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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.

STEEL LIST																															
Mark	Bent	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	No	Size	Lgth	No	Size	Lgth	No	Size	Lgth
a1	A	4	#5	7'-0	4	#5	7'-3	4	#5	7'-6	4	#5	7'-9	4	#5	8'-3	4	#5	8'-6	5	#5	8'-9	5	#5	9'-0	5	#5	9'-6	5	#5	9'-9
a2	A	4	#5	7'-9	4	#5	8'-0	4	#5	8'-3	4	#5	8'-6	4	#5	9'-3	4	#5	9'-6	4	#5	9'-9	5	#5	10'-0	5	#5	10'-6	5	#6	10'-9
a3	A	3	#5	8'-6	4	#5	9'-0	4	#5	9'-3	4	#5	9'-6	4	#5	10'-3	4	#5	10'-6	4	#5	10'-9	4	#5	11'-0	5	#6	11'-6	5	#6	12'-0
a4	A	3	#5	9'-3	3	#5	9'-9	4	#5	10'-0	4	#5	10'-3	4	#5	11'-3	4	#6	11'-6	4	#5	11'-9	4	#6	12'-0	4	#6	12'-9	5	#7	13'-0
a5	A	3	#5	10'-3	3	#5	10'-6	3	#5	10'-9	4	#6	11'-3	4	#6	12'-0	4	#7	12'-6	4	#6	13'-0	4	#7	13'-0	4	#7	13'-9	4	#7	14'-3
a6	A	3	#5	11'-0	3	#6	11'-3	3	#6	11'-6	3	#6	12'-0	4	#7	13'-0	4	#7	13'-6	4	#7	14'-0	4	#7	14'-3	4	#7	15'-0	4	#8	15'-3
a7	A	3	#6	11'-9	3	#6	12'-3	3	#6	12'-6	3	#7	13'-0	3	#7	14'-0	4	#7	14'-6	4	#7	15'-0	4	#8	15'-3	4	#8	16'-0	4	#8	16'-6
a8	A	3	#5	6'-3	3	#5	6'-9	3	#5	7'-0	3	#5	7'-3	3	#5	7'-6	3	#5	7'-9	3	#5	8'-0	3	#5	8'-3	3	#5	8'-9	3	#5	9'-0
a9	A	3	#5	8'-3	3	#5	8'-6	3	#5	8'-9	3	#5	9'-0	3	#5	9'-0	3	#5	9'-0	3	#5	9'-3	3	#5	9'-3	3	#5	10'-6	3	#5	10'-9
a10	A	3	#5	10'-3	3	#5	10'-6	3	#5	10'-6	3	#6	10'-9	3	#6	10'-9	3	#6	11'-3	3	#6	11'-3	3	#6	11'-6	3	#6	12'-3	3	#6	12'-6
a11	A	2	#6	12'-0	2	#6	12'-3	3	#6	12'-3	3	#7	12'-6	2	#6	12'-0	2	#7	12'-3	3	#7	12'-9	3	#7	13'-3	3	#7	13'-9	3	#7	14'-3
a12	A													2	#7	13'-6	2	#7	13'-9	2	#7	14'-3	2	#8	14'-6	3	#8	15'-6	3	#8	16'-0
b1	str	2	#4	22'-6	2	#4	23'-6	2	#4	24'-6	2	#4	25'-6	2	#4	26'-6	2	#4	27'-9	2	#4	28'-9	2	#4	29'-9	2	#4	30'-9	2	#4	31'-9
b2	str	6	#4	22'-0	6	#4	23'-0	6	#4	24'-0	6	#4	25'-0	6	#4	26'-0	8	#4	27'-0	8	#4	28'-0	8	#4	29'-0	8	#4	30'-0	8	#4	31'-0
b3	str	2	#4	16'-9	2	#4	18'-9	2	#4	20'-6	2	#4	23'-0	2	#4	25'-0	2	#4	25'-0	2	#4	20'-9	2	#4	23'-0	2	#4	26'-9	2	#4	28'-9
b4	str	2	#4	10'-6	2	#4	12'-6	2	#4	14'-3	2	#4	16'-3	2	#4	18'-9	2	#4	16'-6	2	#4	16'-9	2	#4	18'-6	2	#4	20'-6	2	#4	22'-6
