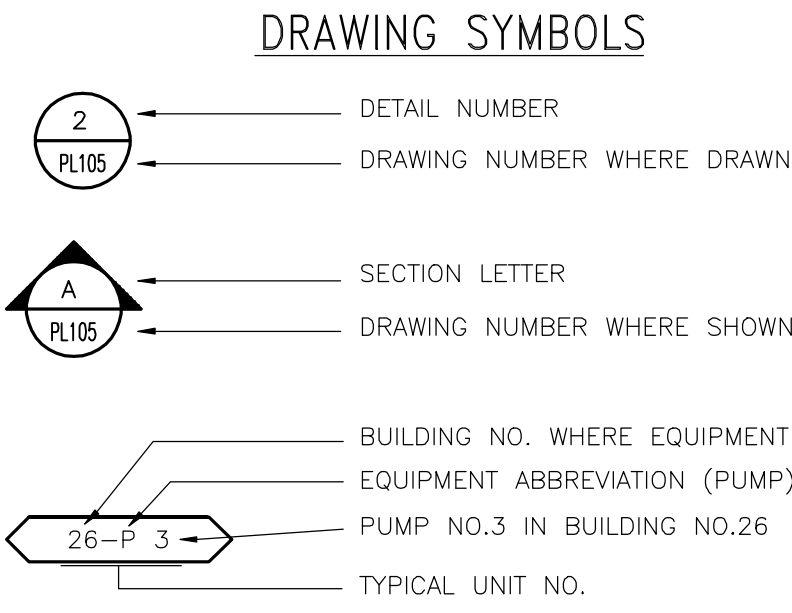


PLUMBING ABBREVIATIONS			PLUMBING ABBREVIATIONS		
A/E	ARCHITECT / ENGINEER	EL	ELEVATION	GAL	GALLON
AD	AREA DRAIN	EMCS	ENERGY MONOSERRAT	GCD	GRADE CLEANOUTS
AFT	ABOVE FINISH FLOOR	EPA	AND CENTRAL SYSTEM	GPD	GALLONS PER DAY
AFG	ABOVE FINISH GRADE	EPACT	ENVIRONMENTAL PROTECTION	GPH	GALLONS PER HOUR
AG	AIR GAP	ESC	AGENCY	GPM	GALLONS PER MINUTE
AP	ACCESS PANEL	ESH	ENERGY POLICY ACT	GPR	GAS PRESSURE REGULATOR
AS	AUTOMATIC SPRINKLER	ET	ESCUICHEON	GRS	GAS REGULATOR STATION
ASD	ADJUSTABLE SPEED DRIVES	EW	EMERGENCY SHOWER	GT	GREASE TRAP
ASD	AUTOMATIC SPRINKLER DRAIN	EW	EXPANSION TANK	QVTR	GAS VENT THROUGH ROOF
ASHRAE	AMERICAN SOCIETY HEATING, REFRIGERATION, AIR CONDITIONING ENGINEERS	EW	ELECTRIC WATER COOLER	QWH	GAS FIRED WATER HEATER
		EW	ELECTRIC WATER COOLER		
		EW	ELECTRIC WATER HEATER		
		EW	EYE WASH STATION		
		EW	EXISTING		
ASME	AMERICAN SOCIETY MECHANICAL ENGINEERS	F	FAHRENHEIT	H&CW	HOT AND COLD WATER
ASPE	AMERICAN SOCIETY PLUMBING ENGINEERS	FCO	FLOOR CLEANOUT	HB	HOSE BIBB
ASR	AUTOMATIC SPRINKLER RISER	FCW	FILTERED COLD WATER	HD	HUB DRAIN
AV	ACID VENT	FD	FLOOR DRAIN	HEX	HEAT EXCHANGER
AW	ACID WASTE	FDC	FIRE DEPARTMENT (HOSE) CONNECTION	HP	HORSEPOWER
		FM	FLOW METER	HS	HAND SINK
