



Series 48000

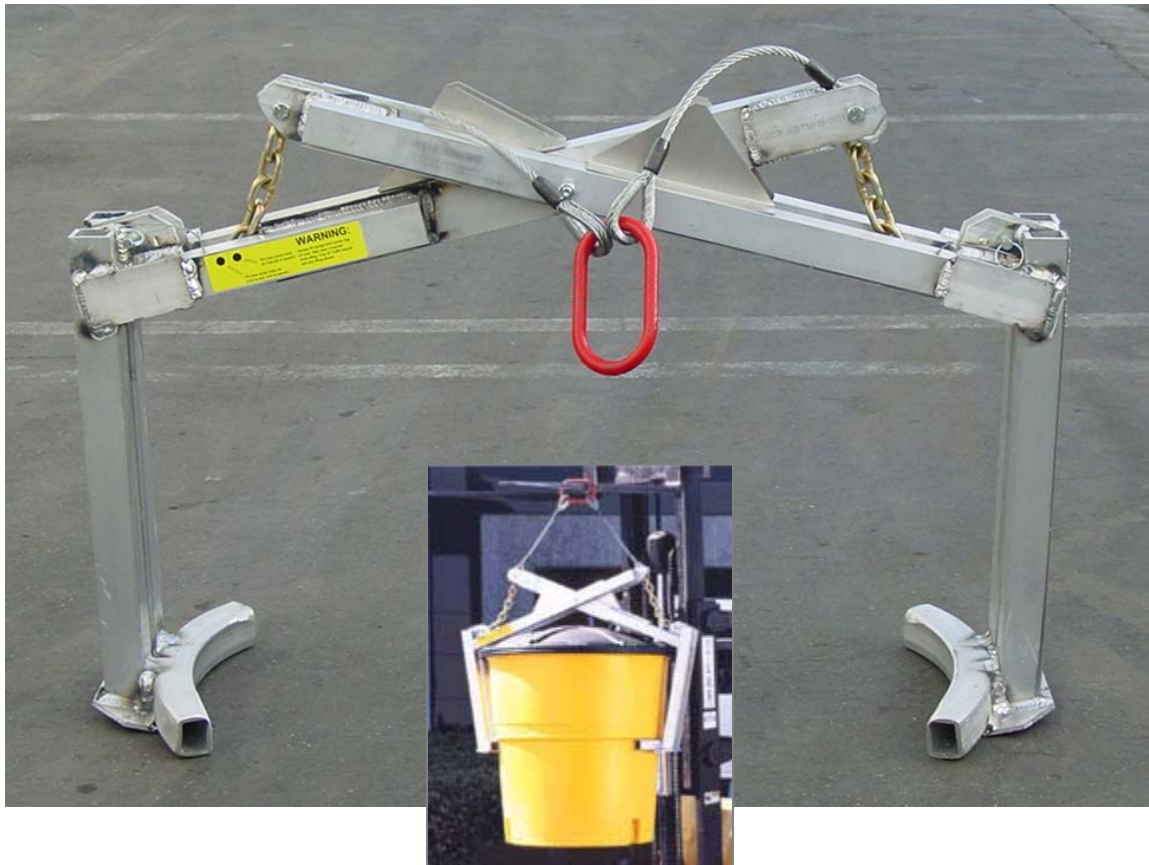
TRAFFIX BIG SANDY

IMPACT ATTENUATOR SAND BARRELS

PRODUCT INFORMATION

- Three barrels are used to create all of the weights used in current standard array geometrics (200, 400, 700, 1400 and 2100 lbs.)
- Combination barrel utilizes a pedestal base and 200, 400, 700 lbs. top half barrel to obtain weights without using shelves or cone inserts – eliminates leaking sand.
- Simply fill the sand to the molded-in fill line to obtain the correct weight. The molded-in fill line makes external verification of weights easy.
- Reinforced lip prevents barrels from deforming when filled and provides a quick and secure fit of blow molded lid.
- All three barrels shoulder allows for easy moving, lifting and emptying with TraFFix optional lifting ring.
- NCHRP 350 Approved

Big Sandy Lifting Ring



- Engineered to safely lift filled TraFFix “Big Sandy” Sand Barrels
- Adjusts to lift 200#/400#/700# combination barrel, 1400# barrel and 2100# barrel
- Easily lifts with a forklift, truck mounted crane or a knuckle boom
- Lightweight (62 pounds) aluminum construction
- Designed for TraFFix “Big Sandy” Barrels only

**Part #
48000-LR**

TraFFix Devices Inc.
160 Ave La Pata, San Clemente, CA 92673
(949) 361-5663 Fax (949) 361-9205
www.traffixdevices.com

1. ORDERING INSTRUCTIONS

1.1 Part Numbers – Barrels are normally ordered using part numbers 48210-0, 48140-0 and 48247-AB. These assemblies include the lid. For part number #48247-AB the assembly has two half barrels that lock together to form one barrel.

