



Liberty-Central Region ("Liberty") Joint-Use/Make Ready Engineering Criteria

Minimum Clearance Requirements:

Clearance anywhere in the span (with 1/2" Ice Loading & 4psf wind)	Clearance Requirement	Reference Standard
Power Conductors (0-750V)		
Clearance above highway	18 feet 0 inches	State of AR/ Most other utilities
Clearance above railroad	25 feet 0 inches	State of KS/ OK/ MO/ AR
Clearance above areas subject to truck traffic, driveways, parking lots & alleys	16 feet 0 inches	NESC Table 232-1
Clearances above areas subject to pedestrians and restricted traffic only <i>(Fences, ditches, embankments and other similar terrain features)</i>	16 feet 0 inches	Liberty Std.
Water areas not suitable for sail boating, prohibited or non-swimming <i>(Surface area shall be based on 10-year flood level (if available), or normal flood level)</i>	14 feet 6 inches	NESC Table 232-1

Clearance anywhere in the span (with 1/2 " Ice Loading and 4psf wind)	Clearance Requirement	Reference Standard
Communication Attachments		
Clearance above highway	18 feet 0 inches	State of AR/ Most other utilities
Clearance above railroad	25 feet 0 inches	State of KS/ OK/ MO/ AR
Clearance above areas subject to truck traffic, driveways, parking lots & alleys	16 feet 0 inches	Liberty Std.
Clearances above areas subject to pedestrians and restricted traffic only <i>(Fences, ditches, embankments and other similar terrain features)</i>	16 feet 0 inches	Liberty Std.
Water areas not suitable for sail boating, prohibited or non-swimming <i>(Surface area shall be based on 10-year flood level, if available, or normal flood level)</i>	14 feet 0 inches	NESC Table 232-1
Clearance from lowest power	30 inches	NESC 235C2b(1)(a)
Clearance from other Communication	4 inches	NESC 235H

Communication clearance at pole	Clearance Requirement	Reference Standard
Clearance from lowest power (Ex: Span Guy, Down Guy, riser, secondary, xfmr bottom, drip loop, xarm brace etc.)	42 inches	Liberty Std.
Clearance from lowest primary voltage equipment (Ex: primary xarm)	114 inches	Liberty Std.
Clearance from light base <i>(Assuming all lights are NOT effectively grounded)</i>	40 inches	NESC Table 238-2
Clearance from drip loops associated with luminaires and traffic signals	13 inches	Liberty Std.
Clearance from communication to communication	12 inches	NESC Table 235-6

Additional Design Criteria :

- No criss-crossing in span.
- No sharing of communication anchors with Liberty.
- All new single phase primary poles will be minimum 40ft class 4 poles.
- All new 3-phase primary poles will be minimum 45ft class 1 poles.
- In case of required pole change-out to taller pole, Uplift must be considered on adjacent poles if installed within a 150ft span.
- Standard embedment of 10%+2ft will be assumed on any new pole change-outs and midspan poles.
- NESC Zone 1 (Heavy loading) to be applied in Liberty service territory (KS/OK/MO/AR).
- Communication must install downguy and anchors prior to installing cable/fiber strand.
- Minimum 5ft of separation is required between communication and power anchors.
- Communication to follow power lines. If communication deviates from Liberty pole line, communication line shall be guyed on last Liberty pole and buried toward next pole.
- Poles with white or yellow square metal tags are deemed to be rotten/bad poles - Liberty will replace the pole.
- Communication Attachers are responsible for adhering to all appropriate design guidelines not mentioned herein (NESC, Federal, State, local, etc.)
- Attacher must provide specifications for proposed cable as well as design tension.