

WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov In addition to Josam Company's complete line of quality cast iron and PVC specification drainage products, we are also pleased to offer the following product lines.

Push-Fit Stainless Steel Drainage System

Complete Line of Stainless Steel Drains Manufactured by ATT Inox



- Pipe and fittings manufactured of austenitic grade 316L stainless steel
- A gasketed "Push-Fit" design resulting in cost effective installations
- Pipe and fittings in sizes 1-1 /2" through 8" pipe size
- Specific gasket materials to suit different product applications
- Pressure ratings that are at least 4 times higher than previous generation systems
- Capable of being used in vacuum systems



Complete Siphonic Roof Drainage System

- A complete system including "Push-Fit" galvanized pipes, fittings and drains
- Josam support in calculating the siphonic size requirements for a balanced system
- Space gained due to horizontal piping without slope below the roof deck
- A higher discharge rate as a result of closed flow circuit allowing smaller pipe sizes
- Less labor cost due to fewer vertical pipes and less pipe penetrations

- 8", 10" and 12" adjustable and non-adjustable round top floor drains
- 6", 8", 10", 12" and 16" adjustable and nonadjustable square top floor drains
- 2" through 8" no-hub outlets for easy connection to existing piping
- 6", 8", 12" and 16" wide trench drains
- Grates for the lightest to heaviest of loads
- 5/16", 3/4" and 3" slot and mini channels
- Ability to customize products to suit individual requirements

Pro-Plus Trench Drain System



- SMC/GRP Construction
- Available with and without slope
- 4", 8" and 12" nominal interior widths
- Lightweight 70% lighter than polymer concrete
- 1.5 times stronger than polymer concrete
- Load class A-E

Information and access to pricing and literature on all of these products is available at www.JOSAM.com. Should you require further details please contact your local Josam representative or Josam directly.

Introduction

This Josam Installation Guide is a dimensional and installation reference guide for use in the field or in the office. It contains details, specifications and roughing dimensions for all Josam Plumbing Drainage Products. All designs, descriptions and dimensions are subject to change without notice.

PRODUCT DESIGNATIONS—Each product is designated by a series number. For drainage products, the last digit in the type number indicates the pipe size. For Hydrants the type number typically indicates wall thickness, for shock absorbers the type number is based on fixture units and for interceptors the type number is based on volume or size. Outlet types are indicated by suffixes to the type number. Please specify –T for threaded, -X for inside caulk, -Y for hub outlet with gasket for 2-4" sizes and –Z for no-hub. Alpha or numeric options are added to the type number and many commonly used options are depicted on separate submittal drawings.

ALPHABETICAL INDEX—The following index will help you to locate specific products when you do not know the product series number.

SUBMITTAL DRAWINGS—This guide is arranged in numerical order by product categories in the numerical ranges shown below. Additional option or installation information is provided at the beginning of the product sections.

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FURTHER ASSISTANCE—For additional technical information, please visit our website at <u>www.Josam.com</u>, or contact your local Josam representative or Josam Customer Service at 1-800-36-JOSAM.

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Abbreviations Used in this Catalog

In this Catalog	
Adj Adjus	stable
ANSI American Na	tional
Standards Ins	
A.R.E Acid Resisting Er	
A.K.E.	iamei
ASME American S	ociety
of Mechanical Eng	ineers
ASPE American Soci	ety of
Plumbing Eng	ineers
Plumbing Eng	ociety
of Sanitary Engl	incore
ASTM American S	ociety
for Testing & Mai	terials
Aux	kiliary
Br	ranch
BrzB	ronze
BWV Backwater	Valve
Cap	
C.I.	
CISPI Cast Iron Soil Pipe Ins	
CP Chrome F	
Dim Dime	nsion
DWVDrain, Waste,	Vent
Ext Exte	nsion
Ftg.	
GalvGalva	nizod
C D U College Der	llaur
G.P.H. Gallons Per	nour
G.P.MGallons Per M	linute
G.R.D Grease Removal Device (
H.P.T Hose Pipe T	
ID Inside Dia	
IRMAInsulated	l Roof
Membrane Ass	embly
L.H Left	Hand
NB Nickel B	ronze
N.P.S.L. National Pipe Straight Lo	cknut
N.P.T National Pipe	
0.C.	enter
OD Outside Dia	
PDI Plumbin	g and
Drainage Ins	titute
R.H Right	Hand
S.F	Finish
SSStainless	
SV Service W	loight
SW Service W	
XH Extra H	leavy

MATERIALS & FINISHES

Materials

BRONZE:

JOSAM bronze is a semi-red brass, generally used with a satin finish and is also an excellent base for chromium plating. All JOSAM chromium plated bronze is cast with this alloy and results in a lasting bright appearance which is stain resistant and maintenance free. Use of bronze instead of cast iron may reduce load classification.

CAST IRON:

JOSAM gray iron is produced to ASTM Standards and has a 25,000 p.s.i. minimum tensile strength. The use of quality materials and the most modern production methods results in sound, dependable metal with good corrosion resistance.

DUCTILE IRON:

A nodular graphite iron with the strength of steel is supplied for gratings, which must carry the heaviest loads.

NIKALOY:

This nickel bronze alloy is used when a high strength harder bronze material is needed for chemical resistance and a long-lasting, easily-maintained bright finish. Use of Nikaloy instead of cast iron may reduce load classification.

ACID-RESISTING COATINGS:

Floor Sinks are provided with an acid-resisting porcelain enameled or highgloss baked epoxy sanitary acid-resisting white coating that has an excellent appearance and is easy to clean. The acid-resisting coating provided on other cast iron and steel products is a two-part epoxy coating.

STAINLESS STEEL:

Stainless steel is commonly used in the dairy, food processing, chemical, pharmaceutical and institutional industries. Available in type 304 and 316L stainless steel.

PLATING AND SPECIAL COATINGS:

JOSAM bronze is often chromium plated for ease of maintenance and resistance to chlorine. All JOSAM cast iron is dip coated with a quality paint and, when required, special chemical-resistant coatings are furnished for harsh environments. Galvanized coatings are supplied by a new zinc-rich polymeric coating. This finish conforms to Mil. Spec. MIL-P21035 and is preferred to hot dipped coatings.

Finishes

ROUGH:

This designation applies to Nikaloy and bronze items, which are supplied in an "as cast" condition. All of the features of Nikaloy and bronze are present.

PAINTED:

JOSAM's protective coating is a water-reducible air-dry enamel paint.

SATIN:

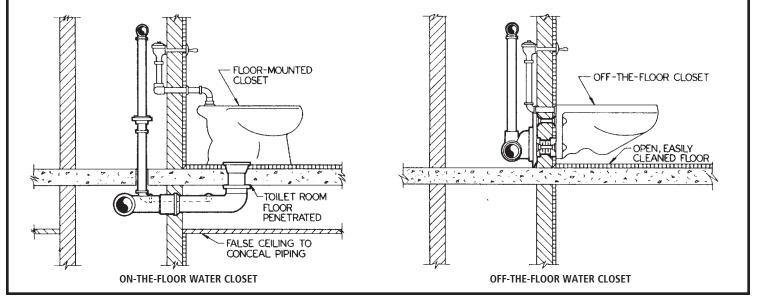
Low luster finish applied to Nikaloy and bronze products makes them compatible with the present architectural trends calling for exposed hardware to be inconspicuous in appearance. This satin finish has been selected by JOSAM to be standard on all Nikaloy and bronze finished parts.

INSTALLATION OF OFF-THE-FLOOR FIXTURES

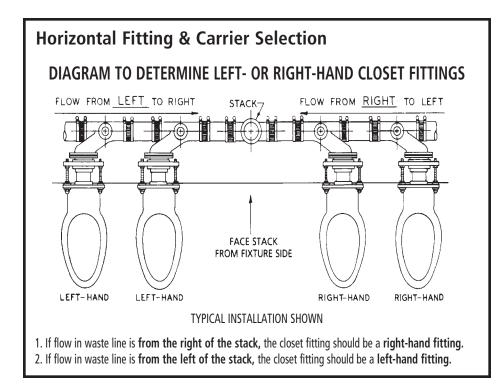
Many factors, including cost, material, labor required, space, handling and others must be thoroughly evaluated when planning an installation. With on-the-floor water closets, slabs must be penetrated and sleeved at each fixture to accommodate waste piping which, in many instances, has to be suspended below the slab.

Such suspended piping requires concealment in multi-story installations, thereby necessitating drop or furred ceilings in the rooms below. The fitting and assembly of waste piping in such installations, as a rule, must be accomplished on the spot with the aid of scaffolding and extra mechanics, which contributes to high construction costs and affects not only the mechanical contractor but the structural, floor, wall and ceiling mechanics as well.

Conversely, with off-the-floor fixtures, there is no slab penetration in toilet room areas. The support and piping systems are concealed behind the walls. Such systems are ideally suited to the modern modular plumbing concept as they are readily fabricated either on site or in the contractor's shop at significant savings over conventional piece-by-piece assembly. A well planned and executed off-the-floor fixture installation today will provide lasting benefits appreciated by future building occupants and owners.



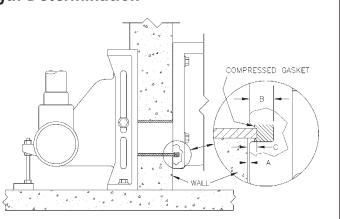
Closet Carriers



Extension Length Determination

This is a side view. The enlarged inset shows the depth of the gasket within the groove of the fixture and the extension with proper pressure on the gasket.

When the closet is installed on the carrier, the front end of the extension must be located properly in order to compress the gasket enough so that the gasket's adhesive coated surfaces are in contact with the china and the face of the extension. This will help ensure a tight seal.

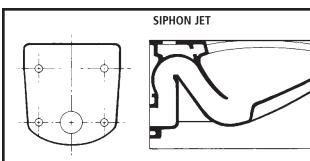


For closets which have a groove with a rectangular cross-section, use this formula: C = A + B - 1/2''

Where: A = Distance from Closet to Wall B = Depth of Groove in Closet C = Distance Extension Extends from Wall

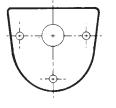
For closets which have a groove with a V-shaped cross-section:

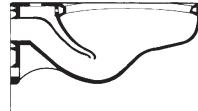
Use the above formula, but an additional 1/8" (or more) may be added to C.



This type, because of its quiet, efficient, sanitary flushing action, is usually specified in most commercial, institutional and hotel applications. Water is introduced into the bowl through the rim and up leg of trap through jets placed there to fill the trapway thus creating siphonic action to quickly evacuate the bowl. The large water surface in the bowl insures sanitation.

BLOWOUT

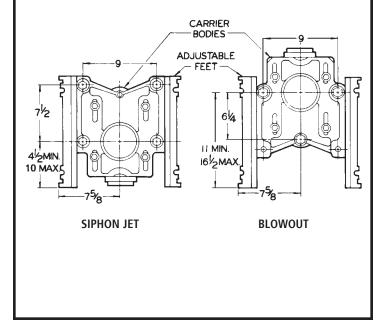


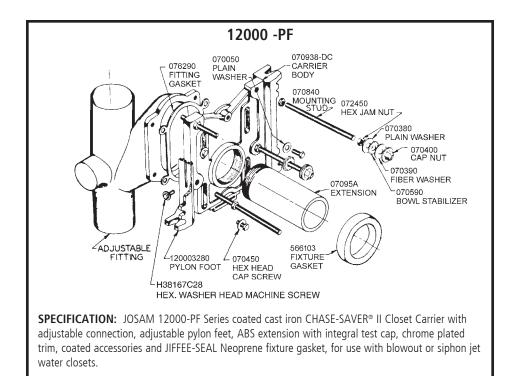


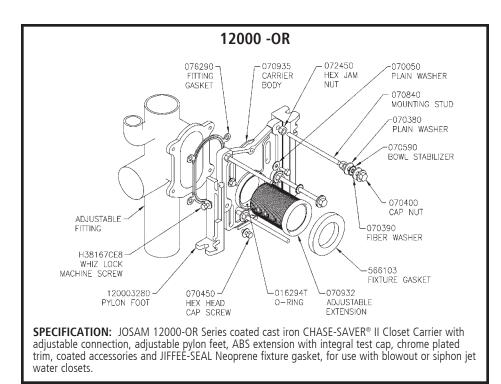
This type is particularly suited to heavy use applications such as public facilities in stadiums and terminals. The flushing action produced by the jet of water in the outlet passage is strong for rapid evacuation of the bowl. Fouling problems are minimal. However, because of the powerful flushing action, this type of closet is noisy to operate.

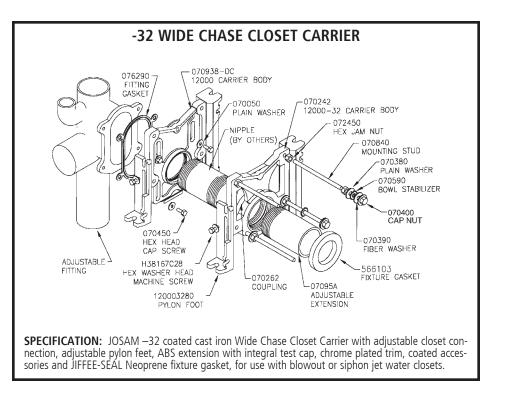
ONE CARRIER FOR SIPHON JET OR BLOWOUT

CHASE-SAVER® is shipped pre-assembled for siphon jet closets and is quickly inverted for use with blowout closets.





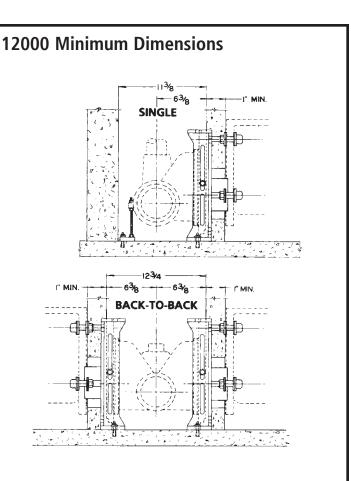


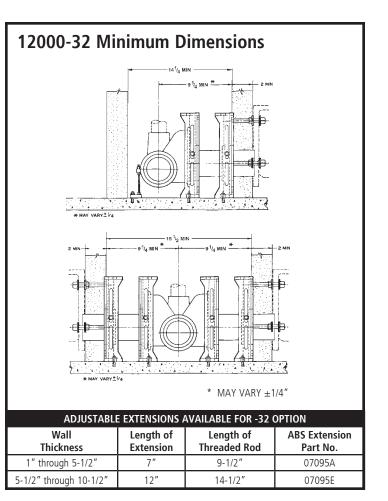


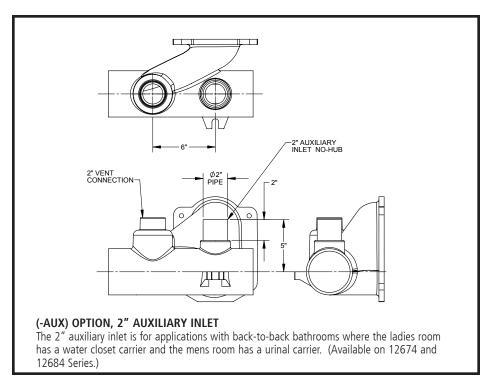
-32 NIPPLE SELECTION

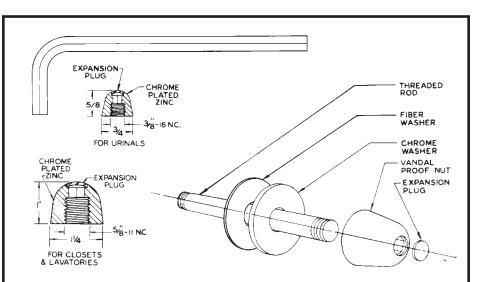
-32 OPTION RECOMMENDED NIPPLE LENGTH DRAWING LENGTH NIPPLES (BY OTHERS) Δ* Length Nipple Minimum Chase to Use 2-7/8 9-1/4 10 - 1/44 11 - 1/45 12-1/4 6 13-1/4 7 14 - 1/48 9 9 15 - 1/416-1/4 10 17-1/4 11 12 18 - 1/4Ш -Recommended Pipe: 4" Galvanized Steel * MAY VARY 1/4

To provide proper fixture support, the carrier should be set directly behind or within the wall. To accomplish this in wide pipe chases with DWV piping either centered or offset, it is necessary to separate carrier and drainage fitting as required with nipples that are longer than 2-7/8." The minimum dimension (A*) was determined using a 2-7/8" length nipple. Nipples ranging in length from 2-7/8" to 12" in 1 inch increments are identified on this page for specification when such construction conditions are encountered.



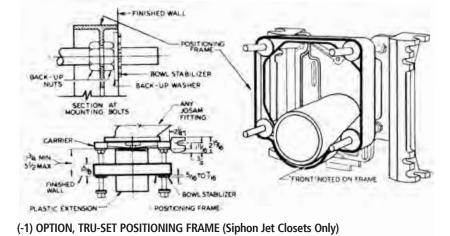




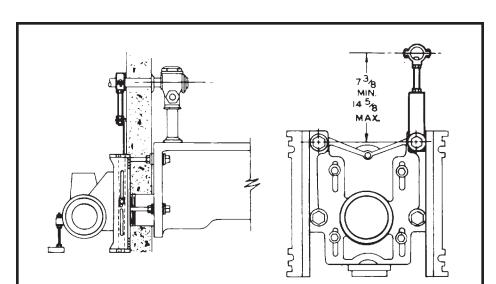


(-VP) OPTION, VANDAL-PROOF TRIM

The JOSAM Vandal-Proof trim is designed to prevent tampering and possible damage to the fixture caused by vandalism. The Vandal-Proof trim can be used in place of the regular JOSAM cap nuts. Trim is installed using a hex key. After installation is complete, chrome plated expansion plugs which match the nuts, snap into place minimizing the chances of vandalism.

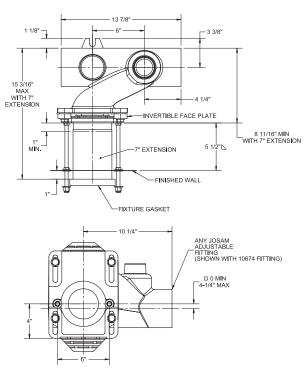


Made of high impact polystyrene, the TRU-SET Positioning Frame offers many advantages to the plumbing contractor. The positioning frame is mounted on the carrier studs at the time the carrier is being installed, thus it acts as a guide and template, eliminating problems caused by normal dimensional variations when the wall is being erected. Studs and adjustable extension are set to the frame, eliminating further adjustment when the fixture is being hung. Chances of bowl breakage are minimized since bowl is held the correct distance from finished wall. **NOTE:** Sold only with JOSAM closet carriers.



(-6) OPTION, SUPPLY PIPE SUPPORT

Support assembly attaches to an upper carrier mounting stud and securely holds water supply pipe running to the flush valve. This hanger prevents movement of water piping during and after construction, protecting piping as well as the flush valve. When ordering, specify type of pipe to be supported.



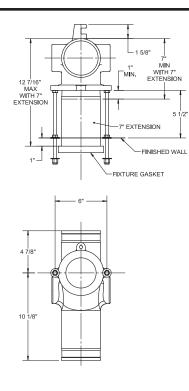
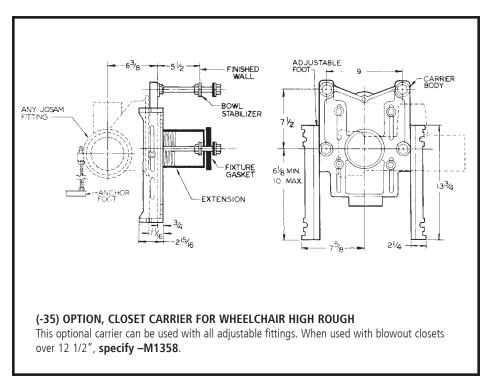


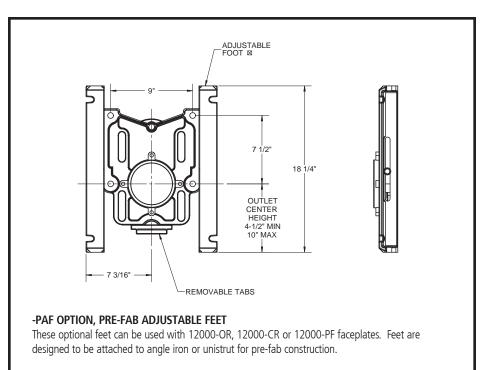
ILLUSTRATION A

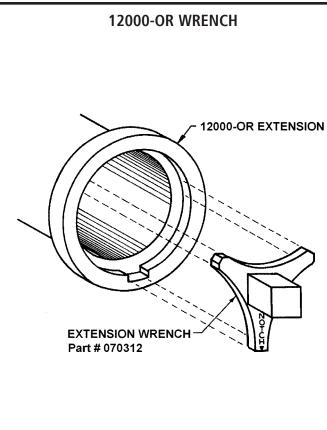
ILLUSTRATION B

(-24) OPTION, FOR FLOOR-MOUNTED BACK-OUTLET CHINA CLOSETS

This option adapts adjustable as well as other types of fittings for securing floor-mounted back-outlet China closets. Any adjustable fitting is adapted as shown in Illustration A. Other types of fittings are provided with bosses to attach the closet securing studs at the correct dimensions for this type of closet. See Illustration B.



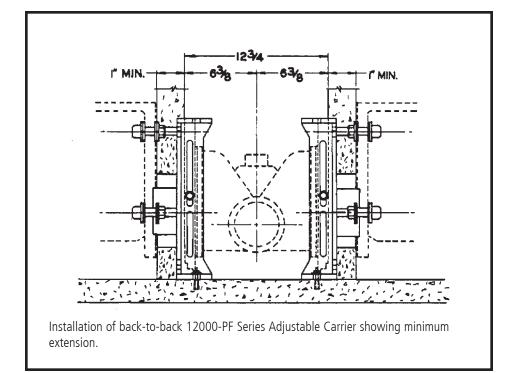


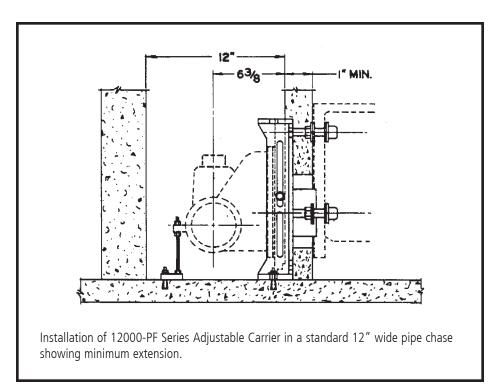


Use 12000-OR wrench to apply forward pressure as you thread extension into 12000-OR faceplace.

BOWL TO CARRIER INSTALLATION MOUNTING STUD BACK-UP NUT STEEL WASHER BOWL STABILIZER CLOSET FLANGE JOSAM CAP -FIBER WASHER FH Hardware Part #: 565985T Mounting Stud and Back-up Nut not included in FH Hardware Kit. To set bowl using finished hardware group "FH," put a hex nut, back-up washer, and a bowl stabilizer on each mounting stud. Adjust with front of back-up nut and washer at finished wall line. If the back-up nut and washer are moved to clear irregularities in the finished wall, the extension MUST be adjusted an equal amount. Place fixture gasket in toilet outlet and hang closet. Assemble fiber washers and JOSAM cap nuts to two studs on the center line of the closet outlet and one other stud below and tighten with a wrench. Assemble fiber washer and JOSAM cap nut to remaining stud, hand tighten and take 1/2 turn with a wrench.

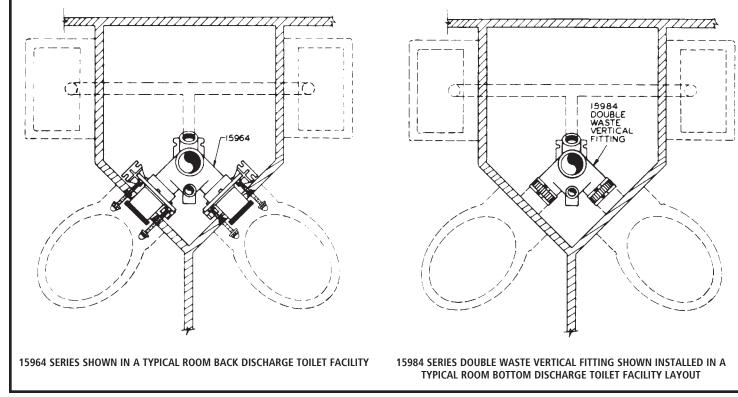
Closet Carriers

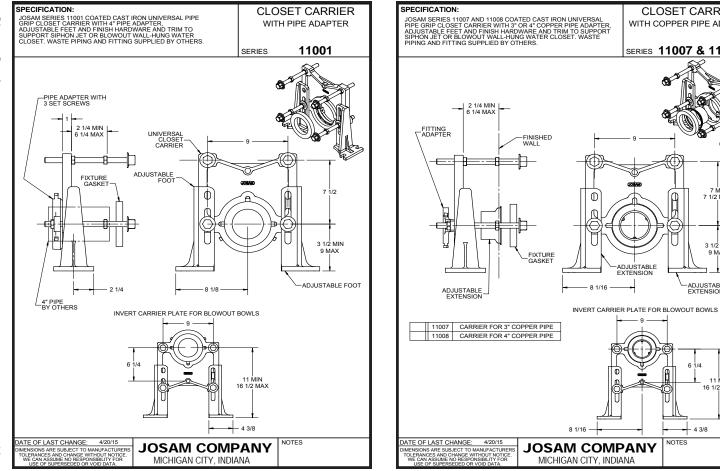




Installations 90° Double Waste Fitting 15964 &15984 Series

Installations of 15964 and 15984 Series double vertical 90° no-hub fittings where a closet and lavatory are installed in each room with one stack serving two rooms.





CLOSET CARRIER

WITH COPPER PIPE ADAPTER

7 MIN

7 1/2 MAX

3 1/2 MIN

9 MAX

11 MIN

16 1/2 MAX

ADJUSTABLE

EXTENSION

6 1/4

4 3/8

NOTES

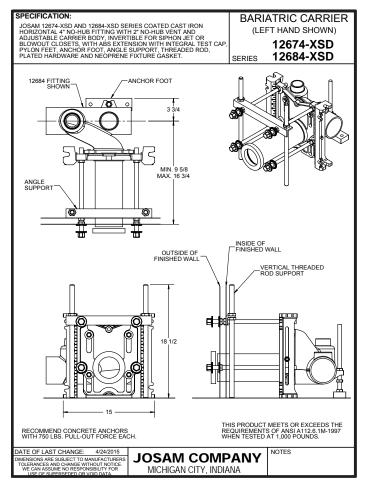
SERIES 11007 & 11008

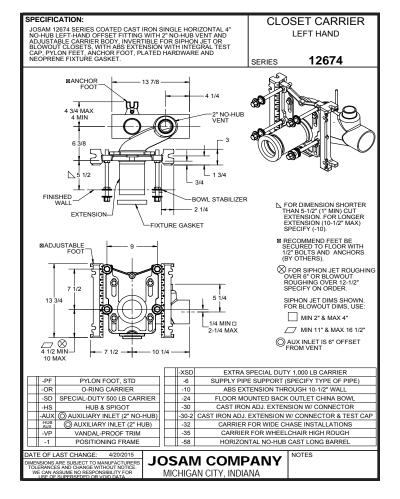
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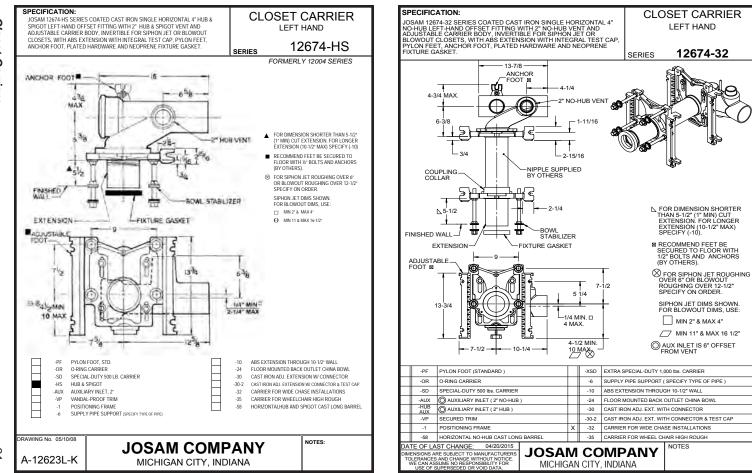
8 1/16

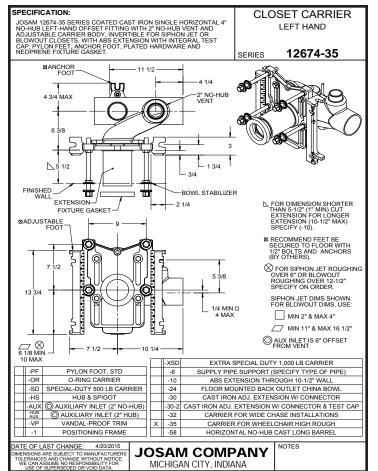
ADJUSTABLE EXTENSION

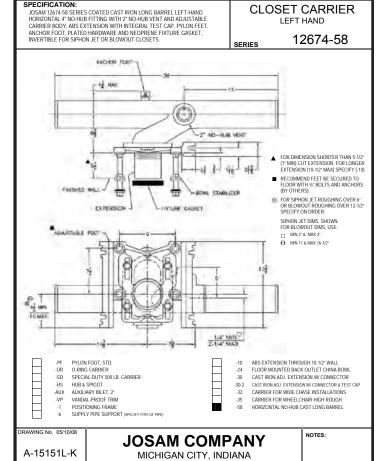
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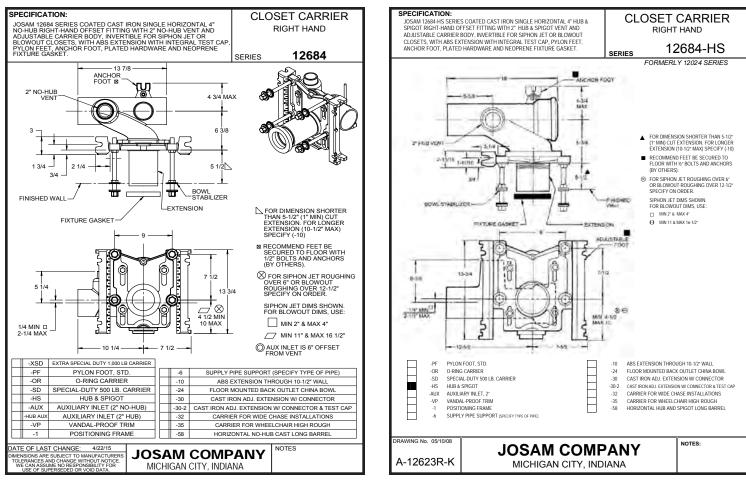


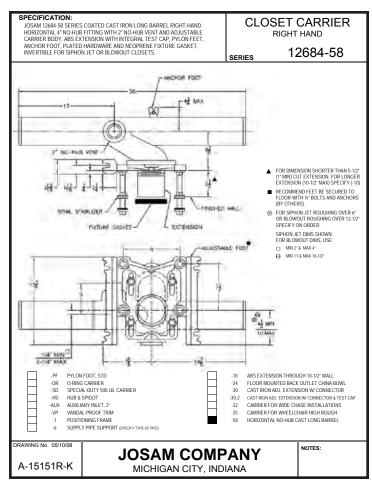


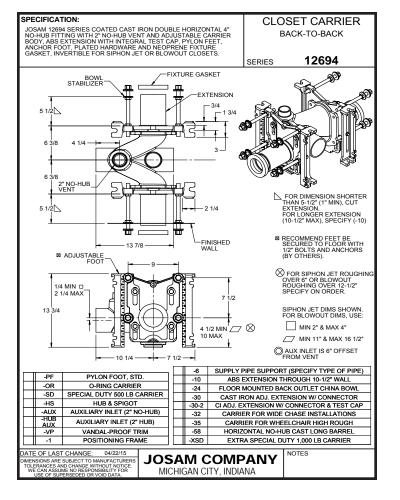


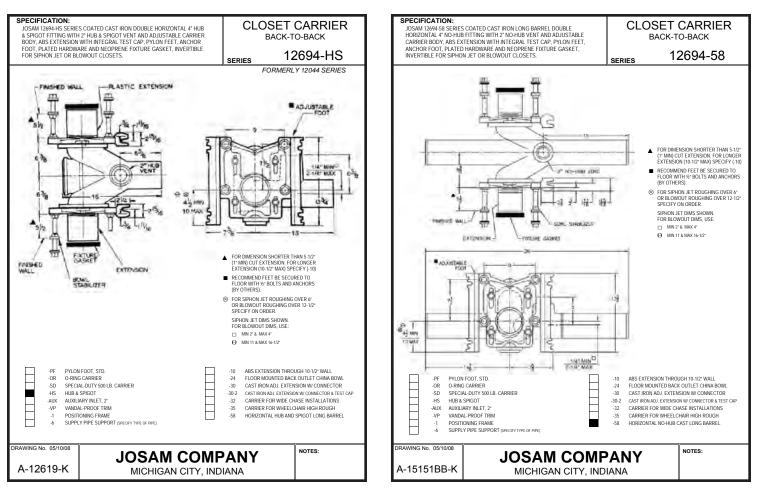




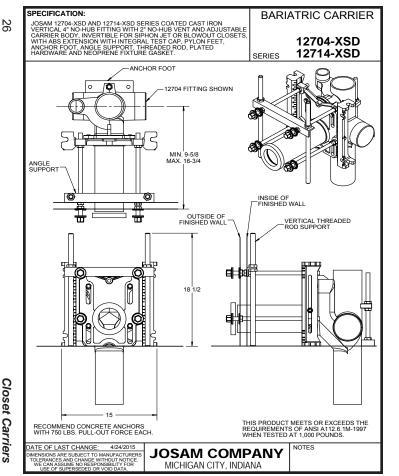


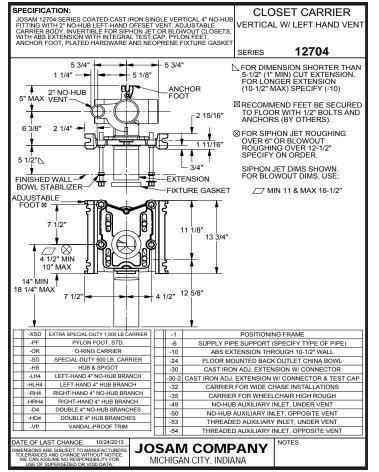




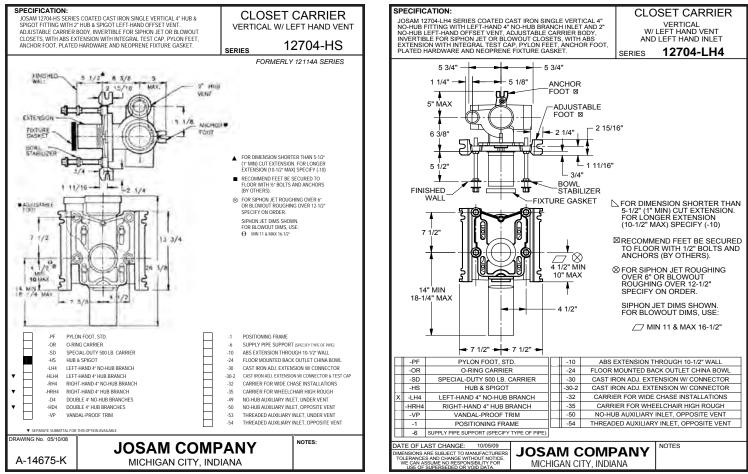


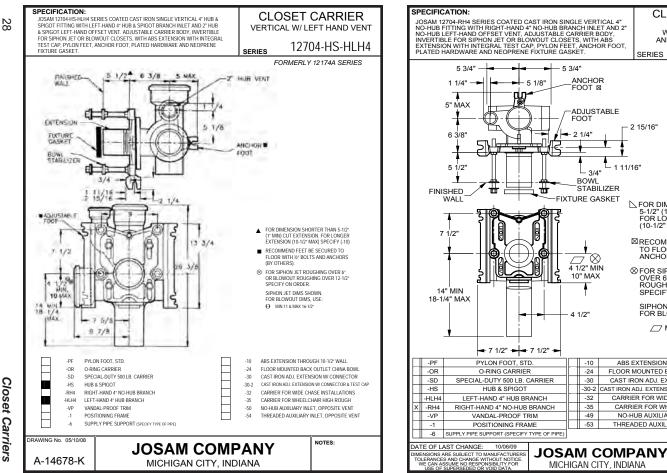
N 5





Closet Carriers





ANCHOR FOOT 🛛 -ADJUSTABLE 2 15/16" 1 11/16' 3/4" STABILIZER -FIXTURE GASKET FOR DIMENSION SHORTER THAN 5-1/2" (1" MIN) CUT EXTENSION. FOR LONGER EXTENSION (10-1/2" MAX) SPECIFY (-10) ☑ RECOMMEND FEET BE SECURED TO FLOOR WITH 1/2" BOLTS AND ANCHORS (BY OTHERS), 4 1/2" MIN ⊗ FOR SIPHON JET ROUGHING 10" MAX OVER 6" OR BLOWOUT ROUGHING OVER 12-1/2" SPECIFY ON ORDER. SIPHON JET DIMS SHOWN. FOR BLOWOUT DIMS, USE: /___7 MIN 11 & MAX 16-1/2" ABS EXTENSION THROUGH 10-1/2" WALL FLOOR MOUNTED BACK OUTLET CHINA BOWL CAST IRON ADJ. EXTENSION W/ CONNECTOR

CAST IRON ADJ. EXTENSION W/ CONNECTOR & TEST CAP

CARRIER FOR WIDE CHASE INSTALLATIONS

CARRIER FOR WHEELCHAIR HIGH ROUGH

NO-HUB AUXILIARY INLET, UNDER VENT

THREADED AUXILIARY INLET. UNDER VENT

NOTES

SERIES

CLOSET CARRIER

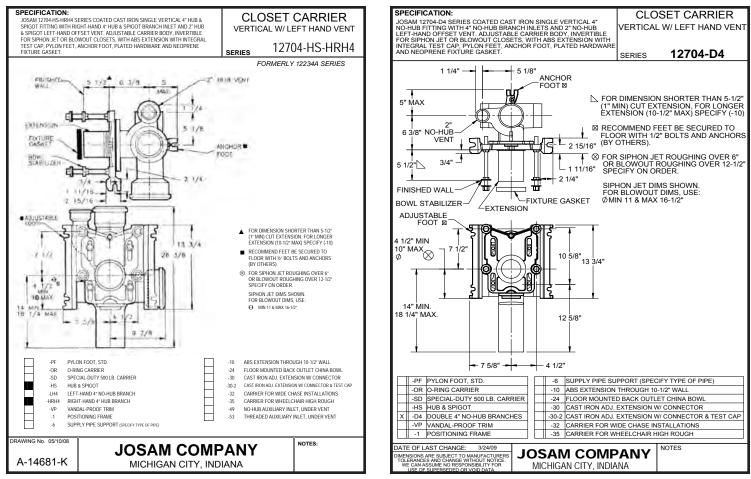
VERTICAL

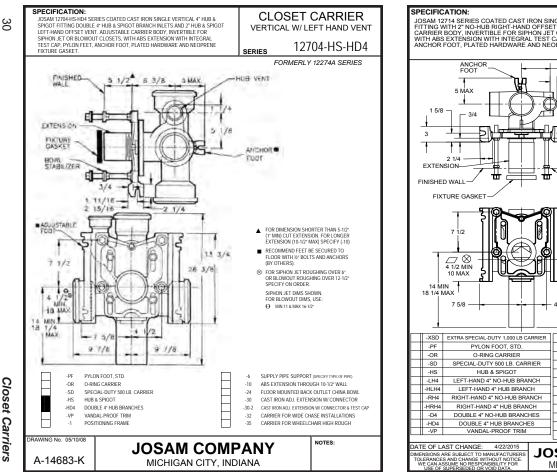
W/ LEFT HAND VENT

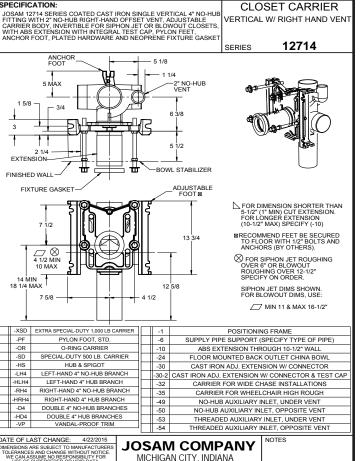
AND RIGHT HAND INLET

12704-RH4

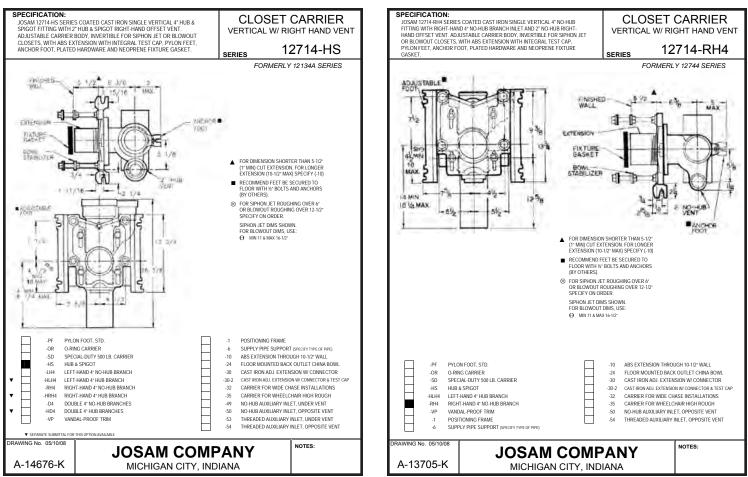
Closet



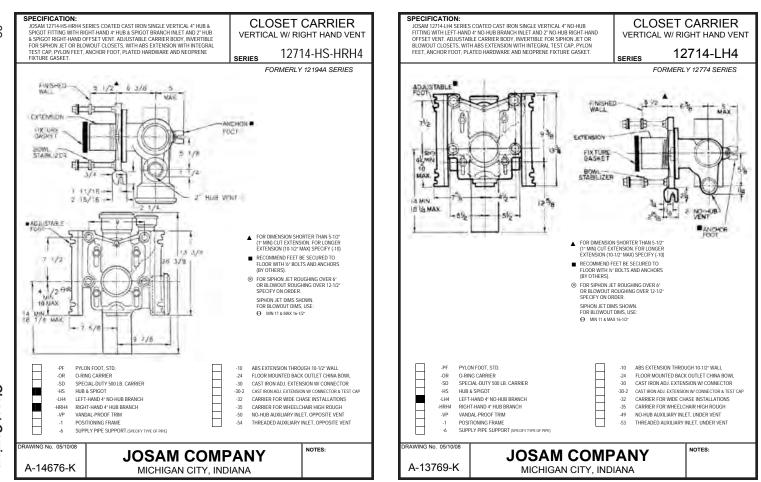




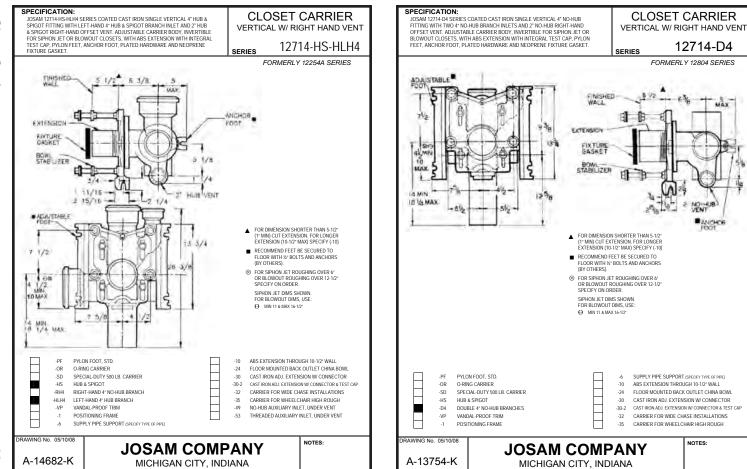
Closet Carriers



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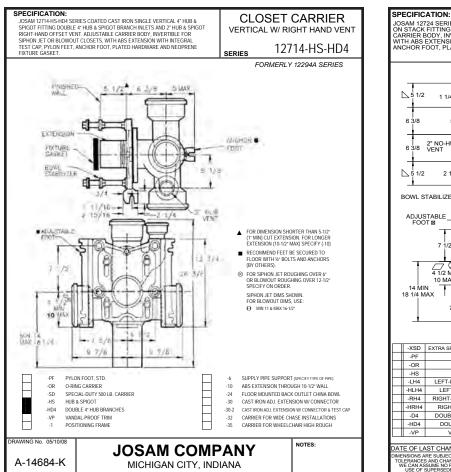


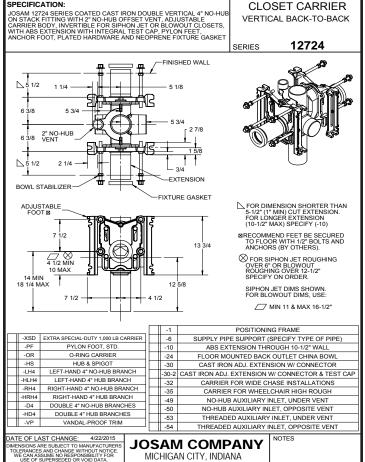
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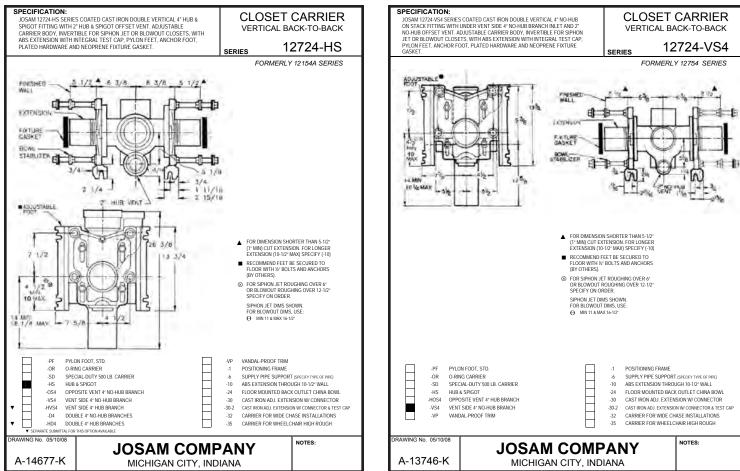
MAX

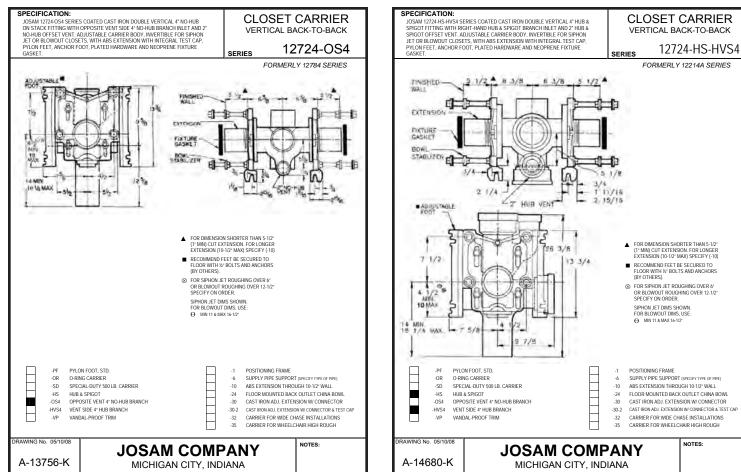
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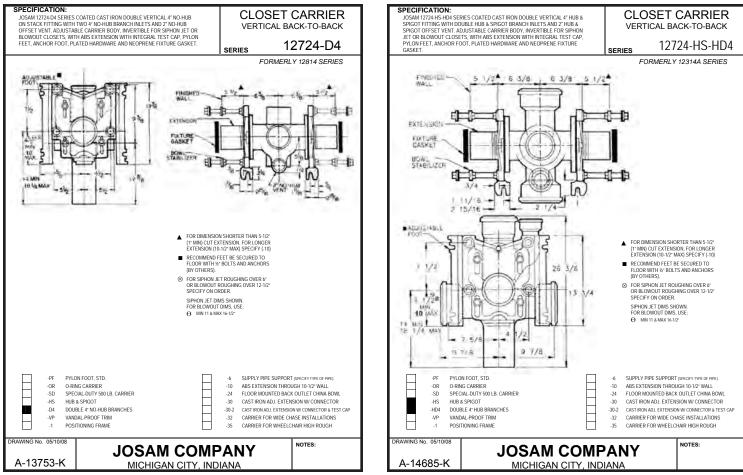
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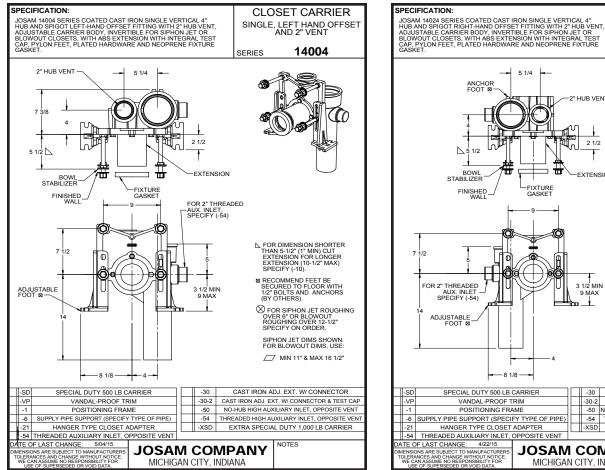


