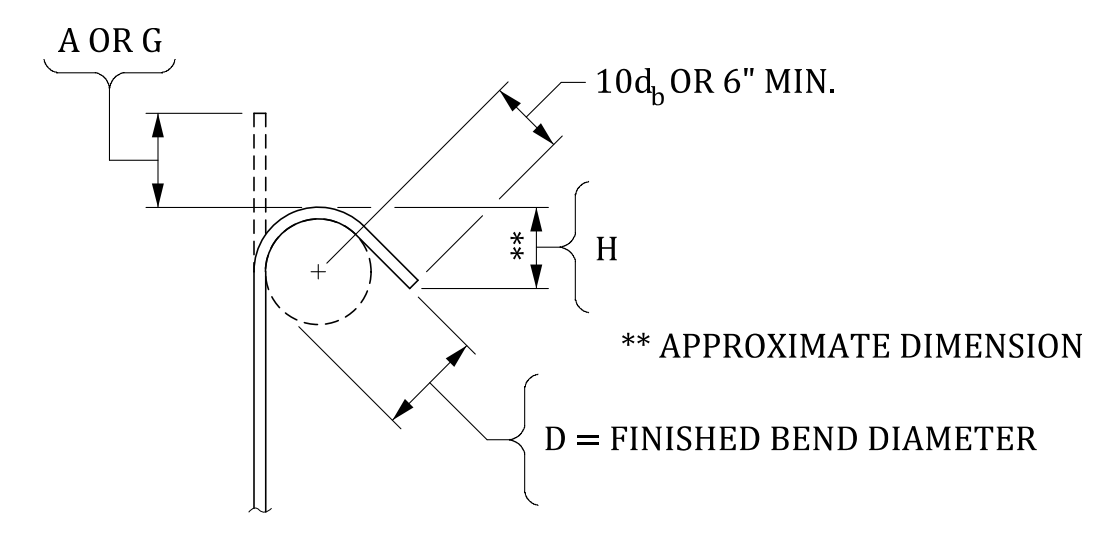


NOTES:  
 FABRICATE REINFORCING BARS IN ACCORDANCE WITH THE CURRENT CRSI MANUAL OF STANDARD PRACTICE, EXCEPT AS NOTED.  
 # - 1 1/8" INSIDE RADIUS FOR UNCOATED #05 BARS  
 ## - OUTSIDE RADIUS = b/2  
 ■ - 1 1/2 TURNS @ A CLOSED PITCH SECURED BY AN ULTIMATE WELDED LAP SPLICE.

REINFORCING STEEL CODE			
TYPE	SIZE	SERIES	SUFFIX
A	05	01	(2)

- ULTIMATE BUTT-WELDED SPLICE - USE COMPLETE JOINT PENETRATION BUTT WELD CONFORMING TO THE REQUIREMENTS OF AWS D1.4/D1.4M STRUCTURAL WELDING CODE - REINFORCING STEEL (LATEST EDITION) AND THE STANDARD SPECIFICATIONS.
- IF A MECHANICAL COUPLER IS REQUIRED, THE REINFORCING STEEL CODE INCLUDES A SUFFIX "S" FOR A SERVICE LEVEL COUPLER AND A SUFFIX "U" FOR AN ULTIMATE STRENGTH COUPLER. UNLESS NOTED OTHERWISE, BAR LENGTHS SHOWN IN THE REINFORCING STEEL SCHEDULES ARE TO THE CENTER OF THE COUPLER. IF NECESSARY, ADJUST THE LENGTH OF THE BARS TO MAINTAIN THE REQUIRED CONCRETE COVER.
- SUFFIX "A" DENOTES ADHESIVELY BONDED DOWEL.  
 SUFFIX "G" DENOTES GALVANIZED REINFORCING STEEL.  
 SUFFIX "T" DENOTES REINFORCING STEEL TO BE THREADED.
- SPLICE WS AND WP BARS WITH EITHER ULTIMATE WELDED LAP SPLICES OR ULTIMATE MECHANICAL COUPLERS. USE OVER AND UNDER LAP SPLICES, NOT SIDE BY SIDE, TO MAINTAIN BAR CLEARANCES.
- THE FABRICATION TOLERANCE FOR WELDED HOOP Ø IS ± 1/2 INCH.
- THIS 135° HOOK REQUIREMENT DOES NOT APPLY TO STIRRUPS EXTENDING FROM PRESTRESSED CONCRETE BEAMS



\* STANDARD 135° SEISMIC HOOK  
 SEE TABLE BELOW FOR DIMENSIONS

SIZE	STANDARD 135° HOOK DIMENSIONS					
	UNCOATED			GALVANIZED		
	D (IN)	A OR G (IN)	H (IN)	D (IN)	A OR G (IN)	H (IN)
#04	2.50	7.75	5.00	3.00	8.00	5.25
#05	3.25	8.50	5.50	3.75	9.00	5.50
#06	4.50	10.75	6.75	4.50	10.75	6.75