b5	str	2	#4	4'-3	2	#4	6'-3	2	#4	8'-3	2	#4	10'-3	2	#4	12'-6	2	#4	8'-3	2	#4	10'-3	2	#4	12'-3	2	#4	14'-6	2	#4	16'-3
b6	str							2	#4	2'-0	2	#4	4'-0	2	#4	6'-3	2	#4	2'-0	2	#4	4'-0	2	#4	6'-6	2	#4	8'-3	2	#4	10'-0
b7	str	2	#4	11'-6	2	#4	12'-0	2	#4	12'-6	2	#4	13'-0	2	#4	13'-9	2	#4	14'-3	2	#4	14'-9	2	#4	15'-6	2	#4	16'-0	2	#4	16'-6
b8	str	4	#4	10'-0	4	#4	10'-6	6	#4	11'-0	6	#4	11'-6	6	#4	12'-0	6	#4	12'-6	6	#4	13'-0	6	#4	13'-6	8	#4	14'-0	8	#4	14'-6
b9	str	2	#4	9'-3	2	#4	10'-3	2	#4	8'-3	2	#4	9'-0	2	#4	10'-3	2	#4	11'-3	2	#4	12'-0	2	#4	13'-0	2	#4	11'-3	2	#4	12'-3
b10	str	2	#4	6'-9	2	#4	7'-6	2	#4	5'-9	2	#4	6'-6	2	#4	7'-9	2	#4	8'-9	2	#4	9'-3	2	#4	10'-3	2	#4	8'-9	2	#4	9'-9
b11	str	2	#4	4'-0	2	#4	5'-0	2	#4	3'-6	2	#4	4'-3	2	#4	5'-3	2	#4	6'-0	2	#4	6'-9	2	#4	7'-9	2	#4	6'-0	2	#4	7'-0
b12	str	2	#4	1'-6	2	#4	2'-3	2	#4	1'-0	2	#4	1'-9	2	#4	2'-9	2	#4	3'-6	2	#4	4'-0	2	#4	5'-0	2	#4	3'-6	2	#4	4'-6
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	#6	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	3'-6	4	#5	3'-9	4	#5	3'-9	4	#5	4'-0	4	#5	4'-0	4	#5	4'-3	4	#5	4'-3	5	#5	4'-6	5	#5	4'-6	5	#5	4'-9
e2	C	4	#5	4'-0	4	#5	4'-3	4	#5	4'-3	4	#5	4'-6	4	#5	4'-9	4	#5	4'-9	4	#5	5'-0	4	#5	5'-3	5	#5	5'-3	5	#5	5'-6
e3	C	3	#5	4'-6	4	#5	4'-9	4	#5	4'-9	4	#5	5'-3	4	#5	5'-3	4	#5	5'-6	4	#5	5'-9	4	#6	6'-0	4	#6	6'-0	5	#6	6'-3
e4	C	3	#5	5'-0	3	#5	5'-3	4	#5	5'-3	4	#6	5'-9	4	#6	6'-0	4	#6	6'-0	4	#6	6'-3	4	#6	6'-6	4	#7	7'-6	4	#7	8'-0
e5	C	3	#5	5'-6	3	#5	5'-9	3	#6	6'-0	4	#6	6'-3	4	#7	7'-6	4	#7	7'-6	4	#7	8'-0	4	#7	8'-3	4	#7	8'-6	4	#8	9'-0
e6	C	3	#5	6'-0	3	#6	6'-3	3	#7	7'-3	3	#7	7'-9	4	#7	8'-0	4	#7	8'-3	4	#7	8'-6	4	#8	9'-0	4	#8	9'-3	4	#9	10'-3
e7	C	3	#6	6'-6	3	#7	7'-6	3	#7	8'-0	3	#7	8'-3	3	#8	8'-9	3	#8	9'-0	4	#8	9'-6	4	#9	10'-3	4	#9	10'-6	4	#9	10'-6
e8	C	2	#6	6'-6	2	#7	8'-0	2	#7	8'-3	2	#7	8'-6	2	#8	9'-0	2	#8	9'-6	2	#8	9'-9	2	#9	10'-6	2	#9	10'-9	2	#9	11'-3
e9	C	11	#6	6'-6	12	#7	8'-0	13	#7	8'-3	13	#7	8'-6	14	#8	9'-0	15	#8	9'-6	16	#8	9'-9	16	#9	10'-6	17	#9	10'-9	18	#9	11'-3
