

System and Components' Installation Manual

1. We recommend our safety systems be installed by certified and or license technician according to all NEC, Building and or Local Code Requirements.
2. Before securing any components, map out the locations for where each component will be installed first and make sure electric is available.
2. Verify power is available at each location for the components
3. Verify with the customer's component locations are acceptable
4. Temporary position all components at their ideal location until end-to-end testing is verified.
5. Call if you have any questions

Flowtech Safety Systems Contacts:

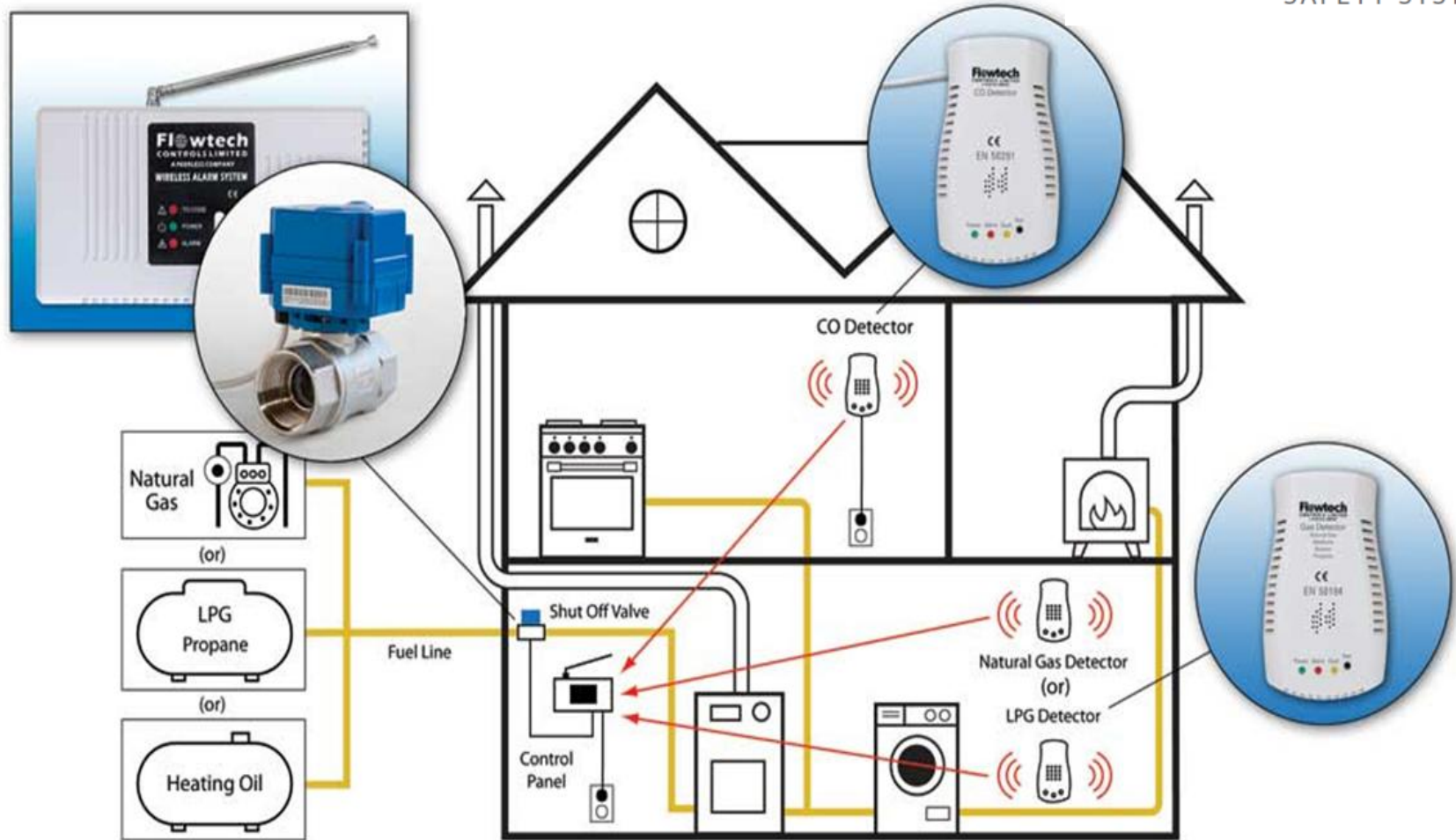
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System Overview



The Flowtech Safety Systems detects dangerous levels of Gas or LPG and CO. Once a leak is detected a signal is sent to the control panel which activates the auto shut-off ball valve. Cutting off the danger from the source which saves lives and prevents illnesses for CO.



