

*Quality People. Building Solutions.*

Comfort Systems USA (Arkansas), Inc.  
P.O. Box 16620  
Little Rock, AR 72231  
Phone 501-834-3320  
Fax 501-834-5416

**Date:** 2/21/2024

**Return Request:** 3/28/2024

**Project:** Little Rock West High School

**Supplier:** Sanders Supply

**Manufacturer:** Various

**Submittal:** Plumbing (Sanitary Waste Piping Specialties)

**Submittal Number:**

**Drawing # and Installation:** Plumbing Drawings

**ARCHITECT**

Lewis Architects Engineers  
11225 Huron Lane, Suite 104  
Little Rock, AR 72211  
501-223-9302

**ENGINEER**

Lewis Architects Engineers  
11225 Huron Lane, Suite 104  
Little Rock, AR 72211  
501-223-9302

**GENERAL CONTRACTOR**

Baldwin & Shell  
1000 W. Capitol Ave.  
Little Rock, AR 72201  
501-374-8677

**MECHANICAL SUBCONTRACTOR**

Comfort Systems USA (Arkansas), Inc.  
9924 Landers Rd.  
N. Little Rock, AR 72117  
501-834-3320

Notes:

--

[chowell@comfortar.com](mailto:chowell@comfortar.com)

9924 Landers Rd.  
No. Little Rock, AR 72117

**PT-1**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **PT-1**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### SI-742

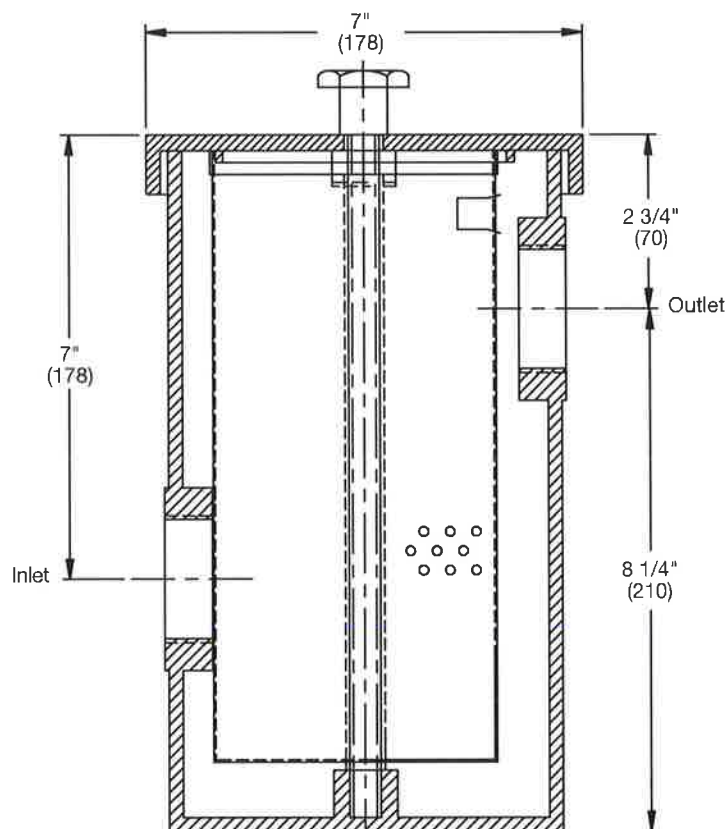
### Hair, Plaster & Sediment Interceptor

#### Specification

Watts SI-742 floor mounted epoxy coated cast aluminum sediment interceptor with removable stainless steel sediment basket, gasketed cover, and 2"(51) IPS threaded connections.

**Note:** 10"(254) clearance required above cover to remove sediment basket.

Options (Select One or More)		
Suffix	Description	
-SS	Stainless Steel	<input type="checkbox"/>



#### NOTICE

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**FD-1**

## Engineering Specification

Job Name LR West HS  
 Job Location LR  
 Engineer Ragsdale  
 Approval \_\_\_\_\_  
 Tag FD-1

Contractor Comfort Systems USA  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative Sanders Supply

# FD-100-A

## Floor Drain with Round Strainer

### Specification

Watts FD-100-A epoxy coated cast iron floor drain with anchor flange, reversible clamping collar with primary and secondary weepholes, adjustable round heel proof nickel bronze strainer, and no hub (standard) outlet.



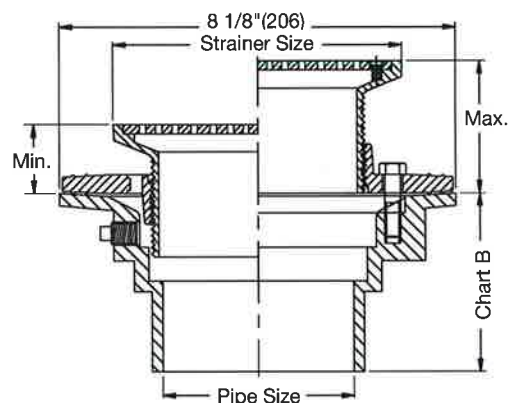
Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
6	6"(152) Pipe Size (NH Only)	<input type="checkbox"/>

Outlet Type		
Suffix	Description	
NH	No Hub (M.I.)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
T	Threaded Outlet	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Strainer		
Suffix	Description	
A5	5"(127) Dia., Nickel Bronze	<input type="checkbox"/>
A6	6"(127) Dia., Nickel Bronze	<input checked="" type="checkbox"/>
A7	7"(178) Dia., Nickel Bronze	<input type="checkbox"/>
A8	8"(203) Dia., Nickel Bronze	<input type="checkbox"/>
A10	10"(254) Dia., Nickel Bronze	<input type="checkbox"/>

Options		
Suffix	Description	
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-7	Trap Primer Tapping	<input checked="" type="checkbox"/>
-8	Backwater Valve (2, 3, 4 Only)	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>
-15	Strainer Extension (DD-50)	<input type="checkbox"/>
-F4-50	4" Round Cast Iron Funnel	<input type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-50	4x9" Oval Cast Iron Funnel	<input type="checkbox"/>
-G-1	4x9" Oval Nickel Bronze Funnel	<input type="checkbox"/>
-S0	Side Outlet	<input type="checkbox"/>

Optional Body Material		
Suffix	Description	
-60	PVC Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>
-61	ABS Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>



Strainer Size				
Str. Dia.	Min.	Max.	Load Rating	Free Area Sq. In.
5"(127)	13/16"(21)	3 1/4"(83)	*MD	8
6"(152)	7/8"(22)	3 3/8"(86)	*MD	9
7"(178)	1 1/16"(17)	3 1/4"(83)	*MD	12
8"(203)	7/8"(22)	3 1/4"(83)	*MD	18
10"(254)	1 1/4"(32)	3 1/4"(83)	*MD	28

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Chart B					
Pipe Size	Std. No Hub	P Push On	T Female Thread	X Inside Caulk	60/61 PVC/ABS
2"(52)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
3"(76)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
4"(102)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
6"(152)	3 1/2"(89)				



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**FD-2**

## Engineering Specification

Job Name LR West HS  
 Job Location LR  
 Engineer Ragsdale  
 Approval \_\_\_\_\_  
 Tag FD-2

Contractor Comfort Systems USA  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative Sanders Supply

### FD-100-A

### Floor Drain with Round Strainer

#### Specification

Watts FD-100-A epoxy coated cast iron floor drain with anchor flange, reversible clamping collar with primary and secondary weepholes, adjustable round heel proof nickel bronze strainer, and no hub (standard) outlet.



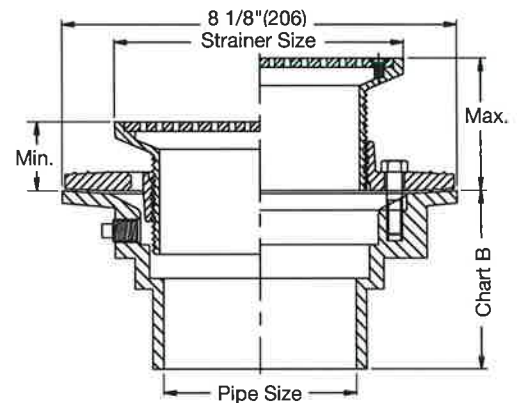
Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
6	6"(152) Pipe Size (NH Only)	<input type="checkbox"/>

Outlet Type		
Suffix	Description	
NH	No Hub (M.I.)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
I	Threaded Outlet	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Strainer		
Suffix	Description	
A5	5"(127) Dia., Nickel Bronze	<input type="checkbox"/>
A6	6"(127) Dia., Nickel Bronze	<input checked="" type="checkbox"/>
A7	7"(178) Dia., Nickel Bronze	<input type="checkbox"/>
A8	8"(203) Dia., Nickel Bronze	<input type="checkbox"/>
A10	10"(254) Dia., Nickel Bronze	<input type="checkbox"/>

Options		
Suffix	Description	
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-7	Trap Primer Tapping	<input checked="" type="checkbox"/>
-8	Backwater Valve (2, 3, 4" Only)	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>
-15	Strainer Extension (DD-50)	<input type="checkbox"/>
-F4-50	4" Round Cast Iron Funnel	<input type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-50	4x9" Oval Cast Iron Funnel	<input type="checkbox"/>
-G-1	4x9" Oval Nickel Bronze Funnel	<input type="checkbox"/>
-S0	Side Outlet	<input type="checkbox"/>

Optional Body Material		
Suffix	Description	
-60	PVC Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>
-61	ABS Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>



Strainer Size				
Str. Dia.	Min.	Max.	Load Rating	Free Area Sq. In.
5"(127)	13/16"(21)	3 1/4"(83)	*MD	8
6"(152)	7/8"(22)	3 3/8"(86)	*MD	9
7"(178)	1 1/16"(17)	3 1/4"(83)	*MD	12
8"(203)	7/8"(22)	3 1/4"(83)	*MD	18
10"(254)	1 1/4"(32)	3 1/4"(83)	*MD	28

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Chart B					
Pipe Size	Std. No Hub	P Push On	T Female Thread	X Inside Caulk	60/61 PVC/ABS
2"(52)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
3"(76)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
4"(102)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
6"(152)	3 1/2"(89)				



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Location: FD-2

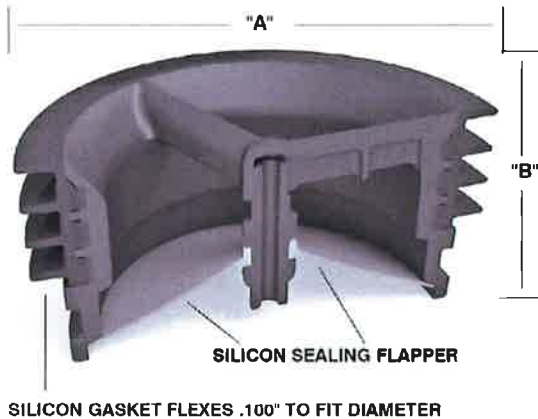


**MI-GARD®**

**FLOOR DRAIN TRAP SEAL**

**Specification:** MIFAB® MI-GARD® Series inline floor drain trap seal with UV resistant ABS plastic frame, silicon rubber sealing flapper and four flexible sealing ribs. Tested and certified to the ASSE 1072 Standard and listed with IAPMO and I.P.C. Specify connection size (1 1/2", 2", 3", 3 1/2", 4" or 6"). 10 year warranty is included.

**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®'s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



**BOTTOM OF BODY**



**TOP OF STRAINER**

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD

Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_



**FD-3**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **FD-3**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

# FD-100-ER

## Floor Drain with Extended Rim Strainer

### Specification

Watts FD-100-ER epoxy coated cast iron floor drain with anchor flange, reversible clamping collar with primary & secondary weepholes, adjustable round nickel bronze extended rim strainer, and no hub (standard) outlet.