UNCOATED BARS - MINIMUM FINISHED BEND DIAMETER	
BAR SIZE AND USE	MINIMUM FINISHED DIAMETER
#03 THROUGH #05 - GENERAL	6.0 db
#03 THROUGH #05 - STIRRUPS AND TIES	4.0 db
#06 THROUGH #08	6.0 db
#09, #10, AND #11	8.0 db
#14 AND #18	10.0 db <sup>1</sup>

GALVANIZED BARS - MINIMUM FINISHED BEND DIAMETER	
BAR SIZE AND USE	MINIMUM FINISHED DIAMETER
#03 THROUGH #06	6.0 db
#07 THROUGH #08	8.0 db
#09, #10, AND #11	8.0 db
#14 AND #18	10.0 db <sup>1</sup>

db = NOMINAL DIAMETER OF REINFORCING BAR (IN.)  
<sup>1</sup> DUE TO SAFETY CONCERNS CRSI DOES NOT RECOMMEND BENDING BARS LARGER THAN #14 WITH GRADE DESIGNATION OF GRADE 75 OR HIGHER

THIS DRAWING IS FURNISHED FOR INFORMATION ONLY. ALL DIMENSIONS SHOWN ARE SHEET SPECIFIC. ANY USE OF THIS DESIGN AND DRAWING, INCLUDING DIMENSIONS, MUST BE CHECKED BY THE USER'S ENGINEER TO ENSURE DESIGN IS ADEQUATE FOR THE INTENDED USE. ALL DRAWINGS MUST BE SIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER WHEN USED.

CONSULTANT NAME/LOGO

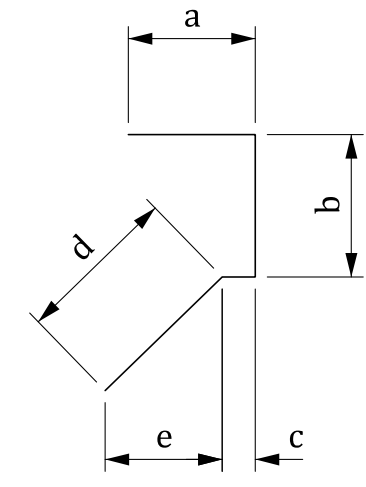
SOUTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION

REINFORCING BENDING DETAILS  
 1 OF 2

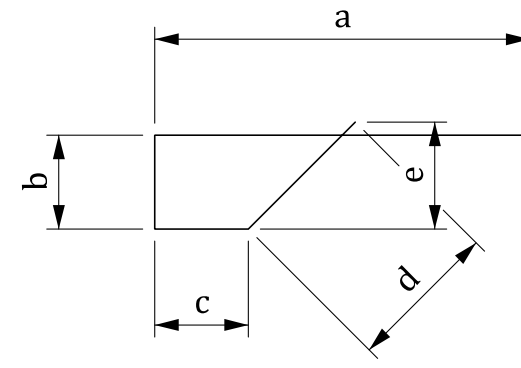
REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	BY	CHK.	DATE

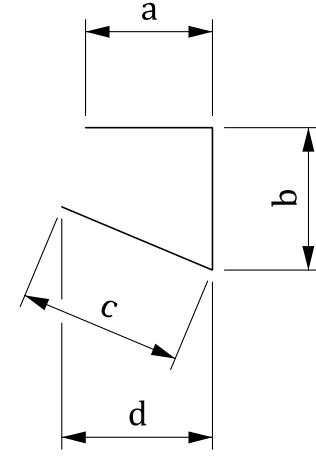
MBreeland 6/27/2024 4:33:26 PM 703-REBAR\_BEND.dgn



