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INSTALLATION INSTRUCTIONS FOR QUIETAIRE STAINLESS STEEL COOLING SYSTEM

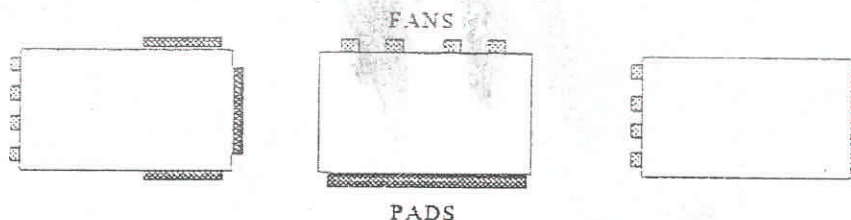
COMPONENTS

1. Cooling pads- pads come 4" thick and 12" wide X 24", 36", 48", 60", and 72" high. Pads may be stacked for higher system.
2. Trough, pump, piping and top cover are furnished with kit.
3. Customers must furnish framing material.

LOCATION OF THE FAN AND PAD SYSTEM

The cooling pads should be placed in the opposite wall from the fans and should be no more than 250 feet apart to avoid excessive temperature rise and air velocity. The top of the pads should be located near the top of the items to be cooled.

TYPICAL LAYOUT WHEN PAD TO FAN DISTANCE IS 250' OR LESS

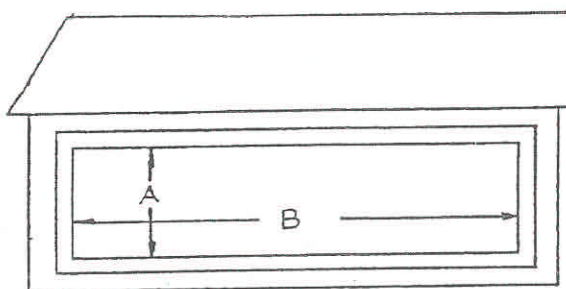
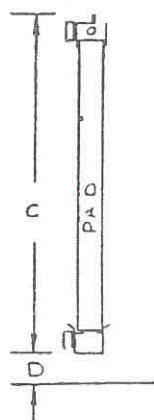


TYPICAL LAYOUTS WHEN PAD TO FAN DISTANCE EXCESS 250'



A quality product that lives up to its name

FRAME OPENING



A= Height of the pad minus 2.5"

B= Length of the system

C= Pad height plus 7"

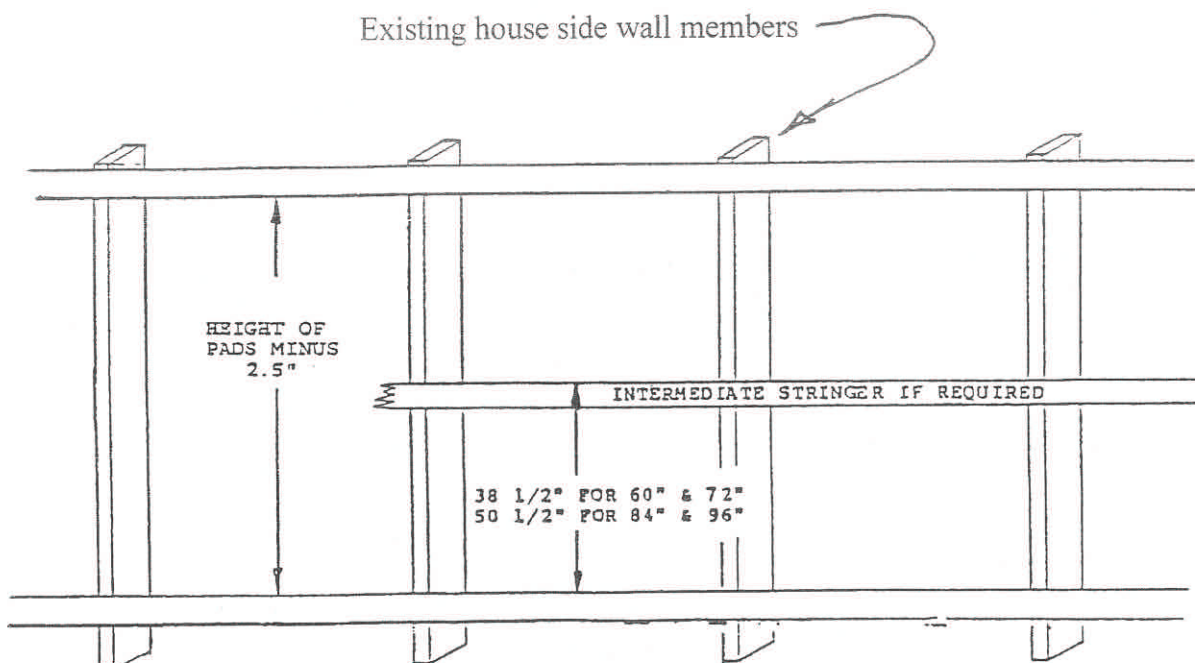
D= Clearance for pump suction

DO NOT REMOVE THE SIDE WALL STRUCTURAL MEMBERS

SUPPORT STRINGERS

The support stringers can be metal or wood and should provide a flat surface for mounting support brackets. The lower stringer should be strong enough to support 2 ¾ pounds per square foot of pad if the trough is to be hung on a stringer with brackets. The trough can also be set on blocks. The rough must be installed level.

