

Sizing and Placement

The fixture unit values shown in the table (below) represent the standard ratings used by engineers to size water distribution systems as well as water hammer arresters. Match fixture units in the table to the Hydra-Rester with the corresponding fixture unit value (see previous page).

Multi-Fixture Branch Lines

**Rule 1: Branch Lines of 20 Feet or Less** The Hydra-Rester should be placed at the end of the branch line within six feet of the last fixture served, as shown. Select required model using fixture unit sizing (above). Always place arrester within six feet of the last fixture.

**Rule 2: Branch lines over 20 feet** An additional Hydra-Rester (Y) should be placed as shown. The additional unit should be placed at the midpoint of the run longer than 20 feet. Select required model(s) using fixture unit sizing (above). The sum of the fixture unit ratings of units X and Y combined, shall be equal to or greater than the demand of all branches.

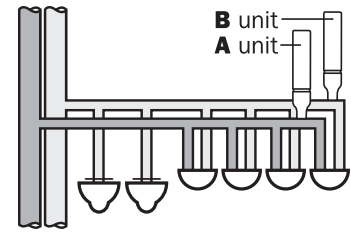
Long Runs of Piping to Remote Equipment

When long runs of piping serve remote equipment, Sioux Chief recommends custom sizing for each specific application. If you have such an application, fill out the arrester sizing form on the next page and fax it to us. Your specific job will be analyzed and calculated by our sizing program. The results will be sent to you, including the required arrester size and information on how to order.

Residential Installations

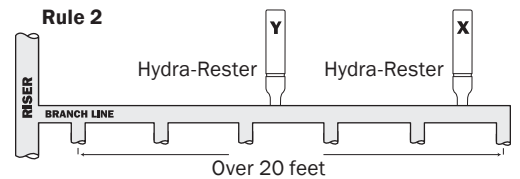
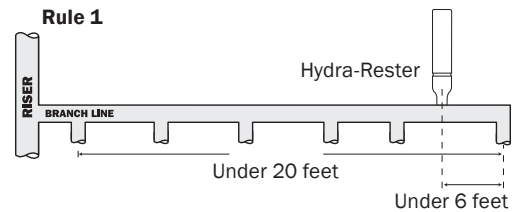
For High-Flow Garden Tub Valves and Multi-Head Shower Valves, install 653-B Hydra-Resters on both hot and cold supply lines within six feet of the valve.

For Lawn Irrigation Zone Valves, on ¾" service lines, install one 653-B Hydra-Rester within six feet of each valve or group of valves. On a 1" service line: Install one 654-C Hydra-Rester within six feet of each valve or group of valves.



**Cold Water**  
Equal to 26 fixture units  
Requires B unit  
Sioux Chief's 653-B  
or 653-BS

**Hot Water**  
Equal to 6 fixture units  
Requires A unit  
Sioux Chief 652-A  
or 652-AS



Fixture	Type of Supply Control	Fixture Units					
		Public			Private		
		Total	C.W.	H.W.	Total	C.W.	H.W.
Water closet	Flush valve	10	10	—	6	6	—
Water closet	Flush tank	5	5	—	3	3	—
Pedestal urinal	Flush valve	10	10	—	—	—	—
Stall or wall urinal	Flush valve	5	5	—	—	—	—
Stall or wall urinal	Flush tank	3	3	—	—	—	—
Lavatory	Faucet	2	1½	1½	1	1	1
Bathtub	Faucet	4	2	3	2	1½	1½
Shower head	Mixing valve	4	2	3	2	1	2
Bathroom group	Flush valve closet	—	—	—	8	8	3
Bathroom group	Flush tank closet	—	—	—	6	6	3
Separate shower	Mixing valve	—	—	—	2	1	2
Service sink	Faucet	3	3	3	—	—	—
Laundry tubs (1-3)	Faucet	—	—	—	3	3	3
Combination fixture	Faucet	—	—	—	3	3	3

WATER HAMMER ARRESTER CROSS REFERENCE

Manufacturer (Trade Name)	Arrester Size						
	AA	A	B	C	D	E	F
Sioux Chief (Mini-Rester, Hydra-Rester)	660 Series	652-A	653-B	654-C	655-D	656-E	657-F
Josam (Absorbotron)	—	75001	75002	75003	75004	75005	75006
J.R. Smith (Hydrotrol)	—	5005	5010	5020	5030	5040	5050
PPP (MM, SC Series)	MM-500 Series	SC500	SC750	SC1000	SC1250	SC1500	SC2000
Wade (Shokstop)	—	W-5	W-10	W-20	W-50	W-75	W-100
Watts (05, 15 Series)	05 Series	15-½"	15-¾"	15-1"	15-1¼"	15-1½"	15-2"
Zurn (Shoktrol)	—	100	200	300	400	500	600