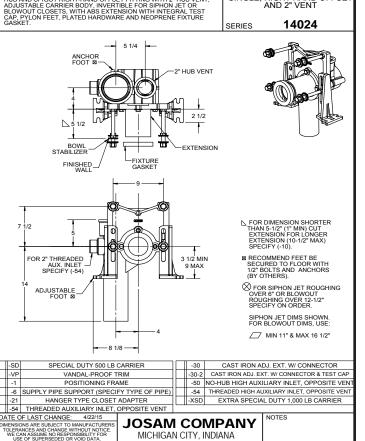


Closet Carriers

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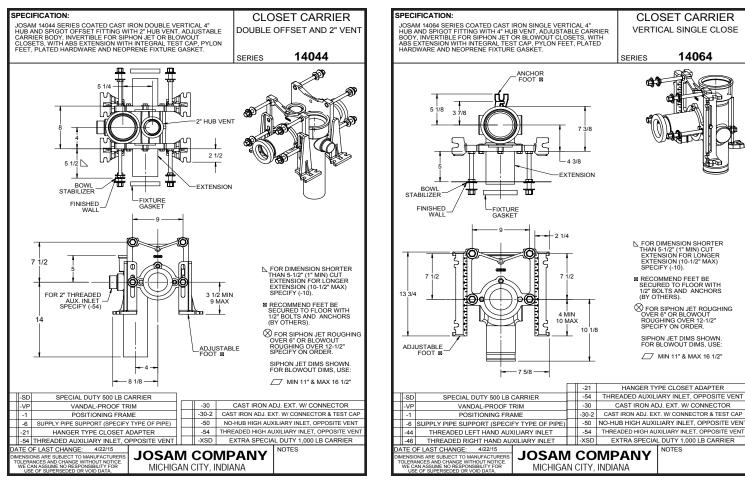


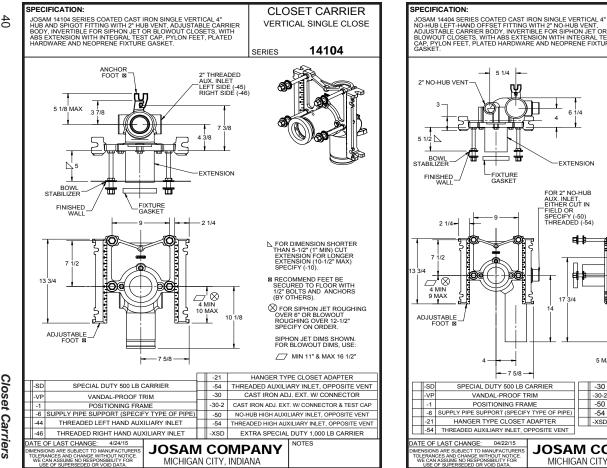
CLOSET CARRIER

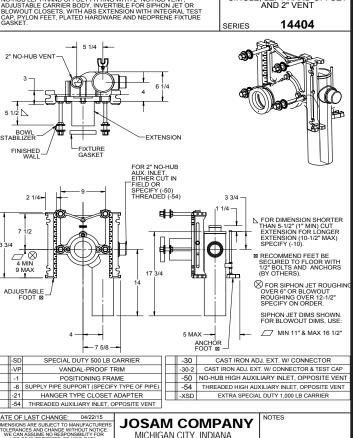
SINGLE, RIGHT HAND OFFSET

Closet Carriers

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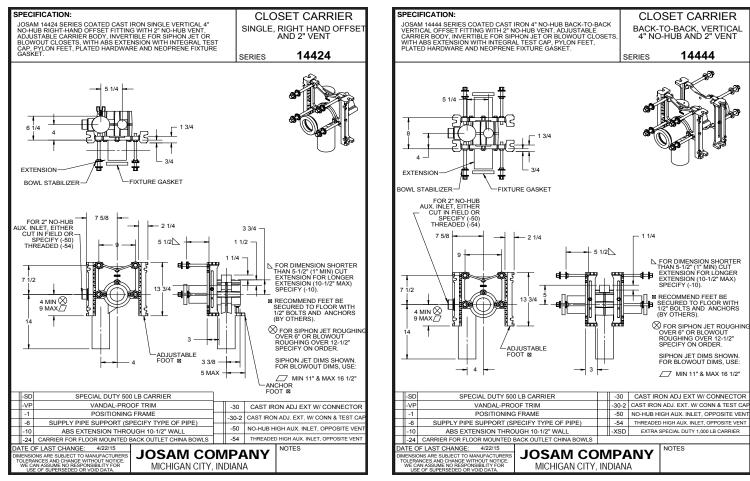


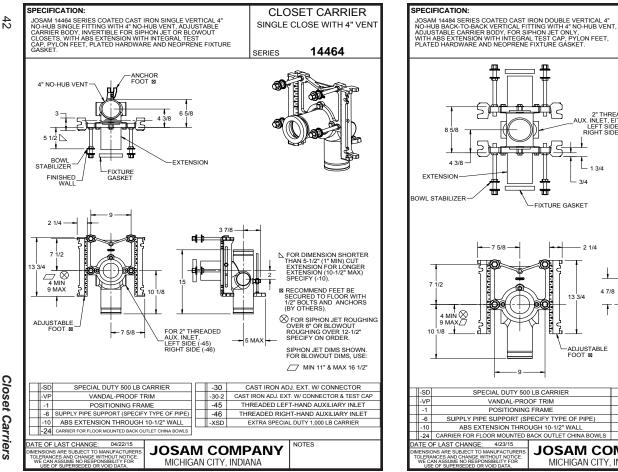


CLOSET CARRIER

SINGLE, LEFT HAND OFFSET

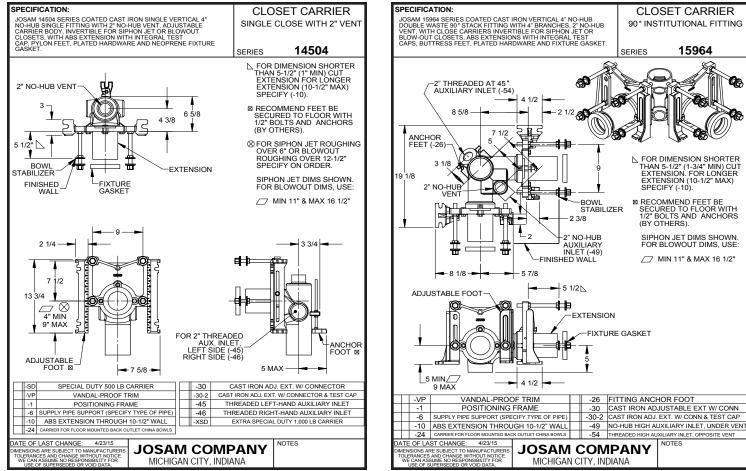
Closet

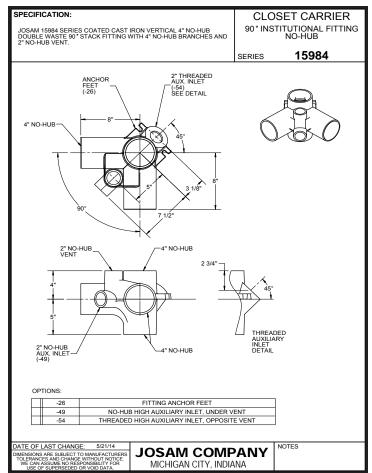


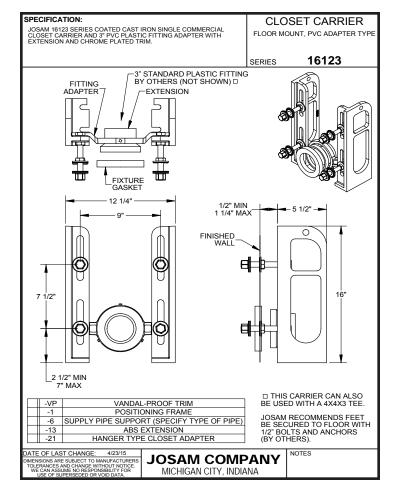


DOUBLE CLOSE WITH 4" VENT 14484 SERIES ▶ FOR DIMENSION SHORTER THAN 5-1/2" (1" MIN) CUT EXTENSION FOR LONGER EXTENSION (10-1/2" MAX) SPECIFY (-10) RECOMMEND FEET BE SECURED TO FLOOR WITH 2" THREADED 1/2" BOLTS AND ANCHORS AUX. INLET, EITHER (BY OTHERS). LEFT SIDE (-45) RIGHT SIDE (-46) S FOR SIPHON JET ROUGHING OVER 6" OR BLOWOUT ROUGHING OVER 12-1/2" SPECIFY ON ORDER. SIPHON JET DIMS SHOWN. 1 3/4 FOR BLOWOUT DIMS, USE: / MIN 11" & MAX 16 1/2" 211 FIXTURE GASKET 2 1/4 5 1/2 84 47/8 13 3/4 ADJUSTABLE FOOT M 3 SPECIAL DUTY 500 LB CARRIER -30 CAST IRON ADJ EXT W/ CONNECTOR -30-2 CAST IRON ADJ. EXT. W/ CONN & TEST CAP -45 THREADED LEFT-HAND AUXILIARY VENT SUPPLY PIPE SUPPORT (SPECIFY TYPE OF PIPE) -46 THREADED RIGHT-HAND AUXILIARY VENT ABS EXTENSION THROUGH 10-1/2" WALL -XSD EXTRA SPECIAL DUTY 1.000 LB CARRIER CARRIER FOR FLOOR MOUNTED BACK OUTLET CHINA BOWLS NOTES JOSAM COMPANY MICHIGAN CITY, INDIANA

CLOSET CARRIER







1. Tandem keepers in slots on the arm permit positioning of leveling 5. The final setting of the arm out from the wall can be made screws on the job to suit punchings of any lavatory specified. from the face of the finished wall after the wall is built. 2. Screws in keepers can then easily be moved up or down to level 6. The set screws are easily accessible for guicker adjustment. the lavatory. 7. Arm with the locking device, tandem keepers, and adjustable 3. The securing lock device is positioned on the arm and tightens sleeve, is completely assembled at the factory. against the fixture to hold it rigidly in place. 8. Hardware is plated to prevent corrosion. 4. The sleeve can be adjusted to suit various wall thicknesses. HE ROD HEADER LOCKNUT

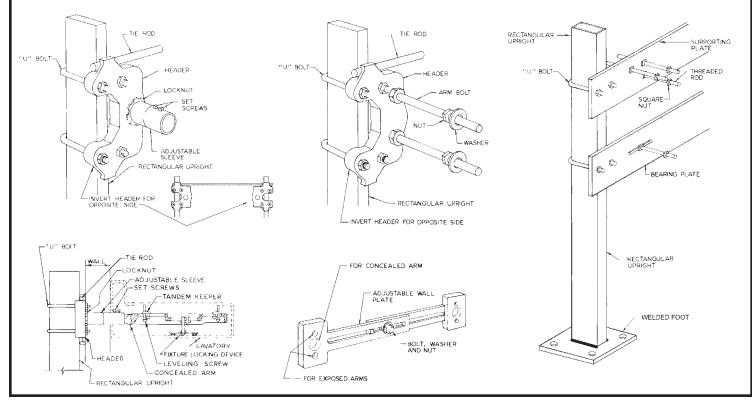
CONCEALED TYPE LAVATORY CARRIER

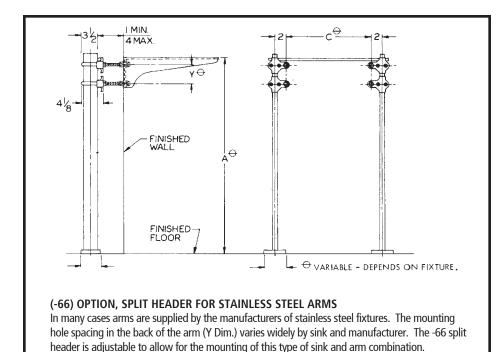
Fixture Carriers

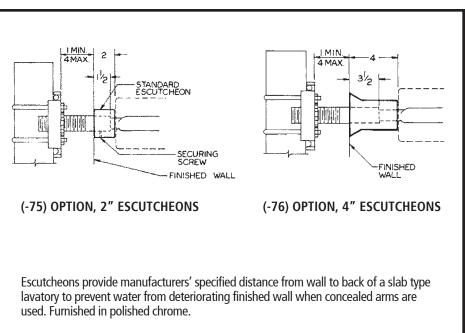
4" SET SCREWS "U" BOLT " TANDEM KEEPER 10 CREWS ADJUSTABLE SLEEVE AD INSTABLE æ SLEEVE PU″ BOLT TANDEM KEEPER CONCEALED ARM CONCEALED TIE ROD ARM RECTANGULAR UPRIGHT OCKNUD Detail of securing method ADJUSTABLE SLEEVE INVERT HEADER FOR OPPOSITE SIDE ----SET SCREWS _EVELING SCREW for concealed arm carrier. масн SCREW Detail of leveling arrangement for concealed arm carrier. Detail of parts of concealed arm carrier in or behind finished wall. FIXTURE LOCKING DEVICE HEADER VELING SCREW CONCEALED ARM For roughing dimensions for specific fixtures, please RECTANGULAR UPRIGHT refer to the Josam website, www.josam.com. Detail of parts of concealed arm carrier.

Parts & Details Lavatory, Sink & Urinal Carriers

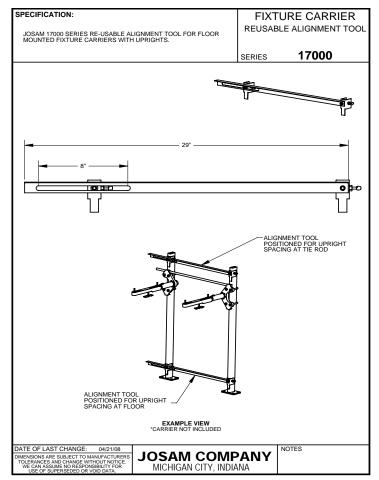
The drawings on this page show the relationship between mating parts of carriers covered in this section.

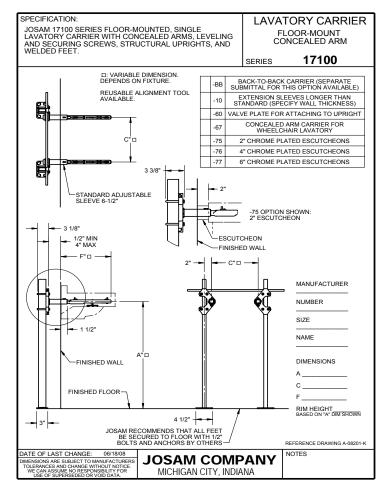




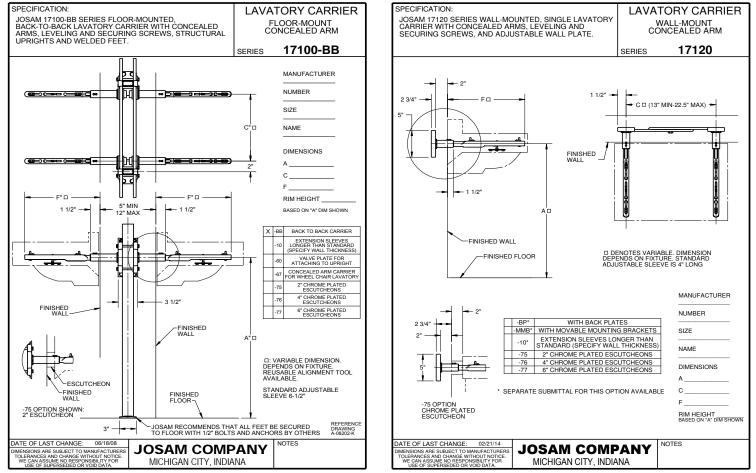


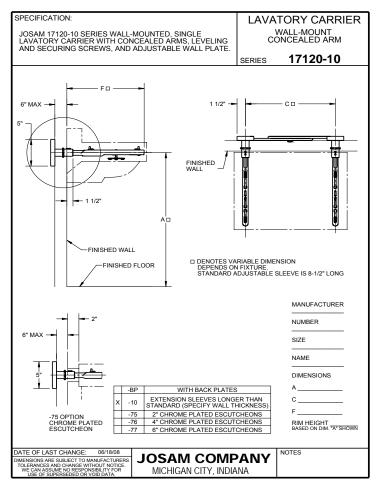
(-77) OPTION, 6" ESCUTCHEONS also available.

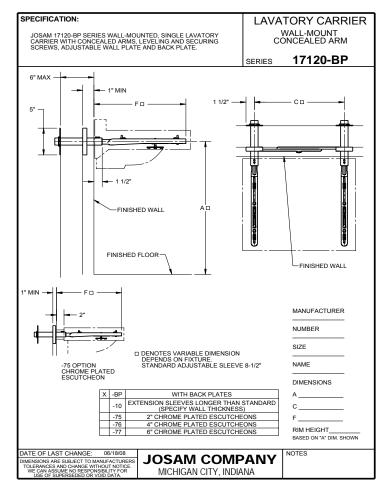




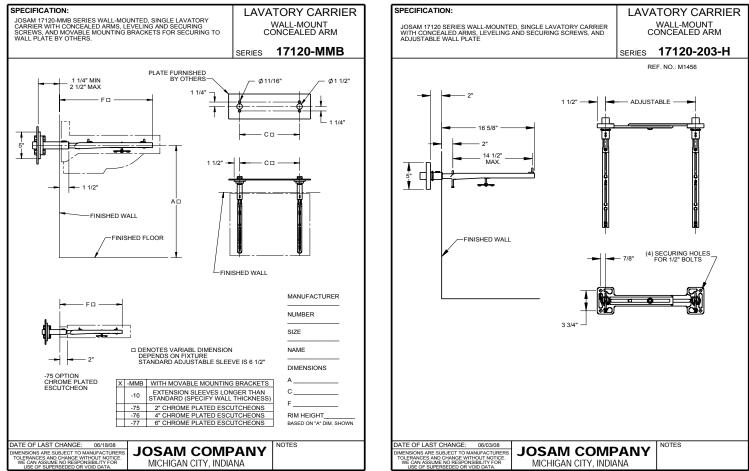
Fixture Carriers



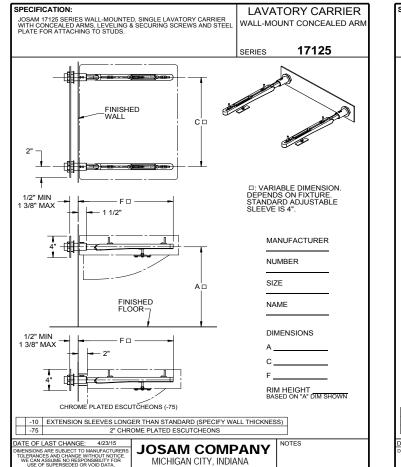


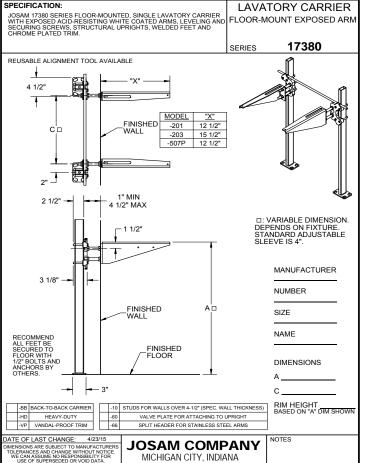


Fixture Carriers

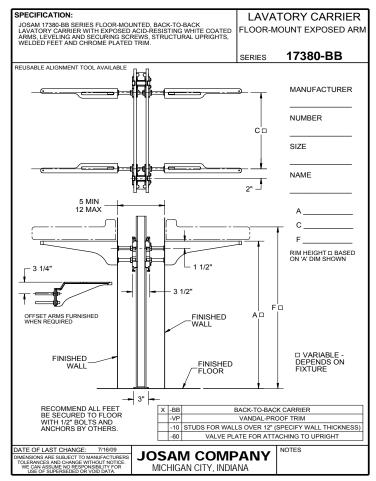


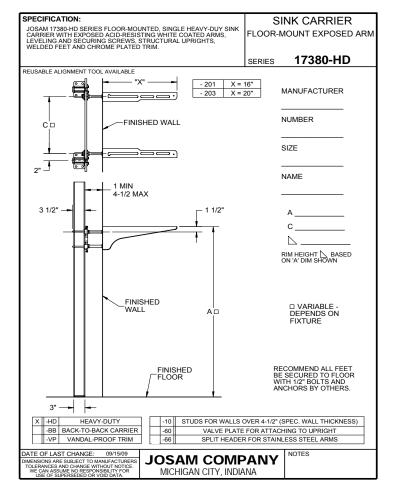
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Fixture Carriers

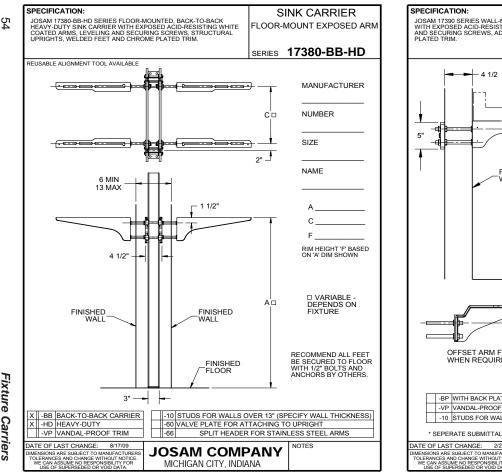


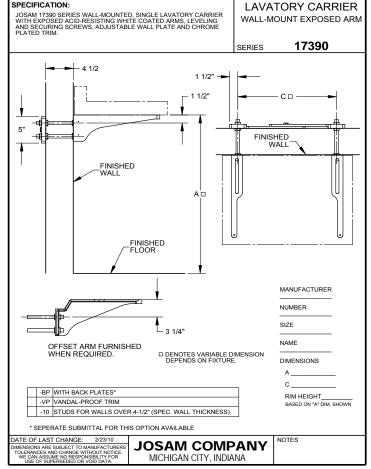


Fixture Carriers

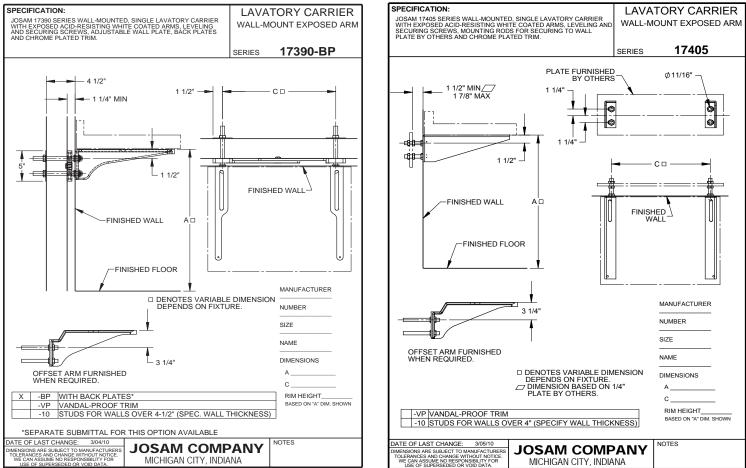
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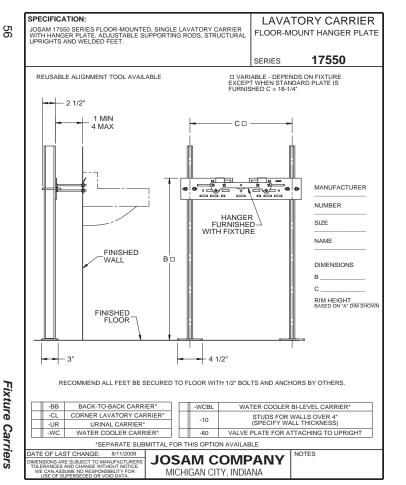
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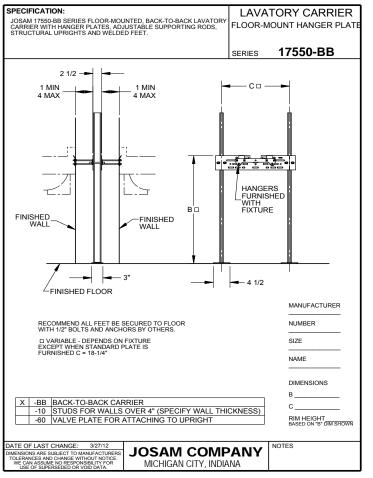


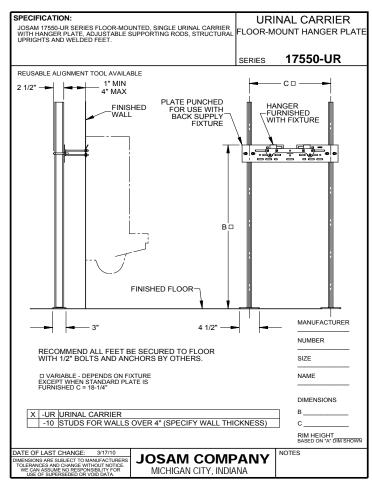


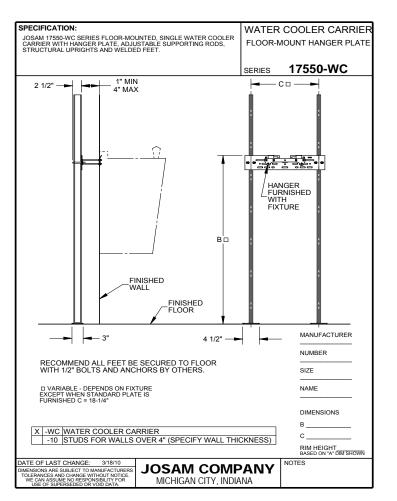
Fixture Carriers



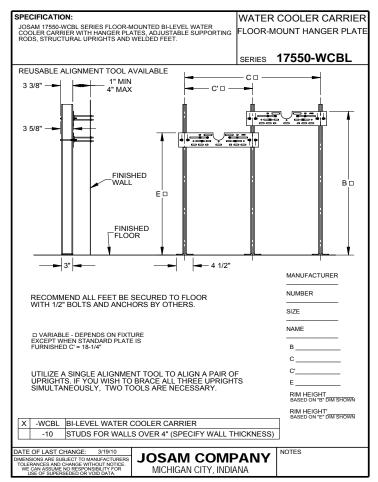


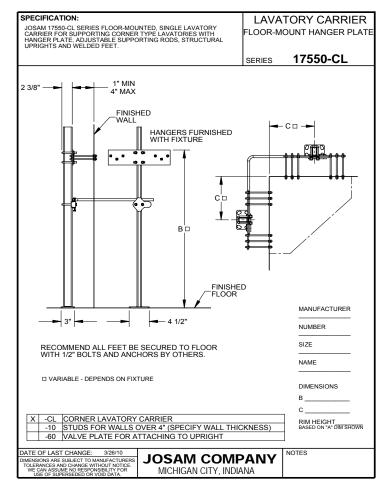




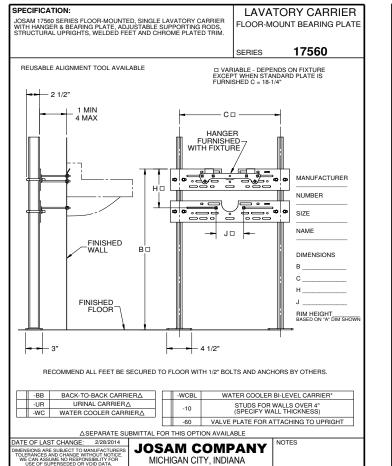


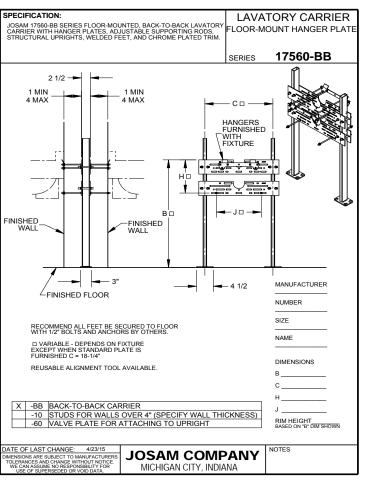
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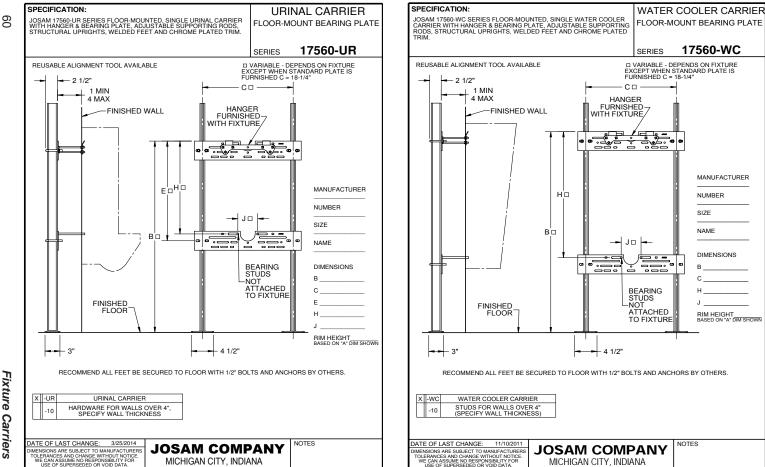




Fixture Carriers







17560-WC

MANUFACTURER

NUMBER

SIZE

NAME

DIMENSIONS

RIM HEIGHT

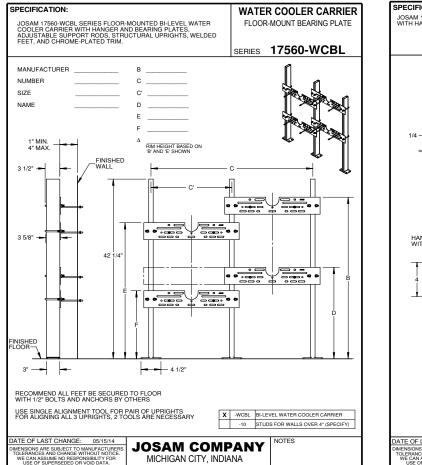
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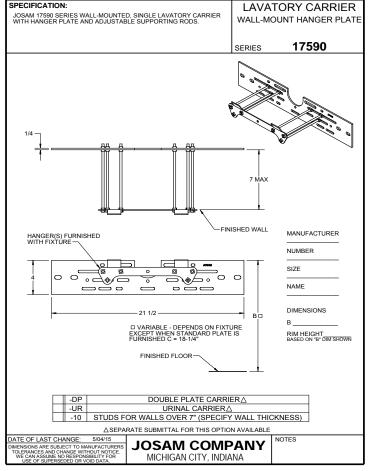
BASED ON "A" DIM SHOWN

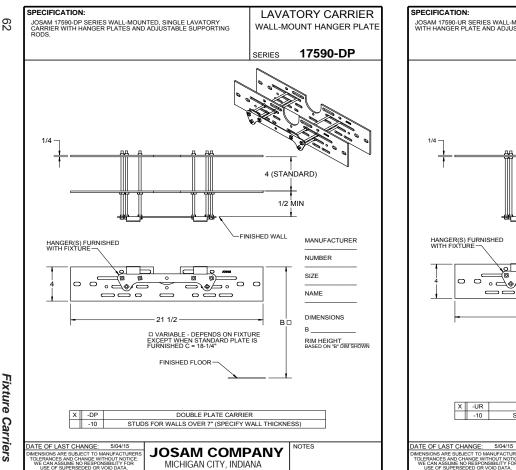
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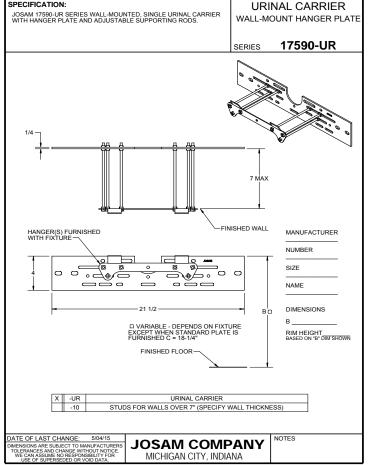
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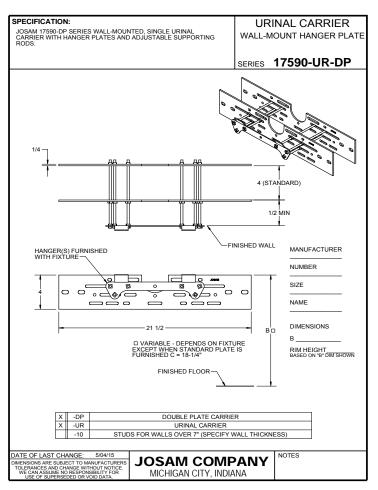
Fixture Carriers

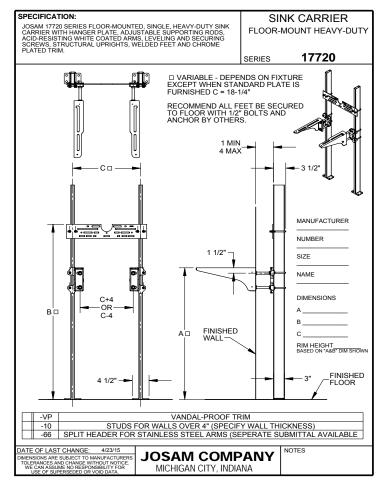


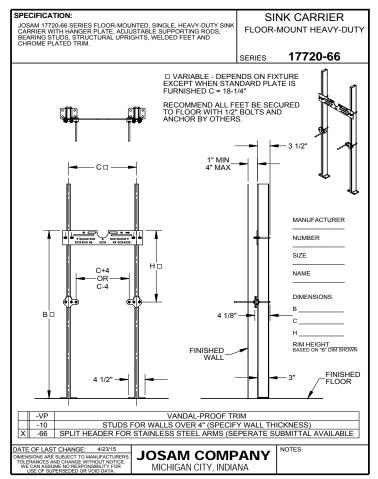


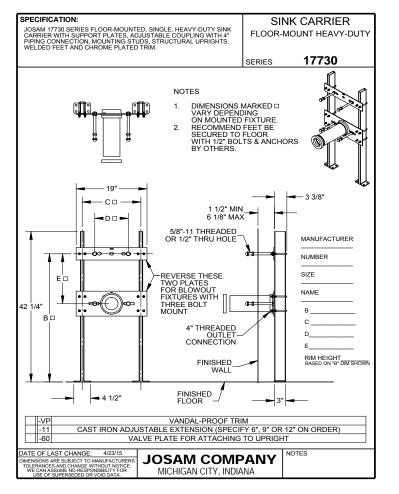




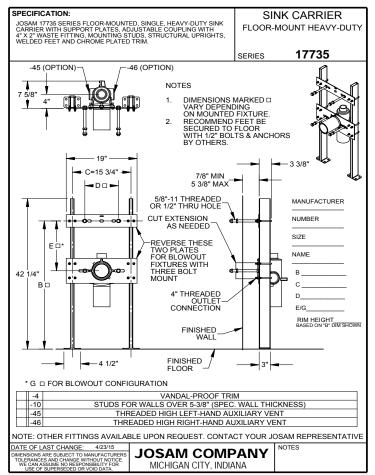








Fixture Carriers



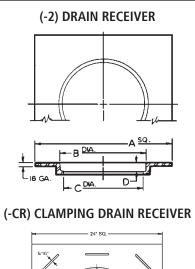
ECIFICATION: ISAM SERIES 19800 ELASTOMERIC NEOPRENE GASKET INFORMING TO ASTM-C564 STANDARD FOR WATER-TIGHT SEAL TH PIPE IN JOSAM INSIDE CAULK OUTLETS (-X).					GASKET JIFFE JOINT
TH PIPE IN JOSAM IN	SIDE CAULK	UUILEIS (-X).		SERIES	19800
					
l l					
	/				
	<u></u>				
-	-	- FITS JOSAM IN	DR PIPE O.D SIDE CAULK (-2		
	1	1 1	EOR BI	PE O.D.	
	TYPE NO.	DESIGNATION	MIN.	MAX.	A
	19802	2" SW	2.125	2.390	1-1/2
	19803	3" SW	3.125	3.390	1-3/4
	19804	4" SW	4.125	4.390	2-1/4
-	19805 19806	5" SW 6" SW	5.210 6.210	5.390 6.390	2-1/2 2-5/8
-	19806	2" XH	2.290	2.470	1-1/2
-	19812	2 XH 3" XH	3.410	3.590	1-3/4
-	19814	4" XH	4.410	4.590	2-1/4
	19815	5" XH	5.410	5.590	2-1/2
	19816	6" XH	6.410	6.590	2-5/8
-			5.550	5.700	2-1/2
	19825	5" SP			
	19825 19826	5" SP 6" SP	6.550	6.700	2-5/8
E OF LAST CHANGE:		6" SP	6.550	6.700	NOTES

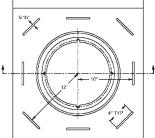
Installing JOSAM Products Using the JIFFEE-JOINT Gasket.

- 1. Set drain body to the proper height over pipe.
- 2. Level and support in place.
- 3. After coating gasket and inside of drain with a gasket lubricant, slip gasket over pipe and press down as far as possible by hand.
- Placing a caulking tool in groove at top of gasket, drive the gasket down flush with the pipe top – no further. You have made a perfect joint.

GASKET-PIPE TABLE									
CAST IRON PVC									
TYPE NO.	SOIL	PIPE	NO	PLA	STIC	THIN		COPPER	
	XH	SW	HUB	ABS	PVC	WALL	STEEL	DWV	GLASS
19802		•				•		•	•
19803		•	•			•		•	
19804		•	•			•		•	
19805		•	•						
19806		•	•						
19812	•		•	٠	•		•		•
19813	•			٠	٠		•		•
19814	•			٠	•		•		•
19815	•								
19816	•								
19825				•	•		•		
19826				٠	•		•		•
SW – Servi	ce Weigh	t)	KH – Fx	tra He	avv	SP -	- Steel Pir)e	

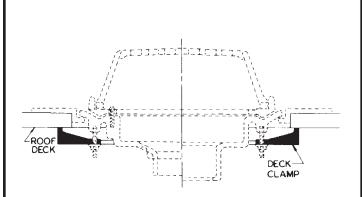
SW – Service Weight XH – Extra Heavy SP – Steel Pipe These recommendations apply to pipe that conforms to ANSI, ASTM and other applicable standards. JIFFEE-JOINT Gaskets are designed for use only with JOSAM caulk outlet (-X) products.





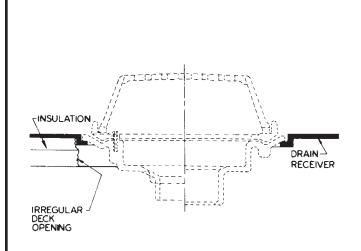


	DRAIN RECEIVER DIMENSIONS									
SERIES NO.	. A	A		В		С		D		
21500	0 24		15-1/2		14-9/16		21/64			
22010	20		12-1/4		11-1/2		21/64			
22080	16		9-1/2		7-1/2		47/64			
	APPLICABLE DRAIN RECEIVER									
DRAIN		OUTLET SIZE								
SERIES	2" - 4"		5″	6'	-	8″		10″		
21500	21500 21500-CR	21	21500 500-CR	215 21500	500 D-CR	21500 21500-CF	2	21500 21500-CR		
22010	22010		22010	220	010					
22080	22080									
23710	22010	2	2010	22010						
23730	22080									
23740	22080									
25500	21500 21500-CR	21	21500 500-CR	215 21500	500 D-CR	21500 21500-CF	{			
25520	22010		22010	220	010					
25540	22080									
28600	21500 21500-CR	21	21500 500-CR	215 21500	500 D-CR	21500 21500-CF	R			



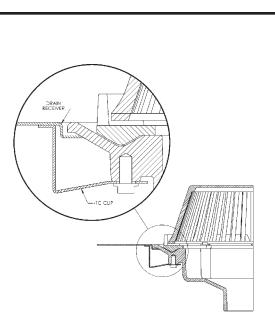
(-1) OPTION, DECK CLAMP

The deck clamp is the most dependable means by which the roof drain can be secured to the roof deck to insure a permanent bond that will prevent damage of flashing and membrane materials caused by movement and vibration. It is secured to the underside of the drain body with heavy-duty threaded rods, which provide adjustment to accommodate various slab or deck thicknesses, and is drawn tightly in place against the underside of the deck to form a positive union.



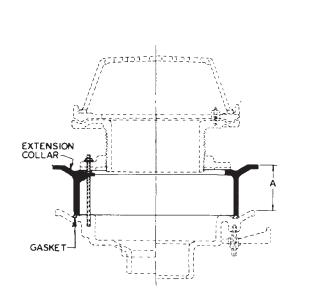
(-2) OPTION, DRAIN RECEIVER

The drain receiver is recommended for use in all roof drain installations regardless of deck construction and is of particular importance when used in conjunction with drains installed in decks where support is on insulation. The drain receiver is produced in heavy gauge steel, coated for protection, and embodies a recessed flange to carry the drain, and a wide flange to support the assembly on the roof. The drain receiver distributes the weight of the roof drain evenly over the deck and compensates for irregular and misaligned deck openings.



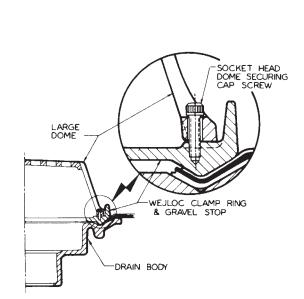
(-3C) OPTION, DRAIN RECEIVER & DRAIN RECEIVER CLIPS

Includes (-2) Optional Drain Receiver and clips, to secure the roof drain body directly to the receiver. Simply position the drain outlet face up, position drain receiver over the drain body and attach the four receiver clips with the hardware provided. Invert body and install the assembly into the deck opening. If necessary, secure assembly to the metal deck with self-tapping screws (by others).



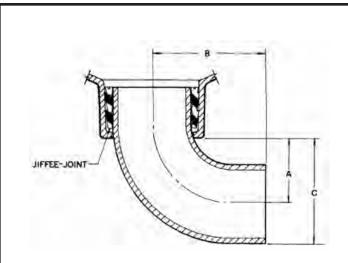
(-10) OPTION, FIXED EXTENSION COLLAR USED WITH LEVELEZE® DRAINS

For roof or deck construction where base slab to surface height is greater than can be accommodated with the standard LEVELEZE® collar, the (-10) Fixed Extension Collar "A" is used along with the (-AE) LEVELEZE® assembly. These collars can be used in multiples where extension requirements dictate. The Fixed Extension Collar can be cast in increments of 1, 2, 3 and 4 inches. Shorter or longer dimensions are available by cutting or stacking extensions



(-VP) OPTION, VANDAL-PROOF SECURED DOME

Where vandalism or mischievous activity is anticipated, it is advisable to specify vandal-proof domes on roof drains. All JOSAM precision-molded plastic large domes incorporate bayonet locking devices as standard equipment; however, when specified vandal-proof, they are further secured with screws to insure permanence of assembly. Other types of domes can also be vandal-proofed when specified.

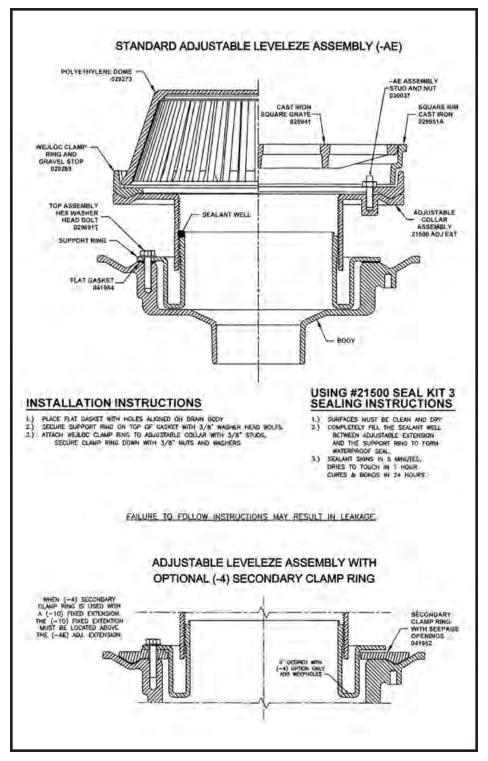


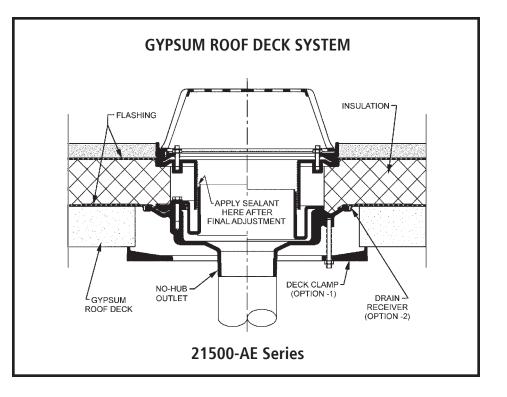
PIPE SIZE	А	В	с
2	2-1/2	4-1/2	3-5/8
3	2-13/16	5	4-1/2
4	3-1/2	5-1/2	5-11/16
5	4-5/16	6-1/2	6-15/16
6	4-13/16	7	7-15/16

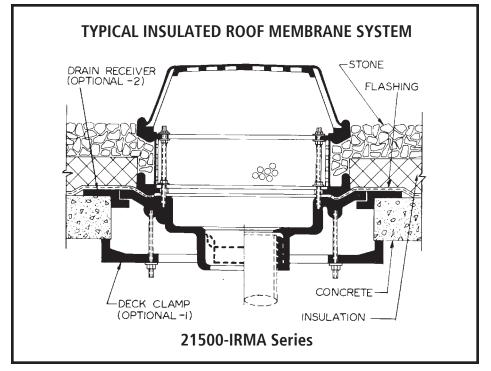
(-66) NO-HUB SIDE OUTLET

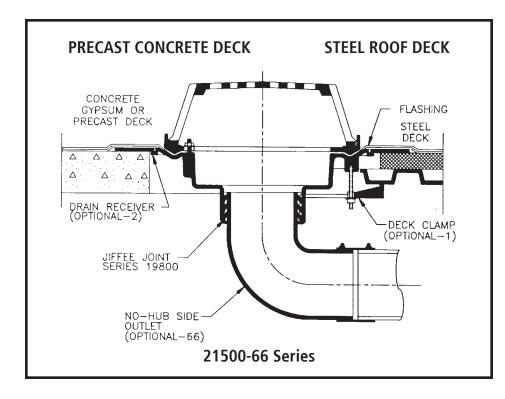
This option converts JOSAM bottom outlet inside caulk drains to no-hub side outlet drains using a 90° no-hub quarter bend and a JIFFEE-JOINT Gasket.

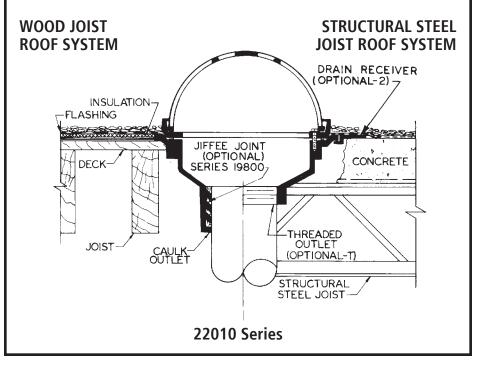
Roof Drains

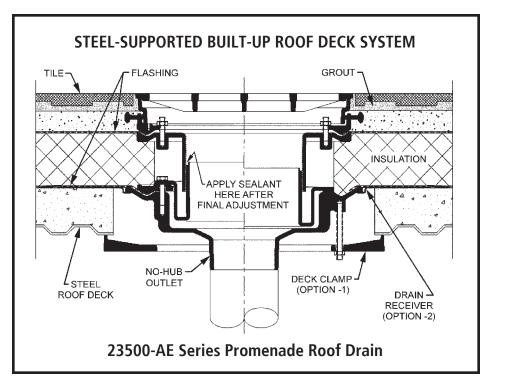


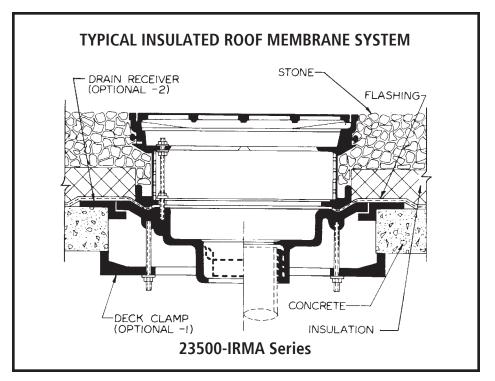


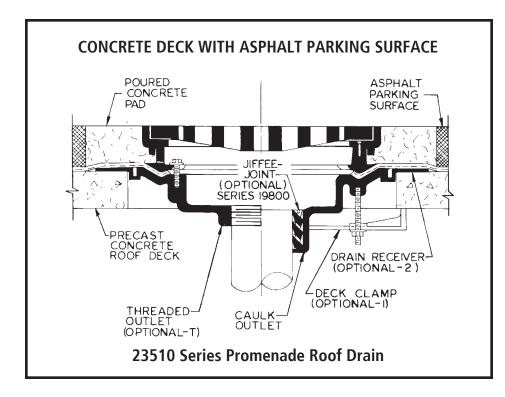


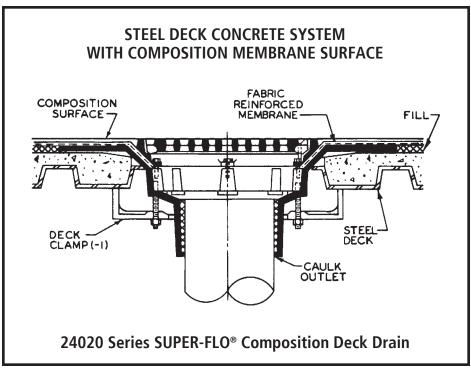


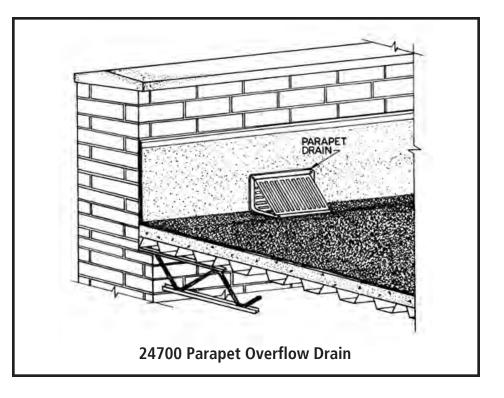


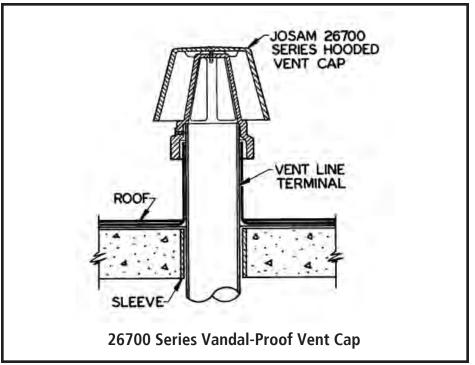








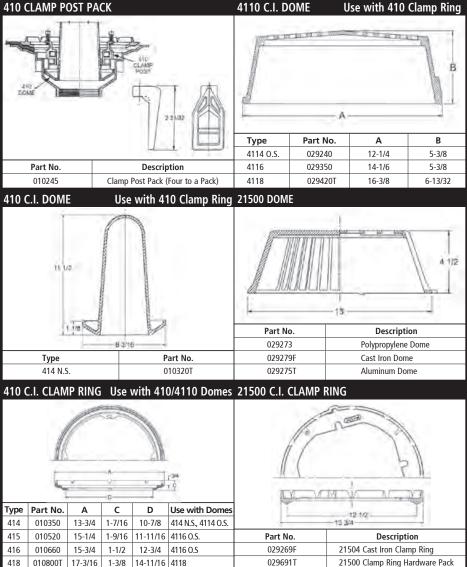




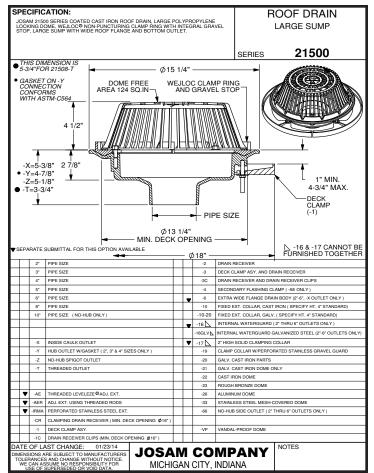
Replacement Parts

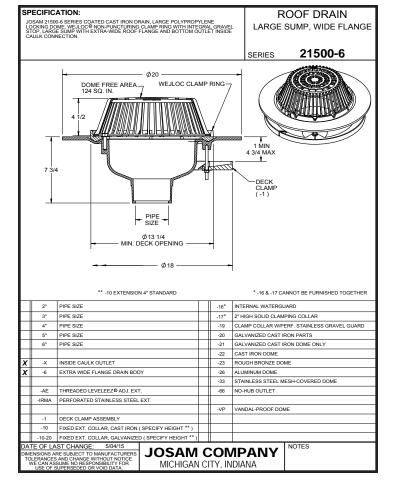
Josam introduced the first non-puncturing clamping device for roof drains in the 1920's. By casting lugs into the body and flat tabs onto the clamp ring, the membrane could be clamped between the drain body and clamp ring using the 410 Clamp Posts. The original design can be identified in the field by the use of these clamp posts to secure the body to the clamp ring. The 410 and 4110 Series replacement parts below are for use with these original drains. Please use these drawings to check dimensions carefully as replacement parts are not returnable.