When pads over 48" tall or two pieces are used an intermediate stringer ¾" thick must be installed to prevent pads from blowing out. See drawing below



SUMP TANK

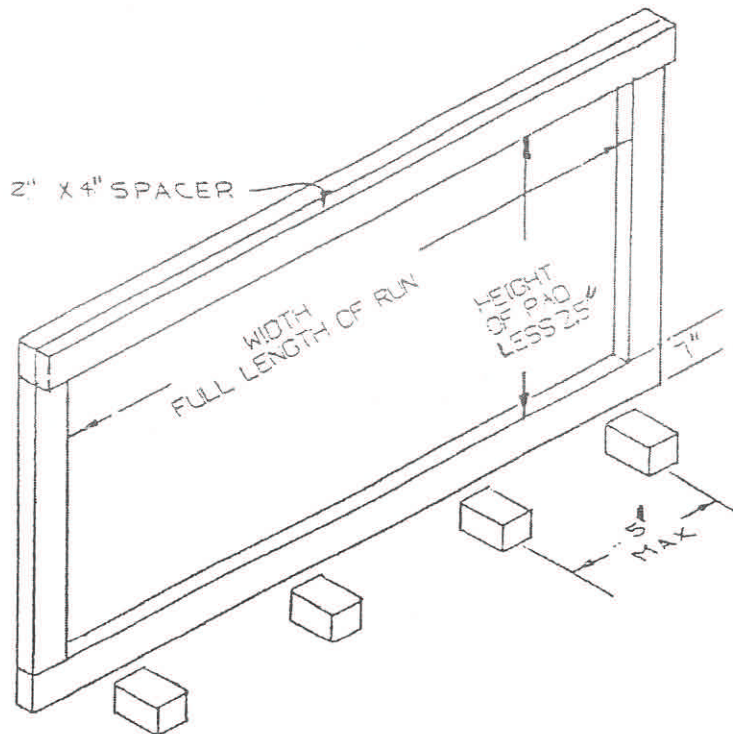
There is no need for a water collecting sump or reservoir as the trough has sufficient capacity to act as such.

INSTALLING THE SYSTEM

After all the framing has been installed and dimension shave been checked the system components can be installed. Locate all of the packages of the system and sort out the basic package that contains the fittings, end caps, the trough with pump suction hole etc. start with this package.

INSTALLING THE TROUGH SUPPORT

Set support blocks on a level line and place trough on the blocks

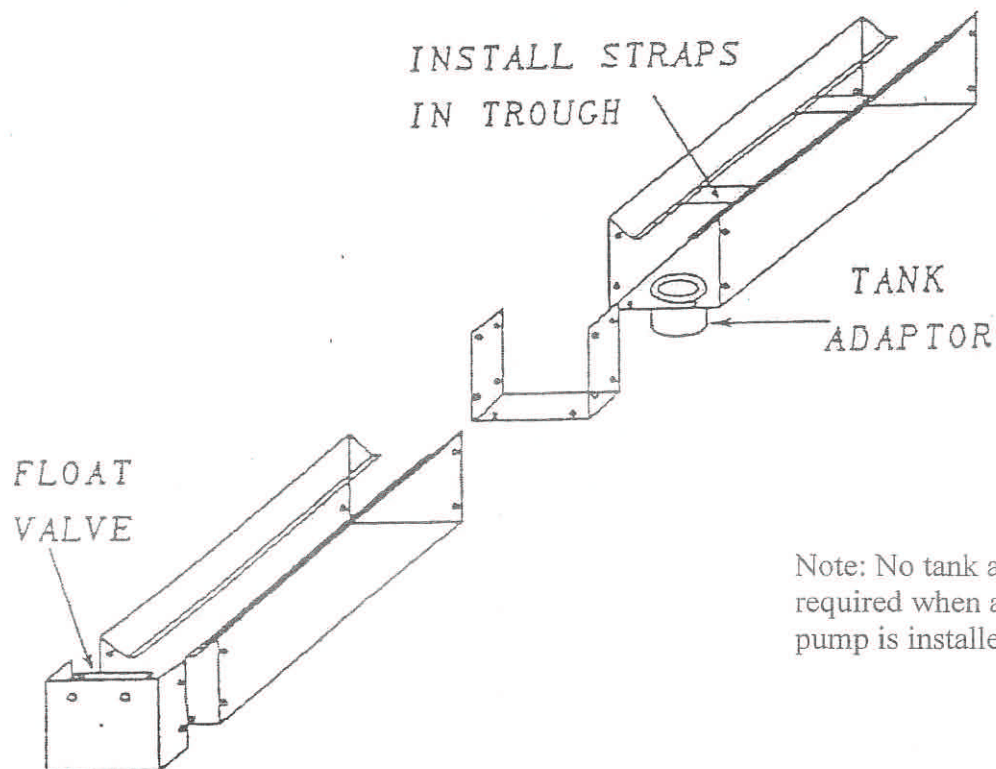


To top of blocks
of bracket

See typical
drawing page 7

INSTALLING THE TROUGH

Install the end caps in the two sections of trough you have selected for the end sections with the mastic strips as shown. Install the end cap that will have the float valve mounted in it where you wish to bring in the water supply. Install the tank adaptor as shown. The tank adaptor may be installed at the end of short runs (up to 40') but should be in the center of longer runs.