2. FIELD SITE CONDITIONS AND LAYOUT

2.1 Surface Conditions – Inspect the area where the sand barrels will be placed. Make sure that the surface is concrete or asphalt if specified in the plans. Also make sure that the grade is not more than 3 degrees and that the surface is smooth and on plane.

2.2 Array Layout – Review the plans and determine the center line for the rows of barrels. Mark the center line with a chalk line. Position the barrel lids centered on the line with the correct spacing between the lids. Mark around the lids with chalk to establish the barrel positions. Remove the lids and place the sand barrels in the correct position.

3. FIELD ASSEMBLY

3.1 Barrel Assembly – All part #48247S half barrels have six butyl caulk strips that are used as contact adhesives. When upper half barrels #48247S are installed on top of #48247P and rotated the two barrels will interlock and the two can be lifted without separation.

3.2 Barrel Disassembly – After half barrels #48247S and #48247P have been interlocked they will be difficult to separate unless the following procedure is followed. Use the barrel lifting ring to elevate the assembly and pry the half barrels apart along several locations around the circumference.

3.3 Sand Filling – All barrels are marked with the sand fill lines indicated on the outside of the barrels. Place all barrels in the correct location as designated in the site plans. Sand filling is best done by having a concrete truck deliver the sand and pouring the sand into the barrel. **WARNING** - sand used in barrels needs to disperse on impact do not use sand unless it has been washed and has less than 5% water content.

3.4 Lid Attachment – Lids are designed to fit tightly to prevent theft. Place lid on barrel with the lid fitted on the barrel at the inside of the array position. Apply pressure at the rim to snap the lid on. Work on each side up to the front. Push down for final set of lid.

3.5 Lid Removal – If the lid needs to be removed a pry-bar or fiberglass batten will easily remove the lid. Slip the pry-bar vertically between the lid and the rim of the barrel and start prying along rim.

4. LIFTING BARRELS

4.1 Work Zones – Check to see if wooden pallets are approved for work zones, if they are, move pallet into position with a fork lift. For work zones not using pallets, move barrels with the optional aluminum lifting ring.

4.2 Permanent Sites – For locations where the barrels are set on a prepared surface use the lifting ring to position barrels. Barrels use two different diameter lifting flanges. Use the aluminum insert in the lifting ring when lifting the smaller diameter flange found on the 700-400 lb. (320 – 180 kg.) capacity barrel.

5. INSPECTION

5.1 Sand Height – Sand barrels can be easily inspected using several methods. Refer to the marking on the barrel for the correct sand height. Hit the side of the barrel and view the barrel on the shaded side. A change of sound and a difference in light transmission should be noticed at the top of the sand.

1. **Processing Procedures** – The rotomolding cycle that has been established (Proprietary) will not be altered in time, temperature or rotation.
 - A. Aluminum mold will be prepared with mold release on a regular basis to prevent dimensional changes in the Sand Barrels.
 - B. Top rim circumference will measure $2.95m \pm .01m$ such that all lids will fit on all barrels.
 - C. Uniform wall thickness will be maintained with an average thickness of 7mm. Wall section will consists of three layers. Unfoamed inner and outer layer will be 1.5mm, foamed core will be 4mm.
 - D. All barrels will be drilled with 6mm Drainage holes and contains six strips of butyl caulk for adhering the two half barrels together.

2. **Materials** – All sand barrels will be manufactured from High Density Polyethylene plastic with the following specifications:

A. Density	0.948 g/cm ³
B. Melt Index	80 g/min.
C. Flex Modules	1,102 M.Pa
D. Tensile Strength	22.4 M.Pa
E. Heat Distortion Temp.	72° c
F. Low Temp Imp - 40° c	135.58 joules
G. UV Stabilized (Compounded)	1.7g/Kg
H. Yellow Color (dry blend)	19.8g/Kg

3. **Weights** – All sand barrels will be manufactured with the following part weights:

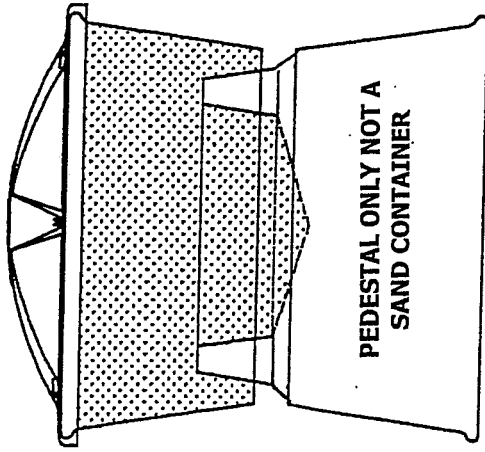
A. Part # 48247-S*	90-320 Capacity	wt = 7.3 Kg \pm .5 Kg
* was 48400		
B. Part # 48247-P**	Base Support	wt = 7.7 Kg \pm .5 Kg
* was 48700		
C. Part # 48140	640 Capacity	wt = 10.4 Kg \pm .5 Kg
D. Part # 48210	960 Capacity	wt = 13.2 Kg \pm .5 Kg