410 CLAMP POST PACK

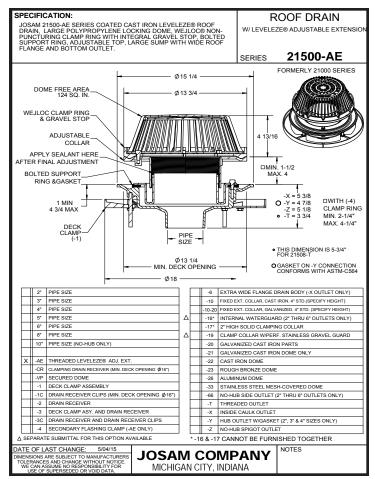


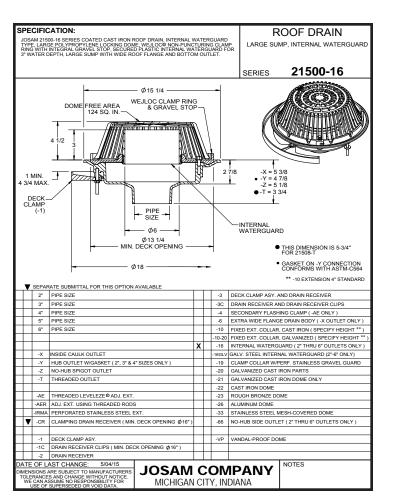
Roof Drains

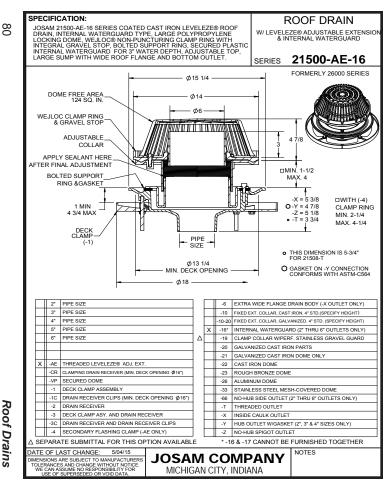


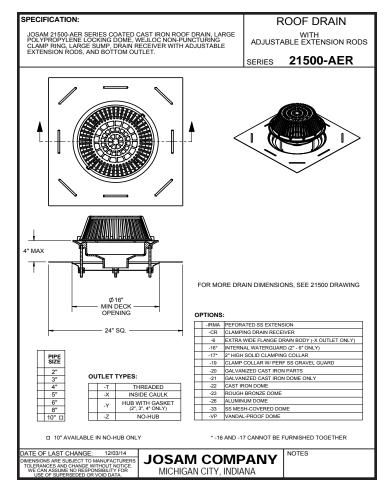


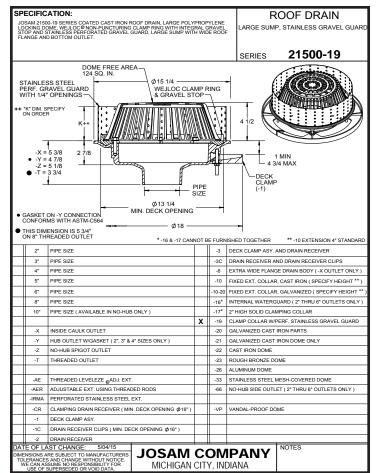
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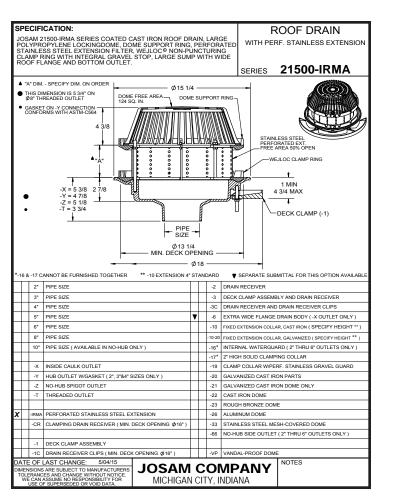


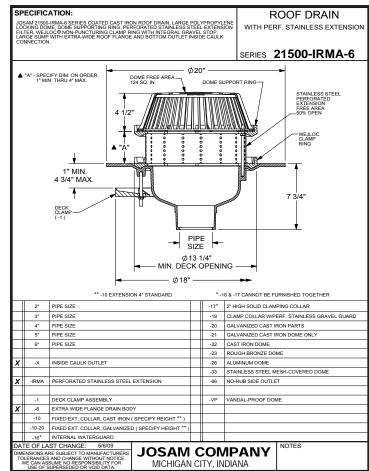


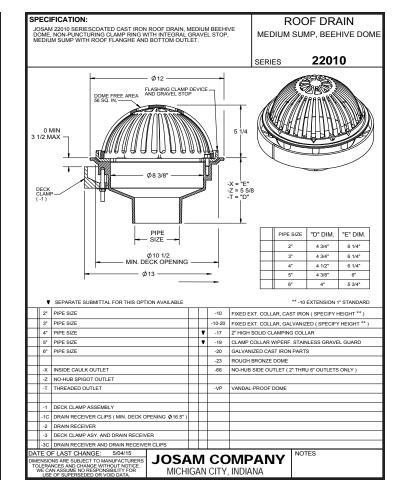






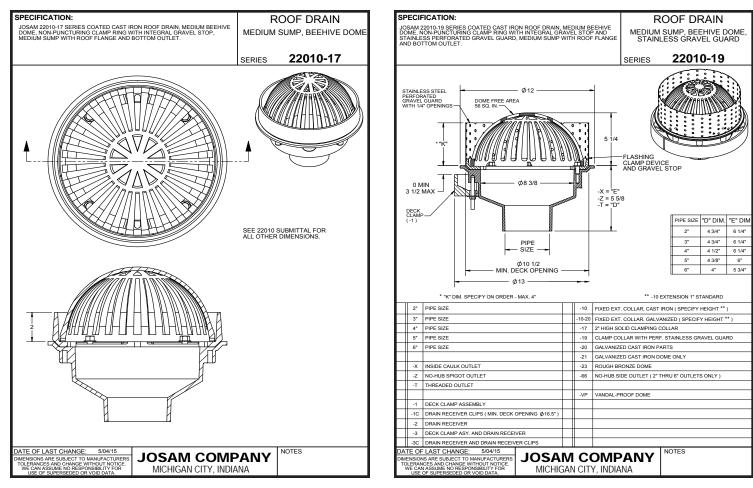


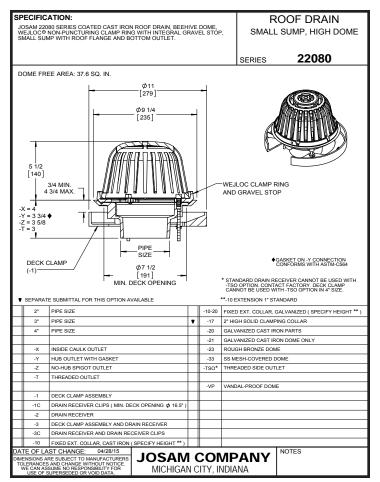


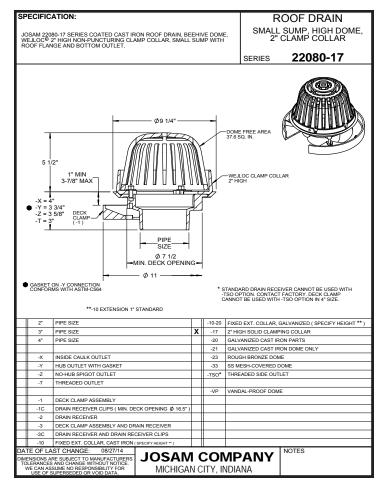


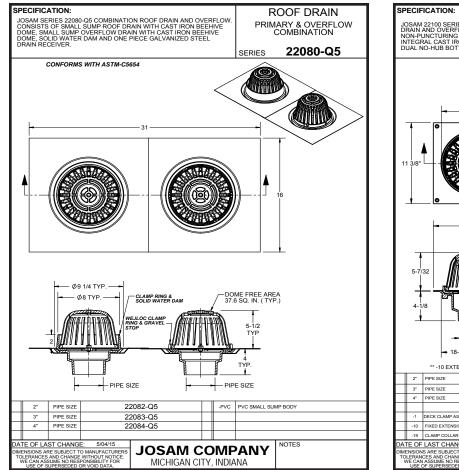
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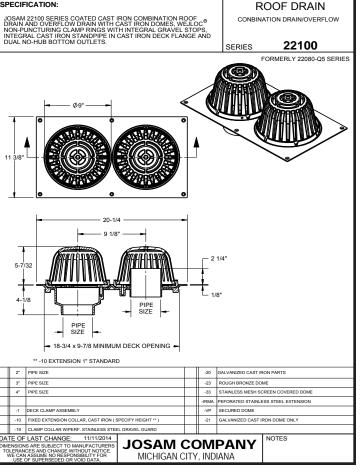
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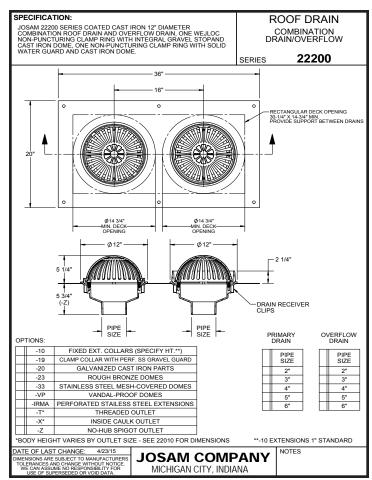


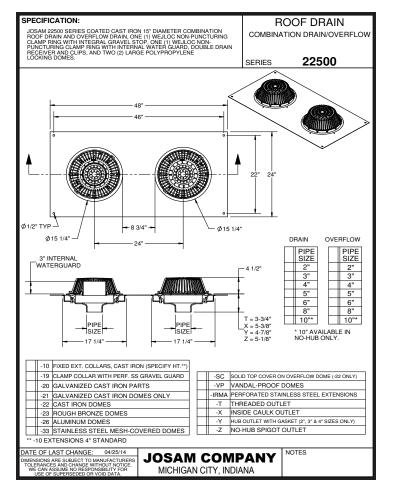


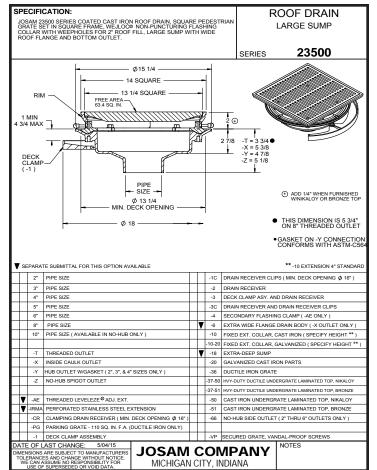


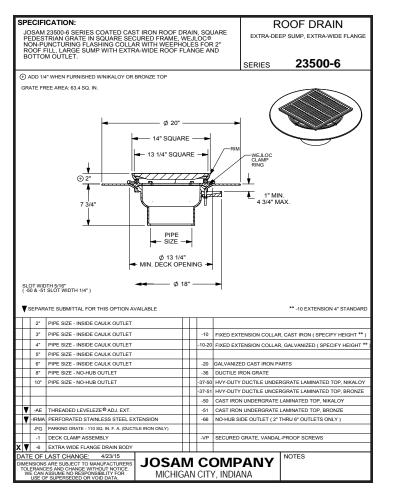


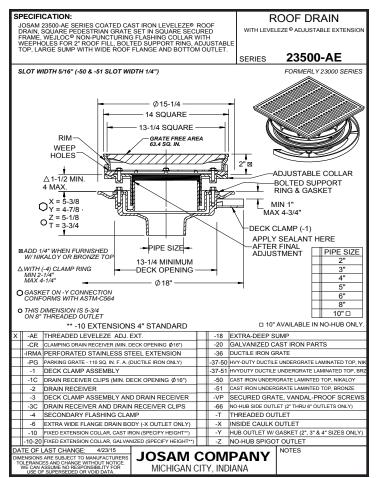


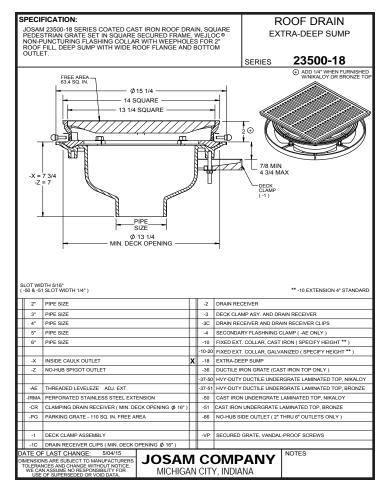


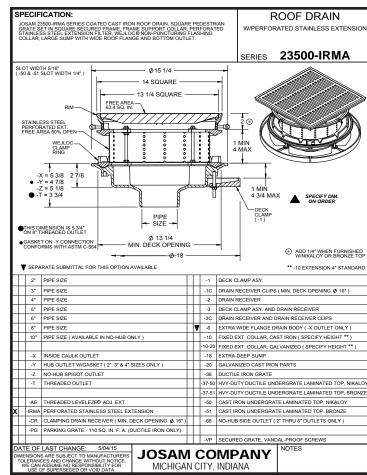


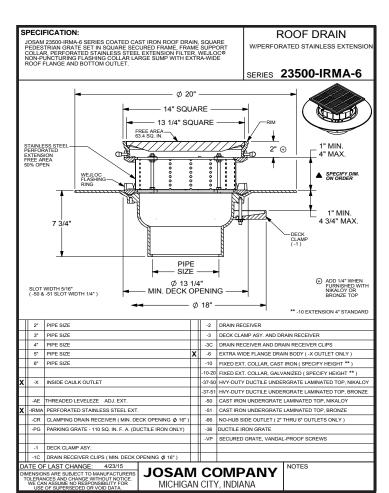




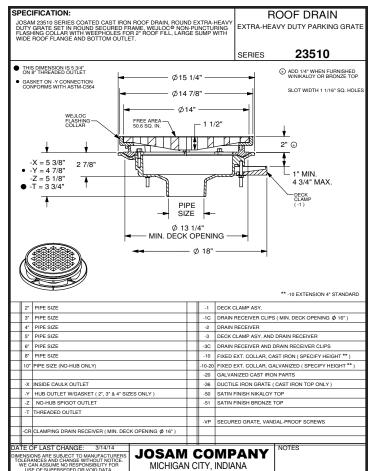


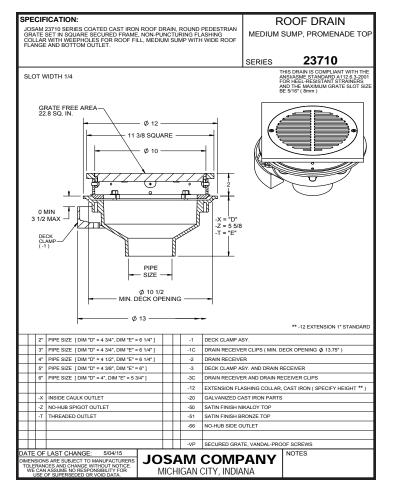


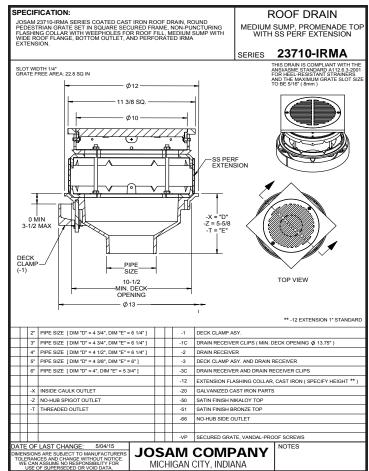


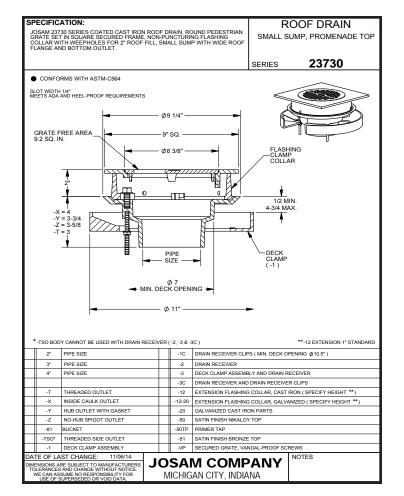


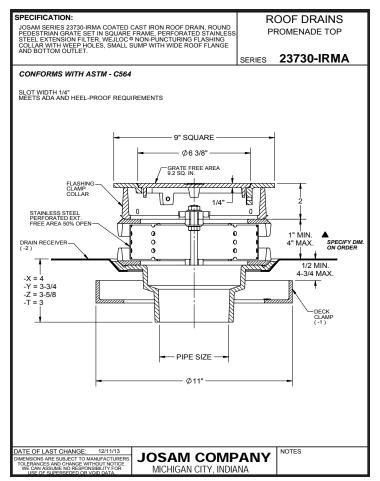
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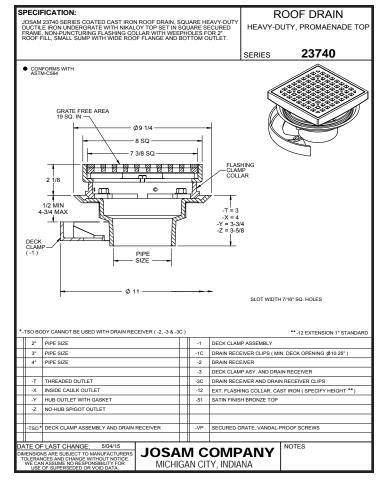


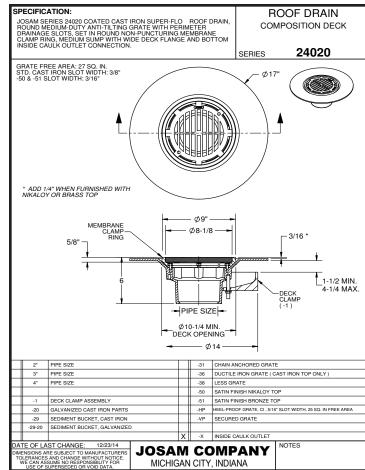


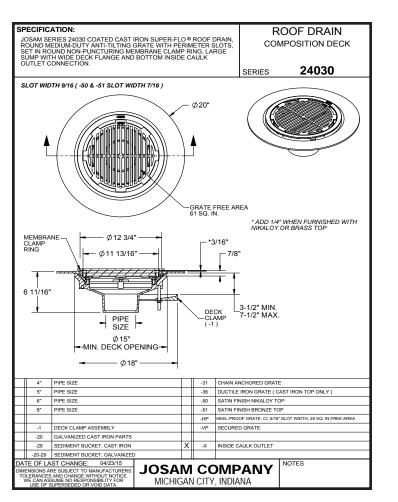


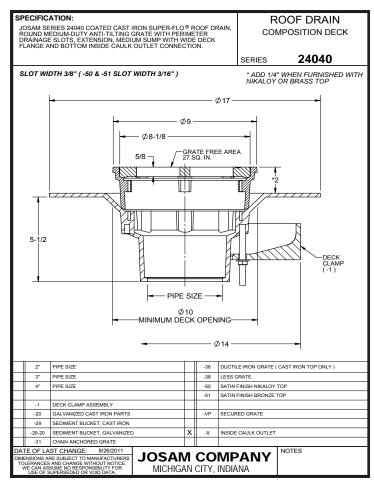


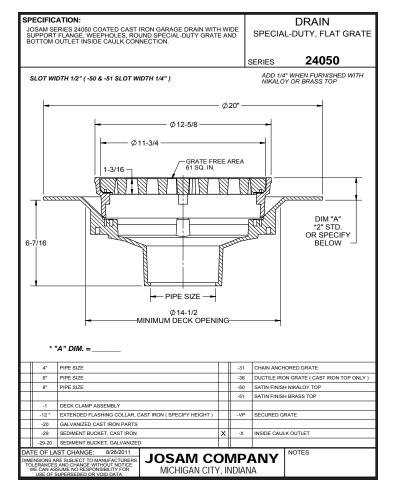


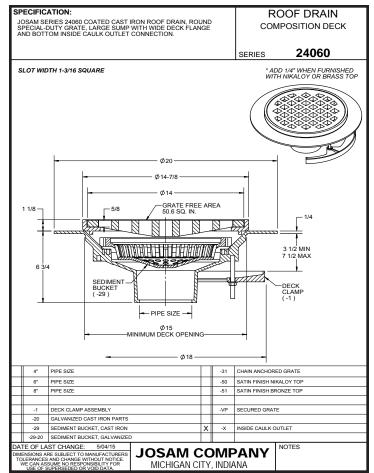


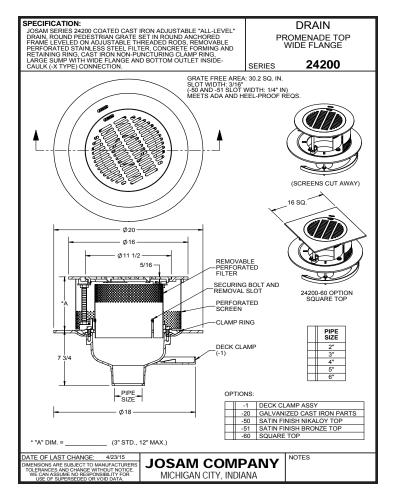


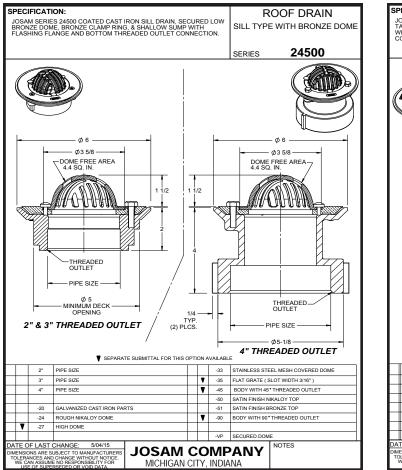


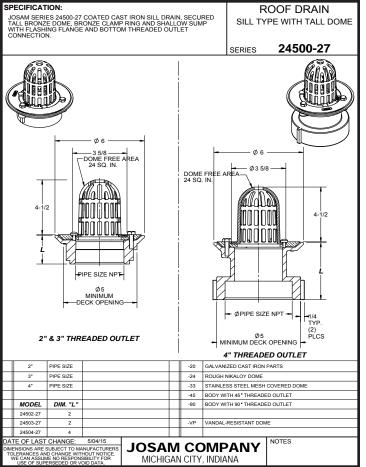


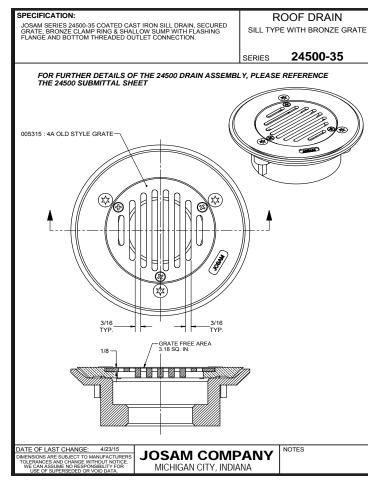


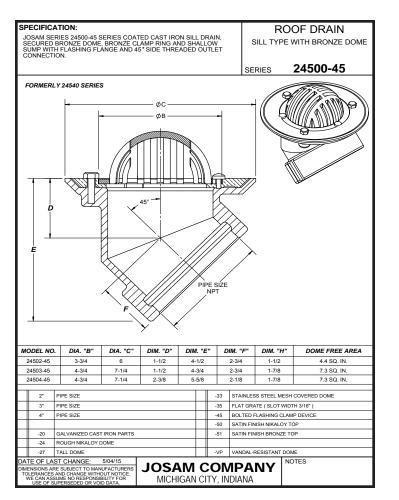




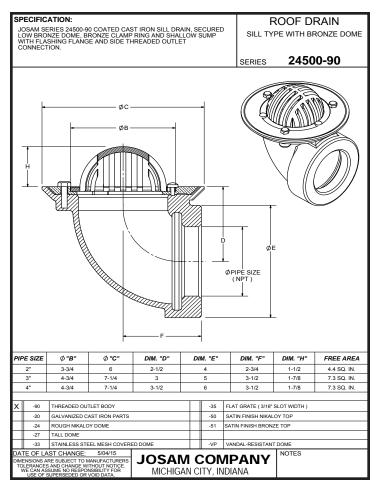


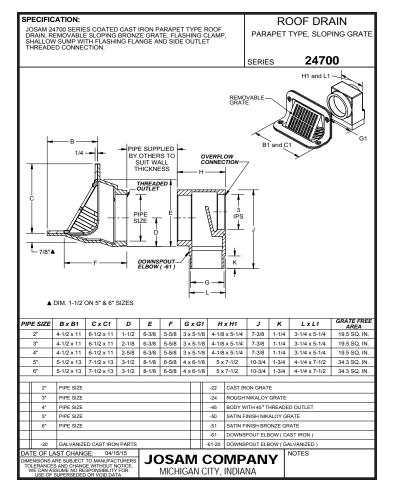


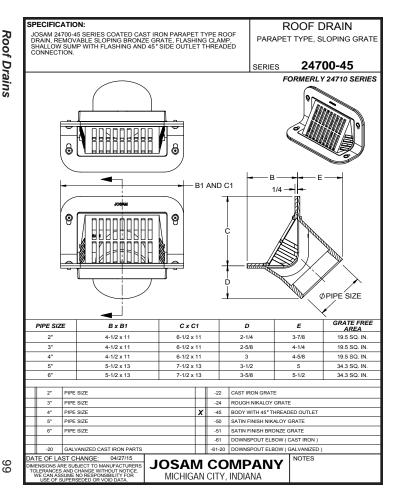


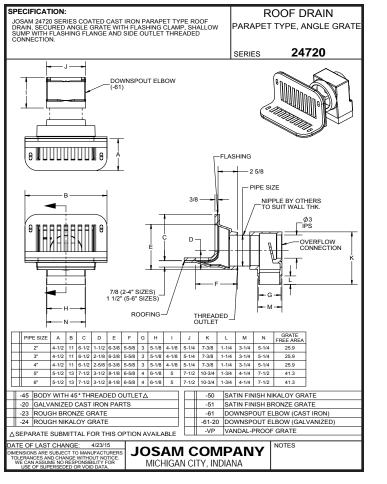


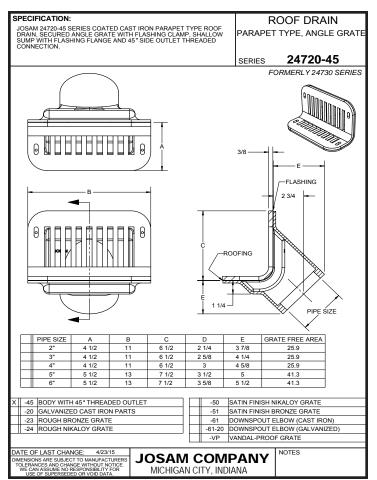
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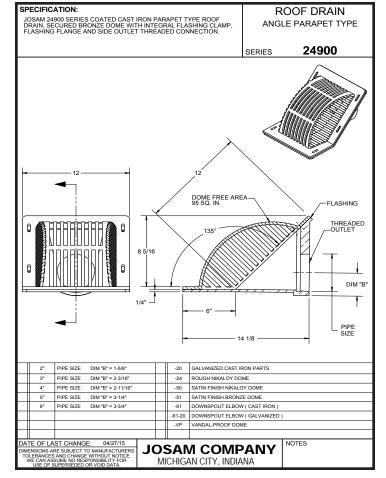


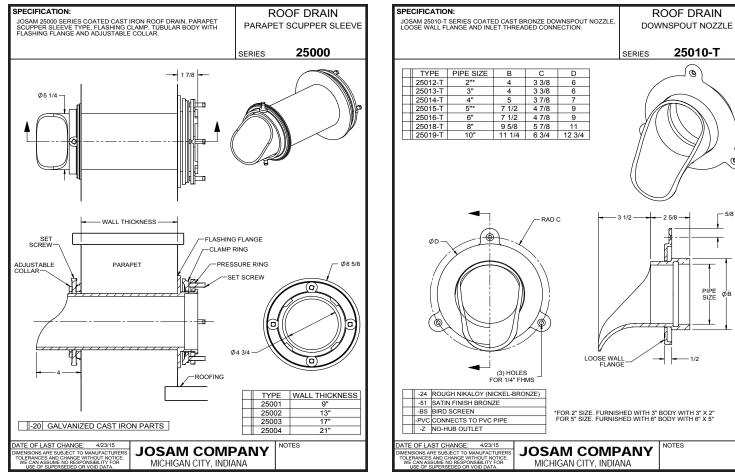


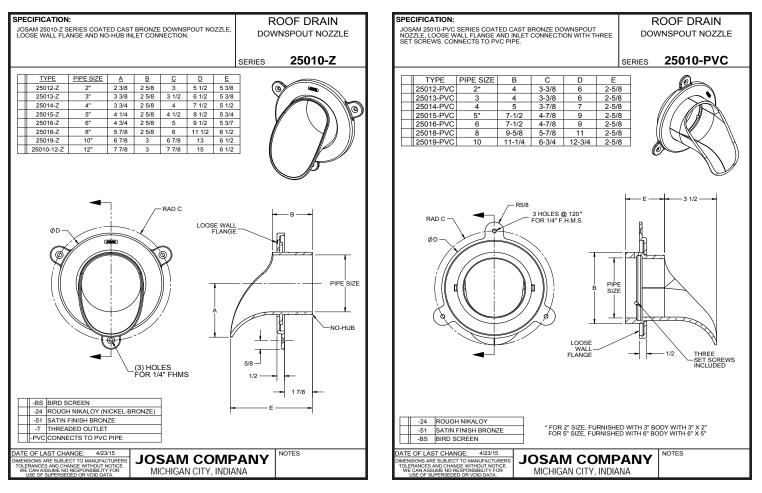


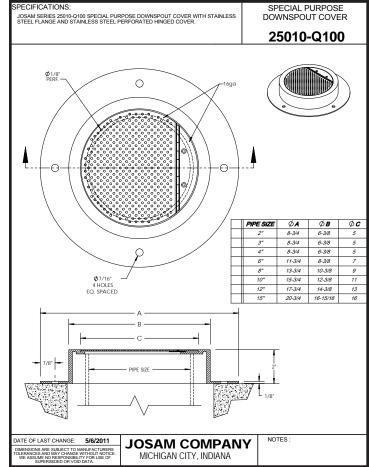


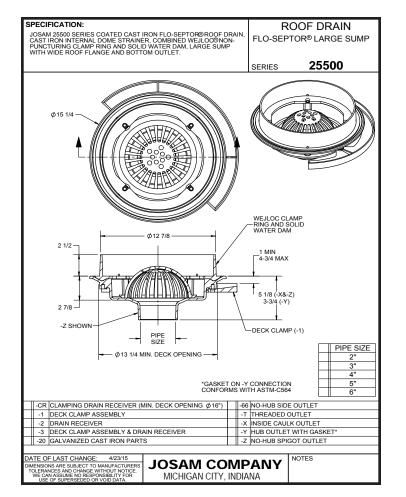


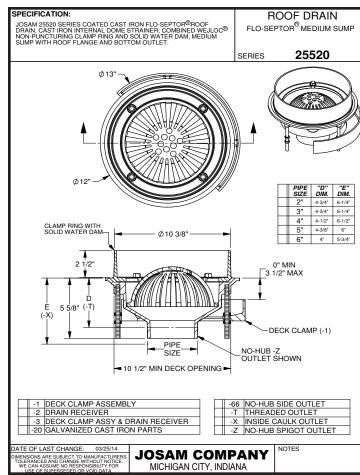


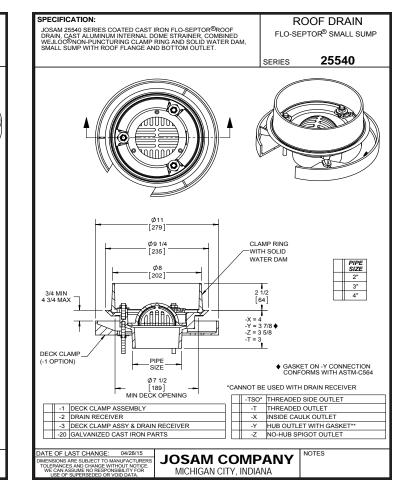


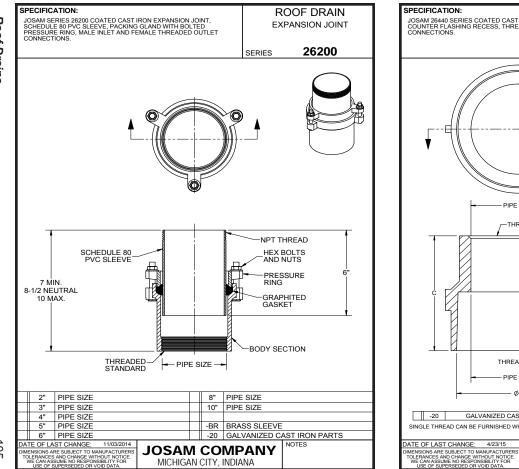


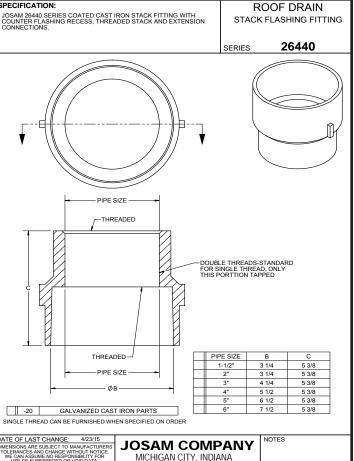


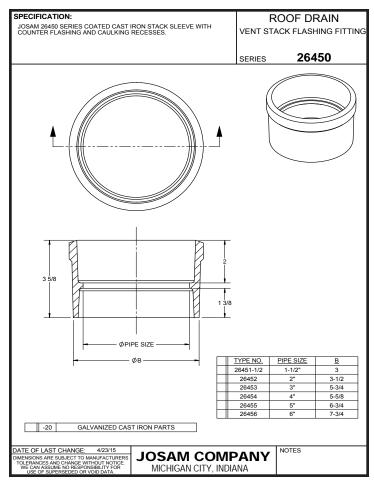


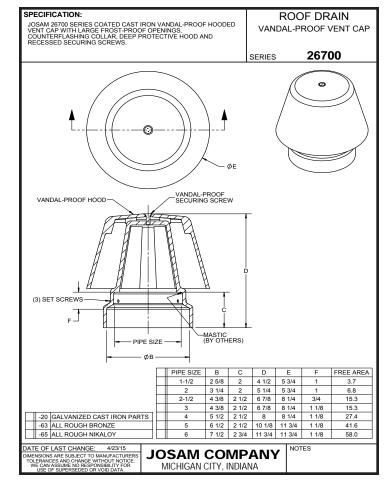


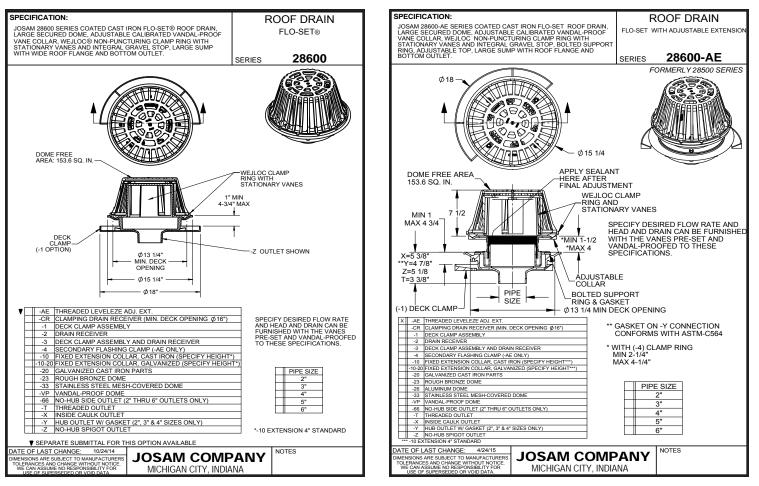


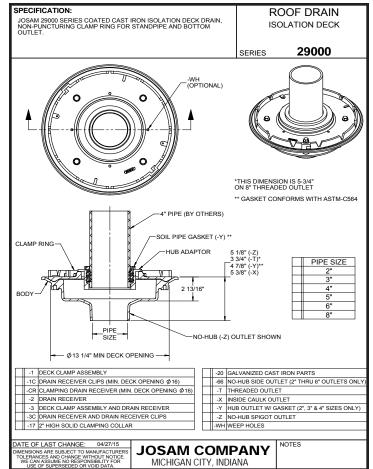


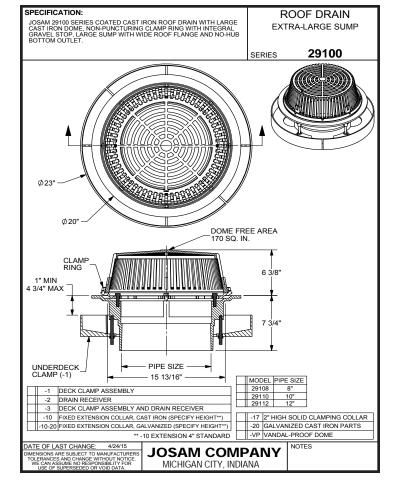




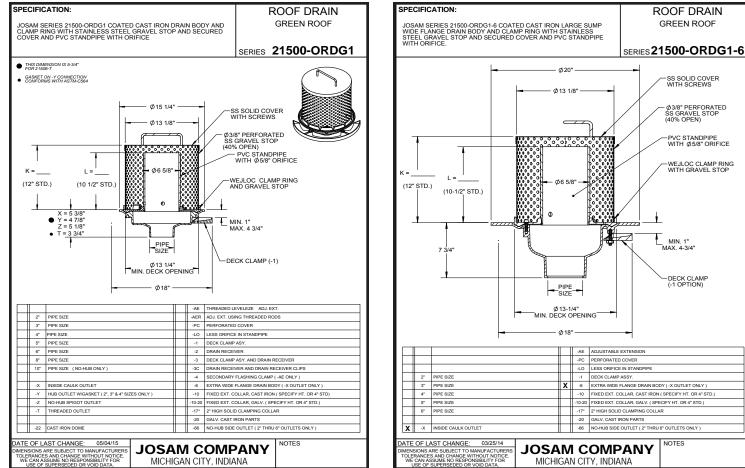


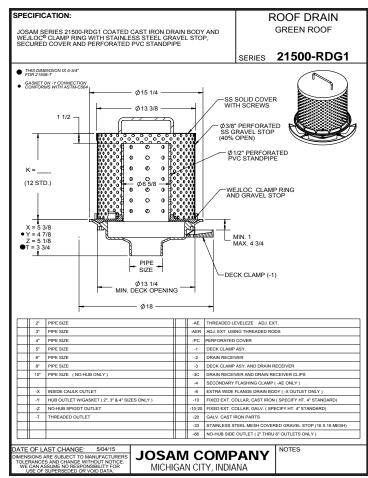


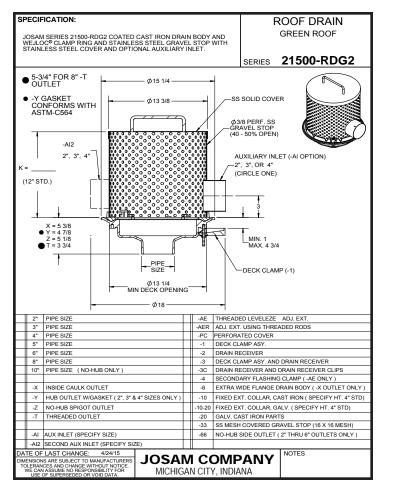


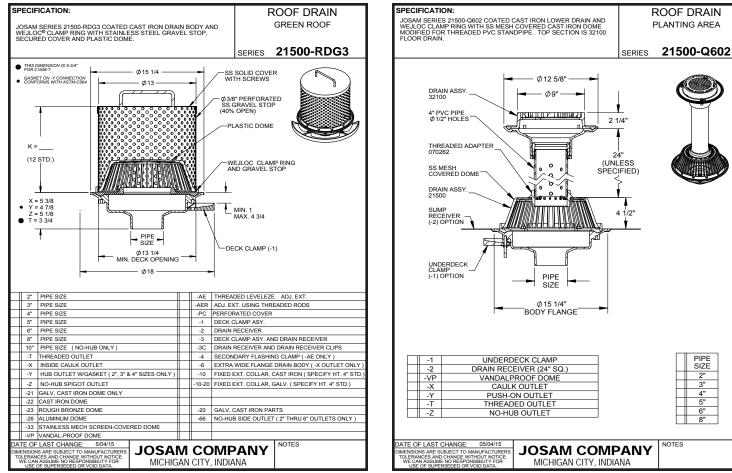


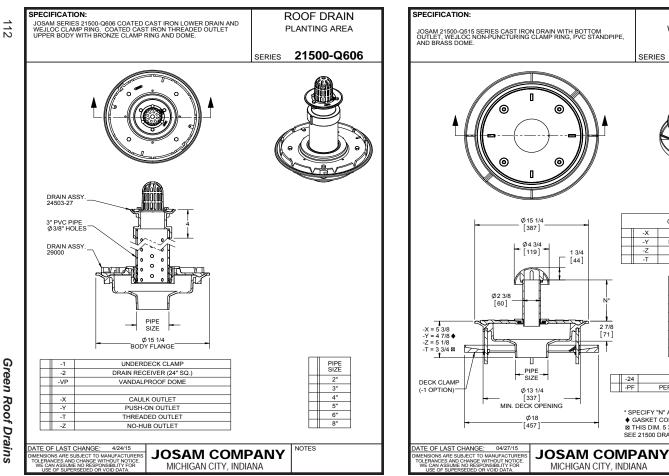
Roof Drains











OUTLET TYPE -X INSIDE CAULK -Y HUB WITH GASKET (2"-4") -Z NO-HUB -T THREADED PIPE SIZE 2" 3" 4" 2 7/8 5" [71] 6" 8" 10" -24 LESS DOME

PERFORATED STANDPIPE

* SPECIFY "N" AT TIME OF ORDER

THIS DIM. 5 3/4" FOR 21508-T

GASKET CONFORMS WITH ASTM-C564

SEE 21500 DRAWING FOR MORE BODY DIMS.

NOTES

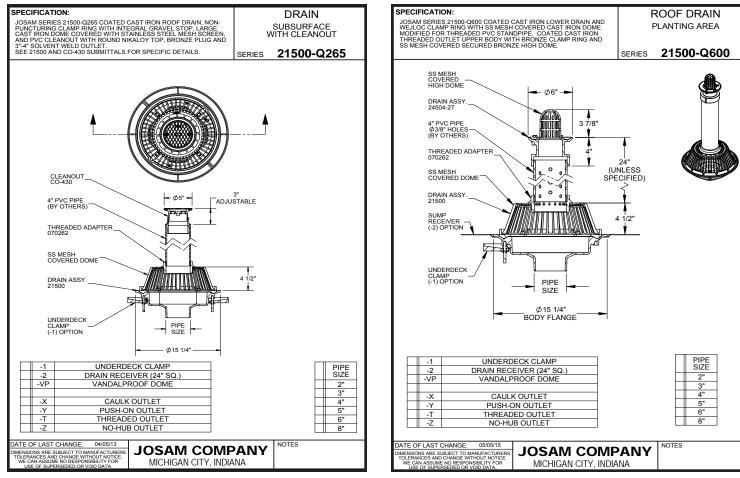
-PF

DRAIN

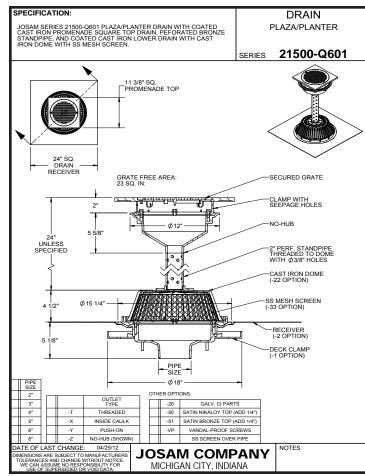
WITH STANDPIPE

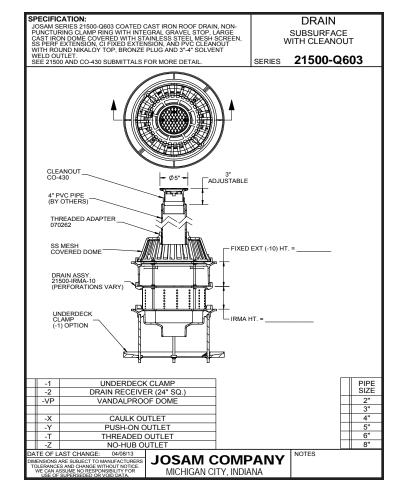
SERIES

21500-Q515

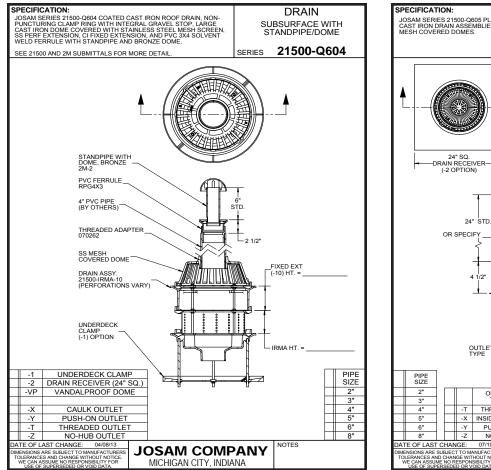


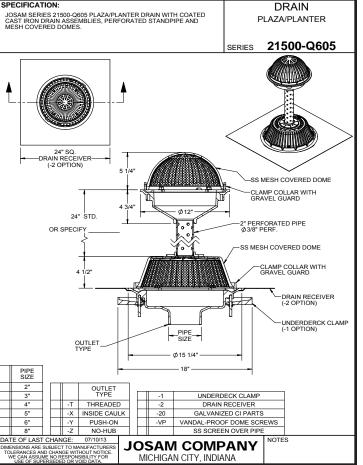
<u>1</u> ω

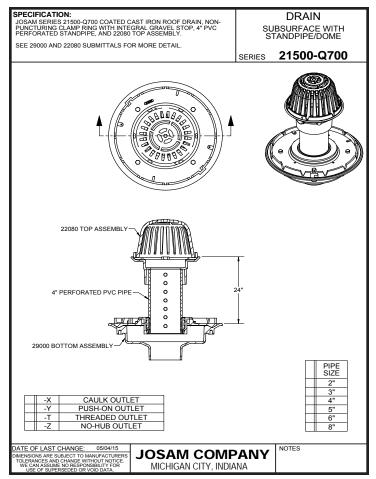


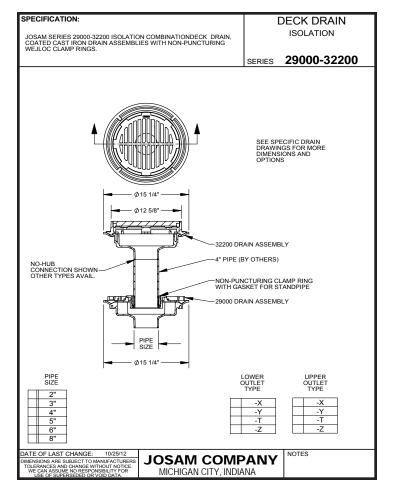


Combination Drains

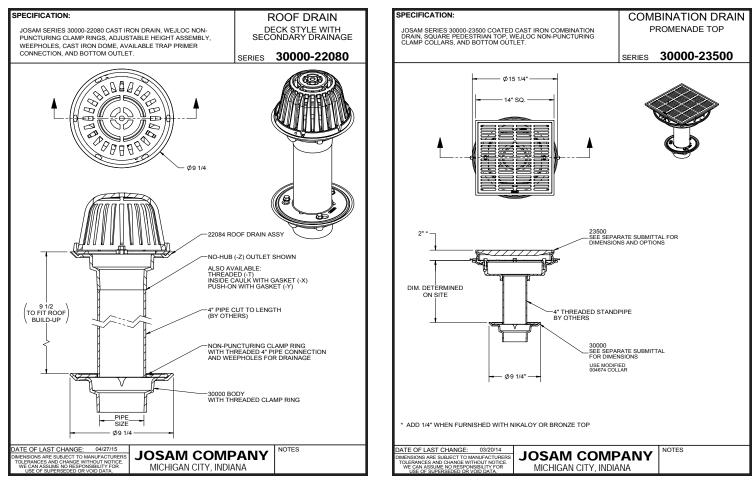


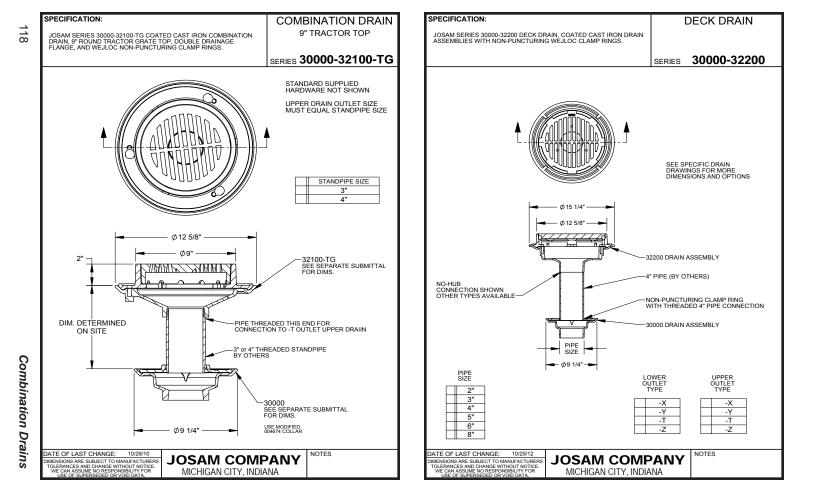


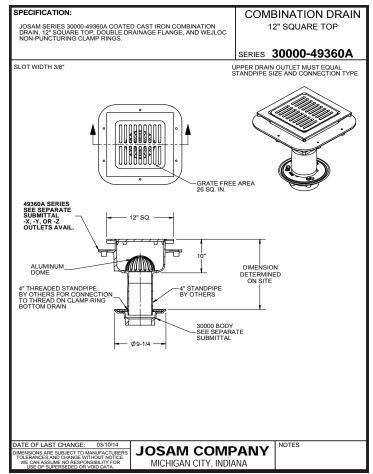


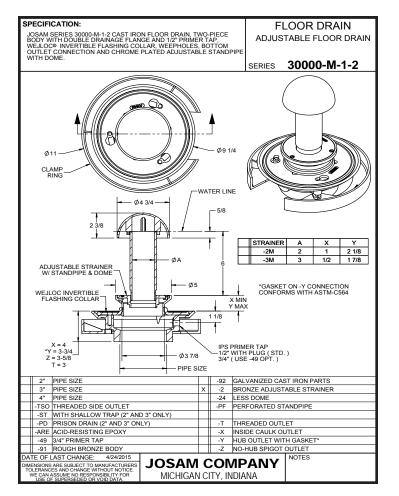


Combination Drains









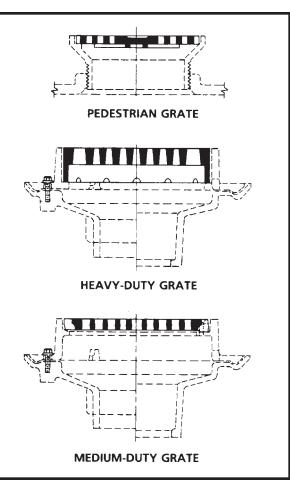
WEIGHT LOADS

Apart from their primary purpose of receiving and conveying liquids, floor drains, as integral components of the floor, must be structurally suitable to withstand the anticipated loads that will be imposed on the floor. Weight support requirements of the drain vary with the location, construction, and service condition. The top loading classifications as published in Floor Drain Standard ANSI A112.21.1M-1980 are as follows:

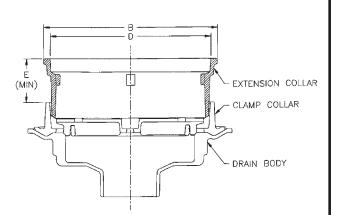
Light-Duty–	All grates testing under 2000 lb. (900 kg.).
Medium-Duty-	All grates testing between 2000 lb. (900 kg.) and 4999 lb. (2250 kg.).
Heavy-Duty–	All grates testing between 5000 lb. (2250 kg.) and 7499 lb. (3375 kg.).
Extra Heavy-Duty–	All grates testing between 7500 lb. (3375 kg.) and 10,000 lb. (4500 kg.).
Special-Duty-	Grates testing over 10,000 lb. (4500 kg.) should

be considered special and treated accordingly.