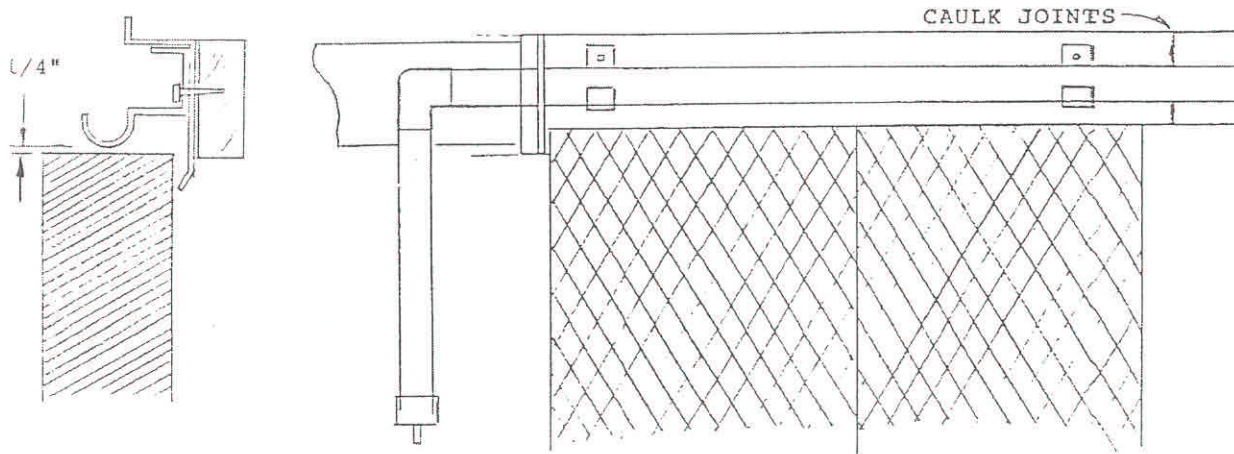


Place the mastic strips inside of the u connector and bolt together with the trough.

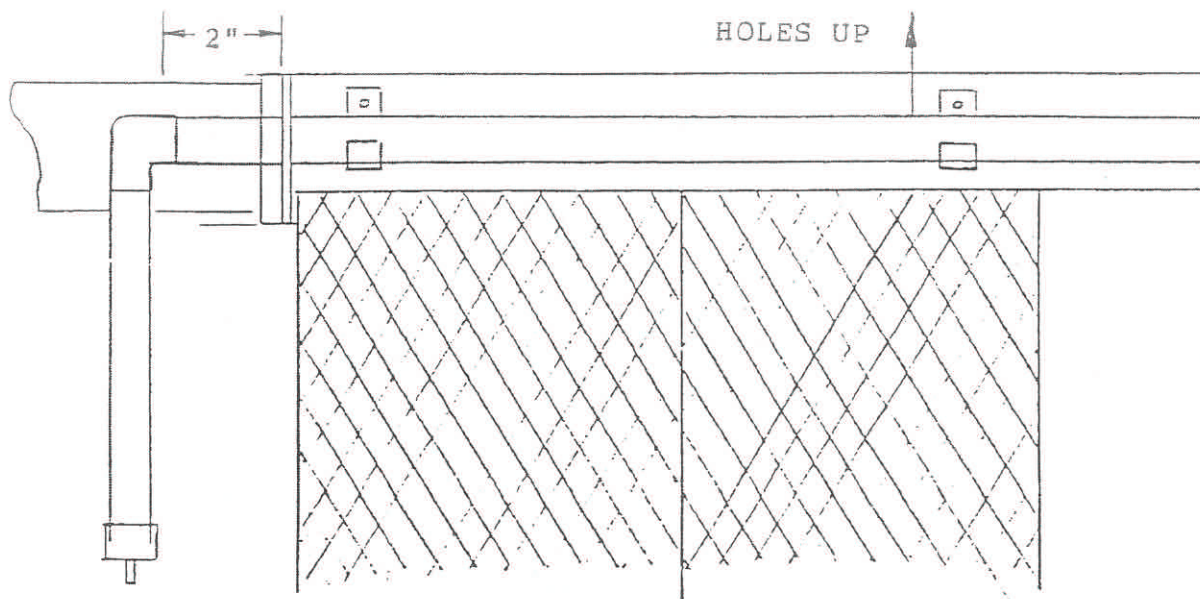
NOTE: The trough, trough ends and u connectors must be cleaned of the oil film or the mastic strips will not stick and seal. Acetone works best and leaves no oily residue.

