

## INSTRUCTIONS FOR SPLICING OVERHEAD CONDUCTORS USING FULL-TENSION AUTOMATIC SLEEVES

### I. Preparation of Conductors:

1. Cut the conductor square so that all strands are even, in lay and free of burrs.
2. Straighten the conductor to remove any curvature due to coiling.
3. Clean the conductor thoroughly by using a wire brush which has been coated with a liberal quantity of inhibitor. Wipe off excess inhibitor after cleaning. It is just as important to clean new conductors as well as old conductors.
4. The conductor size and type stamped on the splice must correspond to the size and type of the conductor to be spliced.
5. Measure and mark the conductor with electrical tape to insure full insertion of the conductor into the splice. One half (1/2) the length of the splice is the measure of full insertion.

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### II. Installation of the Automatic Splice:

1. Remove the colored end plug (if provided) by pulling out with a slight twisting motion.
2. Do not remove the conductor runnel guide or the internal pilot cup (if provided) from the splice. These components confine and guide the conductor strands for easy insertion.
3. Insert end of the conductor into the splice, and with a smooth straight thrust push the conductor through the gripping jaws until the conductor hits the center stop.
4. Visually check tape marker to verify full insertion. Remove the tape marker.
5. As tension is applied the conductor will move 1/4" to 1/2" from the end of the splice due to the sliding action of the gripping jaws.
6. After completion of the splice installation and before the chain hoist or rope blocks have been released, an additional momentary tension (jerk) should be applied to the conductor to "set" the splice and assure proper installation.

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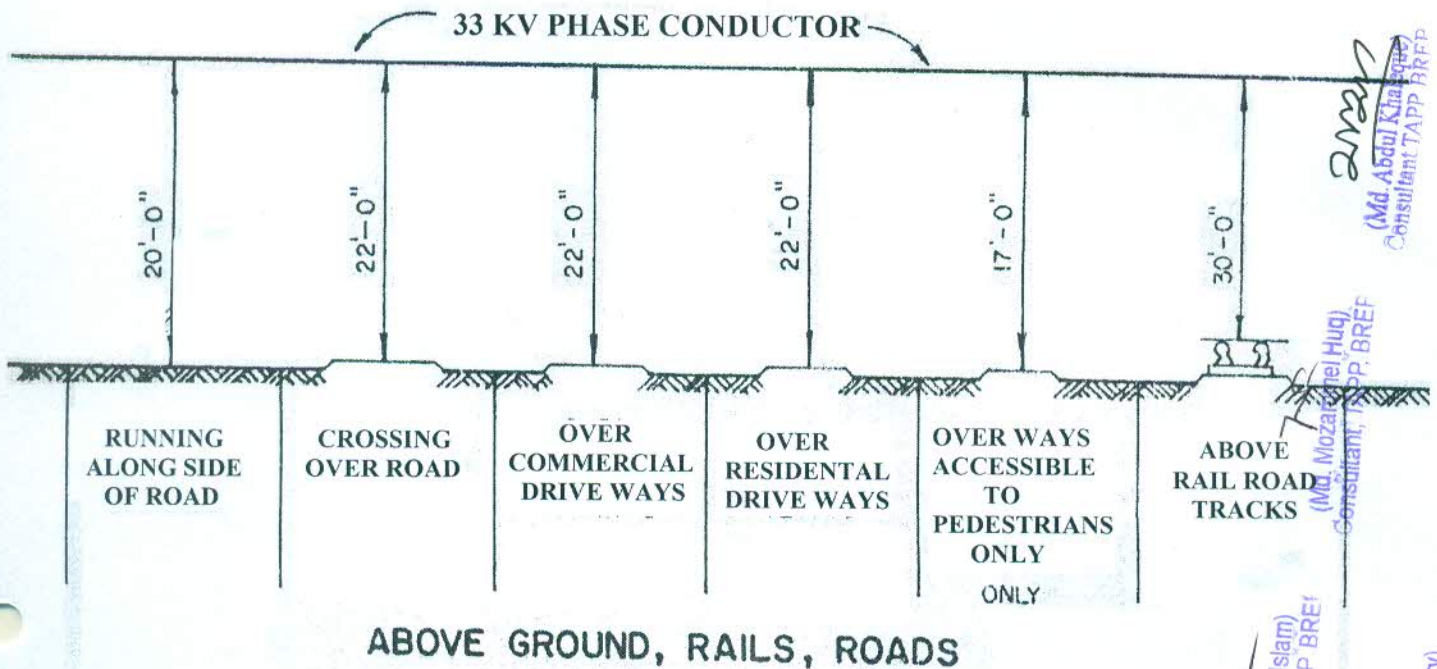
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### BANGLADESH RURAL ELECTRIFICATION BOARD

#### Unit Description: 33 KV SPLICING GUIDE FULL-TENSION AUTOMATIC SLEEVES

Date of Origin	Reviewed by	Approved by	Revision No.	Unit Designation
July 1979	BREB	BREB Board	6	TM46

