



Malfar Mechanical Inc.

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Submittal

21-03 — FORESTSIDE ESTATES

Subject : Drainage Products

To
Vince Staffieri
Royal Pine Homes
3550 Langstaff Road
Suite 200
Woodbridge, ON L4L 9G3
Phone No: 416-213-7181
Mobile: 647-287-4136
Fax No: 905-856-6543
vince@royalpinehomes.com

Number : 2
Spec Section No : 22 13 19
Submittal Number: 2
Date Sent : 3/5/2021
Type : Original Submittal
Method Sent : Email
Reason For Sending : For Approval
Status : Pending

Return To
Gaurav Sharma
Malfar Mechanical Inc.
144 Woodstream Blvd.
Woodbridge, ON L4L 7Y3
Phone No: 905-850-1242
Fax No: 905-850-2630
gauravs@malfar.ca

Copy To

Details

none

Notes

Please return submitted items by **3/19/2021**.

Signed By:

Gaurav Sharma
Project Coordinator

UNITED ENGINEERING INC.

PROFESSIONAL CONSULTING ENGINEERS

THIS SHOP DRAWING IS:

- ☒ REVIEWED
☐ REVIEWED AS MODIFIED
☐ REVISE AND RESUBMIT
☐ SUBMIT HYDRO FOR APPROVAL

The review of these shop drawings is for general design only and shall not relieve the contractor from conforming to the contract drawings and specifications.

All dimensions and sizes shall be checked

DATE:

Apr. 6, 2021

CHECKED BY:

MECH.

L. Matthews

ELEC.

Dated: 3/5/2021

PROJECT NAME: FORESTSIDE CONDO

MECHANICAL CONTRACTOR: MALFAR

MECHANICAL ENGINEER: UNITED

Prepared By: Daniele Bentrovato
Cardinal Sales
Manufacturers Representative
Date: Jan 26, 2021



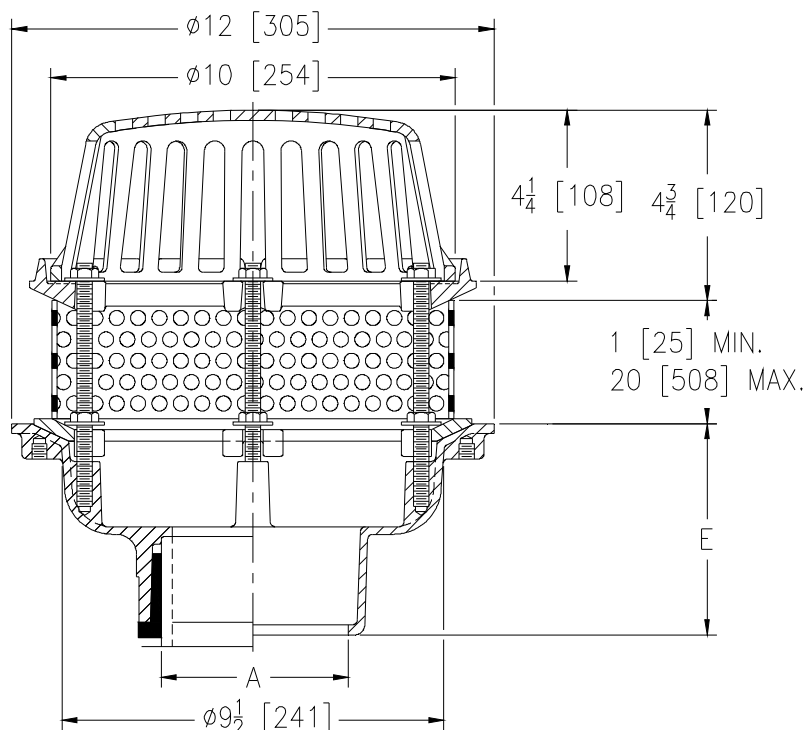
Z121-85

12 [305] DIAMETER ROOF DRAIN W/ PERFORATED EXTENSION AND LOW SILHOUETTE DOME

SPECIFICATION SHEET

TAG Standard Flow

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A- Pipe Size In.	Approx. Wt. Lbs. [kg]	Dome Open Area Sq. In. [cm ²]
2-3-4-6[51-76-102-152]	24 [11]	78 [503]

ENGINEERING SPECIFICATION: ZURN Z121-85
12 [305] Diameter roof drain. Dura-Coated cast iron body with combination membrane flashing clamp/gravel guard secondary clamping collar, stainless steel perforated extension and low silhouette Poly-Dome.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2-3-4-6[51-76-102-152]
2-3-4-6[51-76-102-152]
2-3-4-6[51-76-102-152]
2-3-4[51-76-102]

(Specify size/type) OUTLET

_____ IC Inside Caulk
_____ IP Threaded
_____ ✓ NH No-Hub
_____ NL Neo-Loc

E BODY HT. DIM.

5-1/4 [133]
3-3/4 [95]
5-1/4 [133]
4-9/16 [116]

PREFIXES

_____ Z D.C.C.I. Body with Poly-Dome (4-1/4 [108] Dome Height)*
_____ ✓ ZA D.C.C.I. Body with Aluminum Dome (6-9/16 [167] Dome Height)
_____ ZC D.C.C.I. Body with Low Silhouette Cast Iron Dome (4-1/4 [108] Dome Height)
_____ ZRB D.C.C.I. Body with Plain Bronze Dome (3-7/8 [98] Dome Height)

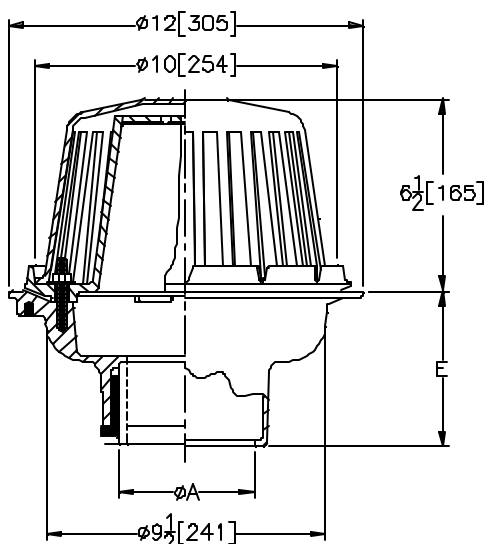
SUFFIXES

_____ -AR Acid Resistant Epoxy Coated Finish	_____ -G Galvanized Cast Iron
_____ -BS Bronze Mesh Screen Over Dome	_____ ✓ -R Roof Sump Receiver
_____ ✓ -C Underdeck Clamp	_____ -SS Stainless Mesh Screen Over Dome
_____ -DB Deep Sump Body (IC Only)	_____ -TC Neo-Loc Test Cap Gasket (2-4 [51-102] NL Bottom Outlet Only)
_____ -DP Top Set® Roof Deck Plate (Replaces both the -C and -R)	_____ -VP Vandal-Proof Secured Top
_____ -DR Adjustable Drain Riser Extension Assembly Adjustable from 3-5/8 [92] to 7-1/4 [184]	_____ -XJ Vertical Expansion Joint (See Z190)
_____ -E Static Extension 1 [25] thru 4 [102] (Specify Ht.)	_____ -84 Stainless Steel Perforated Gravel Guard
_____ -EB Top-Set® Adjustable Extension Assembly	_____ -89 2 [51] High External Water Dam
_____ -FG Flush Grate (Replaces Dome Strainer)	_____ -90 90° Threaded Side Outlet Body (2-4 [51-102] Only)

* Regularly furnished unless otherwise specified.

**ZCF121****SPECIFICATION SHEET****12" [305] DIAMETER ROOF DRAIN****TAG RD-1 CFRD**

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A Pipe Size Inches / [mm]	Approx. Wt. Lbs. / [kg]	Dome Open Area Sq. In. / [sq cm]
2-3-4 [51-76-102]	22 [10]	78 [503]
5-6 [127-152]		

ENGINEERING SPECIFICATION: ZURN ZCF121 12" [305] diameter "Control-Flo" roof drain for dead-level roof construction, Dura-Coated cast iron body. "Control-Flo" weir shall be linear functioning with integral membrane flashing clamp/gravel guard and Poly-Dome. All data shall be verified proportional to flow rates.

OPTIONS (Check/specify appropriate options)**PIPE SIZE**

2 thru 6 [50 thru 150]
2 thru 6 [50 thru 150]
2 thru 6 [50 thru 150]
2,3,4 [50,75,100]

(Specify size/type) **OUTLET**

___ IC Inside Caulk
___ IP Threaded
✓ ___ NH No-Hub
___ NL Neo-Loc

E BODY HT. DIM.

5 1/4 [133]
3 3/4 [95]
5 1/4 [133]
4 5/8 [117]

PREFIXES

___ Z D.C.C.I. Body with Poly-Dome*
✓ ___ ZA D.C.C.I. Body with Aluminum Dome

SUFFIXES

___ -A Waterproof Flange
___ -AR Acid Resistant Epoxy Coated Finish
___ -BS Bronze Mesh Screen Over Dome
✓ ___ -C Underdeck Clamp
___ -DP Top Set® Roof Deck Plate (Replaces both the
-C and -R)
___ -DR Adjustable Drain Riser Extension Assembly
3-5/8" [92] to 7-1/4" [184]
___ -E Static Extension 1 [25] thru 4 [102] (Specify Ht.)
___ -EB Elevating Body Plate
___ -ES Static Extension with Secondary Clamp Collar
Body
___ -FG Flush Grate (Replaces Dome Strainer)
___ -G Galvanized Cast Iron

✓ ___ -R Roof Sump Receiver
___ -SC Secondary Clamp Collar
___ -SE 3 3/4 [95] Slotted Extension - Inverted Roof
___ -SSM Stainless Steel Mesh Screen Over Dome
___ -TC Neo-LocTest CapGasket (2 [51] to 4 [102] NL
Bottom Outlet Only)
___ -VP Vandal Proof Secured Top
___ -84 Stainless Steel Perforated Gravel Guard
✓ ___ -85 Stainless Steel Perforated Extension
___ -89 2 [51] High External Water Dam
___ -90 90° Threaded Side Outlet Body

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. A DATE: 05/17/04 C.N. NO. 89816**DWG. NO. 63603 PRODUCT NO. ZCF121**



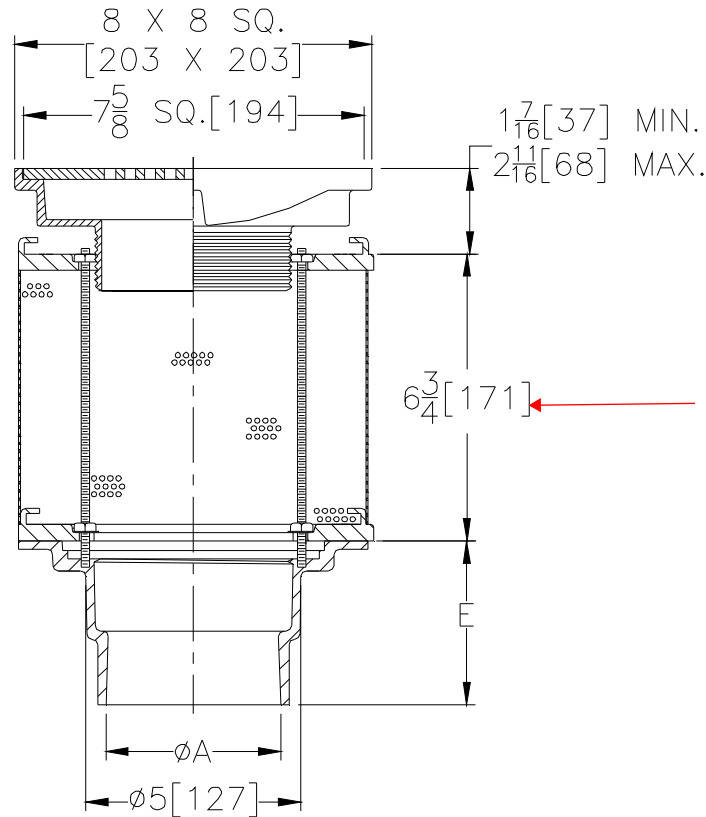
Z135-T-85
8 [203] SQ. MAIN ROOF DRAIN FOR
CONVENTIONAL INVERTED PROMENADE DECK ROOF

SPECIFICATION SHEET

TAG Terrace Drain



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Or Specify Height

A Pipe Size Inches / [mm]	Approx. Wt. Lbs. / [kg]	Grate Open Area Sq. In. / [sq cm]
2 - 3 - 4 [51 - 76 - 102]	15 [6.8]	26 [168]
6 [152]	17 [7.7]	

ENGINEERING SPECIFICATION: ZURN Z135-T-85

8 [203] square drain for conventional inverted promenade deck roof. Dura-Coated cast iron body, adjustable head, round grate, cast iron strainer collar and flashing clamp collar. Stainless steel drainage extension and hardware.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2,3,4 [51,76,102]
6 [152]

(Specify size/type) **OUTLET**

☒ NH No-Hub
☐ IP Threaded

E BODY HT. DIM.