Wireless Control Panel Monitor

1. Panel provides power to the shut-off valve, uses < 2W
2. Monitors and Receives wireless signals from the Detectors
3. Range of 200 Meters or 656 Feet
4. Operates using the 433 Frequency band
5. Each system operates on a unique code to prevent cross communications with adjoining properties
6. Operates up to 40 Detectors
7. CE Approved

Motorized Ball Valve Shut-Off

1. Closing Time: 3 - 4 Seconds
2. Operating Torque 30-60 Kg/cm, <1.2W
3. Can be install in-less than hour on Gas or Oil Lines within a property
4. Installed by certified and or license installer, piped into the internal property gas line after the Gas Meter. Valve is either $\frac{3}{4}$ " or $1 \frac{1}{4}$ " fitting
5. Motor can be installed separately at a property's relay panel to shut-off the Gas Main in commercial properties
6. Valve is CSA and CE approved



Installation Guide: Motorized Shut-Off Valve & location

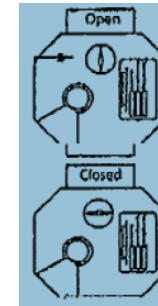
1. Installation should take less than hour
2. **Make sure the gas line is turned-off at the meter valve**
3. Determine the best internal location to safely insert the valve in the premise gas main and to access a power source
4. Valve should be placed as close as possible after the meter and before the 1st gas appliance within the premise
5. Verify after Valve is installed there are no gas leaks at the valve installation points
6. Ensure the Manual Reset Button is accessible
7. **Install the Control Panel Monitor**

Installation Guide: Control Panel Monitor & Location

1. Panel powers the shut-off valve and receives the wireless signals from the Detectors.
2. Recommend Panel be placed in an area/room near the Shut-Off Valve
 - a. Ensure the Panel can be connected to an electrical power source
 - b. Ensure Panel leads can connect to the Shut-over Valve
3. Before installing Monitor, verify wireless link to detectors can be received to ensure system operates correctly and **is not interfered by any other wireless system in the home.**
4. Connect electrical power leads to their power source, comes with approximately 48 inches of cabling from panel
5. Once components are installed, verify system operates properly
6. DO NOT place outside, behind furniture, curtains, blinds, etc.

TEST the Valve and System

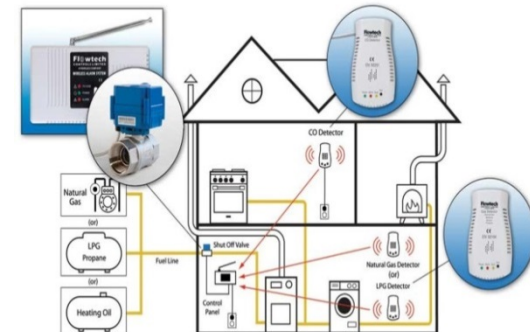
1. Press the Emergency Shutoff Button on the controller 'Open/Reset' to verify the valve and button works by pushing to Close and then to Open
2. Or pull white manual button up, turn to desire position, push button down lock in position
3. Connect power supply lead from the Control Panel to Valve, maximum 60' using 18 AWG
4. **Installation Check:** Power on the Control Panel and Detectors. The system will run a sequence check:
 - a. To the Detectors and Control Panel to check wireless connectivity
 - b. System will verify Power to the Shut-over Valve and that all reset functions are working correctly



