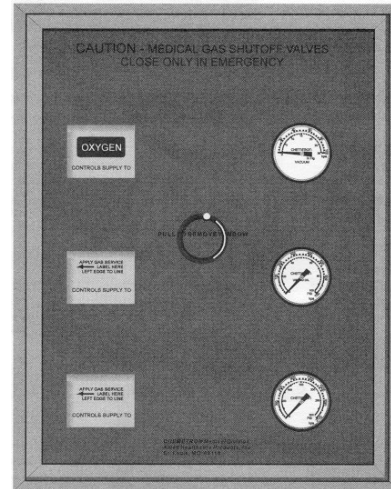




Zone Valve Box Assemblies

Elements

- Complies with NFPA 99 requirements
- Cleaned for oxygen service
- Full-port valves for high flow
- 18-gauge steel valve box
- Factory-installed copper tubing extensions
- Up to six valves in a single box
- Gauges ordered separately



Description

Chemetron® zone valve boxes shall be constructed of 18-gauge sheet steel with air dried lacquer finish. The cover frame shall be made of anodized aluminum and attached to the box by concealed 1-1/2" (38 mm) screws. The finished assembly shall be substantially dust-tight. Frames for all valve boxes shall have uniform width for balanced appearance, and shall allow for a maximum wall thickness of 1". The front assembly shall contain an easily removable cover window with pull ring. The window shall conceal the piping and valves inside the box and shall be labeled "Caution - Medical Gas Shut-Off Valves - Close Only in Emergency." Placement of the valves within the zone valve box shall be such that the removable window cannot be replaced when any valve is closed. Clear viewing space shall be provided in the window to display the gas service, the area controlled by the valve, and the pressure gauges.

Single-valve boxes shall accept valve sizes through 3". Two and three-valve boxes shall accept valve sizes through 2" Four, five and six-valve boxes shall accept valve sizes through 1-1/4". Valves shall be factory installed with the smallest valve at the top, largest at the bottom.

Manufacturer shall provide color-coded self-adhesive gas service labels for compliance with NFPA 99 labeling requirements. The installing contractor shall apply labels to each valve within the assembly for proper gas service identification, according to the manufacturer's instructions. Labels required to indicate area controlled shall be furnished and installed by the installing contractor.

Design of the valve box shall be such that valves may be removed prior to brazing, without disassembly of the box, to permit rearrangement of valves if necessary. Valves shall be ball type with Type K copper extensions, cleaned for oxygen service, supplied with capped ends, and shall operate full open to closed position with 90 degree handle rotation (refer to Medical Gas Valve Specifications). The gauge port shall be equipped with removable plug for pressure testing prior to final assembly of gauge.

