



# Hydraulic, Mechanical and Air-Powered Dock Levelers Box Type Details

Fig. 1

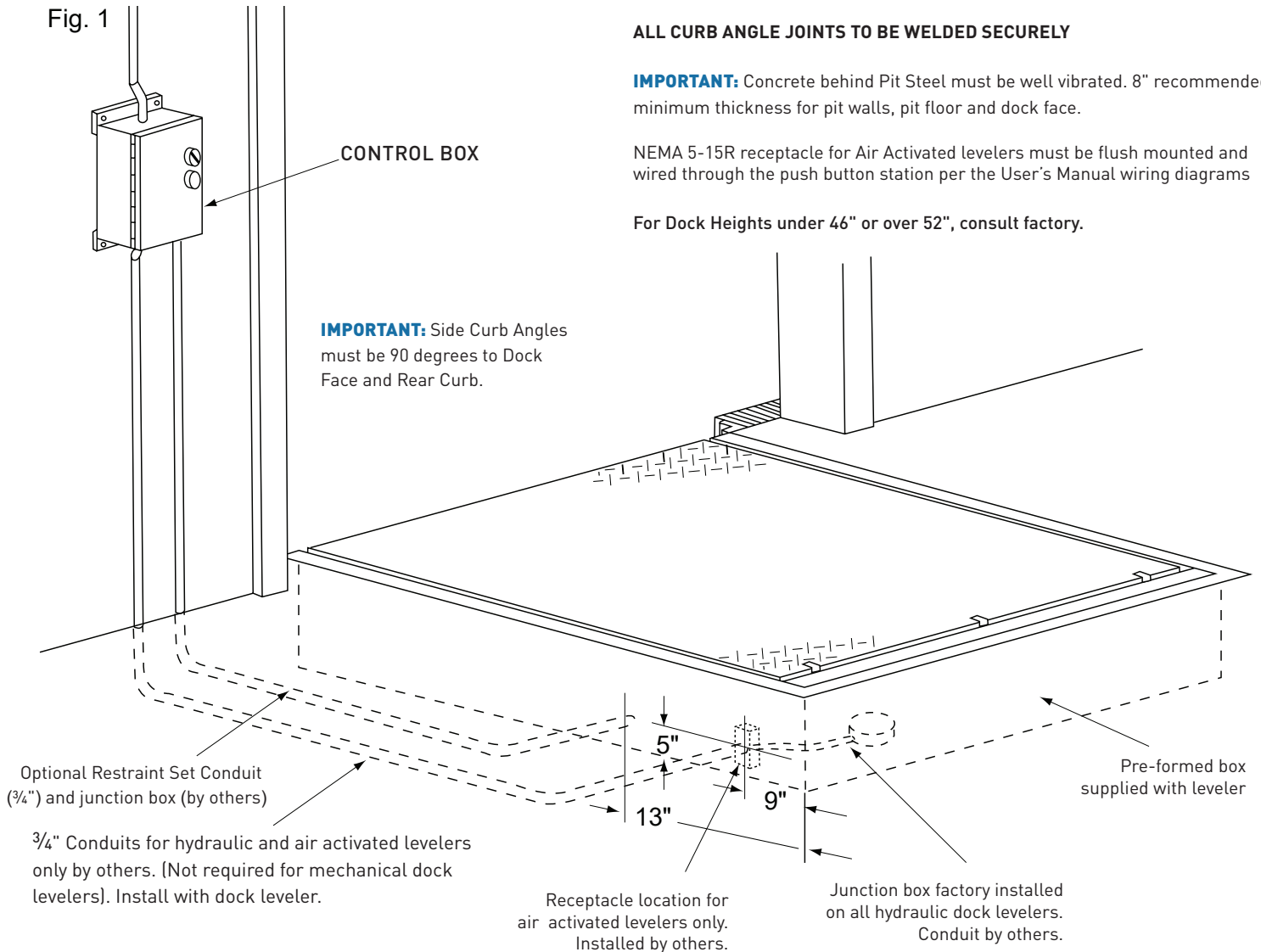
## ALL CURB ANGLE JOINTS TO BE WELDED SECURELY

**IMPORTANT:** Concrete behind Pit Steel must be well vibrated. 8" recommended minimum thickness for pit walls, pit floor and dock face.