3-1/4 [83]
2-5/8 [67]

PREFIXES

☐ Z D.C.C.I. Body with C. I. Strainer
☒ ZN D.C.C.I. Body with Polished Nickel Bronze Grate

SUFFIXES

☐ -A Waterproof Flange
☐ -C Underdeck Clamp
☐ -G Galvanized Cast Iron
☐ -R Roof Sump Receiver
☐ -Y Sediment Bucket
☐ -6NH 6 [152] No-Hub Outlet (6IP w/Z1040)
☐ -DP Top Set Deck Plate

REV. **DATE: 06/19/12** **C.N. NO. 124473**

DWG. NO. 309960 **PRODUCT NO. Z135-T-85**

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED



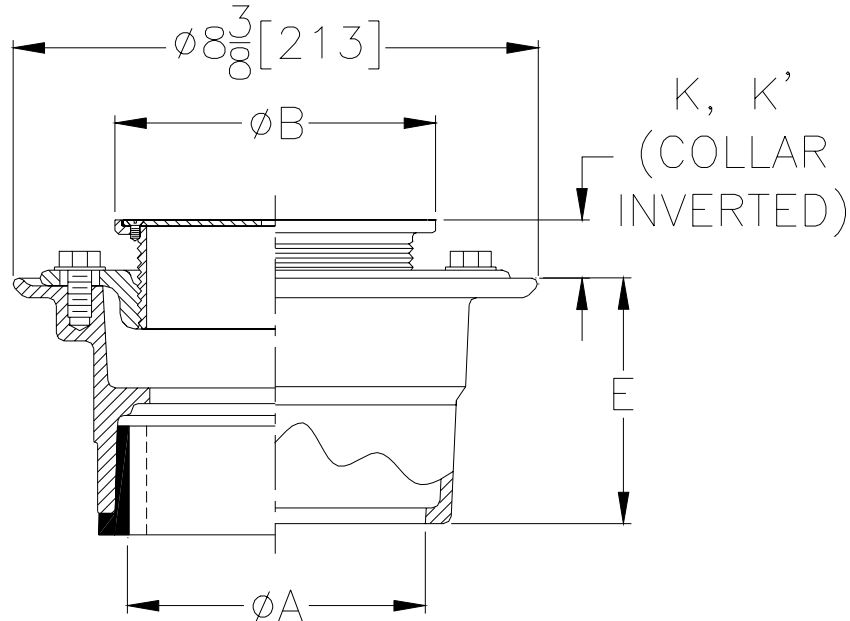
ZN-415-B
BODY ASSEMBLY
WITH "TYPE B" STRAINER

SPECIFICATION SHEET

TAG ^{FD} Finished Area



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Str. Desig.	Dimensions In Inches / [mm]						Approx. Wt. Lbs. / (kg)	Strainer Open Area Sq. In. / [sq cm]
	A Pipe Size	B Str. Dia.	K		K'			
			Min.	Max.	Min.	Max.		
➔-B5	2-3-4	5	1/2	1-5/8	1-3/8	2-3/8	11	8
	[51-76-102]	[127]	[13]	[41]	[35]	[60]	[5]	[52]
-B6	2-3-4	6	3/4	1-3/4	1-5/8	2-3/4	13	9
	[51-76-102]	[152]	[19]	[44]	[41]	[70]	[6]	[58]
-B7	2-3-4	7	1	2-1/4	2	3-1/8	14	12
	[51-76-102]	[178]	[25]	[57]	[51]	[79]	[6]	[77]
-B8	3-4	8	1-1/8	2-1/4	2	3-1/8	16	18
	[76-102]	[203]	[29]	[57]	[51]	[79]	[7]	[116]
-B8	6	8	1-1/8	2-1/4	2	3-1/8	18	18
	[152]	[203]	[29]	[57]	[51]	[79]	[8]	[116]

ENGINEERING SPECIFICATION: ZURN ZN-415-B
Floor and Shower Drain, Dura-Coated cast iron body with bottom outlet, combination invertible membrane clamp and adjustable collar with "Type B" polished nickel bronze strainer with stainless steel screws.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2,3,4 [50,75,100]
2,3,4 [50,75,100]
2,3,4,6 [50,75,100,152]
2,3,4 [50,75,100]
2,3,4 [50,75,100]

(Specify size/type) **OUTLET**

____ IC Inside Caulk
____ IG Inside Gasket
____ IP Threaded
____ ☒ NH No-Hub
____ NL Neo-Loc

E BODY HT. DIM.

3 7/8 [98]
3 7/8 [98]
2 5/8 [67]
3 7/8 [98]
4 5/8 [117]

SUFFIXES

____ -AR Acid Resistant Epoxy Coated Cast Iron
____ -FS Floating Slab
____ -G Galvanized Cast Iron
____ ☒ -P 1/2" [13mm] Trap Primer Connection
____ -U 1" [25mm] - 3" [76mm] High Extension Adapter
____ -VP Vandal-Proof Secured Top
____ -X Squeezin Backwater Valve

____ -Y Sediment Bucket
____ -414 4" [102mm] Diameter Cast Iron Funnel
____ -6NH 6" [152mm] No-Hub Outlet (6IP w/Z-1040)
____ -90 2" [51mm], 3" [76mm] or 4" [102mm] Side Outlet Body Assembly (IP or NH only)

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. A DATE: 06/16/05 C.N. NO. 89829

DWG. NO. 63637 PRODUCT NO. ZN-415-B



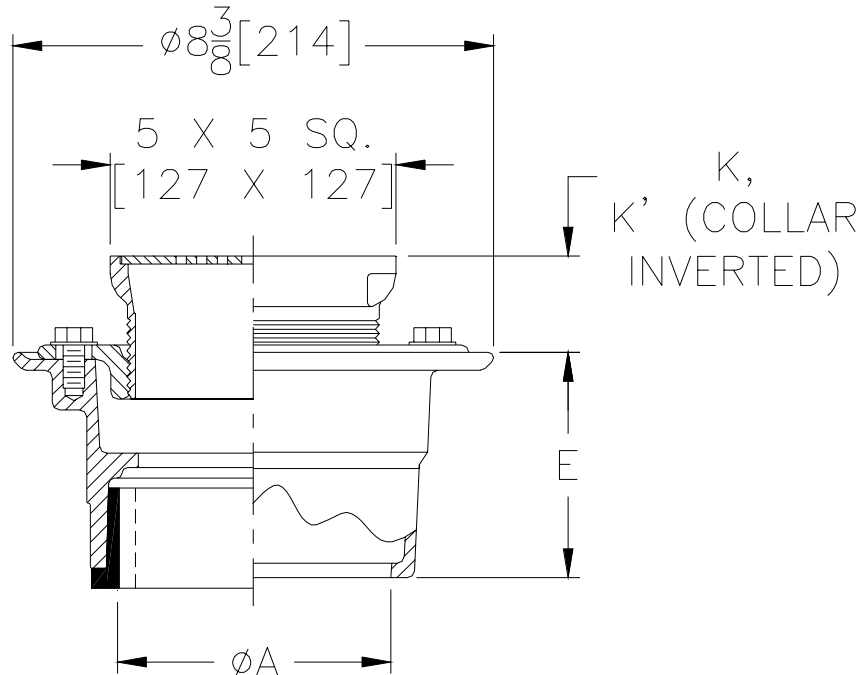
ZN-415-Y
BODY ASSEMBLY
WITH "TYPE Y" STRAINER

SPECIFICATION SHEET

In Quarry Or Mosaic Tiled Areas
TAG _____



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Str. Desig	Dimensions In Inches / [mm]						Approx. Wt. Lbs. / (kg)	Str Oper Area Sq. In. [sq cm]
	A Pipe Size	B X B' Size	K		K'			
			Min.	Max.	Min.	Max.		
-Y5	2-3-4-6 [51-76-102-152]	5 x 5 [127 x 127]	1-1/4 [32]	2-1/8 [54]	2 [51]	2-7/8 [73]	10 [5]	9 [58]
-Y6	2-3-4-6 [51-76-102-152]	6 x 6 [152 x 152]	1-1/4 [32]	2-1/8 [54]	2 [51]	2-7/8 [73]	10 [5]	12 [77]

ENGINEERING SPECIFICATION: ZURN ZN-415-Y Floor and Shower Drain, Dura-Coated cast iron body with bottom outlet, combination invertible membrane clamp and adjustable collar with "Type Y" polished nickel bronze square strainer with stainless steel screws.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2,3,4 [50,75,100]
2,3,4 [50,75,100]
2,3,4,6 [50,75,100,152]
2,3,4 [50,75,100]
2,3,4 [50,75,100]

(Specify size/type) **OUTLET**

_____ IC Inside Caulk
_____ IG Inside Gasket
_____ IP Threaded
✓ _____ NH No-Hub
_____ NL Neo-Loc

E BODY HT. DIM.

3 7/8 [98]
3 7/8 [98]
2 5/8 [67]
3 7/8 [98]
4 5/8 [117]

SUFFIXES

_____ -AR Acid Resistant Epoxy Coated Cast Iron
_____ -FS Floating Slab
_____ -G Galvanized Cast Iron
✓ _____ -P 1/2" [13mm] Trap Primer Connection
_____ -U 1" [25mm] - 3" [76mm] High Extension Adapter
_____ -VP Vandal-Proof Secured Top
_____ -X Squeezin Backwater Valve
_____ -Y Sediment Bucket

_____ -414 4" [102mm] Diameter Nickel Bronze Funnel
_____ -6NH 6" [152mm] No-Hub Outlet (6IP w/Z-1040)
_____ -90 2" [51mm], 3" [76mm] or 4" [102mm] Side
Outlet Body Assembly (IP or NH only)

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. A DATE: 06/16/05 C.N. NO. 89832

DWG. NO. 63658 PRODUCT NO. ZN-415-Y

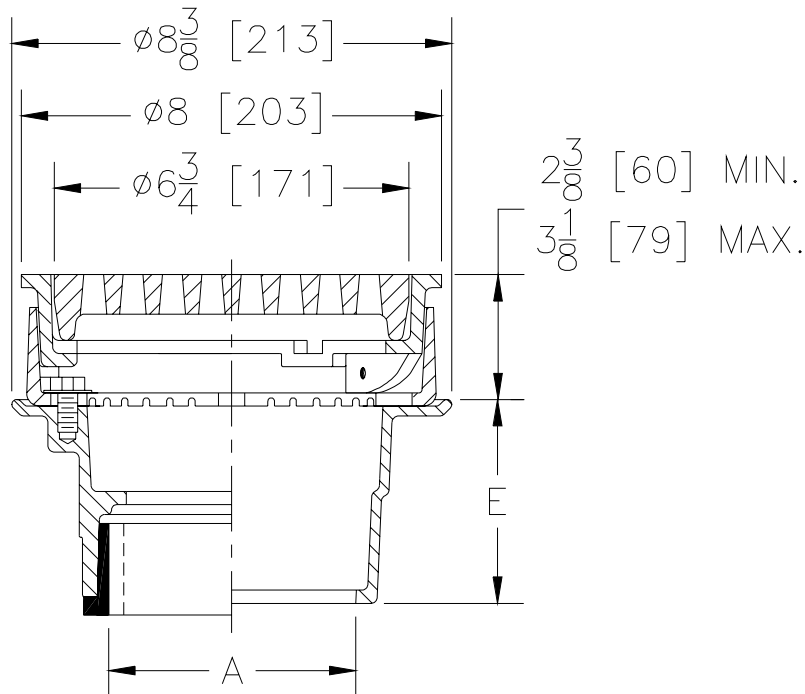


Z-556
8" [203mm]
ADJUSTABLE HEAVY-DUTY DRAIN

SPECIFICATION SHEET
FD Mechanical Rms and Unfin Areas
TAG _____



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A Pipe Size Inches / [mm]	Approx. Wt. Lbs. / [kg]	Grate Open Area Sq. In. / [sq cm]
2-3-4-6 [51-76-102-152]	19 [9]	11 [71]

ENGINEERING SPECIFICATION: ZURN Z-556 8" [203mm] diameter heavy-duty floor drain, Dura-Coated cast iron bottom outlet body, seepage pan and combination membrane flashing clamp and frame for heavy-duty anti-tilt cast iron grate.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2,3,4 [50,75,100]
2,3,4 [50,75,100]
2,3,4,6 [50,75,100,152]
2,3,4 [50,75,100]
2,3,4 [50,75,100]

(Specify size/type) **OUTLET**

_____ IC Inside Caulk
_____ IG Inside Gasket
_____ IP Threaded
_____ ✓ NH No-Hub
_____ NL Neo-Loc

E BODY HT. DIM.

3 7/8 [98]
3 7/8 [98]
2 5/8 [67]
3 7/8 [98]
4 5/8 [117]

PREFIXES

_____ ✓ Z- D.C.C.I. Body with Grate*
_____ ZN- D.C.C.I. Body with Polished Nickel Bronze Top*

*Add 3/16" [5mm] to Min./Max. Dimension

SUFFIXES

_____ -AR Acid-Resisting Epoxy Coated Cast Iron
_____ -F0 3-1/2" x 9" [89 x 229] Funnel
_____ -FS Floating Slab
_____ -G Galvanized
_____ -P 1/2" [13mm] Trap Primer Connection

_____ -VP Vandal-Proof Secured Top
_____ -X Squeezin Backwater Valve
_____ ✓ -Y Sediment Bucket
_____ -6NH 6" [152mm] No-Hub Outlet (IP w/ Z-1040)
_____ -90 90° Threaded Side Outlet Body (IP or NH only)

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. A **DATE: 2/14/00** **C.N. NO. 84101**

DWG. NO. 65047 **PRODUCT NO. Z-556**



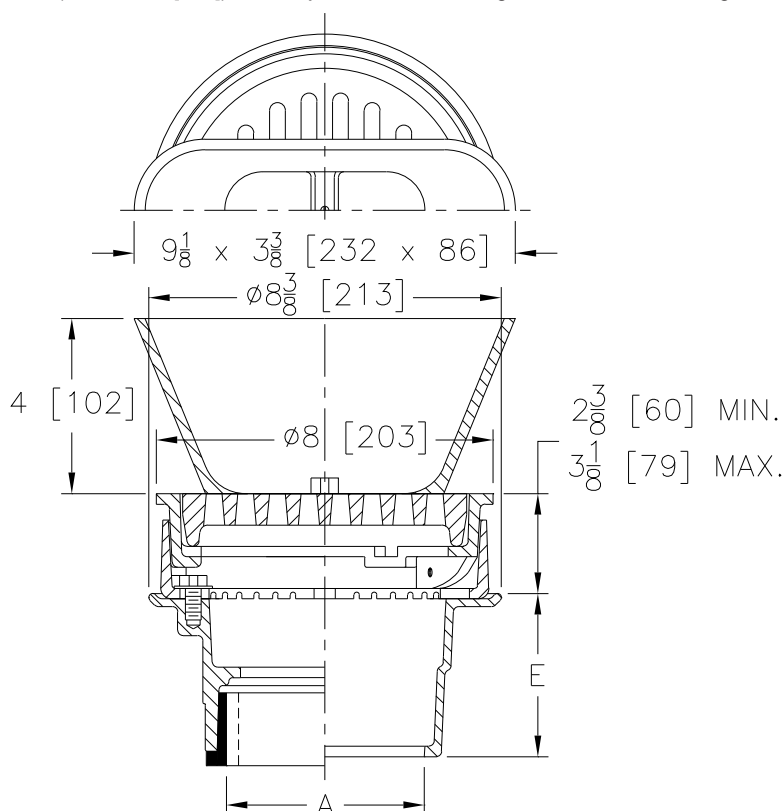
Z556-FO
8 [203] ADJUSTABLE HEAVY-DUTY DRAIN
W/ 9-1/8 x 3-3/8 [232 x 86] FUNNEL

SPECIFICATION SHEET

TAG FFD



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A Pipe Size Inches [mm]	Approx. Wt. Lbs. [kg]	Grate Open Area Sq. In. [cm ²]
2-3-4 [51-76-102]	22 [10]	11 [71]

ENGINEERING SPECIFICATION: ZURN Z556-FO
8 [203] diameter heavy-duty floor drain, Dura-Coated cast iron bottom outlet body, seepage pan and combination membrane flashing clamp and frame, heavy-duty anti-tilt cast iron grate with 9-1/8 x 3-3/8 [232 x 86] funnel.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2,3,4 [51,76,102]
2,3,4 [51,76,102]
2,3,4 [51,76,102]
2,3,4 [51,76,102]
6 [152]
2,3,4 [51,76,102]

(Specify size/type) **OUTLET**

____ IC Inside Caulk
____ IG Inside Gasket
____ IP Threaded
☒ NH No-Hub
____ NH No-Hub (w/ Z1040)
____ NL Neo-Loc

E BODY HT. DIM.