INSTALLING THE TOP OF THE SYSTEM

Place a pad (2 if double stacked) at each end and in the idle of the trough. Next using a top cover back and pipe support mark the location of the mounting hole at each end and the middle of the system and run a chalk line through these marks. Use this line to line up the top cover back and pipe supports and install with $\frac{1}{4}$ X $1 \frac{1}{4}$ screws. Caulk the top cover back joints as shown.

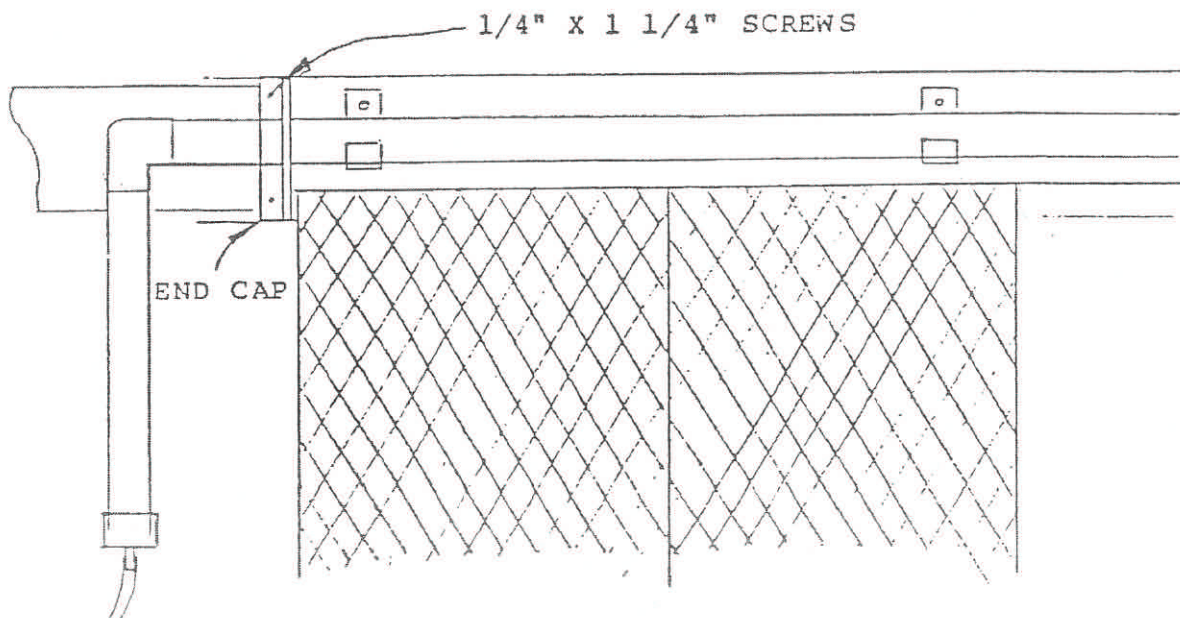


INSTALLING THE DISTRIBUTION PIPE



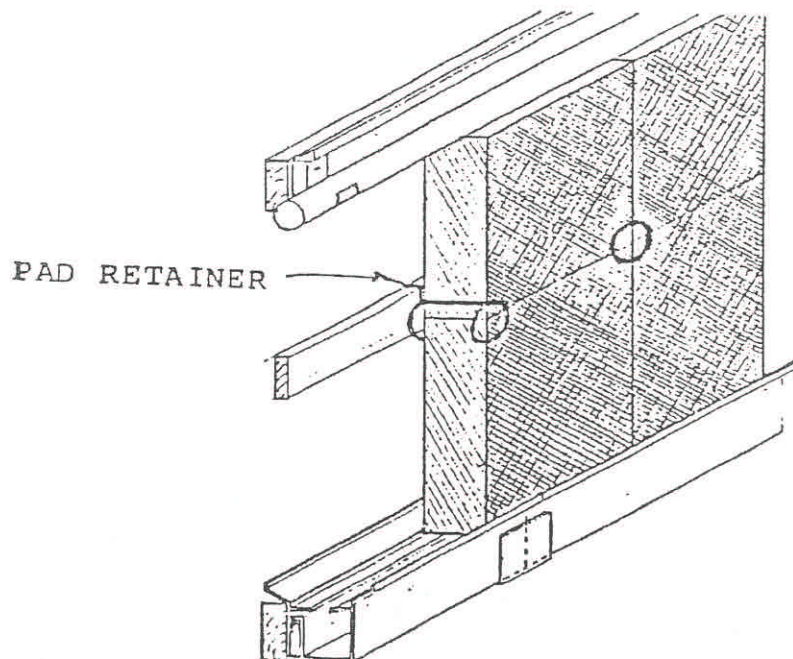
INSTALLING THE DISTRIBUTION PIPE Con't

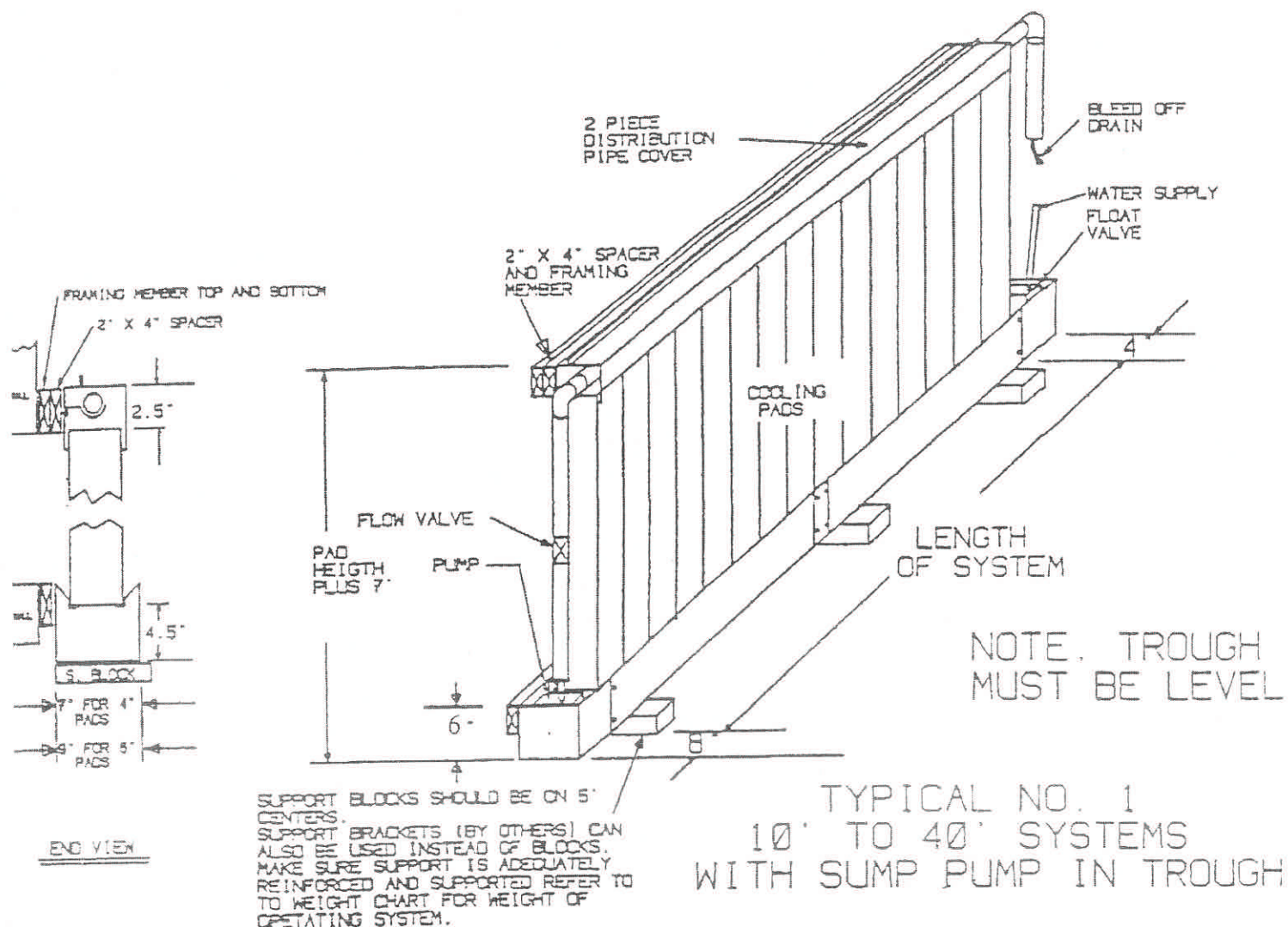
Install the end cap over the distribution pipe and secure with 2-1/4 X 1 1/4 screws as shown. Next cement an elbow, 2' piece of pipe and the threaded adapter to the distribution pipe as shown. Screw the bleed off fitting into the threaded adapter and attach the bleed off tubing as shown, the bleed off tubing should run to the outside of the house or to a drain.



INSTALLING THE PADS

Place the pads in the trough so that they sit on the support lip. If 5' or taller one piece or two piece pads are used pad retainers are required. Install the retainers as shown on the drawing. To install or remove the pads, simply rotate the retainers 90 degrees.



