

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G50.700.7
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AT&TCo Standard

SPLICE CASES

20 AND 21 TYPES

PREPARATION OF SHEATH OPENING

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1. GENERAL

1.01 This section has been revised to include recently introduced small sizes of cast iron splice cases. It describes the cable sheath preparation for lead, alpeth and stalpeth cables, required before installing 20- and 21-type splice cases. **The method described is for use on aerial and underground installations.**

1.02 The method may also be used on buried installations with alpeth, stalpeth, or lead sheath cables **where the cases are bonded to the metal layers of the sheath.** The method of preparing the sheath for buried installations where the cases are insulated from the metal layers of the sheath is covered in another section of the Practices.

1.03 The method and illustrations shown in Part 2 cover the sheath preparation for a straight splice. Use the same method for a "Y" or double "Y" splice.

1.04 The following table gives certain dimensions required in sheath preparation for the 20- and 21-type splice cases.

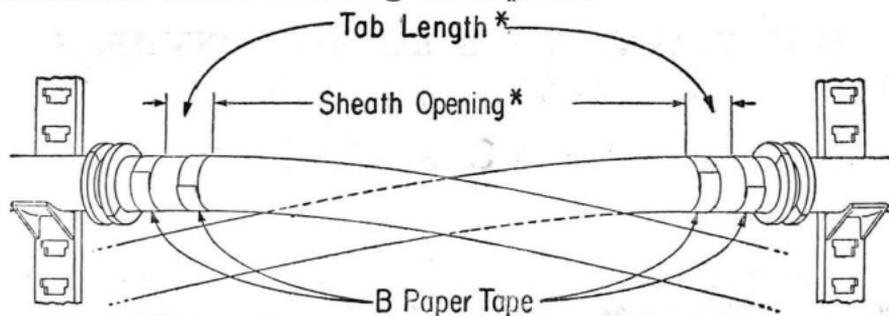
Splice Case No.	Overall Length	Sheath Opening	Length of Tab	Distance Between Outer Markers	Approx. Spacing Between Clamps	Max. Cable Sheath Diam.
20A1 & 20A3	21	13	1½	16	14¾	1
20A2	20¾					
20B1 & 20B3	24	16	1½	19	17¼	1.6
20B2	23¾					
20C or 21C	25⅞	17	2¼	21½	19	2.2
20D or 21D	25⅞	17	2¼	21½	19	2.9
21A	23	15¾	1½	18¾	17	1
21B	25	17¾	1½	20¾	19	1.6

2. SHEATH PREPARATION

2.01 **Precaution:** The cables must be set up and secured firmly in position with the cable sheaths straight and in line for a minimum length of 8 inches back from the sheath butt. This is required to prevent movement of the sheath and cable while splicing the conductors.

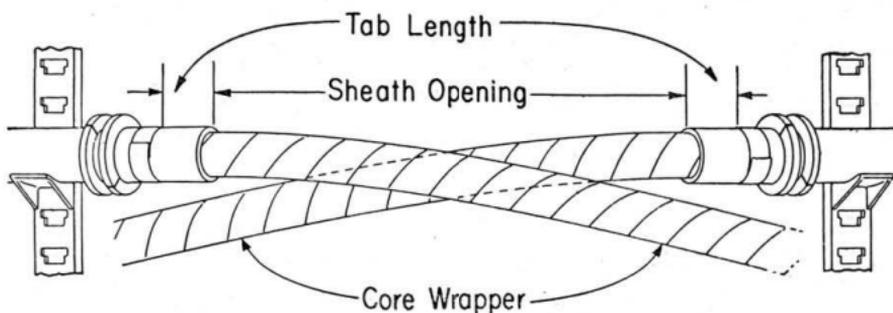
2.02 Select the proper size of sealing washers from the table in Section G50.700.4 and slip two on each cable out of the way. For cables which have not been cut, place these washers over the cables and slip out of the way. If combination lead and polyethylene washers are required, place each set on the cable with the polyethylene washers facing each other.

2.03 Mark center of splice. Then place B paper tape markers on the sheath as illustrated. In aerial installations where the slack puller is used, follow instructions in G52.610.1. Pull slack before marking sheath opening. Complete splice case installation before removing slack puller.

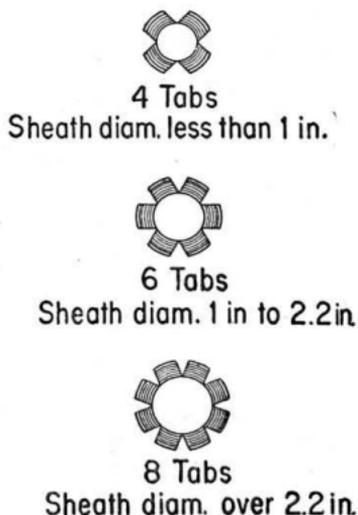
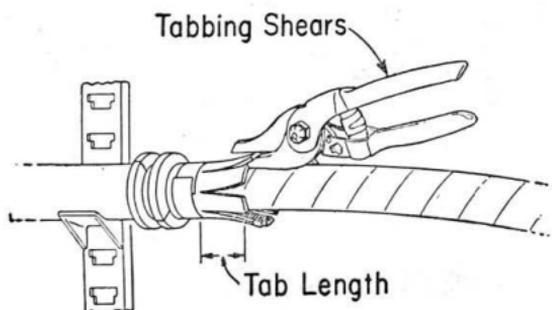


