

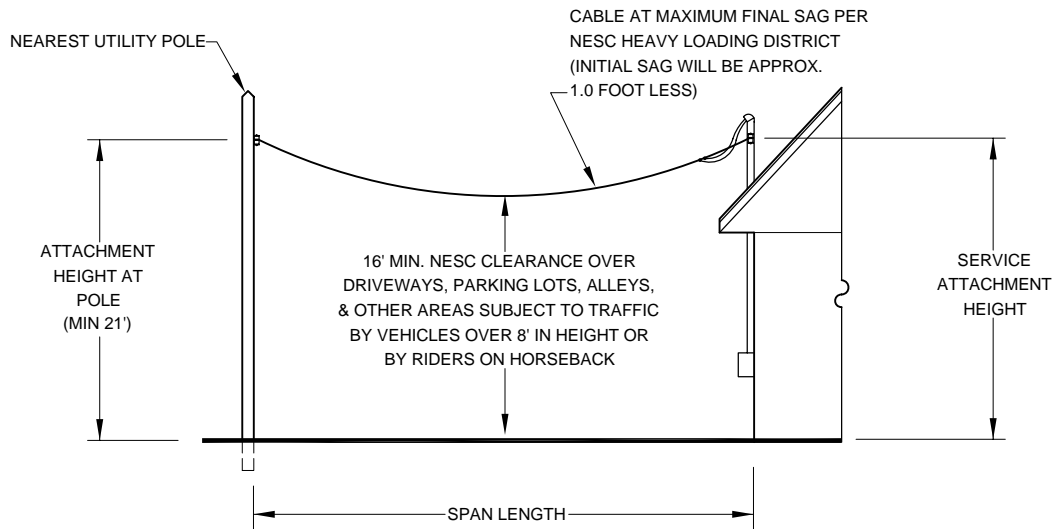
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TABLE 1: OVERHEAD RESIDENTIAL SERVICE DROP SIZING & MAXIMUM SPANS

(Crossing driveways, parking lots, alleys, open spaces, & other areas accessible to traffic by vehicles over 8' in height or by riders on horseback)



MAXIMUM RESIDENTIAL SERVICE DROP SPAN LENGTHS TO MAINTAIN 16' MIN. NESC CLEARANCES OVER AREAS SUBJECT TO TRUCK TRAFFIC OR EQUESTRIANS								
SERVICE ENTRANCE RATING OR MAIN DISCONNECT RATING PER NEC/REGIONAL BLDG. (AMPS)	COLORADO SPRINGS UTILITIES ELECTRIC SERVICE DROP SIZE/TYPE RATING		MAXIMUM SPAN LENGTH (FEET) @ SERVICE ATTACHMENT HEIGHT					
	(ALUMINUM)	(AMPS)*	16'	17'	18'	19'	20'	21'
50-150	#4 triplex	90	50'	72'	81'	88'	94'	100'
151-200	#2 triplex	120	46'	66'	75'	81'	87'	91'
201-250	#1/0 triplex	160	40'	57'	65'	71'	75'	79'
251-380	#4/0 triplex	245	32'	49'	57'	63'	67'	71'

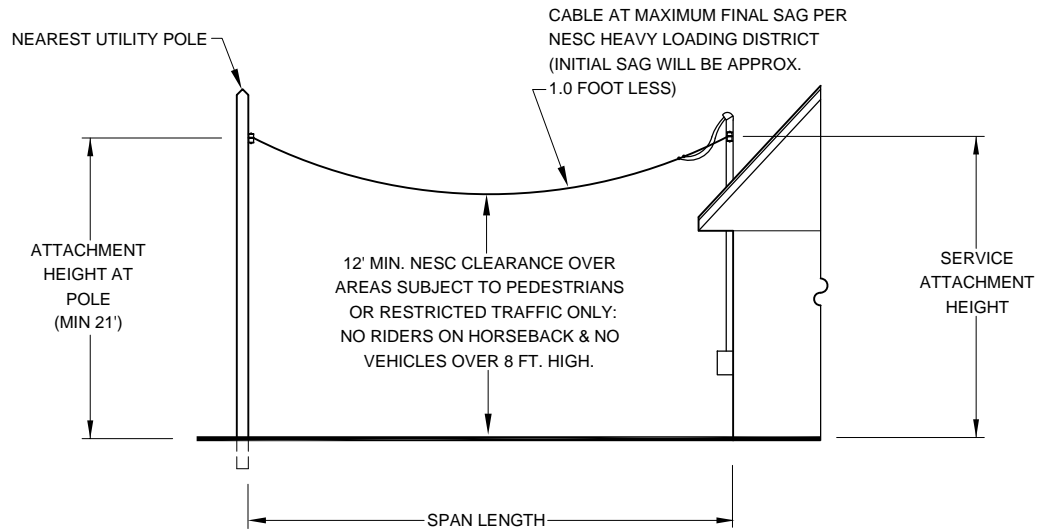
* Ampacity at 90°C steady state conductor temperature.