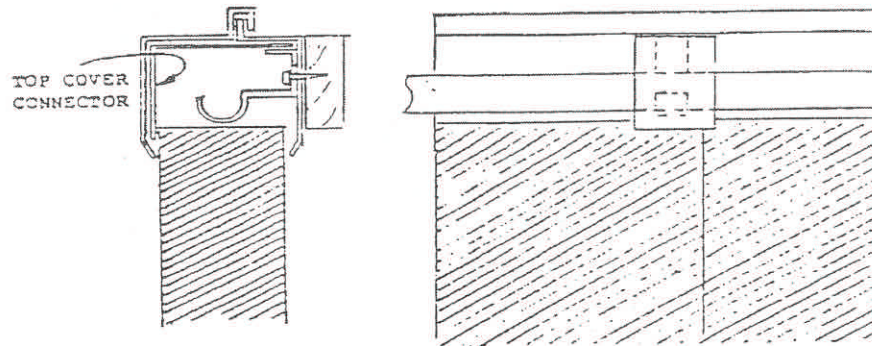


We pads and trough system
weight per foot in pounds

Height	4" pads	6" pads
3'	21	28
4'	24	32
5'	27	36
6'	30	40

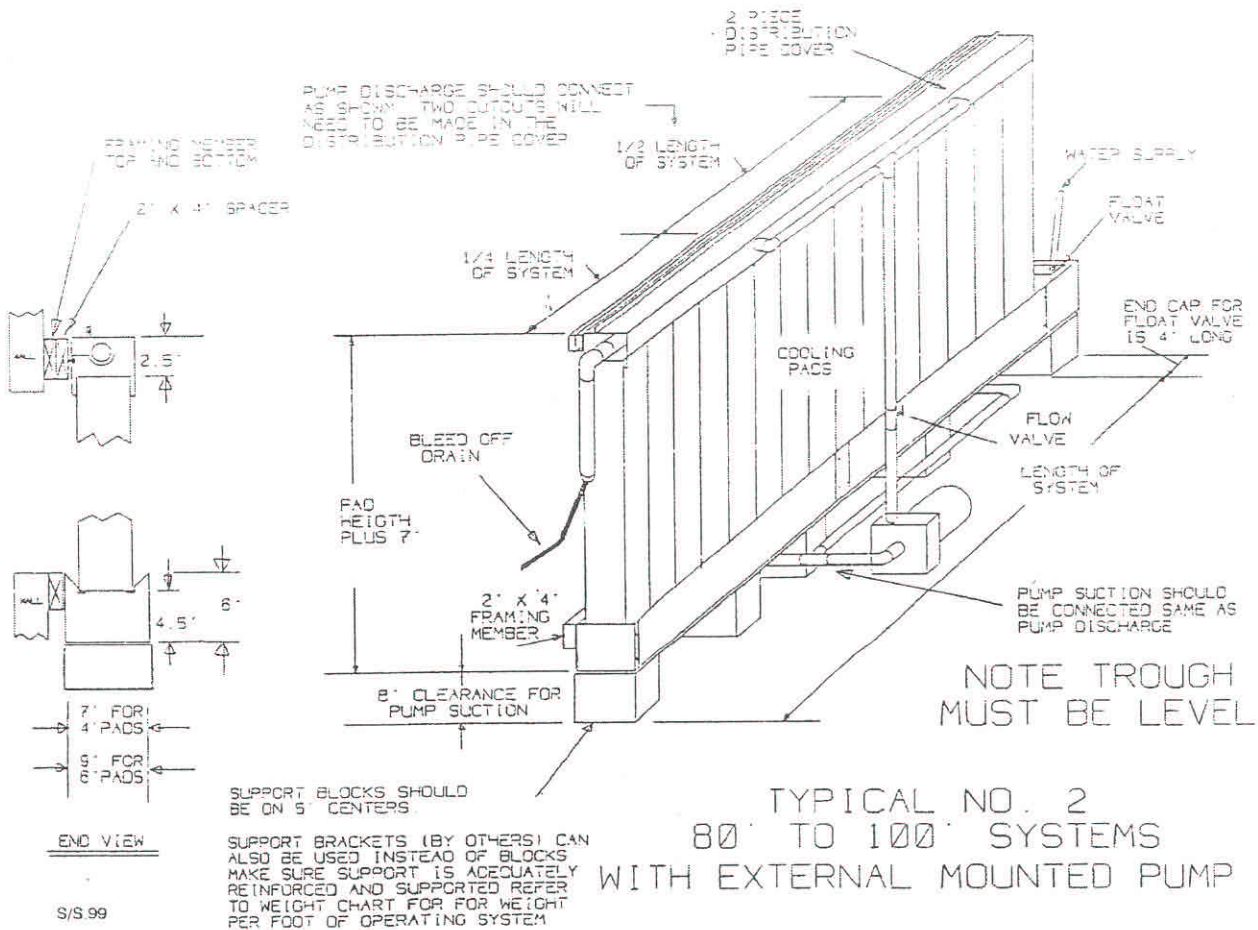
INSTALLING THE FRONT OF THE TOP COVER

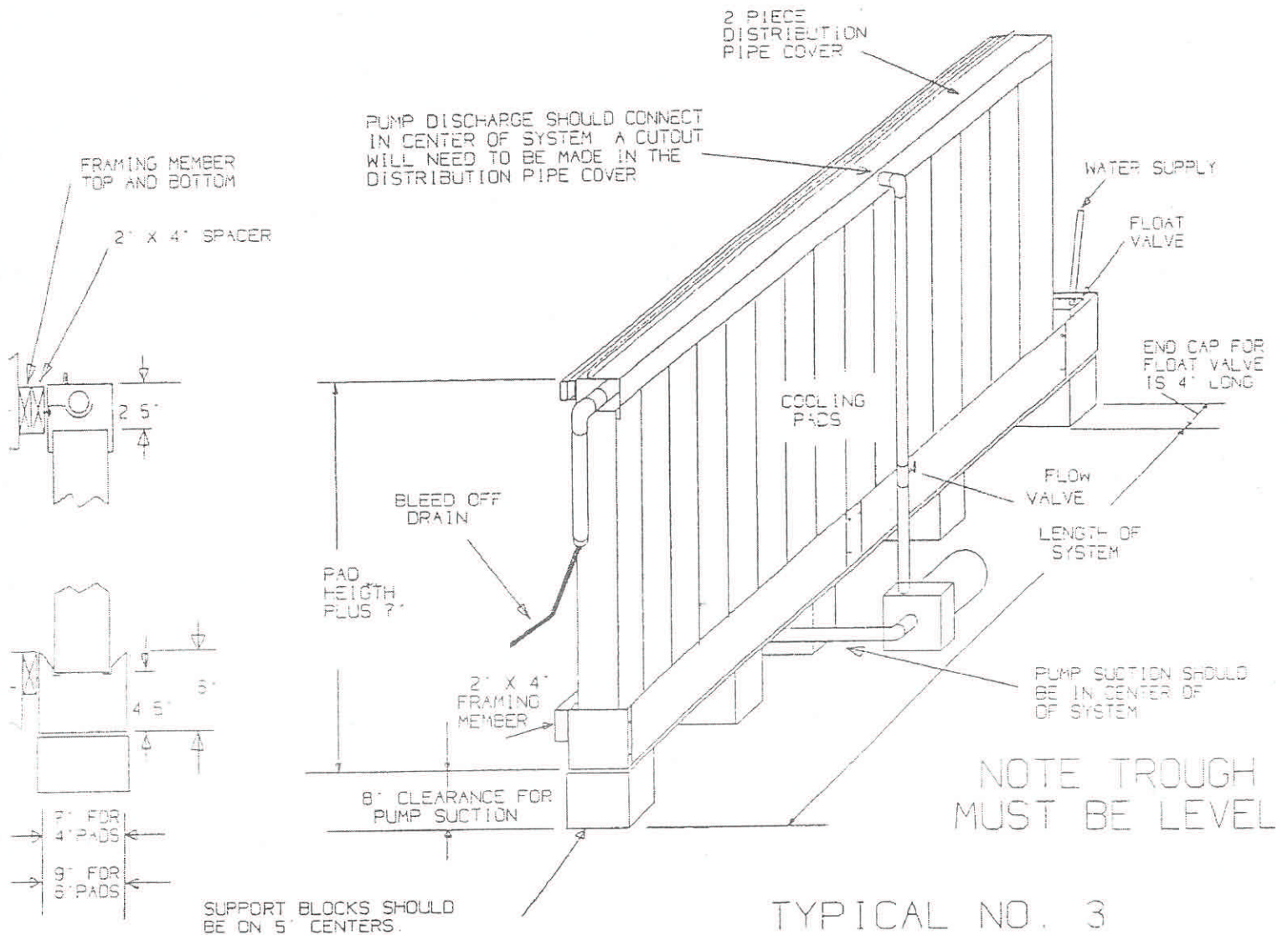
Install the first top cover section, then insert a top connector leaving half of it sticking out. The half sticking out will be covered with the next top cover. Continue this process until all of the top cover is installed.



PLUMBING INSTALLATION

All items installing the plumbing are included with the system. Refer to the drawing for assembly.





