CABLE SPLICING - UNDERGROUND

BONDING - LEAD SHEATH CABLES

NOTES CONCERNING THIS ADDENDUM

This addendum is being issued to provide additional instruction on the placement of anchor holes for the attachment of bondin ribbon in manholes, and to provide an alternate method of bondin and insulating lead cables in central office vaults when insulatin joints are required.

The following paragraphs should be marked "See Addendum" an treated as indicated:

Paragraph 2.02 - Supplemented
Paragraph 3.03 - Supplemented

2. INSTALLATION OF BONDING RIBBON

2.02(a) In new manholes the anchor holes for the attachment o bonding ribbon will be preformed at the time the manhole is constructed. These holes for the horizontal run of bonding ribbon will be placed 2 inches below the ceiling of the manhole and spaced 18 inches apart, with the starting point for the horizontal measurement being the middle of an end wall of the manhole. The horizontal run may be placed around either end of the manhole, but should avoid the direction where the manhole walls contain lateral ducts or other obstructions if possible. A vertical run will be placed down the middle of each splicing bay with the starting point 4 inches below the ceiling of the manhole for the first hole and then spaced 18 inches apart to the bottom of the racks.

2.02(b) In manholes where preformed anchor holes do not exist, they should be drilled in accordance with the measurements given in Paragraph 2.02(a) of this Addendum.

3. BONDING IN CENTRAL OFFICE CABLE VAULTS

3.03(a) When insulating joints are required in central office vaults that have not been provided with wood uprights at the first rack, the following method may be used to insulate the lead sheath cables from the rack:

(1) Cut a shim of junk polyethylene sheath for each lead sheath cable to be insulated from the rack, 8 inches long and of sufficient diameter to cover at least two thirds (2/3) of the circumference of the cable. If preferred, or if junk polyethylene sheath is not available, the 2 inch polyethylene B cable guard may be used.

(2) Place the shim on the cable and center it at the first rack or steel upright from the duct entrance. If there is a gap in the opening of the shim, it must be positioned so that the cable sheath cannot contact any other metallic surface.

(3) Tape the ends of the polyethylene shim to the cable by placing 2 wraps of 2 inch DR tape, centering the tape so that it contacts 1 inch of cable and 1 inch of the shim.

(4) Shims are not required on polyethylene sheath cables as the sheath itself provides sufficient insulation.

3.03(b) When using the method of insulating cables from the rack as described in Paragraph 3.03(a) of this Addendum, bond the cables between the duct entrance and the insulating joints in the following manner:

(1) Continue the ground wire, used on the steel cross member of the frame, down the first rack or steel upright on both sides of the vault to a point sufficient to accommodate the lowest possible racking position for cables, and provide a loop of slack at each racking position where lead sheath cables are racked. These slack loops should be of sufficient length to allow the ground wire to be soldered on the cable at a point 6 inches toward the duct entrance from the rack. Slack loops need be provided for lead sheath cables at existing racking positions only, as subsequent cables racked at other positions may be bonded by attaching a single length of ground wire to the main ground wire run with a soldered joint. In this case,

tape the soldered ground wire joint with 3/4 inch DR tape, covered with one layer of B Vinyl tape to prevent contact between the joint and the steel frame.

(2) When two or more lead sheath cables are racked on the same cable hook at the first rack from the duct entrance, attach the ground wire loop to the lead sheath cable nearest to the rack only, bonding the other cable, or cables, to it at the same point by using bonding ribbon, and allow enough slack between cables so that there is no tension on the ribbon between bonding points.

(3) Unless otherwise specified, do not bond polyethylene sheath cables between the duct entrance and the insulating joints, as the bond in the first manhole outside the central office is considered sufficient for this type of sheath.