BFP	REDUCED PRESSURE BACKFLOW PREVENTER	FOP	FUEL OIL PUMP	HST	HOT WATER STORAGE TANK (DOMESTIC)
BHP	BREAK HORSEPOWER	FOR	FUEL OIL RETURN	HWB	HOT WATER BOILER
BSP	BLACK STEEL PIPE	FOS	FUEL OIL SUPPLY	HWCP	HOT WATER CIRCULATING PUMP
BT	BATHTUB	FOV	FUEL OIL VENT	HYD	HYDRANT
BTU	BRITISH THERMAL UNIT	FW	FLOOR WASH		
BTUH	BRITISH THERMAL UNIT PER HOUR	ICW	INDUSTRIAL COLD WATER		
		INV	INVERT		
C	CELSIUS	IPC	INTERNATIONAL PLUMBING CODE		
CGA	COMPRESSED GAS ASSOCIATION	IRW	IRRIGATION WATER		
CI	CAST IRON	IWH	INSTANTANEOUS WATER HEATER		
CO	CLEANOUT	IWR	INDUSTRIAL WATER RETURN		
CS	CLINICAL SINK	IWS	INDUSTRIAL WATER SUPPLY		
CV	CONTROL VALVE	KW	KILOWATT		
		KWHR	KILOWATT-HOUR		
DCW	DOMESTIC COLD WATER	L/S	LITER PER SECOND		
DHW	DOMESTIC HOT WATER	LA	LABORATORY AIR		
DHWR	DOMESTIC HOT WATER RETURN	LAV	LAVATORY		
DHWR	DOMESTIC WATER RETURN	LBS/HR	POUNDS PER HOUR		
DHWS	DOMESTIC HOT WATER SUPPLY	LCW	LABORATORY COLD WATER		
DI	DEIONIZED WATER	LHW	LABORATORY HOT WATER		
DN	DOWN	LNG	LIQUID NATURAL GAS		
DOE	DEPARTMENT OF ENERGY	LQX	LIQUID OXYGEN		
DS	DOWNSPOUT	LV	LABORATORY VACUUM		
DW	DISHWASHER	LW	LOW WATER		
DWG	DRAWING				
DWH	DOMESTIC WATER HEATER				
DWR	DRINKING WATER RETURN				
DWS	DRINKING WATER SUPPLY				
DWV	DRAIN WASTE VENT				



