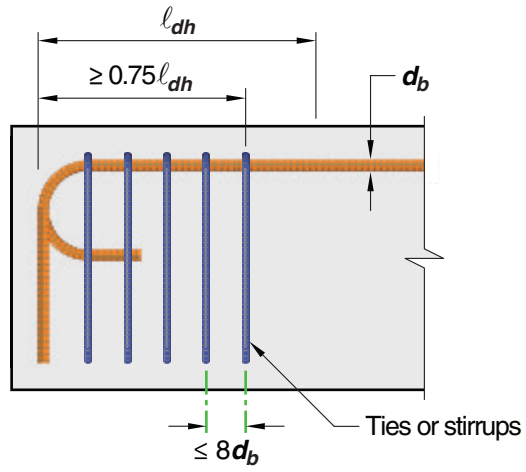


***Fig. R25.4.3.3b****—Confining reinforcement placed perpendicular to the bar being developed, spaced along the development length $\ell_{dh}$, that contributes to anchorage strength of both 90- and 180-degree hooked bars.*

**25.4.3.4** For bars being developed by a standard hook at discontinuous ends of members with both side cover and top (or bottom) cover to hook less than 65 mm, (a) and (b) shall be satisfied:

(a) The hook shall be enclosed along $\ell_{dh}$ within ties or stirrups perpendicular to $\ell_{dh}$ at $s \leq 3d_b$

(b) The first tie or stirrup shall enclose the bent portion of the hook within $2d_b$ of the outside of the bend

where $d_b$ is the nominal diameter of the hooked bar.

**R25.4.3.4** Hooked bars are especially susceptible to a concrete splitting failure if both side cover (perpendicular to plane of hook) and top or bottom cover (in plane of hook) are small (refer to Fig. R25.4.3.4). Transverse reinforcement is required to provide additional splitting resistance. This provision applies at ends of simply-supported beams, at the free end of cantilevers, and at exterior joints for members framing into a joint where members do not extend beyond the joint. This provision does not apply for hooked bars at discontinuous ends of slabs where confinement is provided by the slab on both sides, perpendicular to the plane of the hook.