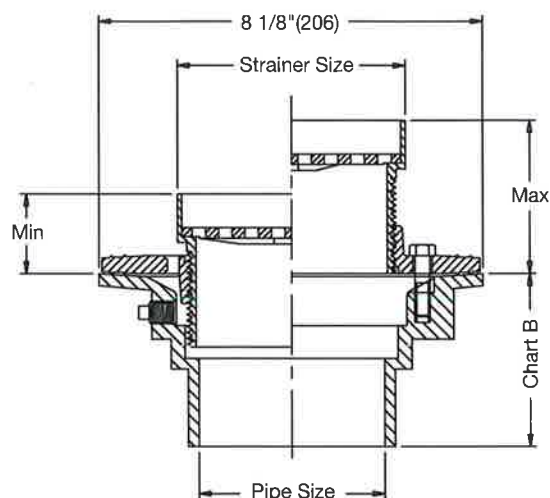
Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
6	6"(152) Pipe Size No Hub Only	<input type="checkbox"/>



Outlet Type		
Suffix	Description	
NH	No Hub (M.I.)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
T	Threaded Outlet	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Options		
Suffix	Description	
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-7	Trap Primer Tapping	<input checked="" type="checkbox"/>
-8	Backwater Valve (2, 3, 4" Only)	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>
-15	Strainer Extension (DD-50)	<input type="checkbox"/>
-S0	Side Outlet	<input type="checkbox"/>

Optional Body Material		
Suffix	Description	
-60	PVC Body w/Socket Outlet	<input type="checkbox"/>
-61	ABS Body w/Socket Outlet	<input type="checkbox"/>



### Strainer Size

Str.	Load		Free Area	
Dia.	Min.	Max.	Rating	Sq. In.
5"(127)	1 1/2"(38)	4"(102)	NA	7
7"(178)	2 1/2"(64)	4"(102)	NA	13
9"(229)	2 1/2"(64)	4"(102)	NA	22

### Chart B

Pipe Size	Std. No Hub	P Push On	T Female Thread	X Inside Caulk	60/61 PVC/ABS
2"(51)	3-5/8"(92)	4-1/4"(108)	4-1/4"(108)	4-1/2"(114)	4"(102)
3"(76)	3-5/8"(92)	4-1/4"(108)	4-1/4"(108)	4-1/2"(114)	4"(102)
4"(102)	3-5/8"(92)	4-1/4"(108)	4-1/4"(108)	4-1/2"(114)	4"(102)
6"(152)	3-1/2"(89)				

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Location: FD-3

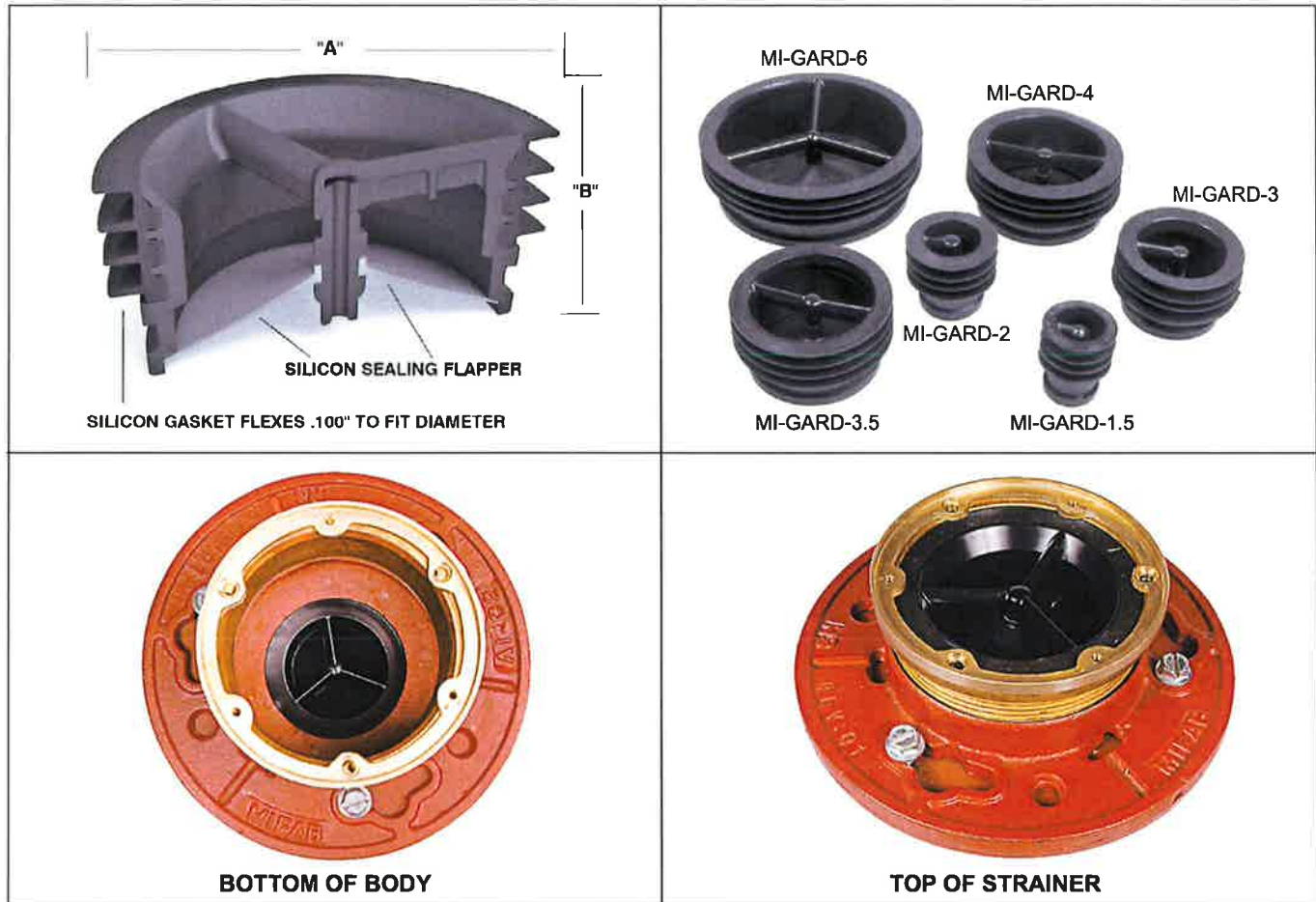


**MI-GARD®**

**FLOOR DRAIN TRAP SEAL**

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**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®'s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD

Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS Page No: \_\_\_\_\_  
Section No: \_\_\_\_\_ Contractor: Comfort Systems USA  
Schedule No: \_\_\_\_\_ Purchase Order No: \_\_\_\_\_

**FD-4**

## Engineering Specification

Job Name LR West HS  
 Job Location LR  
 Engineer Ragsdale  
 Approval \_\_\_\_\_  
 Tag FD-4

Contractor Comfort Systems USA  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative Sanders Supply

### FD-100-A

### Floor Drain with Round Strainer

#### Specification

Watts FD-100-A epoxy coated cast iron floor drain with anchor flange, reversible clamping collar with primary and secondary weepholes, adjustable round heel proof nickel bronze strainer, and no hub (standard) outlet.



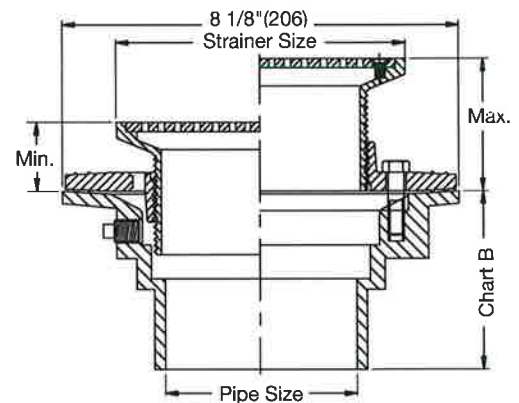
Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
6	6"(152) Pipe Size (NH Only)	<input type="checkbox"/>

Outlet Type		
Suffix	Description	
NH	No Hub (M.I.)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
I	Threaded Outlet	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Strainer		
Suffix	Description	
A5	5"(127) Dia., Nickel Bronze	<input type="checkbox"/>
A6	6"(127) Dia., Nickel Bronze	<input checked="" type="checkbox"/>
A7	7"(178) Dia., Nickel Bronze	<input type="checkbox"/>
A8	8"(203) Dia., Nickel Bronze	<input type="checkbox"/>
A10	10"(254) Dia., Nickel Bronze	<input type="checkbox"/>

Options		
Suffix	Description	
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-7	Trap Primer Tapping	<input checked="" type="checkbox"/>
-8	Backwater Valve (2, 3, 4" Only)	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>
-15	Strainer Extension (DD-50)	<input type="checkbox"/>
-F4-50	4" Round Cast Iron Funnel	<input type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-50	4x9" Oval Cast Iron Funnel	<input type="checkbox"/>
-G-1	4x9" Oval Nickel Bronze Funnel	<input type="checkbox"/>
-S0	Side Outlet	<input type="checkbox"/>

Optional Body Material		
Suffix	Description	
-60	PVC Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>
-61	ABS Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>



Strainer Size				
Str. Dia.	Min.	Max.	Load Rating	Free Area Sq. In.
5"(127)	13/16"(21)	3 1/4"(83)	*MD	8
6"(152)	7/8"(22)	3 3/8"(86)	*MD	9
7"(178)	1 1/16"(17)	3 1/4"(83)	*MD	12
8"(203)	7/8"(22)	3 1/4"(83)	*MD	18
10"(254)	1 1/4"(32)	3 1/4"(83)	*MD	28

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Chart B					
Pipe Size	Std. No Hub	P Push On	T Female Thread	X Inside Caulk	60/61 PVC/ABS
2"(52)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
3"(76)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
4"(102)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
6"(152)	3 1/2"(89)				



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 Latin America: T: (52) 55-4122-0138 • Watts.com



Location: FD-4

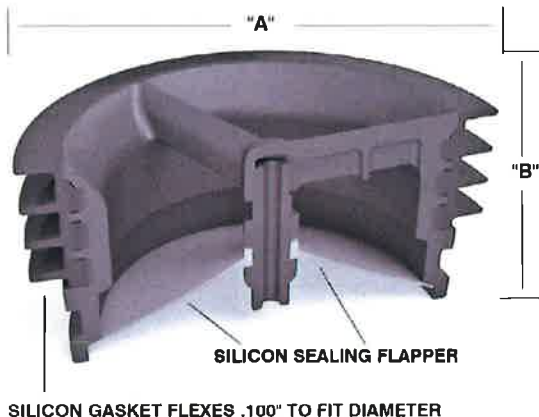


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**BOTTOM OF BODY**



**TOP OF STRAINER**

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

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- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

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MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_

**FD-5**



## Engineering Specification

Job Name LR West HS  
 Job Location LR  
 Engineer Ragsdale  
 Approval \_\_\_\_\_  
 Tag FD-5

Contractor Comfort Systems USA  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative Sanders Supply

### FD-100-A

### Floor Drain with Round Strainer

#### Specification

Watts FD-100-A epoxy coated cast iron floor drain with anchor flange, reversible clamping collar with primary and secondary weepholes, adjustable round heel proof nickel bronze strainer, and no hub (standard) outlet.



