



TABLE 4.
PLASTIC STRAP

ITEM	SIZE	STORES #
4	2"	34152
	3"	34153
	4"	34154
	5"	34155

TABLE 5.
CABLE PROTECTOR

ITEM	SIZE	STORES #
5	3" X 5"	37400
	2" X 2-1/2"	37401

TABLE 1.
U-SHAPE MOLDING

ITEM	SIZE	TYPE	STORES #
1	2"	SCH. 80	34122
	3"	SCH. 80	34123
	4"	SCH. 40	34124
	5"	SCH. 40	34125

TABLE 6.
RECOMMENDED U-SHAPE MOLDING SIZES

VOLTAGE	CABLE SIZE AWG OR KCMIL	MOLDING SIZE
15 KV	#2 (2-3 COND.) 1/0 (3 COND.) 350 (3 COND.) 500 (3 COND.) 750 (3 COND.)	3" 4" 4" 5" 5"
600 V	#2 1/0 4/0 350 500 750	2" 2" 2" 2" 3" 3"

TABLE 2.
REDUCER BOOT

ITEM	SIZE	STORES #
2	2" X 3"	34132
	4" X 2"	34133
	4" X 3"	34134
	5" X 4"	34135

TABLE 3.
BACKING PLATE

ITEM	SIZE	STORES #
3	2"	34142
	3"	34143
	4"	34144
	5"	34145

APPROVED _____
Original Signed
by Engineering Manager
ENGR. MANAGER _____
DRAWN BY _____
CHECKED BY _____

ENGINEERING STANDARD
INSTALLATION OF PVC RISER
CONDUIT ON WOOD POLES
CITY OF PALO ALTO
CALIFORNIA

3	1/26	UPDATED REFERENCE TO NOTES	J.P.
2	7/16	CONVERTED TO AUTOCAD	
1	6/94	DRAWING RENAMED	
REV	DATE	DESCRIPTION	APPR
NTS		DT-SS-U-1001A	1 OF 2
SCALE		STANDARD NO.	SHEET NO.

WOOD POLE RISER INSTALLATION NOTES

UNLESS OTHERWISE SPECIFIED, THIS CONSTRUCTION STANDARD SHALL BE USED FOR ALL WOOD POLE RISER INSTALLATIONS.

U-SHAPED PVC MOLDING SHALL BE MANUFACTURED FROM UNPLASTICIZED POLYVINYL CHLORIDE COMPOUND AND SHALL MEET THE REQUIREMENTS OF NEMA PUBLICATION PH 41-1986 AND NEMA PUBLICATION TC2-1983 AS APPROPRIATE. THE STANDARD SIZES USED SHALL BE 2", 3", 4", AND 5". TO COMPLY WITH THE IMPACT TEST REQUIREMENTS, 2" AND 3" SHALL BE SCHEDULE 80 AND THE 4" AND 5" SHALL BE SCHEDULE 40.

FOR RISERS IN EXCESS OF 750 VOLTS G.O. 95 RULE 54.6E 1988 SPECIFIES THE USE OF A MOLDING THAT MEETS THE IMPACT TEST REQUIREMENTS OF EPC-80-PVC AND REQUIRING AN ADDITIONAL BACKUP PLATE OF PVC MATERIAL.

NOTES:

1. AS A MATTER OF CONVENIENCE, THESE REQUIREMENTS SHALL APPLY TO PRIMARY AND SECONDARY RISER INSTALLATIONS ON WOOD POLES INCLUDING STREET LIGHT AND COMMUNICATIONS LINES.
2. THE RISER CONDUIT SHALL BE LOCATED IN A QUADRANT ON THE POLE AS DIRECTED BY THE ELECTRIC UTILITY.
3. THE TOP OF THE RISER SHALL HAVE A NYLON CABLE PROTECTOR.
4. UNLESS OTHERWISE APPROVED BY THE ELECTRIC UTILITY, A NINETY DEGREE ELBOW AND A PRECAST BOX SIZE AS SPECIFIED SHALL BE INSTALLED AT THE BASE OF THE RISER POLE. REFER TO THE APPLICABLE LAYOUT DRAWING FOR THE EXACT LOCATION OF THE BOX.
5. ANY MATERIALS SUBSTITUTED MUST BE APPROVED BY THE ELECTRIC UTILITY PRIOR TO INSTALLATION.
6. UNLESS OTHERWISE SPECIFIED, THE BEND OR SWEEP USED AT THE BOTTOM OF THE RISER MOLDING FACTORY SHALL BE OF PVC SCHEDULE 40 MATERIAL AND SHALL BE CAPPED WITH CONCRETE (3" THICKNESS) ALONG THE INSIDE PORTION OF THE BEND. THE CONCRETE SHALL BE COLORED RED BY THE ADDITION OF MILLER'S RED OXIDE PIGMENT TO THE CONCRETE MIX. COLOR WILL BE THE SATISFACTION OF THE UTILITIES UNDERGROUND INSPECTOR.
7. THE U-SHAPED MOLDING SHALL BE ATTACHED TO THE POLE WITH 1/4" X 2" NEOPRENE WASHER HEAD LAG SCREWS AT 18" INTERVALS BELOW THE 8 FT. LEVEL AND AT 36" INTERVALS ABOVE THE 8 FT. LEVEL. THESE SCREWS SHOULD BE INSTALLED SNUG AGAINST THE MOLDING BUT NOT DRIVEN TIGHT IN ORDER TO PERMIT EXPANSION OF THE MOLDING DUE TO TEMPERATURE CHANGES.
8. IT IS ACCEPTABLE TO INSTALL A PLASTIC STRAP WHEN IT IS NECESSARY TO JOIN TWO SECTIONS OF MOLDING WITH PLAIN ENDS. A 1/4" SPACING MUST BE PROVIDED BETWEEN THE ENDS TO ALLOW FOR THERMAL EXPANSION.
9. ONE TEN FOOT SECTION OF PVC BACKUP PLATE SHALL BE FASTENED TO THE POLE AT THE LOWER SECTION OF THE RISER WITH 6d GALVANIZED NAILS.
10. USE REDUCER BOOTS TO JOIN DIFFERENT SIZED U-SHAPED MOLDINGS TOGETHER AND TO JOIN DIFFERENT SIZED U-SHAPED MOLDINGS TO CONDUIT BENDS. TWO REDUCER BOOTS MAY BE USED IN SERIES WHERE A DOUBLE REDUCTION IS REQUIRED.

APPROVED		ENGINEERING STANDARD		3	1/26	UPDATED REFERENCE TO NOTES		
ENGR	MANAGER	INSTALLATION OF PVC RISER CONDUIT ON WOOD POLES		2	7/16	CONVERTED TO AUTOCAD		
DRAWN	EM	REV	DATE	DESCRIPTION			APPR	
CHECKED	TT			NTS	DT-SS-U-1001A		2 OF 2	
CITY OF PALO ALTO CALIFORNIA		SCALE	STANDARD NO.		SHEET NO.			

Original Signed
and Approved
by Engineering
Manager