



County of Sonoma
FIRE & EMERGENCY SERVICES DEPARTMENT

FIRE SERVICES EMERGENCY MANAGEMENT HAZARDOUS MATERIALS



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Informational Bulletin

Date Issued:	1-28-2011	Bulletin No:	2011-18N
Topic:	LPG Tank Hold Downs		
Code Reference	California Fire Code (CFC) 3803.1.1 Fire Safe Standards		
For Use By:	Staff, Contractors and Permit Applicants		

NOTE: This bulletin is a summary of Fire Services interpretations of County and State Codes. Information contained herein applies to typical instances and may not address all circumstances.

INFORMATION BULLETIN - LPG Hold Downs

Liquid Propane Gas (LPG) Hold downs are used for the purpose of Seismic Anchoring. This coded was added to the CFC to prevent LPG connection failures at the tank in the event of Seismic Activity.

Hold downs can be accomplished in the form of Bolting and Strapping.

Bolting:

LPG tanks can be installed on a concrete slab non-engineered. The legs of the LPG tank shall attached by corrosion resistant concrete anchored type fitted bolt or stud with a washer, securely tightened down.

Strapping:

Stranded Cable can be of .25 of an inch galvanized or stainless

Strapping shall be 1.25 x .031 stainless steel, minimum tensile strength of 4750 Pounds. Or 1.25 x .031 galvanized steel, class B, grade 1, minimum tensile strength of 4750 pounds.

Attachments:

Earth Augers approved for all conditions and Shall be used in Flood Zones

Steel Bolt, Steel Eye Bolts or Steel Lag Bolt approved for seismic protection only. The bolt shall be installed in concrete or treated wood with a minimum thickness of 4 inches x 4 inches and set in concrete at a minimum of 2'-0" feet below grade.

Steel Turn Buckle shall be used to remove excess slack from cable or strapping and shall be of stainless or galvanized.

Alternates:

Shall be approved by the fire code and building official on a per-case application.