e10	C	5	#6	6'-6	5	#7	8'-0	5	#7	8'-3	6	#7	8'-6	6	#8	9'-0	6	#8	9'-6	6	#8	9'-9	7	#9	10'-6	7	#9	10'-9	7	#9	11'-3
e11	C	2	#5	6'-6	2	#6	6'-9	3	#6	7'-0	3	#7	8'-3	2	#7	8'-6	2	#7	8'-9	2	#7	9'-3	2	#8	9'-9	3	#8	10'-0	3	#8	10'-6
e12	C	3	#5	5'-6	3	#5	5'-9	3	#5	6'-0	3	#6	6'-3	2	#6	7'-0	2	#6	7'-0	3	#6	7'-6	3	#7	8'-6	3	#7	8'-9	3	#7	9'-3
e13	C	3	#5	4'-6	3	#5	4'-9	3	#5	4'-9	3	#5	5'-3	3	#5	6'-0	3	#5	6'-3	3	#5	6'-3	3	#6	6'-6	3	#6	6'-9	3	#6	7'-0
e14	C	3	#5	3'-6	3	#5	3'-9	3	#5	3'-9	3	#5	4'-0	3	#5	5'-0	3	#5	5'-3	3	#5	5'-3	3	#5	5'-6	3	#5	5'-9	3	#5	6'-0
e15	C													3	#5	4'-0	3	#5	4'-3	3	#5	4'-3	3	#5	4'-6	3	#5	4'-9	3	#5	4'-9
f1	str	4	#4	5'-3	4	#4	5'-6	4	#4	5'-9	5	#4	6'-0	5	#4	6'-3	5	#4	6'-6	5	#4	6'-9	5	#4	7'-0	5	#4	7'-3	6	#4	7'-6
f2	str	4	#4	6'-9	4	#4	7'-0	4	#4	7'-3	4	#4	7'-6	5	#4	7'-9	5	#4	8'-3	5	#4	8'-6	5	#4	8'-9	5	#4	9'-0	5	#4	9'-3
f3	str	4	#4	8'-3	4	#4	8'-6	4	#4	8'-9	4	#4	9'-3	4	#4	9'-6	4	#4	10'-0	5	#4	10'-3	5	#4	10'-6	5	#4	10'-9	5	#4	11'-3
f4	str	3	#4	9'-9	4	#4	10'-0	4	#4	10'-3	4	#4	11'-0	4	#4	11'-3	4	#4	11'-9	4	#4	12'-3	5	#4	12'-6	5	#4	12'-9	5	#4	13'-3
f5	str	3	#4	4'-6	3	#4	4'-9	2	#4	5'-0	2	#4	5'-3	2	#4	5'-6	3	#4	5'-9	3	#4	6'-0	3	#4	6'-3	3	#4	6'-6	3	#4	6'-9
f6	str	2	#4	6'-9	2	#4	7'-3	2	#4	6'-9	2	#4	7'-0	2	#4	7'-6	2	#4	7'-9	2	#4	8'-3	2	#4	8'-6	3	#4	8'-9	3	#4	9'-3
f7	str	2	#4	9'-3	2	#4	9'-9	2	#4	8'-6	2	#4	8'-9	2	#4	9'-3	2	#4	10'-0	2	#4	10'-3	2	#4	10'-6	2	#4	11'-3	2	#4	11'-6
f8	str							2	#4	10'-6	2	#4	10'-9	2	#4	11'-3	2	#4	12'-0	2	#4	12'-6	2	#4	12'-9	2	#4	13'-6	2	#4	14'-0
g	str	6	#4	11'-6	6	#4	12'-3	6	#4	12'-9	6	#4	13'-6	6	#4	14'-3	6	#4	15'-0	6	#4	15'-9	6	#4	16'-3	6	#4	17'-0	6	#4	17'-9
m1	str	5	#4	24'-0	5	#4	25'-0	5	#4	26'-0	6	#4	27'-3	6	#4	28'-3	6	#4	29'-3	6	#4	30'-6	7	#4	31'-6	7	#4	32'-6	7	#4	33'-9
m2	str	1	#4	24'-0	1	#4	25'-0	1	#4	26'-0	1	#4	27'-3	1	#4	28'-3	1	#4	29'-3	1	#4	30'-6	1	#4	31'-6	1	#4	32'-6	1	#4	33'-9
m3	str	5	#4	16'-6	5	#4	17'-3	5	#4	18'-3	6	#4	19'-0	6	#4	19'-9	6	#4	20'-6	6	#4	21'-6	7	#4	22'-3	7	#4	23'-3	7	#4	