When the top loading requirements for a drain have been determined, the duty type needed can be resolved. Selection is easily accomplished as all JOSAM Floor Drains are classified according to duty type in this section. For specific detail loading data, contact JOSAM Engineering.



-44 Option, Fixed Extension Collar

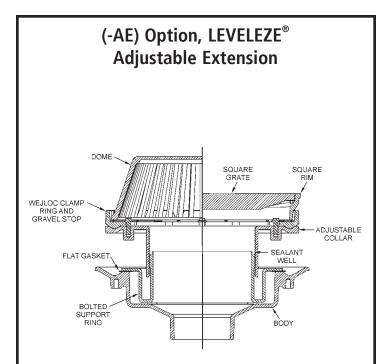


ORDERING INFORMATION

To specify or order a fixed extension collar with floor drain, add Option (-44) and height required to type number of drain.

Example: Type 32103 with a 6" extension would be designated: Type 32103 (-44)-6".

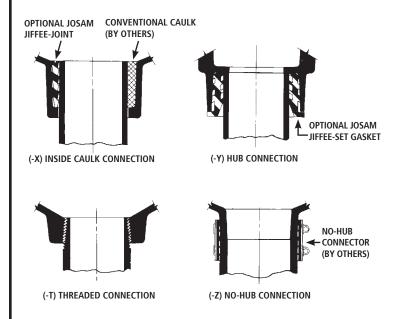
SERIES NO.	B In	D In	E In
32100, 32150, 32160	9-1/8	8-1/8	2
32200, 32300	12-5/8	11-3/4	2

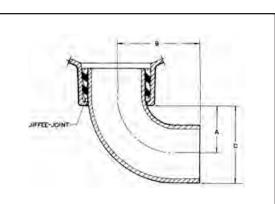


The adjustable integral top is mated to the body and support ring with a heavy machined thread which permits virtually unlimited top level adjustment to accommodate various deck thicknesses. The line contact between the threads provides positive circumferential support of the top at any adjusted elevation.

Outlet Connections

JOSAM drains are furnished with outlets for connection to most types of pipe. The timesaving, economical JIFFEE-JOINT Gasket is used for inside caulk connections (-X) to extra heavy or service weight soil pipe. No-hub spigot outlets (-Z) are also available for connection to no-hub soil pipe. The JIFFEE-SET Outlet (-Y) is for connecting hub outlet drains to PVC and ABS, service weight or no-hub soil pipe. Threaded outlets (-T) can be obtained on many series.

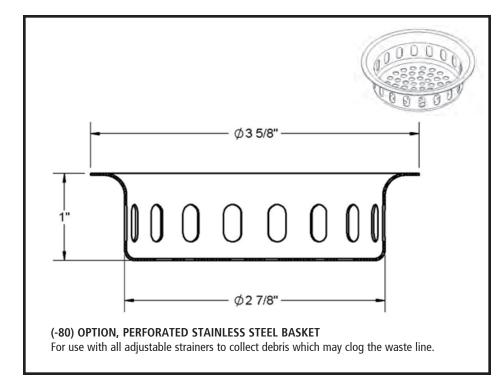


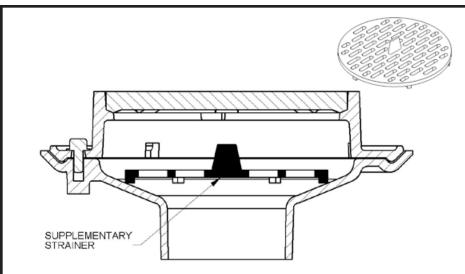


(-66) OPTION

This option converts JOSAM bottom outlet inside caulk drains to no-hub side outlet drains using a 90° no-hub quarter bend and a JIFFEE-JOINT Gasket.

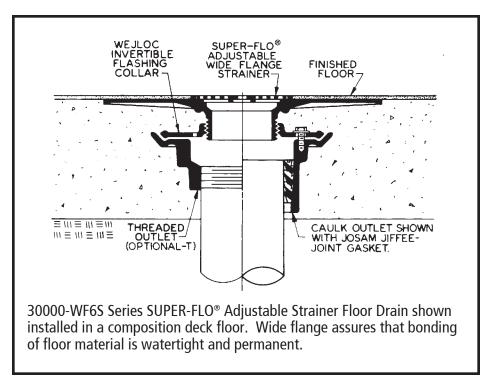
PIPE SIZE	А	В	с
2	2-1/2	4-1/2	3-5/8
3	2-13/16	5	4-1/2
4	3-1/2	5-1/2	5-11/16
5	4-5/16	6-1/2	6-15/16
6	4-13/16	7	7-15/16

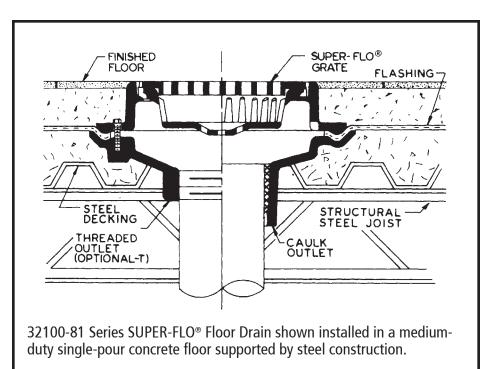


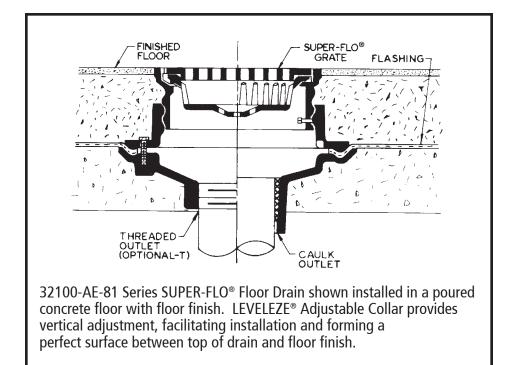


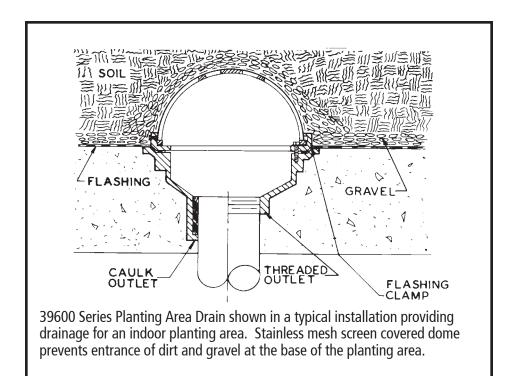
(-88) OPTION, SUPPLEMENTARY STRAINER

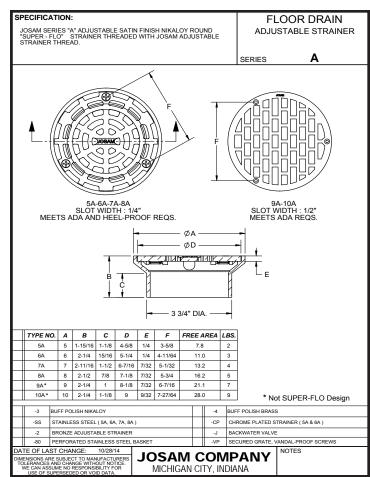
This option provides a secondary means of protection against blockage of drain lines. The openings in the supplementary strainer are smaller than the openings in the top grate, allowing it to intercept debris entering the interior of the drain. This option is primarily used in drains which don't offer a sediment bucket.

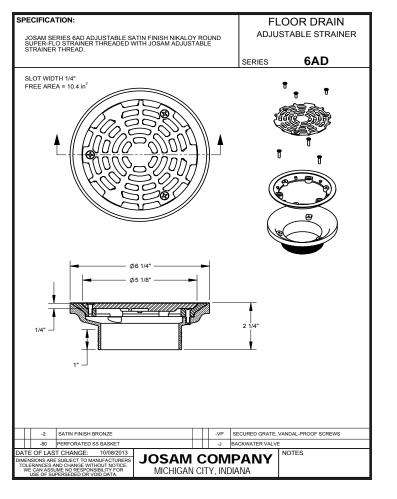


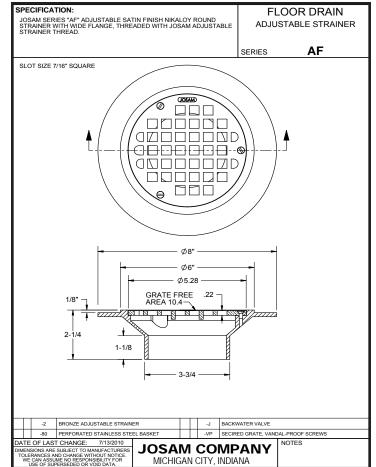


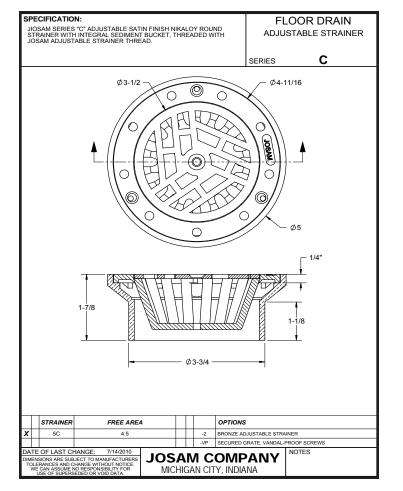


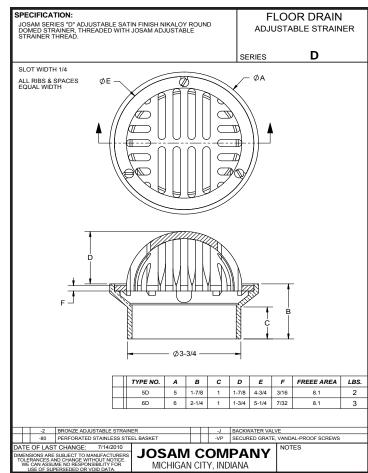


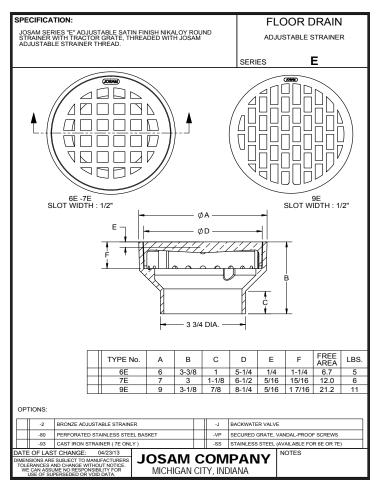


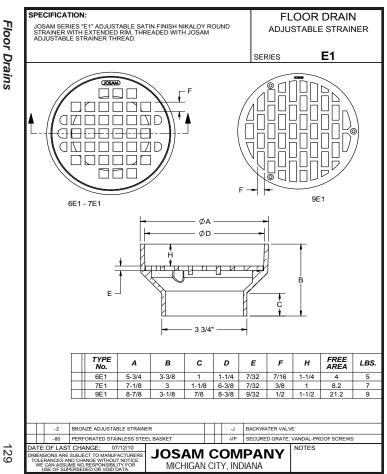


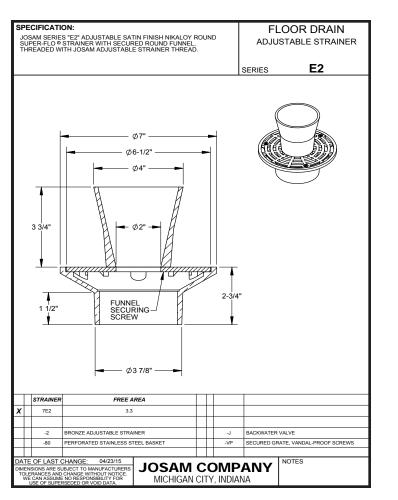


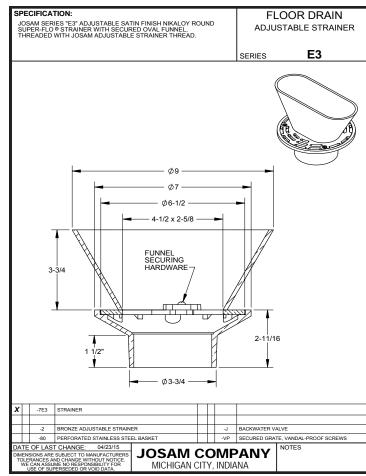


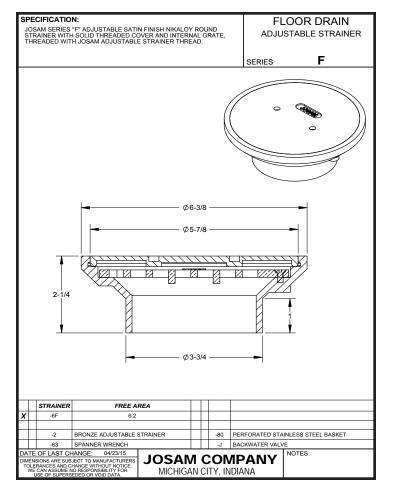


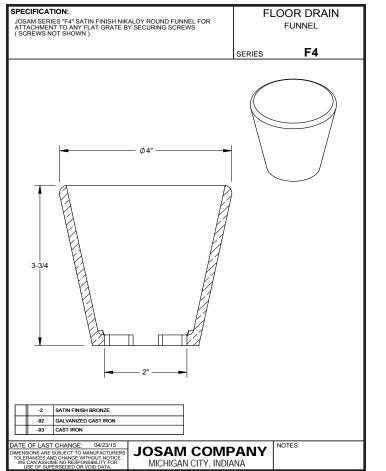


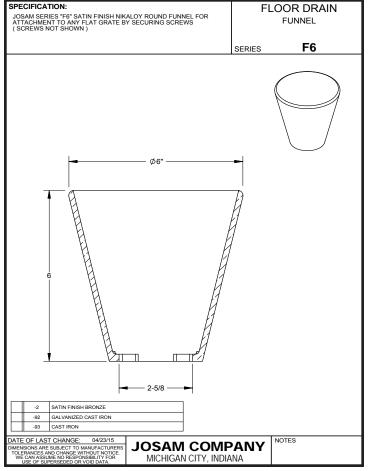


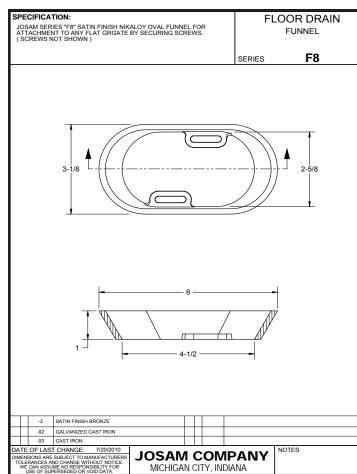


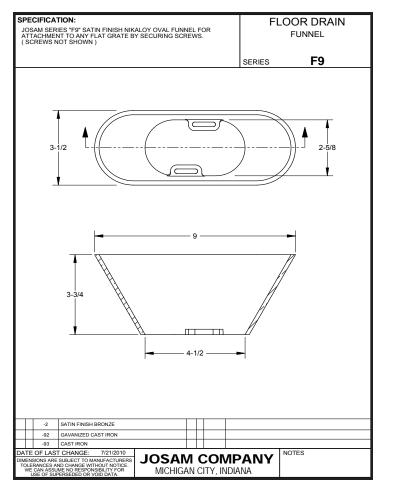


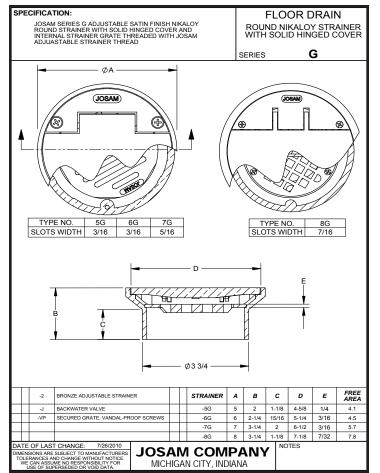


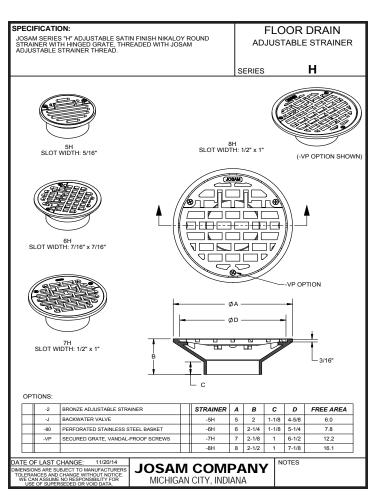


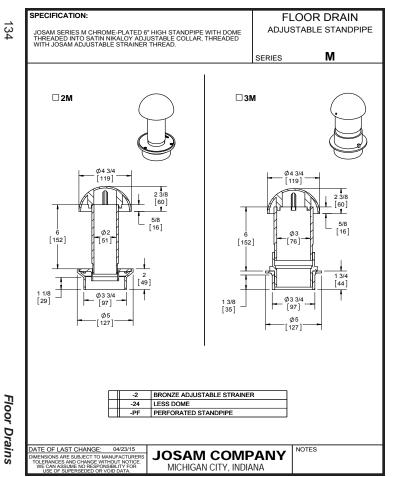




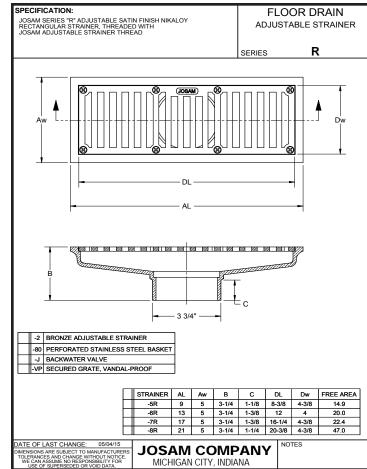


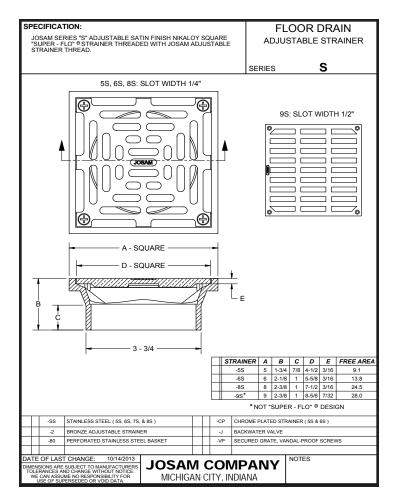






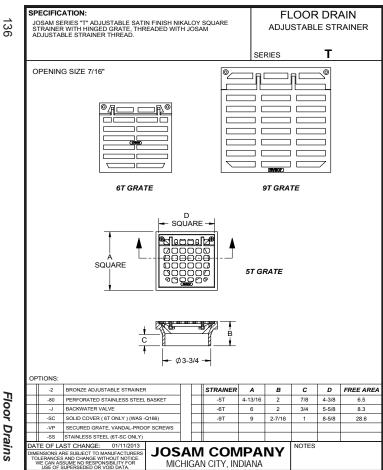
SPECIFICATION: JOSAM SERIES "P" ADJUSTABLE SATIN FINISH NIKALOY ANGLE STRAINER WITH ANGLE BODY AND GRATE, AND ECCENTRIC BUSHING, THREADED WITH JOSAM ADJUSTABLE STRAINER THREAD.			NG,	FLOOR DRAIN ADJUSTABLE STRAINER				
					SERIES	;		Р
SLOT WIDTHS 9/32"								
$ \begin{array}{c} \end{array} $								
-2 BRONZE ADJUSTABLE STRAINER			STRAINER	A	В	с	D	FREE AREA
-80 PERFORATED STAINLESS STEEL BASKET			-4P	2-1/4	3-1/4	4-1/4	1	8.9
-VP SECURED GRATE, VANDAL-PROOF SCREV	s		-6P	3-1/8	_	6-1/4	1-1/2	18.7
DATE OF LAST CHANGE: 04/23/15 DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES AND CHANGE WITHOUT MOTICE WE CAN ASSUME TO RESPONSIBILITY FOR USE OF SUME NO RESPONSIBILITY FOR USE OF SUME NO RESPONSIBILITY FOR USE OF SUME NO RESPONSIBILITY FOR								

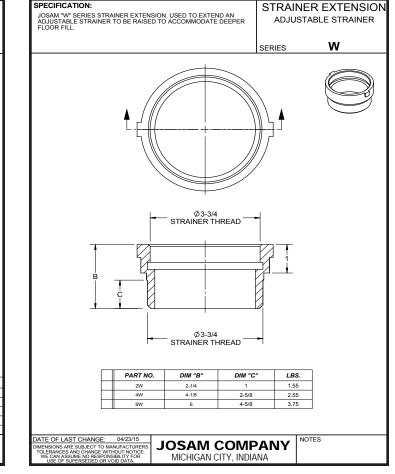


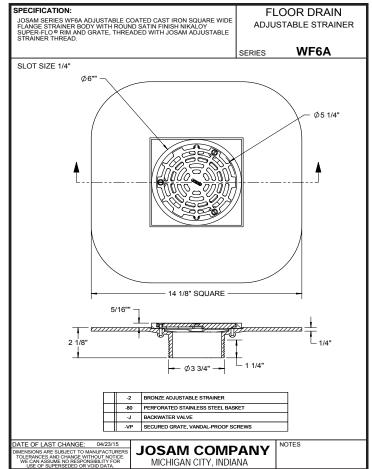


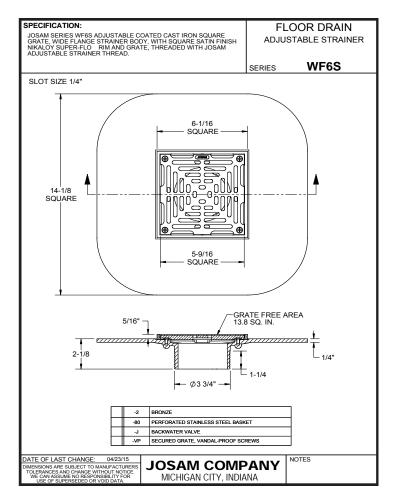
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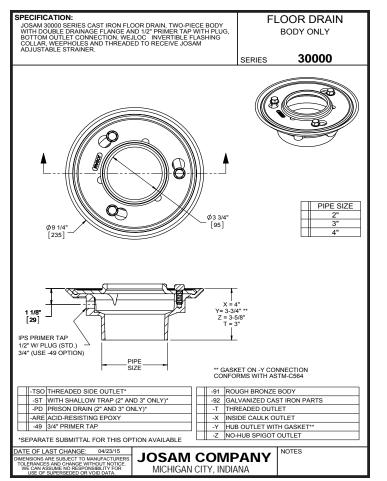
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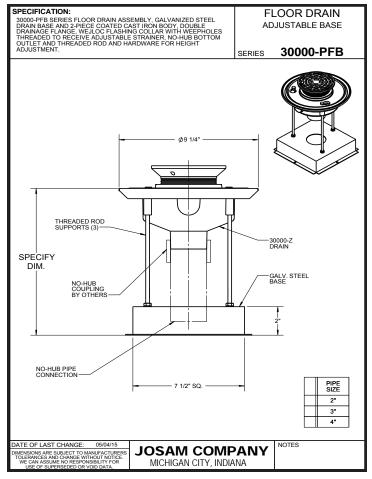


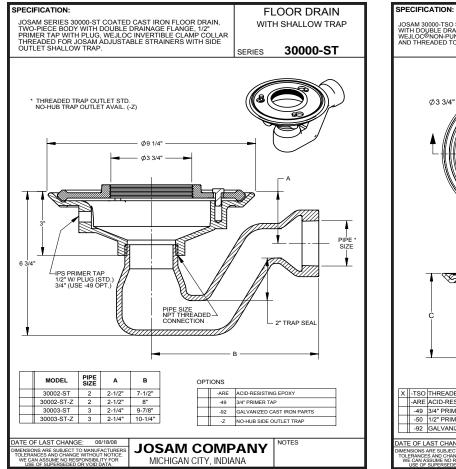


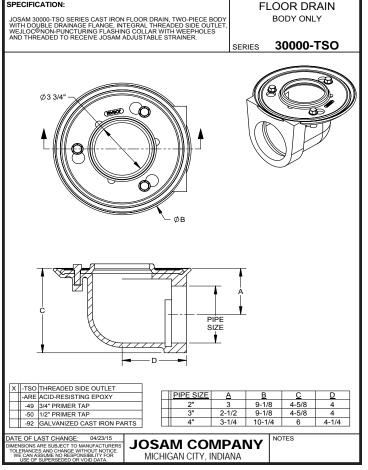


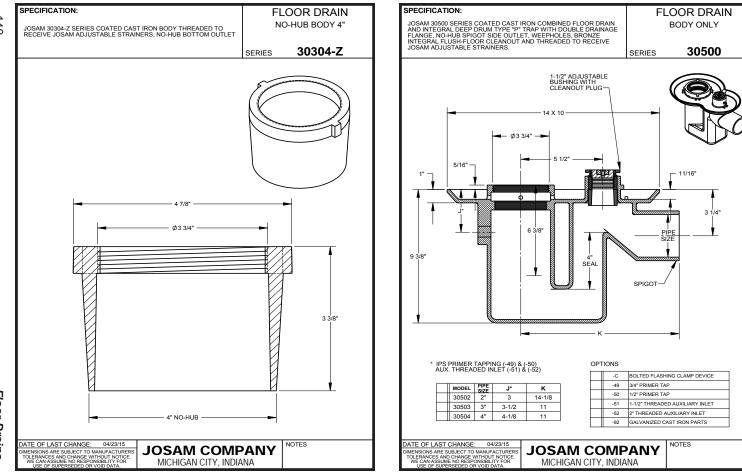


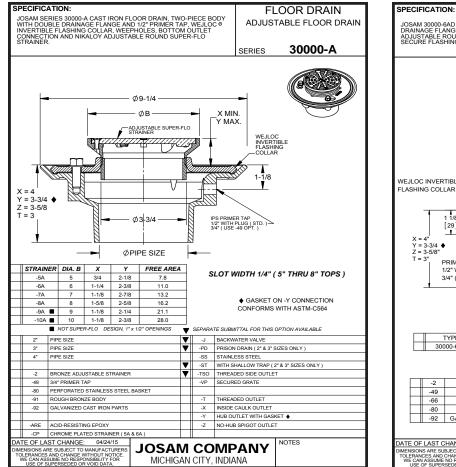


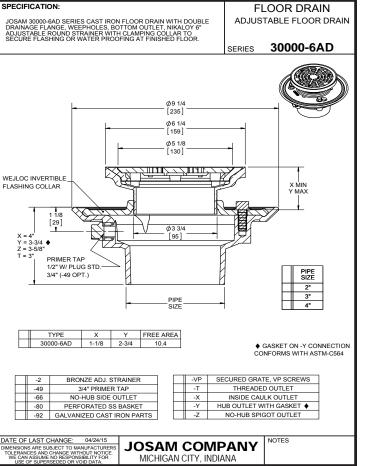


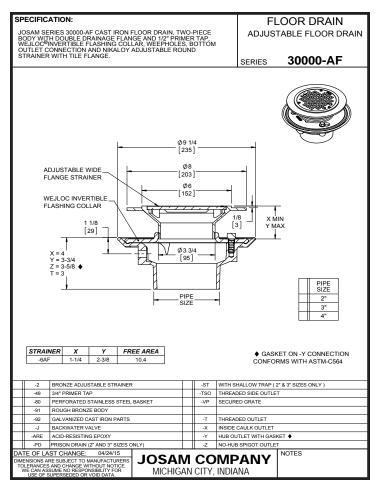


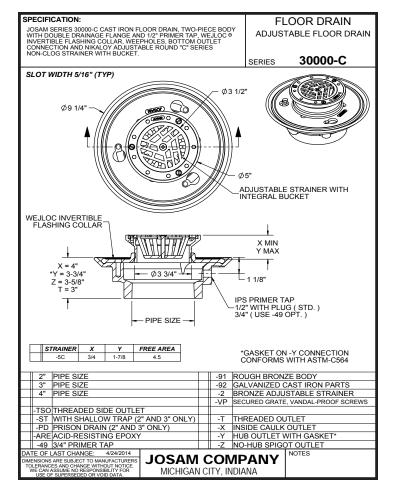


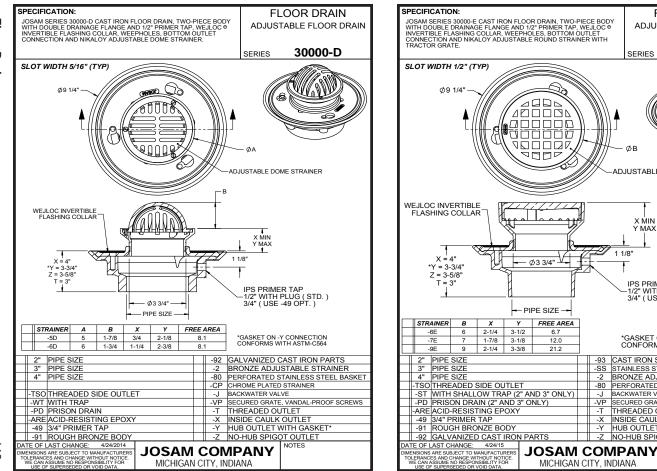












FLOOR DRAIN

ADJUSTABLE FLOOR DRAIN

ADJUSTABLE TRACTOR STRAINER

SERIES

ØВ

X MIN Y MAX

IPS PRIMER TAP

1/2" WITH PLUG (STD.)

*GASKET ON -Y CONNECTION

CONFORMS WITH ASTM-C564

STAINLESS STEEL TOP (6E OR 7E ONLY)

PERFORATED STAINLESS STEEL BASKET

SECURED GRATE, VANDAL-PROOF SCREWS

NOTES

CAST IRON STRAINER (7E ONLY)

BRONZE ADJUSTABLE STRAINER

BACKWATER VALVE

THREADED OUTLET

INSIDE CAULK OUTLET

NO-HUB SPIGOT OUTLET

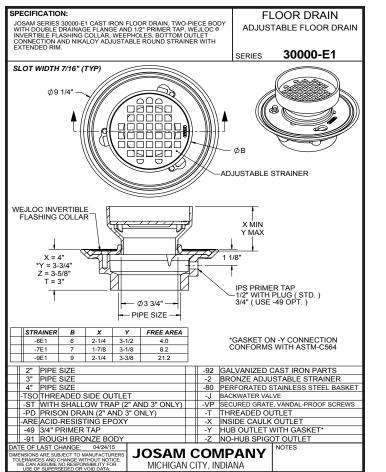
HUB OUTLET WITH GASKET*

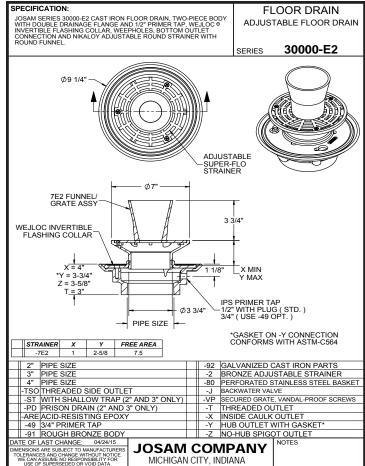
3/4" (USE -49 OPT.)

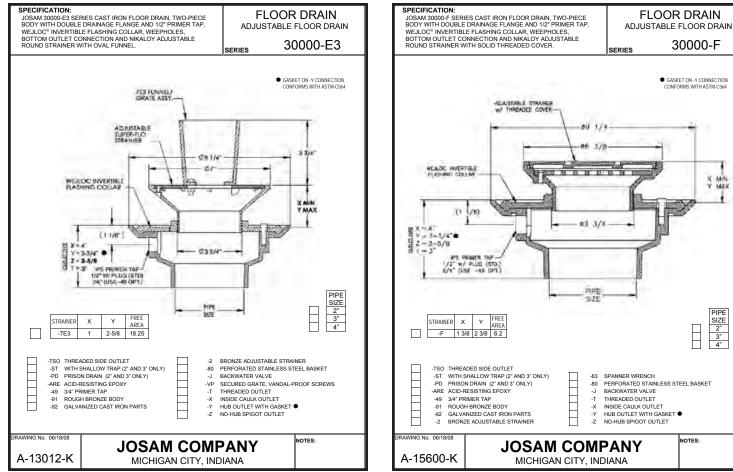
1 1/8'

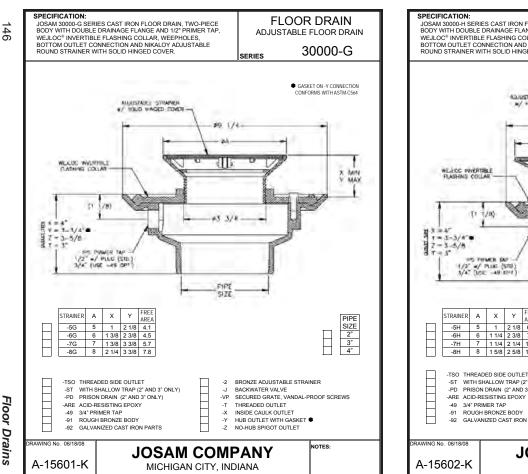
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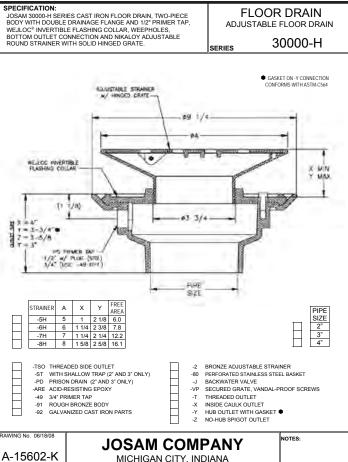
4 ć.

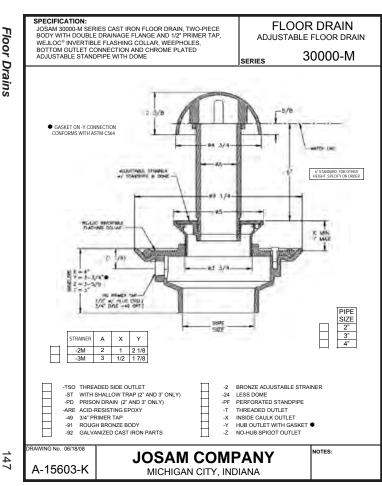


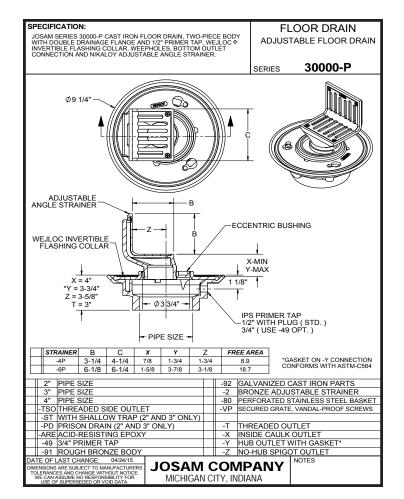


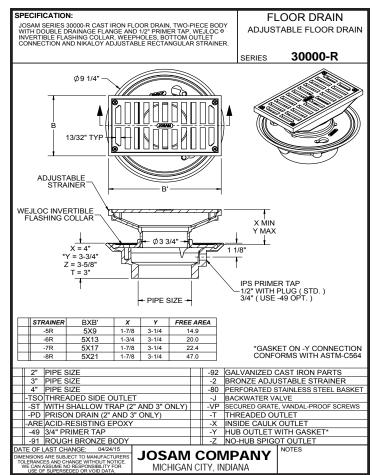


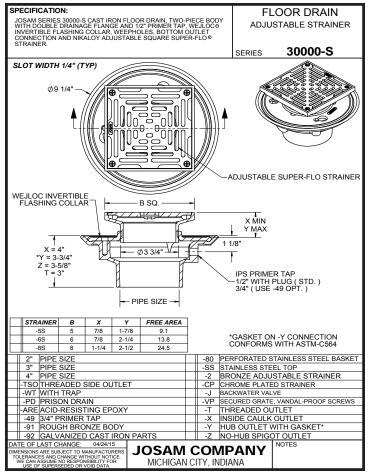


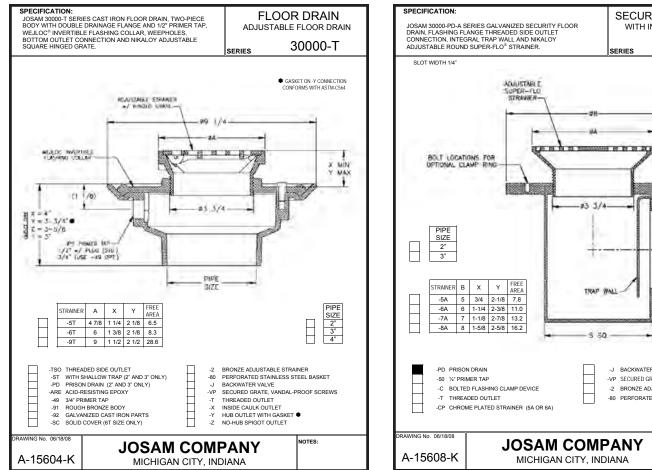












SECURITY FLOOR DRAIN

WITH INTEGRAL TRAP WALL

PIPE

SIZE

-J BACKWATER VALVE

-VP SECURED GRATE, VANDAL-PROOF SCREWS

-80 PERFORATED STAINLESS STEEL BASKET

NOTES:

-2 BRONZE ADJUSTABLE STRAINER

SERIES

30000-PD-A

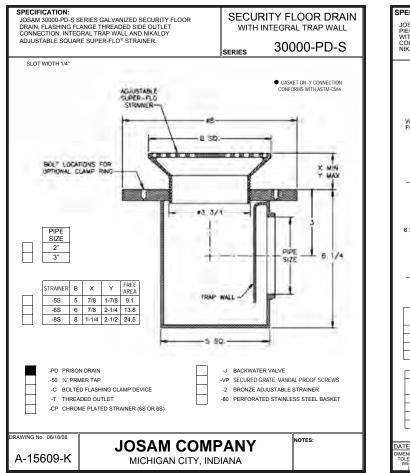
GASKET ON -Y CONNECTION

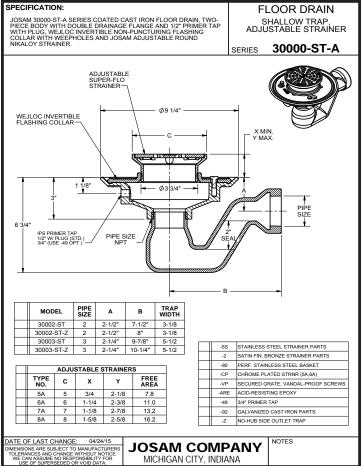
CONFORMS WITH ASTM-C564

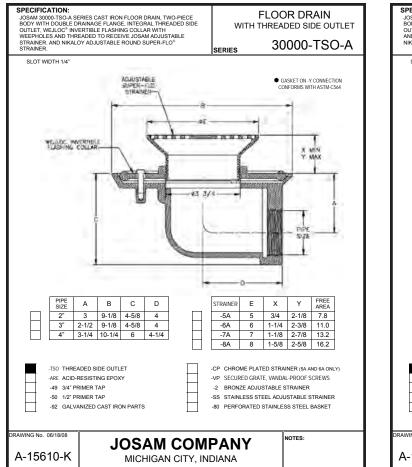
MIN

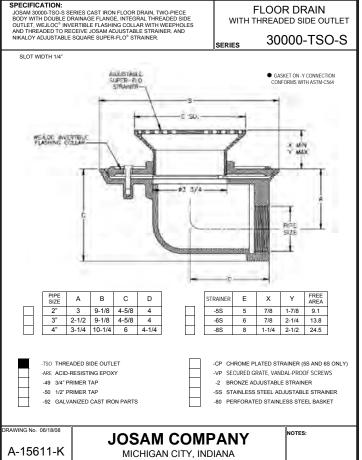
6 1/4

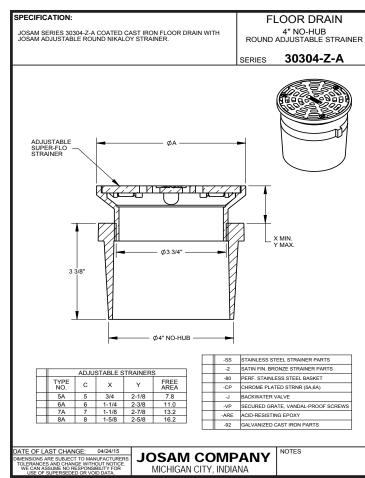
Y MAD

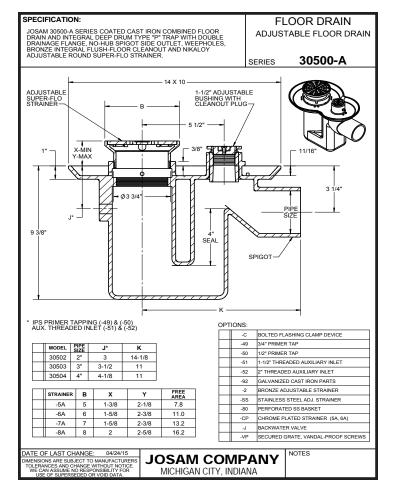






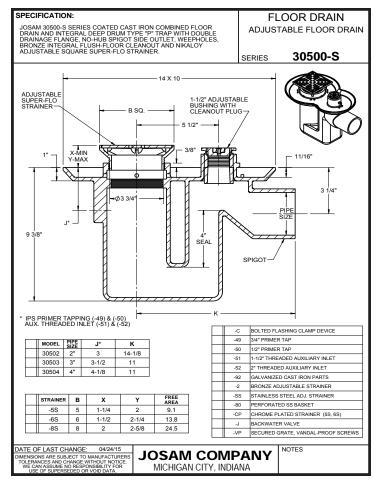


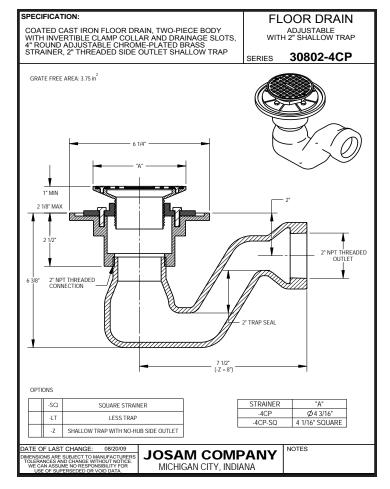


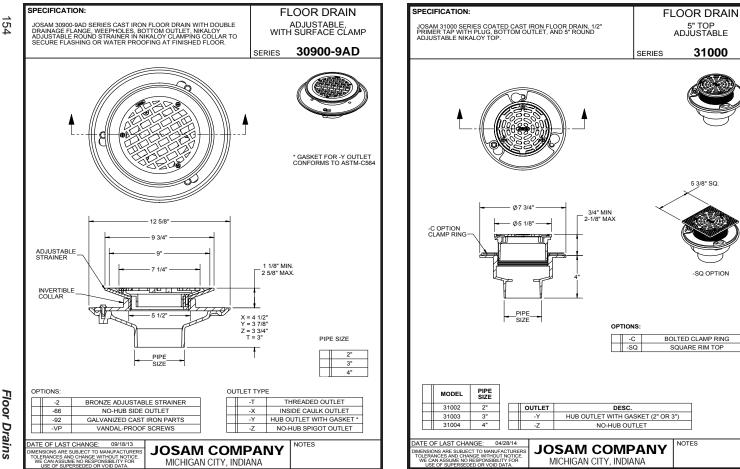


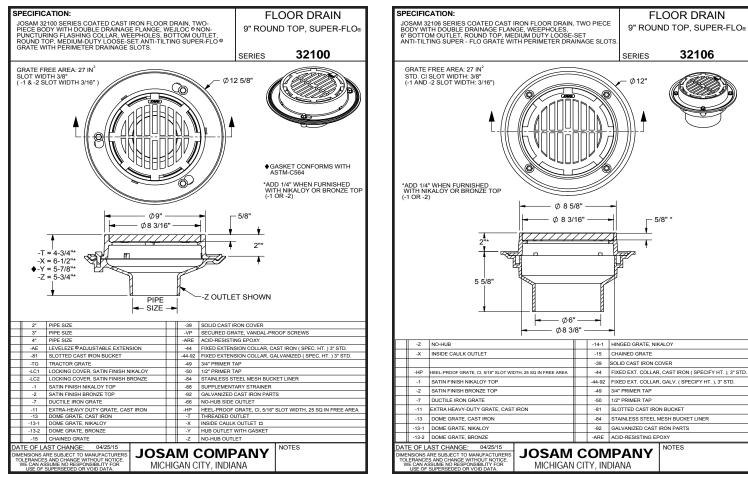
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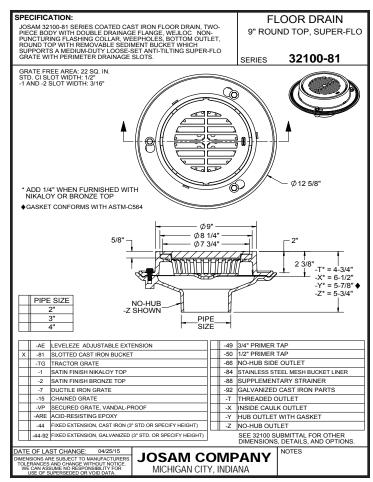
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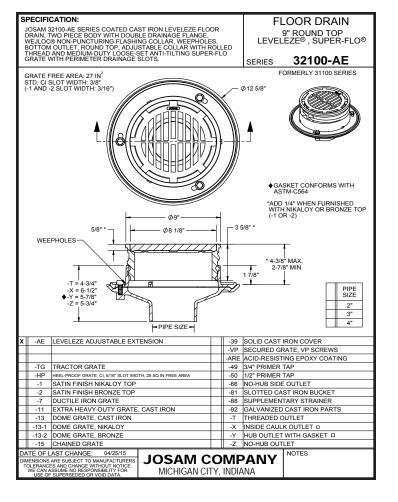






