

WAC 296-307-41047 What electrical requirements apply to LP-gas installations? (1) Electrical equipment and wiring must be specified by and installed according to chapter 296-307 WAC Part T, for ordinary locations.

(2) Fixed electrical equipment and wiring installed within classified areas must comply with Table U-5 and must be installed according to chapter 296-307 WAC Part T.

EXCEPTION: This provision does not apply to fixed electrical equipment at residential or commercial installations of LP-gas systems, LP-gas used as a motor fuel, or to LP-gas system installations on commercial vehicles.

TABLE U-5

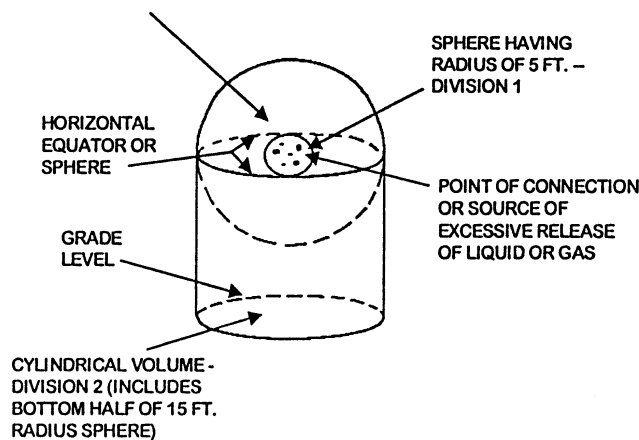
Part	Location	Extent of classified area¹	Equipment shall be suitable for Class I, Group D²
A	Storage containers other than DOT cylinders	Within 15 feet in all directions from connections, except connections otherwise covered in this table	Division 2
B	Tank vehicle and tank car loading and unloading ³	Within 5 feet in all directions from connections regularly made or disconnected for product transfer	Division 1
		Beyond 5 feet but within 15 feet in all directions from a point where connections are regularly made or disconnected and within the cylindrical volume between the horizontal equator of the sphere and grade (See Figure H-1)	Division 2
C	Gauge vent openings other than those on DOT cylinders	Within 5 feet in all directions from point of discharge	Division 1
		Beyond 5 feet but within 15 feet in all directions from point of discharge	Division 2
D	Relief valve discharge other than those on DOT cylinders	Within direct path of discharge	Division 1 <i>Note:</i> Fixed electrical equipment should not be installed
		Within 5 feet in all directions from point of discharge	Division 1
		Beyond 5 feet but within 15 feet in all directions from point of discharge except within the direct path of discharge	Division 2
E	Pumps, compressors, gas-air mixers and vaporizers other than direct fired		
	Indoors without ventilation	Entire room and any adjacent room not separated by a gastight partition	Division 1
		Within 15 feet of the exterior side of any exterior wall or roof that is not vaportight or within 15 feet of any exterior opening	Division 2

Part	Location	Extent of classified area¹	Equipment shall be suitable for Class I, Group D²
	Indoors with adequate ventilation ⁴	Entire room and any adjacent room not separated by a gastight partition	Division 2
	Outdoors in open air at or above grade	Within 15 feet in all directions from this equipment and within the cylindrical volume between the horizontal equator of the sphere and grade (See Figure H-1)	Division 2
F	Service station dispensing units	Entire space within dispenser enclosure, and 18 inches horizontally from enclosure exterior up to an elevation 4 ft. above dispenser base. Entire pit or open space beneath dispenser	Division 1
		Up to 18 inches above grade within 20 ft. horizontally from any edge of enclosure	Division 2
		<i>Note:</i> For pits within this area, see Part F of this table	
G	Pits or trenches containing or located beneath LP-gas valves, pumps, compressors, regulators, and similar equipment		
	Without mechanical ventilation	Entire pit or trench	Division 1
		Entire room and any adjacent room not separated by a gastight partition	Division 2
		Within 15 feet in all directions from pit or trench when located outdoors	Division 2
	With adequate mechanical ventilation	Entire pit or trench	Division 2
		Entire room and any adjacent room not separated by a gastight partition	Division 2
		Within 15 feet in all directions from pit or trench when located outdoors	Division 2
H	Special buildings or rooms for storage of portable containers	Entire room	Division 2
I	Pipelines and connections containing operational bleeds, drips, vents or drains	Within 5 ft. in all directions from point of discharge	Division 1

Part	Location	Extent of classified area ¹	Equipment shall be suitable for Class I, Group D ²
		Beyond 5 ft. from point of discharge, same as Part E of this table	
J	Container filling		
	Indoors without ventilation	Entire room	Division 1
	Indoors with adequate ventilation ⁴	Within 5 feet in all directions from connections regularly made or disconnected for product transfer	Division 1
		Beyond 5 feet and entire room	Division 2
	Outdoors in open air	Within 5 feet in all directions from connections regularly made or disconnected for product transfer	Division 1
		Beyond 5 feet but within 15 feet in all directions from a point where connections are regularly made or disconnected and within the cylindrical volume between the horizontal equator of the sphere and grade (See Fig. H-1.)	Division 2

- 1 The classified area must not extend beyond an unpierced wall, roof, or solid vaportight partition.
- 2 See chapter 296-46 WAC, and chapter 296-306A WAC Part T.
- 3 When classifying the extent of a hazardous area, consider the possible variations in the spotting of tank cars and tank vehicles at the unloading points and the effect these variations of actual spotting point may have on the point of connection.
- 4 Ventilation, either natural or mechanical, is considered adequate when the concentration of the gas in a gas-air mixture does not exceed twenty-five percent of the lower flammable limit under normal operating conditions.

SPHERE HAVING RADIUS OF 15 FT. -- DIVISION 2



[Statutory Authority: RCW 49.17.040. WSR 98-24-096, § 296-307-41047, filed 12/1/98, effective 3/1/99. WSR 97-09-013, recodified as § 296-307-41047, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. WSR 96-22-048, § 296-306A-41047, filed 10/31/96, effective 12/1/96.]