NOTES:

- Usually, for short service drops under 80 feet, the conductor size tabulated will be installed by Colorado Springs Utilities. However, in order to limit voltage drop on long services to acceptable values, a larger service drop conductor may be required.
- For distances longer than these maximum spans, either a service lift pole will be required on the customer's property or a higher service attachment will be necessary. Above lengths are based on a minimum 21' attachment height at the utility pole takeoff and level terrain without the cable crossing over any buildings or other structures, swimming pools, water areas (lakes, pools, streams, etc.), areas accessible to riders on horseback, or to vehicles and other mobile units over 8' in height, elevated terrain, or other conflicting structures that require increased NESC clearances. Contact Field Engineering to schedule installation of a lift pole or for assistance to avoid an undesired additional pole.

CAUTION: For your own safety, keep all measuring instruments at least 10 feet away from any power system conductors in order to prevent electric shock. If you would like help to plan attachment height and service entrance location based on actual conditions at your site, call Field Engineering; people trained and equipped to safely measure the height of conductors and discuss design options will assist you.

TABLE 2: OVERHEAD RESIDENTIAL SERVICE DROP SIZING & MAXIMUM SPANS
 (Crossing areas subject to pedestrians or restricted traffic only)



MAXIMUM RESIDENTIAL SERVICE DROP SPAN LENGTHS TO MAINTAIN 12' MIN. NESC CLEARANCES OVER AREAS SUBJECT TO PEDESTRIANS OR RESTRICTED TRAFFIC ONLY									
SERVICE ENTRANCE RATING OR MAIN DISCONNECT RATING PER NEC/REGIONAL BLDG.	COLORADO SPRINGS UTILITIES ELECTRIC SERVICE DROP		MAXIMUM SPAN LENGTH (FEET) @ SERVICE ATTACHMENT HEIGHT						
	SIZE/TYPE	RATING	12'	13'	14'	15'	16'	17'	18'
(AMPS)	(ALUMINUM)	(AMPS)*							
50-150	#4 triplex	90	67'	89'	98'	105'	111'	117'	121'
151-200	#2 triplex	120	61'	82'	90'	97'	102'	107'	111'
201-250	#1/0 triplex	160	53'	71'	78'	84'	89'	93'	97'
251-380	#4/0 triplex	245	45'	63'	70'	75'	80'	85'	90'

* Ampacity at 90°C steady state conductor temperature.

NOTES:

- Usually, for short service drops under 80 feet, the conductor size tabulated will be installed by Colorado Springs Utilities. However, in order to limit voltage drop on long services to acceptable values, a larger service drop conductor may be required.
- For distances longer than these maximum spans, either a service lift pole will be required on the customer's property or a higher service attachment will be necessary. Above lengths are based on a minimum 21' attachment height at the utility pole takeoff and level terrain without the cable crossing over any buildings or other structures, swimming pools, water areas (lakes, pools, streams, etc.), areas accessible to riders on horseback, or to vehicles and other mobile units over 8' in height, elevated terrain, or other conflicting structures that require increased NESC clearances. Contact Field Engineering to schedule installation of a lift pole or for assistance to avoid an undesired additional pole.
CAUTION: for your own safety, keep all measuring instruments at least 10 feet away from any power system conductors in order to prevent electric shock. If you would like help to plan attachment height and service entrance location based on actual conditions at your site, call Field Engineering; people trained and equipped to safely measure the height of conductors and discuss design options will assist you.

