

CODE

COMMENTARY

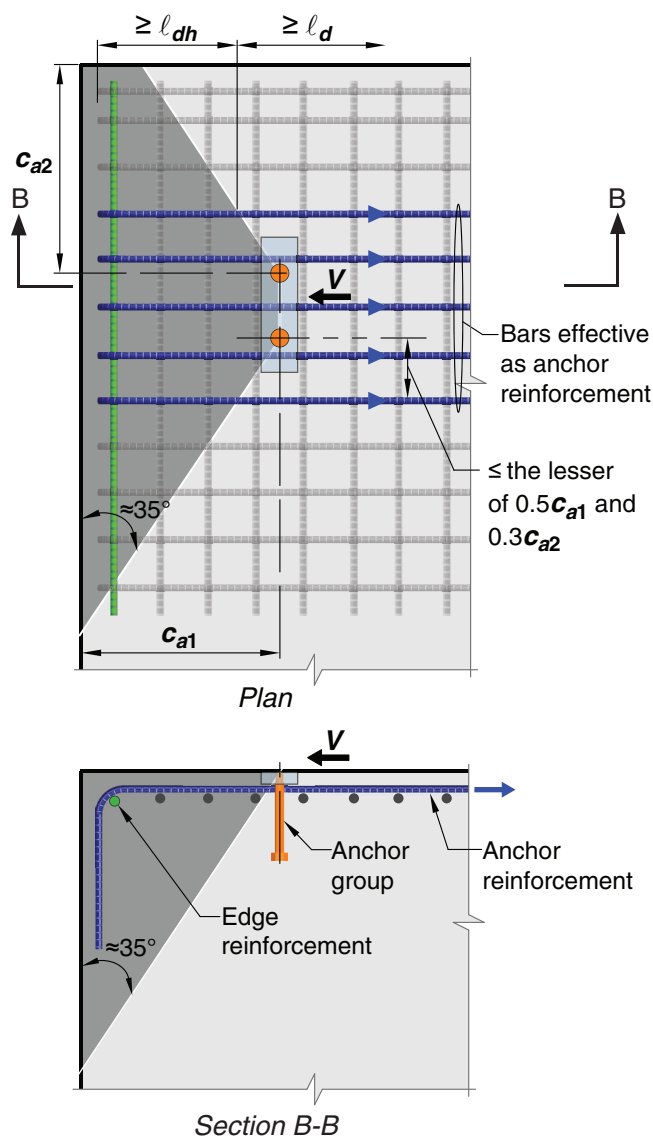


Fig. R17.5.2.1b(ii)—Edge reinforcement and anchor reinforcement for shear.

17.5.2.2 Design of adhesive anchors to resist sustained tension shall satisfy Eq. (17.5.2.2)

$$0.55\phi N_{ba} \geq N_{ua,s} \quad (17.5.2.2)$$

where N_{ba} is basic bond strength in tension of a single adhesive anchor and $N_{ua,s}$ is the factored sustained tensile load.

R17.5.2.2 For adhesive anchors that resist sustained tensile load, an additional calculation for the sustained portion of the factored load for a reduced bond resistance is required to account for possible bond strength reductions under sustained tension. The resistance of adhesive anchors to sustained tension is particularly dependent on correct installation, including hole cleaning, adhesive metering and mixing, and prevention of voids in the adhesive bond line (annular gap). In addition, care should be taken in the selection of the correct adhesive and bond strength for the expected on-site conditions such as the concrete condition during installation (dry or saturated, cold or hot), the drilling method used (rotary impact drill, rock drill, or core drill), and anticipated in-service temperature variations in the concrete.