



The Industry Leader In Above Ground Fuel Storage Systems

MATERIALS SPECIFICATIONS

FOR

NEOPRENE PADS

AND

INSTALLATION INSTRUCTIONS



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Date: April 15, 1996

To: ConVault Network

From: John Ekhtiar

Subject: Neoprene Pads Material Specifications and Installation Instructions
Ref. No. 96FOUND007

Dear Colleagues,

Enclosed, please find a final copy of the Neoprene Pads Material Specifications and Installation Instructions approved by the Technical Committee at its meeting in San Diego, California on 27th of March, 1996.

Please note the following:

- The material specifications call for AASHTO Grade 50 durometer Chloroprene Rubber, "Neoprene". See enclosed Material Specifications. The specifications are generic and you can buy the material from any rubber manufacturer or supplier provided that they meet the material specifications. One grade material is recommended for all ambient conditions.

For 4,000 to 12,000 gallon tanks:

- The pad length is 15 inches,
- The pad width is 6", 8", 10", or 12" depending on the width of the tank legs.
- The pad thickness is 1/2" for the two exterior legs and 1 1/4" for the middle leg.
- The shims, if required, should be of the same material as the pads and can be 1/8" or 1/4" thick.
- See the drawings for the location of the bearing pads for each tank.

NOTE:

Dimensions on the drawings are based on 6" pad width and Convault Denair drawings. Check and verify actual dimension on your tanks.

NOTE:

Please remember that three-point loading is NOT recommended.

For the 2,000-gallon tanks and smaller, installation of bearing pads or grouting is not a requirement. However, for those of you who would like to install bearing pads for this group of tanks, note the following.

- The pad length is 7 1/2 inches. You may cut the 15" long pad in half to eliminate the need for storing pads with two different lengths.
- The pad width is 6", 8", or 12" depending on the width of the tank legs.
- The pad thickness is 1/2".
- The shims, if required, should be of the same material as the pads and can be 1/8" or 1/4" thick.
- See the drawings for the location of bearing pads for each tank. **Please see NOTES on previous page.**

These specifications and installation instructions supersede and replace Installation Instructions Ref. No. 96FOUND002 dated January 17, 1996 and Specifications for Neoprene Pads transmitted under memo Ref. No. 95F001 dated December 22, 1995

To prevent using incorrect procedures, please discard all previous specifications, installation instructions and drawings.

If you have any questions or comments, please do not hesitate to contact me.



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**CONVAULT TANKS
NEOPRENE PADS INSTALLATION INSTRUCTIONS
Ref. No. 96FOUND006**

A. INTRODUCTION

Important Notes:

- Because tank installation is a specialized skill, it is assumed that those using these instructions will have knowledge of, and possess the skills and equipment necessary to install this type of aboveground storage tank properly and safely.
- Consult the Authorities Having Jurisdiction to insure compliance with local codes and regulations prior to carrying out any instructions given herein.
- These instructions should be considered as addendum to the Installation Instructions of the Convault Owner's Manual and have to be read and implemented in conjunction with the Installation Instructions.
- The most important aspect of a job procedure is SAFETY. Please insure that every step of this procedure is carried out with safety in mind.

These specifications and installation instructions supersede and replace Installation Instructions Ref. No. 96FOUND002 dated January 17, 1996 and Specifications for Neoprene Pads transmitted under memo Ref. No. 95F001 dated December 22, 1995

To prevent using incorrect procedures, please discard all previous specifications, installation instructions and drawings.

B. BEARING PADS MATERIALS SPECIFICATIONS

- Use AASHTO grade Neoprene bearing pads with 50 durometer per Convault specifications for bearing pads materials. See enclosed specifications.

C. INSTALLATION INSTRUCTIONS

1. Make the foundation ready to receive the tank.
2. Mark the foundation where the pads will be located in accordance with the drawing for the appropriate size tank.
3. Lay two 1/2" thick and 15" long pads under each of the two exterior legs, one pad at the end of each leg as shown in the drawings. The width of the pads shall be 6", 8" 10", or 12" equal to the width of the tank legs.