3-7/8 [98]
3-7/8 [98]
2-5/8 [67]
3-7/8 [98]
5-1/2 [140]
3-3/4 [95]

PREFIXES

☒ Z D.C.C.I. Body with Grate*
____ ZN D.C.C.I. Body with Polished Nickel Bronze Top* (Add 3/16 [5] to Min./Max. Dimension)

SUFFIXES

____ -AR Acid-Resisting Epoxy Coated Cast Iron
____ -FS Floating Slab
____ -G Galvanized
☒ -P 1/2 [13] Trap Primer Connection
____ -VP Vandal-Proof Secured Top
____ -X Squeezin Backwater Valve
____ -Y Sediment Bucket
____ -90 90° Threaded Side Outlet Body (IP or NH only)

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. - DATE: 10/7/11 C.N. NO. 122242

DWG. NO. 303867 PRODUCT NO. Z556-FO



Z187

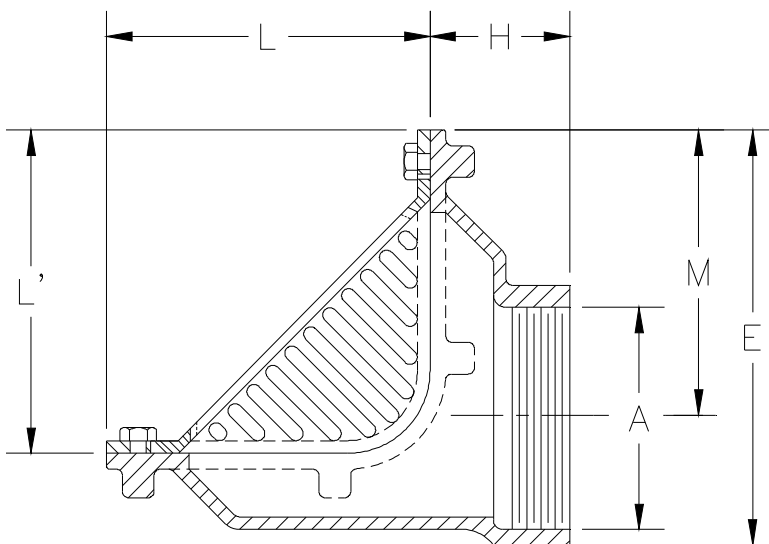
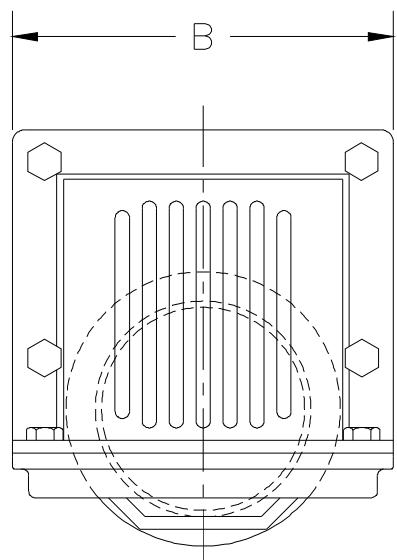
6 X 7 [152 X 178] OR 8 X 12 [203 X 305]

OBLIQUE SCUPPER DRAIN

SPECIFICATION SHEET

TAG Pit Drain

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A-Pipe Size Inches	Dimensions In Inches [mm]					Approx. Wt. Lbs. [kg]	Grate Open Area Sq. In. [cm ²]
	B	H	L	L'	M		
2 [51]					6-11/16 [170]	22 [10]	
3 [76]	7-1/2 [191]	2-3/4 [70]	6-3/8 [162]	6-3/8 [162]	6-5/32 [156]	20 [9]	57 [368]
4 [102]					5-5/8 [143]	20 [9]	
6 [152]	12-1/2 [318]	3-1/2 [89]	8-3/8 [213]	8-3/8 [213]	7-3/8 [200]	32 [15]	57 [368]
8 [203]	12-1/2 [318]	3-1/2 [89]	8-3/8 [213]	8-3/8 [213]	6-3/8 [187]	33 [15]	57 [368]

ENGINEERING SPECIFICATION: ZURN Z187

6 x 7 [152 x 178] or 8 x 12 [203 x 305] Scupper drain, Dura-Coated cast iron body with reversible back or bottom outlet, oblique aluminum grate with 90° combination frame and membrane flashing clamp.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2, 3, 4
6, 8 [51 thru 102, 150, 203]
2, 3, 4

(Specify size/type) OUTLET

___ IP Threaded
___ IP Threaded
___ NH No-Hub
(IP w/Z1040)
___ NH No-Hub
(IP w/Z1040)

'E' BODY HT. DIM.

8-3/16 [208]
11 [279]
8-3/16 [208]
11 [279]

PREFIXES

___ ☒ Z D.C.C.I. Body with Grate*
___ ZB D.C.C.I. Body with Polished Bronze Grate
___ ZN D.C.C.I. Body with Polished Nickel Bronze Grate
___ ZRB D.C.C.I. Body with Plain Bronze Grate

SUFFIXES

___ -BS Bronze Mesh Screen Over Grate
___ -DA Downspout Adapter (Previously Z188)
(2 [51] thru 4 [102], 6 [152] only)
___ -FG Flush Grate

___ -V BACK WATER VALVE
___ -G Galvanized Cast Iron
___ -TS Secured Top
___ -VP Vandal Proof Secured Top

* Regularly furnished unless otherwise specified.

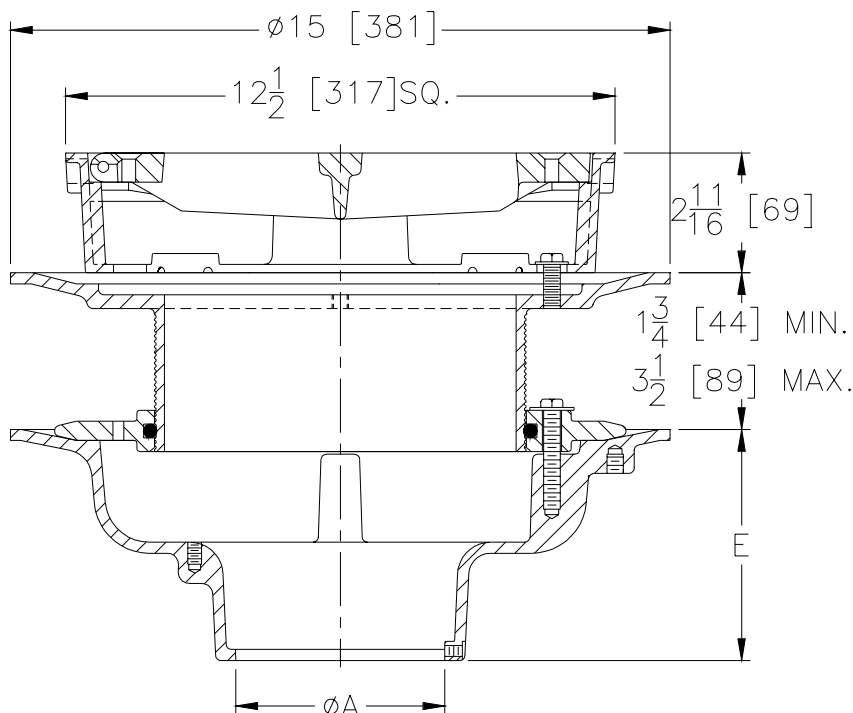


Z-610-H-ADJ
12" [305] HEAVY-DUTY ADJUSTABLE DRAIN

SPECIFICATION SHEET
Elevated Parking Areas
TAG _____



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A Pipe Size Inches / [mm]	Approx. Wt. Lbs. / [kg]	Grate Open Area Sq. In. / [sq cm]
2-3-4-5-6 [51-76-102-127-152]	72 [33]	40 [258]
8 [203]		

ENGINEERING SPECIFICATION: ZURN Z-610-H-ADJ
12" [305] square top adjustable floor drain, Dura-Coated cast iron bottom outlet body, clamping collar, adjustable leveling frame, with heavy-duty cast iron hinged slotted grate.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2-6,8 [50-152,203]
2,3,4,6 [50,75,100,152]
2-6,8 [50-152,203]
2-6,8 [50-152,203]
2,3,4 [50,75,100]

(Specify size/type) **OUTLET**

_____ IC Inside Caulk
_____ IG Inside Gasket
_____ IP Threaded
_____ ✓ NH No-Hub
_____ NL Neo-Loc

E BODY HT. DIM.

5-1/4" [133]
5-1/4" [133]
3-3/4" [95]
5-1/4" [133]
4 5/8" [117]

PREFIXES

✓ Z- D.C.C.I. Body with Grate*
_____ ZN- D.C.C.I. Body with Polished Nickel Bronze Top*
*Add 3/16" [5] to Min./Max. Dimension

SUFFIXES

_____ -AR Acid-Resisting Epoxy Coated Cast Iron
_____ -DG Duresist Grate
_____ -DS Deep Sump Body
_____ -G Galvanized Cast Iron
_____ -HL Hinged Locking Grate
_____ -P 1/2" [13] Trap Primer Connection
✓ -E EXTENSION

_____ -S Secondary Strainer
_____ -VP Vandal-Proof Secured Top
✓ -Y Sediment Bucket
_____ -90 90° Threaded Side Outlet Body
(IP or NH only)
✓ -R SUMP RECEIVER

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. A DATE: 1/3/01 C.N. NO. 83378

DWG. NO. 63666 PRODUCT NO. Z-610-H-ADJ



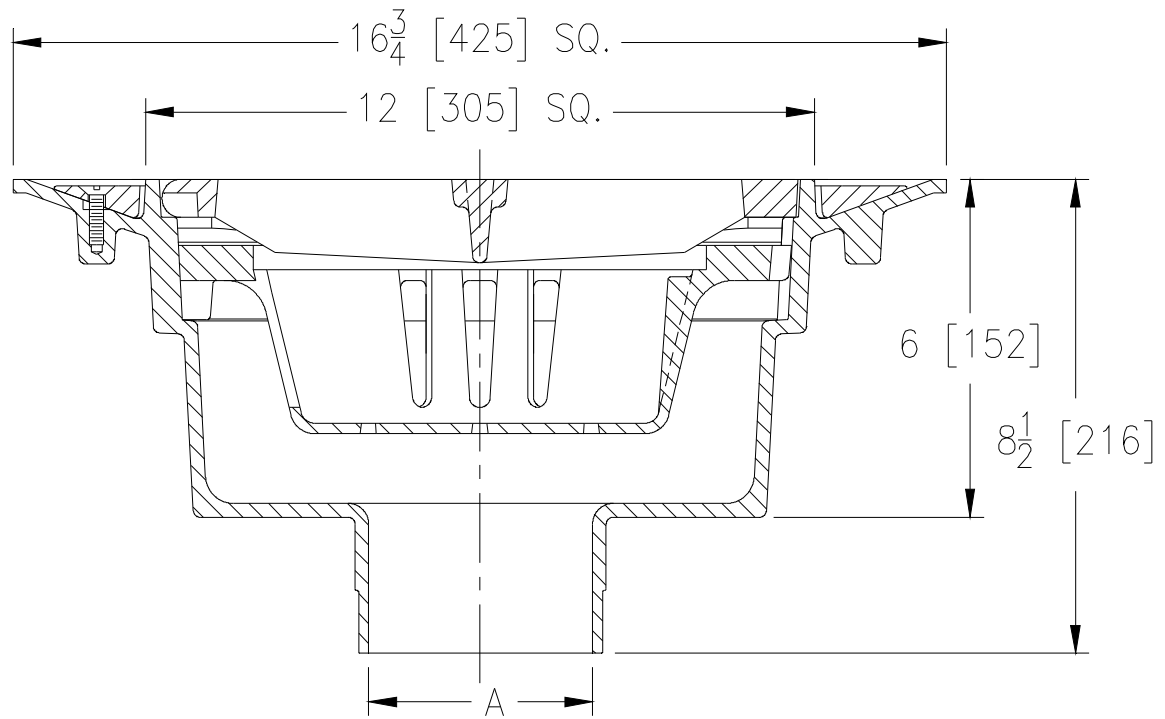
Z535

HEAVY-DUTY PARKING STRUCTURE DRAIN

SPECIFICATION SHEET

TAG _____
Interior PARKING STRUCTURE

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A Pipe Size In.	Approx. Wt. Lbs. [kg]	Grate Open Area Sq. In. [cm ²]
3-4-6-8 [76-102-152-203]	29 [13]	56 [361]

ENGINEERING SPECIFICATION: ZURN Z535

Square top heavy-duty drain, oven cured acid resistant epoxy coated aluminum body with bottom outlet, top membrane clamping collar, anti-ponding slots, sediment bucket and heavy-duty anti-tilt hinged slotted grate with stainless steel hinge pins.