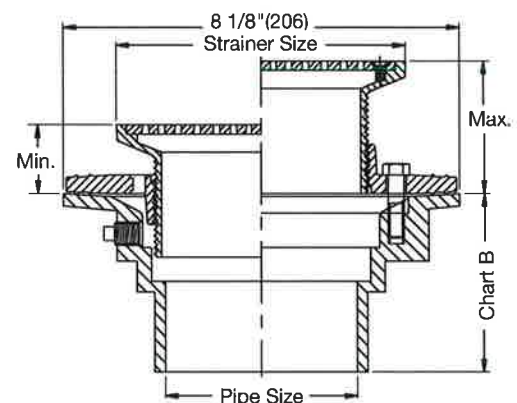
Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input checked="" type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
6	6"(152) Pipe Size (NH Only)	<input type="checkbox"/>

Outlet Type		
Suffix	Description	
NH	No Hub (M.I.)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
I	Threaded Outlet	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Strainer		
Suffix	Description	
A5	5"(127) Dia., Nickel Bronze	<input type="checkbox"/>
A6	6"(127) Dia., Nickel Bronze	<input checked="" type="checkbox"/>
A7	7"(178) Dia., Nickel Bronze	<input type="checkbox"/>
A8	8"(203) Dia., Nickel Bronze	<input type="checkbox"/>
A10	10"(254) Dia., Nickel Bronze	<input type="checkbox"/>

Options		
Suffix	Description	
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-7	Trap Primer Tapping	<input checked="" type="checkbox"/>
-8	Backwater Valve (2, 3, 4" Only)	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>
-15	Strainer Extension (DD-50)	<input type="checkbox"/>
-F4-50	4" Round Cast Iron Funnel	<input type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-50	4x9" Oval Cast Iron Funnel	<input type="checkbox"/>
-G-1	4x9" Oval Nickel Bronze Funnel	<input type="checkbox"/>
-S0	Side Outlet	<input type="checkbox"/>

Optional Body Material		
Suffix	Description	
-60	PVC Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>
-61	ABS Body w/Socket Outlet (2, 3, 4" Only)	<input type="checkbox"/>



Strainer Size				
Str. Dia.	Min.	Max.	Load Rating	Free Area Sq. In.
5"(127)	13/16"(21)	3 1/4"(83)	*MD	8
6"(152)	7/8"(22)	3 3/8"(86)	*MD	9
7"(178)	1 1/16"(17)	3 1/4"(83)	*MD	12
8"(203)	7/8"(22)	3 1/4"(83)	*MD	18
10"(254)	1 1/4"(32)	3 1/4"(83)	*MD	28

#### NOTICE

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Chart B					
Pipe Size	Std. No Hub	P Push On	T Female Thread	X Inside Caulk	60/61 PVC/ABS
2"(52)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
3"(76)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
4"(102)	3 5/8"(92)	4 1/4"(108)	4 1/4"(108)	4 1/2"(114)	4"(102)
6"(152)	3 1/2"(89)				



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Location: FD-5



**MI-GARD®**

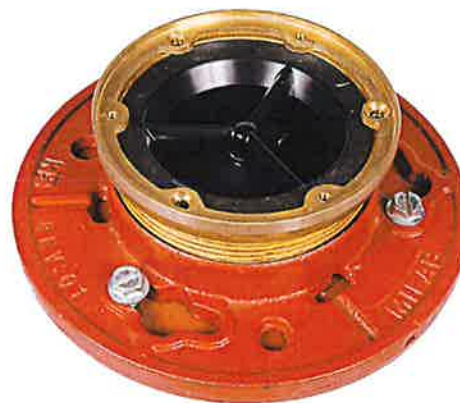
**FLOOR DRAIN TRAP SEAL**

**Specification:** MIFAB® MI-GARD® Series inline floor drain trap seal with UV resistant ABS plastic frame, silicon rubber sealing flapper and four flexible sealing ribs. Tested and certified to the ASSE 1072 Standard and listed with IAPMO and I.P.C. Specify connection size (1 1/2", 2", 3", 3 1/2", 4" or 6"). 10 year warranty is included.

**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



**BOTTOM OF BODY**



**TOP OF STRAINER**

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD

Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_

**AWFD-1**

## Engineering Specification

Job Name LR West HSContractor Signature Comfort Systems USAOrion Representative Sanders Supply

Approval Date \_\_\_\_\_

Quantity Required \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

### FD-1PR

### Floor Drain with Grate, Plug and Trap Primer Connection

#### Specification

Orion FD-1PR corrosion resistant floor drain manufactured from fire retardant polypropylene material conforming to ASTM D4101. 1/2" trap primer connection in lower body. Grate (load rated to 10,000 lbs.), plug, and cover manufactured from fiber-filled polypropylene for strength and durability.

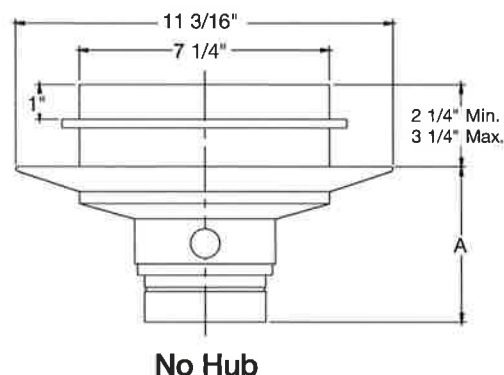
**Note:** Funnel replaces plug in FD-1PR grate.



#### No Hub Connection

	FRPP	Size (in.)	A
<input type="checkbox"/>	710154	2	4.40
<input checked="" type="checkbox"/>	710255	3	4.61
<input type="checkbox"/>	710359	4	4.66
<input type="checkbox"/>	710444	6	3.58

	EDP	Options
<input checked="" type="checkbox"/>	808098	Flashing Clamp
<input type="checkbox"/>	808096	Funnel 4"x 9"
<input type="checkbox"/>	808097	Sediment Bucket
<input type="checkbox"/>	808099	Solid Covers
<input type="checkbox"/>	902145	Vandal Proof



#### NOTICE

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.

Orion product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Orion Technical Service. Orion reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Orion products previously or subsequently sold.

# ORION®

**A WATTS Brand**

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**Latin America:** T: (52) 55-4122-0138 • OrionFittings.com

**FS-1**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **FS-1**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### FS-710

### 8" Square x 6" Deep Sanitary Floor Sink

#### Specification

Watts FS-710 8"(203) square x 6"(152) deep sanitary floor sink with white acid resistant porcelain enamel coated interior, loose set porcelain enamel coated cast iron grate, polypropylene dome bottom strainer, and no hub (standard) outlet.

Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>

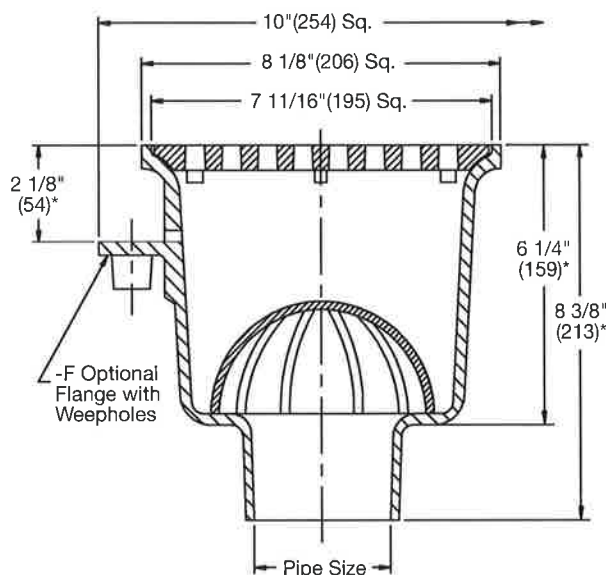
Outlet Type		
Suffix	Description	
NH	No Hub (MJ)	<input type="checkbox"/>
P	Push-On	<input checked="" type="checkbox"/>

Options		
Suffix	Description	
-F	Flange with Weepholes	<input checked="" type="checkbox"/>
-FC	Flange w/Weepholes & Flashing Clamp	<input type="checkbox"/>
-1	Nickel Bronze Top	<input checked="" type="checkbox"/>
-3	Stainless Steel Rim & Grate	<input type="checkbox"/>
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof (-1 Only)	<input type="checkbox"/>
-7	Trap Primer Tapping	<input type="checkbox"/>
-9	Hinged Grate (-1 Only)	<input checked="" type="checkbox"/>
-21	Secondary Strainer	<input type="checkbox"/>
-33	Less Grate	<input type="checkbox"/>
-150	1/2 Grate	<input type="checkbox"/>
-175	3/4 Grate	<input type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-1	4x9" Oval Nickel Bronze Funnel	<input type="checkbox"/>

Free Area Sq. In.	
Standard Grate	With -1/-3 Grate
16	19

Please refer to [watts.com](http://watts.com) for BAA information on specific models.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



\*Add 5/8"(16) for -1 Nickel Bronze Top or -3 Stainless Steel Top

#### NOTICE

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.



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Location: FS-1

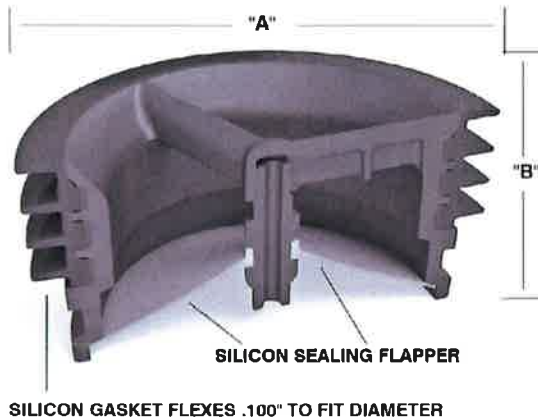


**MI-GARD®**

**FLOOR DRAIN TRAP SEAL**

**Specification:** MIFAB® MI-GARD® Series inline floor drain trap seal with UV resistant ABS plastic frame, silicon rubber sealing flapper and four flexible sealing ribs. Tested and certified to the ASSE 1072 Standard and listed with IAPMO and I.P.C. Specify connection size (1 1/2", 2", 3", 3 1/2", 4" or 6"). 10 year warranty is included.

**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



**BOTTOM OF BODY**



**TOP OF STRAINER**

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD

Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_



**FS-2**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **FS-2**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### FS-710

### 8" Square x 6" Deep Sanitary Floor Sink

#### Specification

Watts FS-710 8"(203) square x 6"(152) deep sanitary floor sink with white acid resistant porcelain enamel coated interior, loose set porcelain enamel coated cast iron grate, polypropylene dome bottom strainer, and no hub (standard) outlet.

Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>

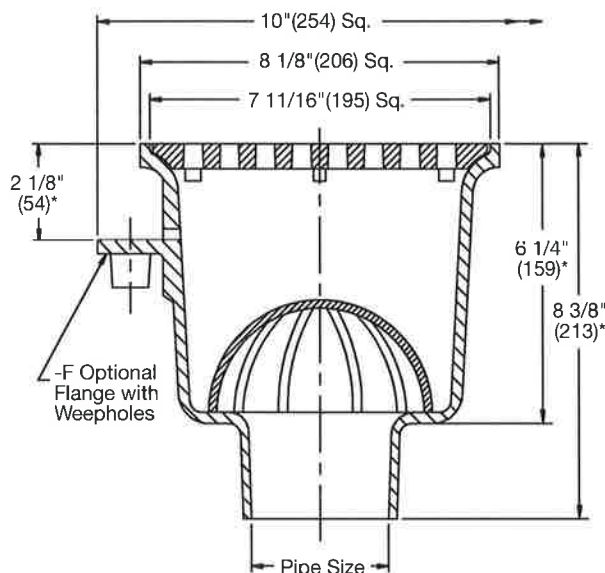
Outlet Type		
Suffix	Description	
NH	No Hub (MJ)	<input type="checkbox"/>
P	Push-On	<input checked="" type="checkbox"/>

Options		
Suffix	Description	
-F	Flange with Weepholes	<input checked="" type="checkbox"/>
-FC	Flange w/Weepholes & Flashing Clamp	<input type="checkbox"/>
-1	Nickel Bronze Top	<input checked="" type="checkbox"/>
-3	Stainless Steel Top	<input type="checkbox"/>
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof (-1 Only)	<input type="checkbox"/>
-7	Trap Primer Tapping	<input type="checkbox"/>
-9	Hinged Grate (-1 Only)	<input type="checkbox"/>
-21	Secondary Strainer	<input type="checkbox"/>
-33	Less Grate	<input type="checkbox"/>
-150	1/2 Grate	<input type="checkbox"/>
-175	3/4 Grate	<input checked="" type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-1	4x9" Oval Nickel Bronze Funnel	<input type="checkbox"/>

Free Area Sq. In.	
Standard Grate	With -1/-3 Grate
16	19

Please refer to [watts.com](http://watts.com) for BAA information on specific models.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



\*Add 5/8"(16) for -1 Nickel Bronze Top or -3 Stainless Steel Top

#### NOTICE

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Location: FS-2



**MI-GARD®**

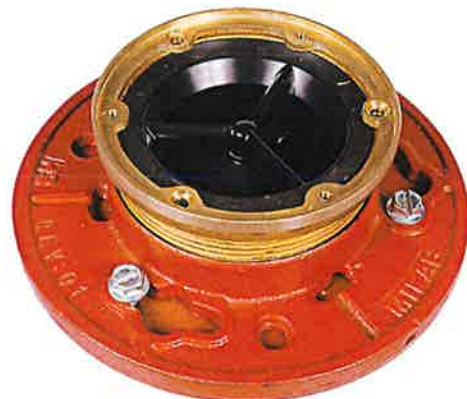
**FLOOR DRAIN TRAP SEAL**

**Specification:** MIFAB® MI-GARD® Series inline floor drain trap seal with UV resistant ABS plastic frame, silicon rubber sealing flapper and four flexible sealing ribs. Tested and certified to the ASSE 1072 Standard and listed with IAPMO and I.P.C. Specify connection size (1 1/2", 2", 3", 3 1/2", 4" or 6"). 10 year warranty is included.

