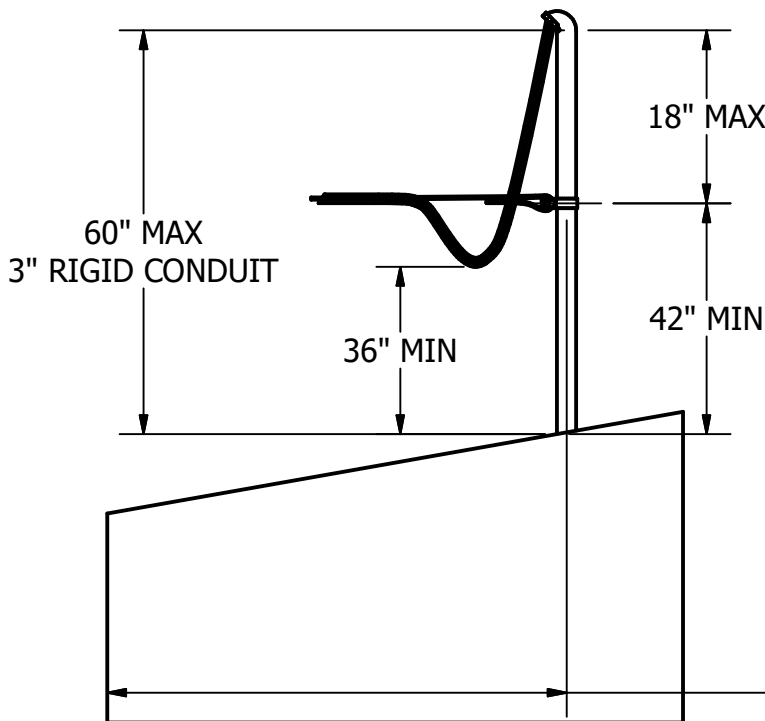


18 INCH MINIMUM CLEARANCE ABOVE ROOF INCLUDING SERVICE WIRES AND DRIP LOOP

CONDUIT SHALL BE GALVANIZED RIGID METAL CONDUIT OR EQUIVALENT PER CURRENT NEC CODE

REQUIRED IF BOTH OF THE FOLLOWING APPLY:

SERVICE MAST LESS THEN 4 FOOT FROM ROOF EDGE.
WEC SERVICE WIRES CROSS LESS THEN 6 FEET OF ROOF LINE.



36 INCH MINIMUM CLEARANCE ABOVE ROOF INCLUDING SERVICE WIRES AND DRIP LOOP

CONDUIT SHALL BE GALVANIZED RIGID METAL CONDUIT OR EQUIVALENT PER CURRENT NEC CODE

REQUIRED IF EITHER OF THE FOLLOWING APPLY:

SERVICE MAST MORE THEN 4 FOOT FROM ROOF EDGE.
WEC SERVICE WIRES CROSS MORE THEN 6 FEET OF ROOF LINE.

