

## Motivation

If a customer chooses to install an excess flow gas shutoff valve or earthquake actuated gas shutoff valve, it should be certified by the State of California's Division of the State Architect (DSA) and should be installed by a licensed plumbing contractor in accordance with the manufacturer's instructions. Pacific Gas and Electric (PG&E) does not install or service seismic actuated or excess flow gas shutoff valves, or recommend specific contractors for customer applications.

The State of California is required to approve all excess flow gas shutoff valves and earthquake actuated gas shutoff valves used in the State of California. A list of approved valves is available on the DSA's [Gas Shutoff Valves Certification Program webpage](#)<sup>1</sup>

## Directions

Excess flow gas shutoff valves and earthquake actuated gas shutoff valves must be installed on the building's gas houseline piping (the gas pipe connecting your appliances to the gas meter) downstream of the utility point of delivery; i.e., *after* the PG&E gas shutoff valve, pressure regulator (if installed), meter(s), and the service tee. No attachments or connections of any kind are allowed on utility facilities prior to the point where the service tee connects to the gas houseline piping. Once installed, the valve must not obstruct the operation or serviceability of PG&E's piping, gas service shutoff valve, gas meter, or gas pressure-regulating equipment.

In the event that a gas service shutoff valve or an automatic gas shutoff device is closed, there may be a considerable delay before PG&E can turn your service on, but do not turn it on yourself. PG&E or another qualified professional should perform a safety check, restore gas service, and re-light any applicable pilots, even if an earthquake did not cause the closure. ©



Figure 1 - Gas Shutoff Device – © PG&E

1 <http://www.dgs.ca.gov/dsa/Programs/programCert/gasshutoff.aspx>

## GAS SHUTOFF DEVICES

There are three types of gas shutoff devices. These are manual shutoff valves, earthquake sensitive automatic shutoff valves, and excess flow automatic gas shutoff valves. The DSA certification program deals with the latter two types of gas shutoff devices.

The original information in this table comes from the California Seismic Safety Commission's report, *Improving Natural Gas Safety in Earthquakes*, and was adapted by the Department of General Services, Division of the State Architect.

Types	Manual shutoff valve by utilities	Earthquake sensitive automatic shutoff valves	Excess Flow Automatic gas shutoff valves <sup>2</sup>
Installed by	Utility Companies	Owners (see important limitations <sup>3</sup> )	Owners (see important limitations <sup>3</sup> )
Basis of operation	Owners with proper wrenches can shut off gas in emergencies	Senses shaking in a residential building that is above a design level of shaking and automatically shuts off gas	Senses gas flows that are above a design trigger flow rate and automatically restricts gas flow downstream to a substantially low level as required by the state adopted standard
Benefits	All gas services already have valves installed by utility companies. Operation guidance is provided in many public information documents such as the phone book.	Activated only in cases when residential building shaking may be sufficient to cause damage to the gas system. Someone does not need to be present to ensure shutoff.	Activated only in cases when excess gas flows downstream of the device, as in gas leaks. Someone does not need to be present to ensure shutoff. Can reset automatically once the downstream leakage is eliminated.
Drawbacks	Only effective if someone is present, knows the valve location, has access to the valve, and has a wrench suitable to close the valve.	Can activate even if damage and hazards do not exist. Requires manual reset. Aftershocks can cause the device to activate after service has been restored. Many activate from shaking not related to earthquakes.	Will not shut off gas if leakage is below the design triggering flow rate, even if a slow leak exists. May not completely shut off gas flow. A small residual flow is required for the excessive flow automatic shutoff valve to reset itself automatically. May not activate if occupant changes gas systems downstream without modifying the device.

<sup>2</sup> Excess Flow Type A: A device actuated by a predetermined gas flow rate to shut off or limit the flow of gas to the downstream system (see Definitions, CSA U.S. Requirements for Excess Flow Valves No. 3-92, Revised 1-16-2000)

<sup>3</sup> Important limitations of DSA Gas Valve Certification:

- DSA certification is for the valve only and does not include the installation and inspection after installation
- DSA certification does not replace any requirements adopted by local building departments. The installation of gas valves is under the jurisdiction of the local building departments. Please contact us if you have any questions about installation, at (510) 747-6800
- DSA certification does not address other plumbing/piping, mechanical, or building code requirements and issues. The installation and the piping systems containing the gas valves must meet the requirements specified by the local building departments and the manufacturers.