**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®'s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



**BOTTOM OF BODY**



**TOP OF STRAINER**

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
<input type="radio"/> MI-GARD-1.5	1-1/2" (38)	2" (51)
<input type="radio"/> MI-GARD-2	2" (51)	2" (51)
<input type="radio"/> MI-GARD-3	3" (76)	2" (51)
<input type="radio"/> MI-GARD-3.5	3 1/2" (89)	2" (51)
<input type="radio"/> MI-GARD-4	4" (102)	2" (51)
<input type="radio"/> MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD

Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_

**FS-3**

## Engineering Specification

Job Name LR West HS  
 Job Location LR  
 Engineer Ragsdale  
 Approval \_\_\_\_\_

Contractor Comfort Systems USA  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative Sanders Supply

### FS-740

### 12" Square x 8" Deep Sanitary Floor Sink

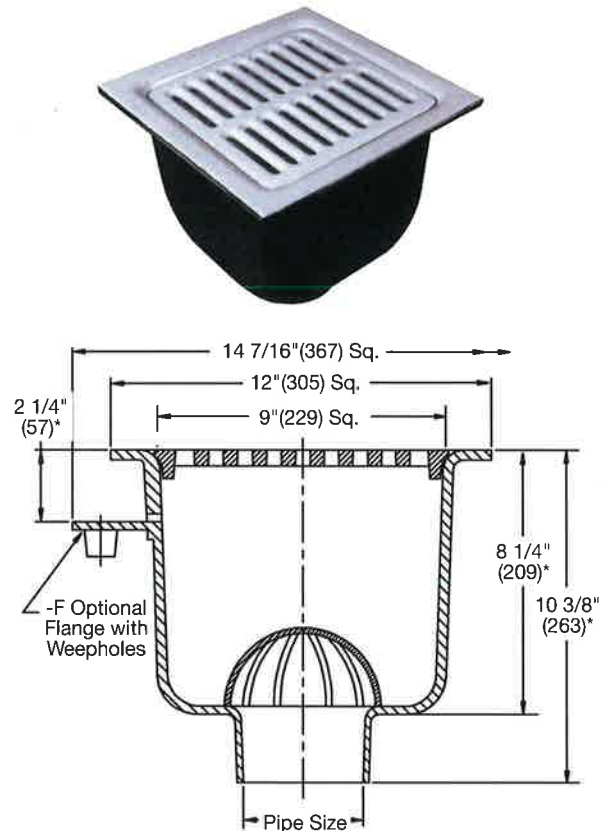
#### Specification

Watts FS-740 12" square x 8" deep sanitary floor sink with white acid resistant porcelain enamel coated interior, loose set porcelain enamel coated cast iron grate, polypropylene dome bottom strainer, and no hub (standard) outlet.

Call customer service at 1 (800) 338-2581 if you need assistance with technical details.

Pipe Sizing			Outlet Type		
Suffix	Description		Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>	NH	No Hub (M.I.)	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>	P	Push-On	<input checked="" type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>			

Options		
Suffix	Description	
-F	Flange with Weepholes	<input checked="" type="checkbox"/>
-FC	Flange w/Weepholes & Flashing Clamp	<input type="checkbox"/>
-FS-DS-SS	Stainless Steel Dome Strainer	<input type="checkbox"/>
-1	Nickle Bronze Top	<input checked="" type="checkbox"/>
-3	Stainless Steel Rim & Grate	<input type="checkbox"/>
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof (-1, -3 Only)	<input type="checkbox"/>
-7	Trap Primer Tapping	<input type="checkbox"/>
-9	Hinged Grate (-1 Only)	<input type="checkbox"/>
-21	Secondary Strainer	<input type="checkbox"/>
-33	Less Grate	<input type="checkbox"/>
-128	Grate w/2 1/2"(64) Center Opening	<input type="checkbox"/>
-150	1/2 Grate	<input checked="" type="checkbox"/>
-175	3/4 Grate	<input type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-1	4 x 9" Oval Nickel Bronze Funnel	<input type="checkbox"/>



\*Add 5/8"(16) for -1 Nickel Bronze Top or -3 Stainless Steel Top

Free Area Sq. In.	
Standard Grate	With -1/-3 Rim & Grate
31	47

#### NOTICE

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Location: FS-3

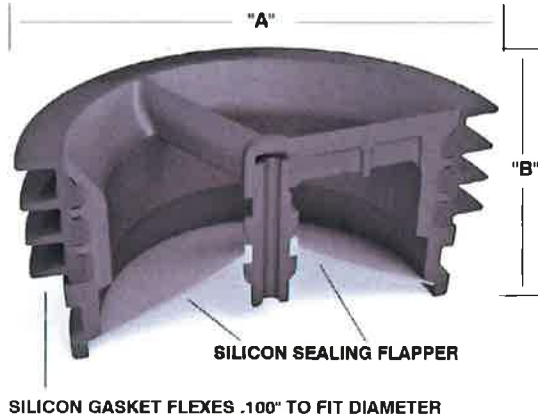


**MI-GARD®**

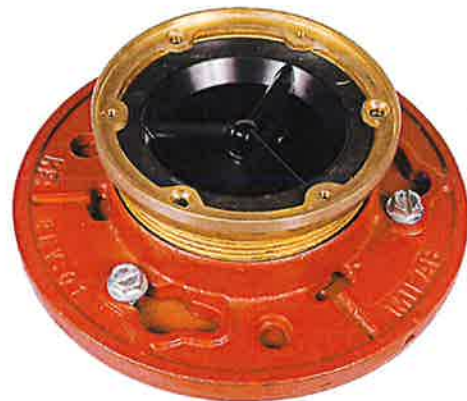
**FLOOR DRAIN TRAP SEAL**

**Specification:** MIFAB® MI-GARD® Series inline floor drain trap seal with UV resistant ABS plastic frame, silicon rubber sealing flapper and four flexible sealing ribs. Tested and certified to the ASSE 1072 Standard and listed with IAPMO and I.P.C. Specify connection size (1 1/2", 2", 3", 3 1/2", 4" or 6"). 10 year warranty is included.

**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®'s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



**BOTTOM OF BODY**



**TOP OF STRAINER**

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_

**FS-4**



## Engineering Specification

Job Name LR West HS  
 Job Location LR  
 Engineer Ragsdale  
 Approval \_\_\_\_\_

Contractor Comfort Systems USA  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative Sanders Supply

### FS-740

### 12" Square x 8" Deep Sanitary Floor Sink

#### Specification

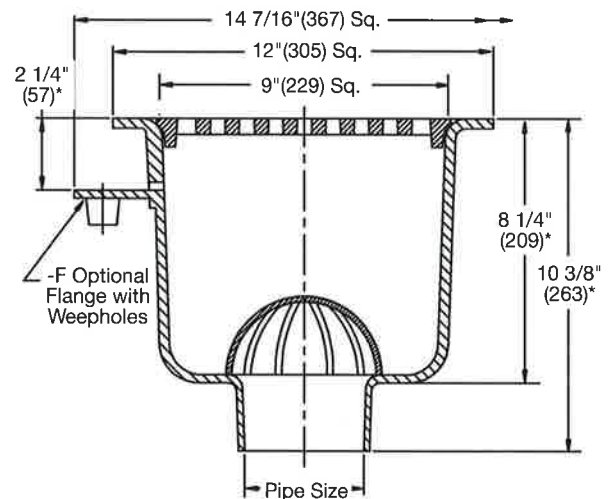
Watts FS-740 12" square x 8" deep sanitary floor sink with white acid resistant porcelain enamel coated interior, loose set porcelain enamel coated cast iron grate, polypropylene dome bottom strainer, and no hub (standard) outlet.

Call customer service at 1 (800) 338-2581 if you need assistance with technical details.

Pipe Sizing			Outlet Type		
Suffix	Description		Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>	NH	No Hub (M.J.)	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>	P	Push-On	<input checked="" type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>			

Options		
Suffix	Description	
-F	Flange with Weepholes	<input checked="" type="checkbox"/>
-FC	Flange w/Weepholes & Flashing Clamp	<input type="checkbox"/>
-FS-DS-SS	Stainless Steel Dome Strainer	<input type="checkbox"/>
-1	Nickle Bronze Top	<input checked="" type="checkbox"/>
-3	Stainless Steel Rim & Grate	<input type="checkbox"/>
-5	Sediment Bucket	<input type="checkbox"/>
-6	Vandal Proof (-1, -3 Only)	<input type="checkbox"/>
-7	Trap Primer Tapping	<input type="checkbox"/>
-9	Hinged Grate (-1 Only)	<input type="checkbox"/>
-21	Secondary Strainer	<input type="checkbox"/>
-33	Less Grate	<input type="checkbox"/>
-128	Grate w/2 1/2"(64) Center Opening	<input type="checkbox"/>
-150	1/2" Grate	<input type="checkbox"/>
-175	3/4" Grate	<input checked="" type="checkbox"/>
-F4-1	4" Round Nickel Bronze Funnel	<input type="checkbox"/>
-F6-1	6" Round Nickel Bronze Funnel	<input type="checkbox"/>
-G-1	4 x 9" Oval Nickel Bronze Funnel	<input type="checkbox"/>

Free Area Sq. In.	
Standard Grate	With -1/-3 Rim & Grate
31	47



\*Add 5/8"(16) for -1 Nickel Bronze Top or -3 Stainless Steel Top

#### NOTICE

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Location: FS-4

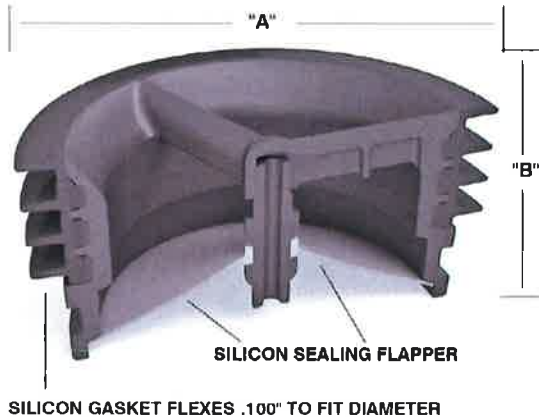


MI-GARD®

FLOOR DRAIN TRAP SEAL

**Specification:** MIFAB® MI-GARD® Series inline floor drain trap seal with UV resistant ABS plastic frame, silicon rubber sealing flapper and four flexible sealing ribs. Tested and certified to the ASSE 1072 Standard and listed with IAPMO and I.P.C. Specify connection size (1 1/2", 2", 3", 3 1/2", 4" or 6"). 10 year warranty is included.

