

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

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AT&T Co Standard

BLOCK AND HOUSE CABLE
PRECAUTIONS

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1. GENERAL

1.01 This section outlines the general precautions to be observed in the construction and maintenance of block and house cables.

1.02 Take all necessary precautions to avoid injury from electric light or power circuits, moving machinery, belts, elevators, counterweights, steam pipes and similar structures.

2. WORKING ON STRAND

2.01 Work on 2200-pound suspension strand shall be performed from ladders as the strength of the strand and the uncertainty in the holding power of masonry attachments may not be sufficient to support the weight of a man and cable car. Ladders should be used for working in spans attached to building walls. When possible, place ladders so that they will tend to push the strand attachments toward rather than away from the building walls. Do not ride strand of questionable strength unless it is first tested by suspending the weight of two

men (about 300 pounds) from the center of the span. In no case shall 2200-pound strand be ridden by a workman.

3. WORKING ON PRIVATE PROPERTY

3.01 Enter private property as little as practicable and where considered necessary notify owner, his representative or the tenant before starting work. Collect all tools and materials required for the job and take them in where needed, in order to avoid annoying occupants of property by frequent visits.

3.02 While working on private property be careful to avoid any damage to buildings, lawns, shrubs, flowers, etc. Avoid placing a ladder over property that may be damaged by falling tools. Prevent damage by covering furniture, floors, machinery, or other articles with tarpaulins. Where damage has been done which cannot be properly and promptly repaired, report case to your supervisor. After finishing work, leave property in a clean and orderly condition.

4. KEEP OFFS

4.01 Where it is essential that employees keep off a property, it will be indicated on the detail plans. Avoid "keep offs" at all times.

5. USE OF ELECTRIC POWER

5.01 Arrangements for the use of electric power necessary for the work, shall be made by supervision with the property owner, building electrician or other authorized person.

6. LADDERS

6.01 The recommendations concerning the proper use, care and maintenance of Extension Ladders, as outlined in the sections of Bell System Practices covering this tool, shall be observed in every respect.

7. PLACING CABLE

7.01 In handling cable either on a reel or in a coil, do not allow kinks to develop and cuts or similar damage to occur in the sheath. When the cable is bent in feeding it, the radius should be as large as possible.

7.02 Handle splices carefully and do not bend a cable near a splice.

7.03 In placing a cable avoid resting it or scraping it against a corner or sharp surface. In such cases protect cable by means of rope mats.

7.04 Make certain that clamps, core hitches, ties and other attachments are secure, before starting a pull.

7.05 Inspect blocks, ropes or other devices used in pulling the cable or lowering it. Make certain that they are in good working condition. See that the pulling setup is done properly. Make initial pull to be certain that the setup is firmly in place. See that moving parts are properly lubricated.

7.06 Where cable is pulled into a conduit, lubricate it with standard Bentonite Cable Lubricant so as to ease the pull and avoid possible sheath damage.

7.07 Pull cable with a slow steady pull.

7.08 When handling rope or cable that is being paid out, exercise care to avoid being caught in a bight.

7.09 Do not leave cable supported on pulling device overnight.

8. SHAFT SIGNAL DEVICE

8.01 Sound signal should be used only when the person to be controlled is positively known to be within distinct hearing distance of the person signaling. In some cases, usually on small riser jobs, a hand line suspended in the shaft and used with the following code, may be sufficient.

GO — Two sharp pulls.

STOP — One sharp pull.

BACK — Three sharp pulls.

8.02 When placing long riser cables extending for a distance of several floors a temporary talking circuit may be installed in the shaft.

9. USE OF ELEVATORS

9.01 Under no circumstances shall telephone workmen run an elevator. Where it is necessary to use an elevator or to work in an elevator shaft an authorized attendant should be on duty **at all times** during the progress of the work. As this may have a bearing on when such work can be performed, arrangements for the services of the attendant shall be made well in advance of the time the elevator is required.

10. HOISTING ROPES

10.01 The sizes and safe working loads of new Manila ropes generally used in block and house cable construction are as follows:

3/8" — 400 lbs.

1/2" — 700 lbs.

5/8" — 1100 lbs.

3/4" — 1400 lbs.

10.02 The strength of Manila rope is affected by many conditions that are present in the field and it is important that such rope be inspected frequently for abrasion, cuts, soft spots or decay as outlined in Bell System Practices covering Manila Rope and Blocks.

10.03 The sizes and recommended working loads of wire ropes generally used in construction work are:

1/4" — 2740 lbs.

5/16" — 4260 lbs.

3/8" — 6100 lbs.

7/16" — 8270 lbs.

10.04 Wire rope is used primarily as winch line for power winches. It is necessary that it be inspected frequently for wear, corrosion, rust, broken wires, kinks, crushed spots, etc., in accordance with Bell System Practices covering Wire Rope—General.