IF ATTACHMENT HEIGHT REQUIRES MORE THE 60 INCHES OF MAST ABOVE ROOF THEN A METER POLE SERVICE IS REQUIRED

DATE EFFECTIVE:
2/3/2020



Warren Electric
Cooperative, Inc

320 EAST MAIN ST
YOUNGSVILLE, PA 16371

814-563-7548

TITLE

120/240V SINGLE PHASE SERVICE ON STRUCTURE UP TO 320 AMP
ROOF TOP CLEARANCE HEIGHTS

SIZE
A

DWG NO

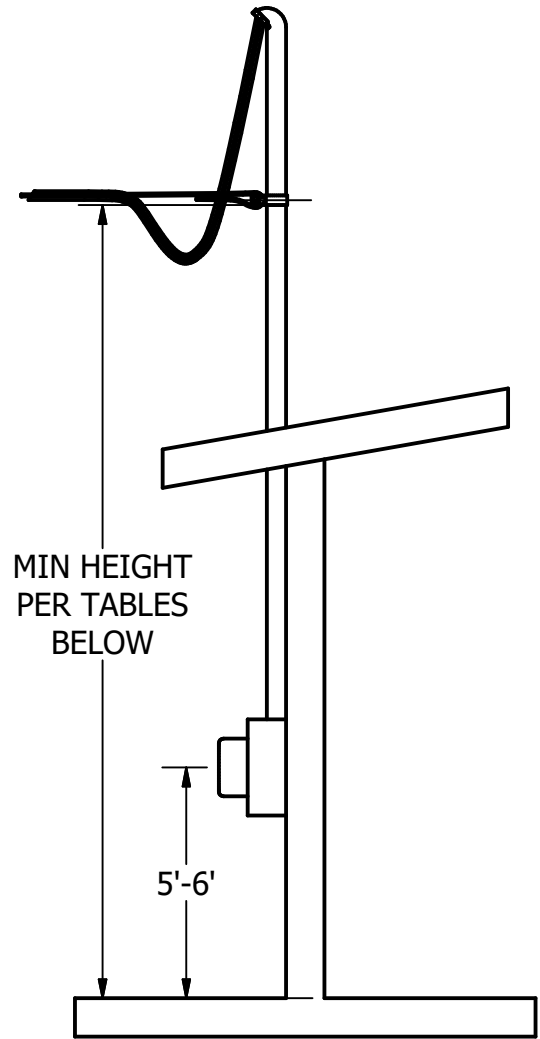
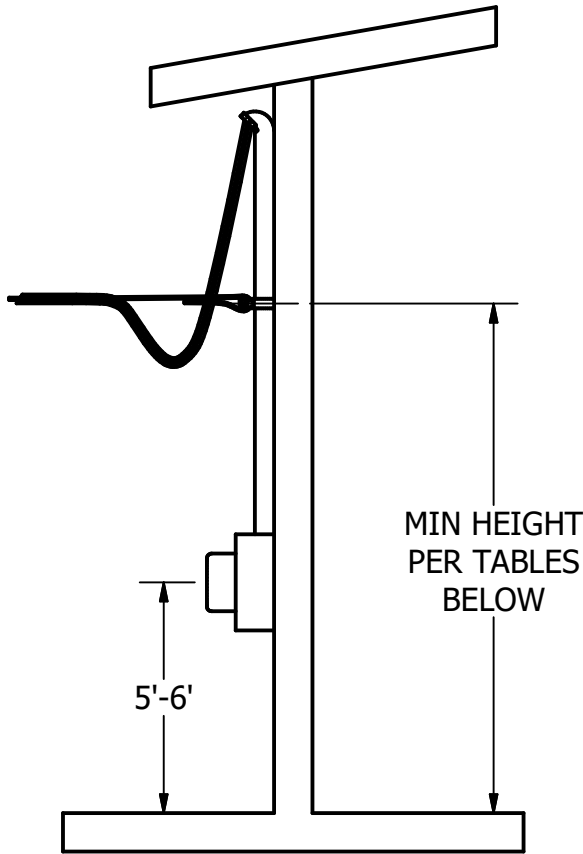
WEC-SVC-MAST

REV
0

SCALE

0.05 : 1

SHEET 1 OF 4



SERVICE WIRE HEIGHT NOT CROSSING ROADS OR DRIVEWAYS			
WIRE SIZE	#2	2/0	4/0
30-40'	16'-0"	16'-0"	16'-0"
41-70'	17'-0"	17'-3"	17'-6"
71-95'	17'-6"	17'-9"	18'-0"
96-115'	18'-0"	18'-0"	
116-150'	19'-0"		

SERVICE WIRE HEIGHT CROSSING ROADS OR DRIVEWAYS			
WIRE SIZE	#2	2/0	4/0
30-40'	18'-0"	18'-0"	18'-0"
41-70'	19'-0"	19'-3"	19'-6"
71-95'	19'-6"	19'-9"	20'-0"
96-115'	20'-0"	20'-0"	
116-150'	21'-0"		

HEIGHTS IN THE ABOVE TABLES ARE THE MINIMUM REQUIRED.

