

Reinforcing Steel Hook Detail

The Standard Specifications require that reinforcing steel hooks and bends conform to the provisions of the Building Code Requirements for Structural Concrete published by the American Concrete Institute (ACI).

Figure 1, *Recommended Industry Practice for Detailing Reinforcing Materials*, is from the Concrete Reinforcing Steel Institute (CRSI), *Manual of Standard Practice*, and conforms to the ACI 318 code requirements for standard hook details.

Reinforcing Steel Hook Detail

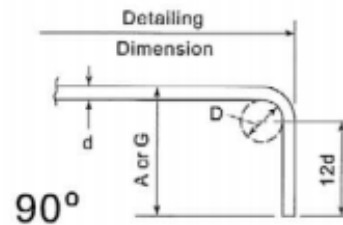
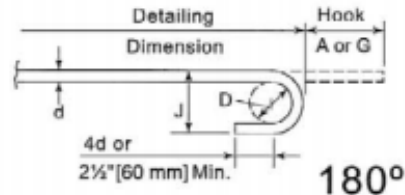
RECOMMENDED INDUSTRY PRACTICE FOR DETAILING REINFORCING MATERIALS

STANDARD HOOKS

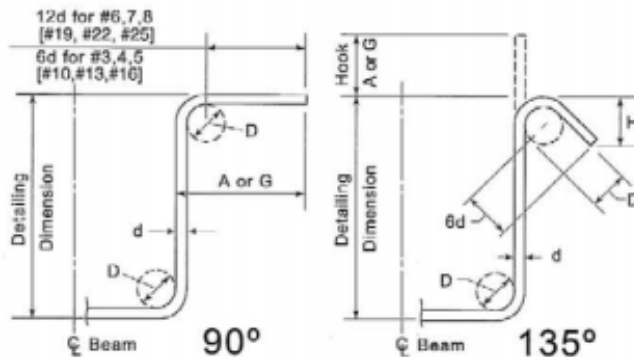
All specific dimensions recommended by CRSI below meet minimum requirements of ACI 318 [318M].

RECOMMENDED END HOOKS
All Grades of Steel
D = Finished bend diameter

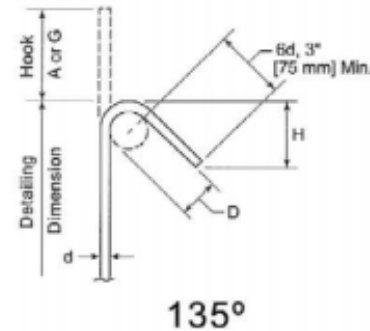
Bar Size	D, in. [mm]	180° Hooks, ft-in. [mm]		90° Hooks, ft-in. [mm]
		A or G	J	A or G
# 3 [#10]	2¼ [60]	0-5 [125]	0-3 [80]	0-6 [150]
# 4 [#13]	3 [80]	0-6 [150]	0-4 [105]	0-8 [200]
# 5 [#16]	3¾ [95]	0-7 [175]	0-5 [130]	0-10 [250]
# 6 [#19]	4½ [115]	0-8 [200]	0-6 [155]	1-0 [300]
# 7 [#22]	5¼ [135]	0-10 [250]	0-7 [180]	1-2 [375]
# 8 [#25]	6 [155]	0-11 [275]	0-8 [205]	1-4 [425]
# 9 [#29]	9½ [240]	1-3 [375]	0-11¾ [300]	1-7 [475]
#10 [#32]	10¾ [275]	1-5 [425]	1-1¼ [335]	1-10 [550]
#11 [#36]	12 [305]	1-7 [475]	1-2¾ [375]	2-0 [600]
#14 [#43]	18¼ [465]	2-3 [675]	1-9¾ [550]	2-7 [775]
#18 [#57]	24 [610]	3-0 [925]	2-4¾ [725]	3-5 [1050]



90° AND 135° STIRRUP AND TIE HOOKS



135° SEISMIC STIRRUP/TIE HOOKS



STIRRUP (TIES SIMILAR)
STIRRUP AND TIE HOOK DIMENSIONS
ALL GRADES OF STEEL

Bar Size	D, in. [mm]	90° Hook, ft-in. [mm]	135° Hook, in. [mm]	
		Hook A or G	Hook A or G	H (Approx.)
#3 [#10]	1½ [40]	0-4 [105]	4 [105]	2½ [65]
#4 [#13]	2 [50]	0-4¾ [115]	4½ [115]	3 [80]
#5 [#16]	2½ [65]	0-6 [155]	5½ [140]	3¾ [95]
#6 [#19]	4½ [115]	1-0 [305]	8 [205]	4¾ [115]
#7 [#22]	5¼ [135]	1-2 [355]	9 [230]	5¼ [135]
#8 [#25]	6 [155]	1-4 [410]	10½ [270]	6 [155]

135° SEISMIC STIRRUP/TIE HOOK DIMENSIONS
ALL GRADES OF STEEL

Bar Size	D, in. [mm]	135° Hook, in. [mm]	
		Hook A or G	H (Approx.)
#3 [#10]	1½ [40]	4¼ [110]	3 [80]
#4 [#13]	2 [50]	4½ [115]	3 [80]
#5 [#16]	2½ [65]	5½ [140]	3¾ [95]
#6 [#19]	4½ [115]	8 [205]	4¾ [115]
#7 [#22]	5¼ [135]	9 [230]	5¼ [135]
#8 [#25]	6 [155]	10½ [270]	6 [155]

Figure 1. Recommended Industry Practice for Detailing Reinforcing Materials