* See table, Paragraph 1.04

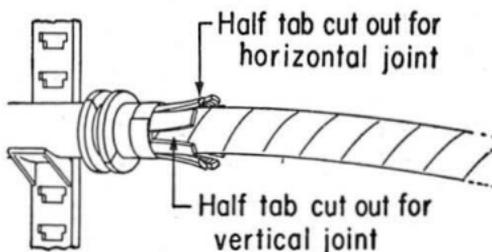
2.04 Remove sheath between inner tape markers exposing core wrapper. Then remove inner tape markers. Gloves should be worn in removing metal layers of sheath.



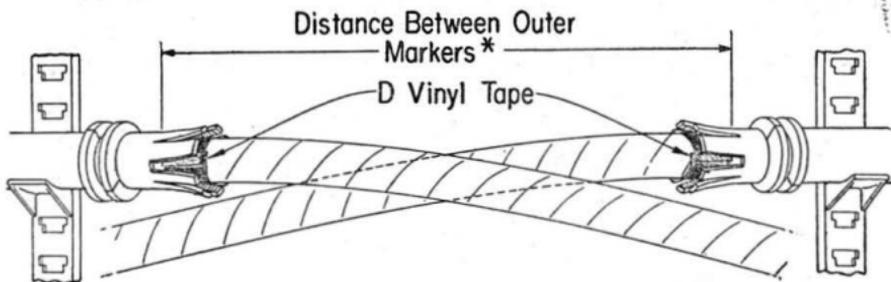
2.05 With tabbing shears for large cables or with splicer's scissors or other approved tools for small cables, cut the required number of tabs, as illustrated in the sketch, through the sheath to the edge of the tape. These cuts should be made so as to make the resulting tabs approximately the same size. On alpeh or stalpeth cables, the cuts should be made through the polyethylene and metal layers. **Avoid injuring the core wrapper.** Carefully bend tabs away from core and remove any metal burrs or slivers.



2.06 If the splice cases are to be mounted so that the joint between them is horizontal, cut to half width one of the tabs on the top of the cable. If this joint is vertical, cut to half width one of the tabs on the front of the cable. These cuts should be made through any metal layers. This space is required for the ears of the inner sheath clamp. These ears must fall in the center of one of the cases after assembly.



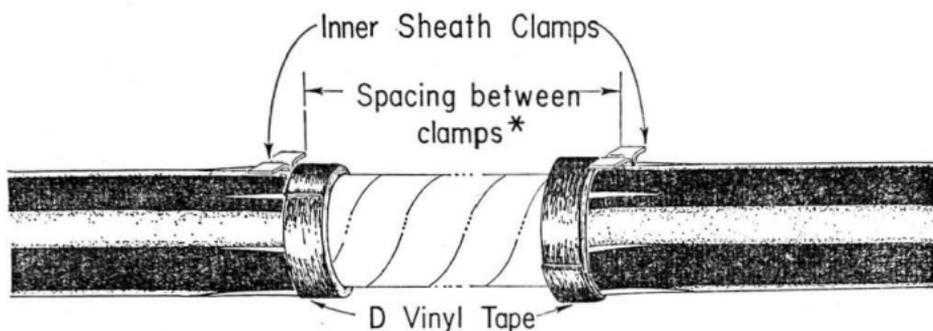
2.07 Make a collar with two turns of D vinyl tape, first turn with adhesive side out lapped about 1/4 inch, then one turn with adhesive side in. Slide the collars back under tabs, recheck distance between outer markers, then remove outer markers.



*See table, Paragraph 1.04

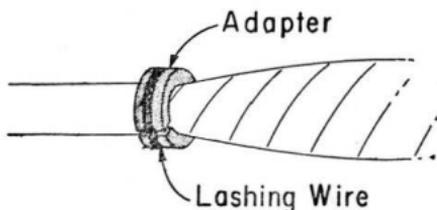
2.08 Slip the inner sheath clamp under the tabs with the ears extending from the slot from which the half tab was removed. If a small cable is to be installed in the splice case an inner sheath clamp of the proper size will be furnished with the adapter assembly. The table for adapter sizes is given in Section G50.700.5.

2.09 At one end, position the inner sheath clamp in center of tab slot. Bind down the tabs with at least two layers of D vinyl tape to hold the clamp firmly in place. Position the other inner sheath clamp at correct spacing and bind down the tabs to hold it in place. **Do not cover the projecting ears of the clamps**, because this will prevent electrical connection with the splice case, and permanent bonding of the metal sheath.



* See table, Paragraph 1.04

2.10 Where adapters are required, place the two halves of the spacer around the cable so as to enclose the inner lashing wire as shown. Place spacer so that the ears of the inner sheath clamp will fall in the center of one of its halves.



2.11 Place temporary bonds where required in accordance with the Section G50.610.1.