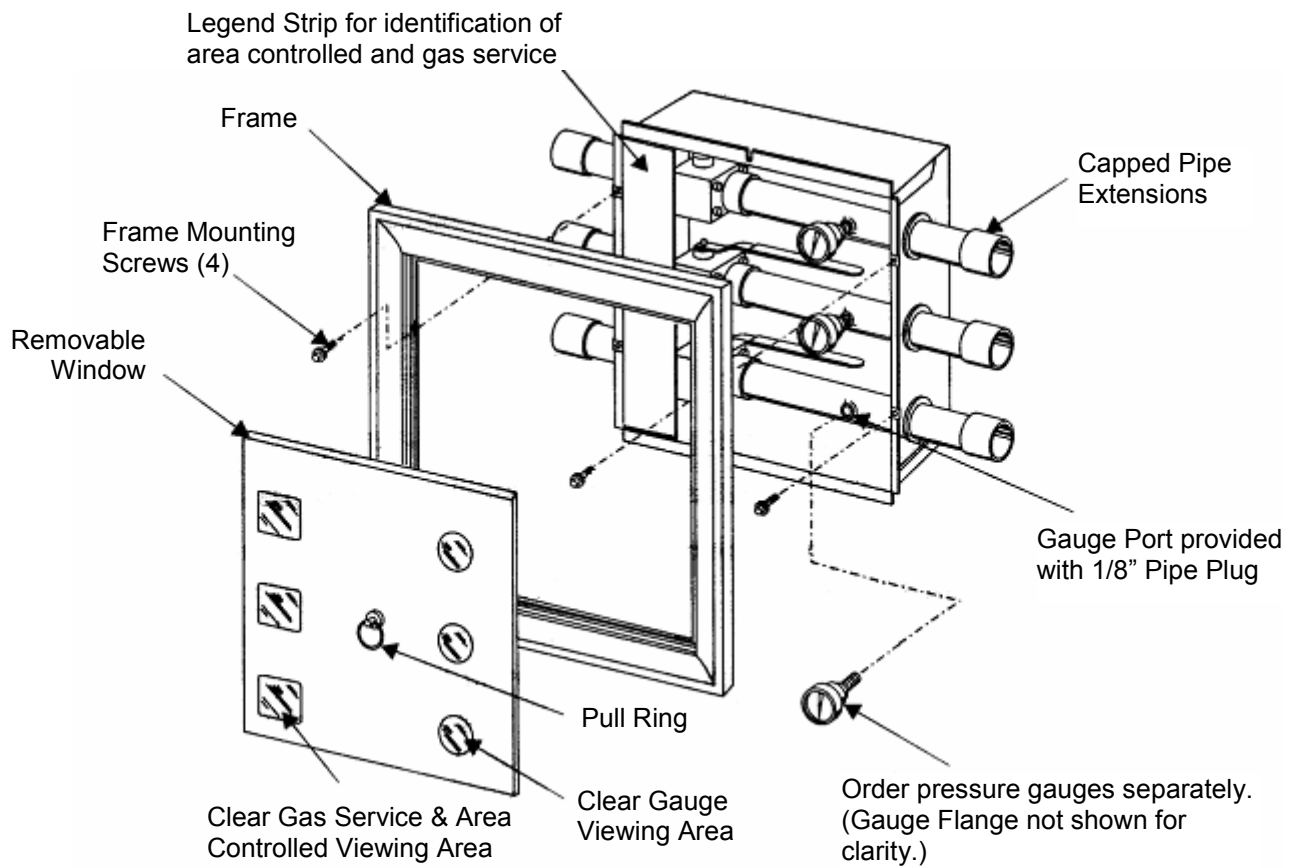
Gauges shall be ordered separately.

All zone valve box assemblies shall read pressure downstream and vacuum upstream of the valve per NFPA 99. Valves shall be piped left to right.

Typical Zone Valve Box Exploded View

(Three-valve box shown. Other arrangements similar.)

Installation Recommendation: Mounting height to be 50" (127 cm) above finished floor to center line of valve box assembly.



Ordering Information - Zone Valve Boxes

SINGLE-VALVE BOXES		
Catalog #	Valve Size	Qty
77-81-0002	1/2"	
77-81-0003	3/4"	
77-81-0004	1"	
77-81-0005	1-1/4"	
77-81-0006	1-1/2"	
77-81-0008	2"	
77-81-0010	2-1/2"	
77-81-0012	3"	
TWO-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-82-0022	1/2", 1/2"	
77-82-0023	1/2", 3/4"	
77-82-0024	1/2", 1"	
77-82-0025	1/2", 1-1/4"	
77-82-0026	1/2", 1-1/2"	
77-82-0028	1/2", 2"	
77-82-0033	3/4", 3/4"	
77-82-0034	3/4", 1"	
77-82-0035	3/4", 1-1/4"	
77-82-0036	3/4", 1-1/2"	
77-82-0038	3/4", 2"	
77-82-0044	1", 1"	
77-82-0045	1", 1-1/4"	
77-82-0046	1", 1-1/2"	
77-82-0048	1", 2"	
77-82-0055	1-1/4", 1-1/4"	
77-82-0056	1-1/4", 1-1/2"	
77-82-0058	1-1/4", 2"	
77-82-0066	1-1/2", 1-1/2"	

