

Through-the-Roof Site Built Structure Overhead Electric Service Requirements

100 - 200 AMP Capacities, 120/240-Volt Single-Phase

Greeneville Light and Power System 423-636-6200 www.glps.net Revised May 29, 2002.

- A. <u>WEATHER HEAD:</u> In most applications on a pitched roof, weather head can be no less than 30 inches above the roof
- B. **POINT OF ATTACHMENT:** The **minimum** point of attachment is 16' above finished grade.
- C. <u>MINIMUM CLEARANCE REQUIREMENTS:</u> The following clearances for GLPS service entrance wire shall be provided by the customer:
 - Over Roads......18'Over Driveways.....16'Open Ground......16'
- D. <u>CUSTOMER'S SERVICE ENTRANCE WIRES:</u> A minimum of 18" of wire must be left extending through the weather head. Neutral wire must be white or marked white throughout the service.

	Conduc	Conductor Sizes	Neutral Sizes	
	Copper	Aluminum	Copper	Aluminum
100 amp	4 AWG	2 AWG	4 AWG	2 AWG
200 amp	2/0 AWG	4/0 AWG	1 AWG	2/0 AWG

- E. <u>RIGID CONDUIT:</u> Rigid metal conduit must be used for through-the-roof installations. The following conduit sizes apply:
 - 200 amp.....2-1/2"
 - 100 amp......2"
- F. METER BASE: Customer must contact GLPS
 Engineering Department to have meter base location determined. GLPS has the right to require relocation of the meter base when customer has not complied with this requirement. Meter base must be mounted between 5 feet and 6 feet above finished grade. Meter base must be grounded to approved ground rod.
- G. GROUND WIRE: Wire must be no less than #6 bare copper.
- H. <u>GROUND ROD:</u> Ground rod must be 5/8" x 8', galvanized or copper with approved teardrop-type clamp. The entire rod should be driven into the ground with the ground wire attached at the top.

Call GLPS Engineering at 423-636-6200 for on-site consultation PRIOR to construction.

NOTE: This is to be used as a guide only - some installations may vary. All installations must meet current NEC, NESC and GLPS requirements.

(A) WEATHERHEAD ——	CUSTOMER'S SERVICE ENTRANCE WIRES	;	© GL&PS SERVICE NTRANCE WIRES
	(E) RIGID CONDUIT (F) METER BASE	16'-0" MINIMUM ABOVE GROUND TO POINT OF ATTACHMENT	SEE MINIMUM CLEARANCE REQUIREMENTS
CONTINUE CONDUIT TO SWITCHBOX	G GROUND WIRE F TO GABON GROUND	S' /E /ND	