1 FOOT ADDITIONAL HEIGHT REQUIRED FROM TELEVISION/COMMUNICATIONS CABLES NEAR POINT OF ATTACHMENT.

DATE EFFECTIVE:
2/3/2020



**Warren Electric
Cooperative, Inc**

320 EAST MAIN ST
YOUNGVILLE, PA 16371

814-563-7548

TITLE

120/240V SINGLE PHASE SERVICE ON STRUCTURE UP
TO 320 AMP
SERVICE ATTACHMENT HEIGHT

SIZE
A

DWG NO

WEC-SVC-MAST

REV
0

SCALE

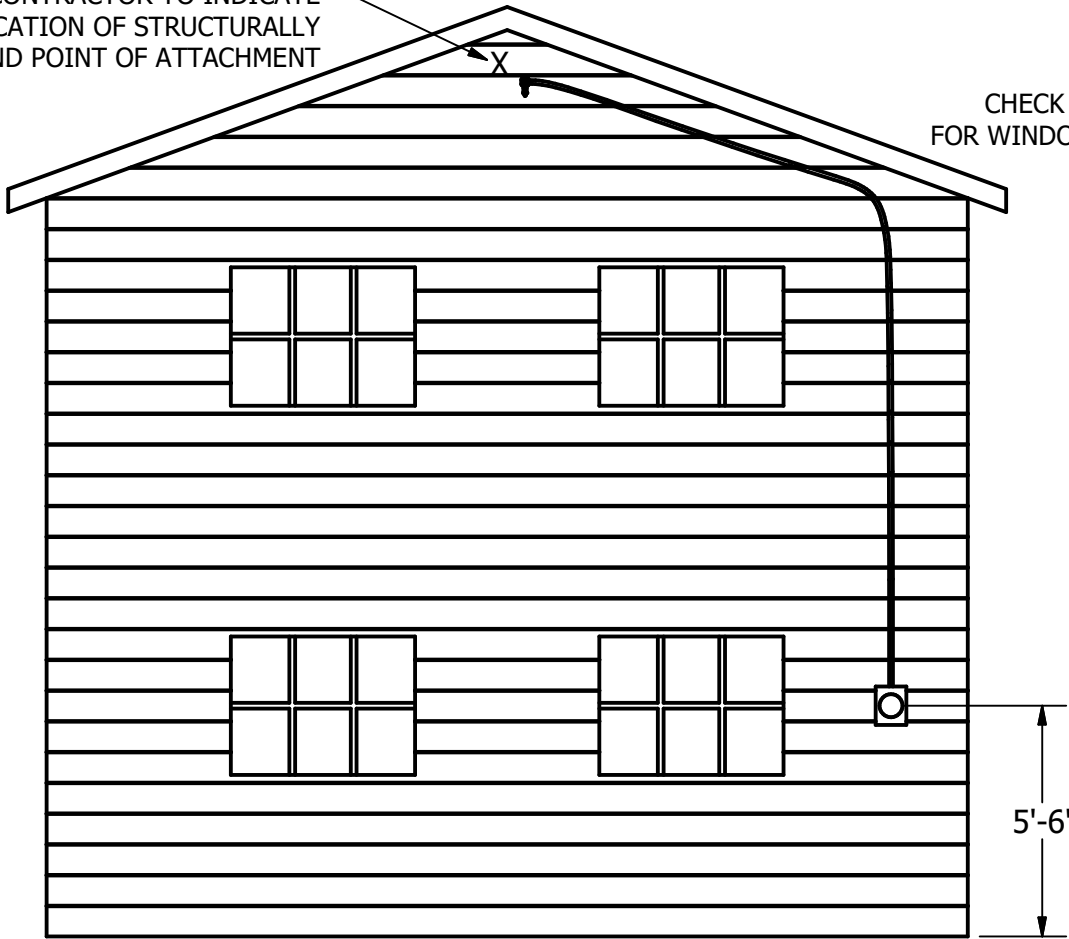
1 / 20

SHEET 2 OF 4

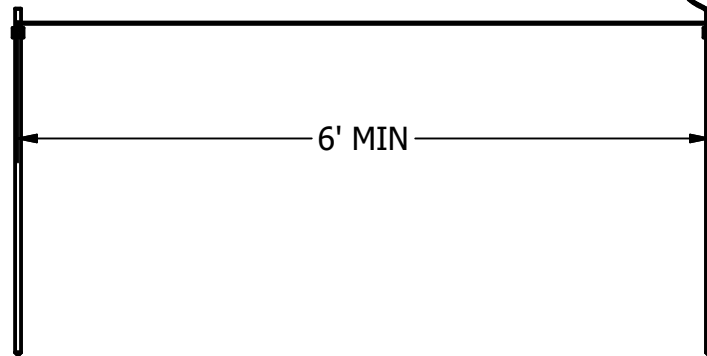
MULTI-STORY UNDER-EAVE MOUNT

MEMBER/CONTRACTOR TO INDICATE WITH AN 'X' LOCATION OF STRUCTURALLY SOUND POINT OF ATTACHMENT

CHECK CURRENT CODE FOR WINDOW CLEARANCES



GROUNDING ELECTRODE CONDUCTOR TO SERVICE PANEL/DISCONNECT



(2) 5/8" X 8' COPPER CLAD GROUND RODS

DATE EFFECTIVE:
2/3/2020



Warren Electric
Cooperative, Inc

320 EAST MAIN ST
YOUNGVILLE, PA 16371

814-563-7548

TITLE

120/240V SINGLE PHASE SERVICE ON STRUCTURE UP TO 320 AMP
ATTACHMENT LOCATION AND GROUNDING

SIZE A	DWG NO WEC-SVC-MAST	REV 0
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SCALE
1 / 50