NOTE:

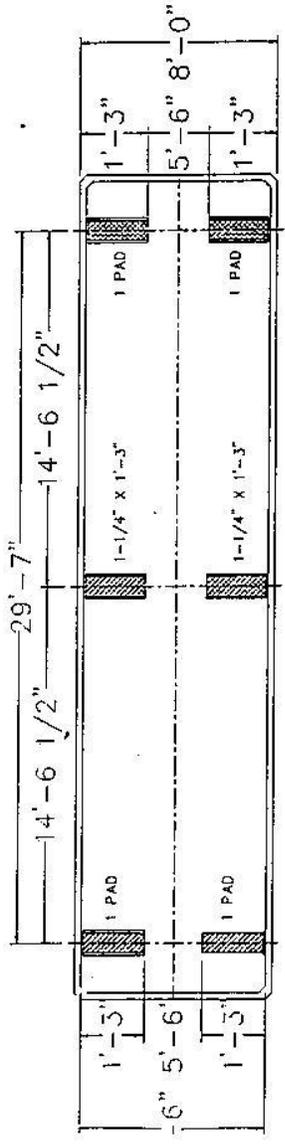
Dimensions on the drawings are based on 6" pad width and Convault Denair drawings. Check and verify actual dimension on your tanks.

NOTE:

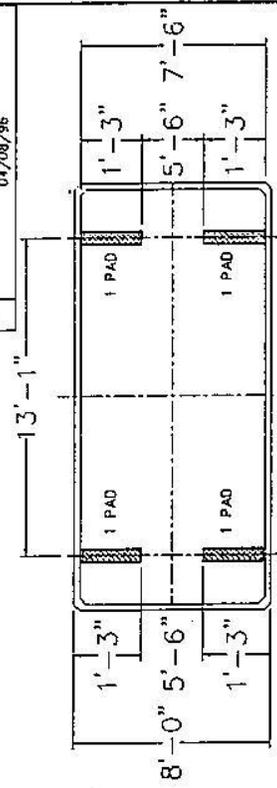
Please remember that three point loading is NOT recommended.

4. If the tank has three (3) legs, lay the 1/2" pads as described in item (3) above. Put two 1 1/4" thick by 15" long pads under each end of the middle leg as shown in the drawings. The width of the pads shall be 6", 8", or 12" and equal to the width of the tank legs.
5. Using appropriate lifting equipment, lift the tank and hold it at about one foot above the foundation. This step of the procedure requires extreme caution, while the tank is being lowered over the pads, make sure that no person is standing under or near the tank.
6. Lower the tank and set it on the pads. When the tank is being lowered, adjust the pads location, if necessary, to set them directly under the tank legs.
7. The pads must be snug and completely touching the legs. If one or more pads are not snug and completely touching the bottom of the legs, use an additional 1/8" or 1/4" thick Neoprene pad, as necessary, to make the pads touch the legs.

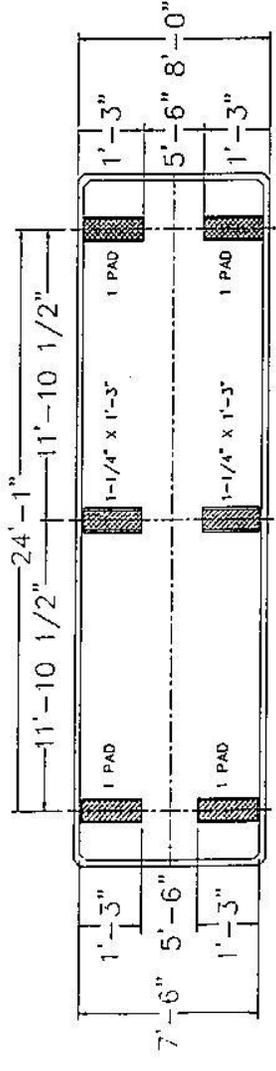
A	REVISED # OF PADS, SIZES 12/19/95
B	REVISED # OF PADS, SIZES 1/16/96
C	REVISED # OF PADS, SIZES 04/08/96



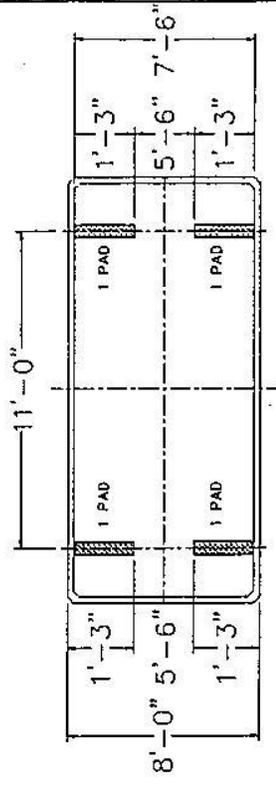
12,000 GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" X 1'-3" LONG
2 EA. 1-1/4" X 1'-3" LONG