## EARTHQUAKE SENSITIVE AUTOMATIC GAS SHUTOFF VALVE CERTIFICATIONS

S.B. 12-16-1 California Standard for Earthquake Actuated Automatic Gas Shutoff Systems (ASCE/ANSI 25-97)

Revised October 2012

Manufacturer	Date of Certification	Application Number	Item Number	Valve Size	Pressure (PSI)	Model Number		
Seismic Safety Products 2011 Center Court Wenatchee, WA 98801 Contact: Gary Lynden Phone: 509-669-7037	Sept. 24, 2012	01 R	1	¾"	10	M75		
		02 R	1	1"	10	M100		
		03 R	1	1¼"	10	M125		
Little Firefighter Corporation 204 S. Center Street Santa Ana, CA 92703 Contact : Ezra Kent Phone: (714) 834-0410	Jan. 8, 2013	04-R	1	¾" x ¾"	10	NAGV-075		
		05-R	1	¾" x ¾"	10	VAGV-075		
		06-R	1	1" x 1"	10	NAGV-100		
		07-R	1	1" x 1"	10	VAGV-100		
		08-R	1	1 ¼" x 1 ¼"	10	NAGV-125		
		09-R	1	1 ¼" x 1 ¼"	10	VAGV-125		
		10-R	1	1 ¼" x 1 ¼"	2	VAGV-125 HF		
		11-R	1	1 ½" x 1 ½"	10	VAGV-150		
		12-R	1	1 ½" x 1 ½"	2	VAGV-150 HF		
		13-R	1	2" x 2"	10	VAGV-200		
		14-R	1	2" x 2"	2	VAGV-200 HF		
		15-R	1	2 ½" x 2 ½"	10	AGV-250		
		16-R	1	3" x 3"	10	AGV-300		
		17-R	1	4" x 4"	10	AGV-400		
		18-R	1	¾" x ¾"	5	AGV-75		
		19-R	1	1" x 1"	5	AGV-100		
		20-R	1	1 ¼" x 1 ¼"	5	AGV-125		
		21-R	1	1 ½" x 1 ½"	5	AGV-150		
		22-R	1	1 ½" x 1 ½"	60	AGV-150 HP		
		23-R	1	2" x 2"	5	AGV-200		
		24-R	1	2" x 2"	60	AGV-200 HP		
		25-R	1	3" x 3"	60	AGV-300 HP		
		26-R	1	4" x 4"	60	AGV-400 HP		
		27-R	1	2 ½" x 2 ½"	60	AGV-250 HP		
		<b>Pacific Seismic Products, Inc.</b> <b>233 East Avenue H-8</b> <b>Lancaster, CA 93535</b>  <b>Contact: Sharon Harper</b> <b>Phone: (661)942-4499</b>	March 12, 2013	28-R	1	¾"x¾"	7	PSP-300
				29-R	1	1"x1"	7	PSP-301
			Sept. 09, 2013	30-R	1	¾"x¾"	60	PSP-310
31-R	1			1"x1"	60	PSP-311		
32-R	1			1 ¼"x1 ¼"	7	PSP-302		
33-R	1			1 ½"x1 ½"	7	PSP-303		

Table 1 - ©DSA, CA DGS

<b>Pacific Seismic Products, Inc.</b> <b>233 East Avenue H-8</b> <b>Lancaster, CA 93535</b>  <b>Contact: Sharon Harper</b> <b>Phone:(661)942-4499</b>	Jan 10, 2014	62-R 63-R 64-R 65-R	1 1 1 1	3" x 3" 3" x 3" 3" x 3" 3" x 3"	60 60 60 60	PSP-VB 315 PSP-VB 315F PSP-VT 315 PSP- VT 315F
	Jan 24, 2014	66-R 67-R 68-R 69-R	1 1 1 1	3/4" x 3/4" 3/4" x 3/4" 3/4" x 3/4" 3/4" x 3/4"	7 7 60 60	PSP-VB 300 PSP-VT 300 PSP-VB 310 PSP- VT 310
	Jan 31, 2014	70-R 71-R 72-R 73-R	1 1 1 1	1" x 1" 1" x 1" 1" x 1" 1" x 1"	7 7 60 60	PSP-VB 301 PSP-VT 301 PSP-VB 311 PSP- VT 311
	Feb 04, 2014	74-R 75-R 76-R 77-R	1 1 1 1	1 1/4"x 1 1/4" 1 1/4"x 1 1/4" 1 1/4"x 1 1/4" 1 1/4"x 1 1/4"	7 7 60 60	PSP-VB 302 PSP-VT 302 PSP-VB 312 PSP- VT 312
	Feb 07, 2014	78-R 79-R 80-R 81-R	1 1 1 1	1 1/2 x 1 1/2 1 1/2 x 1 1/2 1 1/2 x 1 1/2 1 1/2 x 1 1/2	7 7 60 60	PSP-VB 303 PSP-VT 303 PSP-VB 313 PSP- VT 313