OPTIONS (Check/specify appropriate options)**PIPE SIZE**

3-4-6-8 [76-102-152-203]

(Specify size) **OUTLET**☒ NH No-Hub**PREFIXES**☒ Z A.R.C. Aluminum Body and Top***SUFFIXES**☐ -CI Cast Iron Grate
☐ -L Locking Device

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. F DATE: 7/24/09 C.N. NO. 110003

DWG. NO. 58940 PRODUCT NO. Z535

ZURN INDUSTRIES, LLC ♦ SPECIFICATION DRAINAGE OPERATION ♦ 1801 Pittsburgh Ave. ♦ Erie, PA 16514

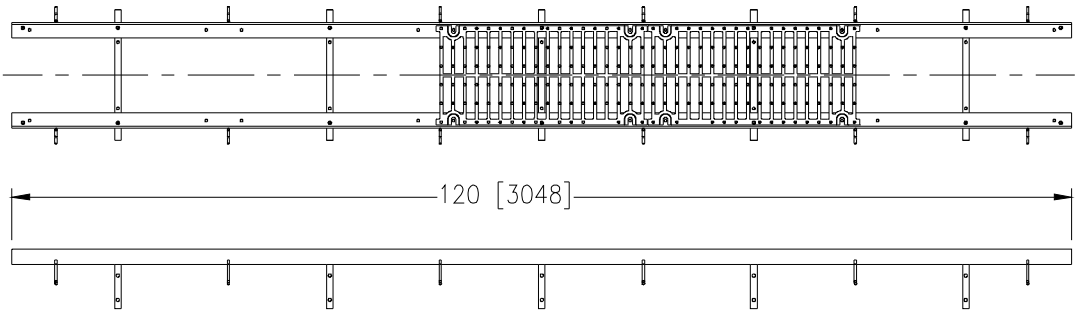
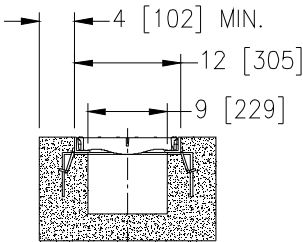
Phone: 814455-0921 ♦ Fax: 814454-7929 ♦ World Wide Web: www.zurn.com

In Canada: ZURN INDUSTRIES LIMITED ♦ 3544 Nashua Drive ♦ Mississauga, Ontario L4V1L2 ♦ Phone: 905405-8272 Fax: 905405-1292

**Z712****12 [305] WIDE REVEAL FRAME AND GRATE SYSTEM****SPECIFICATION SHEET****TAG** _____

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice

SPECIFYING ENGINEER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES

**ENGINEERING SPECIFICATION: Zurn Z712**

Frame and Grate System are 120"[3048mm] long, 12"[305mm] wide reveal and have a 8-1/2"[216mm] clear opening. Channels mechanically lock into the concrete surround every 12" [305mm]. Channels provided with standard DGC grates that lock down to frame. Zurn 12" [305mm] wide reveal Ductile Iron Slotted Grate conforming to ASTM specification A536-84, Grade 80-55-06. Ductile Iron grate is rated class C per the DIN EN1433 top load classifications. Supplied in 24" [608mm] nominal lengths with 63/64" [25mm] wide slots, and 1-1/2" [38mm] bearing depth. Grate has an open area of 86.7 sq. in per ft. [183515 sq. mm per meter]. The 1/4" [6mm] thick Heavy-Duty Carbon Steel Frame Assembly conforms to ASTM specification A36 with 12 - 4" [102mm] long concrete anchors per 120" [3048mm]. Grate lockdown bars are to be integral to the frame. The frame is supplied with a powder coated finish. All welds must be performed by a certified welder per ASTM standard AWS D1.1. Frames produced in the U.S.A.

PREFIX OPTIONS (Check/specify appropriate options)

- ☒ Z Ten-foot Heavy Duty Carbon Steel Frame *

SUFFIX OPTIONS (Check/specify appropriate options)**Frame Options**

- ☐ -CBF Black Acid Resistant Coated Top Frame
☐ -CWF White Acid Resistant Coated Top Frame
☐ -GFA Galvanized Frame Assembly
☐ -SF Type 304 Stainless Steel Top Frame (316 By Request)

Grate Options (Load Classifications are per DIN EN1433)

- ☐ -BG Galvanized Steel Bar Grate - Class D
☐ -BDC Black Acid Resistant Ductile Grate - Class C
☐ -BDE Black Acid Resistant Ductile Grate - Class E
☐ -BDF Black Acid Resistant Ductile Grate - Class F
☐ -DC Ductile Iron Solid Cover - Class E
☐ -DGC Ductile Iron Slotted Grate - Class C *
☒ -DGE Ductile Iron Slotted Grate - Class E
☐ -DGF Ductile Iron Slotted Grate - Class F
☐ -GDC Galvanized Ductile Slotted Grate - Class C
☐ -GDE Galvanized Ductile Slotted Grate - Class E
☐ -GDF Galvanized Ductile Slotted Grate - Class F
☐ -GHPD Galvanized Heel-Proof Ductile Slotted Grate - Class B
☐ -GHPDE Galvanized Heel-Proof Ductile Slotted Grate - Class E
☐ -GG Fiberglass Grate - Class A
☐ -HPD Heel-Proof Ductile Slotted Grate - Class B
☐ -HPDE Heel-Proof Ductile Slotted Grate - Class E
☐ -RFGC Reinforced Slotted Galvanized Grate - Class C
☐ -RPGC Reinforced Perforated Galvanized Grate - Class C
☐ -RPGRC Reinforced Perforated Galvanized Reverse Punch Grate - Class C
☐ -RFSC Reinforced Slotted Stainless Steel Grate - Class C
☐ -RPSC Reinforced Perforated Stainless Steel Grate - Class C
☐ -RPSRC Reinforced Perforated Stainless Steel Reverse Punch Grate - Class C

MADE in the U.S.A.

- ☐ -ADA-USA Meets Americans with Disabilities Act Requirements - Class C
☐ -BDE-USA Black Acid Resistant Ductile Grate - Class E
☐ -DGC-USA Ductile Iron Slotted Grate - Class C
☐ -DGE-USA Ductile Iron Slotted Grate - Class E
☐ -FG Fabricated Galvanized Steel Slotted Grate - Class A
☐ -FS Fabricated Stainless Steel Slotted Grate - Class A
☐ -GADA-USA Galvanized Ductile ADA Slotted Grate - Class C
☐ -GDC-USA Galvanized Ductile Slotted Grate - Class C
☐ -GDE-USA Galvanized Ductile Slotted Grate - Class E
☐ -GHPDE-USA Galvanized Ductile Slotted Grate - Class E
☐ -HPDE-USA Heel-Proof Ductile Slotted Grate - Class E
☐ -PG Perforated Galvanized Steel Grate - Class A
☐ -PGR Perforated Galvanized Reverse Punch ADA Grate - Class A
☐ -PS Perforated Stainless Steel Grate - Class A
☐ -PSR Perforated Stainless Steel Reverse Punch ADA Grate - Class A
☐ -RFG Reinforced Galvanized Slotted Grate - Class B
☐ -RFS Reinforced Stainless Steel Slotted Grate - Class B
☐ -RPG Reinforced Galvanized Perforated Grate - Class B
☐ -RPGR Reinforced Galvanized Perforated Reverse Punch Anti-Slip ADA Grate - Class B
☐ -RPS Reinforced Stainless Steel Perforated Grate - Class B
☐ -RPSR Reinforced Stainless Steel Perforated Reverse Punch Anti-Slip ADA Grate - Class B
☐ -SBG-L Stainless Steel Bar Grate - Class C
☐ -SSCD Reinforced Stainless Steel Solid Cover - Class B

Miscellaneous Options

- ☐ -RC Rebar Clip (Set of 2)
☐ -VP Vandal-Proof Lockdown

* Regularly furnished unless otherwise specified.



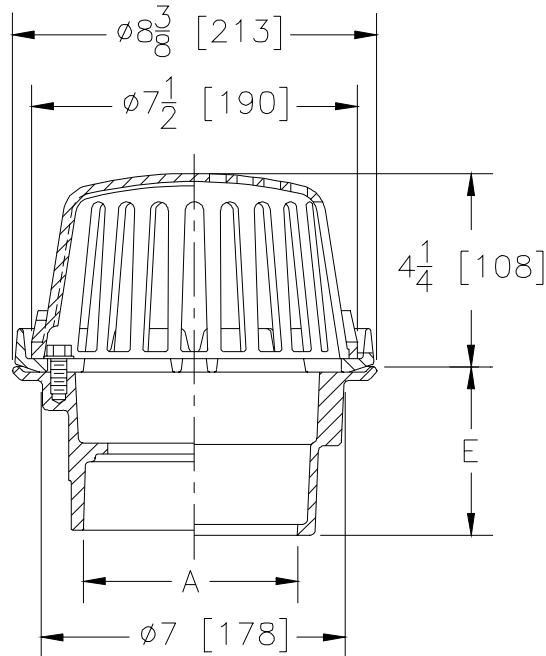
Z125
8 3/8 [213] DIAMETER ROOF DRAIN

SPECIFICATION SHEET

TAG _____
Drain At Bottom Of Trench



Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A- Pipe Size In.	Approx. Wt. Lbs. [kg]	Dome Open Area Sq. In. [cm ²]
2-3-4 [51-76-102]	14 [6]	43 [277]

ENGINEERING SPECIFICATION: ZURN Z125

8 3/8 [213] Diameter roof drain, Dura-Coated cast iron body with combination membrane flashing clamp/gravel guard and low silhouette cast iron dome.

OPTIONS (Check/specify appropriate options)

PIPE SIZE

2 - 3 - 4 [51 - 76 - 102]
2 - 3 - 4 [51 - 76 - 102]
2 - 3 - 4 [51 - 76 - 102]
2 - 3 - 4 [51 - 76 - 102]

(Specify size/type) **OUTLET**

___ IC Inside Caulk
___ IP Threaded
___ ☒ NH No-Hub
___ NL Neo-Loc

E' BODY HT. DIM.

3 7/8 [98]
2 5/8 [67]
3 7/8 [98]
4 5/8 [117]

PREFIXES

☒ Z D.C.C.I. Body with Dome

SUFFIXES

___ -A Waterproof Flange
___ -AR Acid-Resistant Epoxy Coated
___ -C Underdeck Clamp
___ -DP Top-Set® Roof Deck Plate
(Replaces both the -C and -R)
___ -DR Adjustable Drain Riser Extension Assembly
3-5/8" [92] to 71/4" [184]
___ -E Static Extension 1 [25] thru 4 [102] (Specify Ht.)
___ -G Galvanized Cast Iron
___ -R Roof Sump Receiver
___ -SSM Stainless Mesh Screen Over Dome

___ -VP Vandal-Proof Secured Top
___ -84 Stainless Steel Perforated Gravel Guard
___ -85 Stainless Steel Perforated Extension
___ -89 2 [51] High External Water Dam
___ -90 90° Threaded Side Outlet Body
(2 [51] through 4 [102])

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. A DATE: 6/14/04 C.N. NO. 92281

DWG. NO. 65000 PRODUCT NO. Z125



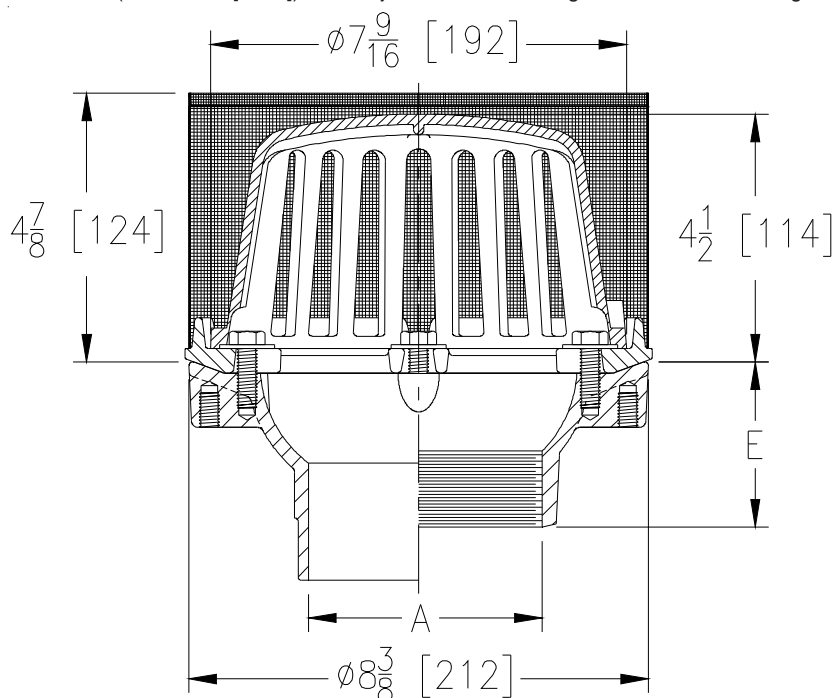
Z125-SS

8-3/8 [213] DIAMETER ROOF DRAIN W/ STAINLESS STEEL MESH SCREEN OVER DOME

SPECIFICATION SHEET

TAG Planter Drain

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



A Pipe Size In.	Approx. Wt. Lbs. [kg]	Dome Open Area Sq. In. [cm ²]
2-3-4[51-76-102]	23 [10]	43 [277]

ENGINEERING SPECIFICATION: ZURN Z125-SS

8-3/8 [213] Diameter roof drain, Dura-Coated cast iron body with combination membrane flashing clamp/gravel guard, low silhouette cast iron dome and stainless steel mesh screen.

OPTIONS (Check/specify appropriate options)**PIPE SIZE**

2-3-4[51-76-102]

2 [51]

3 [76]

4 [102]

2-3-4[51-76-102]

2-3-4[51-76-102]

(Specify size/type) **OUTLET**

___ IC Inside Caulk

___ IP Threaded

___ IP Threaded

___ IP Threaded

☒ NH No-Hub

___ NL Neo-Loc

'E' BODY HT. DIM.

