

Development ℓ_{dh} of Standard Hooks

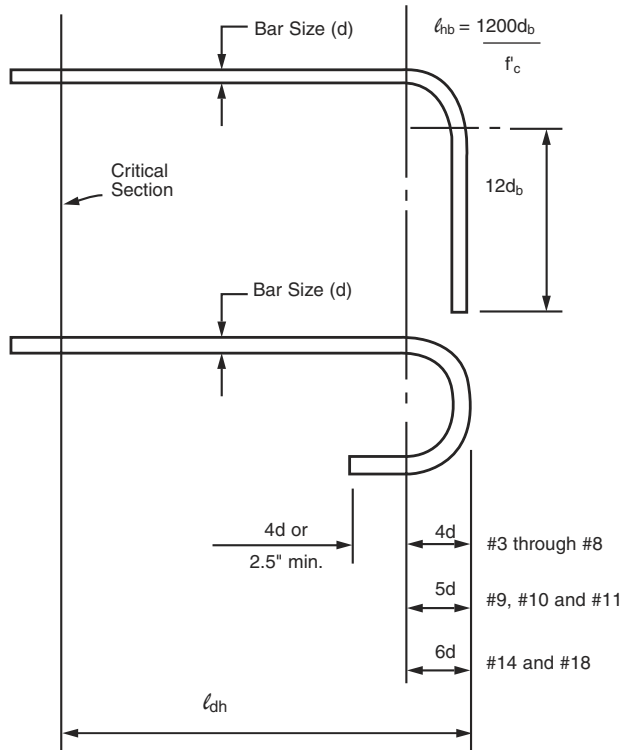


Table 1.9 ACI Hook Development Lengths for $f'_c = 3,000$ to 5,000 psi

Bar Size	$f'_c = 3,000$ psi	$f'_c = 4,000$ psi	$f'_c = 5,000$ psi
#3 [#10]	9	7	7
#4 [#13]	11	10	9
#5 [#16]	14	12	11
#6 [#19]	17	15	13
#7 [#22]	19	17	15
#8 [#25]	22	19	17
#9 [#29]	25	22	19
#10 [#32]	28	24	22
#11 [#36]	31	27	24
#14 [#43]	37	32	29
#18 [#57]	50	43	39

Notes:

1. Tabulated values are based on Grade 60 reinforcing bars and normal-weight concrete.
2. Tension development lengths of standard hooks are based on ACI 318-02, Section 12.5. Lengths are in inches.
3. For bar sizes #3 [#10] through #11 [#36] only:
 - a. If concrete cover conforms to ACI 318-02, Section 12.5.3(a), then a modification factor of 0.7 may be applied but the resulting length must not be less than $8d_b$ nor 6 in.
 - b. If hook is enclosed in ties or stirrups conforming to ACI 318-02, Section 12.5.3(b), then a modification factor of 0.8 may be applied but the resulting length must not be less than $8d_b$ nor 6 in.
4. For epoxy-coated hooks, multiply the tabulated values by 1.2.