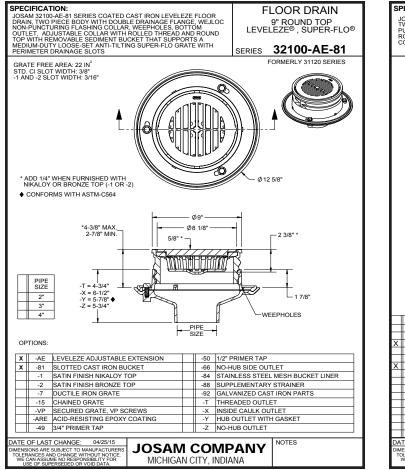


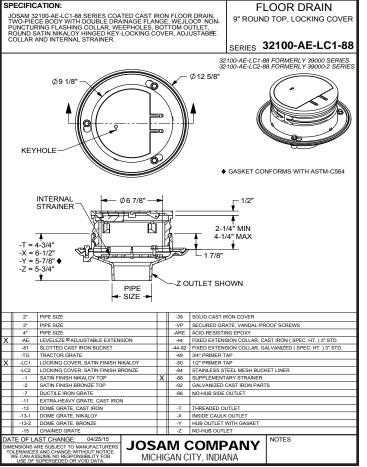


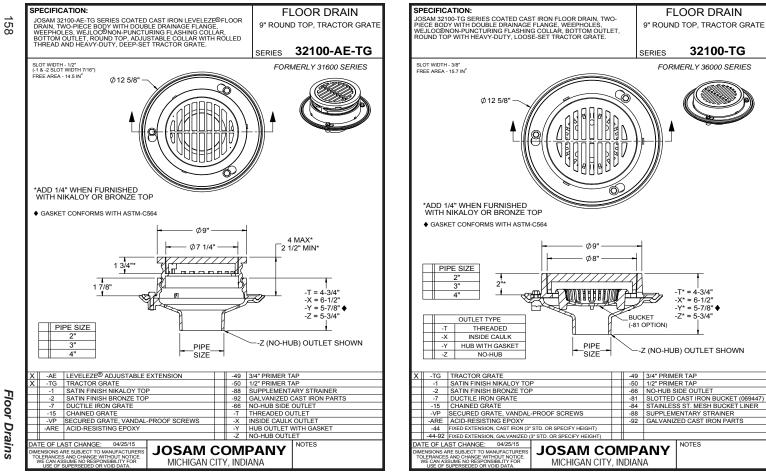


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FLOOR DRAIN

-T* = 4-3/4"

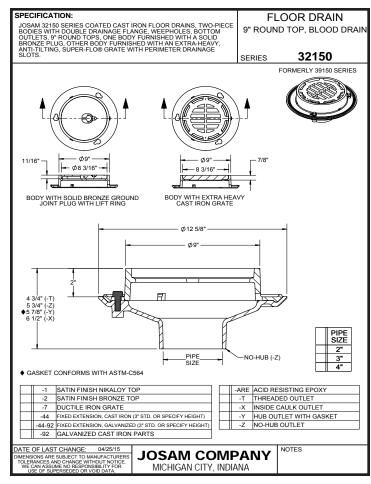
-X* = 6-1/2"

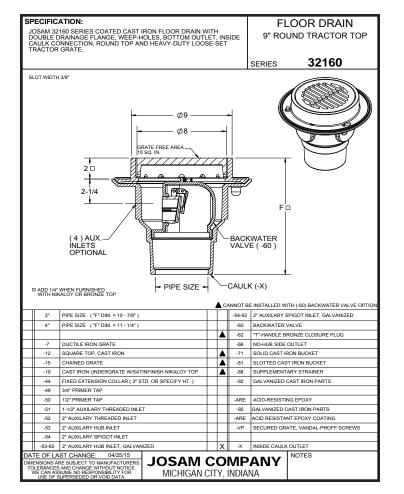
-Z* = 5-3/4"

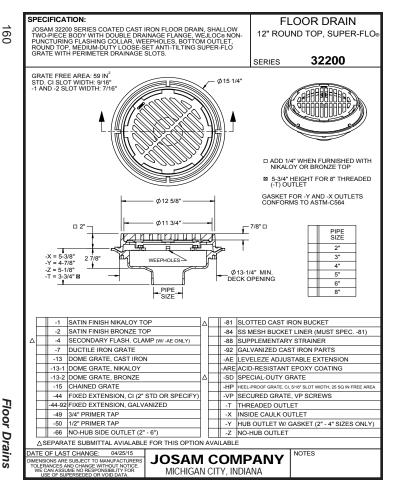
NOTES

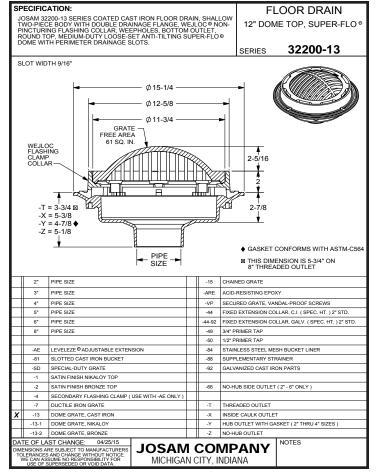
-Y* = 5-7/8" ♦

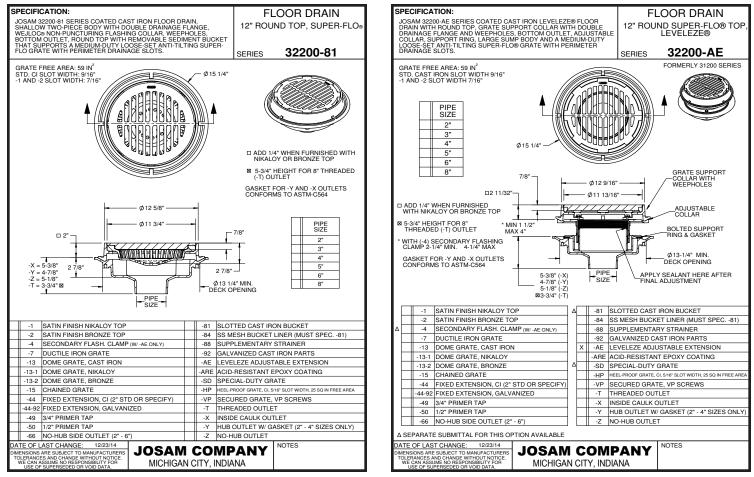
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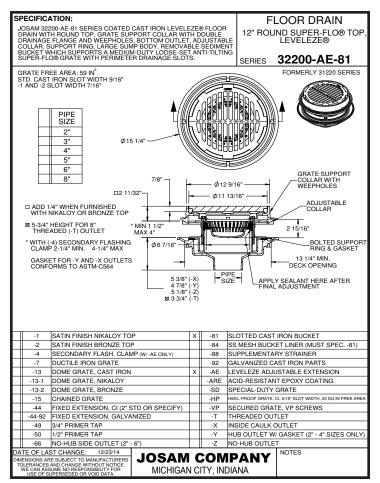


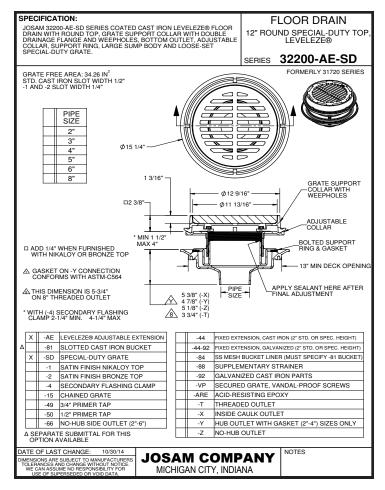






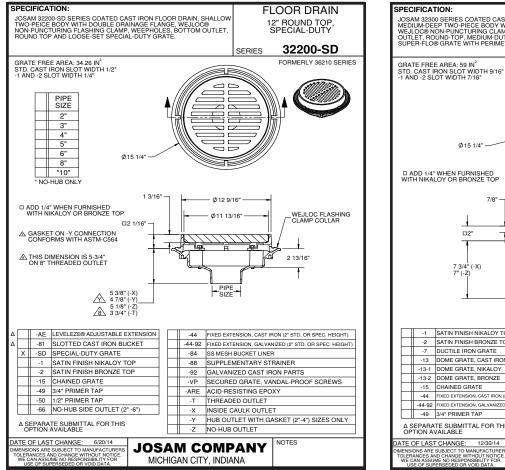


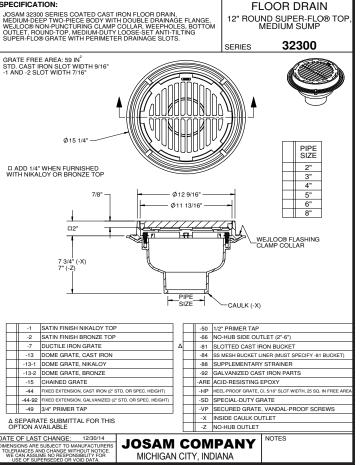




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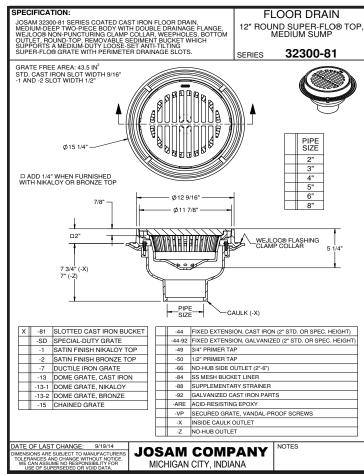
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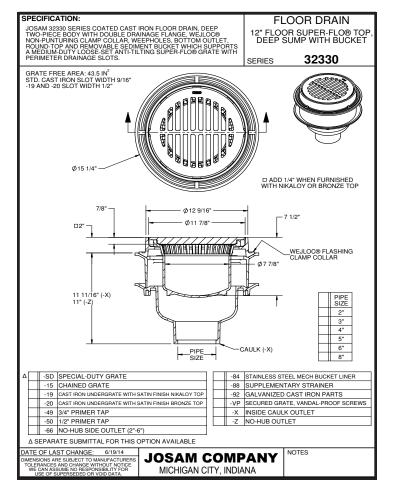


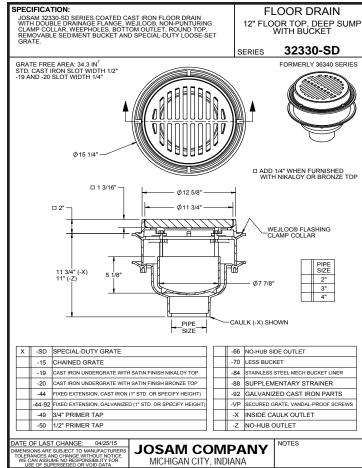


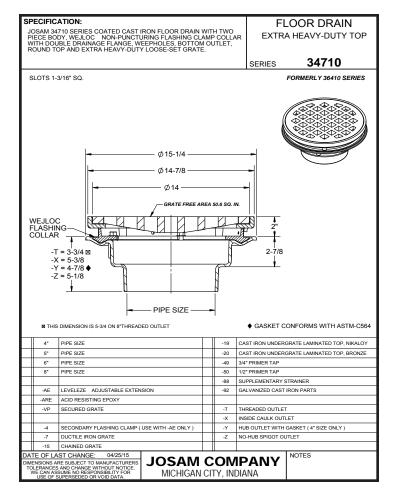
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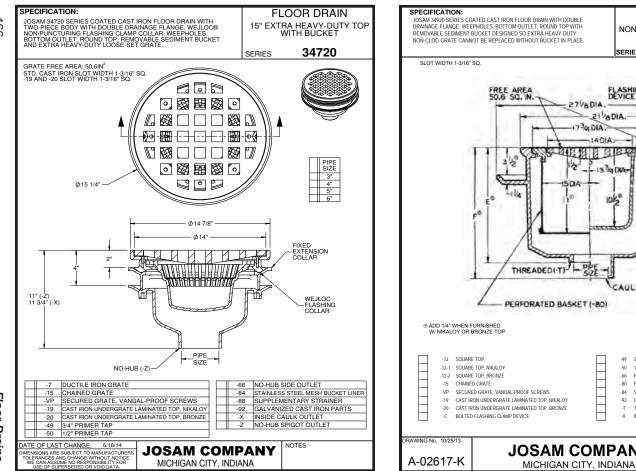
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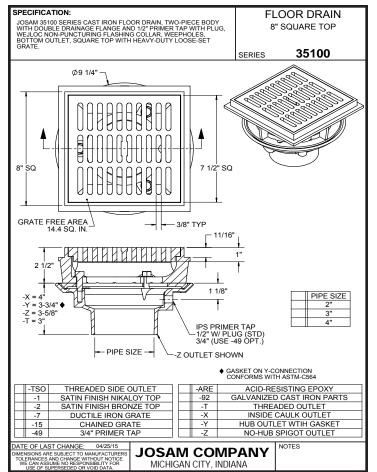


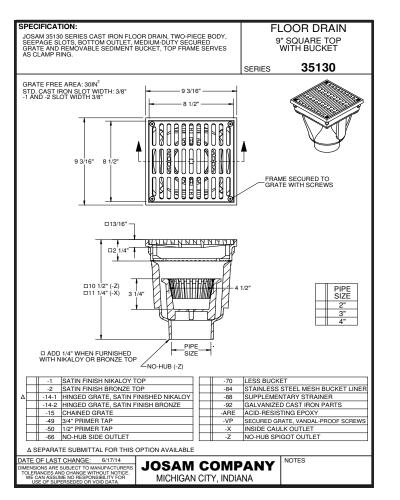


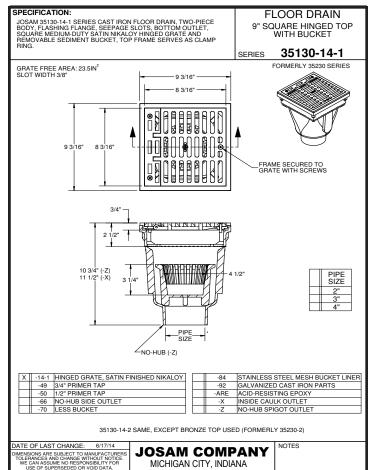
34920 SERIES FREE AREA FLASHING CLAMP 50.6 SQ. N 27VADIA ADIA 7- ADIA 4 DIA THREADEDI-T PIPE SIZE F 3" 14-3/4 16-7/8 PERFORATED BASKET (-80) 4" 14-3/4 16-3/4 5" 15 16-7/8 6" 17-3/4 15 8" 15-1/4 17-3/4 49 3/4" PRIMER TAP -50 1/2" PRIMER TAP -66 NO-HUB SIDE OUTLET (3" - 6") -80 PERFORATED STAINLESS STEEL BASKET SECURED GRATE, VANDAL-PROOF SCREWS -84 STAINLESS STEEL MESH BUCKET LINER CAST IRON UNDERGRATE LAMINATED TOP. NIKALOY 92 GALVANIZED CAST IRON PARTS CAST IRON UNDERGRATE LAMINATED TOP, BRONZE THREADED OUTLET BOLTED FLASHING CLAMP DEVICE .χ INSIDE CAULK OUTLET NOTES: JOSAM COMPANY

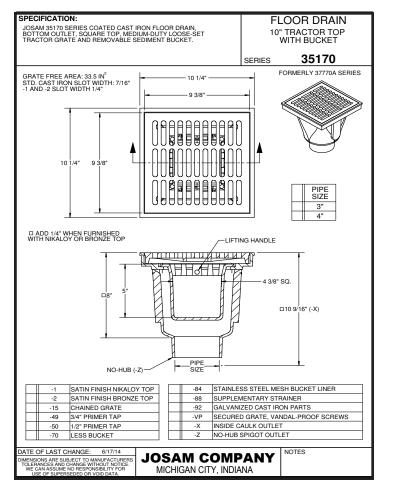
FLOOR DRAIN

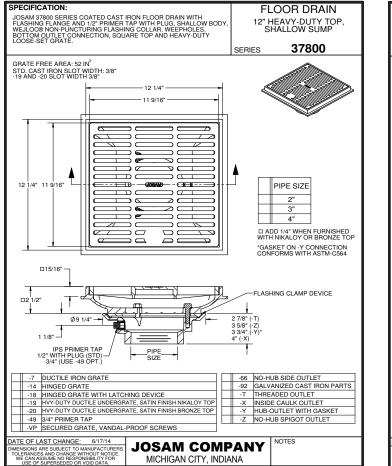
NON-CLOG 21" ROUND W/ BUCKET

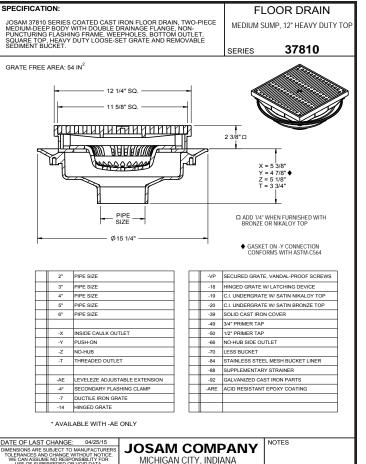








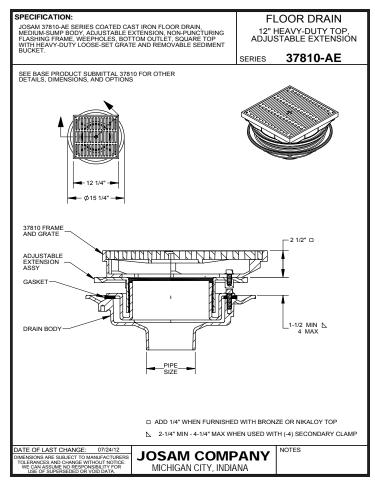


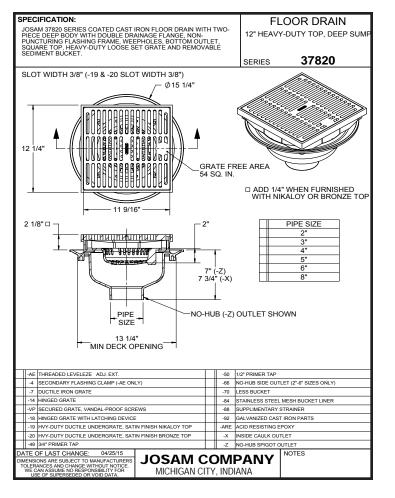


USE OF SUPERSEDED OR VOID DATA

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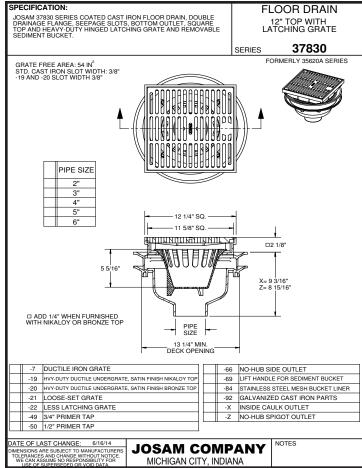


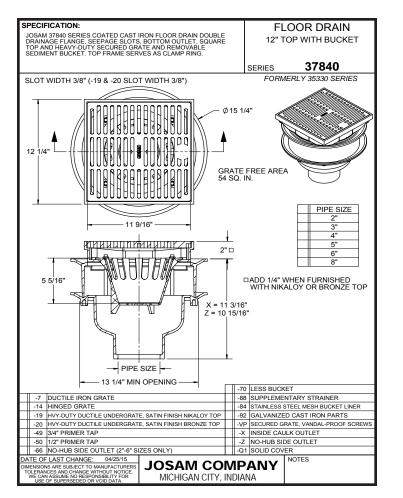


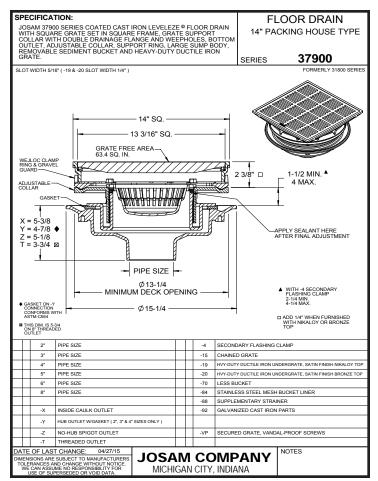
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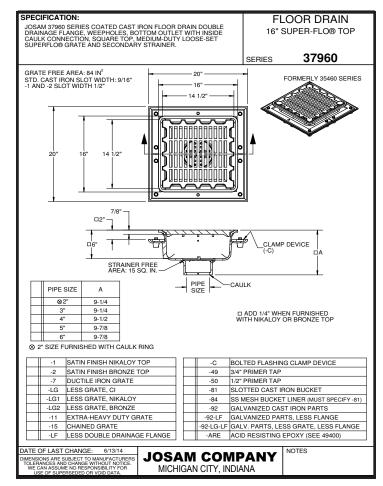
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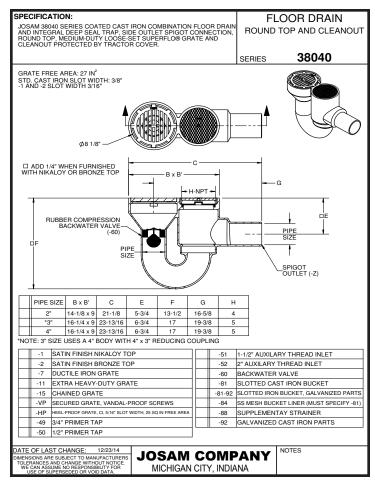




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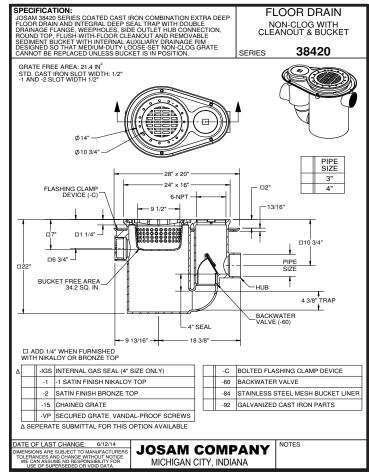
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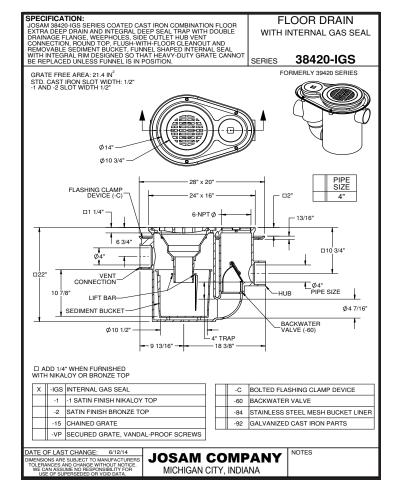


SPECIFICATION:	FLOOR DRAIN			
JOSAM 38250A SERIES COATED CAST IRON COMBINATION FLOOR DRAIN AND INTEGRAL DEEP SEAL TRAP, SIDE OUTLET SPIGOT CONNECTION, ROUND TOP, MEDIUM-DUTY LOOSE-SET GRATE, FLUSH-WITH-FLOOR CLEANOUT AND BALL-FLOAT TYPE BACKWATER VALVE.	ROUND TOP W/CLEANOUT & BWV			
	SERIES	382	250A	
SLOT WIDTH 7/16" (-1 & -2 SLOT WIDTH 7/16") BRONZE TOP ADD 1/4" ON 2" & 3" OUTLET TYPES, ADD 1/2" ON 4" OUTLET TYPE.				
BACKWATER VALVE		F		6
PIPE ØB DIM C	ØD DIM E	DIM F	DIM G	FREE AREA
2" 9" 15"	8" 4-1/2"	11-7/8"	10-1/2"	17.7
<u>3" 10" 18"</u> 4" 12-1/4" 21"	9" 3-7/8" 11" 5-3/8"	12-3/4" 15-5/8"	13" 15"	18.3 29.4
				20.4
	RED GRATE, VANDAL-PROOF SCREWS			
	BACKWATER VALVE ANIZED CAST IRON PARTS			
DATE OF LAST CHANGE: 04/27/15		NOTES		
DIRENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES AND CHANGE WITHOUT NOTICE WE CAN ASSIME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA.	YANY			

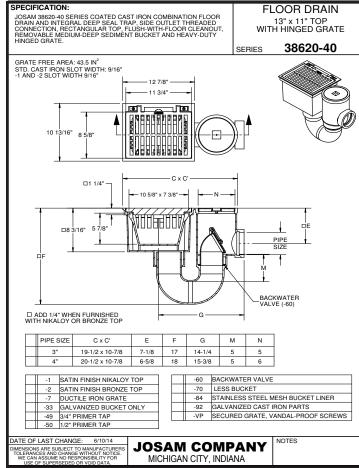
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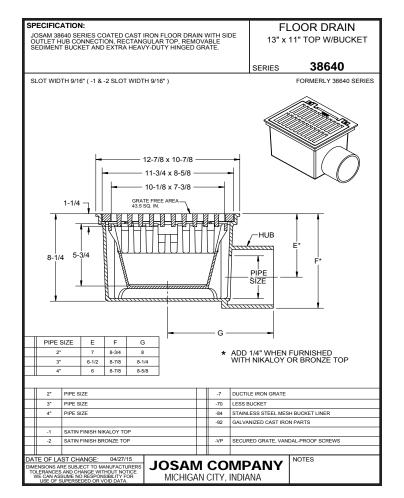
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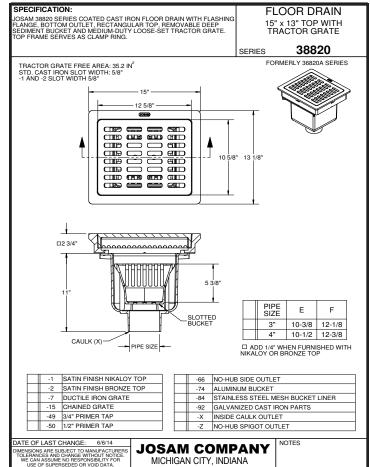


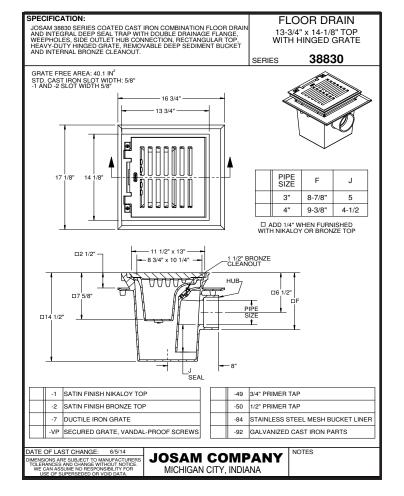


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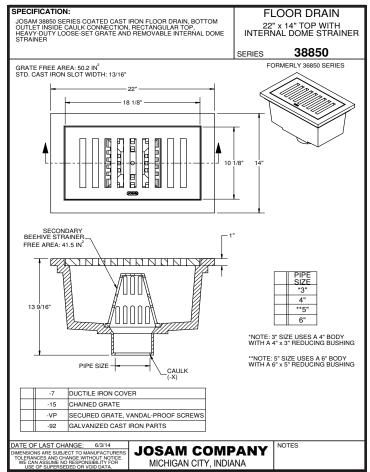


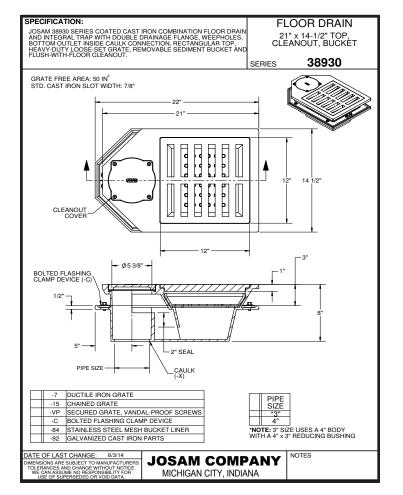


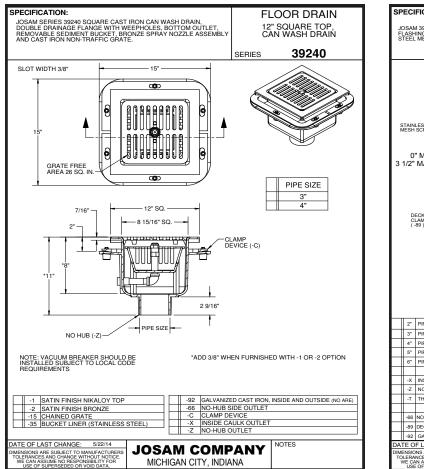


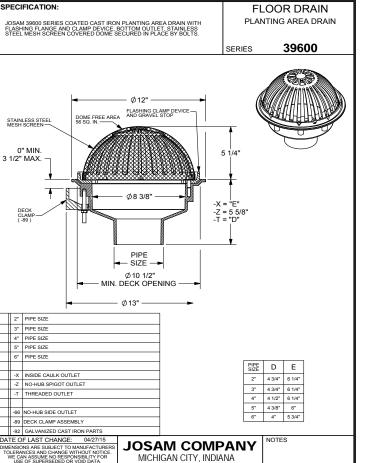
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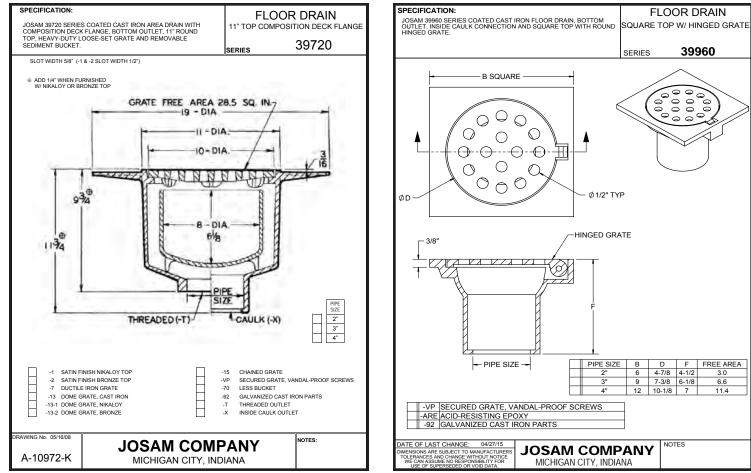






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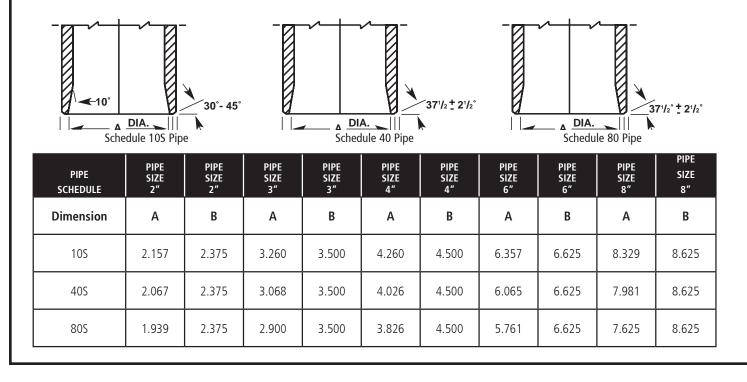


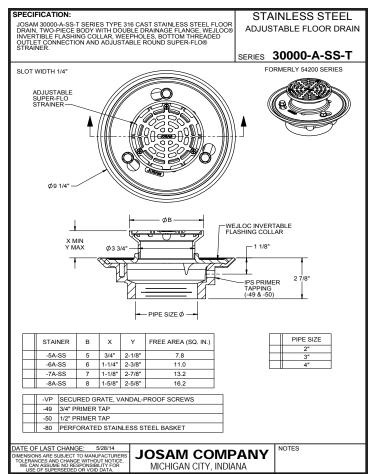
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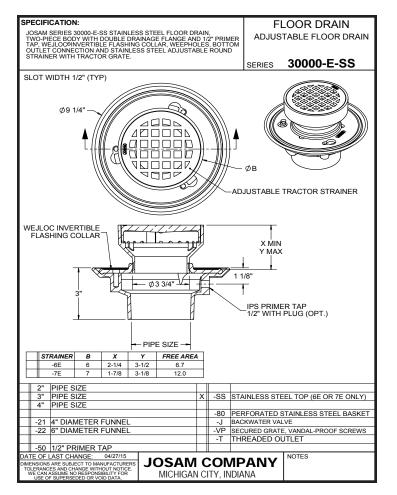
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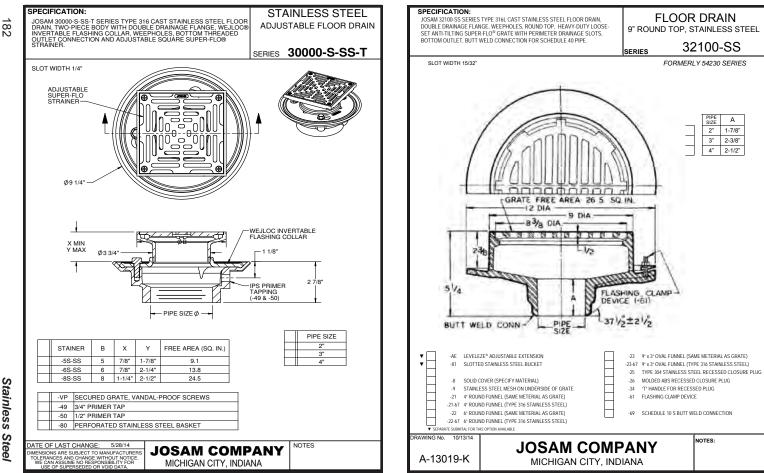
Cast Stainless Steel Butt-Weld Outlet Connection Data

Josam cast stainless steel drains and cleanouts are regularly furnished with Schedule 40S butt-weld outlet connections. Butt-weld outlet connections can also be furnished in Schedule 10S and 80S as specified.









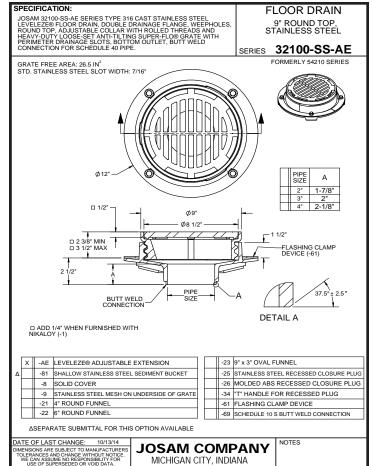
Α SIZE

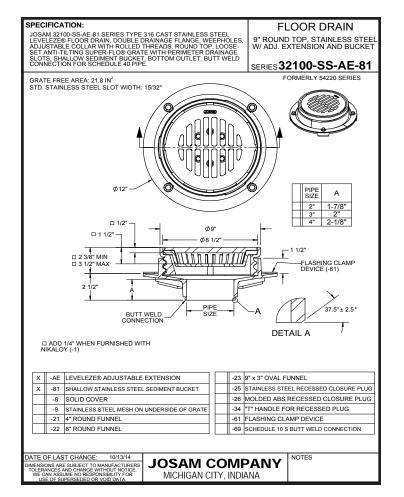
2" 1-7/8"

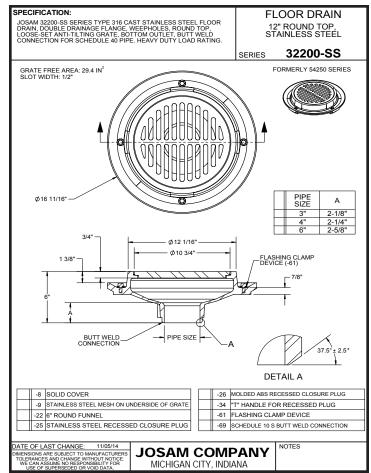
3" 2-3/8"

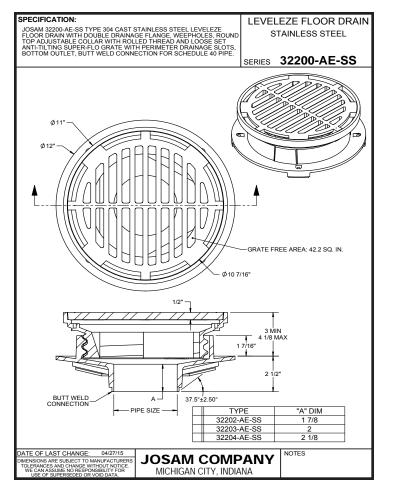
4" 2-1/2"

Stainless

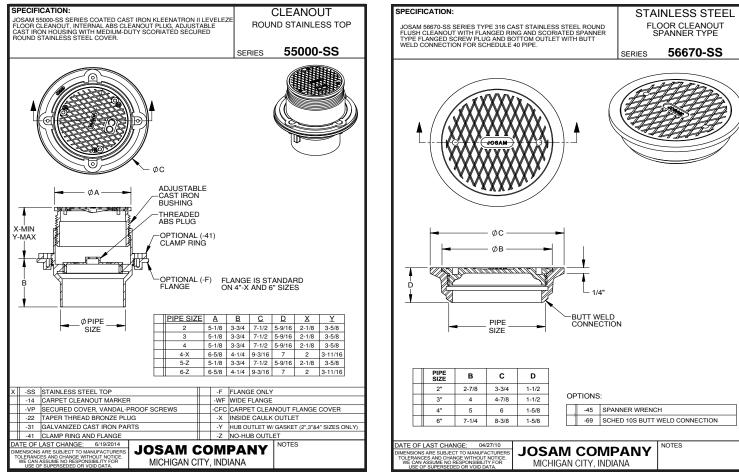


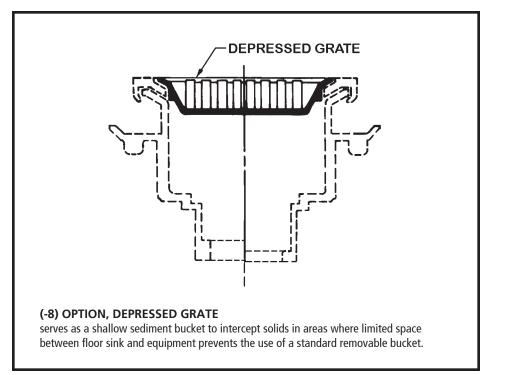


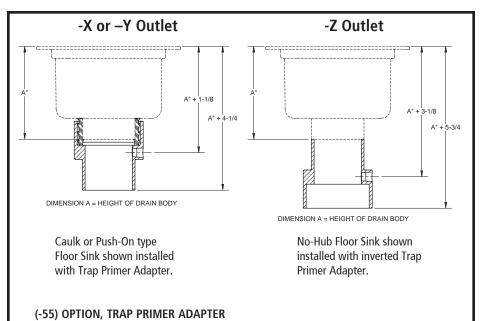




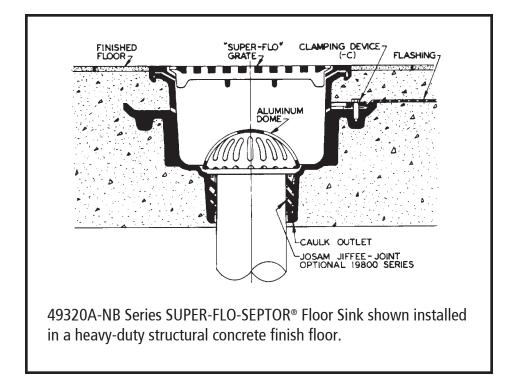
Stainless Steel

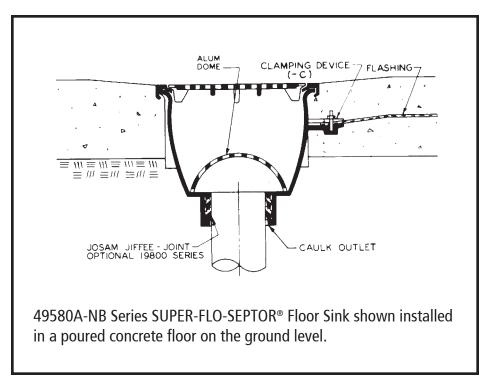


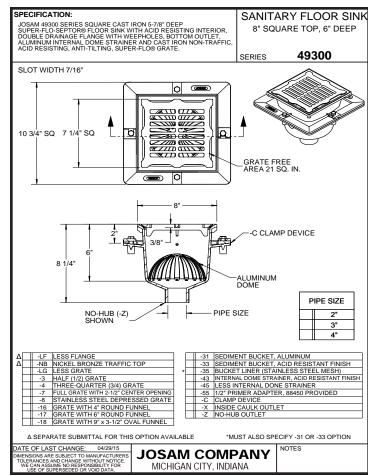


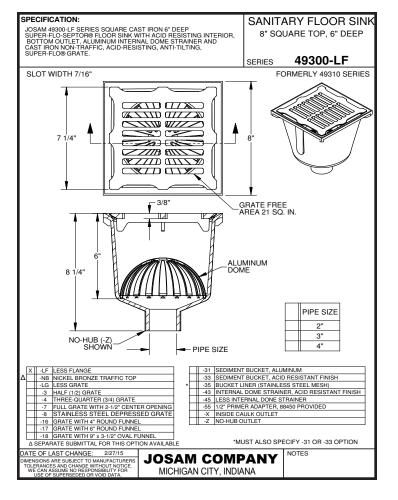


Used to convert any standard drain to a trap primer drain. Install shallow trap primer adapter on all outlet types: -X Caulk, -Y Push-On or –Z No-Hub. (See 88450 for details.)

