CABLING FACTORS

of Conductors

Total	Outside	F1	F2	F3	F4	F5
Twin			.107	.250		
2		2.000	.785	.667		
3		2.155	.417	.483	.0403	.155
4		2.414	.305	.414	.215	.414
5		2.701	.252	.378	.542	.701
6	6	3.000	.221	.354	1.027	1.000
7	6	3.000	.221	.354		
8	7	3.305	.201	.339		
9	8	3.613	.187	.327		
10	8	4.000	.284	.410		
12	9	4.155	.227	.361		
14	10	4.414	.202	.340		
16	11	4.701	.188	.328		
19	12	5.000	.178	.319		
20	13	5.305	.170	.312		
24	14	6.000	.215	.354		
27	15	6.155	.187	.328		
30	16	6.414	.175	.317		
33	17	6.701	.168	.310		
37	18	7.000	.162	.305		
61	24	9.000	.241			

le Diameter
eter * 1.414

d = Diameter of Conductor

F1 x d = Cable OD

F2 x d^2 = Area of Outside Interstice

F3 x d = Diameter That Will Fit in Outside Interstice

F4 x d^2 = Area of Center Interstice

F5 x d = Diameter That Will Fit in Center Interstice

Number of conductors in cable	Maximum length of lay
2	30 x single conductor diameter
3	35 x single conductor diameter
4	40 x single conductor diameter
5 or more	15 x cable core diameter

KGH 5-21-86

CALCULATING
CIRCULAR MILL AREA OF STRAND IN MILS

DIAMETER OF INDIVIDUAL WIRES
MOVE DECIMAL THREE PLACES TO RIGHT
EXAMPLE: .1055" -----> 105.5

SQUARE THE INDIVIDUAL WIRE AND MULTIPLY BY NUMBER OF WIRES

EXAMPLE: 105.5 SQUARED X 19W = 211475 CMA

$/LB * SG
= pound
Volume
COST

Conversions			Multiply By
MPa	to	PSI	145
kN/m	to	Lbs / inch	5.71
N/mm^2	to	PSI	145

(divide by square inches for actual weight)