NEMA 5-15R receptacle for Air Activated levelers must be flush mounted and wired through the push button station per the User's Manual wiring diagrams

For Dock Heights under 46" or over 52", consult factory.

**IMPORTANT:** Side Curb Angles must be 90 degrees to Dock Face and Rear Curb.



## PROJECT INFORMATION

JOB NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
GENERAL CONTRACTOR \_\_\_\_\_  
DISTRIBUTOR \_\_\_\_\_  
MODEL \_\_\_\_\_ VOLTAGE \_\_\_\_\_ QUANTITY \_\_\_\_\_

## CERTIFIED FOR CONSTRUCTION

BY \_\_\_\_\_  
DATE \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_

**WARNING:** Death or serious injury could result from failure to follow Serco specifications for pit dimensions and/or configurations, or conduit location; improper installation of dock leveler, anchoring devices or optional/accessory equipment; installation into improperly formulated, prepared or placed concrete or concrete which is otherwise inadequate or unsound.

Pit Dimensional Tolerances are +/- 1/8" on squareness, Depth, Width and Length.  
 SERCO Assumes No Liability for Deviations beyond this Tolerance.

Fig. 2

20" FRAME					24" FRAME				
	DIM A	DIM B	DIM C	DIM D		DIM A	DIM B	DIM C	DIM D
6x6	80	20	54	90	6x6	80	24	54	90
6x8	80	20	78	90	6x8	80	24	78	90
6x10	80	20	102	90	6x10	80	24	102	90
6.5x6	86	20	54	98	6.5x6	86	24	54	98
6.5x8	86	20	78	98	6.5x8	86	24	78	98
6.5x10	86	20	102	98	6.5x10	86	24	102	98
7x6	93	20	54	104	7x6	93	24	54	104
7x8	93	20	78	104	7x8	93	24	78	104
7x10	93	20	102	104	7x10	93	24	102	104

### PIT PROJECTION GUIDE FOR DECLINE DRIVE CONDITIONS

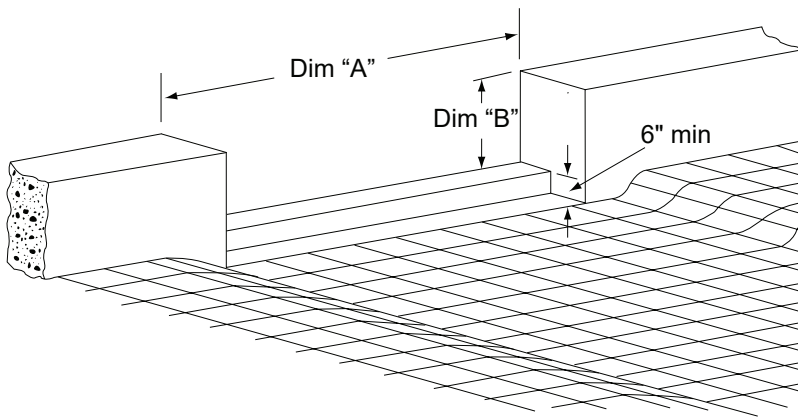
PERCENTAGE OF DRIVEWAY GRADE	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
PIT PROJECTION	0"	2"	3"	4"	5"	6"	8"	9"	10"	11"	12"

**NOTE:** If metal or decorative facing is used, add an extra inch of pit protection for every inch of facing projection.

**NOTE:** If pit projects more than 4", concrete specifications should be reviewed with qualified structural engineer.

Fig. 3

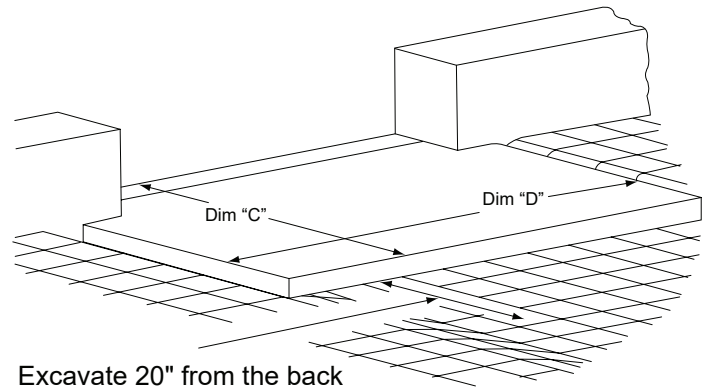
### CONSTRUCTION LAYOUT PRE-POURED PAD METHOD



Form a cutout in the foundation wall with a 6" deep step for the concrete pad. See Fig. 2 for dimensions.