GENERAL NOTES

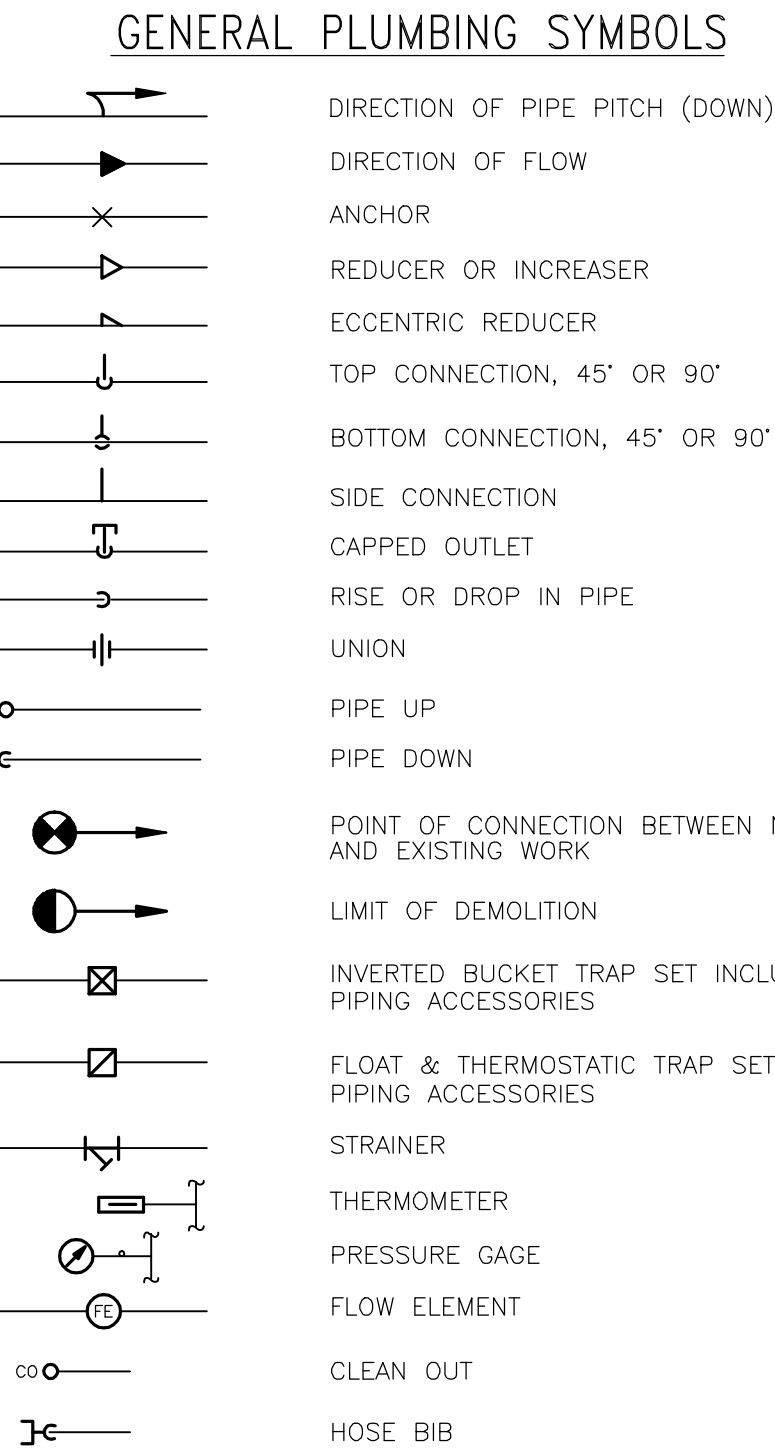
- ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE THE SUSPENDED CEILING.
- FOR PLUMBING FIXTURE MOUNTING HEIGHTS AND LOCATIONS, REFER TO THE ARCHITECTURAL DRAWINGS.
- ACCESS PANELS IN HARD SUSPENDED CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. ACCESS PANELS SHALL BE FURNISHED AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATIONS.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PIPE ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH DUCTWORK, LIGHT FIXTURES, SKYLIGHTS, ETC.
- PLUMBING CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL CONDENSATE DRAIN CONNECTIONS TO MECHANICAL EQUIPMENT.
- SEISMIC PROVISIONS REQUIRED - SEE SPEC. SECT. 13 05 41 AND 22 05 11. ALL PRESSURES LISTED ARE GAGE PRESSURE UNLESS OTHERWISE NOTED.
- ALL ITEMS THAT REQUIRE ACCESS, SUCH AS OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS, CONTROL DEVICES.
- PLUMBING FIXTURES AND PIPING/ VALVES SHALL COMPLY WITH CALIFORNIA ASSEMBLY BILL AB1953.
- ALL BRACING OF PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.
- WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR.
- SUPPORT AND BRACING OF ALL PIPING SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF PLUMBING PIPING SYSTEMS", OR THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.
- COMPLETE LAYOUT DRAWINGS SHALL BE REQUIRED TO BE SUBMITTED PER SPEC. CONSTRUCTION WORK SHALL NOT START ON ANY SYSTEM UNTIL THE LAYOUT DRAWINGS HAVE BEEN APPROVED.
- CLEANOUTS SHALL EXTEND ABOVE THE FLOOD RIM ELEVATION OF ANY FIXTURE LOCATED NEAR THE CLEANOUT AND BE CONNECTED TO THE SAME WASTE LINE.
- AVOID PLACING WATER AND WASTE ABOVE ROOMS HOUSING ELECTRICAL, ELECTRONIC OR TELEPHONE EQUIPMENT, AND IF ANOTHER ROUTE IS NOT POSSIBLE, PROVIDE ENCASMENT OF PIPE WITH LARGER PIPE WITH NO JOINTS OVER THESE ROOMS.
- SEE ARCHITECTURAL DRAWINGS FOR PIPE PENETRATIONS THROUGH FIRE-RATED WALLS AND ACOUSTICAL SOUND WALLS.
- SEE STRUCTURAL DRAWINGS FOR PIPE PENETRATIONS THROUGH FOOTINGS.