4. **Tests** – The following test will be performed yearly for Q.A. verification:

- A. Thermal stress cycle (Hotbox test).
- B. U.V. Weathering (ASTM D 4329)

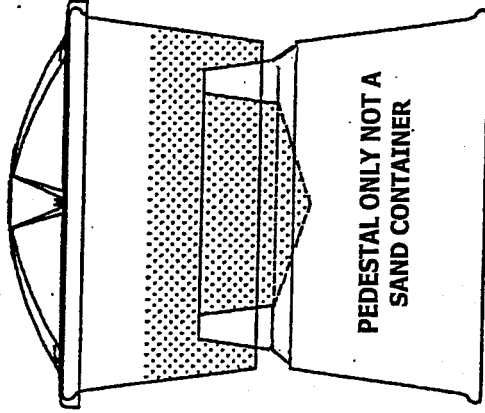
NOTE THAT THERE IS NOW ONLY ONE SAND CONTAINER FOR 200LB, 400LB & 700LB

FILL TO TOP



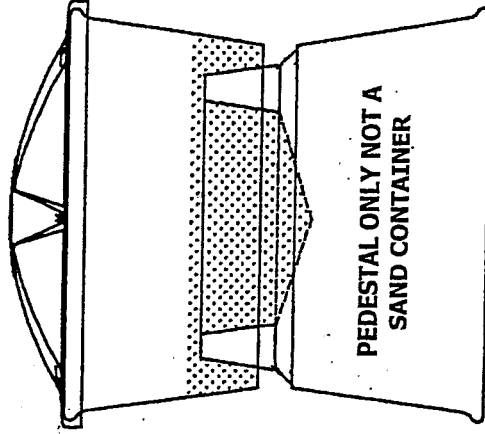
700 LBS
(320 kg)

FILL TO 6 IN. (150 mm)
FROM TOP



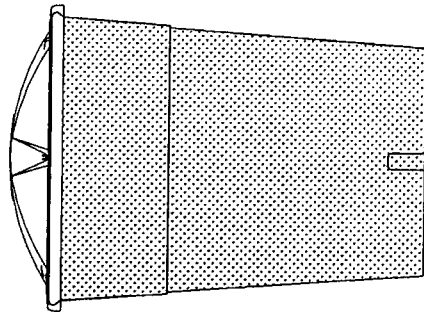
400 LBS
(180 kg)

FILL TO 11 IN. (280 mm)
FROM TOP



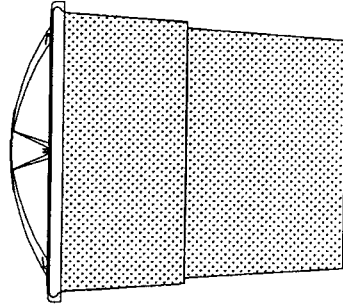
200 LBS
(90 kg)

FILL TO TOP



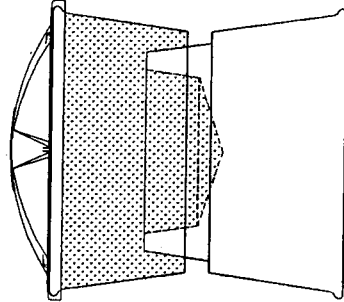
960 Kg

FILL TO 25 mm FROM TOP



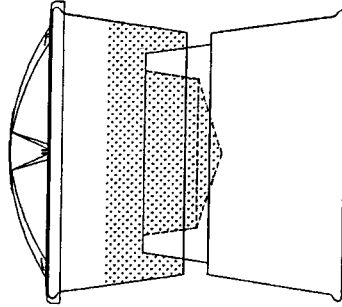
640 Kg

FILL TO TOP



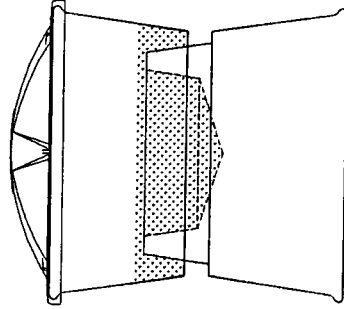
320 Kg

FILL TO 150 mm FROM TOP



180 Kg

FILL TO 280 mm FROM TOP



90 Kg

NOTES:

Traffix Devices, Inc.

Title

BARREL WEIGHTS,

90 THRU 960 Kg MODULE

Drawn by

Checked by

Approved by

Date

Scale

Sheet

of

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1