6,000 GALLON PAD LOCATION
4,000 LP GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" X 1'-3" LONG



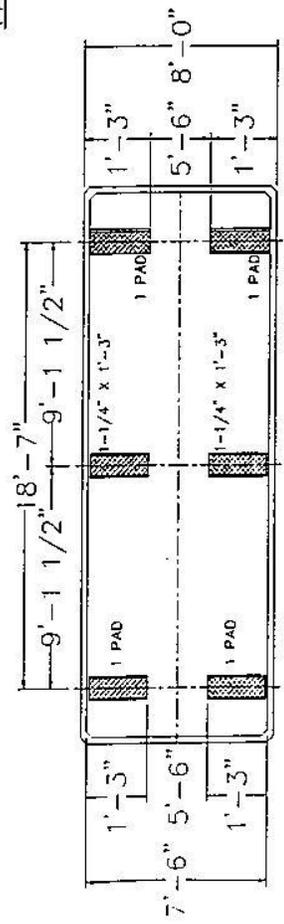
10,000 GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" X 1'-3" LONG
2 EA. 1-1/4" X 1'-3" LONG



5,200 GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" X 1'-3" LONG

PAD NOTES:

- 1.) USE AASHTO GRADE NOEPRENE 50 DUROMETER BEARING PADS. SEE BEARING PADS MATERIAL SPECS
- 2.) BEARING PADS WIDTH SHALL BE EQUAL TO THE WIDTH OF THE TANK LEGS.
- 3.) PADS LOCATIONS ARE BASED ON CONVULT, DENAIR DRAWINGS. CHECK AND CONFIRM YOUR TANK DIMENSIONS.



8,000 GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" X 1'-3" LONG
2 EA. 1-1/4" X 1'-3" LONG

