

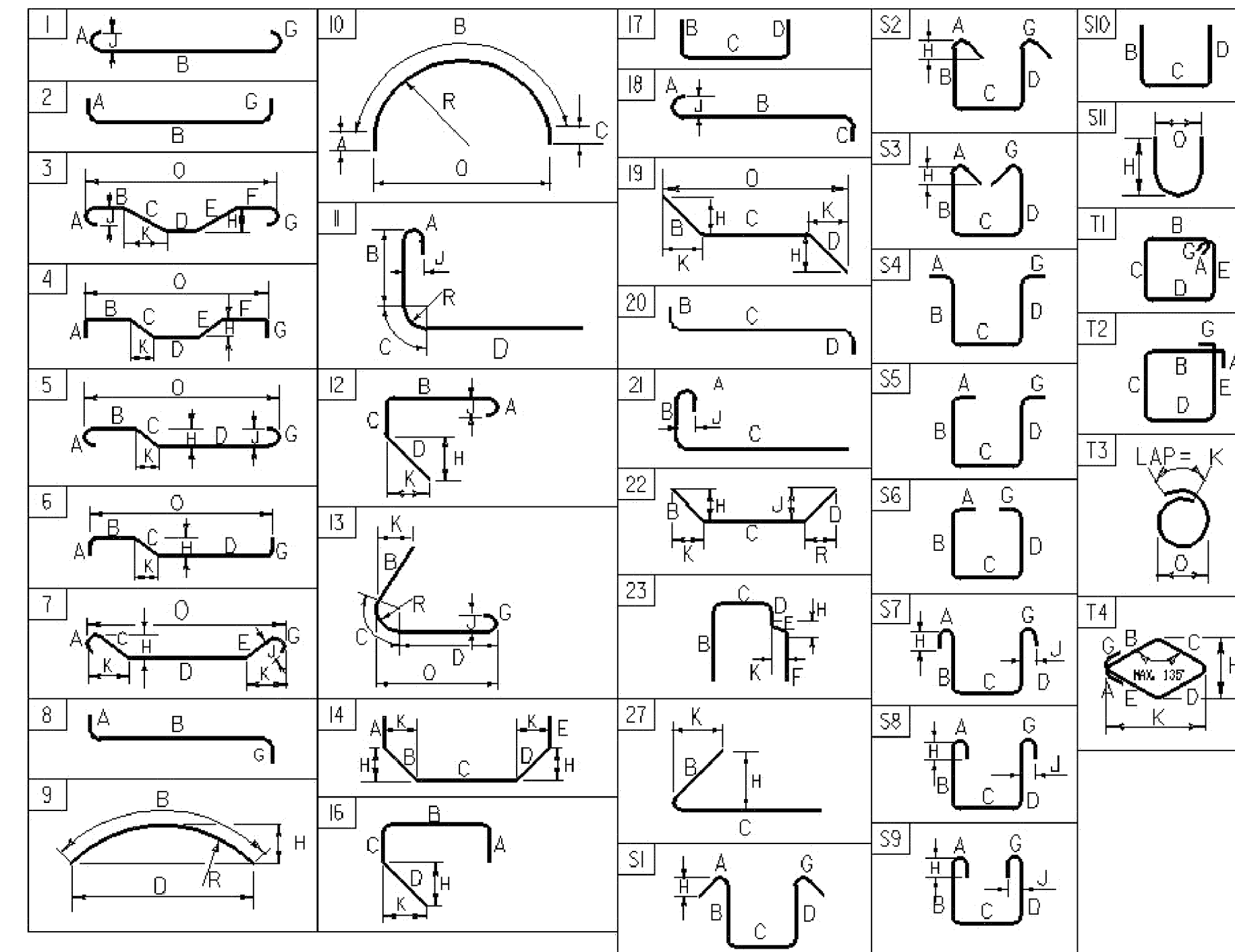
# REINFORCING STEEL SCHEDULE



ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O							
<b>SLAB</b>																																										
*	34	16	6240	ES1601	STR																																					
	14	16	9840	ES1603	STR																																					
	66	16	3120	ES1602	S6	300	360	1800	360				300																													
*	43	29	10215	ES2901	1	375	9840																																			
<b>ABUTMENT 1</b>																	<b>ABUTMENT 2</b>																									
	20	16	8782	1A1601	STR																																					
▲	23	16	3081	1A1603	STR														▲	24	16	3312	2A1603	STR																		
	23	16	2111	1A1604	STR															▲	24	16	2342	2A1604	STR																	
	24	16	3053	1A1606	STR															▲	24	16	3250	2A1606	STR																	
	6	16	2821	1A1607	STR															▲	7	16	3052	2A1607	STR																	
▲	6	16	3791	1A1608	STR														▲	7	16	4022	2A1608	STR																		
	24	16	6183	1A1609	STR															▲	24	16	6469	2A1609	STR																	
*	31	16	3010	1A1602	17		1190	1820	---										*	32	16	3010	2A1602	17		1190	1820	---														
	30	16	1230	1A1605	17		450	330	450											▲	31	16	1230	2A1605	17		450	330	450													
▲	18	16	1730	1A1610	19		660	1070	---										▲	18	16	1730	2A1610	19		660	1070	---														
*	12	25	910	1AE2501	STR															12	25	910	2AE2501	STR																		
	29	25	3250	1A2502	17		2160	1090	---											31	25	3250	2A2502	17		2160	1090	---														
*	31	29	2580	1A2901	STR															*	33	29	2580	2A2901	STR																	
<b>WINGWALL 1</b>																	<b>WINGWALL 3</b>																									
	13	16	2291	1W1601	STR															13	16	2895	3W1601	STR																		
	7	16	1190	1W1602	STR															10	16	1190	3W1602	STR																		
▲	7	16	3793	1W1603	STR														▲	10	16	4022	3W1603	STR																		
	7	16	2473	1W1604	STR															10	16	2702	3W1604	STR																		
▲	26	16	1826	1W1606	STR														▲	28	16	1826	3W1606	STR																		
	4	16	930	1W1605	17		300	330	300											5	16	930	3W1605	17		300	330	300														
	2	16	1876	1W1607	19		706	1170	---											2	16	2526	3W1607	19		711	1815	---														
▲	33	16	1320	1W1608	19		---	660	660					204		675			▲	33	16	1320	3W1608	19		660	660	---														
	7	19	1980	1W1903	STR															10	19	1980	3W1903	STR																		