SHEET 3 OF 4

LOCATION

- A WEC Staking Engineer will determine the location and any additional requirements during an on-site meeting with the member during the design process.
- Services are not permitted within the WEC easement and must be at least 30 feet away from any WEC poles, wires and anchors.
- Service may not cross over propane tanks, oil wells, swimming pools and other obstacles because of safety code requirements.
- Manufactured housing units shall refer to NEC 550 for additional requirements

SERVICE MAST

- Only WEC attachments are allowed on mast.
- Structural reinforcement and flashing (mast roof kit) at roof line is required.
- If WEC service wires must cross **more** than 6 feet of roof and/or attachment is **more** than 4 feet from edge of roof, service mast must extend a minimum of **60** inches above roof. **If more than 60 inches is needed for clearance, a meter pole service is required**
- If WEC service wires must cross **less** than 6 feet of roof and attachment is **less** than 4 feet from edge of roof, service mast must extend a minimum of **42** inches above roof. **If more than 60 inches is needed for clearance, a meter pole service is required**

WEATHER HEAD

- 3 wire rain-tight weather head properly sized and rated will be installed on top of conduit.
- Member/Contractor shall leave 2 to 3 feet of wire from weather head for WEC to make connections.

CONDUIT

- Galvanized rigid metal conduit or equivalent per current NEC code.
- When pipe riser is 10 feet or less, no coupling is permitted. When longer than 10 feet, a coupling shall be installed at joint closest to meter socket.
- Pipe straps (3 minimum) shall be installed at uniform intervals to secure conduit to structure.
- Pipe strap lag bolts shall go into wall studs and/or sound structural members.

MINIMUM SERVICE AND GROUND CONDUCTOR REQUIREMENTS				
RATING (AMPS)	CONDUIT SIZE MIN	WIRE MATERIAL	LINE/NEUTRAL SIZE	GROUND SIZE
320	3"	COPPER (CU)	250 MCM	#2 AWG CU
320	3"	ALUMINUM (AL)	350 MCM	#2 AWG CU
200	2"	COPPER (CU)	2/0 AWG	#4 AWG CU
200	2"	ALUMINUM (AL)	4/0 AWG	#4 AWG CU
100	2"	COPPER (CU)	#4 AWG	#6 AWG CU
100	2"	ALUMINUM (AL)	#2 AWG	#6 AWG CU

All service conductors shall have insulation suitable for the applied voltage but, in any case, not less than 600 volts and sized to rated load of meter base.

METER BASE


- Meter base shall be located between 5ft and 6ft from ground level.
- Meter base shall be a single position, four terminal, and ring-less with a horn or other approved type bypass.
- Meter bases equipped with grounding lugs shall be grounded in accordance to NEC or local inspection authority.
- WEC Recommends using an anti-oxidation grease inside the meter base if using aluminum conductors.

DISCONNECT OPTIONS AND OTHER SERVICE EQUIPMENT REQUIREMENTS (NEC 230)

- All sites served by WEC shall have a service disconnecting means (Mains in panel box). Although not required at this time, an outside disconnect switch is also recommended.
- Disconnect main (inside or outside) shall be appropriately sized (breaker or K1 fuses rated for 10,000 Amperes)
- Weather-Tight connectors and fittings shall be used between outside equipment and components.
- All equipment (meter base, disconnect, etc) shall have all knock-outs, doors, and covers in place to limit access to energized parts and shall be in good physical and working condition.

GROUNDING RODS, WIRE, AND CONNECTORS (NEC 250)

- Meter socket shall be grounded in accordance to NEC and local inspection authority requirements
- Any service connected to WEC shall have two (2) 5/8 in. x 8ft. copper clad ground rods or equivalent per current NEC code, located 6ft. apart
- Ground rod clamps shall be suitable for direct burial and/or exothermic welding.
- Ground wires shall extend unbroken or uncut from grounding lug of disconnect to each rod.
- Ground wires shall be secured to pole and/or protected from damage with 1/2 inch electrical conduit.

DATE EFFECTIVE: 2/3/2020		TITLE 120/240V SINGLE PHASE SERVICE ON STRUCTURE UP TO 320 AMP DETAILED SPECIFICATIONS	
 Warren Electric Cooperative, Inc 320 EAST MAIN ST 814-563-7548 YOUNGVILLE, PA 16371		SIZE A	DWG NO WEC-SVC-MAST
SCALE			REV 0
			SHEET 4 OF 4