

Note to Designer:  
 The information presented in this Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

NO.	DESCRIPTION OF REVISIONS	DATE	MADE BY	CHKD. BY
1	Original Issue	7-12		
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STEEL LIST																															
Mark	Qty	90° Dia.		96° Dia.		102° Dia.		108° Dia.		114° Dia.		120° Dia.		126° Dia.		132° Dia.		138° Dia.		144° Dia.											
		No	Size	Lgth	No	Size	Lgth	No	Size	Lgth	No	Size	Lgth	No	Size	Lgth	No	Size	Lgth	No	Size	Lgth									
a1	A	5	*5	9'-3"	5	*5	9'-6"	5	*5	9'-9"	5	*5	10'-3"	5	*5	10'-9"	6	*5	11'-0"	6	*5	11'-3"	6	*5	11'-9"	6	*5	12'-3"	6	*6	12'-6"
a2	A	4	*5	9'-9"	5	*5	10'-0"	5	*5	10'-3"	5	*5	10'-9"	5	*5	11'-3"	5	*6	11'-6"	6	*5	11'-9"	6	*6	12'-3"	6	*6	13'-0"	6	*6	13'-3"
a3	A	4	*5	10'-3"	4	*5	10'-6"	5	*5	10'-9"	5	*5	11'-3"	5	*6	12'-0"	5	*6	12'-6"	6	*6	13'-0"	6	*6	13'-6"	6	*6	14'-3"	6	*7	13'-9"
a4	A	4	*5	10'-6"	4	*5	11'-0"	5	*6	11'-3"	5	*6	11'-9"	5	*6	12'-6"	5	*7	12'-9"	5	*7	13'-0"	6	*7	13'-6"	6	*7	14'-3"	6	*7	14'-6"
a5	A	4	*5	11'-0"	4	*6	11'-6"	4	*6	12'-0"	5	*6	12'-6"	5	*7	13'-0"	5	*7	13'-3"	5	*7	13'-9"	5	*7	14'-3"	6	*7	15'-0"	6	*7	15'-3"
a6	A	4	*6	11'-6"	4	*6	12'-0"	4	*6	12'-6"	4	*7	13'-0"	5	*7	13'-6"	5	*7	13'-9"	5	*7	14'-3"	5	*7	14'-9"	6	*7	15'-6"	6	*8	15'-9"
a7	A	4	*6	12'-0"	4	*6	12'-6"	4	*7	13'-0"	4	*7	13'-6"	5	*7	14'-3"	5	*7	14'-6"	5	*7	15'-0"	5	*8	15'-6"	5	*8	16'-3"	6	*8	16'-6"
a8	A	3	*5	8'-3"	4	*5	8'-6"	4	*5	8'-9"	4	*5	9'-0"	4	*5	9'-6"	4	*5	9'-9"	5	*5	10'-0"	5	*5	10'-3"	5	*5	10'-9"	5	*5	11'-0"
a9	A	3	*5	9'-3"	3	*5	9'-6"	4	*5	9'-9"	4	*5	10'-0"	4	*5	10'-6"	4	*5	10'-9"	4	*5	11'-3"	5	*6	11'-6"	5	*6	12'-0"	5	*6	12'-3"
a10	A	3	*5	10'-3"	3	*5	10'-6"	3	*6	10'-9"	4	*6	11'-3"	4	*6	11'-9"	4	*6	12'-0"	4	*6	12'-3"	4	*6	12'-9"	5	*7	13'-3"	5	*7	13'-9"
a11	A	3	*5	11'-0"	3	*6	11'-6"	3	*6	12'-0"	3	*6	12'-3"	4	*7	12'-9"	4	*7	13'-0"	4	*7	13'-6"	4	*7	14'-0"	4	*7	14'-9"	5	*8	15'-3"
a12	A	3	*6	12'-0"	3	*6	12'-6"	3	*6	13'-0"	3	*7	13'-6"	3	*7	14'-0"	4	*7	14'-3"	4	*7	14'-9"	4	*8	15'-3"	4	*8	16'-0"	4	*8	16'-6"
b1	str	2	*4	28'-0"	2	*4	29'-6"	2	*4	31'-0"	2	*4	32'-6"	2	*4	34'-0"	2	*4	35'-6"	2	*4	37'-0"	2	*4	38'-6"	2	*4	40'-0"	2	*4	41'-6"
b2	str	8	*4	28'-0"	8	*4	29'-6"	8	*4	31'-0"	10	*4	32'-6"	10	*4	34'-0"	10	*4	35'-6"	10	*4	37'-0"	12	*4	38'-6"	12	*4	40'-0"	12	*4	41'-6"
