A. OVERVIEW

The Culligan HD-120 filters were shipped as separate components for assembly at the job site. This filter system is divided principally into these parts: tank, internals, valve harness and control panels. This section of the manual describes the steps involved in installing these components.

B. TANKS

- The two filter tanks have a 120" diameter and a 60" sideshell.

The tanks for your system have been shipped directly to your installation site from the finishing contractor. In locating and positioning the tanks, ensure that sufficient room is allowed for the harness installation, system and drain plumbing connections, mineral loading, and future servicing. Position the tanks and level them on a concrete slab capable of carrying all applicable loads. Use anchor bolts to permanently locate the tank in the final level position.

C. INTERNALS

Reference Drawing: *Internals Only HD-120* *0X47728*

1. Overview

The internals for the filters are designed to provide optimal flow distribution for service and reconditioning flows. Each filter has an upper and a lower header with distributors designed for long service life and simple installation. Headers are lined and coated steel; distributors are made of PVC material.

2. Lower Header with Distributors

The lower header consists of a lined and coated steel pipe that extends across the tank diameter. Connected to the header are the distributors consisting of a series of PVC pipes, tees, and laterals as shown in Drawing 0X47728. See Figure 1 on the next page for proper lateral orientation. The header is attached to the tank by a flange connection on one end.

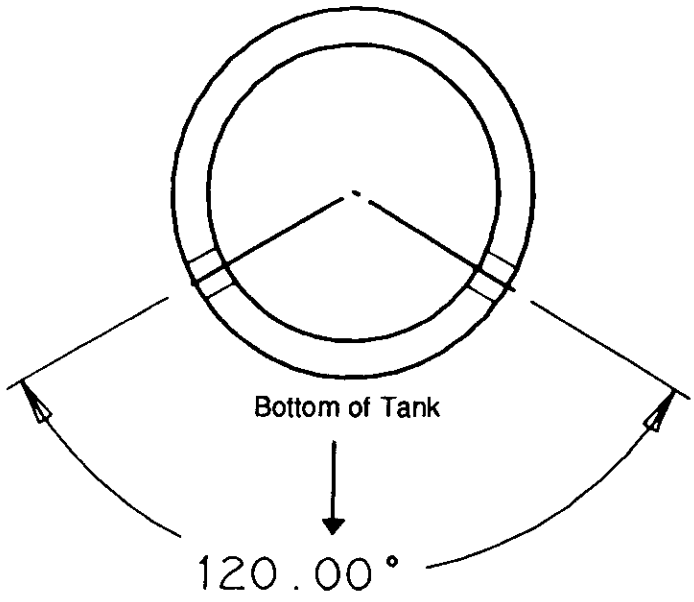


Figure 1 - Lateral Orientation

3. **Upper Header With Distributors**

The upper header consists of a phenolic epoxy lined and coated carbon steel pipe. There are four PVC distributors which are threaded into the sides of the header and positioned as shown in Drawing 0X47728.

The header pipe is attached to the tank by a flange connection on one end.

D. MINERAL LOADING

Separate the bags/containers of underbedding and filter media into groups taking inventory of the quantities received. Compare these quantities to those shown in Figure 2 - Mineral Loadings.

1) Remove the top and side manhole covers.

2) Make loading the media easier: Mark the tank interior *(use a wide tip marker pen)* to show where the top of the various media levels should be. The top of the coarse level should be at the weld seam. From that point, measure up the side of the tank making four marks at the imaginary "corners" of the tank for each layer of media. *Figure 2 shows the measurements of the layers.* When finished marking, there should be five sets of marks at 5", 10", 15", 23" and 39" above the weld seam.

3) Load the coarse gravel through the side manhole.

CAUTION: ***Important: Loading through the top manhole could result in damage to the plastic lateral system.***

4) Carefully level the media making sure that the laterals are covered by several inches of media before continuing.

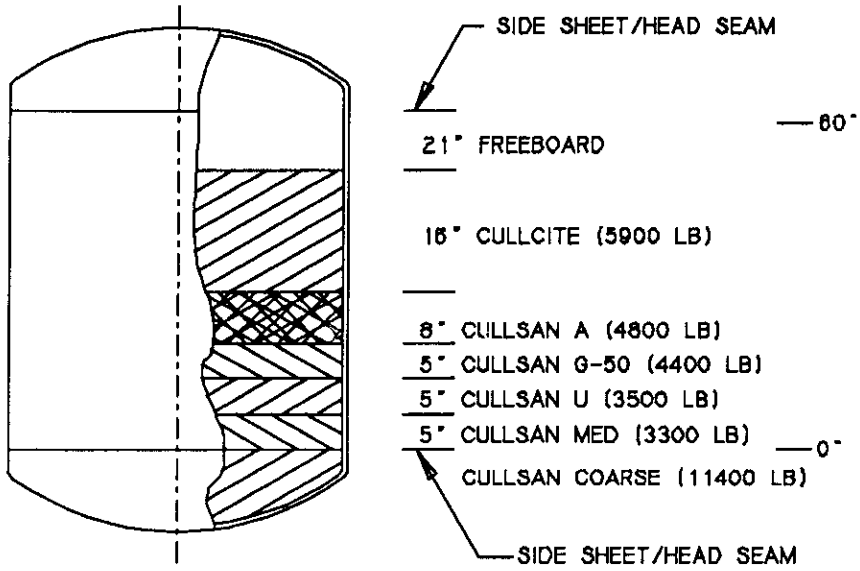
5) Load the remainder of the underbedding media first through the side manhole and then through the top manhole as required. Carefully level each layer before continuing.

MINERAL LOADINGS

HD-120 NON-CODE

JOB NO. 072326

120" X 60"



MINERAL LOADING BOM INFORMATION PN	LB/BAG	
D0162209	100/114	CULLSAN COARSE (11400 LB)
D0162109	100/33	CULLSAN MED (3300 LB)
D0163811	50/70	CULLSAN U (3500 LB)
D0163009	100/44	CULLSAN G-50 (4400 LB)
D0163210	55/88	CULLSAN A (4840 LB)
D0161016	50/118	CULLCITE (5900 LB)

10/3/95 HD120NC

Figure 2 - Mineral Loadings