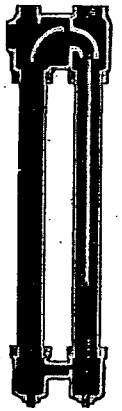


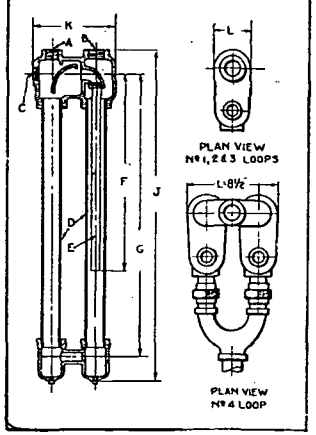
Hoffman Differential Loop

Hoffman Differential Loop

The Differential Loop is the safety device for maintaining a steady water line in vapor and vapor vacuum systems. It is entirely automatic, non-adjustable and has no moving parts to stick at a critical moment.

Through its use water is permitted to rise in the return main a certain predetermined amount when the loop functions, blowing over a small quantity of steam which closes the No. 10 or 11 Valve installed on the loop for venting the system and then compresses the air which is "bottled up" in the return main and builds up a pressure which prevents further rise of water in the vertical part of the return beyond the predetermined amount. As soon as this is accomplished, and the action is almost instantaneous, the loop reseals and no more steam is blown over until the differential pressure is not maintained. It will be readily seen that, by the alternate blowing over and resealing of the loop, a constant differential pressure will be maintained between the steam main and return main and also that by the maintenance of this differential regardless of how high the boiler pressure goes circulation will take place in a radiator which is turned on with the return main vent closed through loop action.

HOFFMAN DIFFERENTIAL LOOP.



Differential Loops are made in four sizes, having a capacity up to 15,000 sq. ft. of radiation. For larger systems the No. 4 Loops can be installed in a battery or the return mains divided so as to have their load come within the capacity of standard loops.

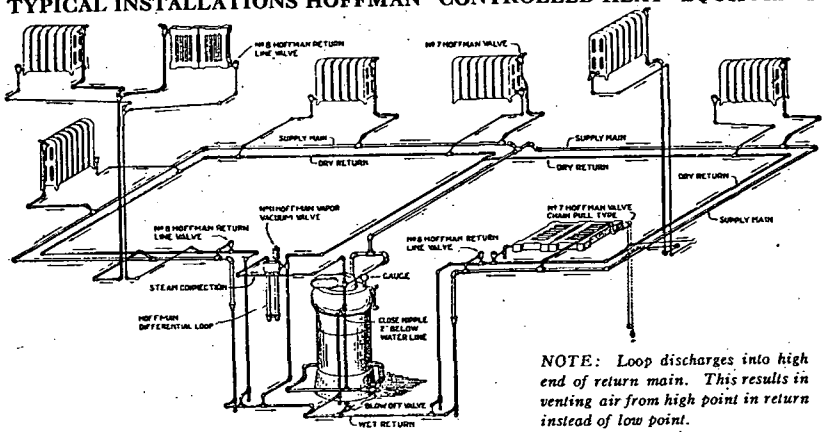
No. 1 and No. 2 Loops should not be used where the low point in the dry return is less than 24 in. above boiler water line; with the No. 3 and No. 4 Loops this distance must be at least 30 in.