**Function:** Used in the outlet connections of floor drain bodies, or the inside of floor drain strainers to seal the opening to prevent odors, sewer gases, and insects from entering up through the floor drain grate. The MI-GARD®s four flexible silicone sealing ribs ensure easy installation into openings that have variations in size. The MI-GARD® will open to allow drainage and close when there is no water flow.



BOTTOM OF BODY



TOP OF STRAINER

MODEL NO.	"A" (PIPE SIZE)	"B" (HEIGHT)
○ MI-GARD-1.5	1-1/2" (38)	2" (51)
○ MI-GARD-2	2" (51)	2" (51)
○ MI-GARD-3	3" (76)	2" (51)
○ MI-GARD-3.5	3 1/2" (89)	2" (51)
○ MI-GARD-4	4" (102)	2" (51)
○ MI-GARD-6	6" (152)	2" (51)

MI-GARD® prevents the following from entering through the top of floor drains:

- Odors and sewer gases
- Insects

Not intended to be used in lieu of a trap seal primer. 6" MI-GARD not IAPMO certified. Note:

The MI-GARD-6 is designed in accordance with industry standards but is not listed. MI-GARD

Floor Drain Trap Seals are in compliance with International Plumbing Code (I.P.C.)



MI-GARD-1.5

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: LR West HS

Page No: \_\_\_\_\_

Section No: \_\_\_\_\_

Contractor: Comfort Systems USA

Schedule No: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_

**RD-1**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **RD-1**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### RD-300-F

### Roof Drain with Deck Flange/ Adjustable Extension

#### Specification

Watts RD-300-F epoxy coated cast iron roof drain with flashing clamp with integral gravel stop, heavy 10 ga. zinc plated steel deck flange and adjustable extension, self-locking polyethylene dome (standard), and no hub (standard) outlet.

Suffix	Pipe Sizing Description	
2	2"(51) Pipe Size (NH Only)	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
5	5"(127) Pipe Size (NH Only)	<input type="checkbox"/>
6	6"(152) Pipe Size	<input type="checkbox"/>
8	8"(203) Pipe Size	<input type="checkbox"/>
10	10"(254) Pipe Size (NH Only)	<input type="checkbox"/>



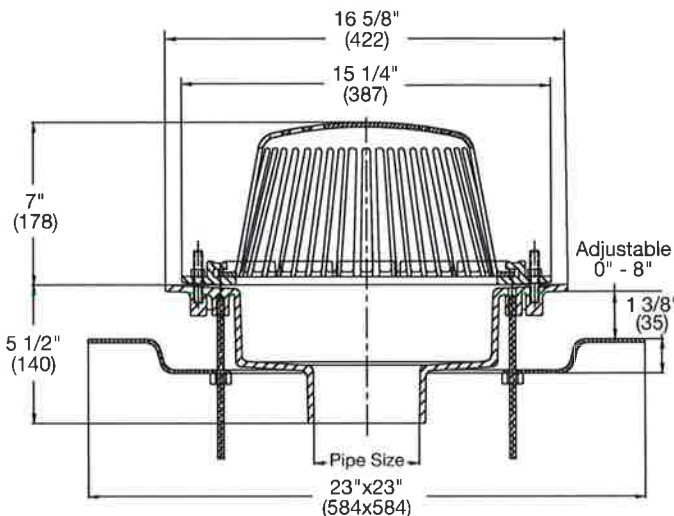
Suffix	Outlet Type Description	
NH	No Hub (MJ)	<input checked="" type="checkbox"/>
P	Push On	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Suffix	Options Description	
-13	Galvanized Body & Clamp	<input type="checkbox"/>
-85	IRMA Perf. SS Extension	<input type="checkbox"/>
-AC	Compression Seal Extension	<input type="checkbox"/>
-AE	Threaded Extension	<input type="checkbox"/>
-D	Underdeck Clamp	<input checked="" type="checkbox"/>
-GSS	Stainless Steel Ballast Guard	<input type="checkbox"/>
-K	Ductile Iron Dome	<input checked="" type="checkbox"/>
-K13	Galvanized Dome	<input type="checkbox"/>
-K40	Ductile Iron Low Dome (4" High)	<input type="checkbox"/>
-K80	Aluminum Dome	<input type="checkbox"/>
-K81	Rough Bronze Dome	<input type="checkbox"/>
-K83	SS Mesh Covered Dome	<input type="checkbox"/>
-L	Vandal Proof Dome	<input type="checkbox"/>
-R	2" External Water Dam	<input type="checkbox"/>
-W	Adj. Internal Water Dam	<input type="checkbox"/>

Deck Opening 18 1/2"(470))

Free Area  
Sq. In.

137



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ES-WD-RD-300-F 2141

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# ERD-1

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **ERD-1**

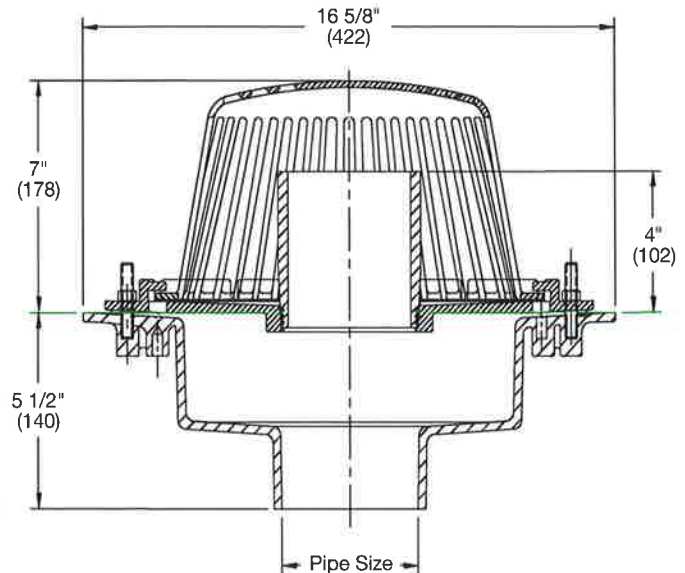
Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### RD-300-W Overflow Roof Drain with 4" Internal Water Dam

#### Specification

Watts RD-300-W epoxy coated cast iron overflow roof drain with 4"(102) high internal water dam, self-locking polyethylene dome (standard), and no hub (standard) outlet.

Suffix	Pipe Sizing Description	
2	2"(51) Pipe Size (NH Only)	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>
5	5"(127) Pipe Size (NH Only)	<input type="checkbox"/>
6	6"(152) Pipe Size	<input type="checkbox"/>
8	8"(203) Pipe Size	<input type="checkbox"/>
10	10"(254) Pipe Size (NH Only)	<input type="checkbox"/>



Suffix	Outlet Type Description	
NH	No Hub (MJ)	<input checked="" type="checkbox"/>
P	Push On	<input type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Suffix	Options Description	
-13	Galvanized Body & Clamp	<input type="checkbox"/>
-85	IRMA Perf. SS Extension	<input type="checkbox"/>
-AC	Compression Seal Extension	<input type="checkbox"/>
-AE	Threaded Extension	<input type="checkbox"/>
-B	Sump Receiver	<input type="checkbox"/>
-D	Underdeck Clamp	<input checked="" type="checkbox"/>
-F	Deck Flange/Adj. Extension	<input checked="" type="checkbox"/>
-GSS	Stainless Steel Ballast Guard	<input type="checkbox"/>
-K	Ductile Iron Dome	<input checked="" type="checkbox"/>
-K13	Galvanized Dome	<input type="checkbox"/>
-K40	Ductile Iron Low Dome (4" High)	<input type="checkbox"/>
-K80	Aluminum Dome	<input type="checkbox"/>
-K83	SS Mesh Covered Dome	<input type="checkbox"/>
-L	Vandal Proof Dome	<input type="checkbox"/>

Deck Opening 14 1/2"(368)  
with Sump Receiver 18"(457)

Free Area  
Sq. In.  
137

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**EDN-1**



## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **EDN-1**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### RD-940

### Downspout Nozzle

#### Specification

Watts RD-940 cast nickel bronze downspout nozzle with anchor flange, countersunk mounting holes, and IPS threaded (standard), no hub, or push-on connection.

Options	
Suffix	Description
-83	Stainless Steel Bird Screen <input checked="" type="checkbox"/>
-NH	No Hub <input type="checkbox"/>
-P	Push-On Connection (3, 4, 6, 8" Only) No Add <input type="checkbox"/>



#### IPS Threaded Connection

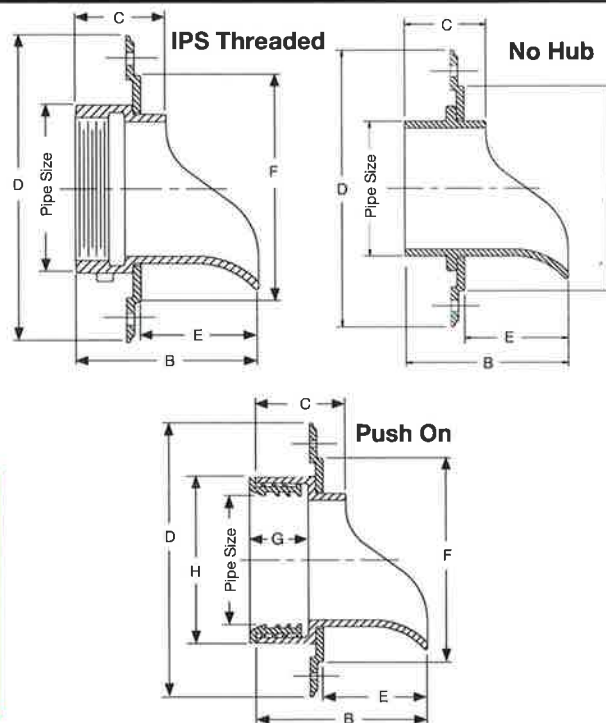
Model	Pipe Size	B	C	D	E	F
RD-942	2"(51)	5 1/4"(133)	2 1/4"(57)	6 3/4"(171)	3 1/2"(89)	4 3/4"(121)
RD-943	3"(76)	5 1/4"(133)	2 1/2"(63)	8 1/4"(210)	3 1/2"(89)	6 3/8"(162)
RD-944	4"(102)	5 1/4"(133)	2 3/4"(70)	9 1/8"(232)	3 1/2"(89)	7"(178)
RD-946	6"(152)	5 1/4"(133)	2 3/4"(70)	11 3/8"(289)	3 1/2"(89)	9"(229)
RD-948	8"(203)	6"(152)	3"(76)	12 1/2"(318)	4"(102)	11"(279)

#### No Hub Connection

Model	Pipe Size	B	C	D	E	F
RD-942-NH	2"(51)	5 1/4"(133)	2 1/4"(57)	6 3/4"(171)	3 1/2"(89)	4 3/4"(121)
RD-943-NH	3"(76)	5 1/4"(133)	2 1/2"(63)	8 1/4"(210)	3 1/2"(89)	6 3/8"(162)
RD-944-NH	4"(102)	5 1/4"(133)	2 3/4"(70)	9 1/8"(232)	3 1/2"(89)	7"(178)
RD-945-NH	5"(127)	5 1/4"(133)	3"(76)	9 1/4"(235)	3 3/8"(86)	7 1/4"(184)
RD-946-NH	6"(152)	5 1/4"(133)	2 3/4"(70)	11 3/8"(289)	3 1/2"(89)	9"(229)
RD-948-NH	8"(203)	6"(152)	3"(76)	12 1/2"(318)	4"(102)	11"(279)
RD-9410-NH	10"(250)	5 3/4"(146)	3"(76)	15 1/4"(387)	3 3/4"(95)	13 1/16"(332)
RD-9412-NH	12"(305)	6"(152)	3 1/4"(83)	17 1/4"(438)	3 3/4"(95)	15 1/16"(383)