TWO-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-82-0068	1-1/2", 2"	
77-82-0088	2", 2"	
THREE-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-83-0222	1/2", 1/2", 1/2"	
77-83-0223	1/2", 1/2", 3/4"	
77-83-0224	1/2", 1/2", 1"	
77-83-0225	1/2", 1/2", 1-1/4"	
77-83-0226	1/2", 1/2", 1-1/2"	
77-83-0228	1/2", 1/2", 2"	
77-83-0233	1/2", 3/4", 3/4"	
77-83-0234	1/2", 3/4", 1"	
77-83-0235	1/2", 3/4", 1-1/4"	
77-83-0236	1/2", 3/4", 1-1/2"	
77-83-0238	1/2", 3/4", 2"	
77-83-0244	1/2", 1", 1"	
77-83-0245	1/2", 1", 1-1/4"	
77-83-0246	1/2", 1", 1-1/2"	
77-83-0248	1/2", 1", 2"	
77-83-0255	1/2", 1-1/4", 1-1/4"	
77-83-0256	1/2", 1-1/4", 1-1/2"	
77-83-0258	1/2", 1-1/4", 2"	
77-83-0266	1/2", 1-1/2", 1-1/2"	
77-83-0268	1/2", 1-1/2", 2"	
77-83-0288	1/2", 2", 2"	
77-83-0333	3/4", 3/4", 3/4"	
77-83-0334	3/4", 3/4", 1"	
77-83-0335	3/4", 3/4", 1-1/4"	
77-83-0336	3/4", 3/4", 1-1/2"	



Zone Valve Box Assemblies

Ordering Information – Zone Valve Boxes

THREE-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-83-0338	3/4", 3/4", 2"	
77-83-0344	3/4", 1", 1"	
77-83-0345	3/4", 1", 1-1/4"	
77-83-0346	3/4", 1", 1-1/2"	
77-83-0348	3/4", 1", 2"	
77-83-0355	3/4", 1-1/4", 1-1/4"	
77-83-0356	3/4", 1-1/4", 1-1/2"	
77-83-0358	3/4", 1-1/4", 2"	
77-83-0366	3/4", 1-1/2", 1-1/2"	
77-83-0368	3/4", 1-1/2", 2"	
77-83-0388	3/4", 2", 2"	
77-83-0444	1", 1", 1"	
77-83-0445	1", 1", 1-1/4"	
77-83-0446	1", 1", 1-1/2"	
77-83-0448	1", 1", 2"	
77-83-0455	1", 1-1/4", 1-1/4"	
77-83-0456	1", 1-1/4", 1-1/2"	
77-83-0458	1", 1-1/4", 2"	
77-83-0466	1", 1-1/2", 1-1/2"	
77-83-0468	1", 1-1/2", 2"	
77-83-0488	1", 2", 2"	
77-83-0555	1-1/4", 1-1/4", 1-1/4"	
77-83-0556	1-1/4", 1-1/4", 1-1/2"	
77-83-0558	1-1/4", 1-1/4", 2"	
77-83-0666	1-1/2", 1-1/2", 1-1/2"	
77-83-0668	1-1/2", 1-1/2", 2"	
77-83-0688	1-1/2", 2", 2"	
77-83-0888	2", 2", 2"	