<b>Pacific Seismic Products, Inc.</b> <b>233 East Avenue H-8</b> <b>Lancaster, CA 93535</b>  <b>Contact: Sharon Harper</b> <b>Phone:(661)942-4499</b>	Jan 10, 2014	62-R 63-R 64-R 65-R	1 1 1 1	3" x 3" 3" x 3" 3" x 3" 3" x 3"	60 60 60 60	PSP-VB 315 PSP-VB 315F PSP-VT 315 PSP- VT 315F
	Jan 24, 2014	66-R 67-R 68-R 69-R	1 1 1 1	3/4" x 3/4" 3/4" x 3/4" 3/4" x 3/4" 3/4" x 3/4"	7 7 60 60	PSP-VB 300 PSP-VT 300 PSP-VB 310 PSP- VT 310
	Jan 31, 2014	70-R 71-R 72-R 73-R	1 1 1 1	1" x 1" 1" x 1" 1" x 1" 1" x 1"	7 7 60 60	PSP-VB 301 PSP-VT 301 PSP-VB 311 PSP- VT 311
	Feb 04, 2014	74-R 75-R 76-R 77-R	1 1 1 1	1 1/4"x 1 1/4" 1 1/4"x 1 1/4" 1 1/4"x 1 1/4" 1 1/4"x 1 1/4"	7 7 60 60	PSP-VB 302 PSP-VT 302 PSP-VB 312 PSP- VT 312
	Feb 07, 2014	78-R 79-R 80-R 81-R	1 1 1 1	1 1/2 x 1 1/2 1 1/2 x 1 1/2 1 1/2 x 1 1/2 1 1/2 x 1 1/2	7 7 60 60	PSP-VB 303 PSP-VT 303 PSP-VB 313 PSP- VT 313

## EXCESS FLOW AUTOMATIC GAS SHUTOFF VALVE CERTIFICATIONS

California Standard for Excess Flow Automatic Gas Shutoff Systems (CSA 3-92)

Revised October, 2012

Manufacturer/Firm	Certification Date	Application Number	Item Number	Valve Size	Model Number
Advanced Safety Technologies, Inc. 3921 Sandstone Drive El Dorado Hills, CA 95762 Contact: Jimmy J. Hershberger Phone: (800) 621-3255	Feb. 25, 2002	03	01	1"	SCV-1 (C1 to C6)
	"	"	"	1"	SCV-1B (C1 to C6)
Brass Craft Manufacturing 39600 Orchard Hill Place Novi, MI 48374-5331 Contact: Jeri Sunisloe or Bob Learmont Phone: (248) 305-6000 <a href="http://www.brasscraft.com">www.brasscraft.com</a>	June 24, 2002 May 29, 2002 " " Feb. 20, 2003 "	02 " " " 02 02	01 " " " 02 02	3/8"-15/16" 3/4" 1" 1" 3/8"-1/2" 1/2"-15/16"	Magne Flo Safety +Plus Series 1001 EP12-A EP16-A EP16-B BrassCraft Safety+Plus Series 1540 BrassCraft Safety+Plus Series 1560
Dormont Manufacturing Co 6015 Enterprise Drive Export, PA 15632 Contact: James Grebinoski TEL: (724) 387-3417 <a href="http://WWW.DORMONT.COM">WWW.DORMONT.COM</a>	May 24, 2004 May 29, 2008 " " " " Oct.07, 2011 " " " April 25, 2012	03 72 " " " " 04 " " 05	01 131 " " " " 132 " " 133	1" 1/4" 3/8" 3/8" 1/2" 1/2" 5/8"-18 3/4"-16 15/16"-16 15/16"-16 15/16"-16	EP16-D 90-1031-E1 90-2031-E2 90-203F-E2 90-3031-E3 90-3041-E3 90-1031-V1 90-1031-V2 90-2031-V4 90-303M-V6 90-3041-V5
OmegaFlex 451 Creamery Way Exton, PA 19431-2509 Contact: Joe McGinnis TEL: (610) 524-7272 WWW.OMEGAFLEX.COM	Aug 8, 2006 " " " " Dec. 18, 2006 " " " " "	70 " " " " 70 " " " " "	02 " " " " 03 " " " " "	1/4" 3/8" 3/8" 1/2" 1/2" 3/4" 3/4" 3/4" 1" 1" 1 1/4"	FGP-AFD-80 FGP-AFD-100A FGP-AFD-100B FGP-AFD-130A FGP-AFD-130B FGP-LFD-70 FGP-LFD-125 FGP-LFD-275A FGP-LFD-275B FGP-LFD-375 FGP-LFD-500
UMAC, Inc. 120 South Ship Road Exton, PA 95762 Contact: Seth Mackay-Smith Phone: (800) 524-0566 WWW.UMAC.COM	May 29, 2002 " " " " May 24, 2004	03 " " " " 03	01 " " " " 01	3/4 " 3/4" 3/4" 1" 1" 1" 1"	GB-090-075 GB-150-075 GB-300-075 GB-300-100 GB-350-100 GB-400-100 GB-600-100

**Table 2 - ©DSA, CA DGS**