3-7/8 [98]

2-7/16 [62]

2-3/4 [70]

3 [76]

4 [102]

3-13/16 [97]

PREFIXES☒ Z D.C.C.I. Body with Dome (4-1/4 [108] Dome Height)*

___ ZA D.C.C.I. Body with Aluminum Dome (4-1/4 [108] Dome Height)

___ ZRB D.C.C.I. Body with Plain Bronze Dome (3-1/4 [83] Dome Height)

SUFFIXES

___ -AR Acid Resistant Epoxy Coated Finish

___ -C Underdeck Clamp

___ -DP Top-Set® Roof Deck Plate
(Replaces both the -C and -R)

___ -DR Top-Set® Drain Riser

___ -E 2 [51] High Static Extension (Specify Height)

___ -EB Top-Set® Adjustable Extension Assembly

___ -G Galvanized Cast Iron

___ -R Roof Sump Receiver

___ -SC Secondary Clamping Collar

___ -TC Neo-Loc Test Cap Gasket
(2 - 4 [51 - 102] NL Bottom Outlet Only)

___ -VP Vandal-Proof Secured Top

___ -XJ Vertical Expansion Joint (See Z190)

___ -84 Stainless Steel Perforated Gravel Guard

___ -85 Stainless Steel Perforated Extension

___ -89 2 [51] High External Water Dam

___ -90 90° Threaded Side Outlet Body

(2 - 4 [51 - 102]) (Previously Z126)

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. E DATE: 2/20/12 C.N. NO. 122777

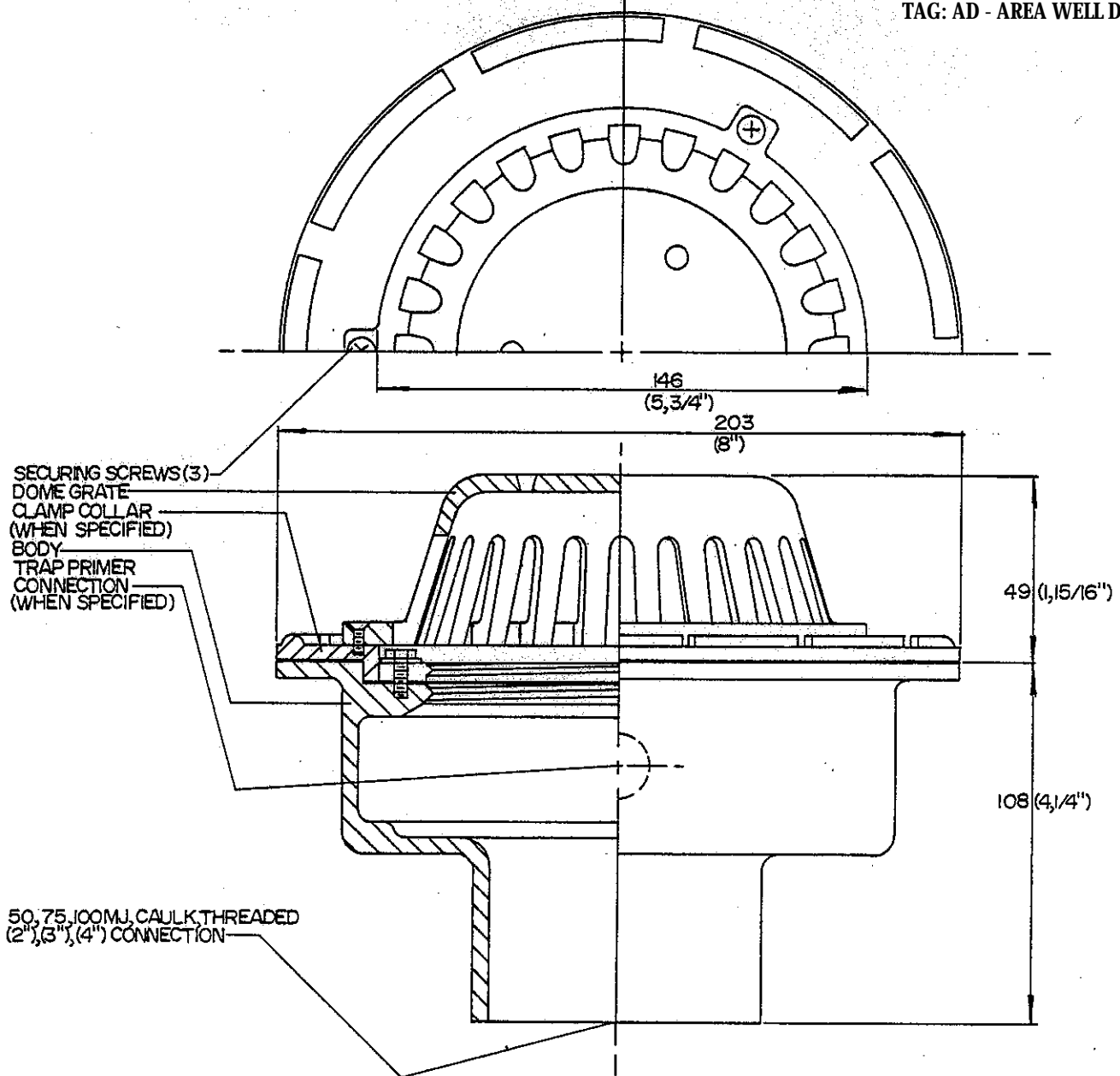
DWG. NO. 59766

PRODUCT NO. Z125-SS

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In Canada: ZURN INDUSTRIES LIMITED ♦ 3544 Nashua Drive ♦ Mississauga, Ontario L4V1L2 ♦ Phone: 905/405-8272 Fax: 905/405-1292



*REGULARLY FURNISHED
DURA-COATED CAST IRON BODY AND SECURED DOME GRATE.

FURNISHED WHEN SPECIFIED

- ☐ ZG-GALVANIZED
- ☐ VP-VANDAL PROOF SCREWS
- ☐ ALUMINUM CLAMP COLLAR
- ☐ DURA-COATED CAST IRON CLAMP COLLAR

*D.C. (DURA-COATED) OVEN CURED, FUSION BONDED EPOXY POWDER COATING

FUNCTION - FOR INSTALLATION IN AIR WELLS, VAULTS, AND SIMILAR AREAS WHERE DOME GRATE IS PREFERRED OVER FLAT GRATE TO AVOID BLOCKAGE.

DIMENSIONS ARE IN INCHES (IN BRACKETS) AND TO THE NEAREST MILLIMETRE.

FLOOR DRAIN WITH DOME GRATE

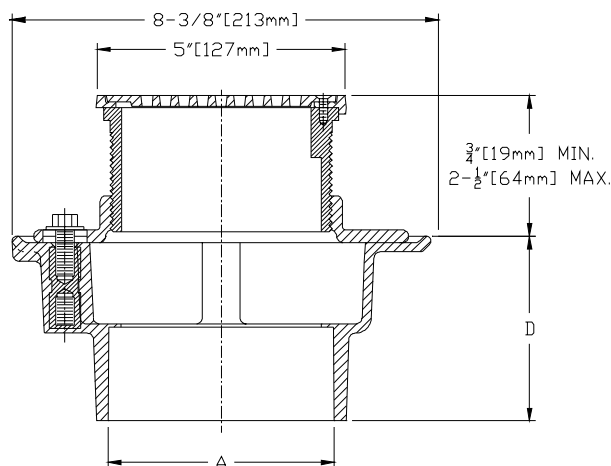
PRODUCT NUMBER

Z-220-D

DRAWING NUMBER

ZURN

ZURN DRAINAGE AND CONTROL SYSTEMS LTD.



ZVC-415-H **Finished Area Floor Drain with Square Top**

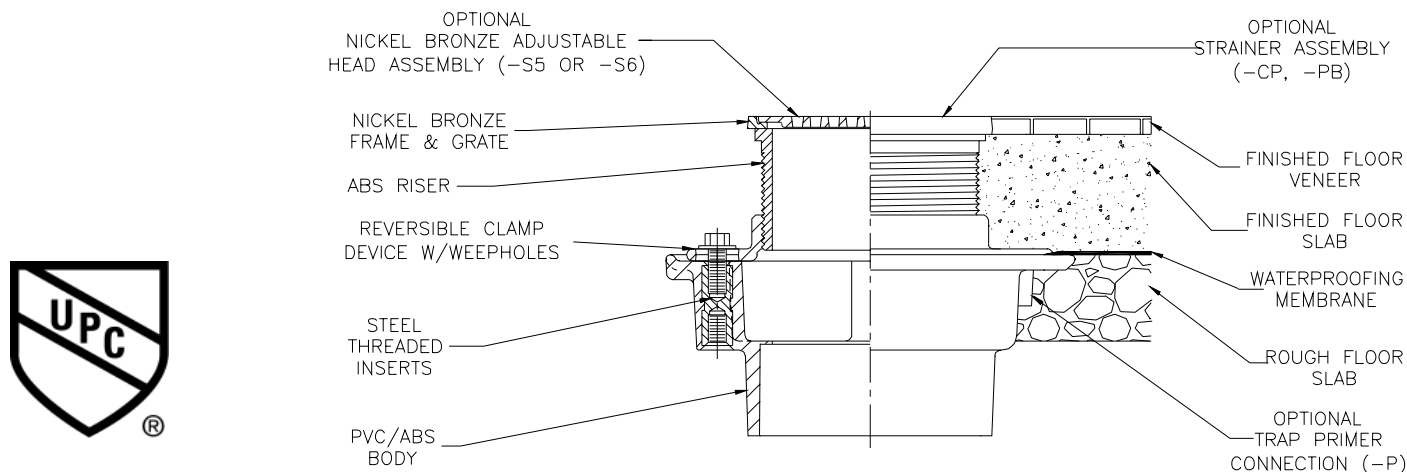
This drain is furnished with a PVC or ABS body, complete with steel-threaded inserts. The adjustable ABS head is complete with nickel frame grate and reversible clamping collar.

Options:

✓	-CP	Chrome Plated Strainer Assembly
—	-P	1/2" Trap Primer Connection
—	-PB	Polished Brass Strainer Assembly
—	-S5	5" Square Nickel Head
✓	-S6	6" Square Nickel Head
—	-VP	Vandal Proof

Product	'A' Connections	D
FD-2280-PV2-ST	2"[51] PVC Hub	2-31/32"[76]
FD-2280-PV3-ST	3"[76] PVC Hub	3-11/16"[94]
✓ FD-2280-PV4-ST	4"[102] PVC Hub	3-13/16"[97]
FD-2280-AB2-ST	2"[51] ABS Hub	2-31/32"[76]
FD-2280-AB3-ST	3"[76] ABS Hub	3-11/16"[94]
FD-2280-AB4-ST	4"[102] ABS Hub	3-13/16"[97]

Typical installation





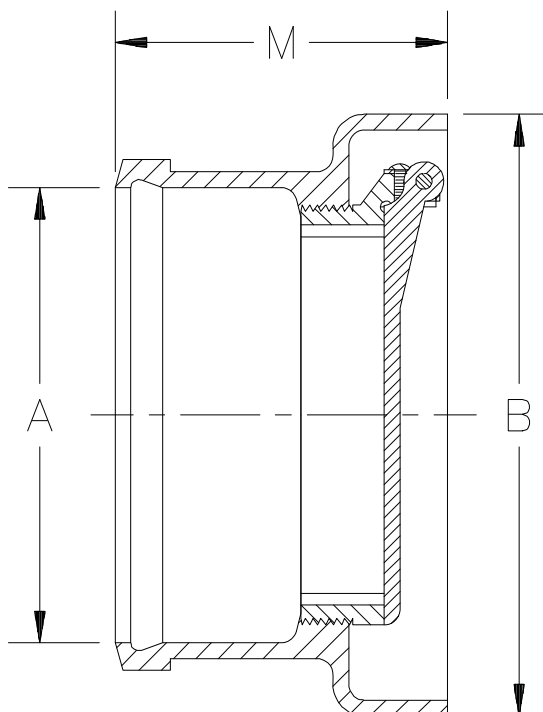
Z1091

BACKWATER VALVE FLAPPER TYPE

SPECIFICATION SHEET

TAG **BACKWATER
VALVE**

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Dimensions In Inches			Approx. Wt. Lbs. [kg]
A Pipe Size	B	M	
3 [75]	7 [178]	5 [127]	12 [5]
4 [100]	7-1/2 [180]		15 [7]
5 [125]	10-1/2 [267]	6 [152]	20 [9]
6 [150]	9-1/2 [241]	5-1/4 [133]	28 [13]
8 [200]	11-1/2 [292]	6 [152]	42 [19]
10 [250]	14 [356]	7 [178]	58 [26]

ENGINEERING SPECIFICATION: ZURN Z1091 Backwater Valve, Dura-Coated cast iron body, hub inlet and open outlet for installation at end of drainage line, automatic PVC (3 [76] and 4 [102] sizes only) flapper type backwater valve with O-ring.

CONNECTIONS (Check/specify appropriate options)

PIPE SIZE

3 thru 6, 8, 10 [75 thru 150, 200, 250]

(Specify size) **CONNECTION**

____ HB Hub

PREFIXES

☒ Z D.C.C.I. Body*

SUFFIXES

____ -BV Bronze Flapper Valve (3 and 4 [76 and 102] Size)
____ -G Galvanized Cast Iron

REV. B DATE: 11/01/10 C.N. NO. 120207

DWG. NO. 58901 PRODUCT NO. Z1091

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

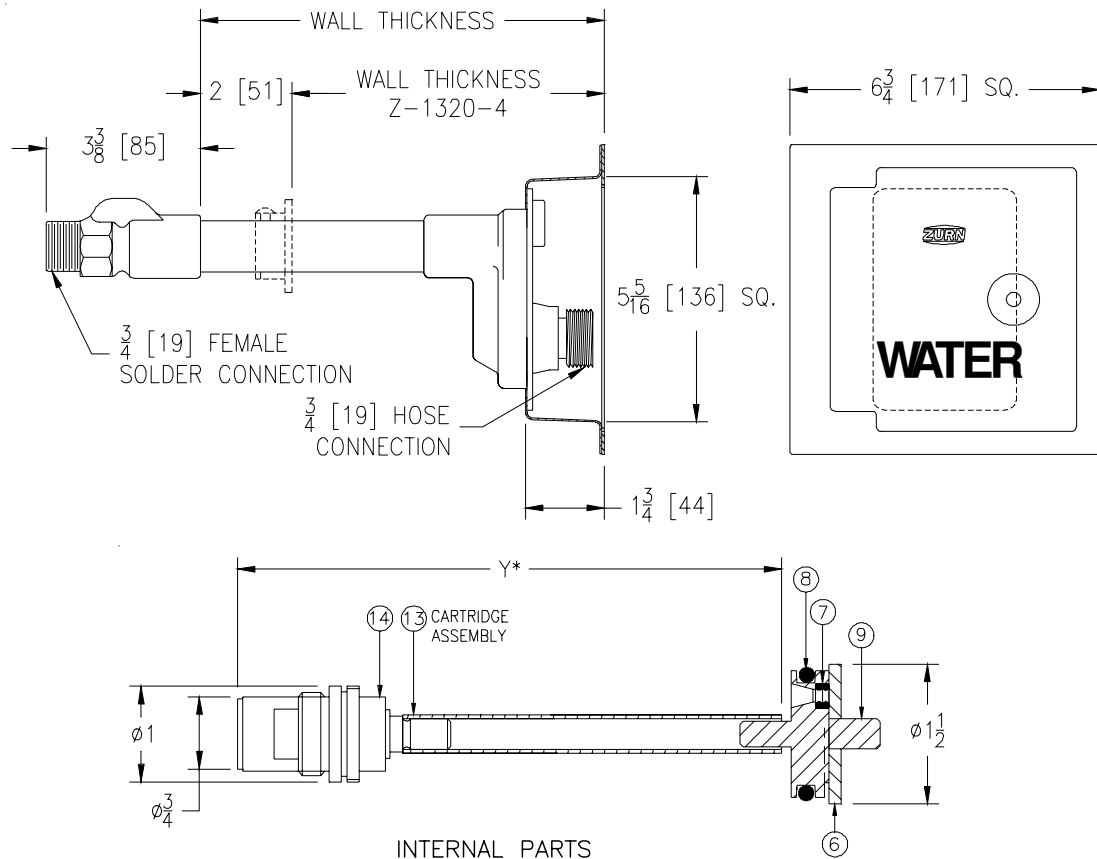
ZURN INDUSTRIES, LLC. ♦ SPECIFICATION DRAINAGE OPERATION ♦ 1801 Pittsburgh Ave. ♦ Erie, PA 16514