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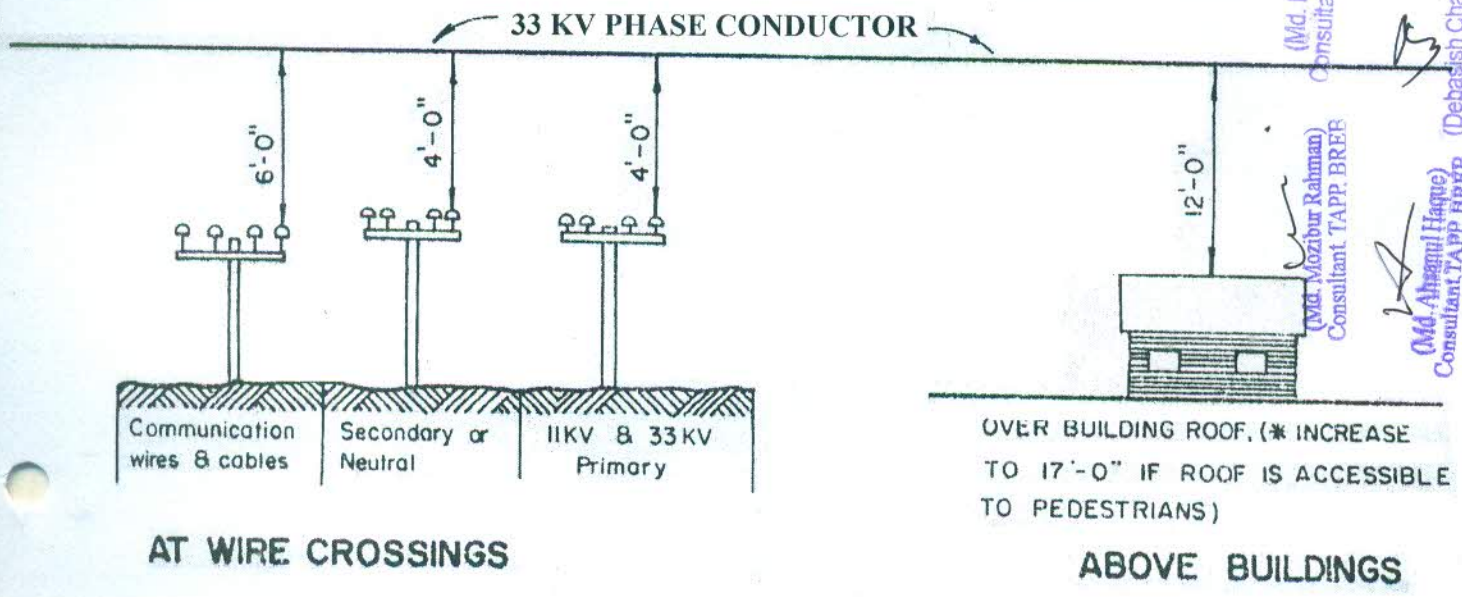


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**NOTE:**

1. CLEARANCES AS SHOWN ARE AT 60°F, NO WIND, FINAL SAG.
2. VERTICAL CLEARANCE OVER NAVIGABLE RIVERS ARE AS AUTHORIZED BY INLAND WATER AUTHORITY.

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**BANGLADESH RURAL ELECTRIFICATION BOARD**

**Unit Description: MINIMUM CONDUCTOR CLEARANCES FOR 33 KV LINE**

Date of Origin	Reviewed by	Approved by	Revision No.	Unit Designation
July 1979	BREB	BREB Board	6	<b>TM50</b>

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## GUYING DATA


### HORIZONTAL CONDUCTOR TENSION AT LINE ANGLES (PER CONDUCTOR)


CONDUCTOR \ LINE ANGLE	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
Nº 3 ACSR	360	450	520	600	670	740	810	880	940	1010	1080	1140
4/0 ACSR	610	880	1110	1330	1550	1770	1990	2200	2410	2620	2820	3010
477 mcm ACSR	630	900	1160	1430	1700	1970	2230	2470	2710	2950	3180	3420


## CONDUCTOR DATA


SIZE (AWG)	OUTSIDE DIAMETER (INCHES)	STRANDING AL. STEEL		CODE NAME	WEIGHT PER 1000 FT.	ULTIMATE STRENGTH (lbs)	MAXIMUM TENSION (lbs)
3	0.281	6	1	SWALLOW	72.3	2290	745
4/0	0.563	6	1	PENGUIN	291.1	8350	2276
477	0.858	26	7	HAWK	657	19500	2687