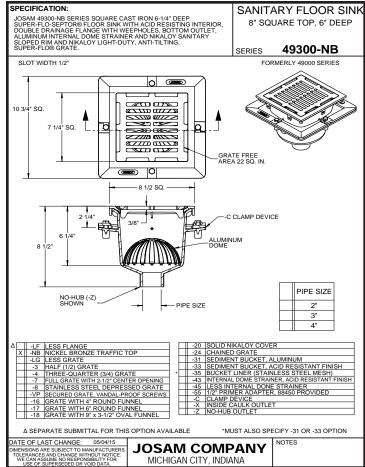


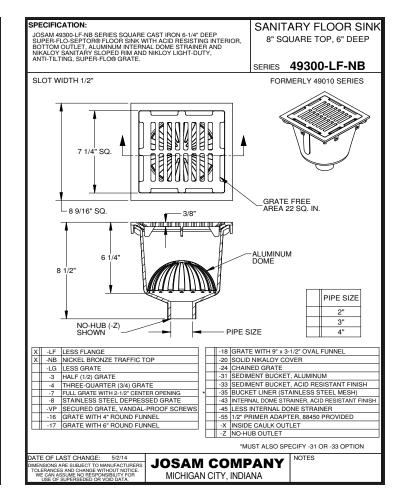


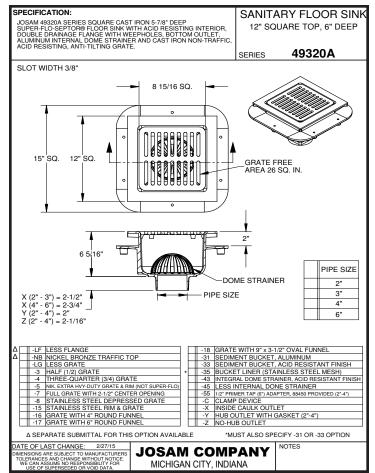


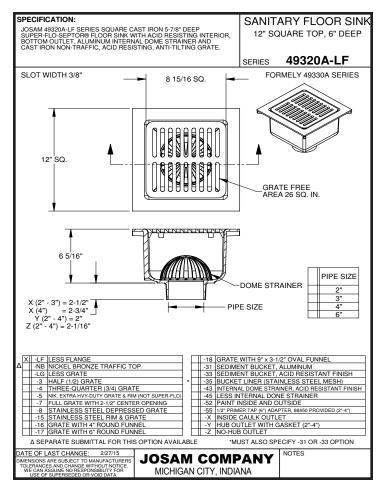


Sanitary Floor Sinks

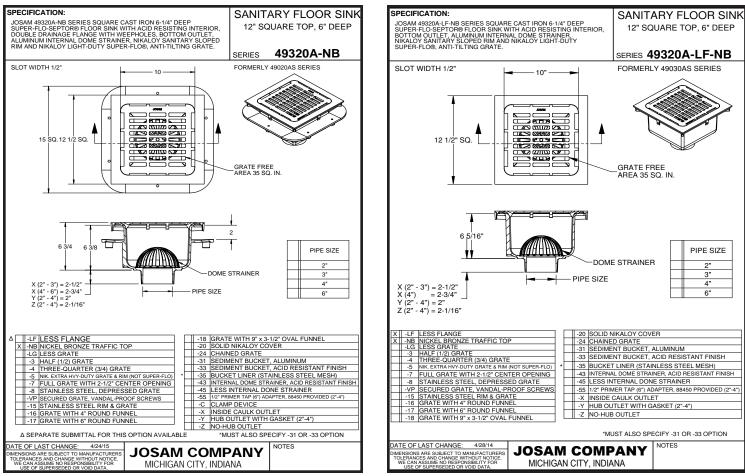


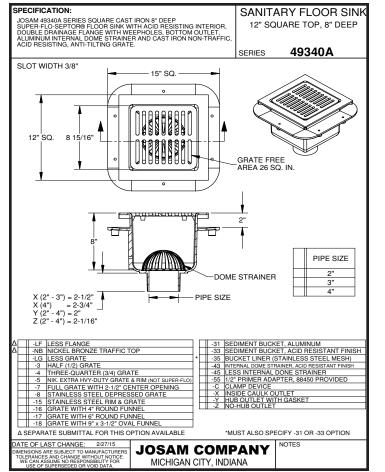


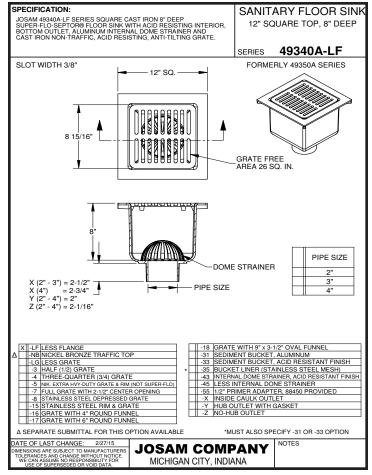




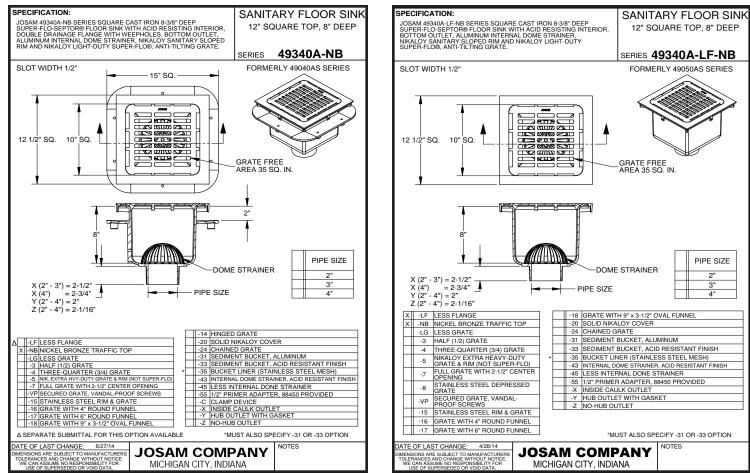
Sanitary Floor Sinks

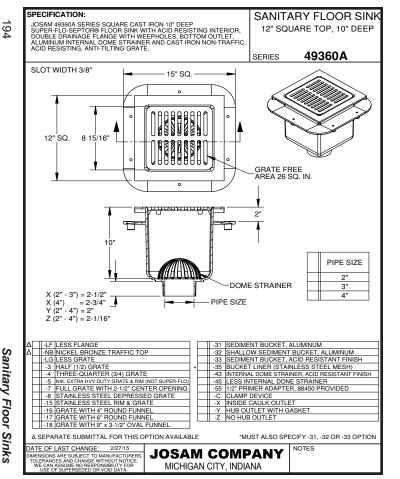


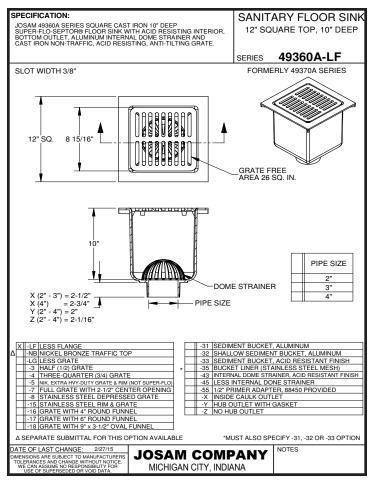


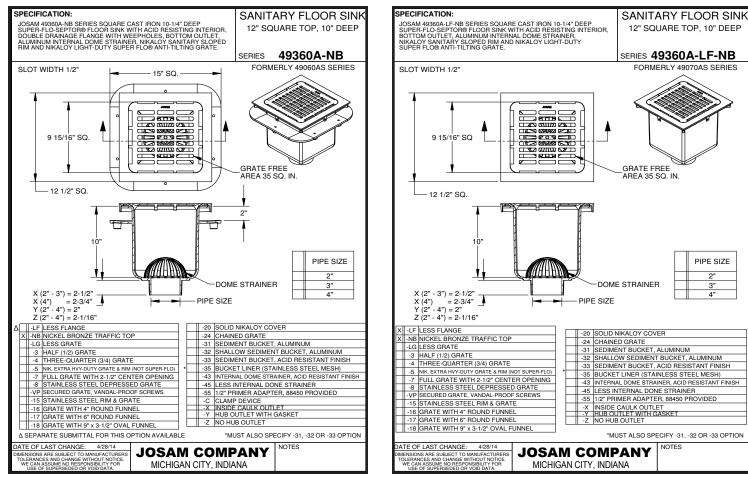


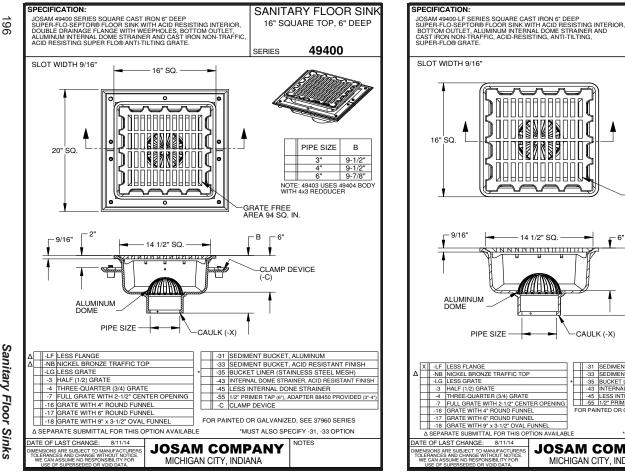
Sanitary Floor Sinks

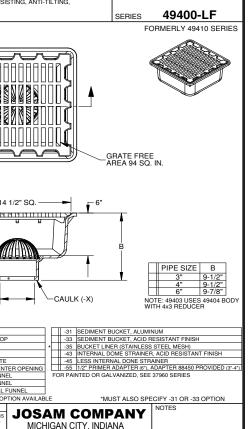








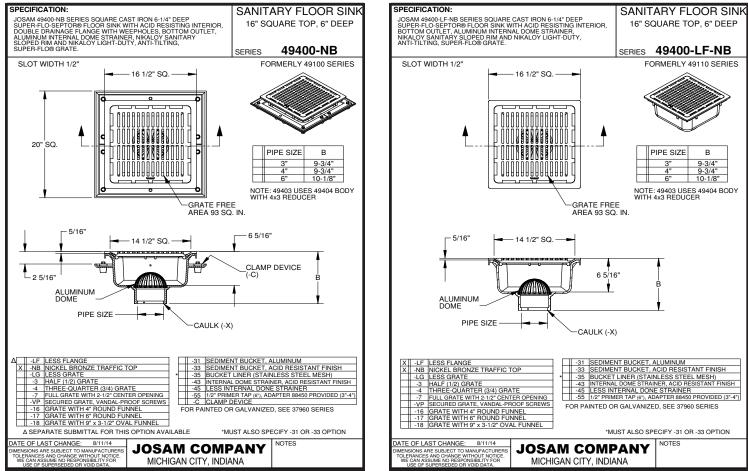


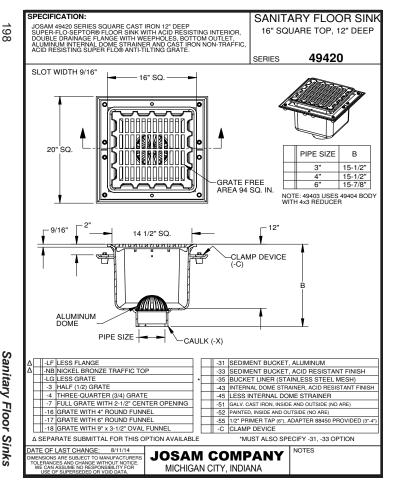


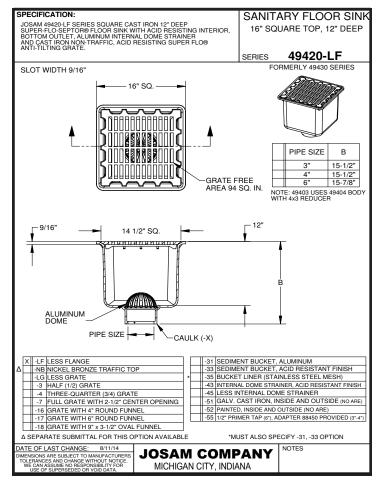
SANITARY FLOOR SINK

16" SQUARE TOP, 6" DEEP

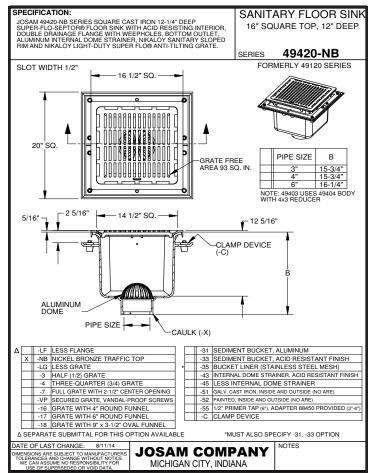
Sanitary Floor Sinks

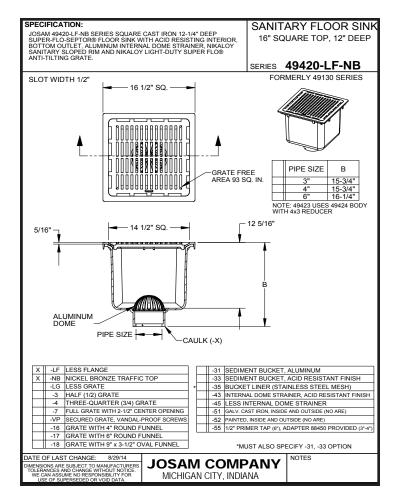


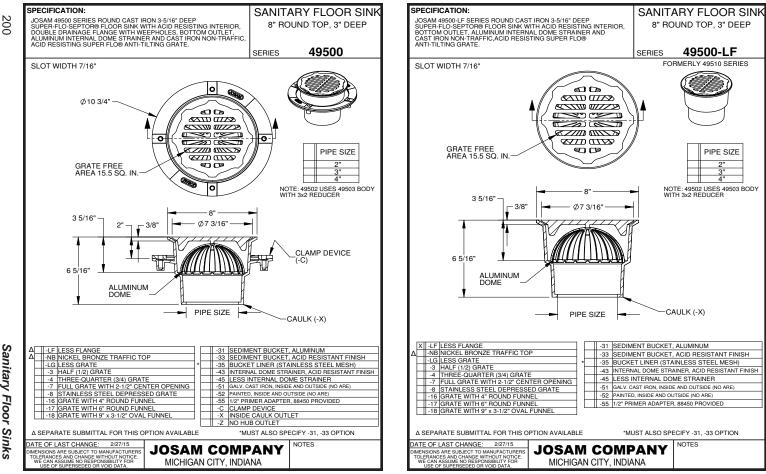




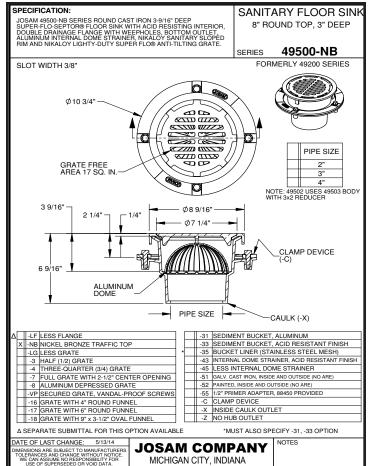
Sanitary Floor Sinks

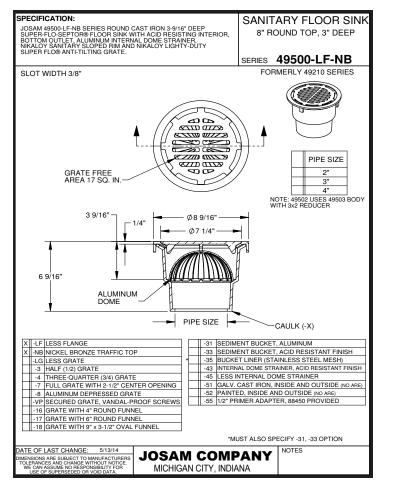


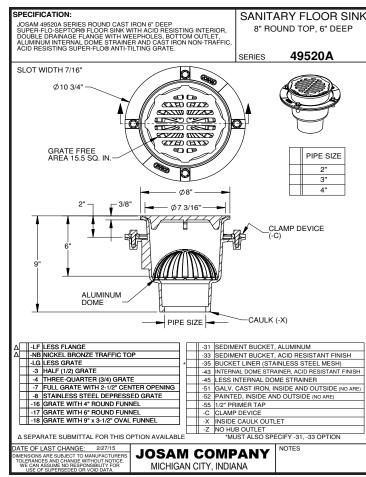


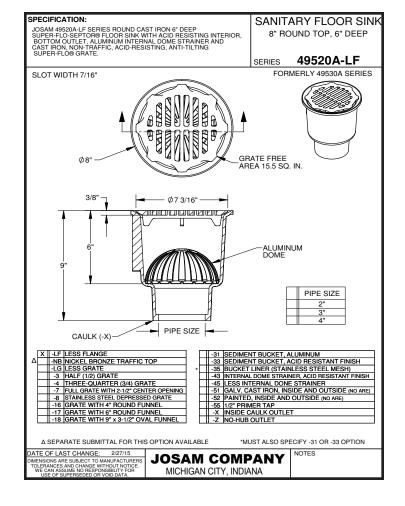


Sanitary Floor Sinks

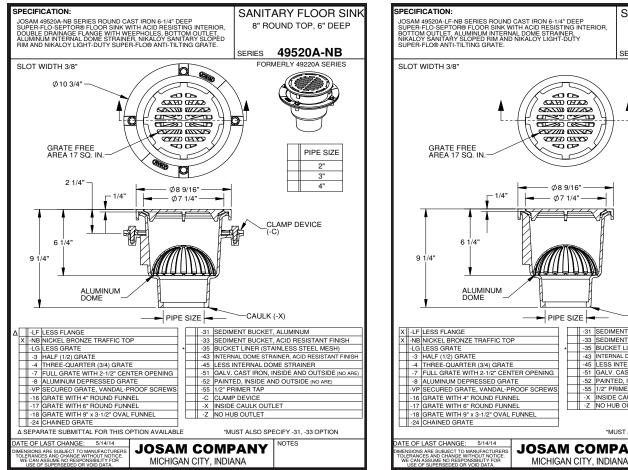


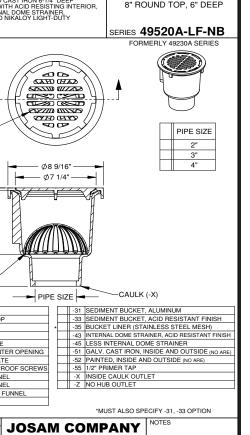




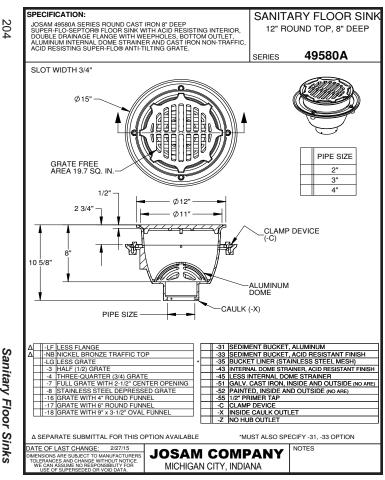


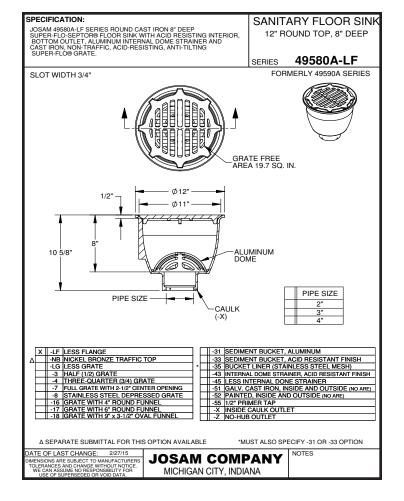
Sanitary Floor Sinks

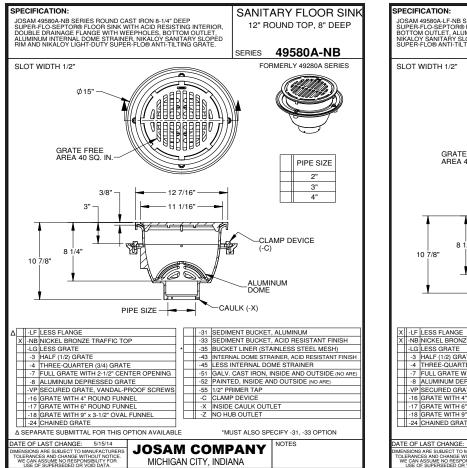


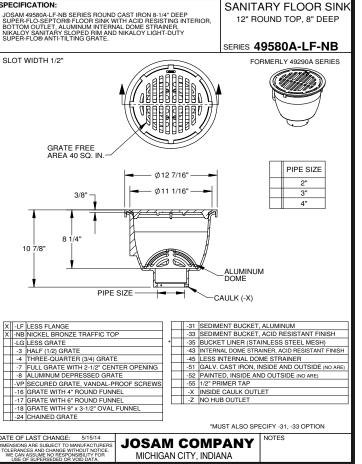


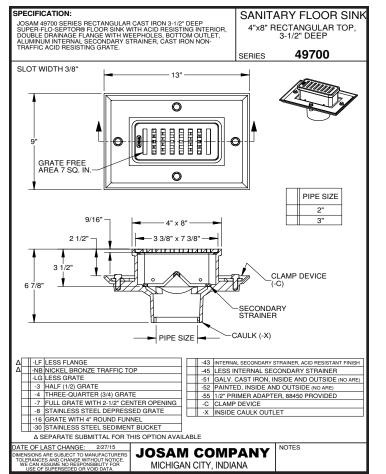
SANITARY FLOOR SINK

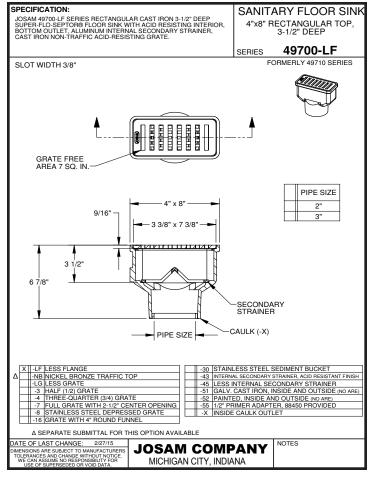




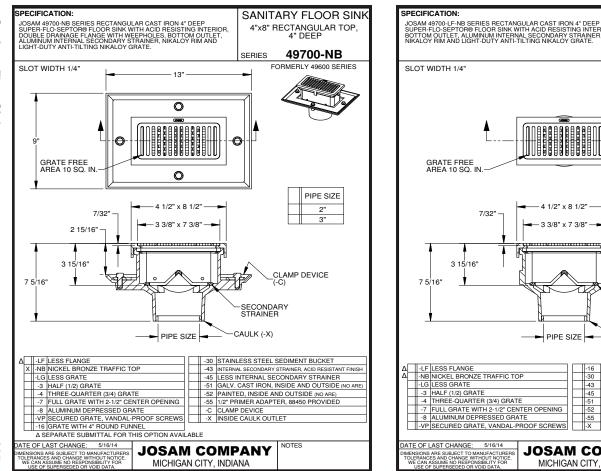


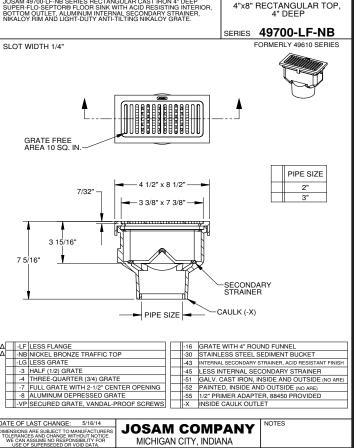




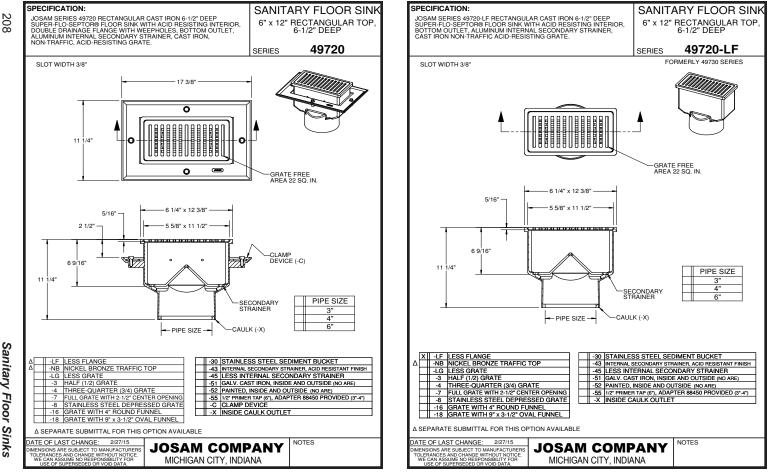


Sanitary Floor Sinks

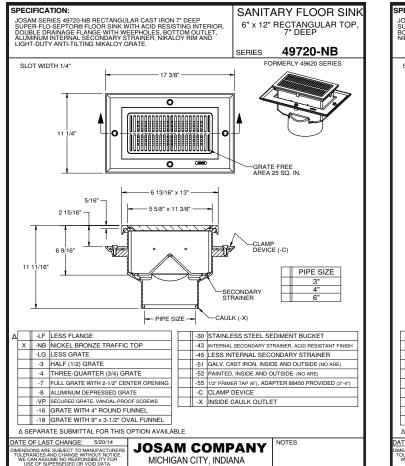


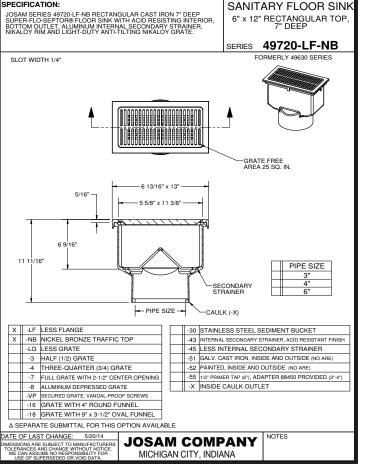


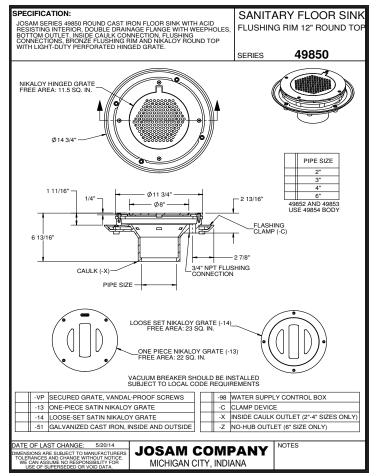
SANITARY FLOOR SINK

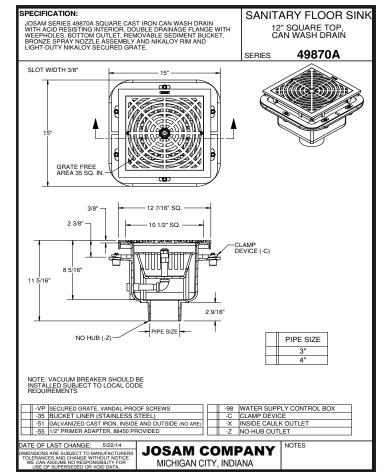


Sanitary Floor Sinks









Sanitary Floor Sinks

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55000 Series KLEENATRON® II ASSEMBLY

WIDE CHOICE OF COVERS

Tops and covers for every area. Round-square, tile-terrazzo, medium-special-duty. Standard cast iron secured cover has specialduty rating.*

*SPECIAL-DUTY: Grates testing over 10,000 lb. (4500 kg.) ASME 112.6.3-2001.

ADJUSTABLE BUSHING

Precision machine threaded cast iron bushing provides LEVELEZE® adjustment; non-tilting top. Body protects threads from concrete, allowing adjustment after pour.

EASY IN – EASY OUT CLOSURE PLUG

ABS plastic closure plug with gas-tight sealing tapered threads.

OPTIONAL CLAMP RING

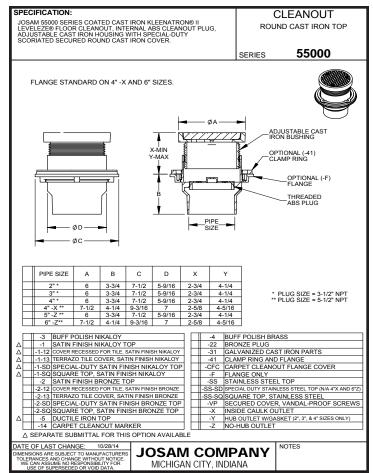
To secure waterproof membrane to flashing flange.

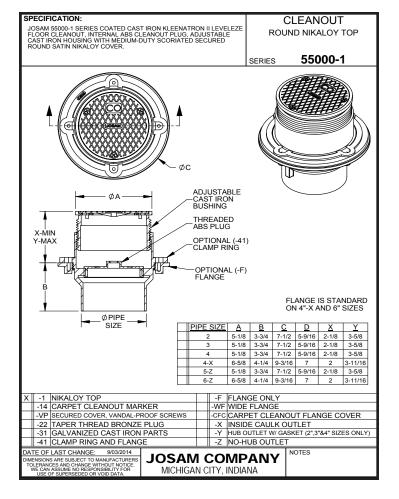
OPTIONAL (-F) FLASHING FLANGE

Mates with machined exterior thread on ferrule to provide watertight connection without the additional use of sealant by others.

CAST IRON BODY

With interior threads to provide unimpaired LEVELEZE® adjustment of top section.





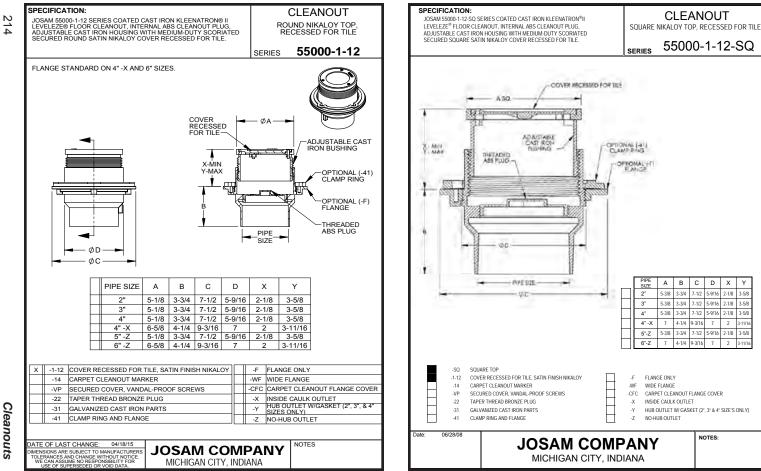
Cleanouts

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	SPECIFICATION:	CLEANOUT	SPECIFICATION: JOSAM 55000-1-SQ SERIES COATED CAST IRON KLEENATRON® II	CLEANOUT
Í.	JOSAM 5500-1-SD SERIES COATED CAST IRON KLEENATRON® II LEVELEZE® FLOOR CLEANOUT, INTERNAL ABS CLEANOUT PLUG, ADJUSTABLE CAST IRON HOUSING WITH SPECIAL-DUTY	ROUND NIKALOY LAMINATE TOP	LEVELEZE® FLOOR CLEANOUT, INTERNAL ABS CLEANOUT PLUG, ADJUSTABLE CAST IRON HOUSING WITH MEDIUM-DUTY SCORIATED	SQUARE NIKALOY TOP
Cleanouts	SCORIATED SECURED ROUND LAMINATED SATIN NIKALOY COVER.	SERIES 55000-1-SD	SECURED SQUARE SATIN NIKALOY COVER.	SERIES 55000-1-SQ
lifs	FLANGE STANDARD ON 4" -X AND 6" SIZES.		FLANGE STANARD ON 4" -X AND 6" SIZES	
		ADJUSTABLE CAST IRON BUSHING OPTIONAL (-41) CLAMP RING OPTIONAL (-F) FLANGE THREADED ABS PLUG	×- MIN Y- MAX Y- MAX Y- MAX H Y- MAX Y- MAX Y- MAX Y- MAX Y- MAX	OPTIONAL (-41) FLANGE OPTIONAL (-41) FLANGE THREADED ABS PLUG
	PIPE SIZE A B C D 2" 6-9/16 3-3/4 7-1/2 5-9/16 3" 6-9/16 3-3/4 7-1/2 5-9/16 4" 6-9/16 3-3/4 7-1/2 5-9/16 4" 8-9/16 3-3/4 7-1/2 5-9/16 5"-Z 6-9/16 3-3/4 7-1/2 5-9/16 6"-Z 8-3/16 4-1/4 9-3/16 7 5"-Z 6-9/16 3-3/4 7-1/2 5-9/16 6"-Z 8-3/16 4-1/4 9-3/16 7 X -1-SD SPECIAL-DUTY SATIN FINISH NIKALOY TOP Image: Second Secon	X Y 3 4-1/2 3 4-1/2 3 4-1/2 2-7/8 4-9/16 3 4-1/2 2-7/8 4-9/16	3" 5-3/8 3-3/4 7-1/2 5-9/16 4" 5-3/8 3-3/4 7-1/2 5-9/16 4"-X 7 4-1/4 9-3/16 7 5"-Z 5-3/8 3-3/4 7-1/2 5-9/16 6"-Z 7 4-1/4 9-3/16 7 X -1-SQ SQUARE TOP, SATIN FINISH NIKALOY -F FLAM	X Y 2-1/8 3-5/8 2-1/8 3-5/8 2-1/8 3-5/8 2 3-11/16 2 3-11/16 2 3-11/16 GE ONLY E LANCE
	-14 CARPET CLEANOUT MARKER -WF WIDE FLANGE -VP SECURED COVER, VANDAL-PROOF SCREWS -CFC CARPET CLEANOUT FLANGE COVER -22 TAPER THREAD BRONZE PLUG -X INSIDE CAULK OUTLET -31 GALVANIZED CAST IRON PARTS -X INSIDE CAULK OUTLET -41 CLAMP RING AND FLANGE -Z NO-HUB OUTLET		-14 CARPET CLEANOUT MARKER -WF WIDE FLANGE -VP SECURED COVER, VANDAL-PROOF SCREWS -CC CARPET CLEANOUT FLANGE COVER -22 TAPER THREAD BRONZE PLUG -X INSIDE CAULK OUTLET -31 GALVANIZED CAST IRON PARTS -Y HUB OUTLET WIGASKET (2", 3", 4" SIZES ONLY) -41 CLAMP RING AND FLANGE -Z NO-HUB OUTLET	
213	DATE OF LAST CHANGE: 05/23/15 DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES AND CHANCE WITHOUT NOTICE WE CAN ASSUME ON DESPONSIBILITY FOR USE OF SUPERFEEED OF WOLD BATA.		DATE OF LAST CHANGE: 04/23/15 DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTCE WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUBJECTSCO KNOD BATA. MICHIGAN CITY, INDIA	

Cleanouts



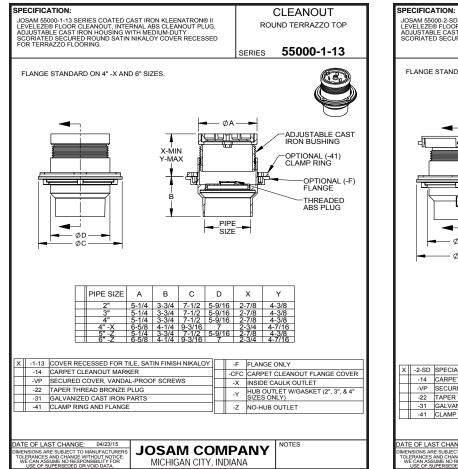
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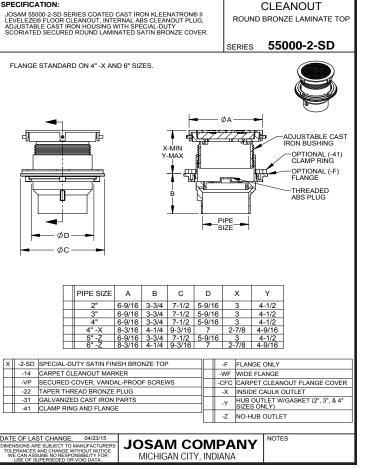
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3-5/8

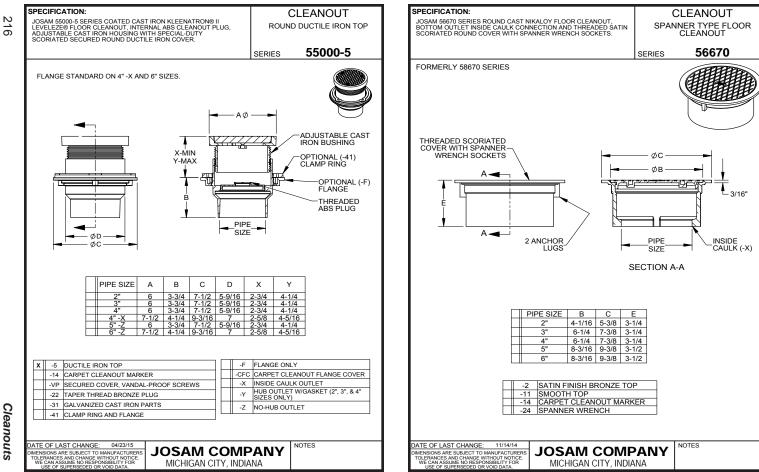
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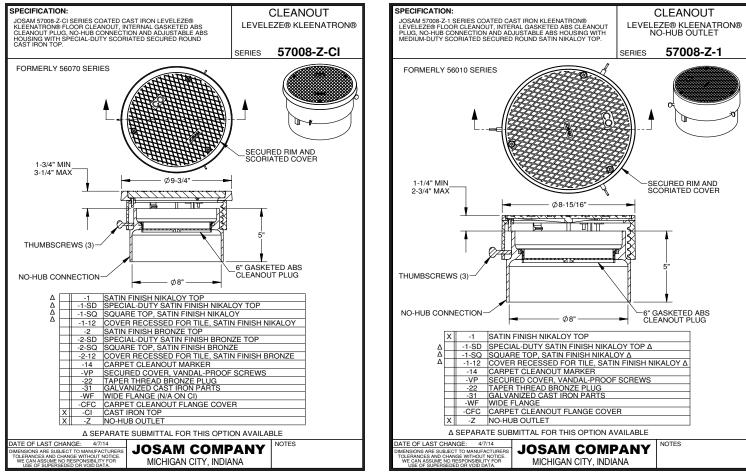
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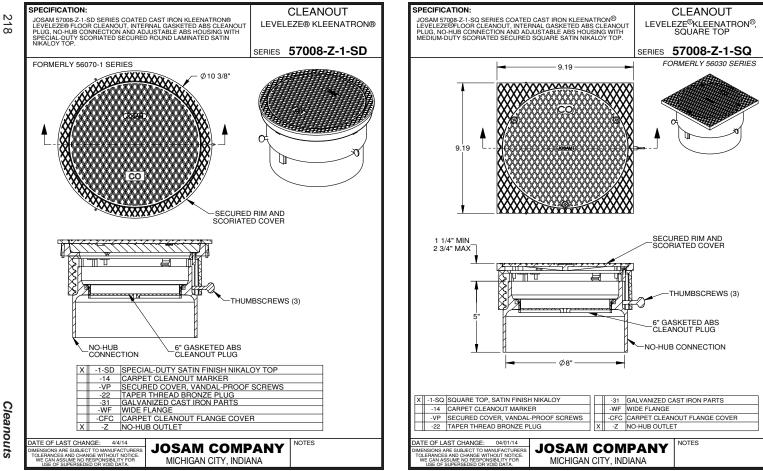


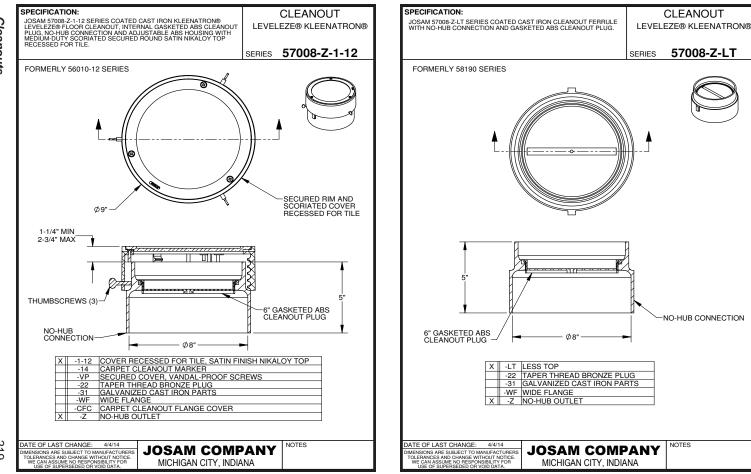


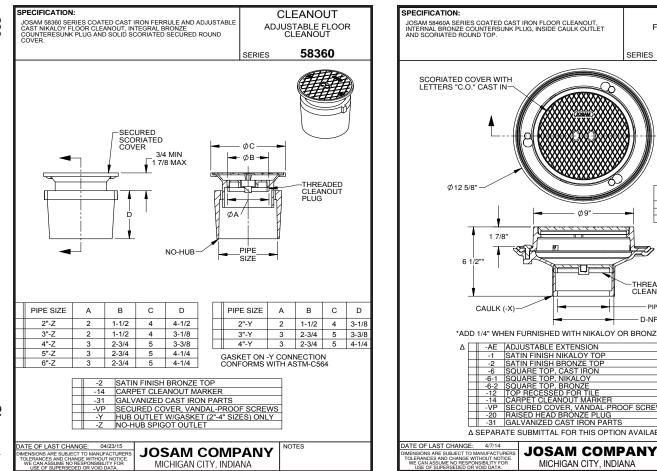
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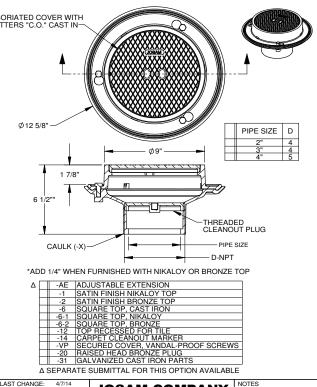












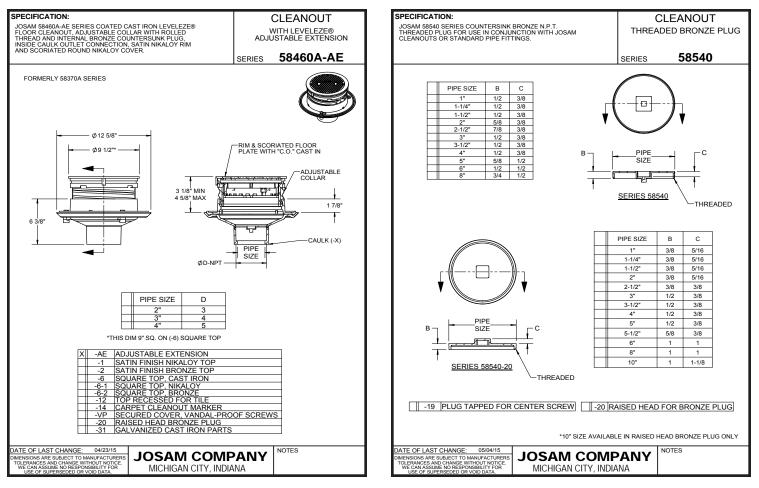
CLEANOUT

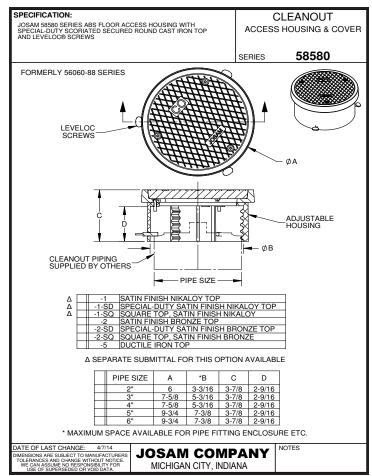
FLOOR CLEANOUT

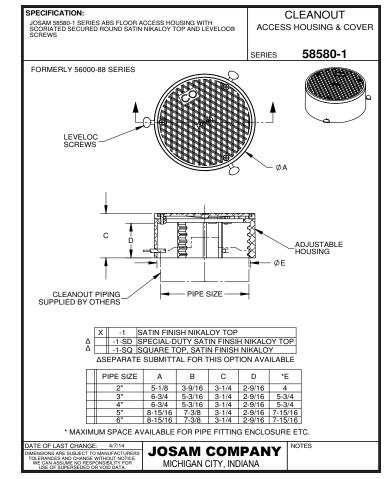
SERIES

58460A

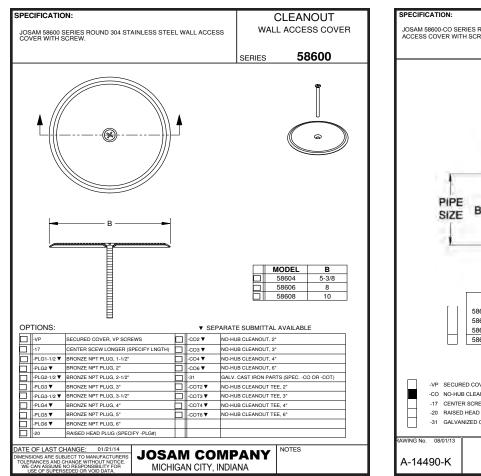
Cleanouts

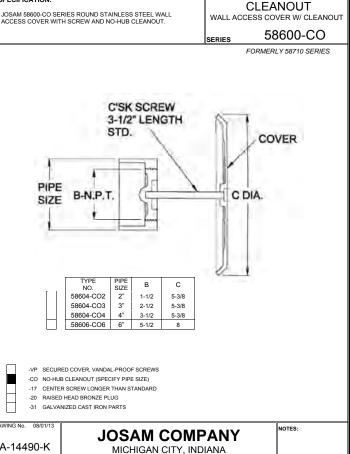


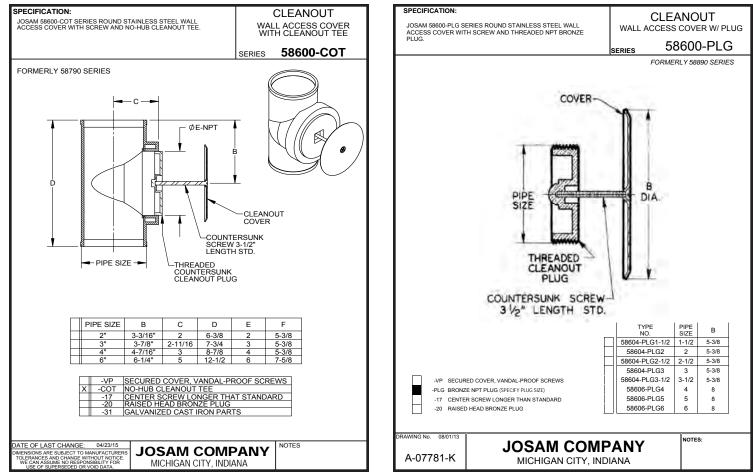


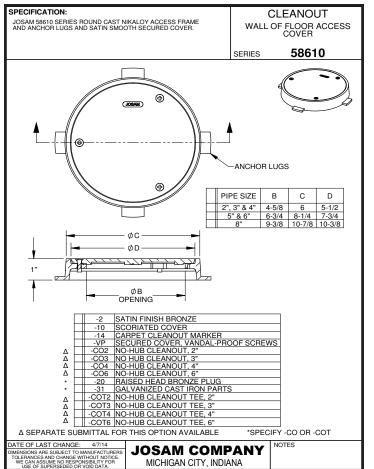


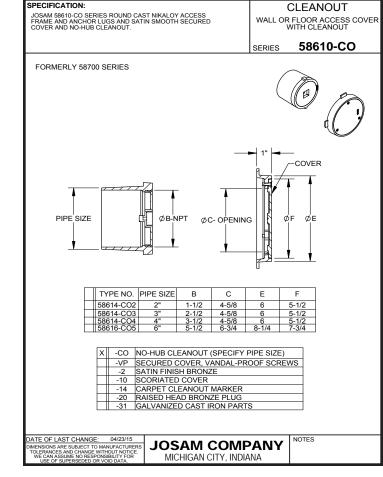
SPECIFICATION:	CLEANOUT	SPECIFICATION:	CLEANOUT		
JOSAM 58580-1-SD SERIES ABS FLOOR ACCESS HOUSING WITH SPECIAL-DUTY SCORIATED SECURED ROUND LAMINATED SATIN NIKALOY TOP AND LEVELOC® SCREWS	ACCESS HOUSING & COVER	JOSAM 58580-1-SQ SERIES ABS FLOOR ACCESS HOUSING WITH MEDIUM-DUTY SCORIATED SECURED SQUARE SATIN NIKALOY TOP AND LEVELOC® SCREWS	ACCESS HOUSING & COVER		
	SERIES 58580-1-SD		SERIES 58580-1-SQ		
FORMERLY 56060-88-1 SERIES		FORMERLY 56020-88 SERIES			
LEVELOC SCREWS	SPECIAL-DUTY SCORIATED COVER WITH "C.O." CAST IN ADJUSTABLE HOUSING	A SQ. OPEN C LEVELOC SCREWS FIP	ING SECURED RIM & SCORIATED COVER WITH "C.O" CAST IN ADJUSTABLE HOUSING CLEANOUT PIPING SUPPLIED BY OTHERS		
X -1 SATIN FINISH NIKALOY TOP X -SD SPECIAL-DUTY TOP, NIKALOY		X -1 SATIN FINISH NIKALOY TOP X SQUARE TOP]		
3" 7-5/8 5-3/16 4-1/8 2 4" 7-5/8 5-3/16 4-1/8 2 5" 9-3/4 7-3/8 4-1/8 2 6" 9-3/4 7-3/8 4-1/8 2	D 9/16 9/16 9/16 9/16 9/16	2" 5-3/8 3-9/16 3-1/4 2- 3" 7 5-3/16 3-1/4 2- 4" 7 5-3/16 3-1/4 2- 5" 9-1/4 7-3/8 3-1/4 2- 6" 9-1/4 7-3/8 3-1/4 2-	D *E 9/16 4 9/16 5-3/4 9/16 5-3/4 9/16 7-15/16 9/16 7-15/16		
* MAXIMUM SPACE AVAILABLE FOR PIPE FITTING ENCLOSU	NOTES	* MAXIMUM SPACE AVAILABLE FOR PIPE FITTING ENCLOS	NOTES		
DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES AND CHANGE WITHOUT NOTICE WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA.	YANY	DIRECT OF ANY OF A STATE OF A STA	PANY		

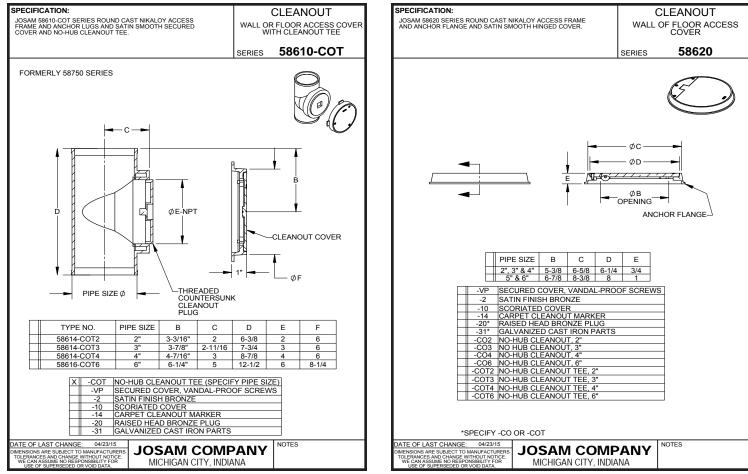


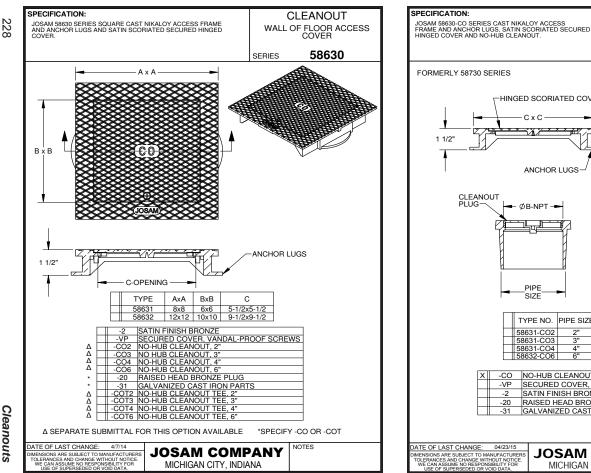


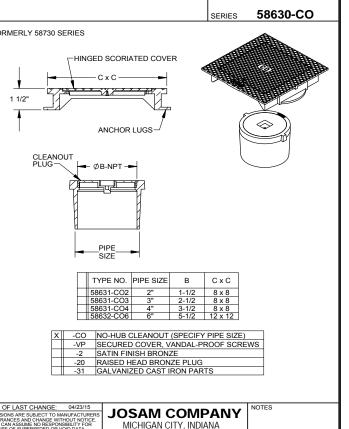






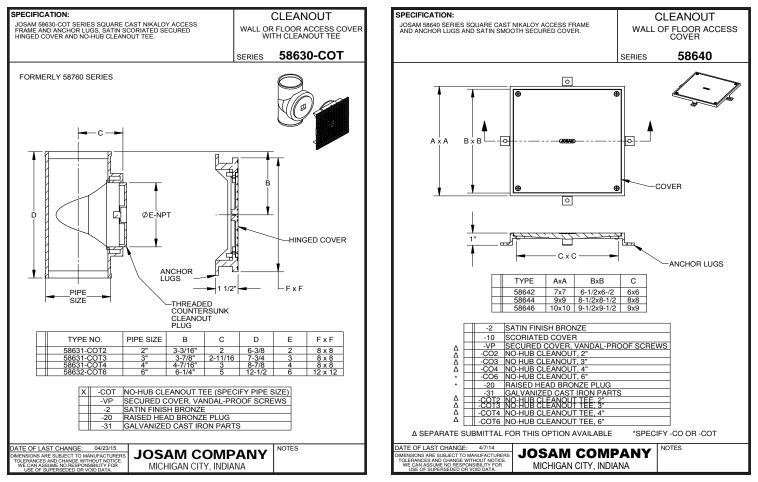


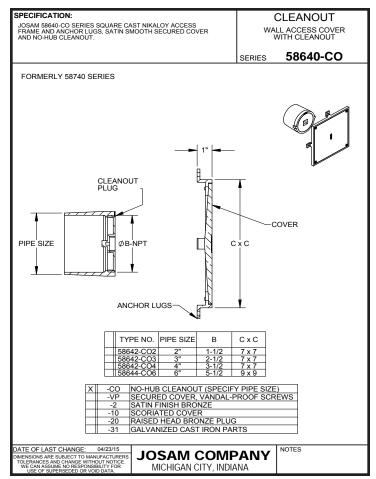


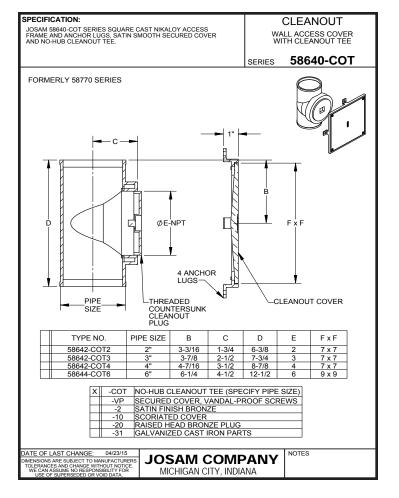


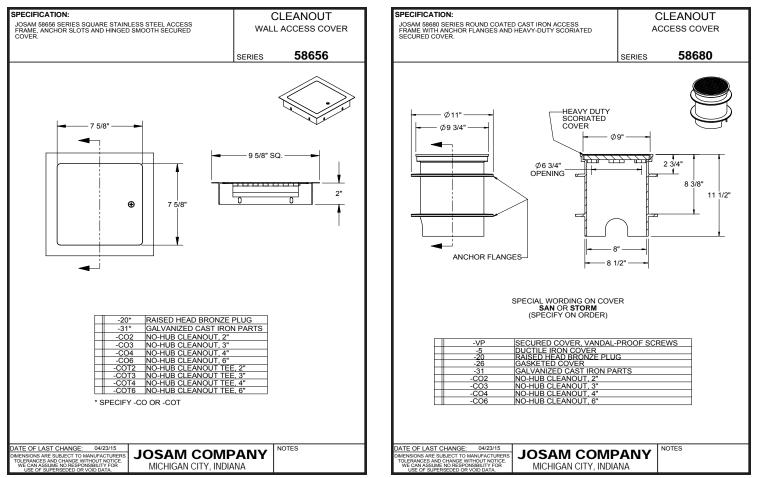
CLEANOUT

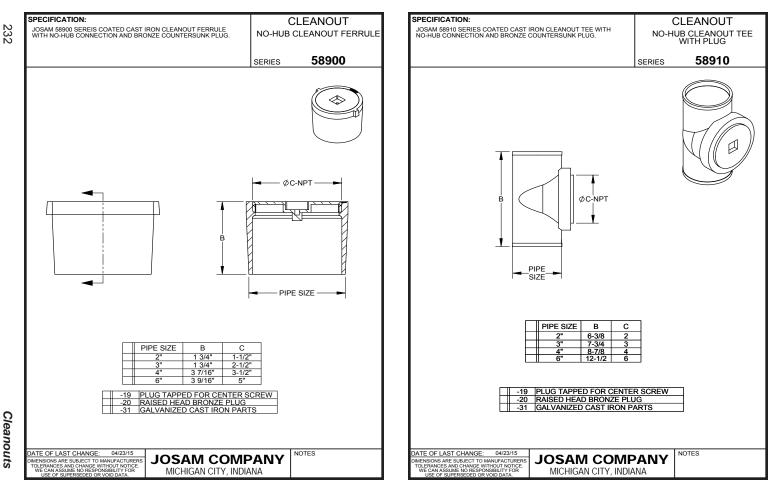
WALL OR FLOOR ACCESS COVER WITH CLEANOUT

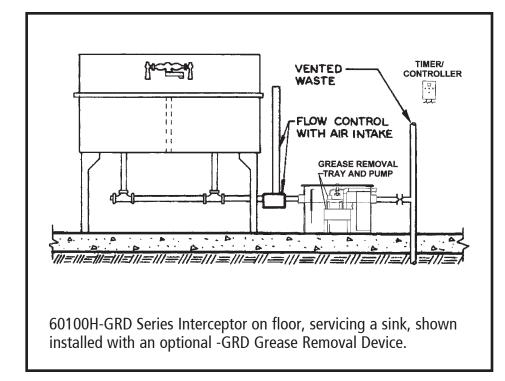


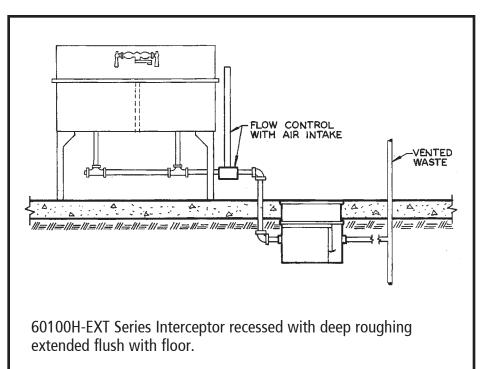


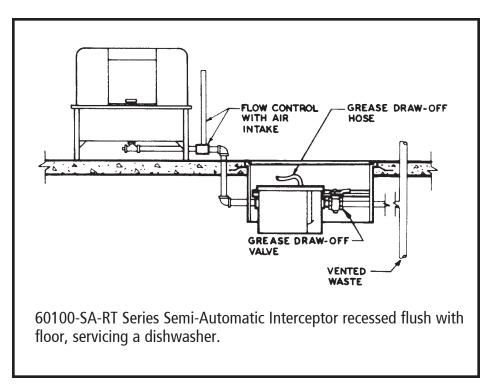


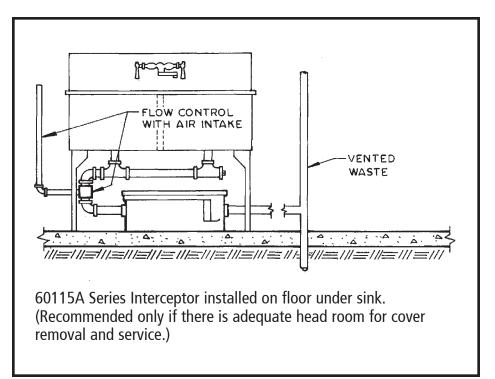


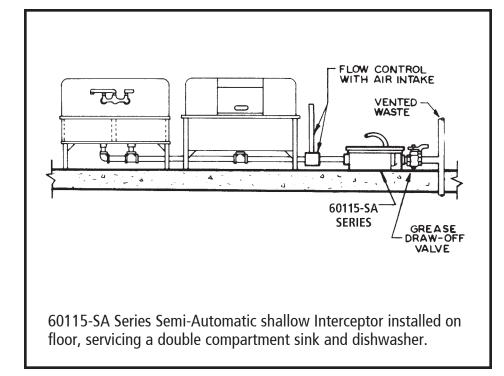


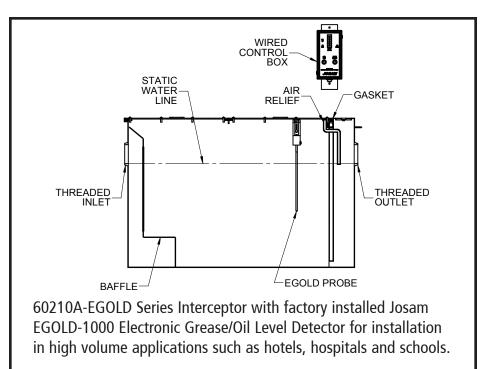


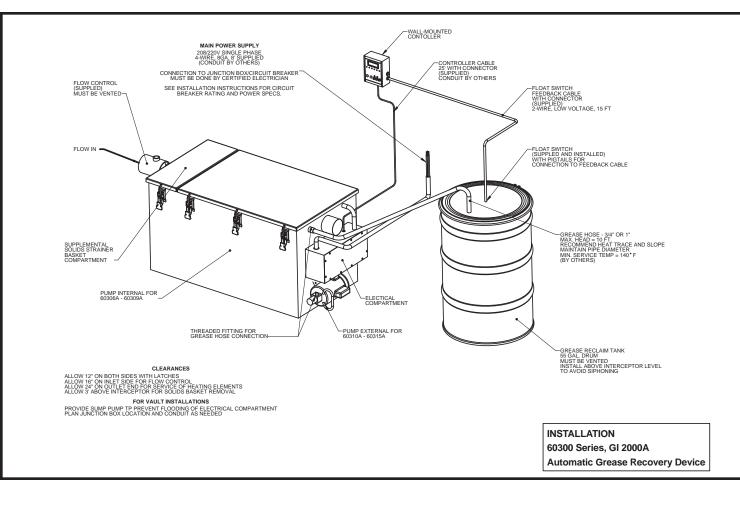












FLOW CONTROLS • ESSENTIAL FOR MAXIMUM EFFICIENCY

Flow control fittings are furnished at no extra cost with all JOSAM Interceptors and Separators. These devices govern flow rate to the interceptor or separator being used, thereby assuring the maximum retention of the material being intercepted.