#### Push-On Connection

Model	Pipe Size	B	C	D	E	F	G	H
RD-943P	3"(76)	5 3/4"(146)	3"(76)	8 1/4"(210)	3 1/2"(89)	6"(152)	1 3/4"(44)	4 3/4"(121)
RD-944-P	4"(102)	5 3/4"(146)	3"(76)	9 1/8"(232)	3 1/2"(89)	6 3/4"(171)	1 3/4"(44)	5 3/4"(146)
RD-946P	6"(152)	6"(152)	3 3/4"(95)	11 3/8"(289)	3 1/2"(89)	8 3/4"(222)	2"(51)	7 3/4"(197)
RD-948P	8"(200)	7"(178)	4"(102)	13 3/8"(340)	34"(864)	10 3/4"(273)	2 1/2"(63)	10"(254)



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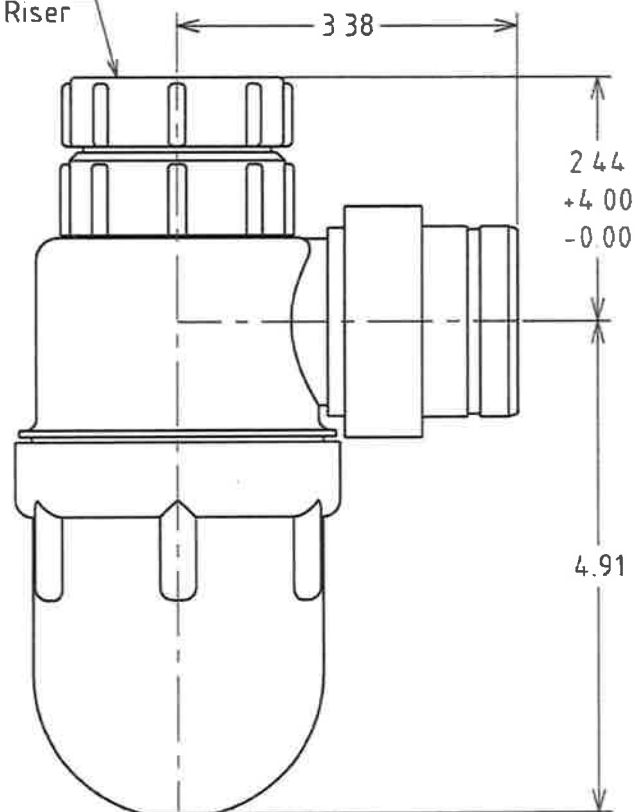
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**LS-1,2,3,CS-1**

1-1/2" Female THD  
Adjustable Riser



<b>ORION</b>	2858 Fairfax Trafficway Kansas City, KS 66115	TITLE Plain End/No-Hub 1-1/2" Bottle Trap 2 - BT2 BL FRPP (P/N#: 01101581) / CR PVDF - NOT AVAILABLE	DATE 12/23/09	DWG NO. 015-PlainEnd-BT2-DWG	REV 1
			DWG TOLERANCE 1/8" 25	DRAWN BY WTH	SHEET 1 OF 1



**McGuire Manufacturing Co., Inc.**

60 Grandview Court  
P.O. Box 746 • Cheshire, CT 06410  
203-699-1801 • Fax: 203-699-1813  
www.mcguiremfg.com

**PRODUCT SPECIFICATION**

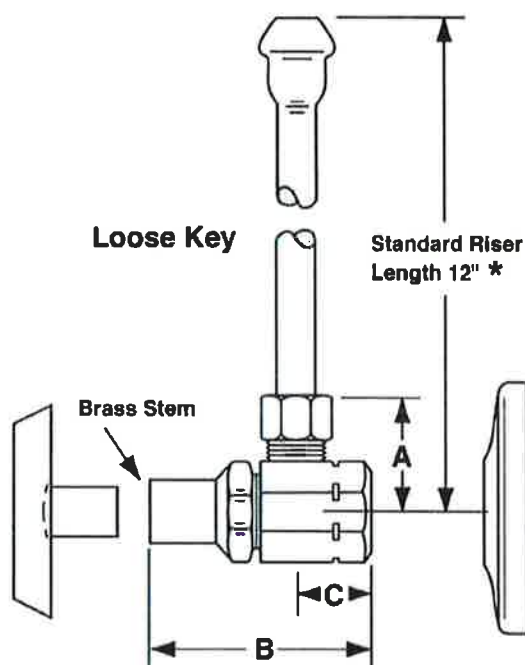
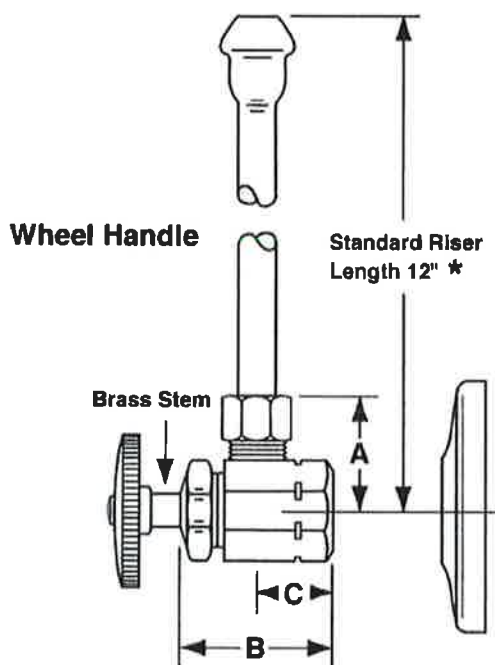
**Part No.**

LF2165, **LF2165LK**,  
LF2167, LF2167LK

**Lavatory Supply**  
**1/2" I.P.S. x O.D.**

**Job Name:**

**Submittal Number:**



NO.	DESCRIPTION	ROUGHING MEASUREMENTS		
		A	B	C
LF2165	1/2" I.P.S. x 3/8" O.D.	1-3/16"	1-1/2"	3/4"
<b>LF2165LK</b>	1/2" I.P.S. x 3/8" O.D.	1-3/16"	2-1/4"	3/4"
LF2167	1/2" I.P.S. x 1/2" O.D.	1-3/16"	1-1/2"	3/4"
LF2167LK	1/2" I.P.S. x 1/2" O.D.	1-3/16"	2-1/4"	3/4"

**LK** designates Loose Key

★ See options and accessories section for details on product variations.



**Specifications:**

Supply kit shall include low lead chrome plated brass supply stop valves with full turn brass stem, no plastic, (12, 15, 20) inch chrome plated risers and (shallow, deep, bell) (steel, brass) or (forged brass with set screw) flange. Inlet shall be (3/8, 1/2) inch (IPS, compression). Outlet shall be (3/8, 1/2) inch compression. Supply kit shall be McGuire \_\_\_\_\_. Supply kit shall be low lead certified by recognized authority and bear manufacturer and testing mark.

**AAV**



## AIR ADMITTANCE VALVES TECHNICAL SPECIFICATION

Job Name	LR West HS	Item #	39016
Location	LR		
Engineer	Ragsdale	Contractor	Comfort Systems USA
PO #		Tag	AAV
Representative	Sanders Supply		

### SPECIFICATIONS

The purpose of an Air Admittance Valve is to provide a method of allowing air to enter the plumbing drainage system without the use of a vent extended to open air and to prevent sewer gases from escaping into a building. An Air Admittance Valve is a one way valve designed to allow air to enter the plumbing drainage system when negative pressures develop in the piping system. The device shall close by gravity and seal the vent terminal at zero differential pressure (no flow conditions) and under positive internal pressures.

### APPROVALS & LISTINGS

ASSE 1050 & 1051

ICC ESR-1664

NSF Standard 14

IAPMO – Classified Mark

ASTM D 2665/D 2661

International Plumbing Code (IPC) 2003

International Residential Code (IRC) 2003



### FEATURES & MATERIALS

Tension Membrane	Silicone
Sweet Spot™	Sweet Spot™ technology opens at -0.01 psi and seals at 0 psi and above
Screening	Screening on air inlets to guard the seal
Grip	Protective sleeve provides grip for installation and keeps valve free from debris
Tested	100% functionally tested at 1/4" H <sub>2</sub> O and 30" H <sub>2</sub> O ensuring trouble free performance
Warranty	Limited Warranty

### INSTALLATION

Read installation instructions prior to use of this product. Always consult local plumbing codes prior to installing an AAV. Individual, branch and circuit vents are permitted to terminate with a connection to a Sure-Vent® AAV. The Sure-Vent® AAV will only vent fixtures that are on the same floor and connect to a horizontal branch drain. The horizontal branch drain shall connect to the drainage stack a maximum of four branch intervals from the top of the stack. The Sure-Vent® AAV should be located within the maximum developed length permitted for the vent. The Sure-Vent® AAV must be located a minimum of 4 inches above the horizontal branch drain and 6 inches above any insulation material and within 15 degrees of vertical. Every structure in which plumbing is installed shall have at least one primary stack vent. The stack vent should run as directly as possible from the building drain through to the open air.

Apply approved pipe joint compound or thread seal tape to the male threads of the valve. Remove protective sleeve after installation.

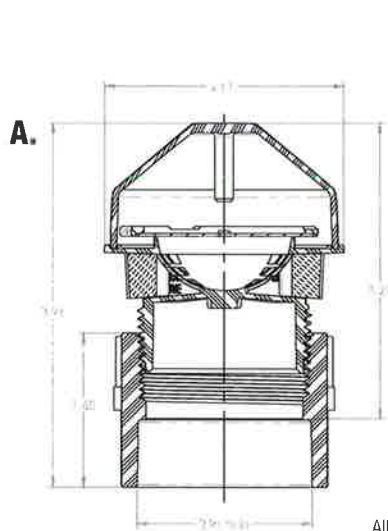
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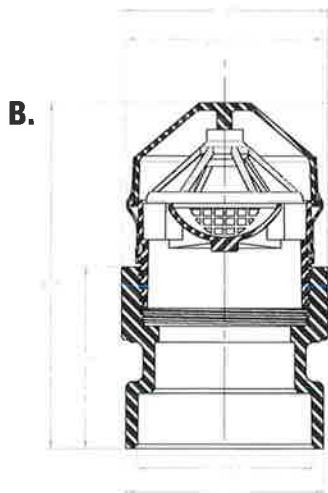
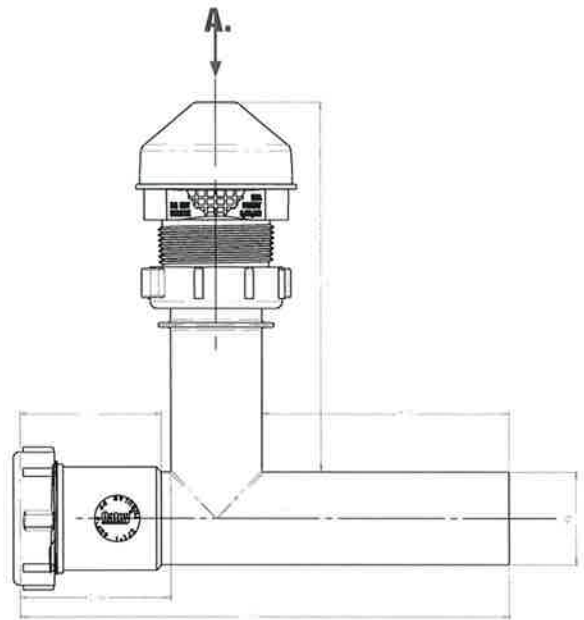