FOUR-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-84-2222	1/2", 1/2", 1/2", 1/2"	
77-84-2223	1/2", 1/2", 1/2", 3/4"	
77-84-2224	1/2", 1/2", 1/2", 1"	
77-84-2225	1/2", 1/2", 1/2", 1-1/4"	
77-84-2233	1/2", 1/2", 3/4", 3/4"	
77-84-2234	1/2", 1/2", 3/4", 1"	
77-84-2235	1/2", 1/2", 3/4", 1-1/4"	
77-84-2244	1/2", 1/2", 1", 1"	
77-84-2333	1/2", 3/4", 3/4", 3/4"	
77-84-2334	1/2", 3/4", 3/4", 1"	
77-84-2335	1/2", 3/4", 3/4", 1-1/4"	
77-84-3333	3/4", 3/4", 3/4", 3/4"	
77-84-3334	3/4", 3/4", 3/4", 1"	
77-84-3335	3/4", 3/4", 3/4", 1-1/4"	
77-84-3344	3/4", 3/4", 1", 1"	
77-84-3345	3/4", 3/4", 1", 1-1/4"	
77-84-4444	1", 1", 1", 1"	

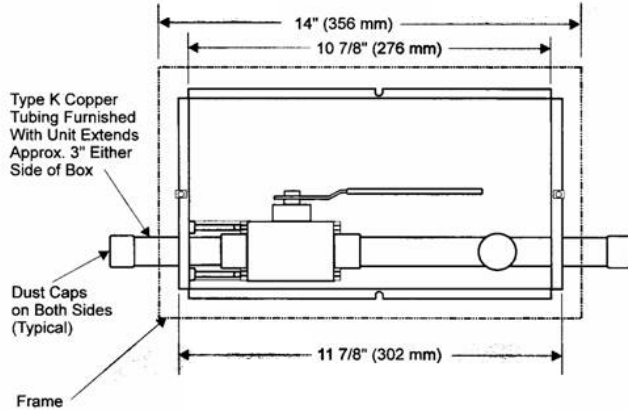
FIVE-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-85-22222	(5) 1/2"	
77-85-22223	(4) 1/2", 3/4"	
77-85-22224	(4) 1/2", 1"	
77-85-22225	(4) 1/2", 1-1/4"	
77-85-22233	(3) 1/2", (2) 3/4"	
77-85-22234	(3) 1/2", 3/4", 1"	
77-85-22235	(3) 1/2", 3/4", 1-1/4"	
77-85-22244	(3) 1/2", (2) 1"	

Ordering Information – Zone Valve Boxes

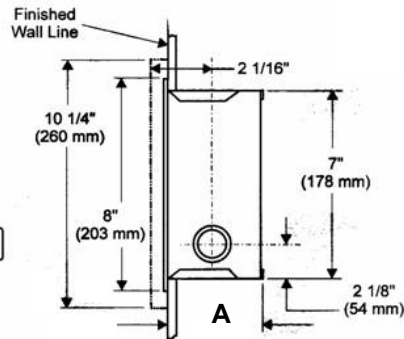
FIVE-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-85-22245	(3) 1/2", 1", 1-1/4"	
77-85-22334	(2) 1/2", (2) 3/4", 1"	
77-85-33334	(4) 3/4", 1"	
77-85-33335	(4) 3/4", 1-1/4"	
77-85-33344	(3) 3/4", (2) 1"	
77-85-33445	(2) 3/4", (2) 1", 1-1/4"	
SIX-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-86-222223	(5) 1/2", 3/4"	
77-86-222224	(5) 1/2", 1"	
77-86-222225	(5) 1/2", 1-1/4"	
77-86-222233	(4) 1/2", (2) 3/4"	
77-86-222234	(4) 1/2", 3/4", 1"	
77-86-222235	(4) 1/2", 3/4", 1-1/4"	
77-86-222244	(4) 1/2", (2) 1"	
77-86-222245	(4) 1/2", 1", 1-1/4"	
77-86-222255	(4) 1/2", (2) 1-1/4"	
77-86-222333	(3) 1/2", (3) 3/4"	
77-86-222334	(3) 1/2", (2) 3/4", 1"	
77-86-222335	(3) 1/2", (2) 3/4", 1-1/4"	
77-86-222344	(3) 1/2", 3/4", (2) 1"	
77-86-223334	(2) 1/2", (3) 3/4", 1"	
77-86-223344	(2) 1/2", (2) 3/4", (2) 1"	
77-86-223345	(2) 1/2", (2) 3/4", 1", 1-1/4"	
77-86-233335	1/2", (4) 3/4", 1-1/4"	
77-86-233345	1/2", (3) 3/4", 1", 1-1/4"	
77-86-333335	(5) 3/4", 1-1/4"	
77-86-333344	(4) 3/4", (2) 1"	
77-86-333445	(3) 3/4", (2) 1", 1-1/4"	