Position Indicator,
valve open or
closed



Motorized Ball Valve

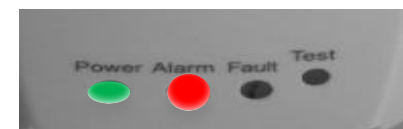
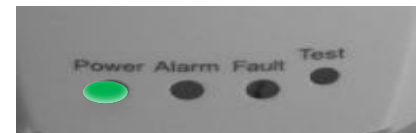


Control Panel Monitor Setup: Control Panel Monitor

1. When power is supplied to monitor and detectors, Power lights turns **Green**
2. Gas Detectors' the green LED light begins to flash, syncing with control panel monitor
3. The Control Panel is design to pair with the Detectors by receiving a unique code
4. When all detectors are stabilized, the **green** LED power lights remains solid
5. Press black button on top of the Control Panel for 1 second, the **Red Code Light** with turn on and stay lit for 30 seconds, sending an unique code to detectors within range to pair the components
6. Pair each Detector, press the test button for 2 seconds on each Detectors during the 30 second Control Panel syncing period
7. When the Control Panel beep 3 times, pairing is compete with the Detector.
8. Repeat the process until all Detectors are paired or if you add additional Detectors
9. **Secure the Detectors in place**
 - ❖ To clear all pairing press the button on top of the Control Panel for 40 seconds, red code light will light and go off

Final System Checks & Notes

1. The system is designed to stop attempts to re-open the Shut-Off Device during an alarm. The device will automatically re-close if you try to reopen the valve
2. **IMPORTANT** Ensure that the gas supply is open as your system check is now completed.
3. The System provides Visual and Audible Alarms when dangerous Gas or CO levels are reached
4. The System closes off the gas supply to prevent further build up of these gases
5. It is vital that you protect yourself and other occupants by taking the following steps if an alarm is activated:
 - i. Immediately leave premise and move to a fresh air location
 - ii. Call 911
 - iii. If anyone is experiencing symptoms of CO poisoning: headaches, dizziness, vomiting, call for Medical help
 - iv. Do not re-enter the premises until the location has been checked by an Emergency 1st Responder
 - v. Call your service provider or a qualified technician and have the problem fixed before restarting appliances.



Installation Guide: Gas Detectors - Sensors Locations

1. Recommend Detectors placed in every room with a gas fuel burning appliance (Burner, Stove, Dryer, etc.)
2. Detectors come supplied with a back-plate and two methods of fixing using either a single screw or two screw with approximately 48 inches of cabling
3. **GAS Detector:** Recommend placing Detector approximately 12" below ceiling level, at least 60" off the floor & within 13' to 16' away from a Gas Burning Appliance.
 - * Detector can be placed on ceiling next to light and power source
4. **LPG Detectors:** must be installed at a low level due to the density of the gas.
5. Before installing detector, verify wireless link to monitor can be received to ensure system operates correctly
6. Ensure Detector location can be connect to a required power supply.
 - ❖ *Detectors can be power by plugging into the nearest outlet or hard wired*
7. If only one Gas detector is placed, install near the gas furnace area.

Installation Guide: CO Detector - Sensors Locations: (Optional but recommended)

1. Recommend CO Detectors be placed in every room with a fuel burning appliance.
2. Detectors come supplied with a back plate and two methods of fixing using either a single screw or two screw with approximately 48 inches of cabling
3. Place CO Detector approximately: 12" below ceiling level, 60" off the floor & within 13' to 16' away from a Gas Burning Appliance.
4. Before installing CO detector, verify wireless link to monitor can be received, ensure system operates correctly
5. Ensure Detector location can be connect to a required power supply.
 - ❖ *Detectors can be power by plugging into the nearest outlet or hard wired, fished behind wall/ceiling to nearest power outlet or use a surface mounted wiring method.*
6. If only one CO detector position near bedroom area so the alarm can be heard

DO NOT place GAS or CO Detectors:

- a) Outside, drafty, damp, humid or dusty areas or behind furniture, curtains, blinds, etc.
- b) Or Directly above any gas appliances
 - ❖ Product warranty is not covered if Detector is placed in the above situation



All Detectors should be replaced every 5 years.