The appropriate flow control will be shipped with every JOSAM Grease Interceptor or Oil Separator. They were designed after many years of tests and field experiments with interceptor installations under varying conditions and ensure 90% or more grease or oil retention efficiency of the interceptor.

When consideration isn't given to the flow rate of the waste water to be handled, generally the actual flow rate through the interceptor or separator exceeds its rated maximum. With such flow rate, the interceptor or separator would be overloaded. Retention time within the unit would not be sufficient for maximum separation. The result would be low efficiency and pollutants left in the waste water would pass through the interceptor or separator making the installation less than effective. When the flow is controlled by use of a JOSAM flow control fitting so that it can never exceed the maximum rating of the interceptor or separator, and the unit is cleaned on a regular basis, the maximum pollutant retention efficiency will be achieved and maintained.

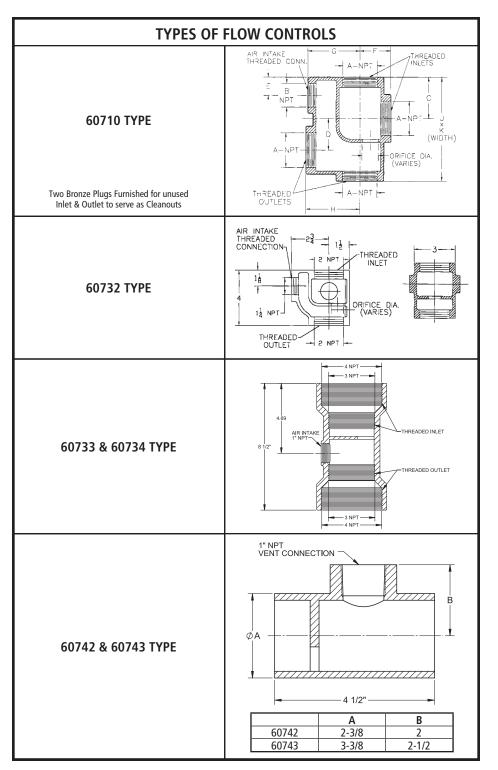
All flow controls are provided with an air intake and should be connected to vent stack or vent not lower than the flow level of highest drain serviced or terminated in a return bend at the same elevation outside of building.

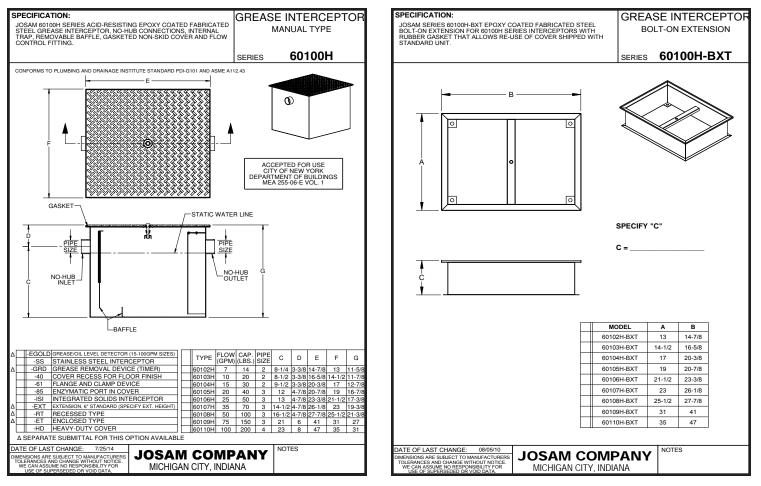
FLOW CONTROLS								
Series	Flow Control Series	Series	Flow Control Series	Series	Flow Control Series			
60100-SA	60730	60110A	60730	60210A*	60710			
60110-SA	60730	60100H-EXT	60740	60500B	60740			
60100-SA-RT	60730	60100H-RT	60740	60500B-EXT	60740			
60100-SA-ET	60730	60100H-ET	60740	60610-EXT*	60710			
60100H	60740	60210A-EXT*	60710	60610A*	60710			

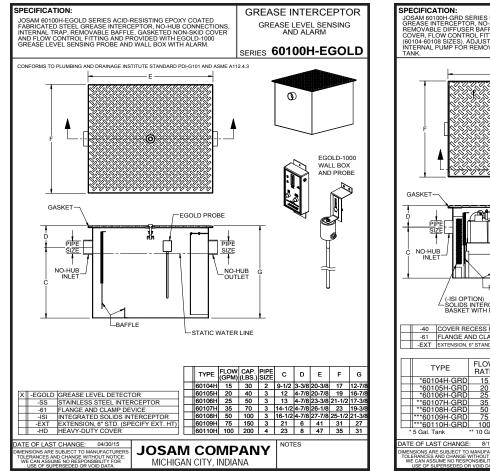
This table indicates which series flow control is furnished with the JOSAM interceptors or separators shown.

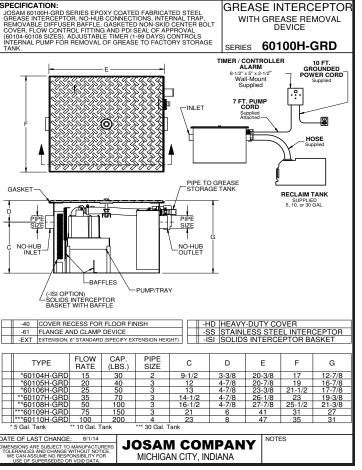
* All interceptors or separators in this series with a flow rate of 150 G.P.M. or less are shipped with a 60733 & 60734 Type Flow Control.

DIMENSIONS IN INCHES											
Туре	Α	В	С	D	E	F	G	Н	J	К	LBS.
60712	2	1-1/4	2-1/2	2	1-1/8	2	3-1/4	3-3/8	6-1/2	3	7
60713	3	1-1/2	3	2-7/8	1-3/8	2-3/4	4-1/8	4-1/2	8-5/8	4-1/4	14
60714	4	2-1/2	3-3/4	4-1/8	1-7/8	4-1/4	6-1/2	6-7/8	12	6-7/8	52
60715	5	2-1/2	3-3/4	4-1/8	1-7/8	4-1/4	6-1/2	6-7/8	12	6-7/8	54
60716	6	3	4-3/8	5-1/8	2-1/8	4-3/4	7-7/8	8	14-1/4	8	85

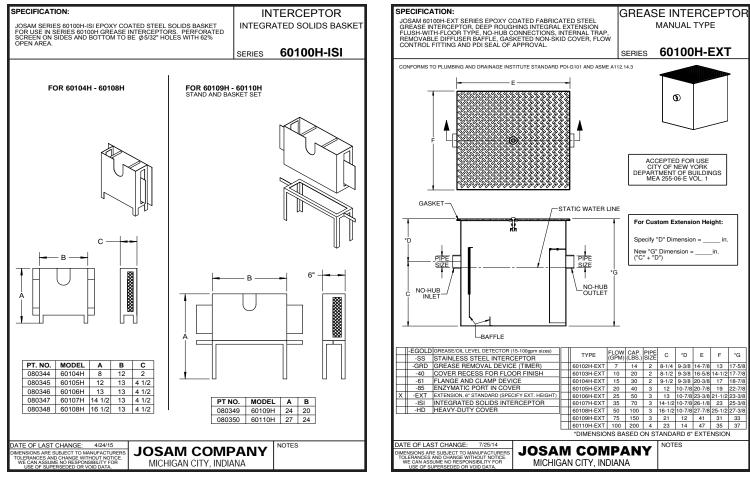


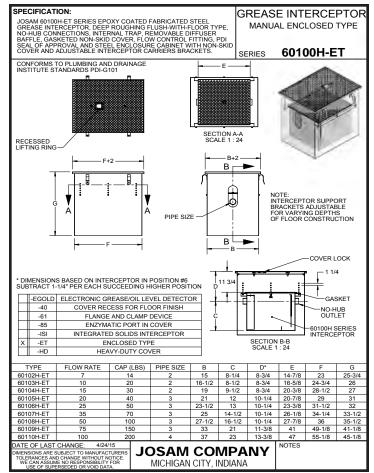


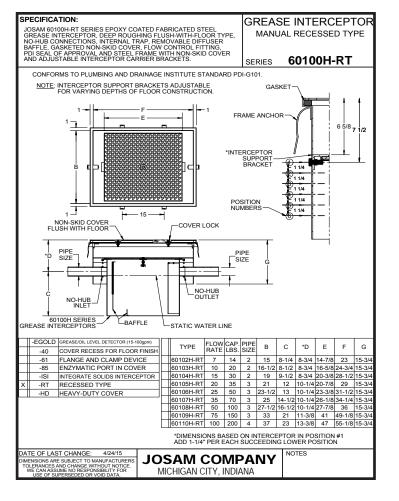




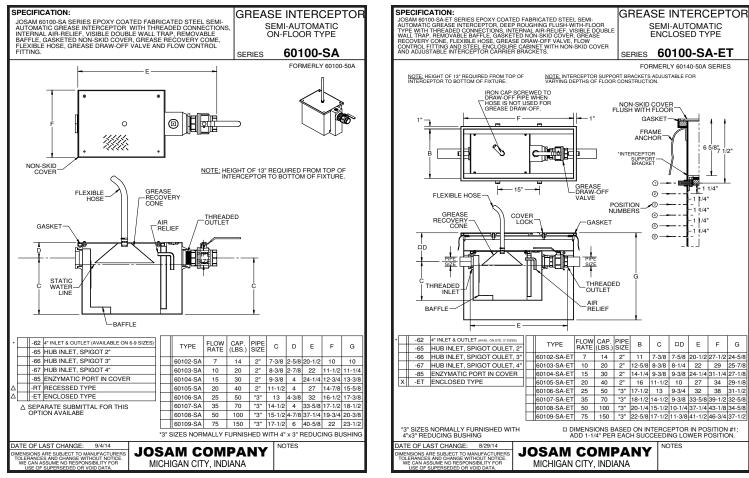
Interceptors

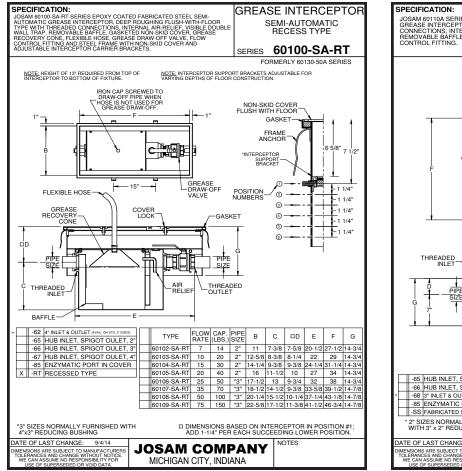


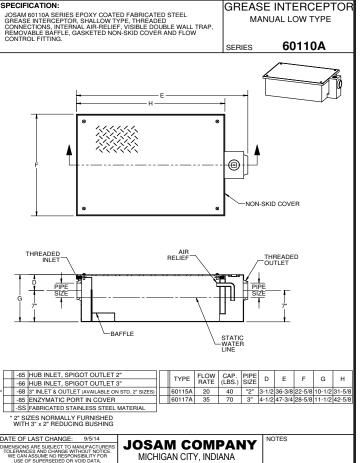




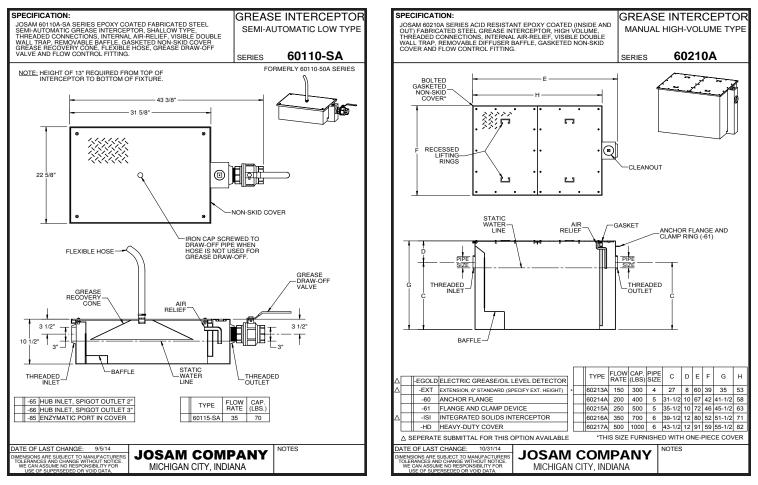
Interceptors

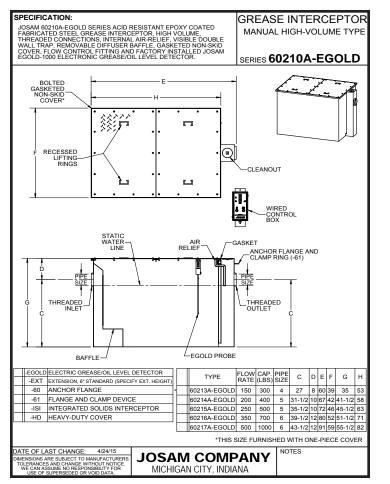


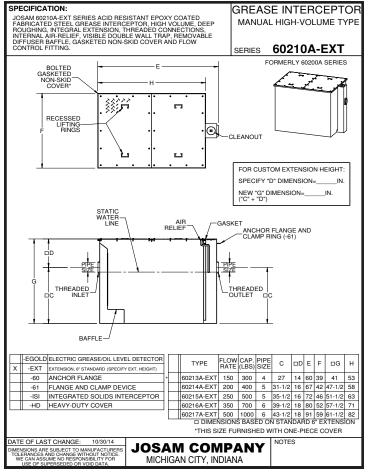




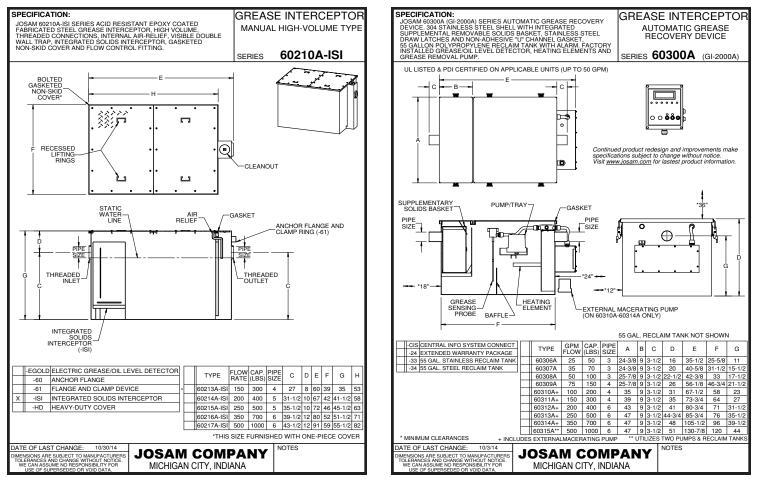
Interceptors

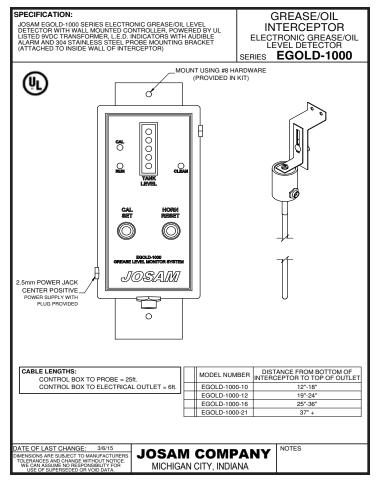


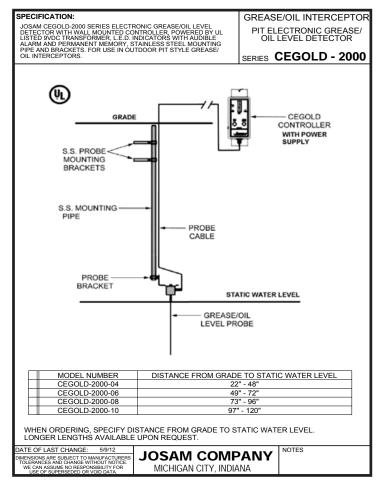




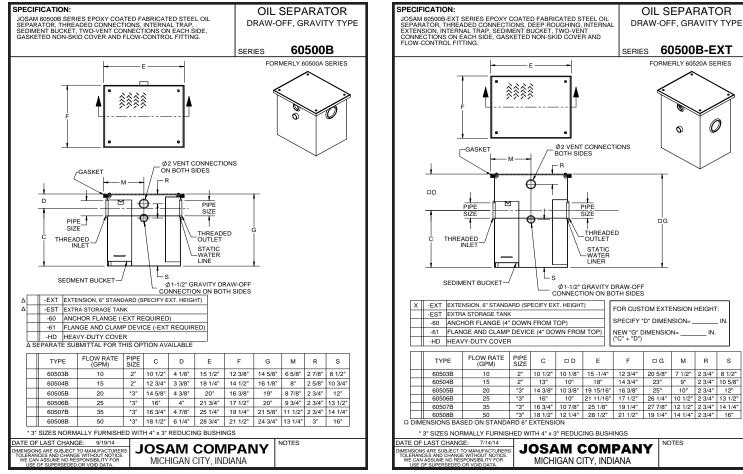
Interceptors

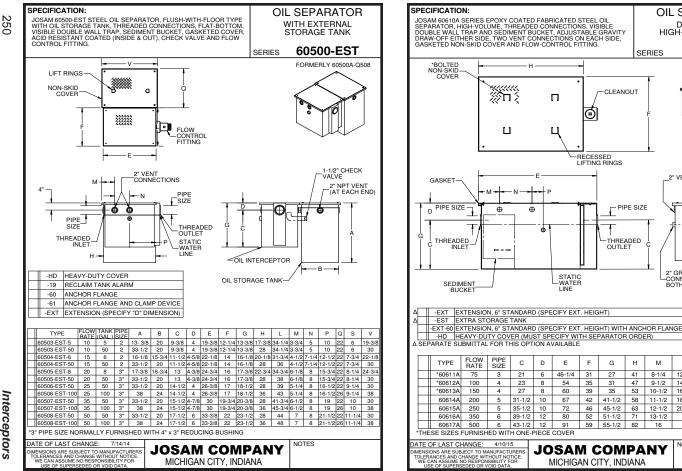






Interceptors





OIL SEPARATOR

DRAW-OFF.

SERIES

CLEANOUT

PIPE SIZE

41 8-1/4

71

13-1/2 23

16

51-1/2

THREADED

OUTLET

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31

35 31 47 9-1/2

39 35 53 10-1/2

42 41-1/2 58 11 - 1/218-1/8

46 45-1/2 63 12-1/2 20-1/4

52

59 55-1/2 82 HIGH-VOLUME TYPE

60610A

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0

c

2" VENT CONNECTIONS

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2" GRAVITY DRAW OFF

Р

10 - 1/4

12-1/2

14-1/2

16

17-1/2

19-3/4

23

S

13-1/2

15-1/4

19-1/4

26-1/4

29-3/4

34-1/4

38-1/4

CONNECTION

BOTH SIDES

12-1/2

14-1/2

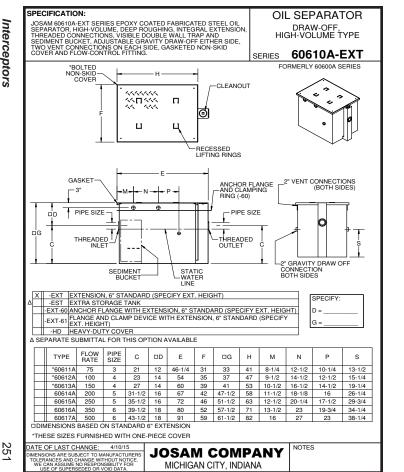
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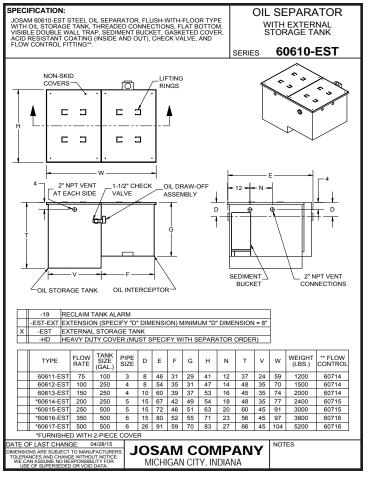
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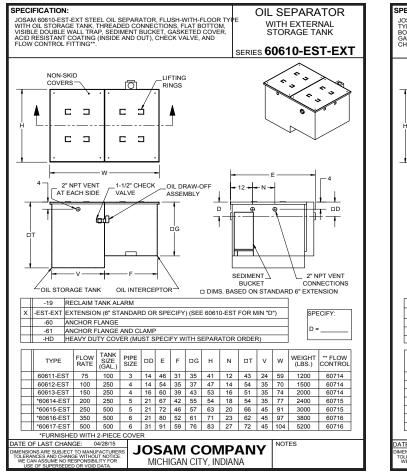
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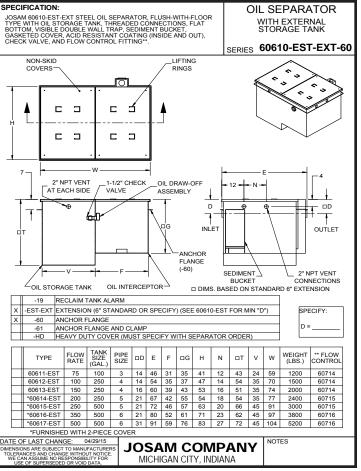
(BOTH SIDES)

Interceptor



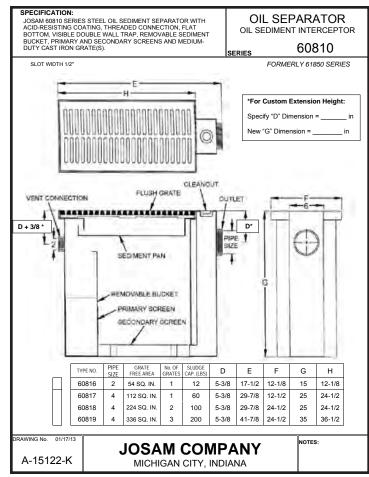


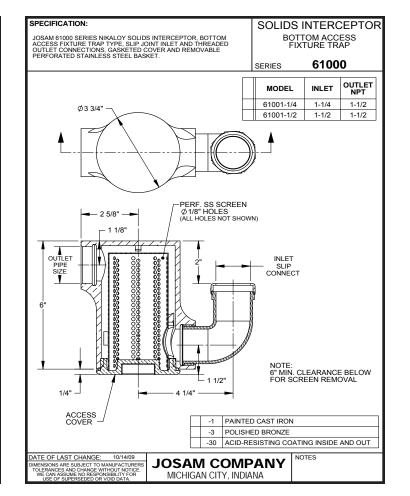


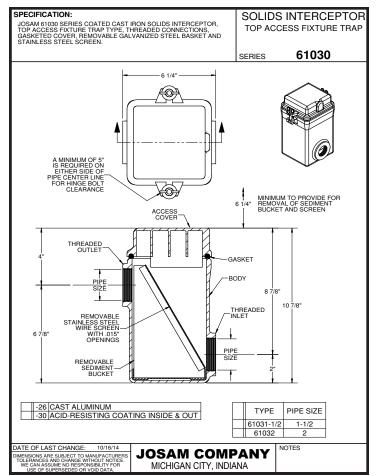


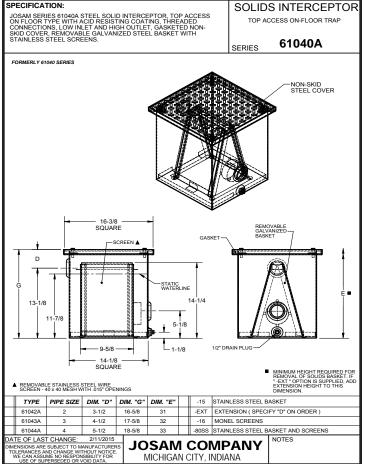
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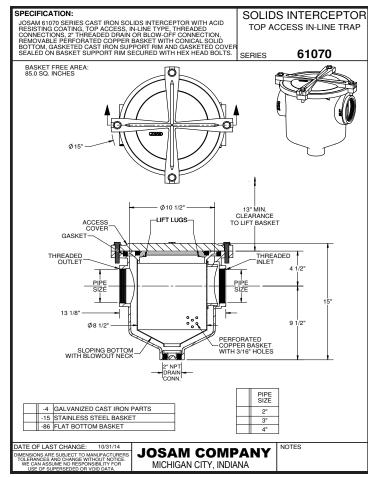
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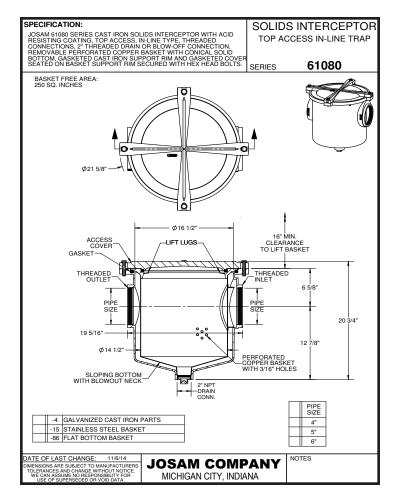


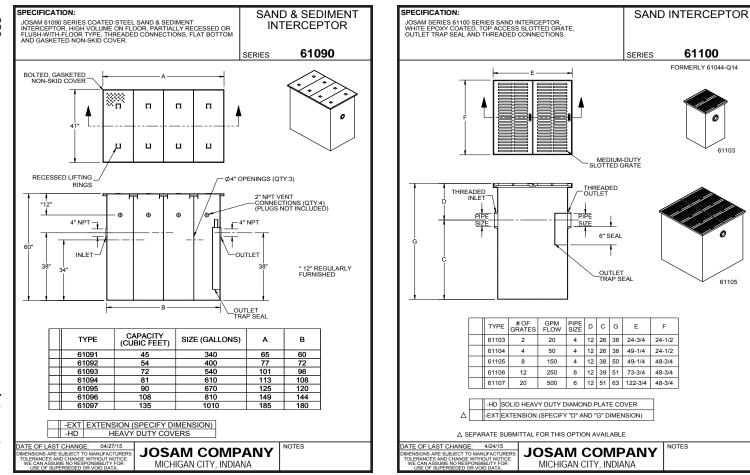




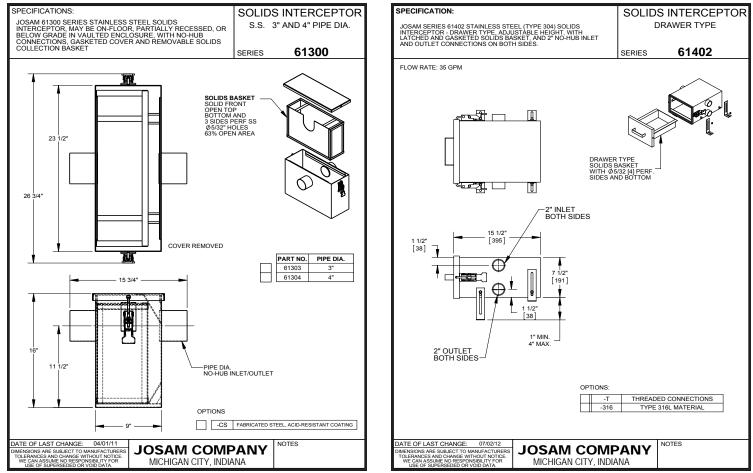


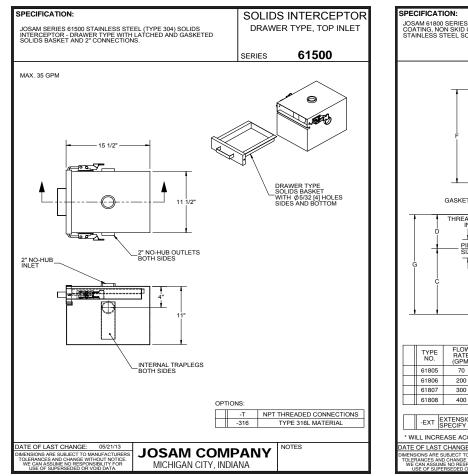


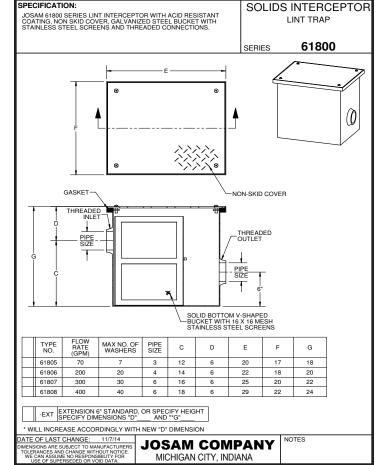


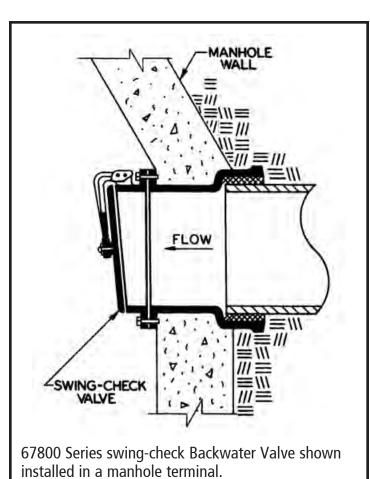


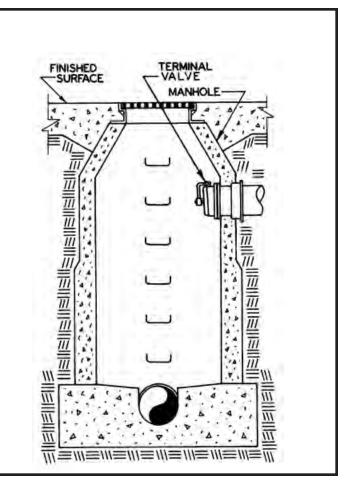
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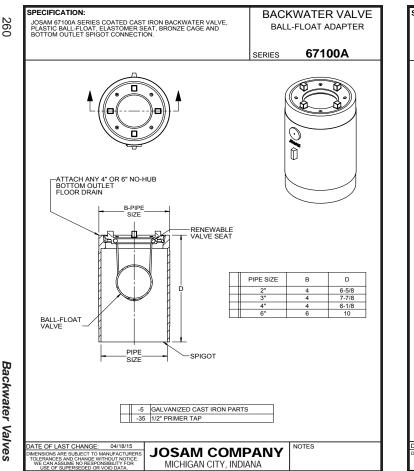


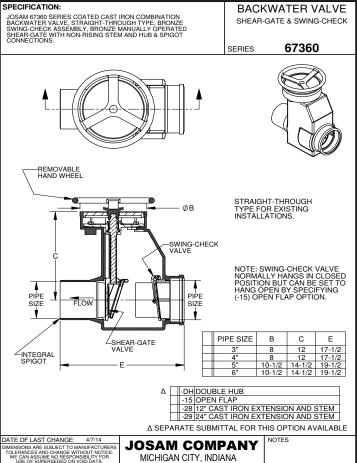




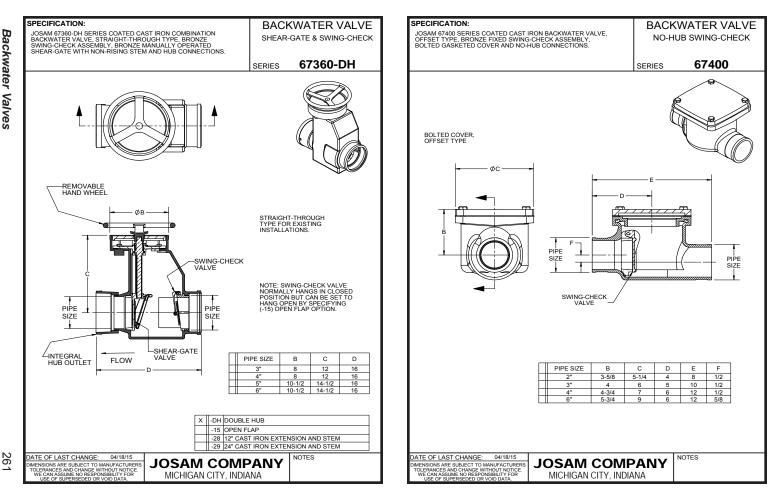


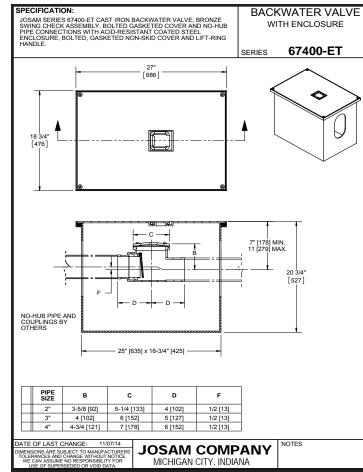


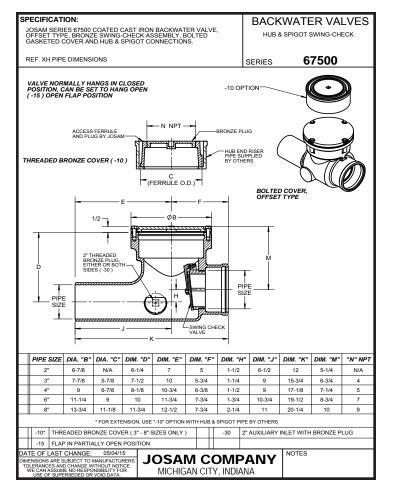




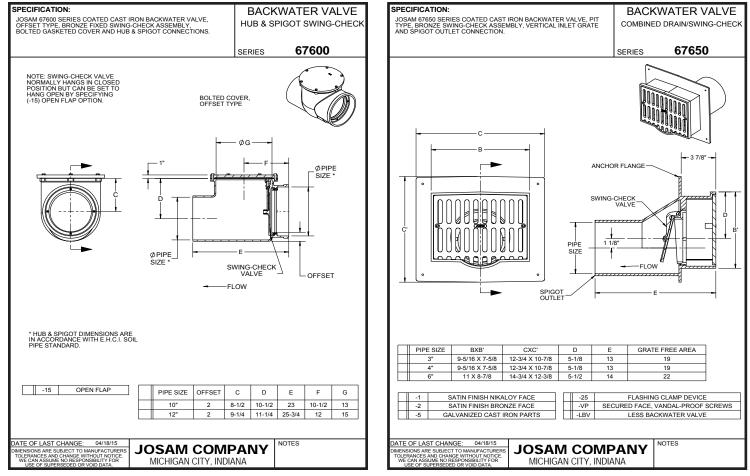
Backwater Valve õ

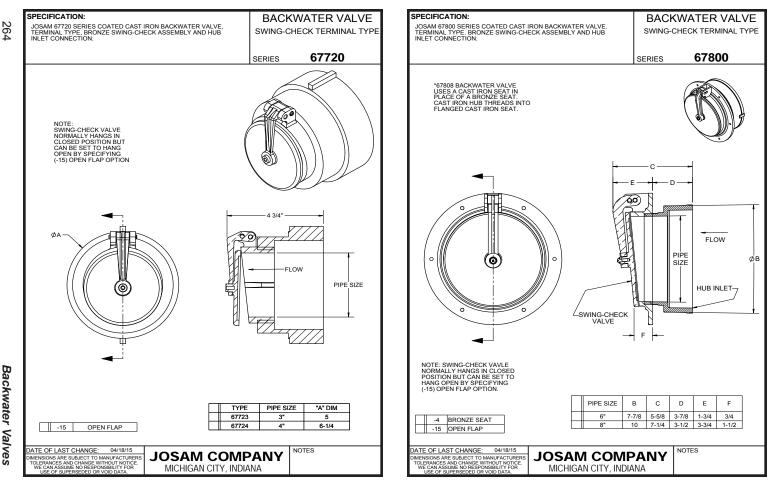


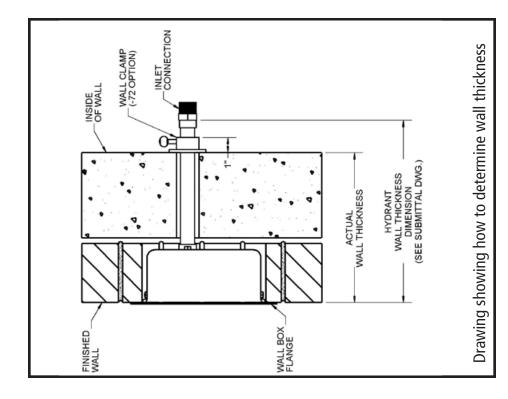


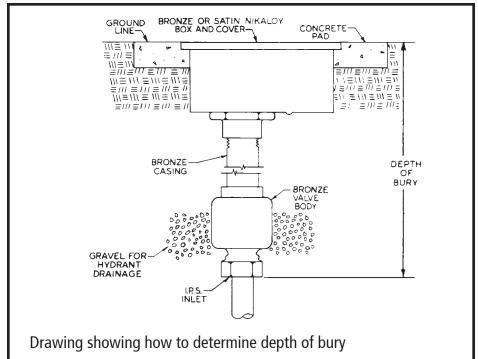


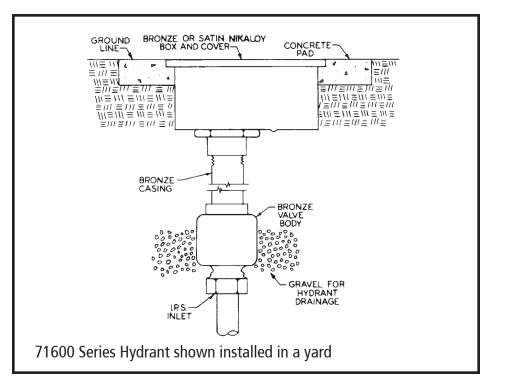
Backwater Valves

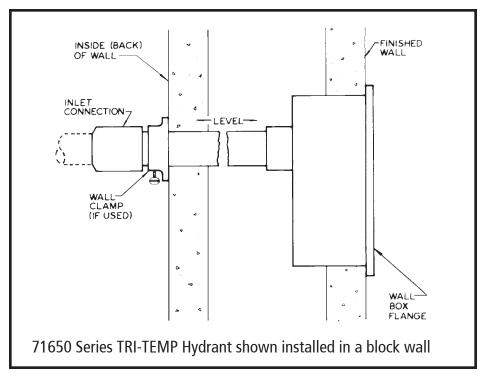


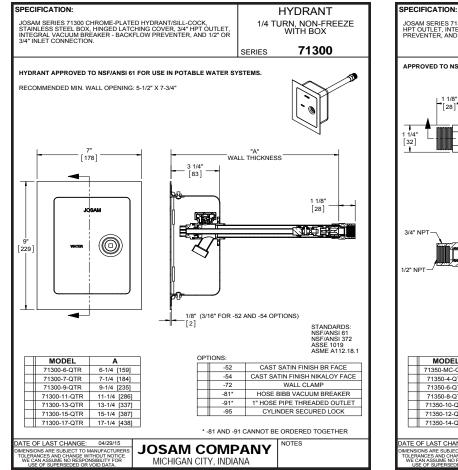


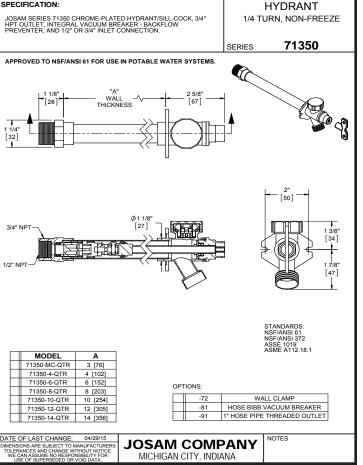


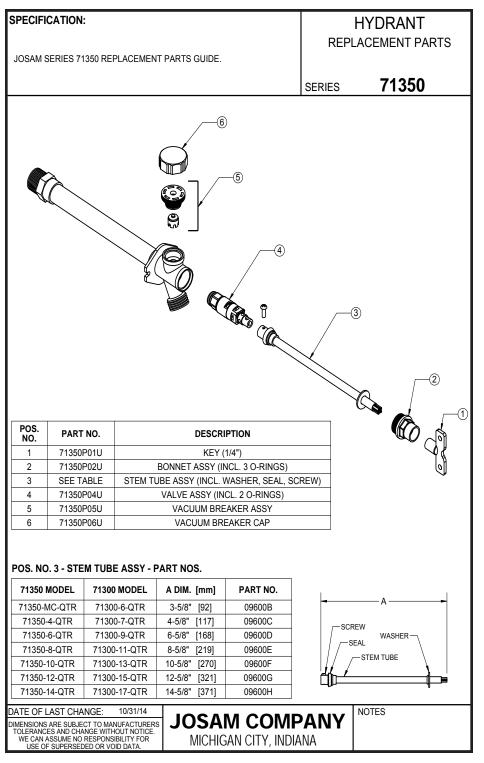


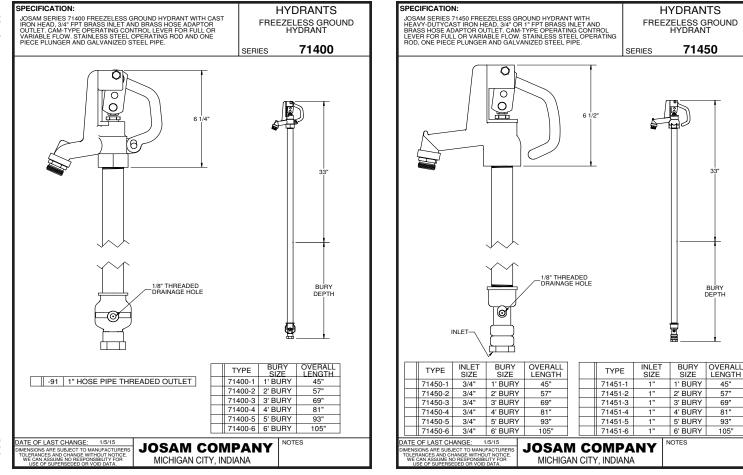


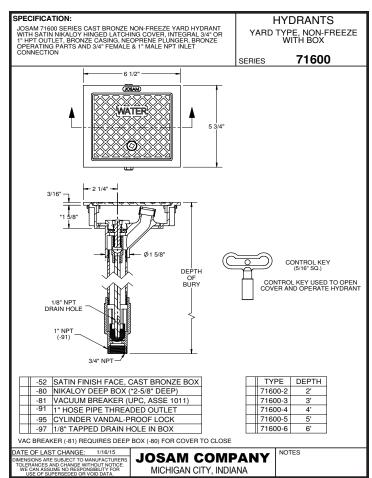


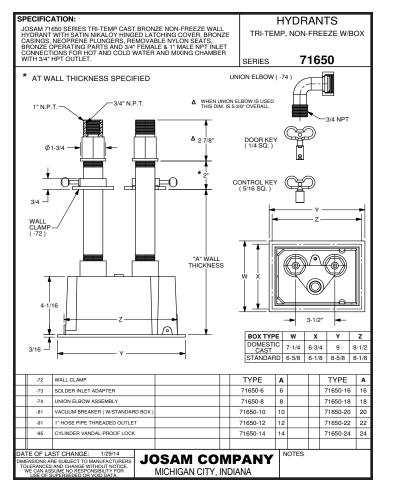












27

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HYDRASAN I[®] HYDRANT MAINTENANCE

HYDRASAN[®] I will seldom require service. However, continuous drainage from the outlet is a signal that inspection and possible replacement of certain parts are in order. A selfcontained tool, Actuator Rod (3), when reversed, makes the job easy. The procedure for removal and replacement of hydrant sealing parts is as follows:

A. Shut off water in supply line to hydrant, and turn hydrant on to relieve pressure.

B. Use pliers. Firmly grip Cap Retainer (8) and turn counterclockwise to remove it, then remove Deflector Cap (7). Shut off hydrant as tight as possible with Control Key (1) and use an adjustable open end wrench or channel-lock type plyers to "break" Draw Nut (11) loose, the remove it with Control Key (1), turning counterclockwise until threads are free from Hydrant Head (12). Grasp Draw Nut (11) firmly and pull toward you to remove Actuator (2) and Actuator Rod (3).

C. Loosen Set Screw (13) with a $\frac{3}{32}$ " hex. key and separate Actuator (2) from Actuator Plug (21) on end of Actuator Rod (3).

D. Reverse Actuator Rod (3) and insert into hydrant as far as possible, using Control Key (1) secured to Actuator Rod (3) with Set Screw (14). With Actuator Plug (21) (hex.) on end of Actuator Rod (3) inserted in Hex. Hole (22) in Seat (15), which places Rod Extension (20) in Hole (23) in Shuttle (4), firmly rotate Control key (1) counterclockwise to unscrew Seat (15) and pull out entire Valve (15, 5 and 4).

E. Replace worn parts with new parts as required. Reassemble hydrant, reversing the procedure in Steps A through D to place it back in service. Be sure to make Cap Retainer (8) tight to prevent tampering.

NOTE: If pressure reliev Valve "O" Ring (6) appears worn, it should be replaced when hydrant is apart. This part can be checked and, if necessary, replaced without turning off water supply to hydrant because the Pressure Assist Seal (Parts 4, 5, and 15) prevents any water from entering. This feature makes possible removal of all parts downstream (in front) of the Seal (or Valve) with water supply on.

Should it ever be necessary to service the Vacuum Breaker-Backflow Preventer in the outlet of HYDRASAN I, the procedure for removal and replacement of operating parts is as follows:

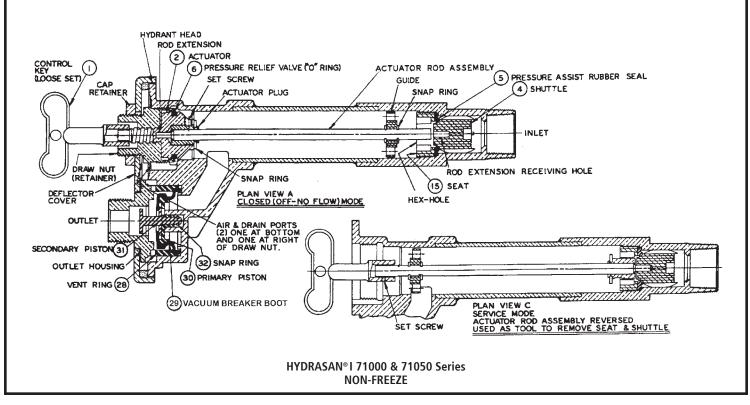
F. After Deflector Cover (7) has been removed (see Maintenance Step B), remove the four housing retaining screws with a $\frac{5}{32}$ " hex. key and take off Outlet Housing (27). Lift out Vent Ring (28) and operating parts, Seal (29) Primary and Secondary Pistons (30 and 31). Inspect for wear.

G. Replace worn parts with new parts as required. Reassemble Vacuum Breaker-Backflow Preventer, reversing the procedure in Step F to place it back in service.