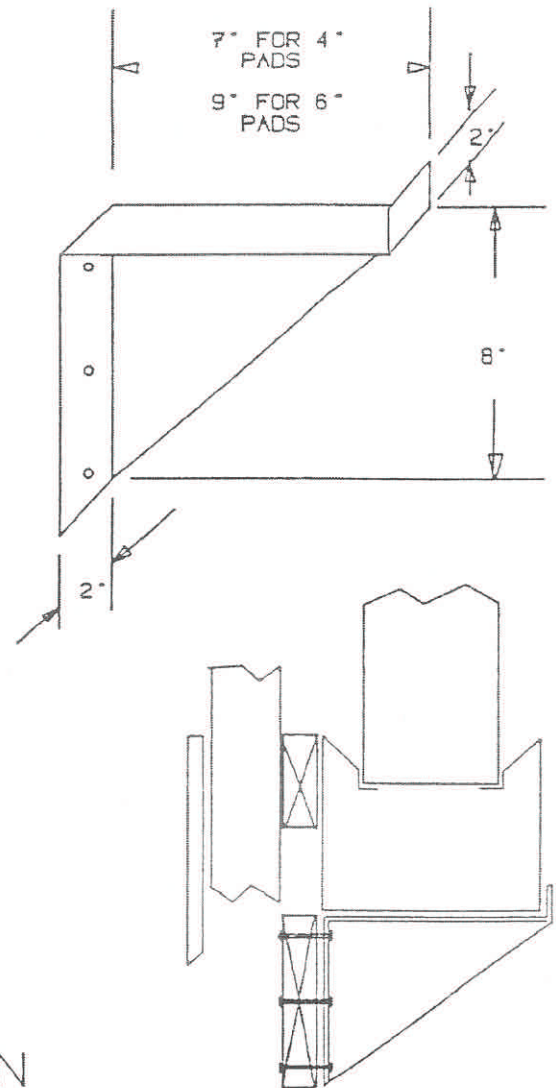
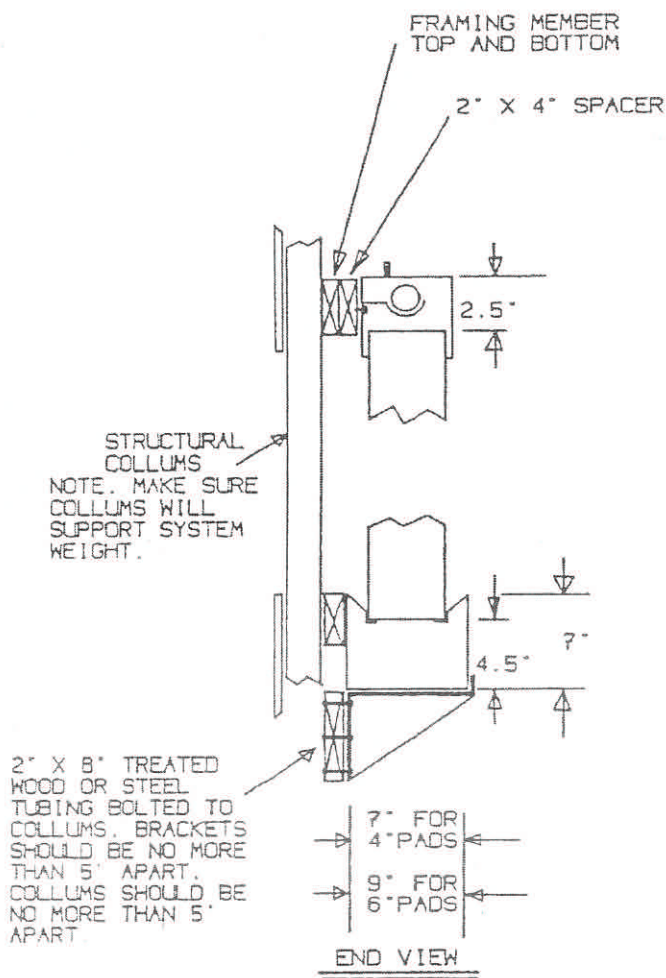
END VIEW

SUPPORT BLOCKS SHOULD BE ON 5' CENTERS.

SUPPORT BRACKETS (BY OTHERS) CAN ALSO BE USED INSTEAD OF BLOCKS. MAKE SURE SUPPORT IS ADEQUATELY REINFORCED AND SUPPORTED REFER TO WEIGHT CHART FOR WEIGHT PER FOOT OF OPERATING SYSTEM

TYPICAL NO. 3
40' TO 80' SYSTEMS
WITH EXTERNAL MOUNTED PUMP

OPTIONAL MOUNTING BRACKETS



SUGGESTED MOUNTING WHEN
USING OPTIONAL MOUNTING BRACKETS
NOT INCLUDED WITH TROUGH SYSTEMS
ORDER PART NO. TRMB1-4" OR TRMB1-6"

STARTING UP THE SYSTEM

1. Turn on the water supply and let the trough fill up through the float valve. Set the float valve so the water level is 1" to 2' below the pad support lip in the trough. Refer to the instructions packed with the float valve.
2. Prime the pump.
3. Run the system with the end plugs of the distribution pipe removed to flush out the system. Turn off the pump and replace the plugs.
4. Turn the pump back on and make sure all the distribution holes are open. Turn the pump off and install the distribution pipe front cover.
5. Turn the pump back on and adjust the flow valve so all the pads are wet.
6. If the flow valve is open too much water will leak out at the point where the top cover contact the pads.

MAINTENANCE

1. Drain the trough and system as required to remove sediment.
2. Make sure all parts of the system are working properly. Flow valve, pump, float valve, etc.
3. Check pads for algae growth. To prevent algae growths follow these suggestions.
 - A. Use chlorinated make up water or well water. Do not use water from stock ponds.
 - B. Run fans until pads are dry after turning off system.
 - C. Keep the pads shaded to prevent sunlight from promoting algae growth.
 - D. An algicide may be added if necessary.
4. Maintain PH of the water between 6 and 9 to prevent damage to the pads.
5. Keep the sodium chloride concentrate (salt) below 40,000 ppm to prevent build up on the pads.
6. If pads are within reach of livestock or poultry a guard should be installed.