

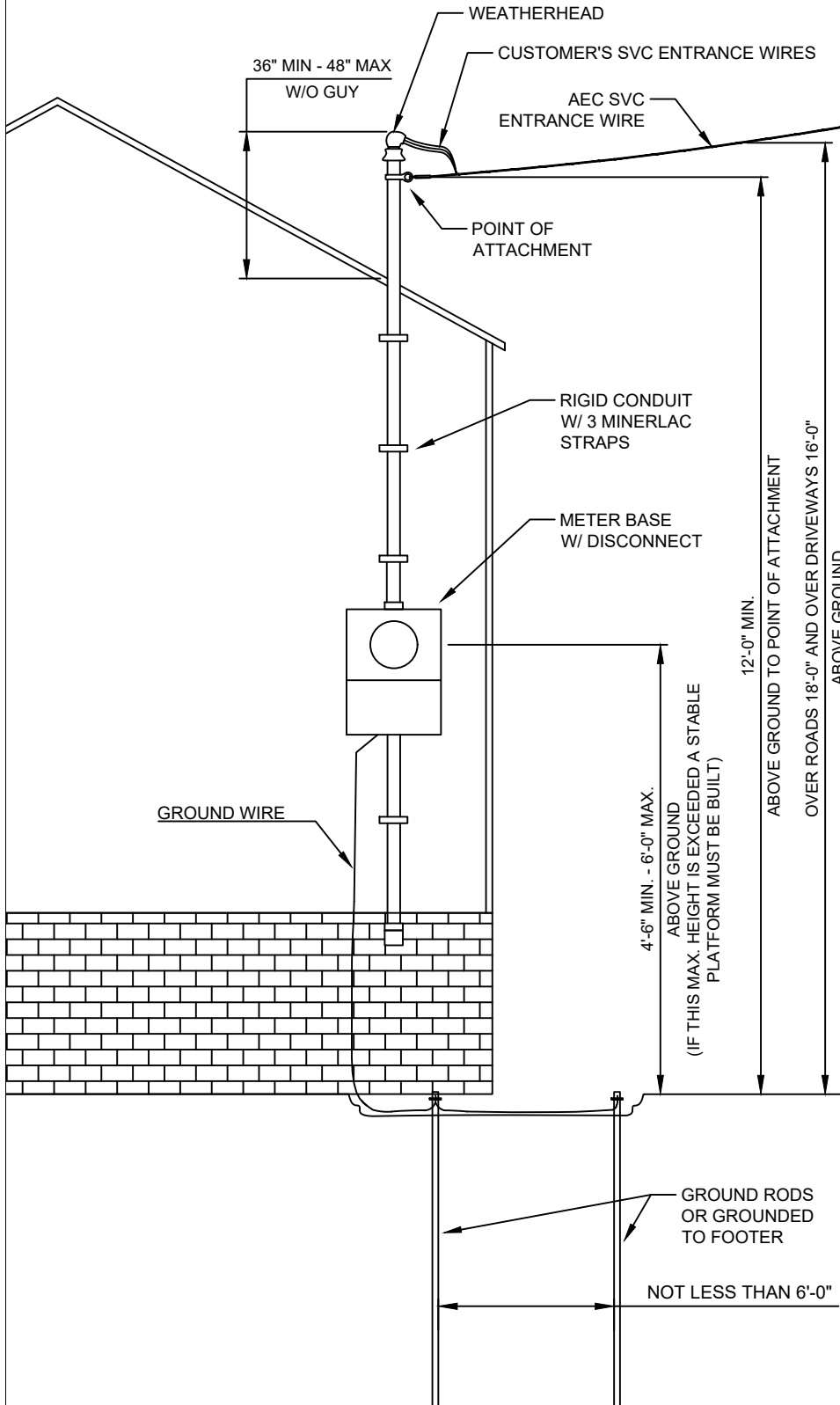
Appalachian Electric Cooperative

Electrical Service Installation Guide

Home or Building

Service Mast to Above the Roof

240/120 Volt Single Phase, up to 320 Amp



SERVICE NOTES:

1. **WEATHERHEAD:** In most applications on a pitched roof, weatherhead can be no less than 36" above the roof. maximum height above roof without guying and bracing conduit: (RIGID CONDUIT 36" - 48" LONG) When necessary to exceed these height requirements, conduit must be properly braced or guyed.
2. **CUSTOMER'S SERVICE ENTRANCE WIRES:** A minimum of 18" must be left extending through the weatherhead. Neutral wire must be white or marked white throughout the service.

	100AMP	200AMP	400AMP
RISER SIZE UNDER ROOF	2"	2"	3"
RISER SIZE ABOVE ROOF	2 1/2" GALV.	2 1/2" GALV.	3" GALV.

	100AMP	200AMP	400AMP
COPPER CONDUCTORS	#2	#2/0	500
COPPER NEUTRAL	#4	#1/0	350

	100AMP	200AMP	400AMP
ALUMINUM CONDUCTORS	#1	#4/0	750
ALUMINUM NEUTRAL	#2	#2/0	500

3. **RIGID CONDUIT W/3 MINERLAC STRAPS:** Rigid metal conduit must be used for through-the-roof installations. Conduit Sizes: 2 1/2" - 100A / 200A or 3" - 400A. At least (3) Minerlac straps must be used above meter base when there is no overhang to help support conduit.
4. **METER BASE W/ DISCONNECT:** Customer must contact AEC to have meter base location spotted. AEC has the right to require relocation of meter base when customer has not complied with this requirement.
5. **GROUND WIRE:** Ground wire must be no smaller than #6 bare copper.
6. **(2) GROUND RODS:** Ground rods must be 5/8" x 8', galvanized or copper with approved teardrop-type clamp.

"IF YOU ARE UNSURE OF THE SUITABLE REQUIREMENTS PLEASE CONSULT WITH A QUALIFIED ELECTRICIAN"

		ORIGINAL				REVISION				
APPALACHIAN ELECTRIC COOPERATIVE	A E C	DESCRIPTION	BY	CKD	APR	ORG. DATE:	BY	CKD	APR	REV. DATE:
		Home or Building Above the Roof Overhead (320A, 240/120V, 1Ø)	BLC	MLM	BMM	8/21/25	-	-	-	-