## AIR ADMITTANCE VALVES TECHNICAL SPECIFICATION

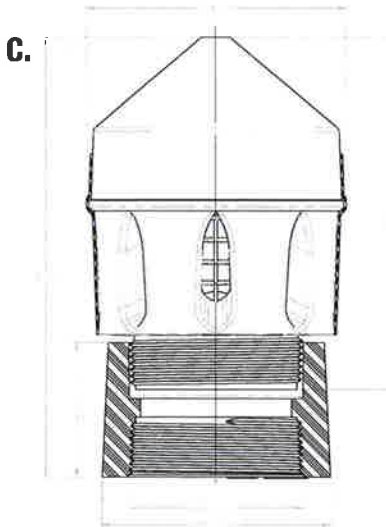
	DFU Rating	Connection	Membrane	Adapter
A	20 Branch, 8 Stack	1.5" PVC NPT Threads	Silicone	1.5" PVC
B	160 Branch, 24 Stack	2" PVC NPT Threads	Silicone	1.5" x 2" PVC or ABS
C	160 Branch, 72 Stack	2" PVC NPT Threads	Silicone	2" x 3" PVC or ABS
D	160 Branch, 500 Stack	3" PVC NPT Threads	Silicone	3" x 4" PVC or ABS



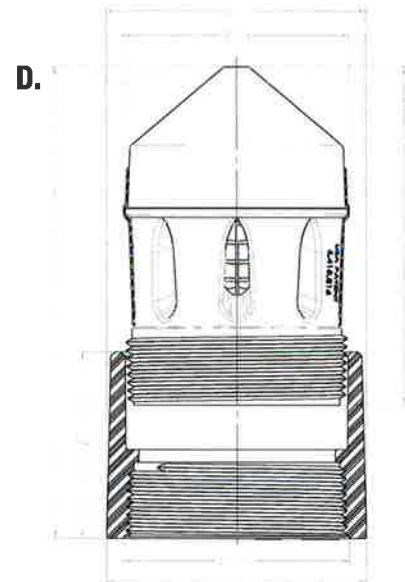
All dimensions in inches



All dimensions in inches



All dimensions in inches



All dimensions in inches

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## AIR ADMITTANCE VALVES TECHNICAL SPECIFICATION

### PRODUCT SELECTOR

#### 20 BRANCH, 8 STACK DFU SURE-VENT AIR ADMITTANCE VALVE WITH SCHEDULE 40 ADAPTER

✓	Product Number	Description	Pack
	39228	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, W/PVC SCHED 40 ADAPTER	6
	39229	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, W/ABS SCHED 40 ADAPTER	6
	39005	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN PVC SCHED 40 ADAPTER	50
	39227	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN W/ABS SCHED 40 ADAPTER	6
	39250	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, 90 DEG PVC SCHED 40 ADAPTER	50
	39251	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, 90 DEG ABS SCHED 40 ADAPTER	6
	39252	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, 90 DEG PVC SCHED 40 ADAPTER	6
	39253	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, W/90 DEG ABS SCHED 40 ADAPTER	6
	39254	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, STRAIGHT PVC SCHED 40 ADAPTER	50
	39256	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, STRAIGHT ABS SCHED 40 ADAPTER	50
	39255	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, STRAIGHT PVC SCHED 40 ADAPTER	6
	39020	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, NO ADAPTER	6

#### 20 BRANCH, 8 STACK DFU SURE-VENT AIR ADMITTANCE VALVE WITH TUBULAR ADAPTER

✓	Product Number	Description	Pack
	39225	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN WHITE TUBULAR ADAPTER	6
	39226	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN BLACK TUBULAR ADAPTER	6
	39239	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, INSTALLATION PACK W/TUBULAR ADAPTER	6
	39020	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, NO ADAPTER	50
	392393	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, INSTALLATION PACK- 3 PACK	6
	39245	20 BRANCH, 8 STACK DFU SURE-VENT, 1.5 IN, TRAP PACK	20

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## AIR ADMITTANCE VALVES TECHNICAL SPECIFICATION

### PRODUCT SELECTOR

#### 160 BRANCH, 24 STACK DFU SURE-VENT AIR ADMITTANCE VALVE WITH SCHEDULE 40 ADAPTER

✓	Product Number	Description	Pack
➔	39016	160 BRANCH, 24 STACK DFU SURE-VENT, 1.5 X 2 IN PVC SCHED 40 ADAPTER	6
	39018	160 BRANCH, 24 STACK DFU SURE-VENT, 1.5 X 2 IN ABS SCHED 40 ADAPTER	6
	39017	160 BRANCH, 24 STACK DFU SURE-VENT, 1.5 X 2 IN PVC SCHED 40 ADAPTER	50
	39019	160 BRANCH, 24 STACK DFU SURE-VENT, 1.5 X 2 IN ABS SCHED 40 ADAPTER	50
	39238	160 BRANCH, 24 STACK DFU SURE-VENT, 1.5 IN W/MECHANICAL ADAPTER	12
	39018C	160 BRANCH, 24 STACK DFU SURE-VENT, 1.5-2 IN ABS CANADA	6

#### 160 BRANCH, 72 STACK DFU SURE-VENT AIR ADMITTANCE VALVE WITH SCHEDULE 40 ADAPTER

✓	Product Number	Description	Pack
	39220	160 BRANCH, 72 STACK DFU SURE-VENT, 2 X 3 IN PVC SCHED 40 ADAPTER	6
	39221	160 BRANCH, 72 STACK DFU SURE-VENT, 2 X 3 IN ABS SCHED 40 ADAPTER	6

#### 160 BRANCH, 500 STACK DFU SURE-VENT AIR ADMITTANCE VALVE WITH SCHEDULE 40 ADAPTER

✓	Product Number	Description	Pack
	39223	160 BRANCH, 500 STACK DFU SURE-VENT, 3 X 4 IN PVC SCHED 40 ADAPTER	6
	39224	160 BRANCH, 500 STACK DFU SURE-VENT, 3 X 4 IN ABS SCHED 40 ADAPTER	6

Data is subject to manufacturing tolerances.

Access BIM/Revit content through [www.oatey.com](http://www.oatey.com)

**DT-1**



## H-M COMPANY

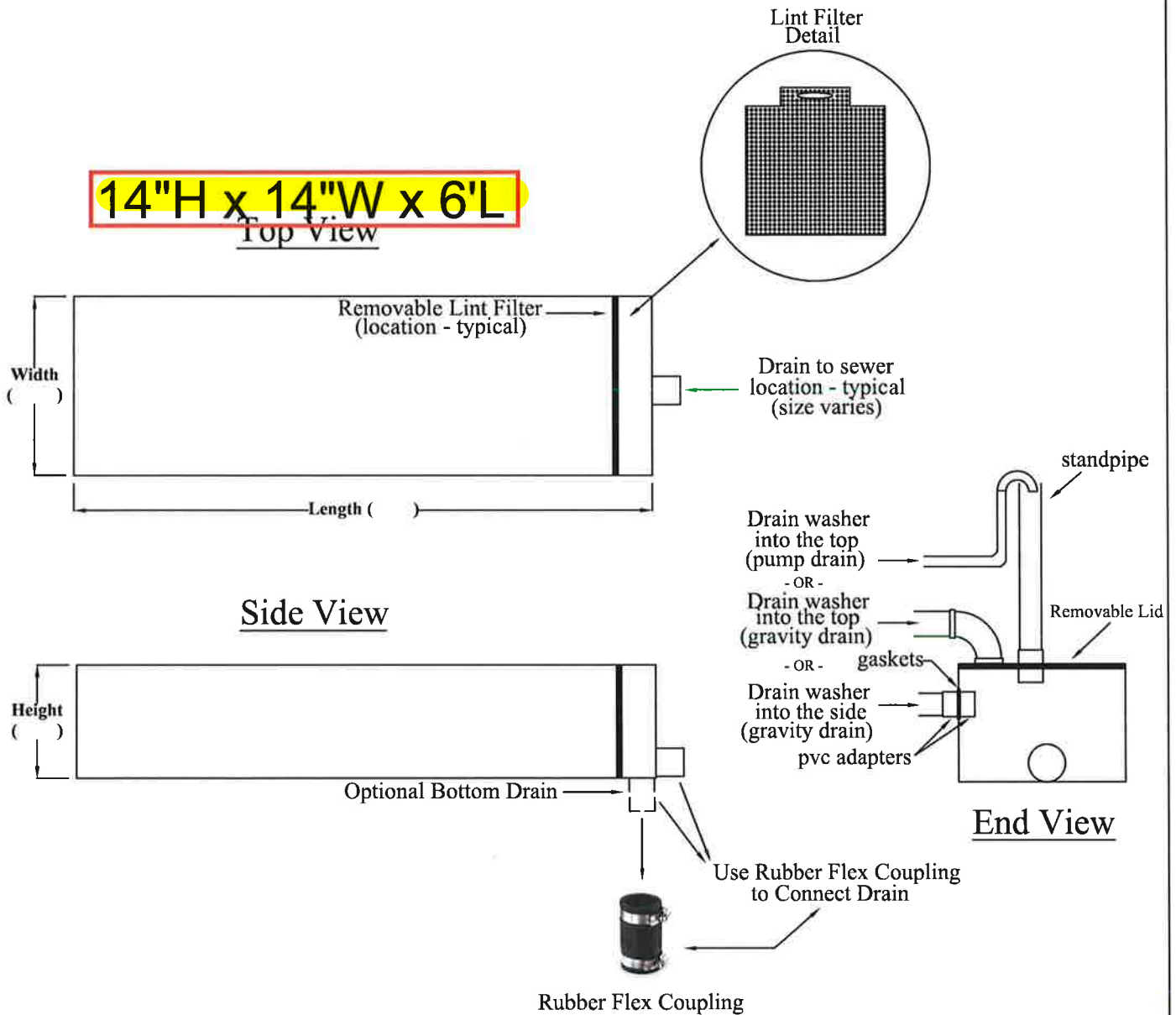
2305 GILBERT AVENUE CINCINNATI, OHIO 45206

PHONE: (800) 365-1900 FAX: (513) 281-0572

WWW.DRAINTROUGHS.COM

## SUBMITTAL SHEET

## DRAIN TROUGH



## ENGINEERING DATA

### COMMERCIAL GRADE

BODY MATERIAL: 1/4" POLYPROPYLENE

LID MATERIAL: 3/8" POLYPROPYLENE

LINT FILTER MATERIAL: 1/4" PVC

LINT FILTER HOLES: 3/8"