b3	str	2	*4	21'-0"	2	*4	27'-0"	2	*4	29'-0"	2	*4	29'-0"	2	*4	25'-0"	2	*4	28'-9"	2	*4	33'-9"	2	*4	26'-3"	2	*4	30'-3"	2	*4	34'-0"
b4	str	2	*4	7'-6"	2	*4	13'-6"	2	*4	15'-9"	2	*4	6'-0"	2	*4	12'-0"	2	*4	15'-9"	2	*4	20'-6"	2	*4	11'-0"	2	*4	16'-6"	2	*4	20'-0"
b5	str							2	*4	2'-6"						2	*4	3'-0"	2	*4	7'-6"				2	*4	3'-0"	2	*4	6'-3"	
b6	str																														
b7	str	2	*4	14'-6"	2	*4	15'-6"	2	*4	16'-6"	2	*4	17'-6"	2	*4	18'-6"	2	*4	19'-6"	2	*4	20'-6"	2	*4	21'-6"	2	*4	22'-9"	2	*4	23'-9"
b8	str	8	*4	14'-0"	8	*4	15'-0"	8	*4	16'-0"	8	*4	17'-0"	8	*4	18'-0"	8	*4	19'-0"	10	*4	20'-0"	10	*4	21'-0"	10	*4	22'-0"	10	*4	23'-0"
b9	str	2	*4	8'-9"	2	*4	10'-6"	2	*4	12'-3"	2	*4	14'-0"	2	*4	16'-3"	2	*4	18'-3"	2	*4	14'-3"	2	*4	16'-6"	2	*4	18'-3"	2	*4	20'-3"
b10	str	2	*4	3'-6"	2	*4	5'-3"	2	*4	7'-3"	2	*4	8'-6"	2	*4	10'-9"	2	*4	12'-9"	2	*4	8'-9"	2	*4	10'-9"	2	*4	12'-9"	2	*4	14'-9"
b11	str							2	*4	2'-0"	2	*4	3'-3"	2	*4	5'-3"	2	*4	7'-3"	2	*4	3'-3"	2	*4	5'-3"	2	*4	7'-6"	2	*4	9'-3"
b12	str															2	*4	1'-9"													
c	str	4	*4	10'-6"	4	*4	11'-0"	4	*4	11'-6"	4	*4	12'-0"	4	*4	12'-6"	4	*4	13'-0"	4	*4	13'-6"	4	*4	14'-0"	4	*4	14'-6"	4	*4	15'-0"
d	A	6	*6	12'-3"	6	*6	12'-9"	6	*7	13'-3"	6	*7	13'-9"	6	*7	14'-6"	6	*7	15'-0"	6	*7	15'-6"	6	*8	16'-0"	6	*8	16'-6"	6	*8	17'-0"
e1	C	4	*5	4'-0"	5	*5	4'-0"	5	*5	4'-3"	5	*5	4'-6"	5	*5	4'-6"	6	*5	4'-9"	6	*5	5'-0"	6	*5	5'-0"	6	*6	5'-3"	6	*6	5'-6"
e2	C	4	*5	4'-3"	5	*5	4'-3"	5	*5	4'-6"	5	*5	4'-9"	5	*5	5'-0"	5	*5	5'-3"	6	*6	5'-6"	6	*6	5'-6"	6	*6	5'-9"	6	*6	6'-0"
e3	C	4	*5	4'-6"	4	*5	4'-9"	5	*5	5'-0"	5	*5	5'-3"	5	*5	5'-3"	5	*6	5'-6"	5	*6	5'-9"	6	*6	6'-0"	6	*6	6'-3"	6	*7	7'-3"
e4	C	4	*5	5'-0"	4	*5	5'-3"	4	*5	5'-6"	5	*5	5'-6"	5	*6	5'-9"	5	*6	6'-0"	5	*6	6'-0"	5	*7	7'-3"	6	*7	7'-3"	6	*7	7'-9"
e5	C	4	*5	5'-3"	4	*5	5'-6"	4	*5	5'-9"	5	*6	6'-0"	5	*6	6'-3"	5	*6	6'-6"	5	*7	7'-9"	5	*7	7'-9"	6	*7	8'-3"	6	*8	8'-9"
e6	C	4	*5	5'-6"	4	*5	5'-9"	4	*6	6'-0"	4	*6	6'-3"	5	*7	7'-6"	5	*7	7'-9"	5	*7	8'-0"	5	*7	8'-3"	5	*8	9'-0"	6	*8	9'-3"
e7	C	4	*5	5'-9"	4	*6	6'-3"	4	*6	6'-6"	4	*7	7'-6"	4	*7	8'-0"	5	*7	8'-3"	5	*7	8'-6"	5	*8	9'-0"	5	*8	9'-6"	6	*8	9'-9"
e8	C	2	*5	6'-0"	2	*6	6'-6"	2	*6	6'-9"	2	*7	8'-0"	2	*7	8'-3"	3	*7	8'-6"	3	*7	8'-9"	3	*8	9'-6"	3	*8	9'-9"	3	*8	10'-0"
e9	C	12	*5	6'-0"	13	*6	6'-6"	13	*6	6'-9"	14	*7	8'-0"	14	*7	8'-3"	15	*7	8'-6"	15	*7	8'-9"	16	*8	9'-6"	16	*8	9'-9"	17	*8	10'-0"