SIX-VALVE BOXES		
Catalog #	Valve Sizes	Qty
77-86-334445	(2) 3/4", (3) 1", 1-1/4"	
ZONE VALVE GAUGES (includes plastic gauge flange)		
Catalog #	Gauge Type	Qty
77-90-0571	0-100 PSI (oxygen, medical air, nitrous oxide, carbon dioxide)	
77-90-0572	0-30" Hg (vacuum, WAGD)	
77-90-0573	0-300 PSI (nitrogen)	

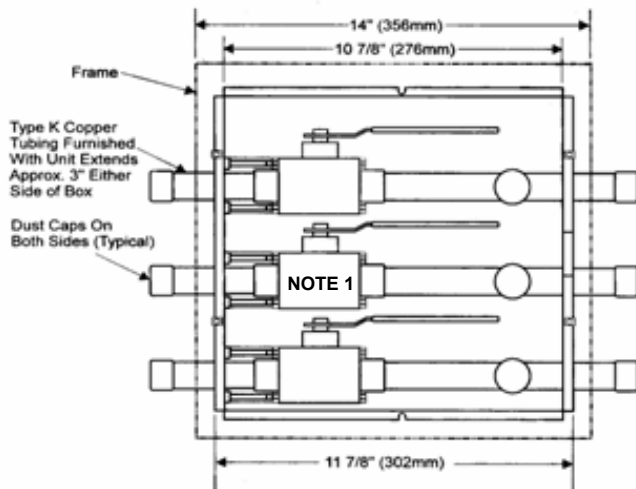
Dimensional Data (One, Two & Three-Valve Boxes)



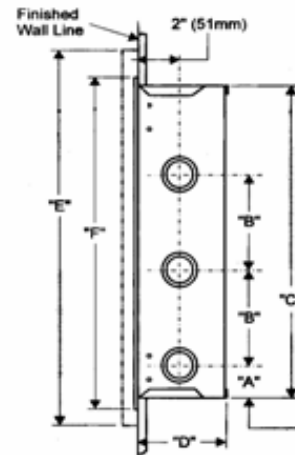
ONE-VALVE BOX DIMENSIONS



Box Depth (dimension 'A' above)
 Boxes with 1-1/4" or smaller valve: 3-5/8" (92 mm)
 Boxes with 1-1/2" or 2" Valve: 4-1/8" (105 mm)
 NOTE: Box dimensions for single 2-1/2" or 3" valve are 11.35" high x 12.5" wide x 6.5" deep.