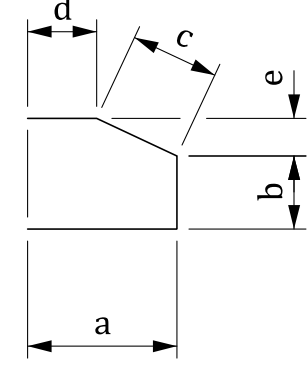
BARS RA



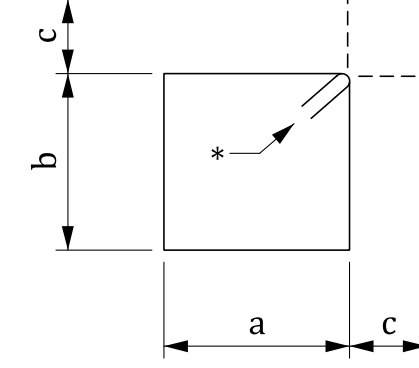
BARS RB



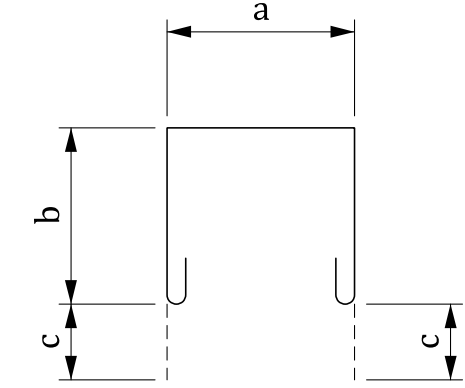
BARS RC



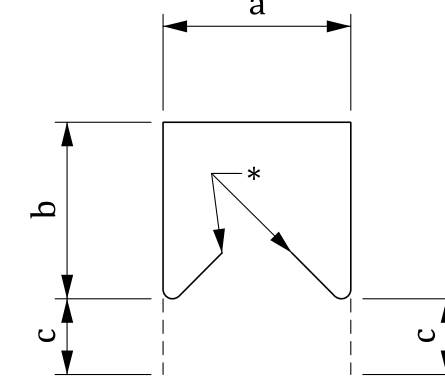
BARS RD



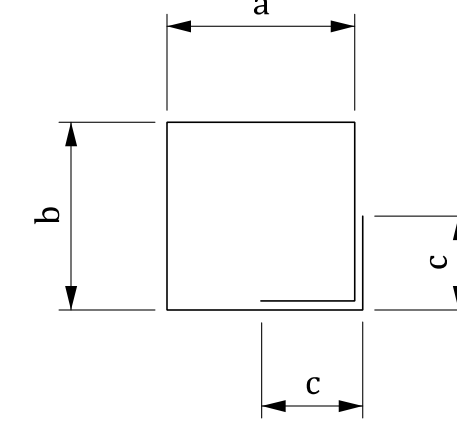
BARS S



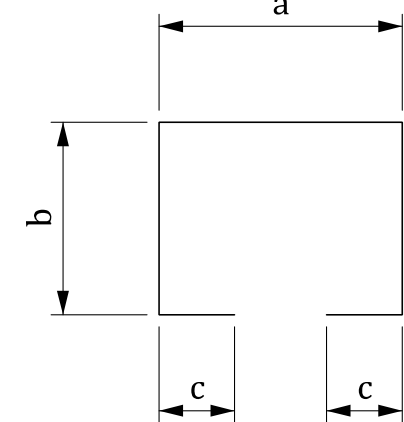
BARS SA



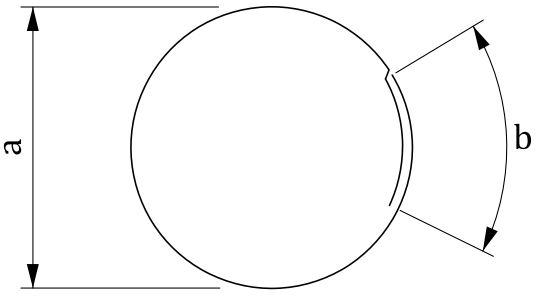
BARS SB



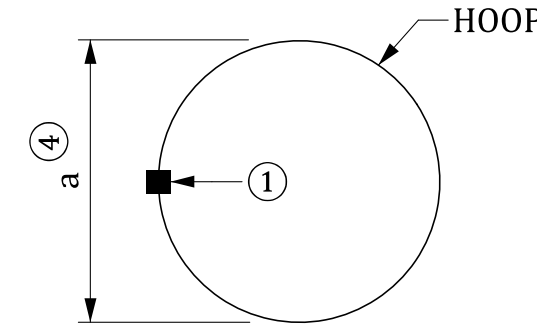
BARS SC



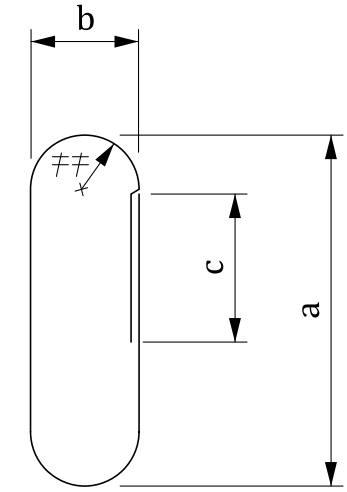
BARS SD



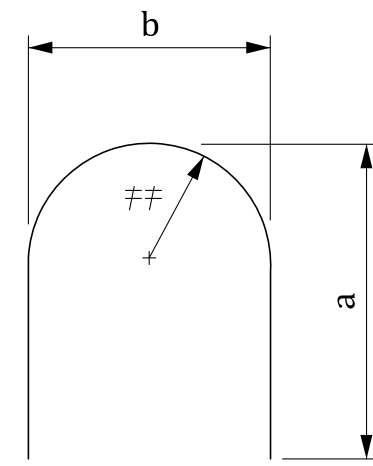
BARS T



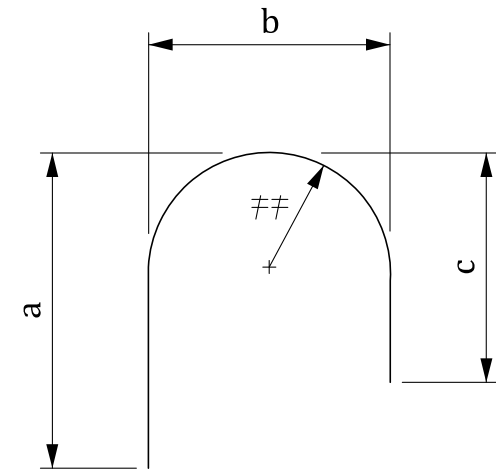
BARS TA



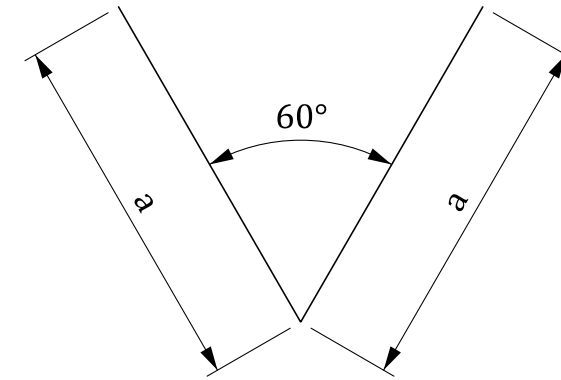
BARS TB



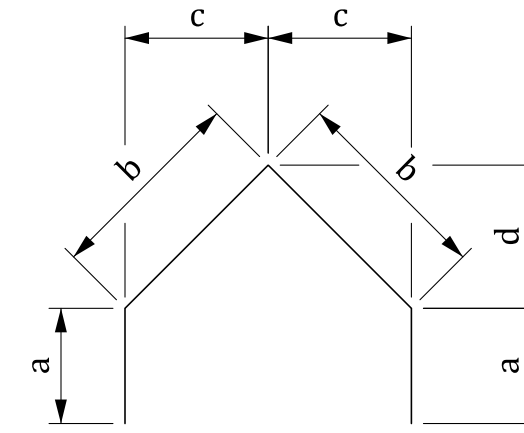
BARS U