TABLE 3

MATERIALS APPROVED FOR USE IN ELECTRIC SERVICE
LINE CONSTRUCTION

Item Description	Designation	Approved Manufacturer *
4/0 AWG AL with 2/0 AWG AL Neutral Service Wire	600V UD “SureSeal” or “SuperSeal” Self-repairing wire types only	Southwire (SureSeal): <ul style="list-style-type: none">• Wesco- Utility, Denver• Western United Electric Supply Prysmian/Pirelli (SuperSeal): <ul style="list-style-type: none">• Wesco- Utility, Denver• Utility Products Supply
350 MCM AL with 4/0 AWG AL Neutral	Abuse-Resistant type only	All manufacturers including: <ul style="list-style-type: none">• Southwire• Prysmian (Pirelli)• Alcan• General Cable (BICC)
2” SCH 40 PVC	Electrical Rated (grey only)	All manufacturers including: <ul style="list-style-type: none">• Carlon• Cantex• Heritage
3” & 4” DB120 or SCH 40 PVC	Electrical Rated (grey only)	All manufacturers including: <ul style="list-style-type: none">• Carlon• Cantex• Heritage
Meter Socket, 5 Terminal, 100A, Horn Bypass (residential)	<ul style="list-style-type: none">• Single Phase, 2 Wire, 120V• Single Phase, 3 Wire, 240V• 120/208V, 3 Wire, Network	Milbank Manufacturing Co: U7487-RL-KK & U8750-RL-KK Cutler Hammer: UGHTRS101BCH Siemens/Landis & Gyr: UAT111-MXA
Meter Socket, 5 Terminal, 200A, Horn Bypass (residential)	<ul style="list-style-type: none">• Single Phase, 2 Wire, 120V• Single Phase, 3 Wire, 240V• 120/208V, 3 Wire, Network	Milbank Manufacturing Co: U9101-RL-KK Square-D: UGHT-RS213C Cutler Hammer: UGHTRS213BCH Siemens/Landis & Gyr: UAT417-XVZ

Meter Socket, 5 Terminal, 200A, Lever Bypass (commercial)	<ul style="list-style-type: none"> • Single Phase, 2 Wire, 120V • Single Phase, 3 Wire, 240V • 120/208V, 3 Wire, Network 	<p>Milbank Manufacturing Co: U4551-RRL</p> <p>Siemens/Landis & Gyr: 40405-025</p>
Meter Socket, 4 Terminal, 320A, Lever Bypass (underground)	<ul style="list-style-type: none"> • Single Phase, 3 Wire, 240V 	<p>Milbank Manufacturing Co: U3000-0-K3L-K2L-5T9</p> <p>Siemens/Landis & Gyr: 48104-8203</p>
Meter Socket, 4 Terminal, 320A, Lever Bypass (overhead)	<ul style="list-style-type: none"> • Single Phase, 3 Wire, 240V 	<p>Milbank Manufacturing Co: U1779-RRL-K3</p> <p>Siemens/Landis & Gyr: 47707-82</p>
Meter Socket, 7 Terminal, 200A, Lever Bypass (only for self-contained meters)	<ul style="list-style-type: none"> • Three Phase, 4 Wire-Wye, 120/208V • Three Phase, 4 Wire-Wye, 277/480V • Three Phase, 4 Wire-Delta, 120/240V 	<p>Milbank Manufacturing Co: U4701-RRL</p> <p>Siemens/Landis & Gyr: 40407-025</p>
Meter Socket, 13 Terminal, 20A, Pre-wired Test Switches, Instrument Transformer Rated (necessary for CT meter)	<ul style="list-style-type: none"> • Three Phase, 4 Wire-Wye, 120/208V • Three Phase, 4 Wire-Wye, 277/480V • Three Phase, 4 Wire-Delta, 120/240V 	<p>Milbank Manufacturing Co: UC3913-RL-WC-11</p>
Meter Socket, 8 Terminal, 20A, Pre-wired Test Switches (Instrument Transformer Rated)	<ul style="list-style-type: none"> • Single Phase, 3 Wire-Wye, 120/208V • Three Phase, 3 Wire-Delta, 120/240V • Single Phase, 4 Wire-Delta, 120/240V 	<p>Milbank Manufacturing Co: UC4415-RL-WC-21</p>

* Manufacturer as listed or approved equal. Approval must be in writing by Colorado Springs Utilities Engineering Standards.

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