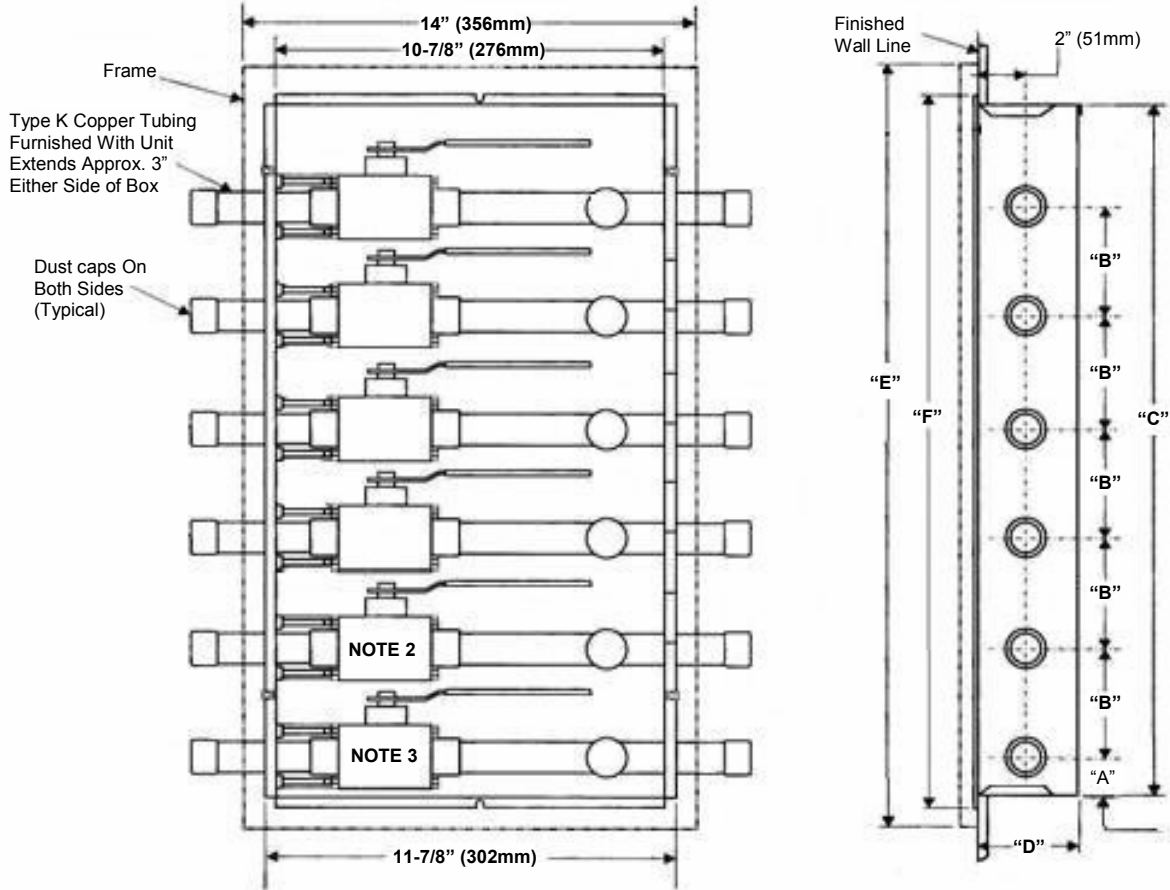
NOTE 1: The center valve is omitted for a two-valve box.



TWO AND THREE-VALVE BOX DIMENSIONS

Dimension	If Largest Valve Is 1-1/4" or Smaller	If Box Includes 1-1/2" or 2" Valves
A	1-1/2" (38 mm)	2-1/8" (54 mm)
B	4-3/8" (111 mm)	5-3/4" (146 mm)
C	14" (356 mm)	18-1/4" (463 mm)
D	3-5/8" (92 mm)	4-1/8" (105 mm)
E	17-3/16" (436 mm)	21-3/8" (543 mm)
F	15" (381 mm)	19-1/4" (488 mm)

Dimensional Data (Four, Five and Six-Valve Boxes)



NOTE 2: The two bottom valves are omitted for a four-valve box (77-84-XXXX).
NOTE 3: The bottom valve is omitted for a five-valve box (77-85-XXXXX).

FOUR, FIVE AND SIX-VALVE BOX DIMENSIONS

Dimension	Largest Valve Is 1-1/4" or Smaller
A	1-1/2" (38 mm)
B	4-3/8" (111 mm)
C	27-1/2" (699 mm)
D	3-5/8" (92 mm)
E	30-3/8" (770 mm)
F	28-1/2" (724 mm)



Zone Valve Box Assemblies

All specifications are nominal and subject to change without notice.

Warranty
See Allied Statement of Warranties for details.

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Product Specification