e10	C	5	*5	6'-0"	5	*6	6'-6"	5	*6	6'-9"	6	*7	8'-0"	6	*7	8'-3"	6	*7	8'-6"	6	*7	8'-9"	7	*8	9'-6"	7	*8	9'-9"	7	*8	10'-0"
e11	C	3	*5	5'-9"	3	*6	6'-3"	3	*6	6'-6"	3	*6	6'-9"	3	*7	8'-0"	3	*7	8'-3"	4	*7	8'-6"	4	*7	9'-0"	4	*7	9'-3"	4	*7	9'-6"
e12	C	3	*5	5'-3"	3	*5	5'-9"	3	*5	6'-0"	3	*6	6'-3"	4	*6	6'-6"	4	*6	6'-9"	4	*7	7'-9"	4	*7	8'-3"	4	*7	8'-6"	4	*7	8'-9"
e13	C	3	*5	4'-9"	3	*5	5'-0"	3	*5	5'-3"	4	*5	5'-9"	4	*6	6'-0"	4	*6	6'-3"	4	*6	6'-6"	4	*6	6'-9"	4	*7	7'-9"	5	*7	8'-0"
e14	C	3	*5	4'-6"	3	*5	4'-6"	4	*5	4'-9"	4	*5	5'-0"	4	*5	5'-3"	4	*5	5'-6"	4	*5	5'-9"	4	*6	6'-0"	5	*6	6'-0"	5	*6	6'-3"
e15	C	3	*5	4'-0"	4	*5	4'-0"	4	*5	4'-3"	4	*5	4'-6"	4	*5	4'-6"	4	*5	4'-9"	4	*5	5'-0"	5	*5	5'-0"	5	*5	5'-3"	5	*5	5'-6"
f1	str	5	*4	7'-3"	5	*4	7'-9"	6	*4	8'-0"	6	*4	8'-3"	6	*4	8'-9"	6	*4	9'-0"	7	*4	9'-3"	7	*4	9'-9"	7	*4	10'-0"	7	*4	10'-3"
f2	str	5	*4	8'-3"	5	*4	8'-6"	5	*4	9'-0"	6	*4	9'-3"	6	*4	9'-6"	6	*4	10'-0"	6	*4	10'-3"	7	*4	10'-9"	7	*4	11'-3"	7	*4	11'-6"
f3	str	5	*4	9'-0"	5	*4	9'-6"	5	*4	9'-9"	5	*4	10'-3"	6	*4	10'-6"	6	*4	11'-0"	6	*4	11'-6"	6	*4	12'-0"	7	*4	12'-3"	7	*4	12'-9"
f4	str	4	*4	10'-0"	5	*4	10'-3"	5	*4	10'-9"	5	*4	11'-3"	5	*4	11'-6"	6	*4	12'-0"	6	*4	12'-6"	6	*4	13'-0"	6	*4	13'-6"	7	*4	14'-0"
f5	str	3	*4	6'-6"	3	*4	6'-9"	3	*4	7'-0"	3	*4	7'-3"	3	*4	7'-6"	4	*4	7'-9"	4	*4	8'-0"	4	*4	8'-3"	4	*4	8'-6"	4	*4	8'-9"
f6	str	3	*4	7'-9"	3	*4	8'-0"	3	*4	8'-3"	3	*4	8'-6"	3	*4	8'-9"	3	*4	9'-0"	4	*4	9'-6"	4	*4	9'-9"	4	*4	10'-3"	4	*4	11'-6"
f7	str	2	*4	8'-9"	2	*4	9'-0"	3	*4	9'-6"	3	*4	9'-9"	3	*4	10'-3"	3	*4	10'-6"	3	*4	11'-0"	3	*4	11'-6"	4	*4	11'-9"	4	*4	12'-0"
f8	str	2	*4	10'-0"	2	*4	10'-3"	2	*4	10'-9"	3	*4	11'-0"	3	*4	11'-6"	3	*4	11'-9"	3	*4	12'-6"	3	*4	13'-0"	3	*4	13'-6"	4	*4	13'-9"
g	str	2	*4	11'-6"	2	*4	12'-3"	2	*4	12'-9"	2	*4	13'-6"	2	*4	14'-3"	2	*4	15'-0"	2	*4	15'-9"	2	*4	16'-3"	2	*4	17'-0"	2	*4	17'-9"
m1	str	4	*4	29'-9"	4	*4	31'-3"	4	*4	33'-0"	5	*4	34'-6"	5	*4	36'-0"	5	*4	37'-9"	5	*4	39'-3"	6	*4	40'-9"	6	*4	42'-6"	6	*4	44'-0"
m2	str	1	*4	29'-9"	1	*4	31'-3"	1	*4	33'-0"	1	*4	34'-6"	1	*4	36'-0"	1	*4	37'-9"	1	*4	39'-3"	1	*4	40'-9"	1	*4	42'-6"	1	*4	44'-0"
m3	str	4	*4	20'-0"	4	*4	21'-3"	4	*4	22'-6"	5	*4	24'-0"	5	*4	25'-3"	5	*4	26'-6"	5	*4	27'-9"	6	*4	29'-3"	6	*4	30'-6"	6	*4	31'-9"
m4	str	1	*4	20'-0"	1	*4	21'-																								