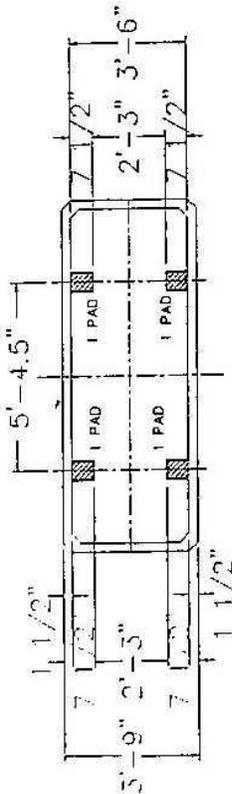


DWG NAME: PAD52

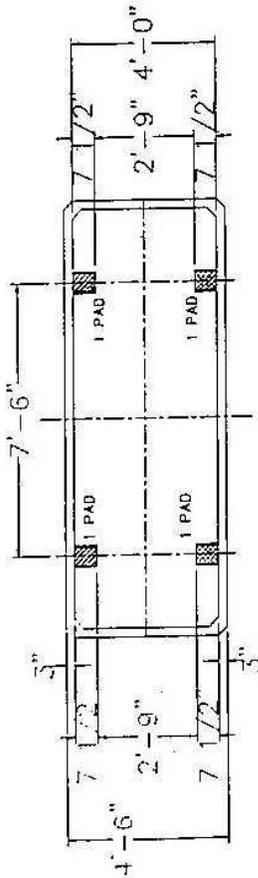
WEIGHT
SPECIFICATION
REVISION DATE 04/08/96
PAGE 1 OF 2

BY: ISR	REVISION	DATE: 05/21/94	SCALE: 1/8"=1'
NEOPRENE BEARING PAD INSTALLATION DRAWING #1			

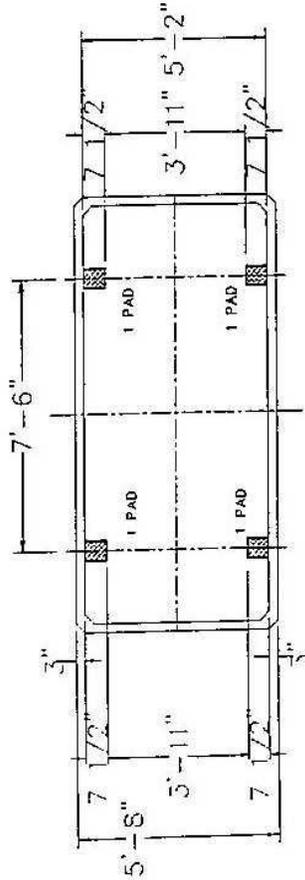
A	REVISED # OF PADS, SIZES 12/15/95
B	REVISED # OF PADS, SIZES 1/16/96
C	REVISED # OF PADS, SIZES 04/08/96



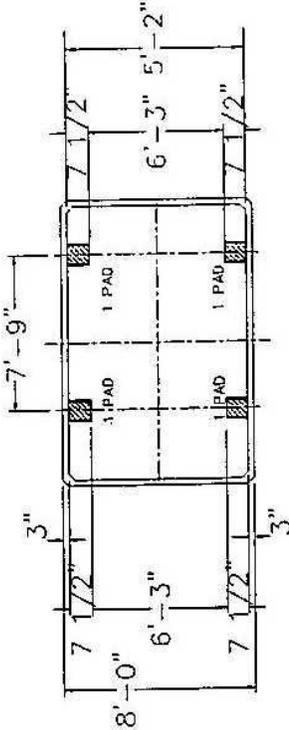
250 GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" x 7 1/2" LONG



500 GALLON PAD LOCATION
NEOPRENE BEARING PADS
4 EA. 1/2" x 7 1/2" LONG



1000 GALLON PAD LOCATION
NEOPRENE BEARING PADS
1/2" x 7 1/2" LONG
(4 REQ'D. TOTAL)



2000 GALLON PAD LOCATION
NEOPRENE BEARING PADS
1/2" x 7 1/2" LONG
(4 REQ'D. TOTAL)

PAD NOTES:

- 1.) USE AASHTO GRADE NEOPRENE 50 DUROMETER BEARING PADS. SEE BEARING PAD MATERIAL SPECS
- 2.) BEARING PADS WIDTH SHALL BE EQUAL TO THE WIDTH OF THE TANK LEGS.
- 3.) PADS LOCATIONS ARE BASED ON CONVAULT, DENAIR DRAWINGS. CHECK AND CONFIRM YOUR TANK DIMENSIONS.

DWG. NAME: PADS1



WEIGHT	
SPECIFICATION	
REVISION DATE	04/08/96
PAGE	2 OF 2

BY: JSP	REVISION	DATE: 05/24/94	SCALE: 1/8"=1'
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NEOPRENE BEARING PAD INSTALLATION
DRAWING #2



NEOPRENE PADS SPECIFICATIONS PHYSICAL PROPERTIES

The physical properties of the tank pads shall conform to the following specifications:

1. The pads shall be 100 percent Chloroprene compound known as “Neoprene”, black, and shall be cast in molds under pressure and heat. Compositions for pads shall meet the requirements listed below. Test specimens shall be in accordance with ASTM Method D 15, Part B.
2. The physical properties shall meet or exceed AASHTO specifications M251, Sections 18, 25.
3. The pads shall meet the following physical test requirements:

PROPERTY	REQUIREMENT	ASTM TEST METHOD
Durameter Type A, Hardness	50±5	D 2240
Ultimate Tensile PSI Min.	2250	D 412
Elongation at Break Min. %	400	D 412
Heat Resistance 70 HRS. @ 212° F in AIR Change in Hardness Change in Tensile %, max. Change in Elongation, % Max.	+15 -15 -40	D 573
COMPRESSION SET - COMPRESSED TO 22 HRS. @ 212° F, % Calc. On Orig. Deflection, % Max.	35	D 395 Method B
OZONE RESISTANCE 100 pphm for 100 Hrs. @ 100° F	No Cracks	D 1149-78
100° F ±2° F, 100 Hrs.	No Cracks	D518 Procedure A
LOW TEMPERATURE BRITTLE POINT 3± .05 Min. @ - 40° F	Pass	D 746 Procedure B
FLAME RESISTANCE (ASTM C-542)	Pass	L - 542
Tear, ppi Min.	150	D 624, Die C
Brittleness C 40° F	No Failure	D 2137