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**Z1320****SPECIFICATION SHEET****ECOLOTROL CERAMIC DISC WALL HYDRANT**
Encased, Non-Freeze, Anti-Siphon, Automatic DrainingTAG NFHB Exterior

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Wall Thickness Inches [mm]	Approx. Wt. Lbs. [kg]
6-8 [152-203]	5 [2]
10-12-14 [254-305-356]	6 [3]
16-18 [406-457]	7 [3]
20-22-24 [508-559-610]	8 [4]
26-30 [660-762]	10 [5]

ENGINEERING SPECIFICATION: ZURN Z1320 Encased Ecolotrol "anti-siphon" automatic draining wall hydrant for flush installation. Complete with copper casing, all bronze interior parts with 1/2 turn ceramic disk cartridge and combination 3/4 [19] female solder and 3/4 [19] male pipe thread inlet. Nickel bronze box and hinged cover with operating key lock and "WATER" stamped on cover. (All solder connections are lead free.)

OPTIONS (Check/specify appropriate options)**SUFFIXES**

___ -CL	Cylinder Lock
___ -PB	Polished Bronze Face
___ -RK	Hydrant Parts Repair Kit
___ -RT12	Ceramic Cartridge Removal Tool (Up to 12 [305] Wall)
___ -RT24	Ceramic Cartridge Removal Tool (Up to 24 [610] Wall)
___ -RT36	Ceramic Cartridge Removal Tool (Up to 36 [915] Wall)
___ -WC	Wall Clamp
___ -34EL	3/4 [19] IP 90° Solder Inlet Elbow
___ -34FIP	3/4 [19] IP Straight Female Inlet Adapter

PARTS LIST

Item	Name	Quan.
14	Cartridge	1
13	Operating Tube	1
9	Operating Coupling	1
8	'O' Ring	1
7	'O' Ring	2
6	Retaining Washer	1

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. B	DATE: 03/26/07	C.N. NO. 89845
DWG. NO. 65227	PRODUCT NO. Z1320	



Z1330

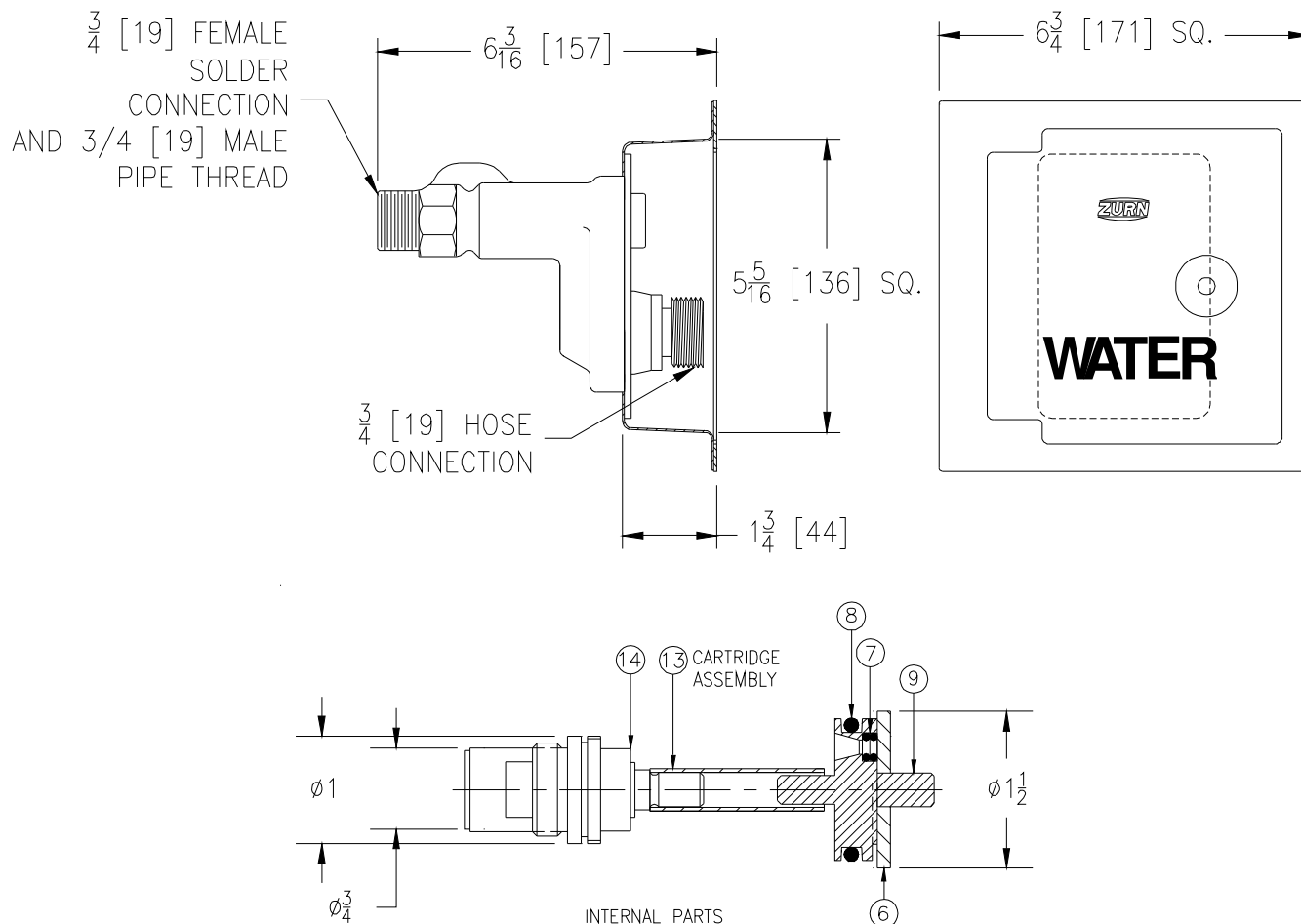
ECOLOTROL CERAMIC DISC WALL HYDRANT

Encased, Anti-Siphon, Automatic Draining,
Moderate Climate

SPECIFICATION SHEET

TAG _____
WHB Interior Washdown

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Wall Thickness In Inches	Approx. Wt. Lbs. [kg]
8 [203]	4 [2]

ENGINEERING SPECIFICATION: ZURN Z1330 Encased Ecolotrol "anti-siphon" wall hydrant, for moderate climate and interior wall installation. Complete with integral backflow preventer, all bronze interior parts with 1/2 turn ceramic disc cartridge and combination 3/4 [19] female solder and 3/4 [19] male pipe thread inlet. Stainless steel box and hinged cover with operating key lock and "WATER" stamped on cover.

OPTIONS (Check/specify appropriate options)

SUFFIXES

___ -CL	Cylinder Lock
___ -NB	Polished Nickel Bronze Face
___ -PB	Polished Bronze Face
___ -RK	Hydrant Parts Repair Kit
___ -RT12	Ceramic Cartridge Removal Tool (Up to 12 [305] Wall)
___ -34EL	3/4 [19] IP 90° Solder Inlet Elbow
___ -34FIP	3/4 [19] IP Straight Female Inlet Adapter

PARTS LIST

Item	Name	Quan.
14	Cartridge	1
13	Operating Tube	1
9	Operating Coupling	1
8	O-Ring	1
7	O-Ring	2
6	Retaining Washer	1

REV. F DATE: 10/22/10 C.N. NO. 111940

DWG. NO. 58874 PRODUCT NO. Z1330

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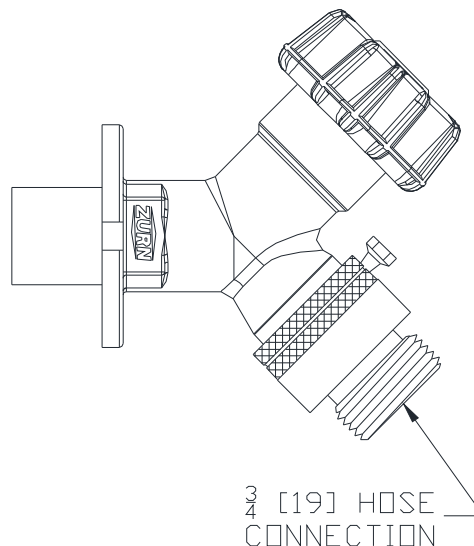
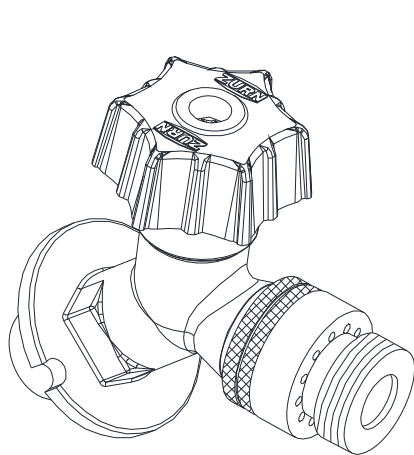


Z1341 Wall Faucet

SPECIFICATION SHEET

TAG **HB - INTERIOR
HOSE BIBB**

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



Inlet Connection	Inlet Description in Inches	Approx. Wt. Lbs. [kg]
___ -C12	1/2 [13] Solder x 3/4 [19] Solder	2 [1]
___ -C12-PX	1/2 [13] PEX	2 [1]
___ -CP12	1/2 [13] Solder x 1/2 [13] MPT	2 [1]
___ -P12	1/2 [13] FPT	2 [1]
___ -P34	3/4 [19] FPT	2 [1]

ENGINEERING SPECIFICATION: Z1341

Exposed, anti-siphon, wall faucet for use in moderate climate installation, complete with Z1399-VB external vacuum breaker, all bronze interior components, vandal-resistant operating stem, rough bronze exterior and 3/4 [19] male hose connection (Conform to ASME B1.20.7). Furnished with choice of five different inlet connections. Provided with optional loose key handle.

OPTIONS (Check/specify appropriate options)**SUFFIXES**

___ -LF	Less Flange (-C12 and -CP12 only)
___ -PB	Polished Bronze Finish
___ -PC	Polished Chrome Finish
___ -RC	Rough Chrome Finish
___ -RK	Hydrant Parts Repair Kit



1011
(Hose Connection Vacuum Breaker)

* Regularly furnished unless otherwise specified.

Zurn Industries, LLC | Specification Drainage Operation
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www.zurn.com

Rev. F
Date: 10/22/13
C.N. No. 130143
Prod. | Dwg. No. Z1341

Application

Ideal for use where Lead-Free* valves are required. Designed for installation on potable water lines to protect against both backsiphonage and backpressure of polluted water into the water supply. Assembly shall provide protection where a potential health hazard does not exist.

Standards Compliance (Horizontal & Vertical)

- ASSE® Listed 1015
 - IAPMO® Listed
 - CSA® Certified B64.5
 - AWWA Compliant C510
 - Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
 - UL® Classified (less shut-off valves only)
 - C-UL® Classified (less shut-off valves only)
 - Certified to NSF/ANSI 372* by IAPMO R&T
 - NSF® Listed-Standard 61 & 372*
- *(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

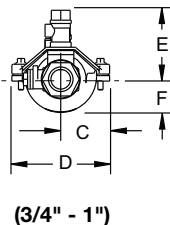
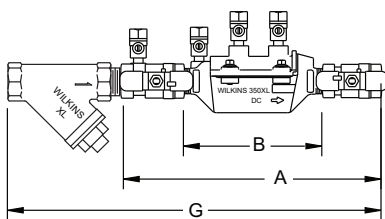
Materials

Main valve body	Cast Bronze, ASTM B 584 (3/4-1")
Housing	Reinforced Nylon
Fasteners	Stainless Steel, 300 Series
Elastomers	Silicone (FDA Approved)
	Buna Nitrile (FDA Approved)
Internals	Delrin, NSF Listed
Springs	Stainless Steel, 300 series
Ball Valves	Cast Bronze, ASTM B 584
Struts	Stainless Steel, 300 Series
Handles	Stainless Steel, 200 Series

Features

Sizes: 3/4", 1", 1-1/4", 1-1/2", 2"

Maximum working water pressure	175 PSI
Maximum working water temperature	180°F
Hydrostatic test pressure	350 PSI
End connections Threaded	ANSI B1.20.1



Options

(Suffixes can be combined)

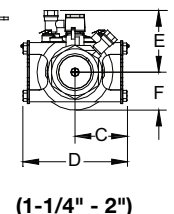
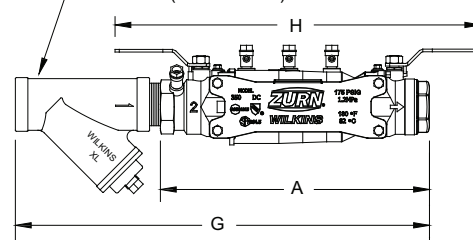
- ☐ - with full port QT ball valves (standard)
- ☐ L - less ball valves, male pipe thread
- ☐ S - with Model SXL lead-free bronze "Y" type strainer
- ☐ FT - with integral male 45° flare SAE test fitting
- ☐ BOF - with blow out / flush fitting
- ☐ PF - with Z-Bite™ push fit connections* (1/2"-1" only)
- ☐ PR - with Z-Press™ press fit connections*

*Fittings ship in box with valve and must be threaded into valve by hand on site.