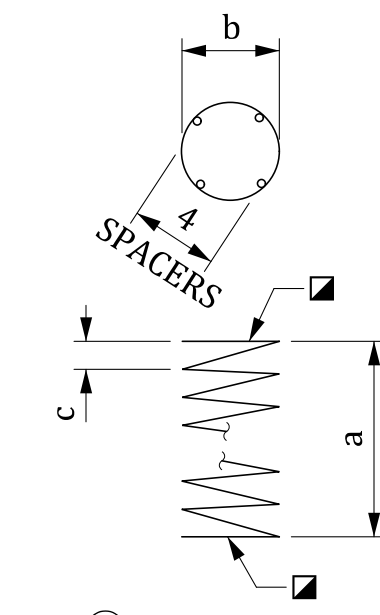
BARS UA



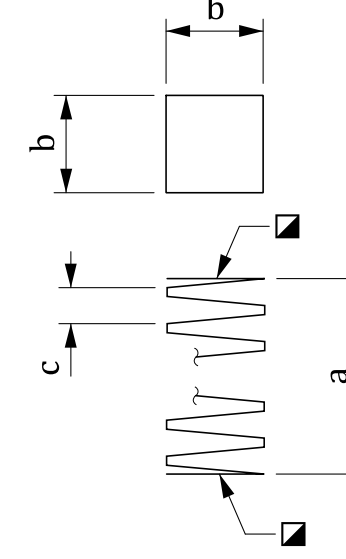
BARS V



BARS VA



BARS WS



BARS WP

REV.				
REV.				
REV.				
BY	CHK.	DATE	DESCRIPTION OF REVISION	

REVIEWED				
QUAN.				
DR.	GMC	MWB	12-23	
DES.				
BY	CHK.	DATE		

THIS DRAWING IS FURNISHED FOR INFORMATION ONLY. ALL DIMENSIONS SHOWN ARE SHEET SPECIFIC. ANY USE OF THIS DESIGN AND DRAWING, INCLUDING DIMENSIONS, MUST BE CHECKED BY THE USER'S ENGINEER TO ENSURE DESIGN IS ADEQUATE FOR THE INTENDED USE. ALL DRAWINGS MUST BE SIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER WHEN USED.

CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
REINFORCING BENDING DETAILS 2 OF 2	
COUNTY: ####	ROUTE: ####