CHEMICAL RESISTANT

MAXIMUM WATER TEMPERATURE: 165 DEGREES

LID ATTACHED WITH STAINLESS STEEL SCREWS

OPTIONAL SECOND FILTER CAN BE INSTALLED

CAN MANUFACTURE ANY SIZE NEEDED

# DT-2





Since 1957

## H-M COMPANY

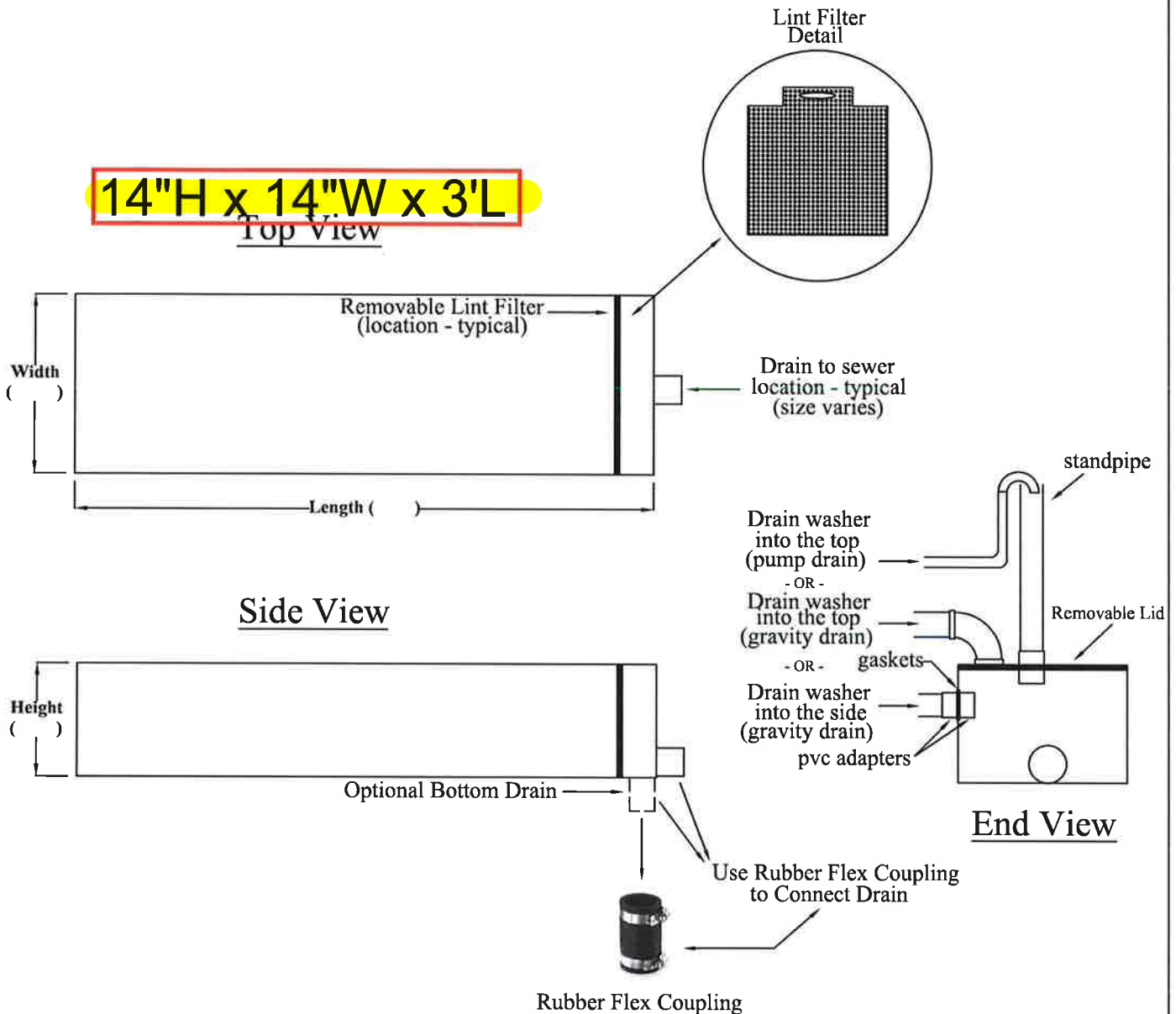
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## SUBMITTAL SHEET

### DRAIN TROUGH



ANSI Accredited Program  
PRODUCT CERTIFICATION  
#0202

## ENGINEERING DATA

### COMMERCIAL GRADE

BODY MATERIAL: 1/4" POLYPROPYLENE

LID MATERIAL: 3/8" POLYPROPYLENE

LINT FILTER MATERIAL: 1/4" PVC

LINT FILTER HOLES: 3/8"

CHEMICAL RESISTANT

MAXIMUM WATER TEMPERATURE: 165 DEGREES

LID ATTACHED WITH STAINLESS STEEL SCREWS

OPTIONAL SECOND FILTER CAN BE INSTALLED

CAN MANUFACTURE ANY SIZE NEEDED

**WCO**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **WCO**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

### CO-460-RD

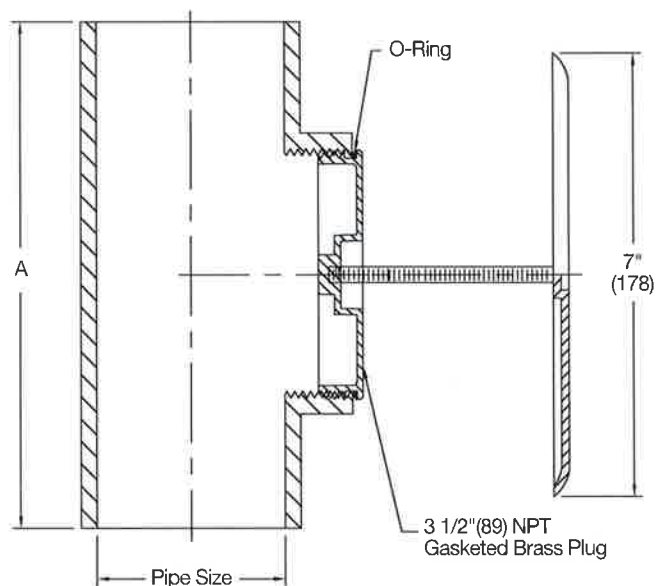
## Stack Cleanout with Brass Plug & Stainless Steel Cover

### Specification

Watts CO-460-RD cast iron stack cleanout with gasketed brass countersunk plug, stainless steel access cover, vandal proof stainless steel screw, and no hub connections.



PIPE SIZE	"A" HEIGHT
2"(51)	6 1/4"(159)
3"(76)	7 3/4"(197)
4"(102)	9"(229)



Please refer to [watts.com](http://watts.com) for BAA information on specific models.

### NOTICE

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.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



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Latin America: T: (52) 55-4122-0138 • [Watts.com](http://Watts.com)

ES-WD-CO-460-RD 2138

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**FCO**

## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **FCO**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

# CO-200-R

## Floor Cleanout with Round Top

### Specification

Watts CO-200-R epoxy coated cast iron floor cleanout with 5"(127) round adjustable gasketed nickel bronze top, removable gas tight gasketed brass cleanout plug, and no hub (standard) outlet.

Pipe Sizing (Select One)		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>

Outlet Type (Select One)		
Suffix	Description	
NH	No Hub (MJ)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Options (Select One)		
Suffix	Description	
-C	Membrane Clamp	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>
-CF	Carpet Clamping Flange	<input type="checkbox"/>
-SO	Side Outlet	<input type="checkbox"/>

Optional Body Material (NH Only)		
Suffix	Description	
-60	PVC Body w/Poly Plug	<input type="checkbox"/>
-61	ABS Body w/Poly Plug	<input type="checkbox"/>

**Load Rating**  
MD

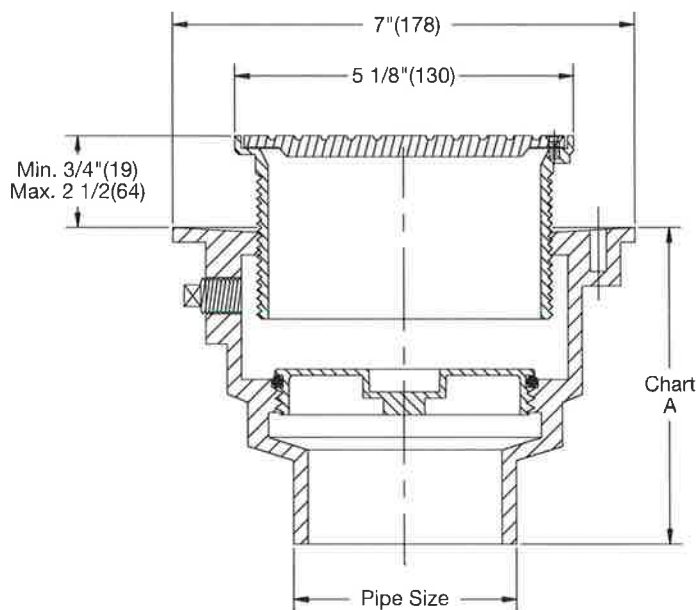


Chart A

Pipe Size	NH	Push-On	PVC/ABS
2"(51)	4 3/4"(121)	5 1/2"(140)	4"(102)
3"(76)	4 3/4"(121)	5 1/2"(140)	4"(102)
4"(102)	4 3/4"(121)	5 1/2"(140)	4"(102)

### NOTICE

The load classifications are in accordance with the American National Standards ASME A112.36.2M-91(R2012) ASME Ratings are as follows:  
 MD - Safe Live Load 2000-4999 lbs. (900-2250 kg)  
 The above categories are given as a guide only.  
 Please consult factory.

### NOTICE

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**Canada:** T: (888) 208-8927 • F: (905) 481-2316 • Watts.ca  
**Latin America:** T: (52) 55-4122-0138 • Watts.com

# COTG



## Engineering Specification

Job Name **LR West HS**  
 Job Location **LR**  
 Engineer **Ragsdale**  
 Approval \_\_\_\_\_  
 Tag **COTG**

Contractor **Comfort Systems USA**  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative **Sanders Supply**

# CO-200-RX-4

## Floor Cleanout with Ductile Iron Top

### Specification

Watts Drainage CO-200-RX-4 epoxy coated cast iron floor cleanout with 5"(127) round adjustable gasketed heavy duty ductile iron top, removable gas tight gasketed brass cleanout plug, and no hub (standard) outlet.

Pipe Sizing		
Suffix	Description	
2	2"(51) Pipe Size	<input type="checkbox"/>
3	3"(76) Pipe Size	<input type="checkbox"/>
4	4"(102) Pipe Size	<input type="checkbox"/>

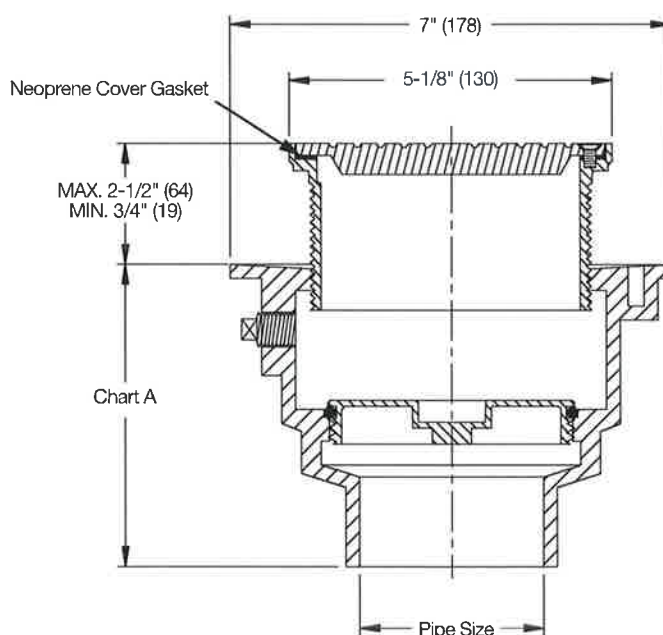
Outlet Type		
Suffix	Description	
NH	No Hub (MJ)	<input type="checkbox"/>
P	Push On	<input checked="" type="checkbox"/>
X	Inside Caulk	<input type="checkbox"/>

Options		
Suffix	Description	
-C	Membrane Clamp	<input type="checkbox"/>
-6	Vandal Proof	<input type="checkbox"/>
-13	Galvanized Body	<input type="checkbox"/>

Optional Body Material		
Suffix	Description	
-60	PVC Body w/Poly Plug	<input type="checkbox"/>
-61	ABS Body w/Poly Plug	<input type="checkbox"/>

Chart A

	NH(MJ)	P	60/61
Pipe Size	No Hub	Push On	PVC/ABS
2"	4-1/2" (114)	5-1/2" (140)	4" (102)
3"	4-1/2" (114)	5-1/2" (140)	4" (102)
4"	4-3/4" (121)	5-1/2" (140)	4" (102)



Load Rating
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*XHD
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\*The load classifications are in accordance with the American National Standards ASME A112.21.1M ASME Ratings are as follows:  
 XHD - Safe Live Load 7500-10000 lbs.(3375-4500kg)  
 The above categories are given as a guide only.  
 Please consult factory.

### NOTICE

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