	7	19	2710	1W1901	17		1770	940	---											10	19	2710	3W1901	17		1770	940	---														
	7	19	2260	1W1902	17		1320	940	---											10	19	2260	3W1902	17		1320	940	---														
	9	29	2430	1W2901	STR															11	29	2430	3W2901	STR																		
<b>WINGWALL 2</b>																	<b>WINGWALL 4</b>																									
	13	16	2291	2W1601	STR															13	16	2895	4W1601	STR																		
	7	16	1190	2W1602	STR															10	16	1190	4W1602	STR																		
▲	7	16	3586	2W1603	STR															▲	10	16	3830	4W1603	STR																	
	7	16	2266	2W1604	STR															10	16	2510	4W1604	STR																		
▲	26	16	1826	2W1606	STR															▲	26	16	1826	4W1606	STR																	
	4	16	930	2W1605	17		300	330	300											5	16	930	4W1605	17		300	330	300														
	2	16	1827	2W1607	19		706	1121	---											2	16	2431	4W1607	19		711	1720	---														
▲	30	16	1320	2W1608	19		660	660	---					29		705			▲	33	16	1320	4W1608	19		---	660	660														
	7	19	1980	2W1903	STR															10	19	1980	4W1903	STR																		
	7	19	2710	2W1901	17		1770	940	---											10	19	2710	4W1901	17		1770	940	---														
	7	19	2260	2W1902	17		1320	940	---											10	19	2260	4W1902	17		1320	940	---														
	9	29	2430	2W2901	STR															11	29	2430	4W2901	STR																		

~ NOTES ~

- UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 55M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31M (ASTM A 615M-SI). ALL BARS SHALL BE GRADE 420, UNLESS OTHERWISE DESIGNATED.
- FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
- BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
- "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
- "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
- ▲ DENOTES BARS TO BE CUT IN FIELD.
- \* DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
- △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
- E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



BAR SIZE	NOMINAL MASS (kg/m)	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER (mm)	CROSS SECTIONAL AREA (mm <sup>2</sup> )	PERIMETER (mm)
#10	0.560	9.5	71	29.84
#13	0.994	12.7	129	39.90
#16	1.552	15.9	199	49.95
#19	2.235	19.1	284	60.00
#22	3.042	22.2	387	69.74
#25	3.973	25.4	510	79.80
#29	5.060	28.7	645	90.16
#32	6.404	32.3	819	101.47
#36	7.907	35.8	1006	112.47
#43	11.380	43.0	1452	135.09
#57	20.240	57.3	2581	180.01