Accessories

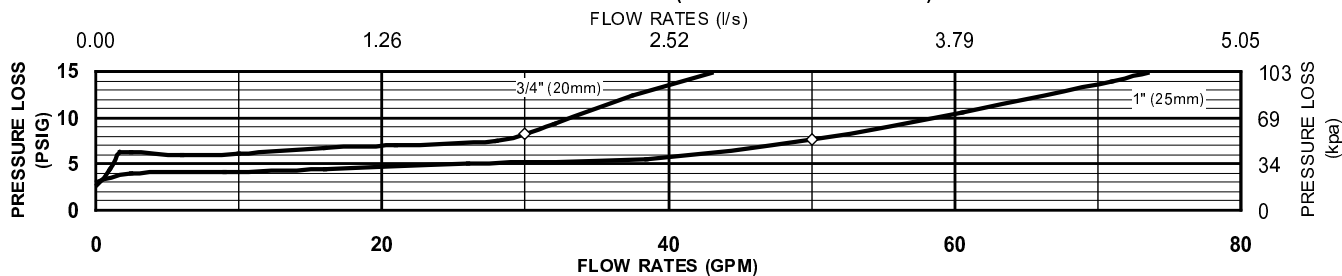
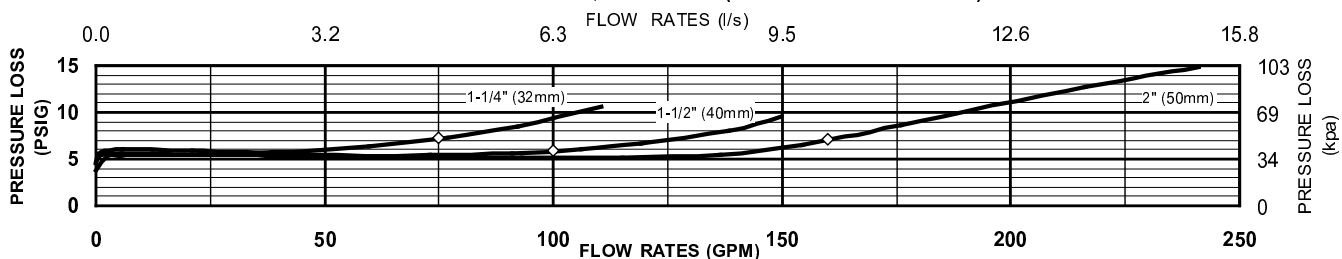
- ☐ Repair kit
- ☐ Thermal expansion tank (Model XT)
- ☐ QT-SET Quick Test Fitting Set
- ☐ Winterizing Blow out/Flush fitting (RK34-350BOF, RK1-350BOF or RK114-350-375BOF)

OPTIONAL LEAD-FREE STRAINER (MODEL SXL)



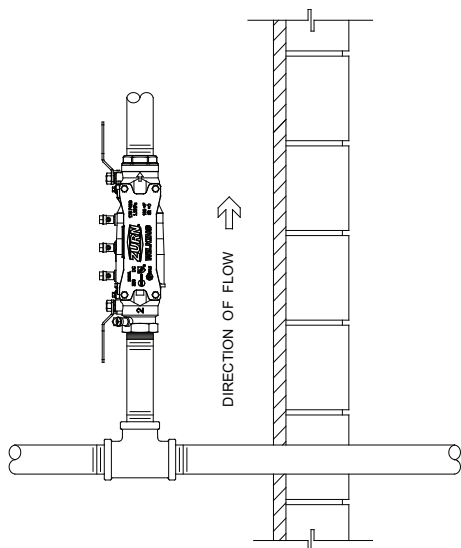
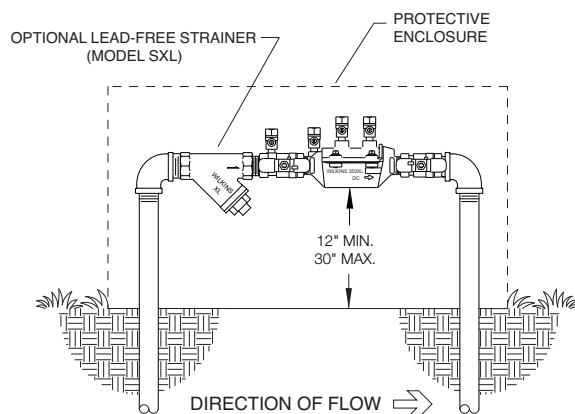
Dimensions & Weights (do not include pkg.)

MODEL 350XL SIZE	DIMENSIONS (approximate)																WEIGHT			
	A		B LESS BALL VALVES		C		D		E		F		G		H		LESS BALL VALVES		WITH BALL VALVES	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
3/4	20	11	279	6 5/8	168	1 7/8	48	3 3/4	95	3	76	1 1/4	32	15 1/8	384	11 7/16	2.3	1.0	4.3	2.0
1	25	12 1/4	311	7	178	2 1/16	52	4 1/8	105	3 1/4	83	1 3/4	45	17	431	12 5/16	3.0	1.4	6.0	2.7
1-1/4	32	14 7/8	378	14 3/8	367	3 1/8	80	6 1/4	159	3 3/4	95	2 1/4	57	20 1/2	521	18 1/2	17.2	7.8	19	8.6
1-1/2	40	15 1/4	387	14 3/8	367	3 1/8	80	6 1/4	159	3 3/4	95	2 1/4	57	22	559	20 1/4	17	7.7	20	9.1
2	50	16	406	14 3/8	367	3 1/8	80	6 1/4	159	3 3/4	95	2 1/4	57	24	609	20 3/4	18	8.2	22	10

MODEL 350XL 3/4" & 1" (STANDARD & METRIC)**MODEL 350XL 1-1/4", 1-1/2" & 2" (STANDARD & METRIC)****Typical Installation**

Local codes shall govern installation requirements. To be installed in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. If installed below grade, be certain adequate drainage is provided to prevent the device from being submerged.

Capacity thru Schedule 40 Pipe				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
1/2"	5	7	9	14
3/4"	8	12	17	25
1"	13	20	27	40
1 1/4"	23	35	47	70
1 1/2"	32	48	63	95
2"	52	78	105	167

**INDOOR INSTALLATION****OUTDOOR INSTALLATION****Specifications**

The Double Check Valve Backflow Preventer shall be certified to NSF/ANSI 61 & 372, shall be ASSE® Listed 1015, rated to 180°F, and supplied with full port ball valves. The main body shall be low lead Bronze for sizes 3/4" & 1", and Nylon for sizes 1-1/4" to 2". The housing shall be reinforced Nylon and the seat disc elastomers shall be silicone (FDA Approved). The first and second checks shall be accessible for maintenance without removing the device from the line. The Double Check Valve Backflow Preventer shall be a ZURN WILKINS Model 350XL.

Application

Ideal for use where Lead-Free* valves are required. Designed for installation on potable water lines to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. Assembly shall provide protection where a potential health hazard exists.

Standards Compliance

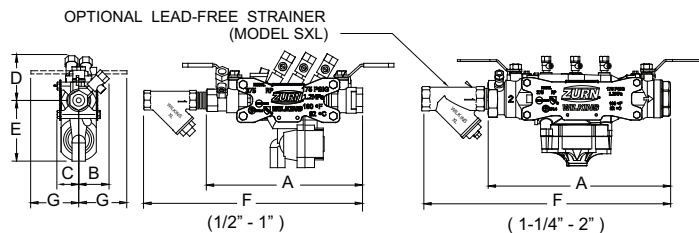
- ASSE® Listed 1013
- IAPMO® Listed
- CSA® Certified B64.4
- AWWA compliant C511
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- UL® Classified (less shut-off valves only, 3/4"-2")
- C-UL® Classified (less shut-off valves only, 3/4"-2")
- NSF® Listed - Standard 61 & 372*
- Certified to NSF/ANSI 372* by IAPMO R&T

Materials

Housing	Reinforced Nylon, FDA approved
Fasteners	Stainless Steel, 300 Series
Elastomers	Silicone (FDA Approved)
	Buna Nitrile (FDA Approved)
Internals	Delrin, Nylon, NSF Listed
Springs	Stainless Steel, 300 series
Ball Valves	Cast Bronze, ASTM B 584
Struts	Stainless Steel, 300 Series

Features

Sizes:	1/2", 3/4", 1", 1-1/4", 1-1/2", 2"
Maximum working water pressure	175 PSI
Maximum working water temperature	180°F
Hydrostatic test pressure	350 PSI
End connections	Threaded FNPT
	ANSI B1.20.1



Options

(Suffixes can be combined)

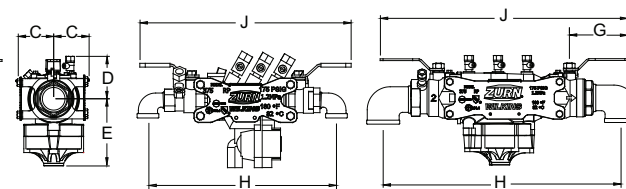
- ☐ - with full port QT ball valves (standard)
- ☐ L - less ball valves, male pipe thread
- ☐ S - with Model SXL lead-free bronze "Y" type strainer
- ☐ FT - with integral male 45° flare SAE test fitting
- ☐ AG - with air gap
- ☐ SAG - with Model SXL lead-free bronze "Y" strainer and air gap
- ☐ BOF - with Blow out/Flush fitting
- ☐ B - with black fusion epoxy coated ball valves & struts for theft protection
- ☐ PF - with Z-Bite™ push fit connections* (1/2" -1" only)
- ☐ PR - with Z-Press™ press fit connections*

*Fittings ship in box with valve and must be threaded into valve by hand on site.

Accessories

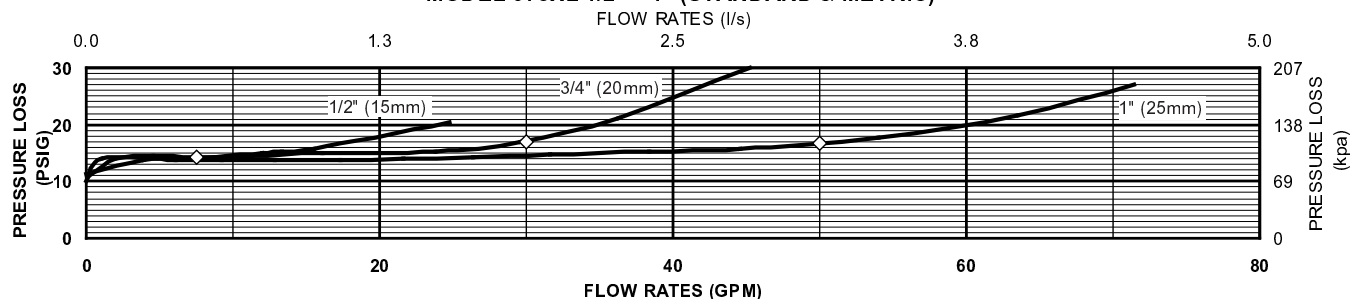
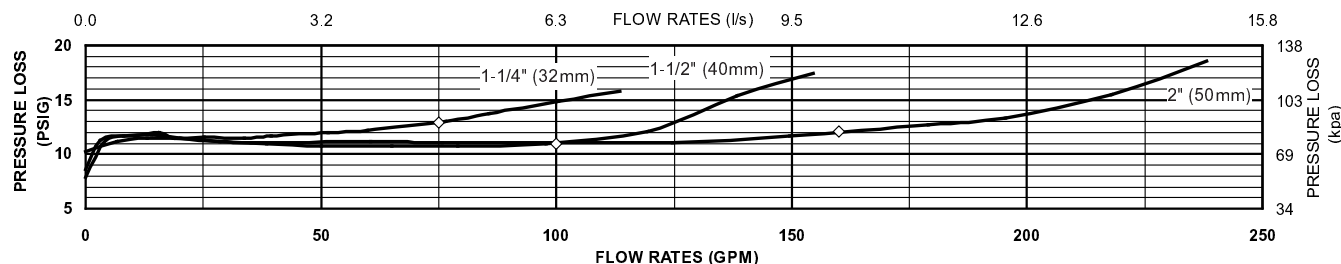
- ☐ Repair kits
- ☐ Thermal expansion tank (Mdl. XT)
- ☐ Soft seated check valve (Mdl. 40XL2)
- ☐ Shock arrester (Model 1250XL)
- ☐ QT-SET Quick Test Fitting Set
- ☐ Blow out / Flush fitting (RK34-375BOF (1/2" or 3/4"), RK1-375BOF or RK114-350-375BOF)

MODELS 375XLSE



Dimensions & Weights (do not include pkg.)