  
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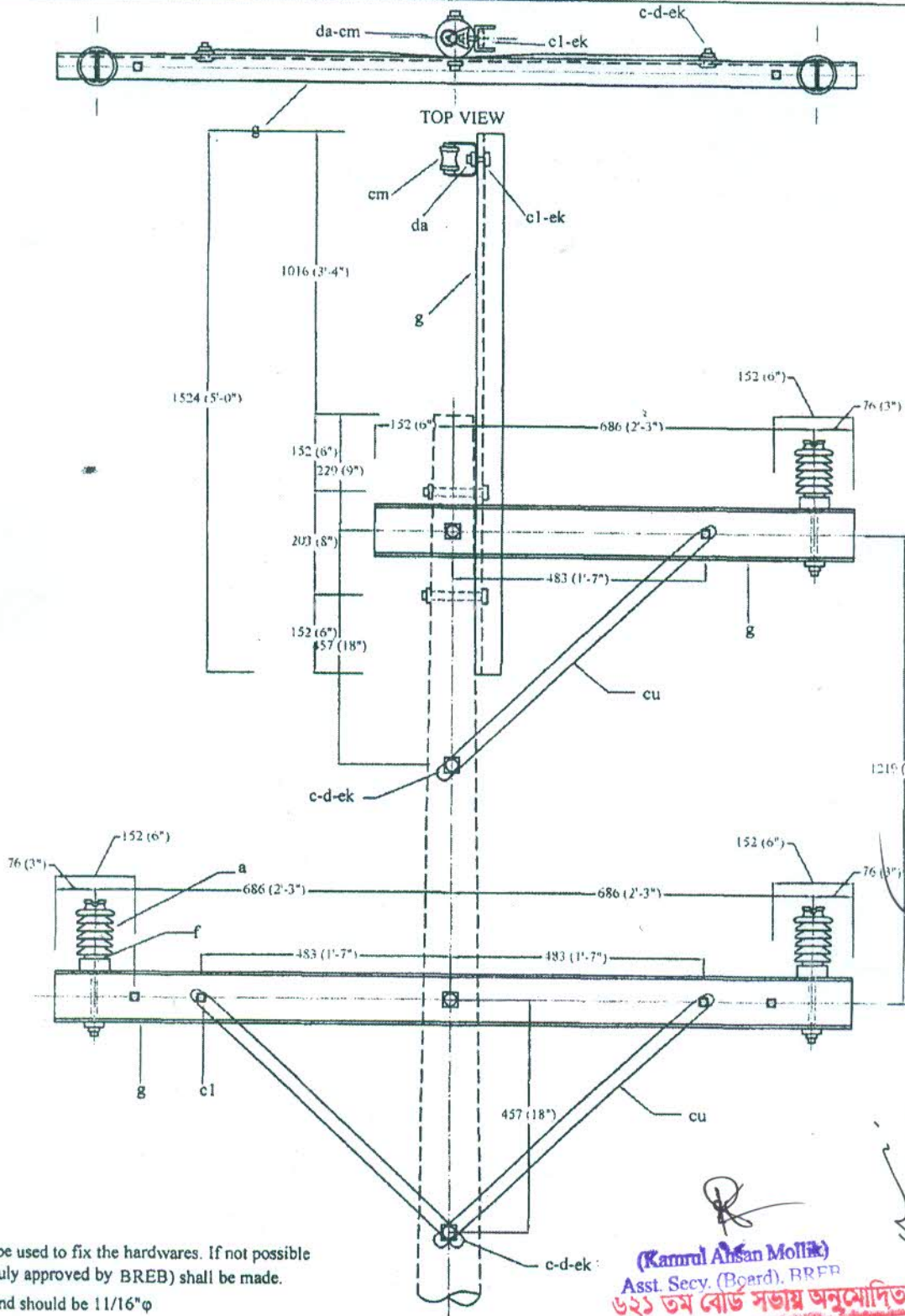
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### BANGLADESH RURAL ELECTRIFICATION BOARD

### Unit Description : 33 KV CONDUCTOR AND GUYING DATA

Date of Origin	Reviewed by	Approved by	Revision No.	Unit Designation
July 1979	BREB	BREB Board	6	<b>TM51</b>

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**Note :-**

1. Normally Bolts will be used to fix the hardwares. If not possible use of G I Clamps (duly approved by BRFB) shall be made.
2. Brace holes at both end should be 11/16"φ

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ITEM	MAT. CODE	Qty.	MATERIAL	ITEM	MAT. CODE	Qty.	MATERIAL
dc	B 49	04	Washer, curved, 4" x 1/4"φ, 1/4" x 11/16" hole	ek	B 50/138	10	Locknuts, as required
dc	B 46	02	Washer, flat, 2 1/4" sq. x 11/16" hole	ca	C 13	03	Insulator, post type, 33 KV
g	X 5	01	Crossarm, steel, channel 4" x 2" x 2" x 1/4" x 3'-0"	cu	B41/B41.1/B44	03	Brace, Steel / Wood, 28" x 1/4"
g	X 6	02	Crossarm, steel, channel 4" x 2" x 2" x 1/4" x 5'-0"	da	B 72	01	Bracket, secondary
cl	B 95	04	Bolt, m/c, 5/8" x req'd. length	cm	C 2/3	01	Insulator, spool
				c	B 6/7/8	06	Bolt, m/c, 5/8" x req'd. length

**BANGLADESH RURAL ELECTRIFICATION BOARD**

**Unit Description: 33 KV STEEL CROSSARM CONSTRUCTION TANGENT POLE**

Date of Origin	Reviewed by	Approved by	Revision No.	Unit Designation
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