CODE

COMMENTARY

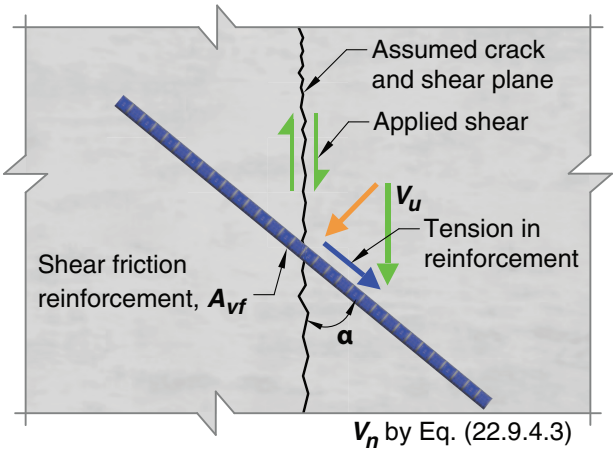

***Fig. R22.9.4.3a**—Tension in shear friction reinforcement.*

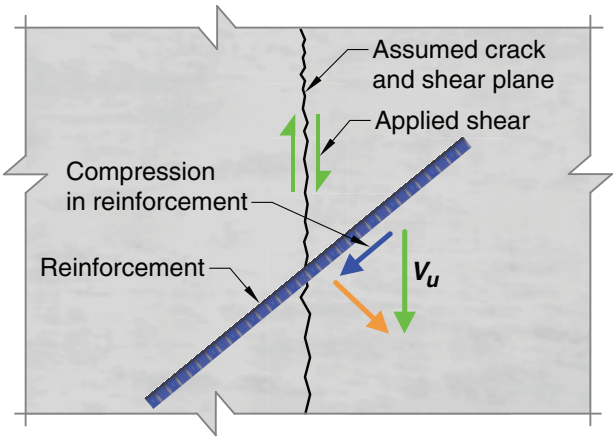

***Fig. R22.9.4.3b**—Compression in reinforcement.*

22.9.4.4 The value of V_n across the assumed shear plane shall not exceed the limits in Table 22.9.4.4. Where concretes of different strengths are cast against each other, the lesser value of f_c' shall be used in Table 22.9.4.4.

Table 22.9.4.4—Maximum V_n across the assumed shear plane

Condition	Maximum V_n		
Normalweight concrete placed monolithically or placed against hardened concrete intentionally roughened to a full amplitude of approximately 6 mm	Least of (a), (b), and (c)	$0.2f_c'A_c$	(a)
		$(3.3 + 0.08f_c')A_c$	(b)
		$11A_c$	(c)
Other cases	Lesser of (d) and (e)	$0.2f_c'A_c$	(d)
		$5.5A_c$	(e)

R22.9.4.4 Upper limits on shear friction strength are necessary, as Eq. (22.9.4.2) and (22.9.4.3) may become unconservative for some cases (Kahn and Mitchell 2002; Mattock 2001).

22.9.4.5 Permanent net compression across the shear plane shall be permitted to be added to $A_{vf}f_y$, the force in the shear-friction reinforcement, to calculate required A_{vf}.

R22.9.4.5 This provision is supported by test data (Mattock and Hawkins 1972) and should be used to reduce the amount of shear-friction reinforcement required only if the compressive force across the shear plane is permanent.