Fig. 4

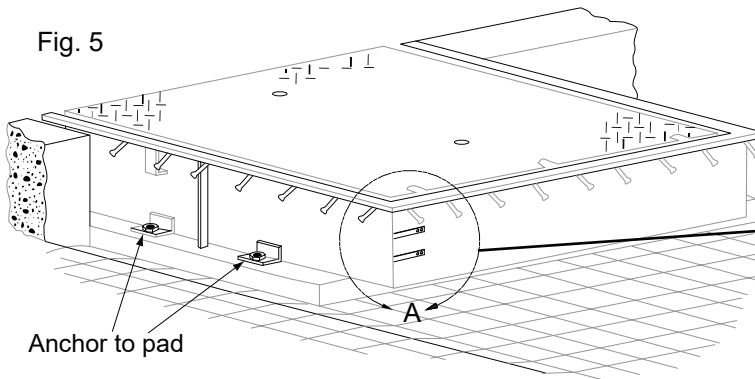
**Note:** DIM "C" is shorter than the box length.



Excavate 20" from the back of the concrete pad.

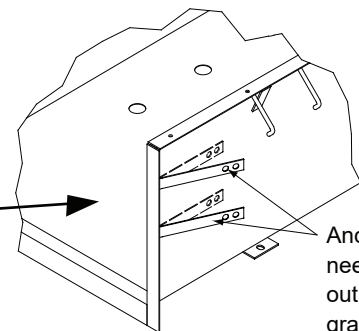
Pour a concrete pad minimum 6" thick to support the dock leveler with 1/2" slope from back to front. See Fig. 2 for dimensions. Edges of pad must tie into final concrete pour

Fig. 5



Anchor to pad

Anchor dock leveler to pad.



Anchor straps will need to be bent out to match the grade beam notch.

