

CODE

COMMENTARY

should be determined based on the concrete breakout surface originating at the shear lug (Fig. R17.11.3.1).

The nominal concrete breakout strength of a shear lug is based on Eq. (17.7.2.2.1b) for V_b that applies to concrete edge failure in shear for large diameter anchors.

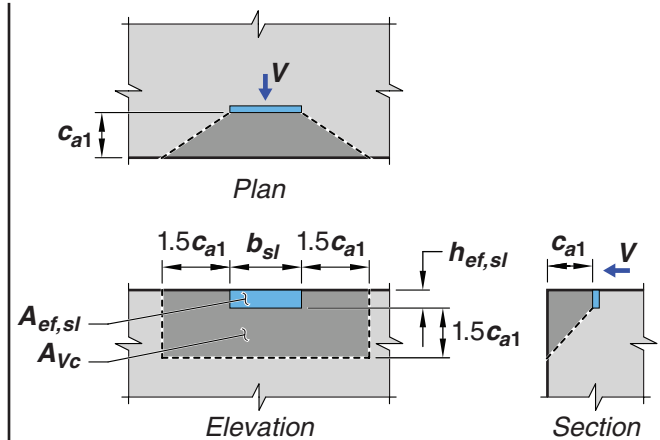


Fig. R17.11.3.1—Example of A_{vc} for a shear lug near an edge.

17.11.3.2 Nominal concrete breakout strength of a shear lug for shear parallel to the edge shall be permitted to be determined in accordance with 17.7.2.1(c) using Eq. (17.7.2.1(a)) with c_{a1} taken as the distance from the edge to the center of the shear lug and with $\psi_{ec,V}$ taken as 1.0.

17.11.3.3 For shear lugs located at a corner, the limiting concrete breakout strength shall be determined for each edge, and the minimum value shall be used.

17.11.3.4 For cases with multiple shear lugs, the concrete breakout strength shall be determined for each potential breakout surface.

R17.11.3.2 The concrete breakout strength for shear lugs loaded parallel to the edge is based on 17.7.2.1(c) for concrete failure with load applied parallel to the free edge, assuming shear lug breakout behavior is similar to that of a single anchor.

R17.11.3.3 The concrete breakout strength for shear lugs located near a corner is based on 17.7.2.1(d) for anchors.

R17.11.3.4 The concrete breakout strength for multiple shear lugs is based on R17.7.2.1 and shown in Fig. R17.7.2.1b Case 1 and Case 2.