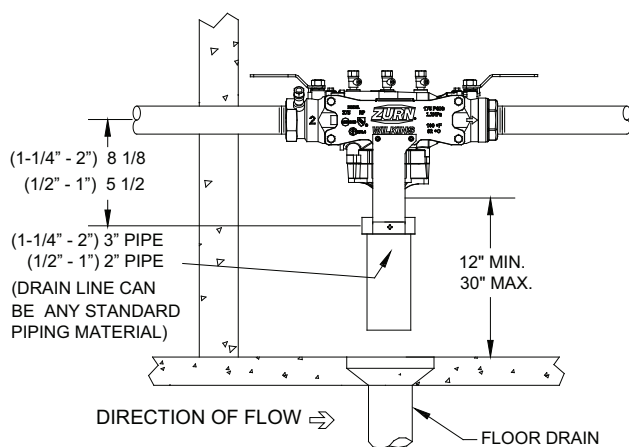
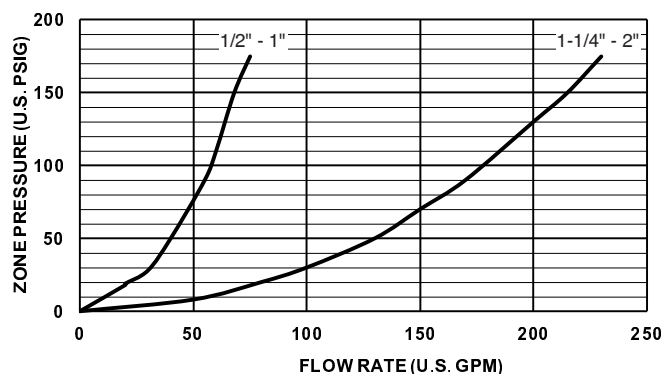
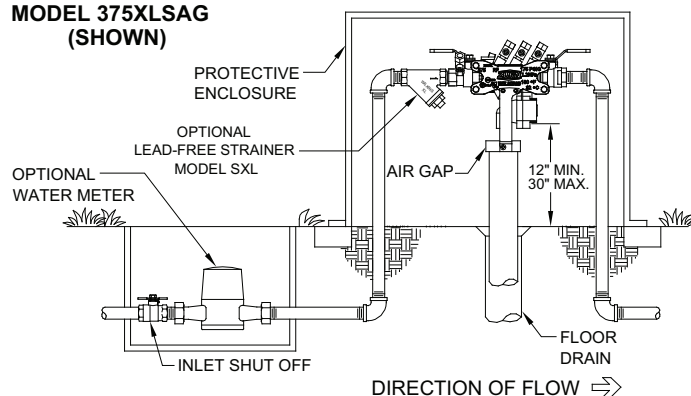
MODEL 375XL SIZE	DIMENSIONS (approximate)																		WEIGHT						
	A		A LESS BALL VALVES		B		C		D		E		F		G		H		J		LESS BALL VALVES		WITH BALL VALVES		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg	
1/2	20	8 7/8	225	n/a	n/a	1 15/16	49	1 3/8	35	2 15/16	75	3 7/8	98	12 1/4	311	3	76	10 7/8	276	12 1/4	311	4.7	2.1	5.7	2.6
3/4	20	8 7/8	225	7 1/8	181	1 15/16	49	1 3/8	35	2 15/16	75	3 7/8	98	12 5/8	321	3	76	11	279	12 1/4	311	4.7	2.1	5.7	2.6
1	25	11 3/16	284	8 7/8	225	2 1/4	57	1 13/16	46	3 7/16	87	4	102	14 9/16	370	4	102	13 3/4	349	15 1/4	387	8.2	3.7	9.7	4.4
1-1/4	32	14 7/8	378	14 3/8	367	3 3/8	86	3 1/8	80	3 3/4	95	5 3/4	146	20 1/2	521	3 3/4	95	18	457	18 1/2	470	18.7	8.5	20.5	9.3
1-1/2	40	15 1/4	387	14 3/8	367	3 3/8	86	3 1/8	80	3 3/4	95	5 3/4	146	22	559	4 1/2	114	18 3/4	476	20 1/4	514	18.3	8.0	21.5	9.8
2	50	16	406	14 3/8	367	3 3/8	86	3 1/8	80	3 3/4	95	5 3/4	146	24	610	4 3/4	120.7	20 3/4	527	20 3/4	527	19.4	8.8	23.5	10.7

MODEL 375XL 1/2" - 1" (STANDARD & METRIC)**MODEL 375XL 1-1/4" - 2" (STANDARD & METRIC)****Typical Installation**

Local codes shall govern installation requirements. To be installed in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Relief Valve Discharge Rates

(Worst case condition - If 1st check or relief valve is lodged wide open)

**INDOOR INSTALLATION****MODEL 375XLSAG (SHOWN)****OUTDOOR INSTALLATION****Specifications**

The Reduced Pressure Principle Backflow Preventer shall be certified to NSF/ANSI 372, ASSE® Listed 1013, rated to 180°F, and supplied with full port ball valves. The main body shall be Nylon and the seat disc elastomers shall be silicone. If installed indoors, the installation shall be supplied with an air gap adapter. The Reduced Pressure Principle Backflow Preventer shall be a ZURN WILKINS Model 375XL.

Application

Designed for installation on potable water lines to protect against both backsiphonage and backpressure of polluted water into the potable water supply. The Model 350AST shall provide protection where a potential health hazard does not exist. Ideal for use where Lead-Free* valves are required.

Standard Compliance (Horizontal and Vertical)

- ASSE® Listed 1015
 - AWWA Compliant C510 (with gates only), and C550
 - UL® Classified
 - C-UL® Classified
 - FM® Approved
 - CSA® Certified
 - IAPMO® Listed
 - Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
 - NSF® Listed-Standard 61, Annex G*
 - Certified to NSF/ANSI 372* by IAPMO R&T
- *(0.25% max. weighted average lead content)

Materials

Main valve body	304L Stainless steel
Access covers	304L Stainless steel
Internals	Stainless steel, 300 Series
	NORYL™, NSF Listed
Fasteners and springs	Stainless Steel, 300 Series
Seal ring	EPDM (FDA approved)
O-ring	Buna Nitrile (FDA approved)

Features

Sizes: 2 1/2", 3", 4", 6", 8", 10"	
Maximum working water pressure	175 PSI
Maximum working water temperature	140°F
Hydrostatic test pressure	350 PSI
End connections	
(Grooved for steel pipe)	AWWA C606
(Flanged)	ANSI B16.1 Class 125

MODEL 350AST SIZE		WEIGHT													
		WITHOUT GATES		WITH NRS GATES (GXF)		WITH OS&Y GATES (GXF)		WITH NRS GATES (GXG)		WITH OS&Y GATES (GXG)		WITH BUTTERFLY VALVES (GXG)		WITH BUTTERFLY VALVES (GXF)	
in.	mm	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
2 1/2	65	33	15	94	43	112	51	86	39	104	47	79	36	89	40
3	80	34	15.4	112	51	130	60	102	46	120	54	83	38	96	44
4	100	35	15.8	168	76	204	93	142	64	184	83	87	39	109	50
6	150	63	29	280	127	338	153	250	114	308	140	150	68	180	82
8	200	177	80	565	256	647	293	525	238	593	269	347	112	393	178
10	250	177	80	769	349	865	392	717	325	807	366	443	200	501	227

MODEL 350AST SIZE		DIMENSION (approximate)																					
		A		A WITH BUTTERFLY		B LESS GATE VALVES		C		D		E NRS GATE		E OS&Y OPEN		E OS&Y CLOSED		E WITH BUTTERFLY VALVES		F		G	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
2 1/2	65	31 7/8	810	28 3/4	730	16 5/8	422	4 1/2	114	7 1/4	184	11 1/2	292	17 3/4	451	15 3/8	391	8 1/4	210	5	127	42	1067
3	80	32 7/8	835	29 3/8	746	16 5/8	422	4 1/2	114	7 1/4	184	12 3/4	324	20 1/4	514	17	432	8 1/4	210	5	127	43 1/2	1105
4	100	34 7/8	886	30 1/4	768	16 5/8	422	4 1/2	114	8	203	14 1/2	368	22 1/2	572	18 1/4	464	9	229	5	127	50	1270
6	150	43 1/2	1105	36 1/2	927	22 1/4	565	5 1/2	140	10	254	18	457	30 1/2	775	24 1/4	616	10 1/4	260	6	152	61 5/8	1565
8	200	52 3/4	1340	45 3/4	1162	29 1/2	749	9 1/4	235	11	279	21 1/8	537	37	940	28 1/2	724	18 1/2	470	8 3/8	213	77 1/8	1959
10	250	55 3/4	1416	49 3/4	1264	29 1/2	749	9 1/4	235	12	305	24 3/4	629	45 5/8	1159	34 3/4	883	18 1/2	470	8 3/8	213	85 3/8	2169



(SHOWN WITH OPTIONAL OSY GATE VALVES)



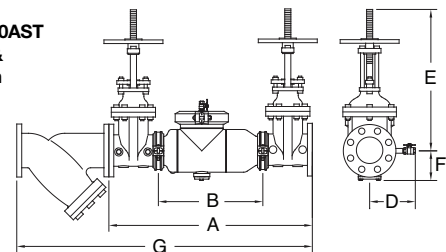
Options (Suffixes can be combined)

- ☐ - with flanged end NRS gate valves (standard)
- ☐ FSC - with epoxy coated wye type strainer (flanged only)
- ☐ G - with grooved end NRS gate valves
- ☐ GF - with grooved inlet gate connection and flanged outlet gate connection
- ☐ FG - with flanged inlet gate connection and grooved outlet gate connection
- ☐ OSY - flanged end OS&Y gate valves
- ☐ OSYG - with grooved end OS&Y gate valves
- ☐ PI - with Post Indicator Gate Valves
- ☐ BG - with grooved end butterfly valves with integral supervisory switches
- ☐ BF - with flanged end butterfly valves with integral supervisory switches

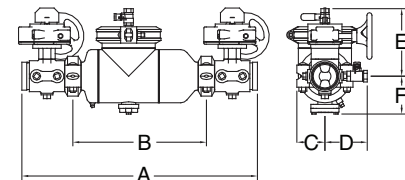
Accessories

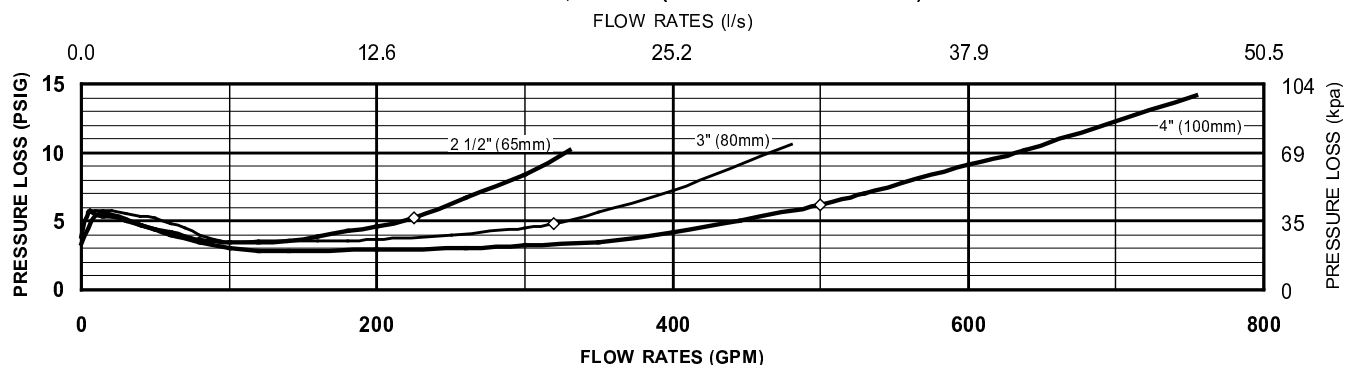
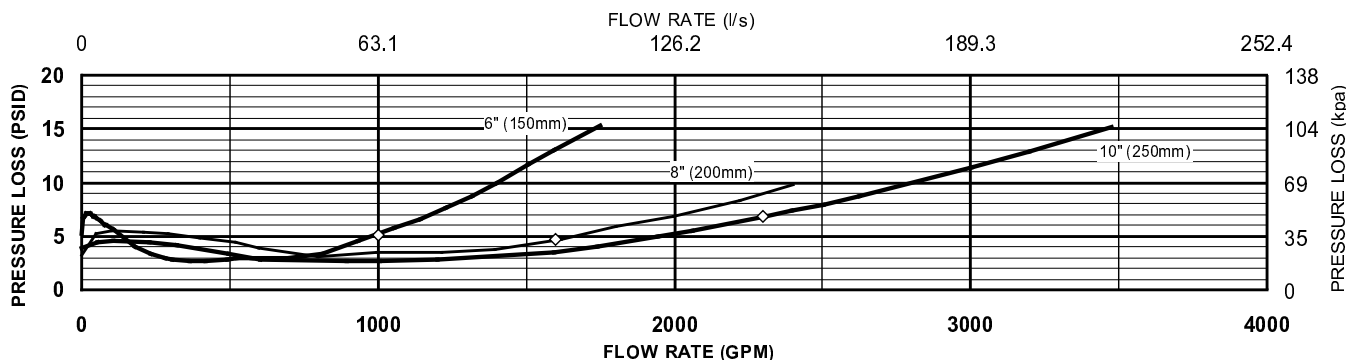
- ☐ Repair kit (rubber only)
- ☐ Thermal expansion tank (Model XT)
- ☐ OS & Y Gate valve tamper switch (OSY-40)

MODEL 350AST with OSY & FSC option



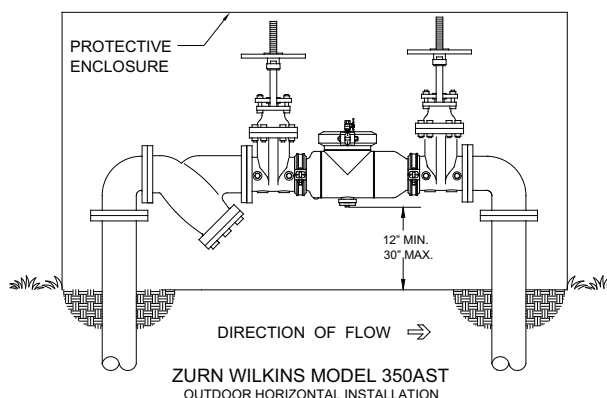
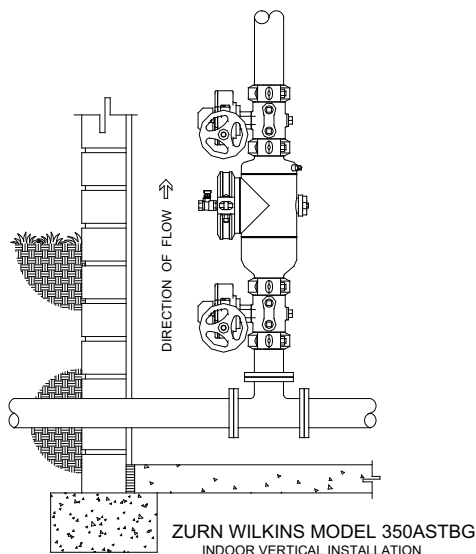
MODEL 350AST with BG option



MODEL 350AST 2 1/2", 3" & 4" (STANDARD & METRIC)**MODEL 350AST 6", 8" & 10" (STANDARDS AND METRIC)****Typical Installation**

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Capacity thru Schedule 40 Pipe (GPM)				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
2 1/2"	75	112	149	224
3"	115	173	230	346
4"	198	298	397	595
6"	450	675	900	1351
8"	780	1169	1559	2339
10"	1229	1843	2458	3687
12"	1763	2644	3525	5288

**Specifications**

The Double Check Backflow Prevention Assembly shall be certified to NSF/ANSI 372, ASSE® Listed 1015, and supplied with full port gate valves. The main body and access cover shall be 304L Stainless Steel, the seat ring and check valve shall be NORYL™, the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The checks shall be accessible for maintenance without removing the device from the line. The Double Check Backflow Prevention Assembly shall be a ZURN WILKINS Model 350AST.