

2178 Centurion Place
Boise, Idaho, 83709

B.A. FISCHER

SALES CO., INC.

ph: 208-375-1411
fax: 208-375-8022

TOLL-FREE 888-375-1411

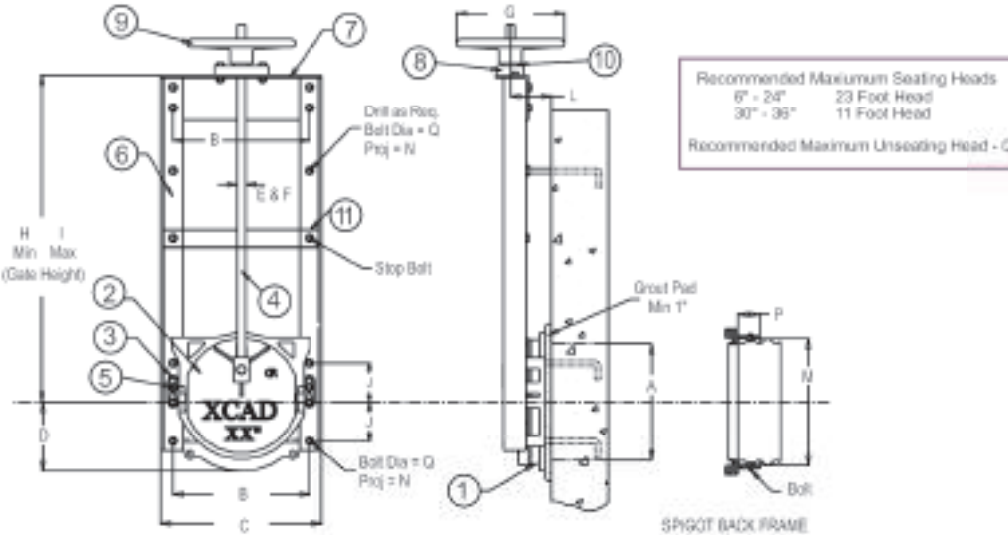
PERVIOUS & FINEST

1977

IRRIGATION SUPPLIES

BAFISCHER.COM

X-Gate™ Specifications



Parts List & Standard Features			
No.	Description	Qty.	Material
1	Frame	1	Cast Iron
2	Cover	1	Cast Iron
3	Wedge (Rt. & Lft)	1 ea	Cast Iron
4	Stem	1	Stainless Steel
5	Wedge Bolts	4	Stainless Steel
6	Guide Rail	2	Galv. Structural Steel
7	Head Rail	1	Galv. Structural Steel
8	Lift Collar	1	Cast Iron
9	Handwheel	1	Cast Iron
10	Lift Nut	1	Bronze
11	Stem Support		Galv. Structural Steel

Flat Back
for Headwall and Flange Mounting

Spigot Back
for Mounting to Corrugated Pipe

Dimensions For X-GATE™ Low-Head Canal Gates
(All Measurements in Inches)

A	B	C	D	E ICAD	F FISCO	G ICAD	H	I	J	K FISCO	L	M	N	P	Q
8	10	13	4 7/8" (4.875)	7/8" (.875)	7/8" (.875)	10	24	120	3	18	2.5	9 1/8" (9.125)	3.5	2.25	1/2 x 12
10	12	14 7/8" (14.875)	6"	7/8" (.875)	7/8" (.875)	10	24	120	3.5	18	2.5	11 1/4" (11.25)	3.5	2.25	1/2 x 12
12	14	16 7/8" (16.875)	7"	7/8" (.875)	7/8" (.875)	10	24	120	4	18	3	13 1/8" (13.125)	4	2.25	1/2 x 12
15	17	19 7/8" (19.875)	8 7/8" (8.875)	7/8" (.875)	7/8" (.875)	10	36	120	5	18	3.5	16	4	2.25	1/2 x 12
18	21	22 7/8" (22.875)	10 1/2" (10.5)	1"	1 1/8" (1.125)	12	36	120	6	14	4.25	19 1/8" (19.125)	4.5	2.25	5/8 x 12
24	27 1/4" (27.25)	29 1/8" (29.125)	13 7/8" (13.875)	1"	1 1/8" (1.125)	12	48	120	8	14	4.125	25	4.5	2.25	5/8 x 12
30	33 3/4" (33.75)	36 1/8" (36.125)	17 3/8" (17.375)	1 1/8" (1.125)	1 1/8" (1.125)	15	60	120	10	14	4.5	31 1/2" (31.5)	6	2.25	3/4 x 12
36	39 3/4" (39.75)	42 1/8" (42.125)	20 1/2" (20.5)	1 1/8" (1.125)	1 1/8" (1.125)	15	72	120	12	14	5.375	37	6	2.25	3/4 x 12

Gate Size	Gate Height																
	Min.															Max.	
8	24		36		48		60		72	78	84	90	96	102	108	114	120
10	24		36		48		60		72	78	84	90	96	102	108	114	120
12	24		36		48		60		72	78	84	90	96	102	108	114	120
15	36		48		60		72	78	84	90	96	102	108	114	120		
18	36		48		60		72	78	84	90	96	102	108	114	120		
24	48		60		72	78	84	90	96	102	108	114	120				
30	60		72	78	84	90	96	102	108	114	120						
36	72	78	84	90	96	102	108	114	120								

* Gate Height of Old Style Gates

Low Head Flat Back Gate

Installation Guide for Flat Back Gate to Concrete Headwall

1 - Secure all specified anchor bolts in their proper position in concrete form, checking to see that anchor bolts, projections, perpendicular and horizontal alignments are all correct. Extra care is needed in this initial procedure to ensure that all bolts are properly set. Improperly set bolts will cause gate warpage and excess leakage between the seat surfaces. *Do Not Force Gate Onto Misaligned or Improperly Set Anchor Bolts.*

2 - Each anchor bolt needs to be supplied with two nuts to facilitate proper headwall mounting of the gate. It is also recommended that you provide sufficient access to the back side of the gate, allowing easy adjustment of the back nuts. Sufficient grout space must be left for adjustment of back nuts and proper alignment of gate.

3 - After the concrete has been poured and forms stripped, place one nut on each anchor bolt and run them down against the headwall. Carefully place the closed gate onto the anchor bolts. *Do Not Force Gate onto Misaligned Anchor Bolts.* Place the second nut on each anchor bolt and bring front and back nuts into finger-tight contact with the gate frame, then align gate as necessary.

At this point of the installation, check all clearances between seating surfaces with a .004" feeler gauge. If there is proper seating at this point the gauge will not admit. In the event that the gate is not seated properly, check to see if the gate has been warped. If so, readjust nuts on anchor bolts to flatten gate. Adjustment of the wedges may also be necessary.

4 - After the gate is seated properly, carefully dry pack or grout in between frame ring and concrete headwall using a non-shrink material. Check voids and fill as necessary.

5 - Lightly tighten all exposed anchor bolt nuts uniformly so as not to warp gate to uneven surfaces.

6 - Gate is now ready for operation.

NOTE: Gates and Pipe Are Heavy! Use Care and Good Working Practice in Assembly and Installation.

Low Head Spigot Back Gate

Installation Guide for Spigot Back Gate to Corrugated Pipe

1 - Place spigot back gate over corrugated pipe, making sure the pipe and gate are perpendicular.

2 - Drill holes through corrugated pipe using holes in spigotback gate as a template (13/52" or 7/16" drill bit).

3 - Secure the gate to corrugated pipe using either galvanized Grade 5 steel bolts or a stainless 304 bolts and nuts. *Forcing Bolt May Cause Damage to Gate.*

4 - Apply a mastic sealant to joint in between corrugated pipe and gate.

5 - Brace both pipe and gate as necessary. Deflection and distortion of corrugated pipe may cause the gate to leak.

6 - Place braced coupled gate and corrugated pipe into ditch or trench, then back fill or pour as required ensuring that gate is vertical from the centerline opening.

7 - Remove bracing, check and clean gate seat to make sure proper full periphery seating is achieved. (Use .004 feeler gauge.)

8 - Check the gate for any type of damage or irregularities.

9 - Gate is now ready for operation.

NOTE: Gates and Pipe Are Heavy! Use Care and Good Working Practice in Assembly and Installation.