Detail A

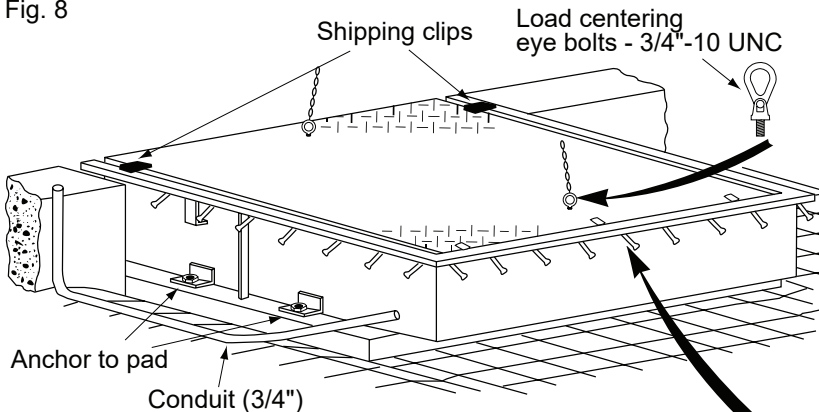
## Pre-Poured Pad Method

### NOTICE

**Always review the Construction Layout Details prior to installation to verify exact construction dimensions.**

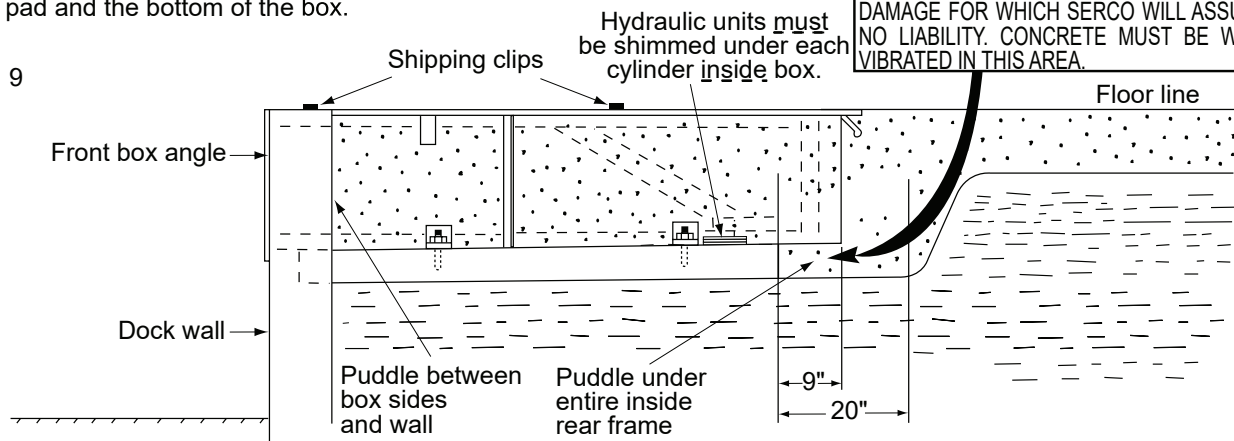
1. If the depth of the foundation wall cutout exceeds the depth of the front of the leveler box, place shims on top of wall cutout, 17" either side of the center line to support the Safety Legs/ Ramp Stops. Ref. Fig. 7.
2. Clear away any debris from the back of the concrete pad, maintaining a minimum 6" deep x 20" wide excavation at the back of the pad to allow for concrete to flow under leveler. See Fig. 9.

Fig. 8



6. With the shipping clips on the top side angles, pour concrete around the base of the leveler box. Puddle under the back of the box to support the inside rear frame and if needed puddle between the concrete pad and the bottom of the box.

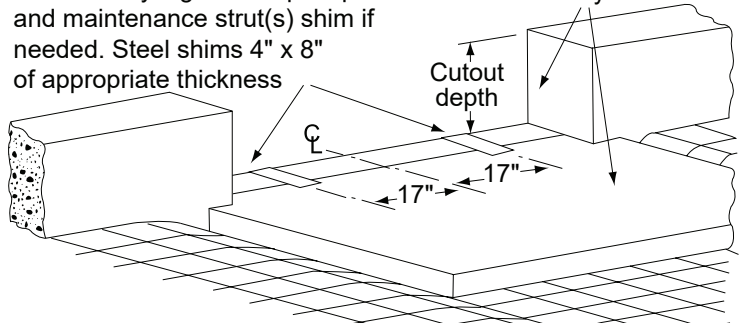
Fig. 9



7. Finish pouring concrete up to the curb angles and puddle between the box sides and the wall cutout.
8. Once the concrete has cured sufficiently, remove the shipping clips from the top side angles. Open the leveler and firmly support the top plate on the maintenance strut.
9. For bumper installation see manual.
10. Retorque rear back frame leveling screws to 25 - 40 Ft. Lbs. (where applicable).

Fig. 7

Front of leveler must be supported under safety legs or ramp stops and maintenance strut(s) shim if needed. Steel shims 4" x 8" of appropriate thickness



For dimensions of wall cutout and pad see construction layout details

3. Keep the leveler bolted closed. Install 2 load centering eye bolts into the front and rear of the top plate and hoist the leveler into position with the box angles snug against the face of the wall.
4. Level the box with floor line. If needed, select 4" square steel shims to fit snug under the leveler inside frame, below hydraulic cylinder or rollers.
5. With the leveler fully supported and level with the floor line, anchor down to the concrete pad at the 4 anchor brackets on the sides of the pan using 1/2" wedge anchors.
- 5A. For hydraulic/air activated levelers - Install 3/4" conduit from the leveler to the control panel mounting position. See Fig. 1 and 8.

### NOTICE

FAILURE TO SUPPORT THE UNDER-SIDE OF THE LEVELER MAY RESULT IN STRUCTURAL DAMAGE FOR WHICH SERCO WILL ASSUME NO LIABILITY. CONCRETE MUST BE WELL VIBRATED IN THIS AREA.