BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G50.669.1
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AT&T Co Standard

CABLE SPLICING—GENERAL
TEMPORARY PROTECTION OF SHEATH OPENINGS

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1. GENERAL

1.01 This section describes methods of providing temporary protection at uncompleted splices, trouble openings, etc., at locations where moisture conditions are not severe and where the cable is not maintained under gas pressure.

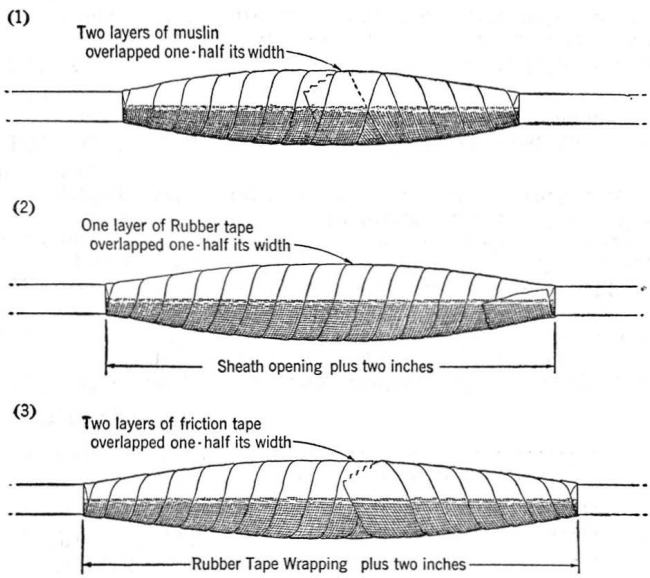
1.02 If practicable, raise the splice so that water will not run along the cable sheath toward the splice. If this is not practicable and the splice is in such position that water might run along the cable sheath toward it, make drip collars by wrapping friction tape around the cable at each side of the splice.

1.03 At locations where the cable is exposed to severe moisture conditions or is likely to become submerged the opening should be protected with CR Tape.

1.04 **Open splices in working cables must be tightly wrapped** to prevent circulation of air. Otherwise, there is danger of the splice catching fire in case an arc occurs between conductors.

2. TAPE WRAPPING

2.01 A rubber and friction tape wrapping which can be applied rapidly is commonly used in aerial, block and house cables. The method is as follows:



If the wrapping is to remain longer than overnight paint with No. 2 asphalt paint

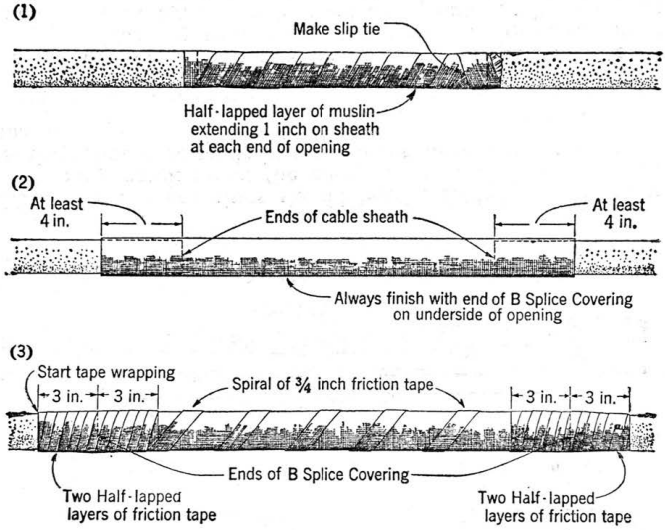
2.02 In wrapping the Y end of a splice, serve the tapes between the cables at the crotch.

2.03 If the cable is supported on strand, raise and support the wrapped opening at the midpoint with a houseline tie or friction tape.

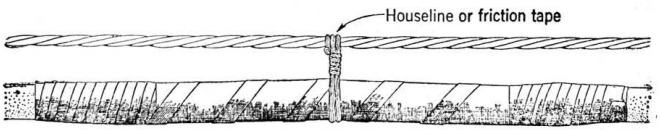
2.04 If the cable is located where there is little or no moisture, such as the street floor or upper floors in a building, the layer of rubber tape may be omitted.

3. B SPLICE COVERING

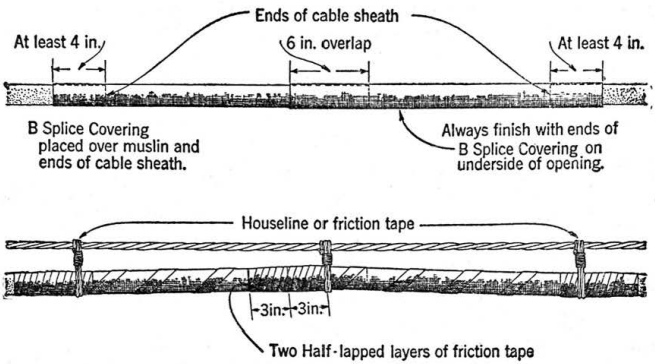
3.01 The B Splice covering provides a convenient protection where moisture conditions are not severe. It has the advantage of being reusable as long as it is in good condition. It is generally used in the horizontal portion of cable in aerial, block or house plant. It is not suitable on vertical cable runs, nor for protecting openings that have a crotch, except in favorable locations as in a building. The method is as follows:



3.02 If the cable is supported on strand, raise and support the wrapped opening at the midpoint with a houseline tie or friction tape as shown below.



3.03 Where the length of the opening is such that two or more B splice coverings are required, the cloths are wrapped one at a time around the openings with overlaps of not less than 6 inches. The overlaps are taped with 2 layers of half-lapped friction tape as shown below. If on strand, the wrapping is raised and supported near the overlaps and near the ends.



3.04 B splice coverings should not be folded because they may crack along the edge of the fold. When not in use, they should be made into a roll for storage or transportation.

4. RUBBER BANDAGE

4.01 The rubber bandage method of wrapping is a convenient way to protect open splices in large size cables if applied carefully. It can be used on straight or Y splices or sheath openings in aerial or underground cables where there is no danger of the cable being submerged. The method of protecting the splice is as follows:

(1) Examine the bandage to make sure that it is not torn.

(2) Wrap the conductors with two layers of dry muslin.

(3) Apply at least two half-lapped layers of bandage extended about 6 inches on the sheath at each end. Apply the bandage tightly and terminate with a slip tie. If there is a crotch, serve the bandage through it and around the cables.

4.02 If the bandage wrapping is to remain in place for several days, cover it with a layer of muslin and two layers of half-lapped friction tape, painted with No. 2 Asphalt Paint.

4.03 Exposure to sunlight will deteriorate the rubber bandage. It is generally advisable on aerial openings to protect the bandage with a layer of muslin or a B splice covering held in place by a long spiral of friction tape.

5. EMERGENCY PROTECTION

5.01 In unusual circumstances, such as following a break in a water-main or during a heavy rain storm or flood, water may enter a manhole at such a rapid rate that there will not be time to protect the cable in the usual way. If possible, wrap muslin around the end where there are unspliced conductors and then wrap tightly with a rubber bandage extending over the sheath. Raise the cable as high as possible in the manhole. If it is apparent that there will not be time to place a bandage, beat a ring in the sheath, or flatten the cable close to the end of the sheath and raise the cable. This will help to retard the entrance of the water into the cable.