1 PLUMBING SYMBOLS, NOTES AND ABBREVIATIONS

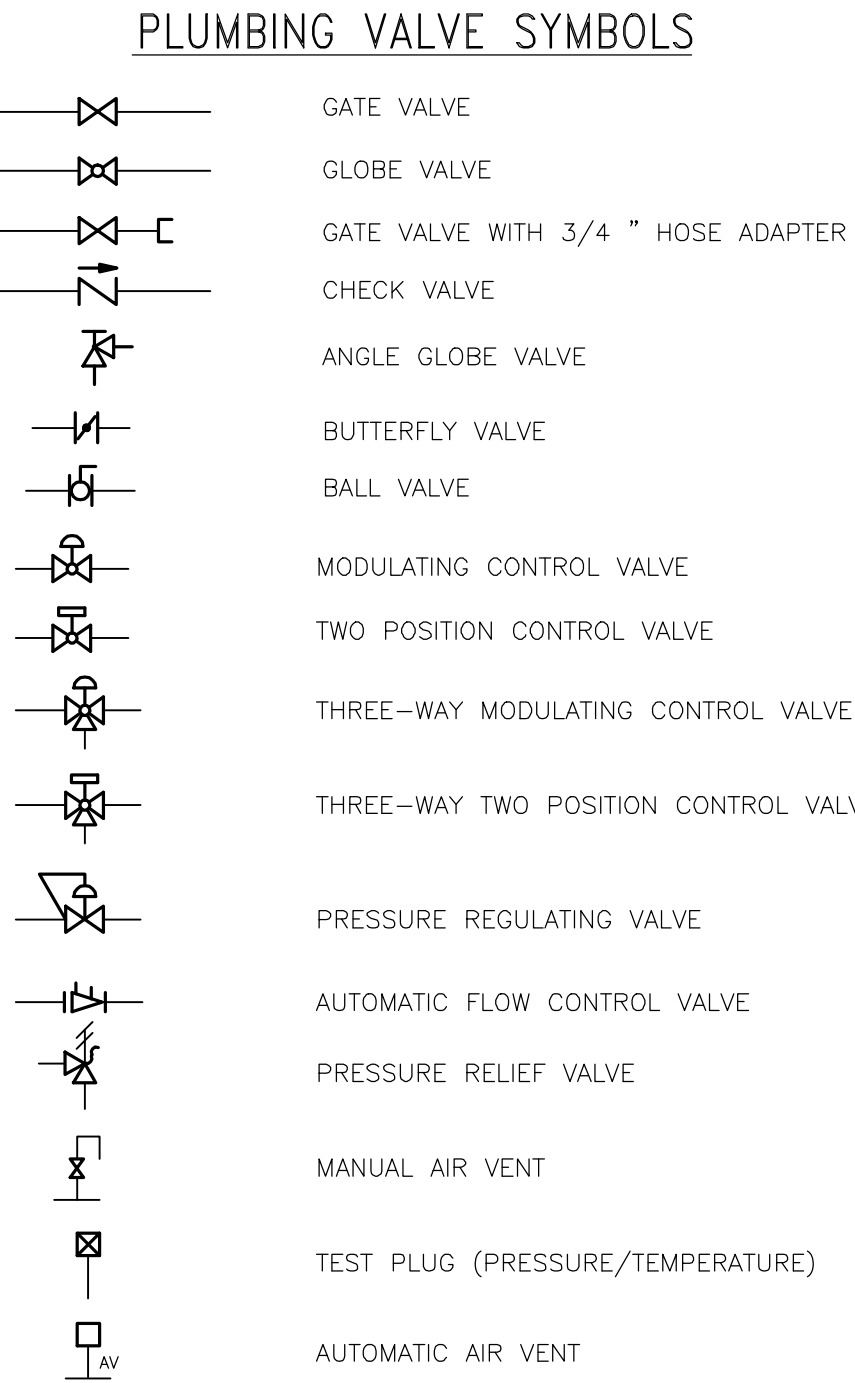
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PLUMBING PIPING SYMBOLS



GENERAL PLUMBING SYMBOLS



PLUMBING VALVE SYMBOLS

LEED NOTES

- WeP1: REDUCE THE USE OF POTABLE WATER FOR BUILDING BY 20% (NOT INCLUDING IRRIGATION).
- We2.1: REDUCE THE USE OF POTABLE WATER FOR BUILDING SEWAGE CONVEYANCE BY A MINIMUM OF 50% THROUGH THE USE OF WATER-EFFICIENT WATER CLOSET AND URINAL FIXTURES SPECIFIED, (GPF SPECIFIED IS MAXIMUM) OR NONPOTABLE WATER (CAPTURED RAINWATER, RECYCLED GRAYWATER, ON-SITE OR MUNICIPALLY TREATED WASTEWATER.
- We2.3: REDUCE THE USE OF POTABLE WATER FOR BUILDING BY 30%, 35% OR 40% BEYOND THE BASELINE ESTABLISHED BY THE ENERGY POLICY ACT OF 1992 AND SUBSEQUENT CODE MODIFICATIONS OF THOSE REQUIREMENTS. SEE CAL GREEN CALCULATIONS AND MAXIMUM FIXTURE FLOWS ON PLUMBING FIXTURE SCHEDULE ON DRAWINGS.
- Eap1: CONTRACTOR SHALL SUBMIT ALL O & M MANUALS AT START OF JOB FOR COMMISSIONING AGENT TO PROVIDE TESTING REPORTS. CONTRACTOR WILL BE REQUIRED TO WORK WITH COMMISSIONING AGENT TO TEST ALL EQUIPMENT.

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T 559 322 2444/ www.hmcarchitects.com  
HMC PROJECT #1383002-000

Drawing Title

PLUMBING SYMBOLS, NOTES AND ABBREVIATIONS

Approved: Project Director

Project Title

Mental Health Psychosocial Rehab Recovery and Health Care for Homeless Veteran Center

Location  
2615 E. CLINTON AVE, FRESNO, CA 93703

Date  
8/ 11/ 2014

Checked  
PD, GL

Drawn  
DN

Project Number

570-217

Building Number

37

Drawing Number

PP001

Dwg. of

Office of Construction and Facilities Management: