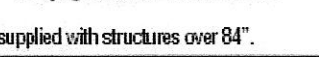


HOW DO YOU BUILD A PART NUMBER?
See page (34) for Drain Basins

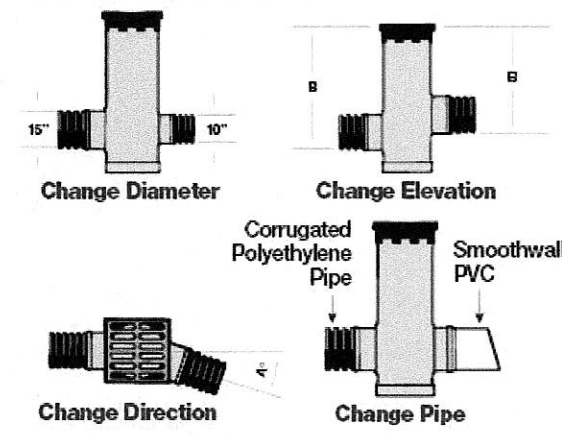


A riser will be supplied with structures over 84".

Part/Prefix	Product Description	Available Outlets
2809AG_X	8" Standard Basin*	2" & ONLY max 2.0 gpm, max height 12"
2810AG_X	10" Standard Basin*	4", 6" & ONLY max 2.0 gpm, max height 20"
2809AG_X	8" Custom Basin	4" thru 8"
2810AG_X	10" Custom Basin	4" thru 10"
2812AG_X	12" Custom Basin	4" thru 12"
2815AG_X	15" Custom Basin	4" thru 15"
2818AG_X	18" Custom Basin	4" thru 18"
2824AG_X	24" Custom Basin	4" thru 24"
2830AG_X	30" Custom Basin	4" thru 30"

Includes any grate option except bronze and domed. Bronze grates are available in 8", 10", 12", or 15" for Drain Basins and Inline Drains only.

When are Drain Basins Used?



Series LF4000B-FP Reduced Pressure Zone Assemblies are designed to protect potable water supplies in accordance with national plumbing codes and water authority requirements. This series can be used in a variety of installations, including the prevention of health hazard cross connections in piping systems or for containment at the service line entrance. This series features two in-line, independent check valves, captured springs and replaceable check seats with an intermediate relief valve. Its compact modular design facilitates easy maintenance and assembly access.

- **Features**
 - Single access cover and modular check construction for ease of maintenance
 - Top entry – all internals immediately accessible
 - Captured springs for safe maintenance
 - Internal relief valve for reduced installation clearances
 - Replaceable seats for economical repair
 - Bronze body construction for durability – 1" to 2"
 - Ball valve test cocks – sawdrewler slotted – 1" to 2"
 - Large body passages provides low pressure drop
 - Compact, space saving design
 - No special tools required for servicing
 - End connections gear-operated slow-close ball valves –

• Pre-wired tamper switch (2) per shutoff

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate. For more information, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change specifications, or materials without prior notice and without incurring any obligation to make such changes retroactively.

Specifications

A Lead Free* Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to backpressure and/or back-siphonage. The assembly shall consist of an internal pressure differential relief valve with a check valve between two positive sealing check modules with captive ball and seat discs. These seat and steel discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the watertight exposed to line fluids. Service of all internal components shall be through a top access cover secured with stainless steel bolts. The assembly shall also include two gear operated slow close resilient seat isolation valves, four resilient seated test cocks and an air gap/purge line fitting. The assembly shall meet the requirements of: Manual 8th Edition (2001); ASSE Std. 1013; AWWA Std. C511; SCS B64.4. The assembly shall be an Ames Fire & Waterworks SCS

*The wetted surface of this product contacted by consumable

AME
FIRE & WATERWORKS
A WATTS Brand

Materials

Lead free* bronze body construction, silicone rubber disc material in the first and second check plus the relief valve. Replaceable polymer check seats for first and second checks. Removable relief valve seat, cover bolts.

Standardly furnished with NPT body connections. Series LF4000-BP furnished with gear operated, full port, resilient seated, bronze ball valve shutoffs with National Pipe Thread Taper ANSI/ASME B1.20.1 or Grooved end Table 4 of AWWA C 606-11 end connections.

Standards

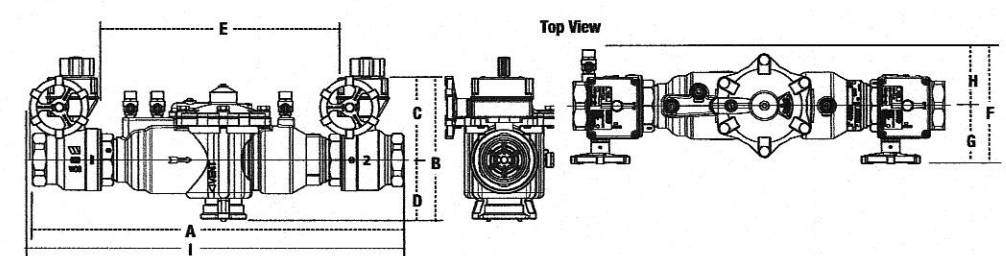
Approvals

1013 C-ULUS 864.4

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

Weights – Dimensions



MODEL	SIZE	DIMENSIONS																WEIGHT			
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O					
LJ400C00M2-PP	1	145%	370	57%	148	3%	89	2%	59	9%	235	5%	146	2%	73	2%	73	15%	357	13.8	7.2
LJ400C00M2-PP	1 1/4	17	432	5%	156	3%	95	2%	60	11%	283	6%	154	2%	73	3%	81	17%	454	19.1	8.7
LJ400C00M2-PP	1 1/2	18	457	6%	162	4	102	2%	61	11%	287	6%	159	2%	73	3%	86	18%	473	20.8	9.4
LJ400C00M2-PP	2	21	533	7 1/4	191	4%	108	3%	83	13%	341	6 1/4	165	2%	73	3%	92	21%	543	30.4	13.6

Strainer sold separately

²Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

Pressure – Temperature
Suitable for supply pressures up to 175psi (12.06 bar) and water temperature to 180°F (75°C) continuous.

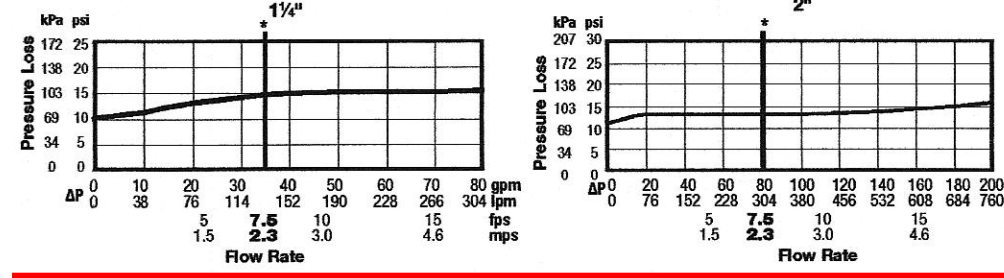
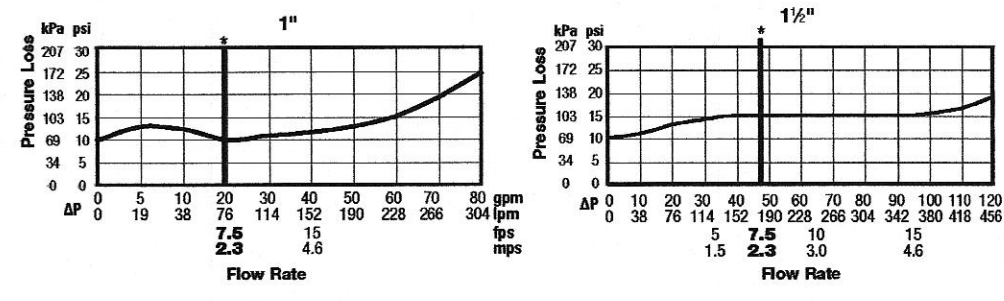
NOTICE
Inquire with governing authorities for local installation requirements

NOTICE
Inquire with governing authorities for local installation requirements

Capacity

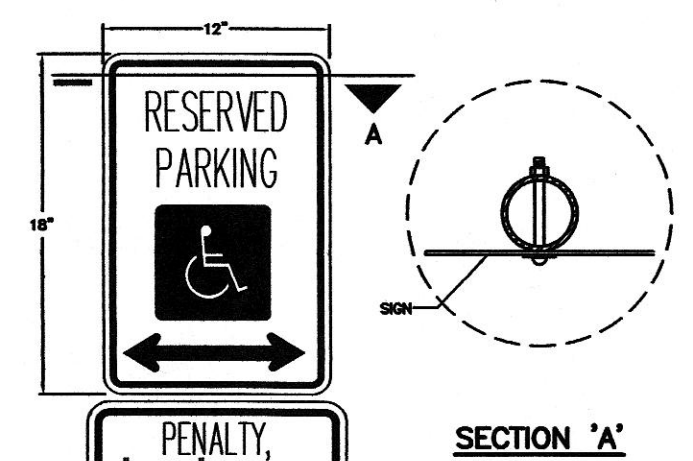
Performance as established by an independent testing laboratory

*Typical maximum system flow rate (7.5 feet/sec., 2.3 meters/sec.)

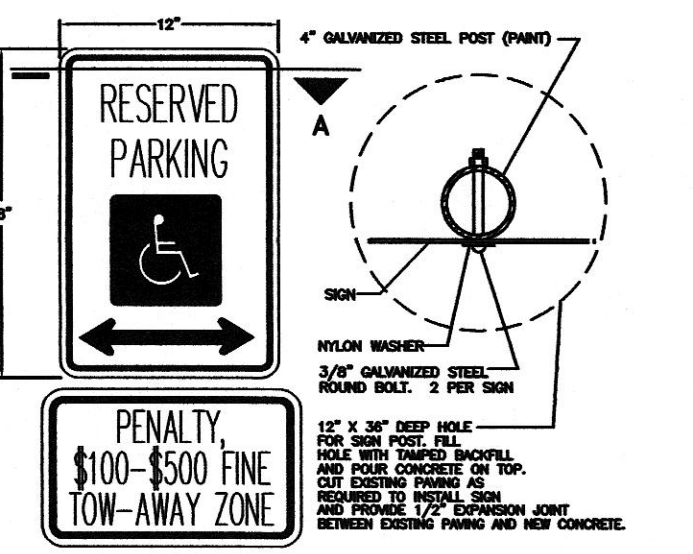


- ☐ FOR CONSTRUCTION
- ☒ FOR BID
- ☐ FOR REVIEW
- ☐ CONCEPTUAL

Issued 01/22/2024



SIGN ELEVATION
HANDICAPPED PARKING / VAN ACCESSIBLE



SIGN ELEVATION SECTION 'A'

[illegible]

STATE OF
NORTH CAROLINA
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

SECTION I-I

PLAN

GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

POSITION ALL CATCH BASINS OVER 24" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.06.

OPTIONAL CONSTRUCTION - MONOLITHIC POOL, 2" REINFORCING, OR 840 BAR ROBBES AT 12" CENTERING AS DIRECTED BY THE ENGINEER.

USE STEPS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, AND TO SLAB AS SHOWN OR STD. NO. 840.02.

USE 1/2", 3/4" AND 1" GRATES UNLESS OTHERWISE INDICATED.

FOR 12" IN DEPTH OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 24" IN DEPTH OR LESS REINFORCE WITH 6" WALLS AND BOTTOM SLAB. AUGMENT QUANTITIES ACCORDINGLY.

CONSTRUCT WITH PIPE CROSSING BATHING.

CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

SECTION Y-Y

SECTION Y-Y

SECTION J-J

SECTION J-J

SECTION H-H

SECTION H-H

DETAIL SHOWING METHOD OF RISER CONSTRUCTION

PLAN

PLAN

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

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ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
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SECTION H-H

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ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

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DRAWING NOT TO SCALE.

SECTION Y-Y

SECTION Y

DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N. C.

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N. C.

NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N. C.

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N. C.

CONCRETE CATCH BASIN

12" THRU 54" PIPE

ENGLISH STANDARD DRAWING FOR
 CONCRETE CATCH BASIN
 12" THRU 54" PIPE

ENGLISH STANDARD DRAWING FOR
 CONCRETE CATCH BASIN
 12" THRU 54" PIPE

PLAN OF TOP SLAB

SECTION S-S

PLAN OF BOTTOM SLAB

SECTION S-S

PLAN OF TOP SLAB

SECTION S-S

PLAN OF BOTTOM SLAB

SECTION S-S

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SECTION S-S

PLAN OF BOTTOM SLAB

SECTION S-S

PLAN OF TOP SLAB

SECTION S-S

PLAN OF BOTTOM SLAB

[illegible]

ANCHOR PAD/PTEZ
PADLOCK
(BY OTHERS)

SLOT THROUGH THE ENCLOSURE FLANGE

LOCKING DETAIL
LIFT OFF STYLE (2 PLACES)
HINGED STYLE (1 PLACE)

PART#	OLD#	STYLE	COLOR	"A" WIDTH	"B" LENGTH	"C" DEPTH	INSULATION THICKNESS
H0006015010E		LFT (ONLY)	BROWN				
H0006015010N	CHRS	LFT (ONLY)	GRANITE	6 [162]	15 [381]	19 [485]	
H0006015010E		LFT (ONLY)	DUSTY ROSE				
H0010006022E		LFT OFF	BROWN				
H0010006022N	CHRS	LFT OFF	GRANITE				
H0010006022E		LFT OFF	DUSTY ROSE	10 [254]	24 [616]	19 1/2 [495]	1 [25]
H0010006022N		HINGED	BROWN				
H0010006022E		HINGED	GRANITE				
H0010006022N		HINGED	DUSTY ROSE				
H00150404030R		LFT OFF	BROWN				
H00150404030N		LFT OFF	GRANITE				
H00150404030E	CHRS	LFT OFF	DUSTY ROSE	15 3/4 [400]	40 3/4 [1035]	20 3/4 [519]	
H00150404030SO		HINGED	BROWN				
H00150404030SE		HINGED	GRANITE				
H00150404030NE		HINGED	DUSTY ROSE				
H00201007043R		HINGED (ONLY)	BROWN				
H00201007043N	CHRS	HINGED (ONLY)	GRANITE	21 [533]	67 [1702]	43 [1092]	
H00201007043E		HINGED (PAINT)	DUSTY ROSE				

*SEE NOTE 2 FOR UNICATED & NON INSULATED PART DIMENSIONS.

Diagram illustrating the dimensions of the Lift Off Style enclosure. Dimensions are labeled as follows:

- A: Width of the main body
- B: Length of the main body
- C: Depth of the main body
- D: Width of the flange
- E: Length of the flange
- F: Depth of the flange
- G: Width of the mounting hinge
- H: Length of the mounting hinge
- I: Depth of the mounting hinge
- J: Width of the drain port
- K: Length of the drain port
- L: Depth of the drain port
- M: Width of the BPP
- N: Length of the BPP
- O: Depth of the BPP
- P: Width of the slot
- Q: Length of the slot
- R: Depth of the slot
- S: Width of the padlock
- T: Length of the padlock
- U: Depth of the padlock
- V: Width of the anchor pad
- W: Length of the anchor pad
- X: Depth of the anchor pad
- Y: Width of the PTEZ
- Z: Length of the PTEZ

Diagram illustrating the dimensions of the Hinged Style enclosure. Dimensions are labeled as follows:

- A: Width of the main body
- B: Length of the main body
- C: Depth of the main body
- D: Width of the flange
- E: Length of the flange
- F: Depth of the flange
- G: Width of the mounting hinge
- H: Length of the mounting hinge
- I: Depth of the mounting hinge
- J: Width of the drain port
- K: Length of the drain port
- L: Depth of the drain port
- M: Width of the BPP
- N: Length of the BPP
- O: Depth of the BPP
- P: Width of the slot
- Q: Length of the slot
- R: Depth of the slot
- S: Width of the padlock
- T: Length of the padlock
- U: Depth of the padlock
- V: Width of the anchor pad
- W: Length of the anchor pad
- X: Depth of the anchor pad
- Y: Width of the PTEZ
- Z: Length of the PTEZ

2 [51] MOUNTING HINGE

LIFT OFF STYLE HINGED STYLE

NOTES:

- INSIDE LENGTH AND WIDTH ARE AT THIS ALL DIMENSIONS ARE APPROXIMATE.
- FOR RECOMMENDED SLAS SIZE AND "F" ENCLOSURE EXTERIOR.
- FOR UNICATED VERSION REPLACE THE "I". FOR NON-INSULATED VERSION REPL WITH A "Y".

DRAWING AREA				REVISE OR SELECTIVE REVISEMENTS			
REV.	DATE	REVISION	BY	REV.	DATE	REVISION	BY
1	02/02/00	REVISED	WJW	2	02/02/00	REVISED	WJW
2	02/02/00	REVISED	WJW	3	02/02/00	REVISED	WJW
3	02/02/00	REVISED	WJW	4	02/02/00	REVISED	WJW
4	02/02/00	REVISED	WJW	5	02/02/00	REVISED	WJW
5	02/02/00	REVISED	WJW	6	02/02/00	REVISED	WJW
6	02/02/00	REVISED	WJW	7	02/02/00	REVISED	WJW
7	02/02/00	REVISED	WJW	8	02/02/00	REVISED	WJW
8	02/02/00	REVISED	WJW	9	02/02/00	REVISED	WJW
9	02/02/00	REVISED	WJW	10	02/02/00	REVISED	WJW
10	02/02/00	REVISED	WJW	11	02/02/00	REVISED	WJW
11	02/02/00	REVISED	WJW	12	02/02/00	REVISED	WJW
12	02/02/00	REVISED	WJW	13	02/02/00	REVISED	WJW
13	02/02/00	REVISED	WJW	14	02/02/00	REVISED	WJW
14	02/02/00	REVISED	WJW	15	02/02/00	REVISED	WJW
15	02/02/00	REVISED	WJW	16	02/02/00	REVISED	WJW
16	02/02/00	REVISED	WJW	17	02/02/00	REVISED	WJW
17	02/02/00	REVISED	WJW	18	02/02/00	REVISED	WJW
18	02/02/00	REVISED	WJW	19	02/02/00	REVISED	WJW
19	02/02/00	REVISED	WJW	20	02/02/00	REVISED	WJW
20	02/02/00	REVISED	WJW	21	02/02/00	REVISED	WJW
21	02/02/00	REVISED	WJW	22	02/02/00	REVISED	WJW
22	02/02/00	REVISED	WJW	23	02/02/00	REVISED	WJW
23	02/02/00	REVISED	WJW	24	02/02/00	REVISED	WJW
24	02/02/00	REVISED	WJW	25	02/02/00	REVISED	WJW
25	0						

FENCE ON RETAINING WALL DETAILED

WEIGHT
25g
50g
80g
W 95g

LNK.

TW AN
IT

adm.	LOC
E	IC
REV	S
D	REV
NOT	
on sheets	
B/LG	

8'-0"

2 1/2" SQ X .100" POSTS

CONCRETE SIDEWALK

ANCHOR FENCE POSTS IN HYDRAULIC CEMENT, TYPE EA POST

12" DIA TUBE

4'0" X 16" PVC SLEEVE, SET TOP FLUSH WITH PAVERS

1'-0"

2'-0"

3'-1 1/2"

FENCE DETAIL @ SEATING AREA

1 1/2" = 1'-0"

Steel Fence or (guard Rail) others)

Backfill or Concrete Post in Place

Max O is 6' unless sleeves are installed during wall construction.

4" Cap Unit

Wall Unit

Geogrid

Backfill or Concrete

2'-0"

Notes:

- Sleeve for post to be installed during construction, or excavation for post to be hand dug to expose and cut grid.
- Fencing material to be galvanized steel and black in color.
- Fencing shall be a minimum of 42 inches in height and possess openings no greater than 4 inches.
- Fencing shall be present behind all sections of retaining wall 30 inches in height or greater.
- Post spacing and slips per manufacturer.
- Fencing to be submitted to owner for review and approval.

LE&D
PROFESSIONALS, P.C.
RIVER RUN EXECUTIVE OFFICES
SUITE B
110 EXCHANGE STREET
DANVILLE, VA. 24541

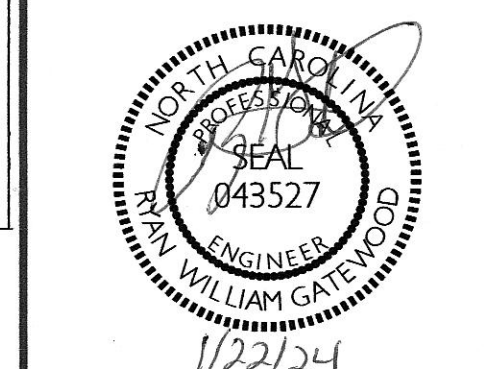
N.C. LICENSE: # C-2577
V.A. LICENSE: # 0404-001401

PHONE NO. (434) 792-3680
FAX NO. (434) 792-3685

www.landeng.com

LET

**PROPOSED SHEETZ STORE
SHEETZ, INC.
CORNER OF EAST KING STREET AND NEW MARKET STREET
STANDARD DETAILS**



	REVISIONS					
	6-7-23	TOWN OF BOONE				WKW
	7-20-23	TOWN OF BOONE				WKW
	1-22-24	ISSUE FOR CONSTRUCTION				RWG
ID.	DATE	DESCRIPTION				BY

Sheet No. **25** of **25**

Date: **MARCH 29, 2023**

Scale: **NTS**

Project No. **NC122-010-B075-Engineering-22010-PLAN-I-REV-2**