

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

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AT&T Co Standard

CABLE SPLICING—GENERAL

LEAD SLEEVES—DUCT SPLICES

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1. GENERAL

1.01 The lead sleeve for a duct splice must be small enough to fit inside the duct and it is, therefore, generally limited to a maximum diameter of 2-3/4 inches.

1.02 The length of the sleeve depends on whether it is used for the repair of a damaged cable or to cover a complete splice. In repairing damaged cable the length is determined by the extent of the sheath damage and the number of conductors that must be pieced out. In making a complete splice the length may be varied in order to restrict the diameter of the finished splice.

2. TABLES

2.01 The following table lists the lead sleeve sizes for complete duct splices in large exchange cables. It is based on boiling out with paraffin and using standard 3-1/4-inch cotton sleeves with a 1/4-inch separation between rows and an end clearance of approximately 2 inches between the sheath and the first row. Where it is necessary to piece out and splice only a limited number of conductors, the length of the sleeve may be reduced correspondingly.

Size of Cable (Pairs)	Gauge	Diameter of Sleeve (Inches)	Length of Sleeve (Inches)	Rows of Cotton Sleeves
303	19	2-3/4	31-1/2	7
455	19	2-3/4	49	12
404	22	2-1/2	31-1/2	7
606	22	2-3/4	28	6
909	22	2-3/4	59-1/2	15
404	24	2-1/4	31-1/2	7
606	24	2-1/2	31-1/2	7
909	24	2-3/4	35	8
1212	24	2-3/4	49	12
1515	24	2-3/4	70	18
606	26	2-1/4	31-1/2	7
909	26	2-1/2	31-1/2	7
1212	26	2-3/4	35	8
1215	26	2-3/4	42	10
1818	26	2-3/4	59-1/2	15
2121	26	2-3/4	70	18

2.02 When it is necessary to make a duct splice in a confined space, it may be desirable to reduce the length of the lead sleeve by using cotton sleeves 2-1/2 inches in length instead of the standard 3-1/4-inch length. The following table lists the lead sleeve sizes necessary for the larger cables when using 2-1/2-inch cotton sleeves.

Size of Cable (Pairs)	Gauge	Diameter of Sleeve (Inches)	Length of Sleeve (Inches)	Rows of Cotton Sleeves
455	19	2-3/4	40	12
909	22	2-3/4	48	15
909	24	2-3/4	29	8
1212	24	2-3/4	40	12
1515	24	2-3/4	56-1/2	18
1212	26	2-3/4	29	8
1515	26	2-3/4	34-1/2	10
1818	26	2-3/4	48	15
2121	26	2-3/4	56-1/2	18