DIMENSIONS AND CAPACITIES OF HOFFMAN DIFFERENTIAL LOOPS

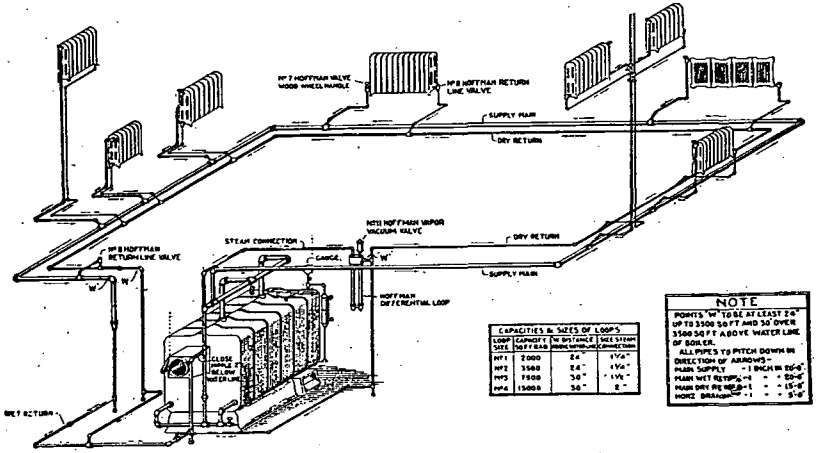
Loop No.	A	B	C	D	E	F	G	J	K	L	Capacity Sq. Ft. Rad.
1	¾″	1¼″	1¼″	1½″	½″	18¼″	26″	30⅜″	7⅝″	3″	2000
2	¾″	1¼″	1¼″	1½″	¾″	18¼″	26″	30⅜″	7⅝″	3″	3500
3	¾″	1½″	1½″	2″	1″	25″	32″	37¾″	10″	3¾″	7500
4	¾″	2″	2″	2″	1″	25″	32″	37¾″	10″	8½″	15000

Write for Descriptive Circular—Hoffman Controlled Heat

TYPICAL INSTALLATIONS HOFFMAN "CONTROLLED HEAT" EQUIPMENT



NOTE: Loop discharges into high end of return main. This results in venting air from high point in return instead of low point.



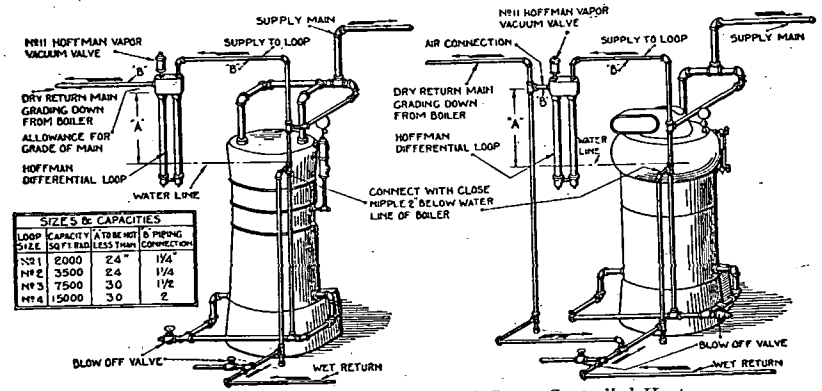
CAPACITIES & SIZES OF LOOPS			
LOOP SIZE	CAPACITY IN SQ FT RAD	IN PIPING FROM BOILER	RET SYSTEM CONNECTION
Nº1	2000	24 "	1¼"
Nº2	3500	24 "	1¼"
Nº3	7500	30 "	1½"
Nº4	15000	36 "	2 "

NOTE

POINTS "W" TO BE AT LEAST 24" UP TO 3500 SQ FT AND 30" OVER 3500 SQ FT ABOVE WATER LINE OF BOILER.

ALL PIPES TO PITCH DOWN IN DIRECTION OF ARROWS—

MAIN SUPPLY — 1 INCH IN 20'-0"
MAIN WET RETURN — " " 20'-0"
MAIN DRY RETURN — " " 15'-0"
HORZ BRANCH — " " 5'-0"



SIZES & CAPACITIES			
LOOP SIZE	CAPACITY SQ FT RAD	A TO BE NOT LESS THAN	B PIPING CONNECTION
Nº1	2000	24"	1¼"
Nº2	3500	24	1¼
Nº3	7500	30	1½
Nº4	15000	30	2

Write for Descriptive Circular—Hoffman Controlled Heat