Service kits containing all parts necessary for this maintenance can be obtained through your plumbing supply dealer.

Parts Drawings, HYDRASAN[®] Non-Freeze

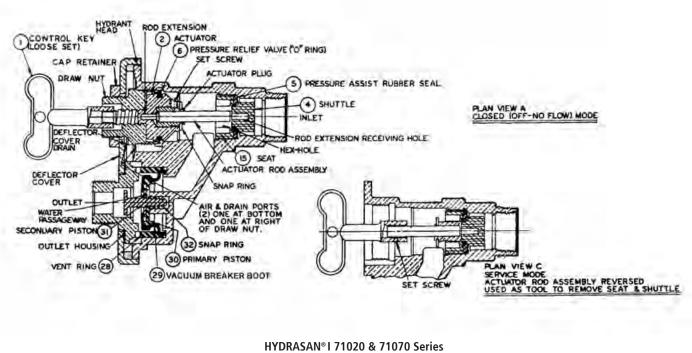
Hydrant replacement parts are available in Repair Kits only. Kits #6, #7, #8 and #23 apply to the Non-Freeze HYDRASAN® Hydrants depicted below. See page 270 for parts included in kits. For replacement rod assemblies, contact your local representative.



Hydrants

Parts Drawings, HYDRASAN® Mild Climate

Hydrant replacement parts are available in Repair Kits only. Kits #6, #9, #10 and #23 apply to the Mild-Climate HYDRASAN® Hydrants depicted below. See page 270 for parts included in kits. For replacement rod assemblies, contact your local representative.



MILD-CLIMATE

Repair Kits • We recommend that a complete HYDRANT REPAIR KIT be installed when it becomes necessary to repair a hydrant.

PART NO.	ITEM	QTY.	PART No.	ITEM	QTY.	PART NO.	ITEM	QTY.
71550P02U	KIT #2		71950P12U	KIT #12		71550P21U	KIT #21	
#1	5/16" Key	12		For 1420N - 71950		Fo	r 1400N – 1410N Old Style	
71050P06U KIT #6			#1 5/16" Key 1			71550 – 71650 – Previous Design		
#4	Shuttle	2	#2	Worm Stem	1	#1	5/16" Key	1
#5/15	Seal/Seat	2	#3	Brass Washer	1	#2	Worm Stem	1
71050P07U	KIT #7		#5	Packing	1	#3	Brass Washer	1
#1	1/4" Key with set screw	12	#12	Nylon Seat	1	#4	Packing Nut	1
	Allen Wrench	12	#15	Plunger	1	#5	Packing	1
71050P08U			71600P14U	KIT #14		#12	Nylon Seat	1
	HYDRASAN® I or II Non-Free	76		1430N Old Style 3/4" or 1"		#15	Plunger	1
#1	1/4" Key with set screw	1		1440N or 71700 3/4"		71550P22U	KIT #22	
#2	Actuator	1		71600 3/4″ O.S.		Fc	or 71500 – 71550 – 71650	
#4	Shuttle	1	#1	5/16" Key	1		New Style	
#5	Pressure Assist Rubber Seal	1	#2	Worm Stem	1	#1	5/16" Key	1
#6	Pressure Relief Valve (O-Ring)	1	#3	Brass Washer	1	#2	Worm Stem	1
#15	Seat	1	#5	Packing	1	#3	Brass Washer	1
	Allen Wrench	1	#15	Plunger	1	#6	Worm Assy. Nut	1
71070P09U KIT #9			71600P15U KIT #15			#12	Nylon Seat	1
#4	Shuttle	2		For 71600 3/4" or 1"		#15 #37	Plunger Retainer Seal	1
#5/15	Seal/Seat	2		New Style		#37	Worm Stem Seal	1
71070P10U	KIT #10		#1	5/16″ Key	1			
For HYDRASAN [®] I or II – Mild Climate			#2	Worm Stem	1	71050P23U	KIT #23 For HYDRASAN® I	
#1	1/4" Key with set screw	1	#3	Brass Washer	1	#28		2
#2	Actuator	1	#15	Plunger	1		Vent Ring Boot for Vacuum Breaker	2 2
#4	Shuttle	1	#37	Nylon Seal	1	#29	Primary Piston	2
#5	Pressure Assist Rubber Seal	1	#38	Worm Stem Seal	1	#30	Secondary Piston	2
#6	Pressure Relief Valve (O-Ring)	1				#31	Snap Ring	2
#15	Seat	1				<i>π</i> 32	Shap Mily	2
	Allen Wrench	1						

Selection for Long Piping Runs

The majority of sizing and selection applications will involve single and multiple fixture branch lines. These are easily handled with Table IV. The remainder of applications involves individual runs of piping to a remote item of equipment. The properly sized water hammer arresters for such applications can be determined by Table V and Table V-A.

P.D.I. Water Hammer Arrester Sizes									
Length of	Nominal Pipe Diameter								
Pipe	1/2″	3/4″	1″	1-1/4″	1-1/2″	2″			
25	А	А	В	С	D	E			
50	А	В	С	D	E	F			
75	В	С	D	AE	F	EF			
100	С	D	E	F	CF	FF			
125	С	D	F	AF	EF	EFF			
150	D	E	F	DF	FF	FFF			

TABLE V

FOR WATER PRESSURES UP TO 65 P.S.I.G.

Ideally the flow pressure in branch lines serving fixtures should never exceed 60 P.S.I.G. Pressure reducing valves should be installed to maintain proper pressure. However, when flow pressures of 65 to 85 P.S.I.G. are used, the next larger size water hammer arrester should be selected. Refer to Table V-A.

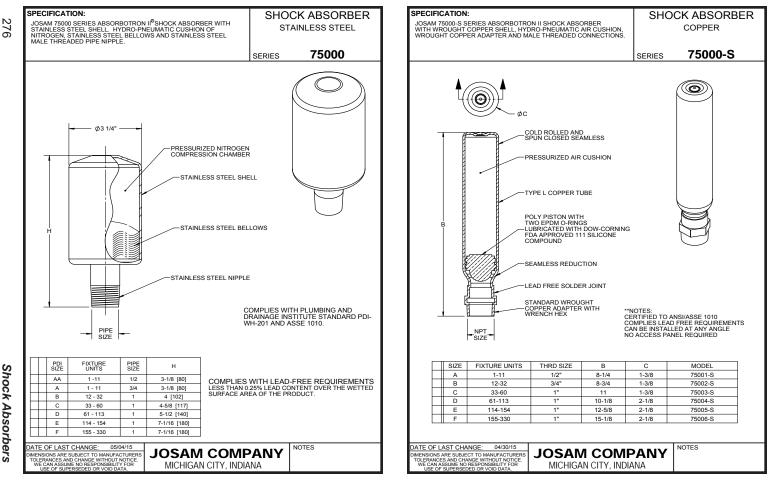
All sizing data in this section are based on flow velocities of 10 F.P.S. or less. The certification testing was conducted with a velocity of 10 F.P.S. to offer assurance that P.D.I. approved units were capable of handling shocks of maximum intensity that may be encountered.

TABLE V-A FOR WATER PRESSURES OVER 65 P.S.I.G. AND UP TO 85 P.S.I.G.

P.D.I. Water Hammer Arrester Sizes								
Length of	Nominal Pipe Diameter							
Pipe	1/2″	3/4″	1″	1-1/4″	1-1/2″	2″		
25	В	В	С	D	E	F		
50	В	С	D	E	F	CF		
75	С	D	E	F	CF	FF		
100	D	E	F	CF	EF	EFF		
125	D	E	CF	DF	FF	BFFF		
150	E	F	CF	FF	DFF	FFFF		

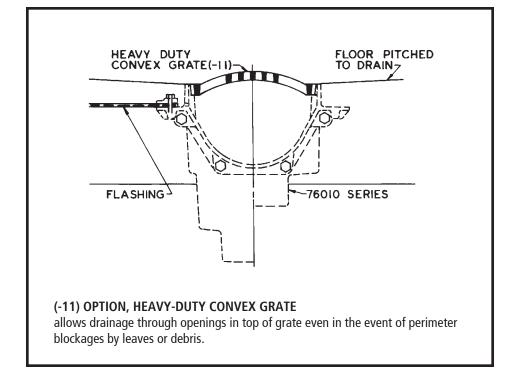
When long runs of piping are employed to serve a remote item of equipment, the water hammer arrester should be located as close as possible to the point of quick closure. At this location, the water hammer arrester will control the developed energy and prevent the shock wave from surging through the piping system.

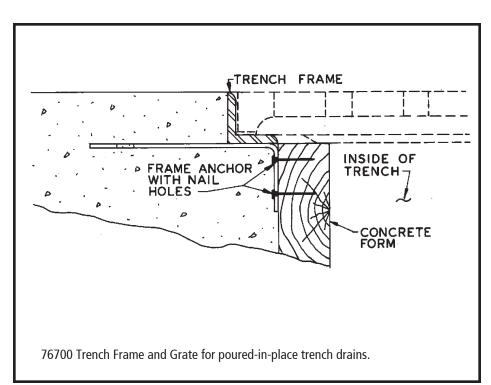
NOTE: For best performance results, the ABSORBOTRON[®] II should always be installed in an upright position and located as close as possible to the fixture or equipment closure valve.

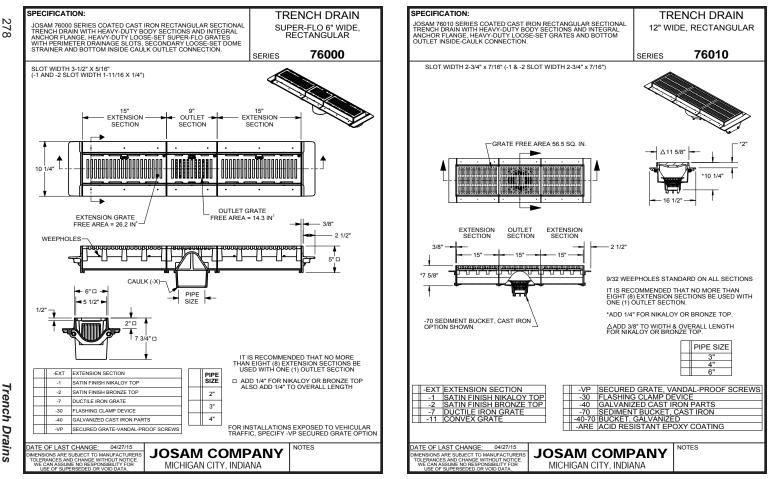


Shock Absorber

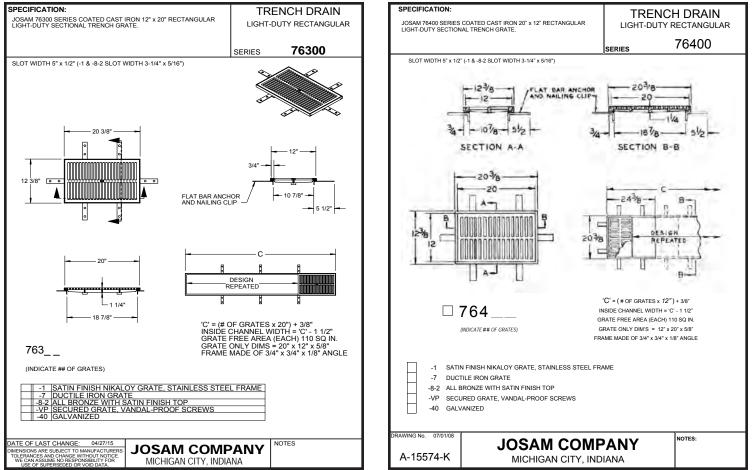
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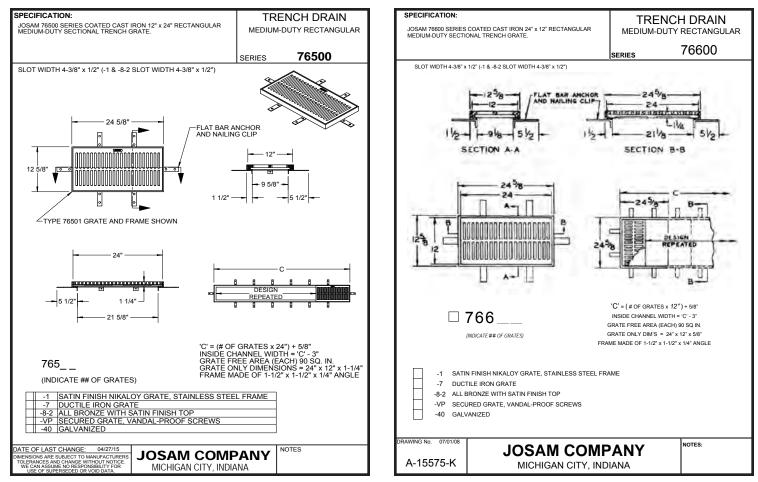




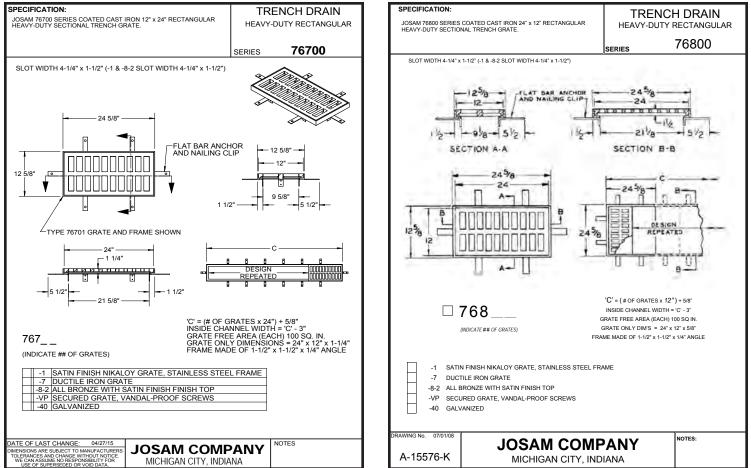


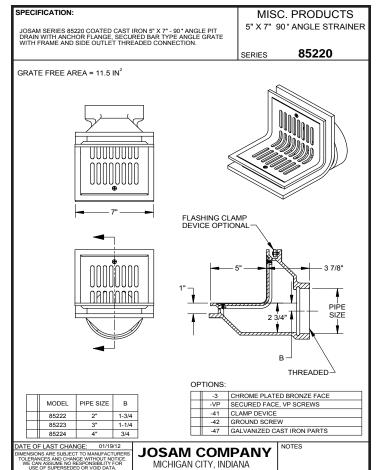
Trench

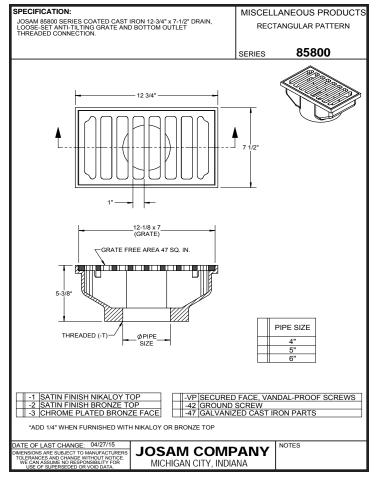




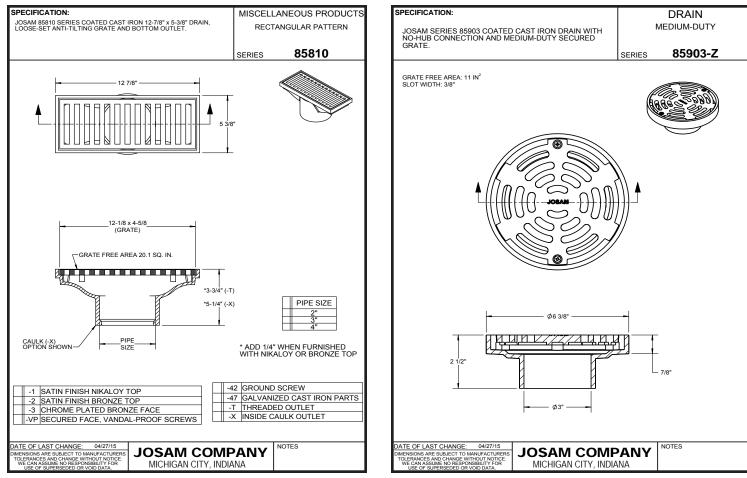
Trench Drains

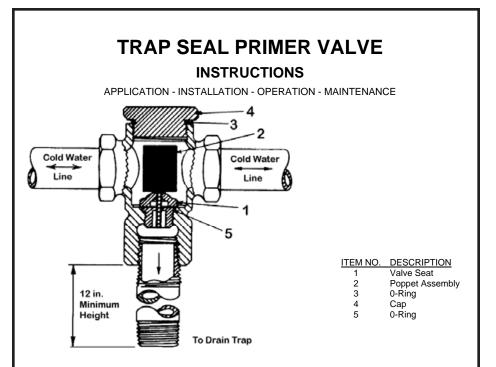






Miscellaneous Products





APPLICATION

This valve, when properly installed in a cold water supply line and connected to a floor drain trap, will ensure a constant seal of fresh water in the drain trap. Frequently, without such a device, the water seal will evaporate from the trap and allow sewer gas and vermin to enter buildings from the sewer lines.

OPERATING PRINCIPLE

As water is drawn through the supply line by an appliance or water closet, the resulting flow tips the valve mechanism to one side which meters water from the supply line into the primer trap line. Water flow can be observed at the bottom outlet side slots. These side slots act as a vacuum breaker.

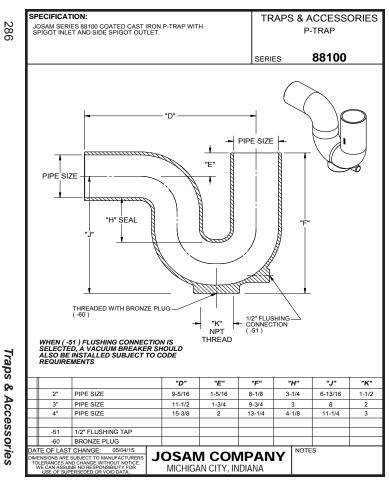
INSTALLATION REQUIREMENTS

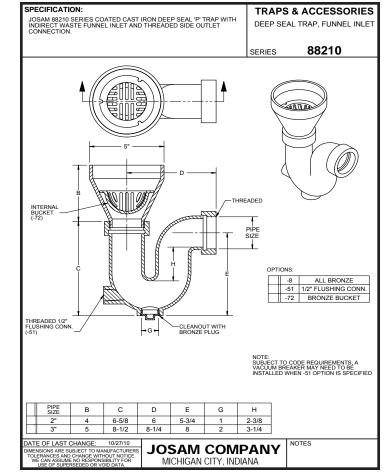
- 1. Water lines to which the primer valve will be connected must be clear of dirt.
- 2. Primer valve must be mounted vertically with sufficient clearance above valve to remove Cap. Connect primer valve to a horizontal cold water supply line near the drain trap.
- 3. The pipe connecting the primer valve bottom outlet to the drain trap should be at least 1/2 in. inside diameter and must be vertically straight for at least one foot directly below the primer valve.
- 4. Elbows, tees and reducers must not be connected to the primer valve bottom outlet because they will cause water to flow out through the outlet side slots.
- 5. The Cap, Valve Seat, Poppet Assembly and O-Rings must be removed prior to any soldering that may be required.
- 6. Check all connections for leaks and repair as needed. No adjustments are required.

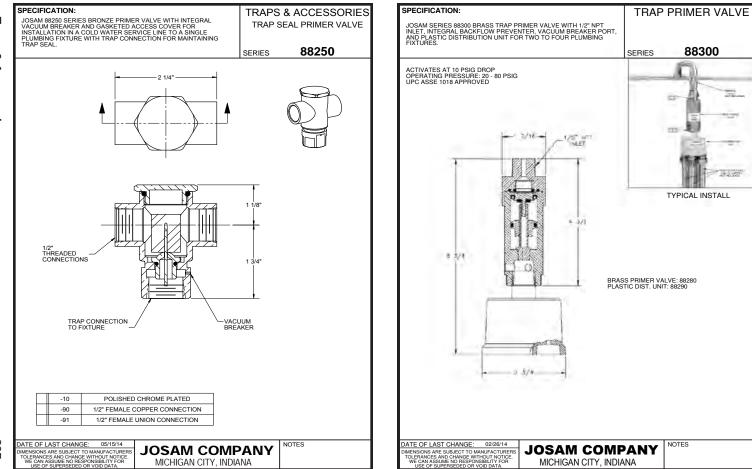
MAINTENANCE INSTRUCTIONS

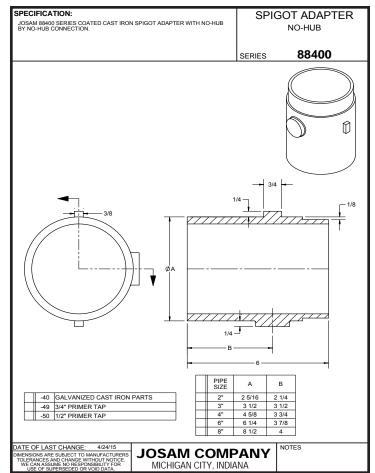
- 1. Close supply line valve to shut off water pressure to the primer valve.
- 2. Remove Cap with a 1-1/4 in. hex wrench. Lift out Poppet Assembly.
- 3. Unscrew Valve Seat with a 5/8 in. thin wall socket wrench.
- 4. Insert new Valve Seat and O-Ring in Valve Body and tighten Valve Seat.
- 5. Place Poppet Assembly on Valve Seat. Small stem must extend into seat orifice.
- 6. Attach Cap and O-Ring to Valve Body and tighten Cap.

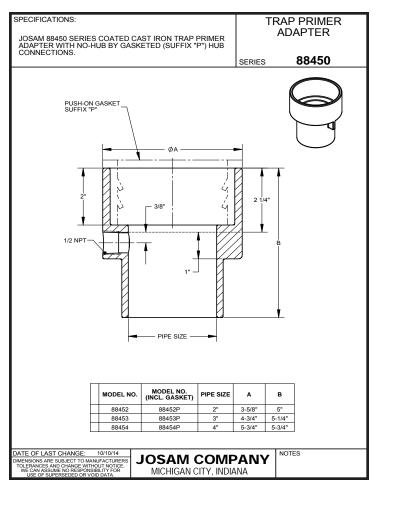
Open water supply line valve. Check for leaks around Cap. Observe flow of water into trap when water is flowing through supply line. No Adjustments are required.



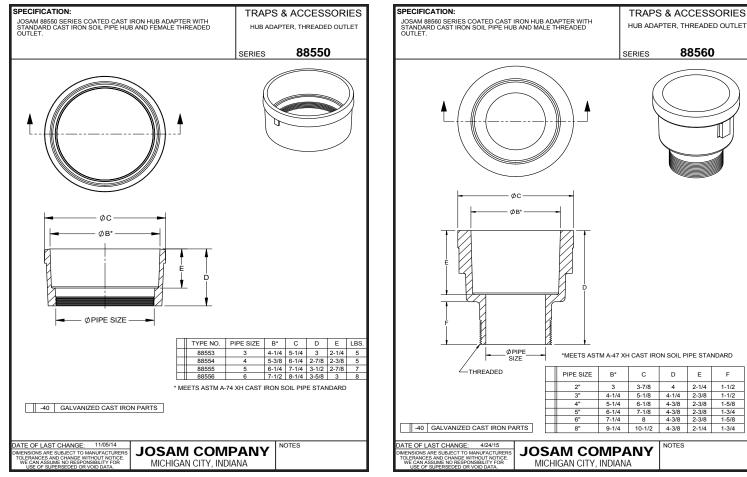


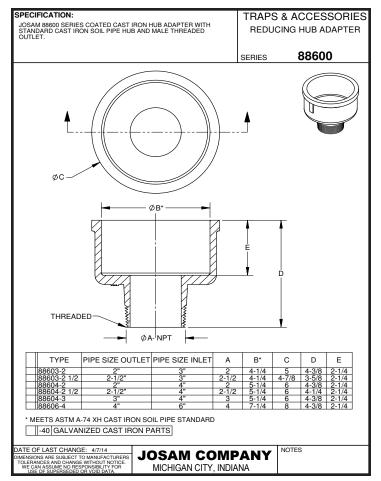


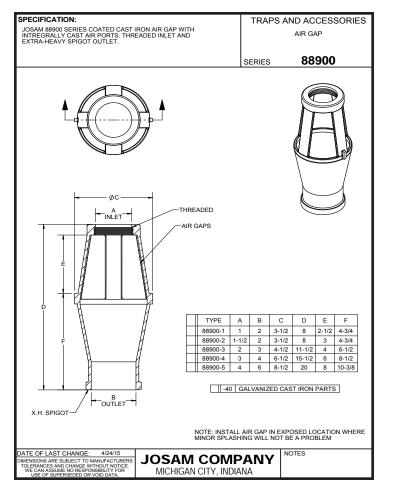


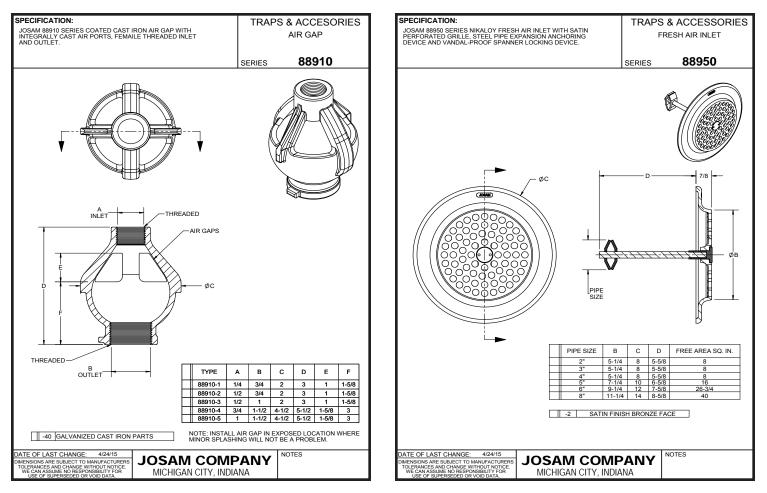


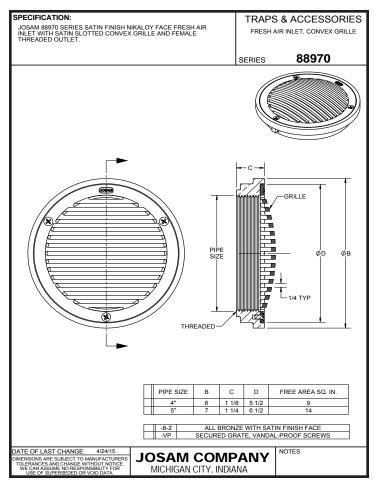
Traps & Accessories

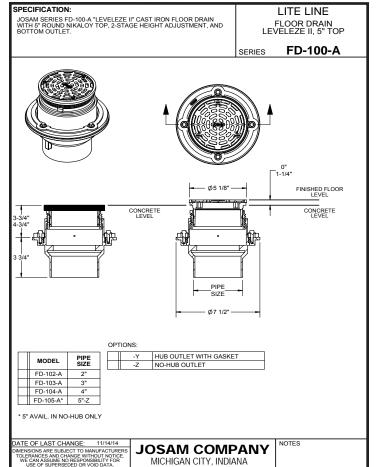


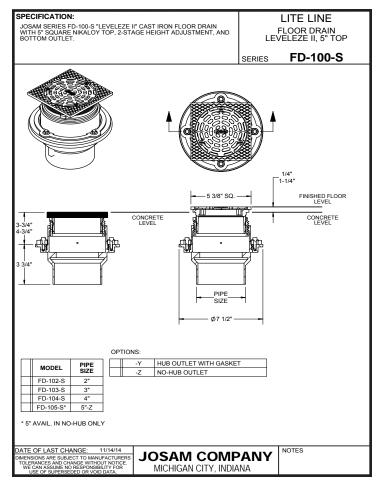


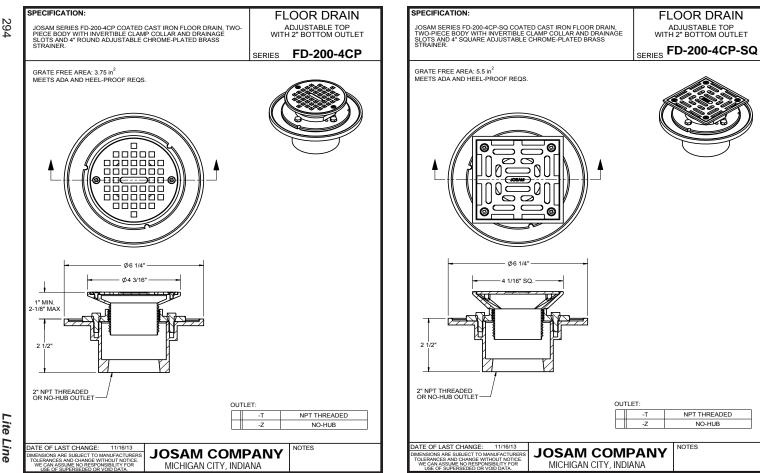


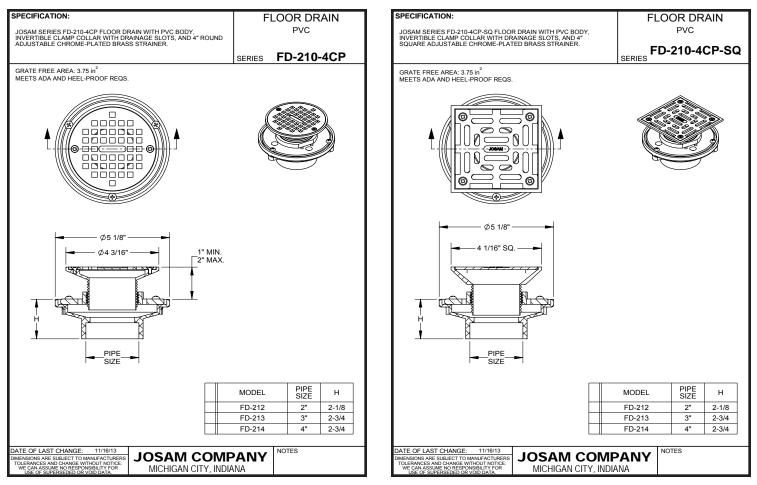


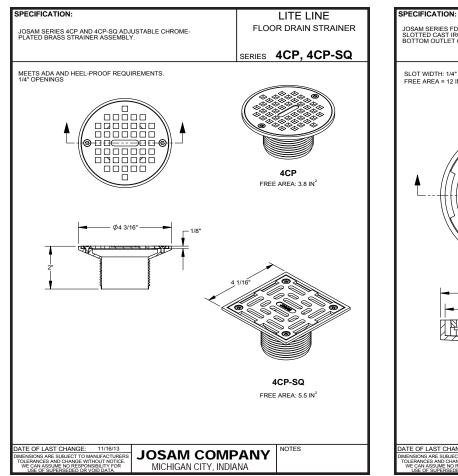


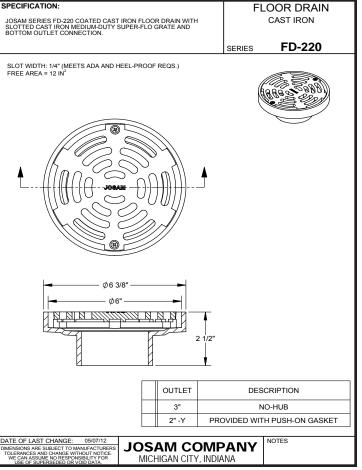


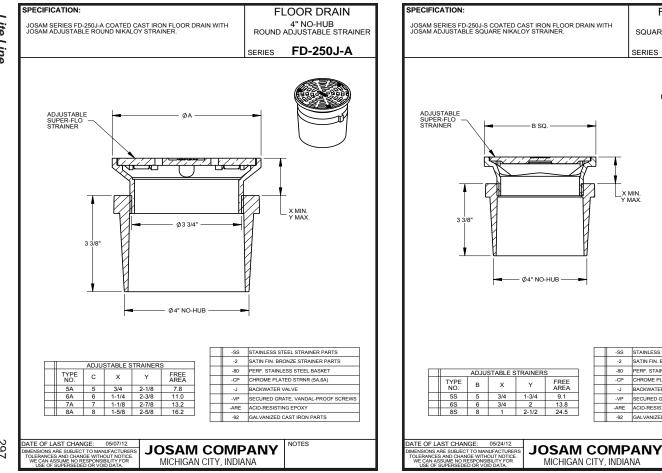












FLOOR DRAIN

4" NO-HUB

SQUARE ADJUSTABLE STRAINER

SERIES

X MIN Y MAX.

STAINLESS STEEL STRAINER PARTS

SATIN FIN. BRONZE STRAINER PARTS

SECURED GRATE, VANDAL-PROOF SCREWS

NOTES

PERF. STAINLESS STEEL BASKET

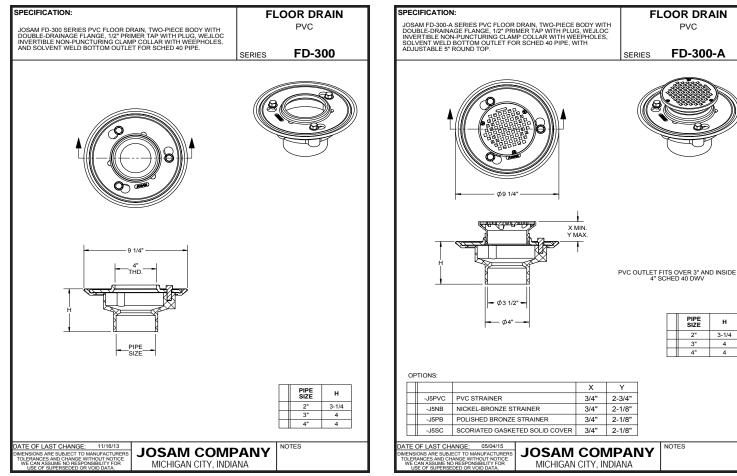
CHROME PLATED STRNR (5S,6S)

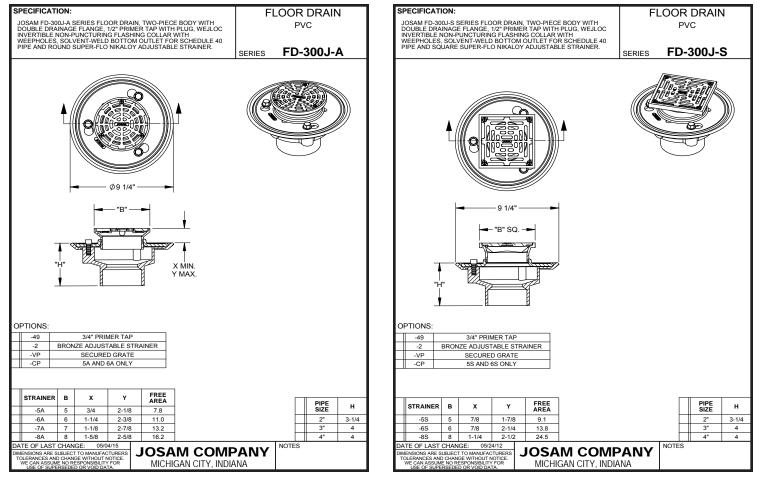
BACKWATER VALVE

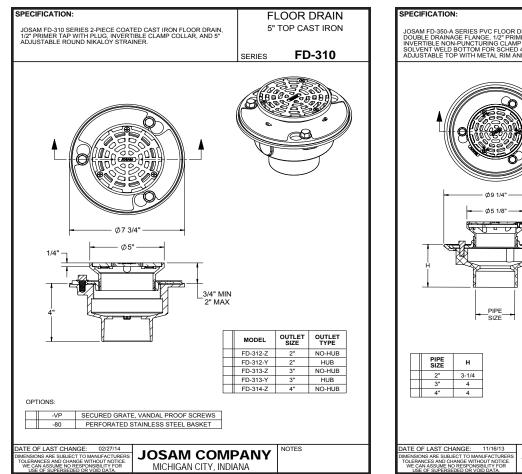
ACID-RESISTING EPOXY

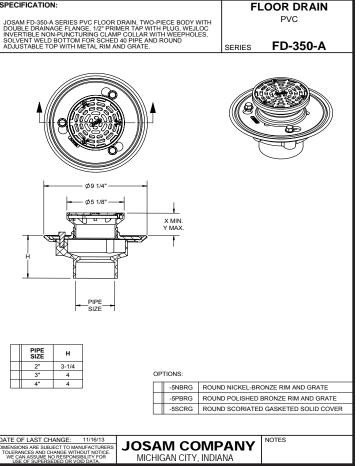
GALVANIZED CAST IRON PARTS

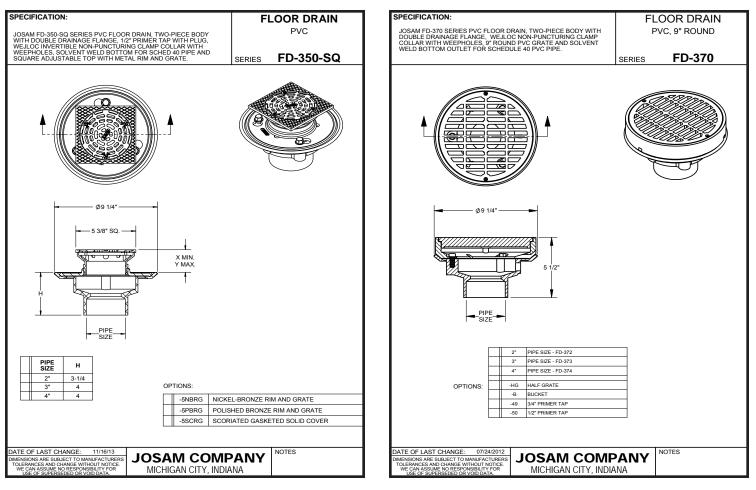
FD-250J-S

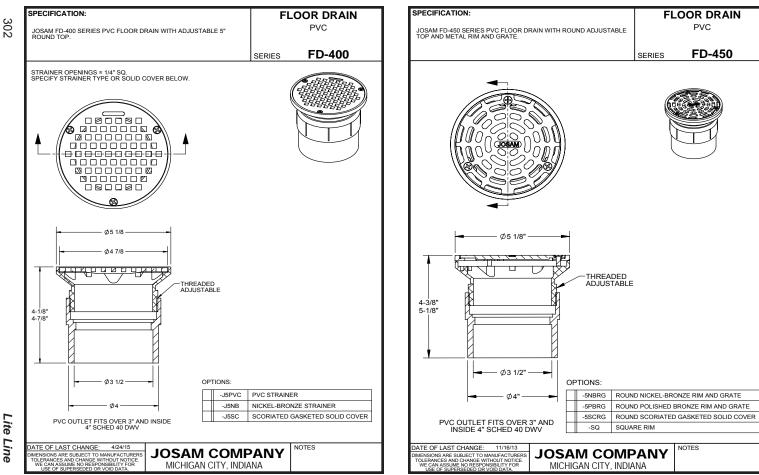


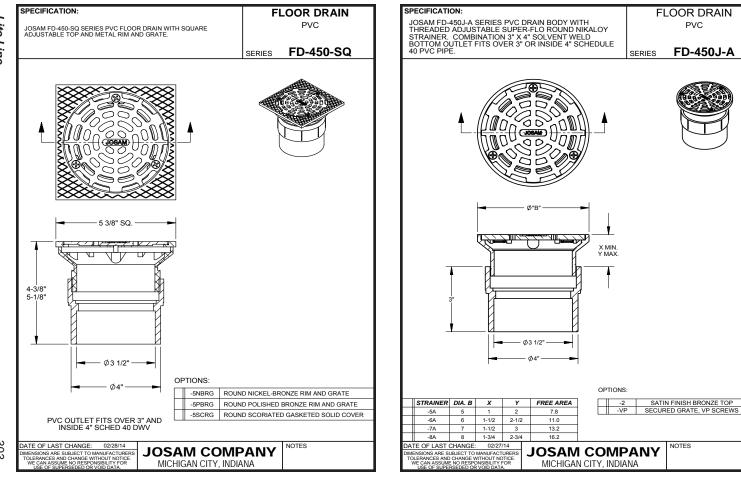


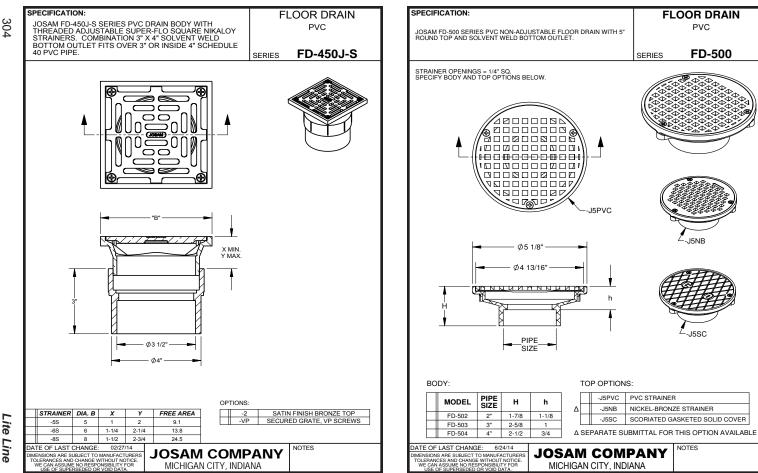


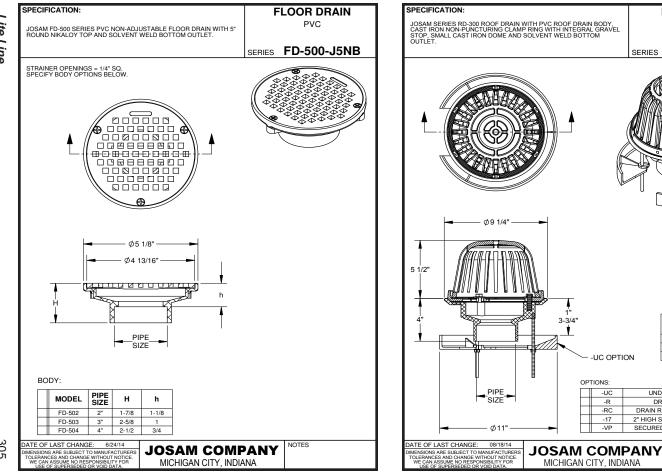


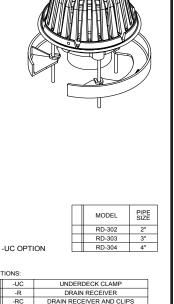












2" HIGH SOLID CLAMP COLLAR

SECURED DOME, VP SCREWS

NOTES

-17

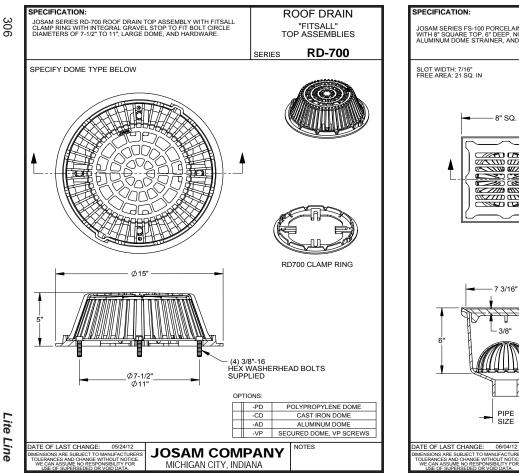
-VP

ROOF DRAIN

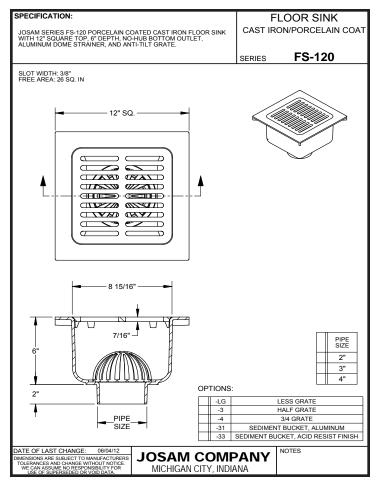
PVC

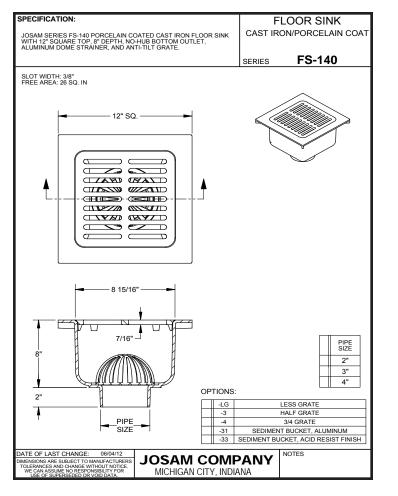
SERIES

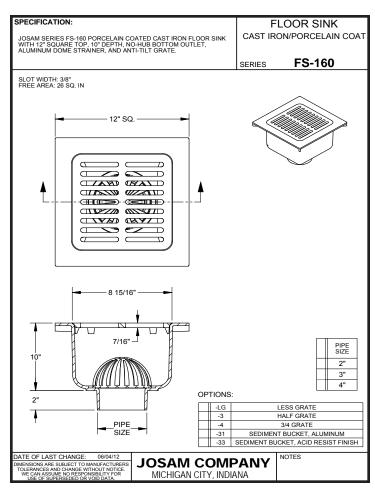
RD-300

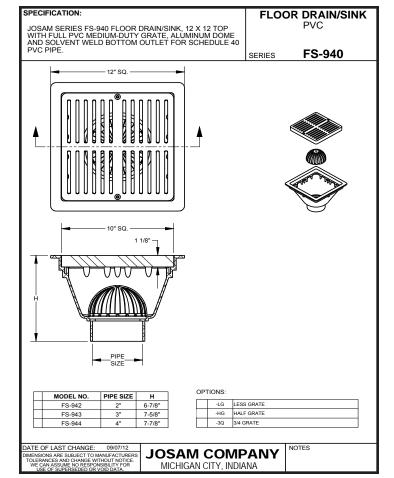


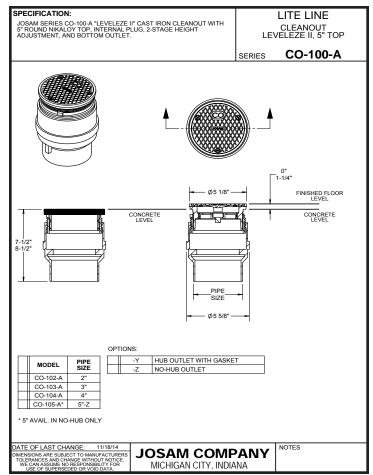
PECIFICATION:			FLOOR SINK	
JOSAM SERIES FS-100 PORCELAIN COATED CAST IRON FLC WITH 8" SQUARE TOP, 6" DEEP, NO-HUB BOTTOM OUTLET, ALUMINUM DOME STRAINER, AND ANTI-TILT GRATE.		OOR SINK	CAST IRON/PORCELAIN COAT	
			SERIES	FS-100
		Ŵ		
6" PIPE		OPTIONS: -4.G -3 -4 -31 -31 -33	SEDIMEN	LESS GRATE HALF GRATE 3/4 GRATE BUCKET, ALUMINUM CKET, ACID RESIST FINISH
ATE OF LAST CHANGE: 06/04/12 MENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES AND CHANGE WITHOUT NOTICE. WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA.	JOSAM MICHIGAN (NOTES

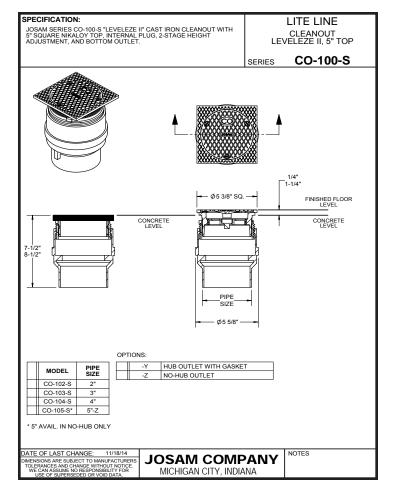


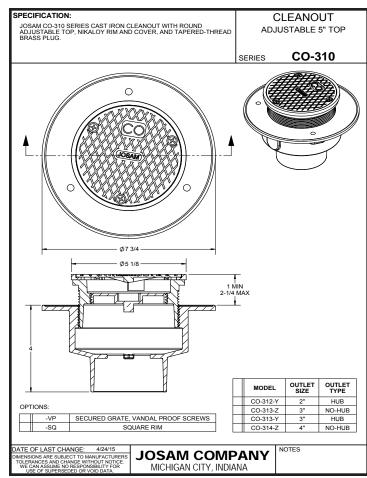


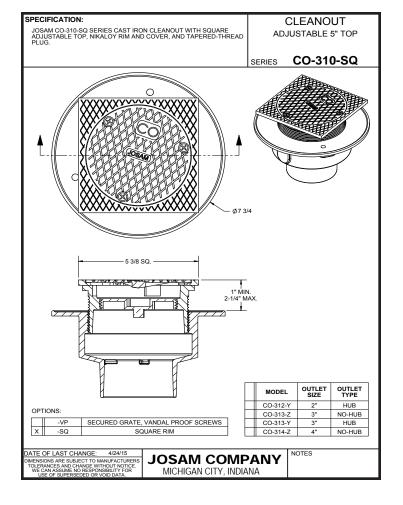


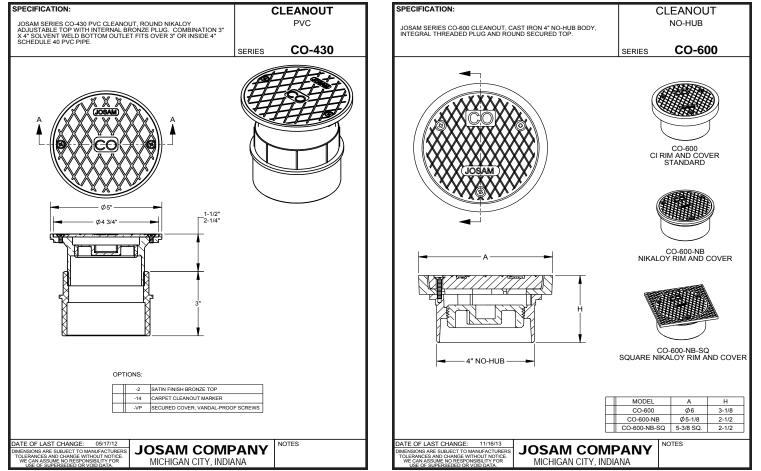


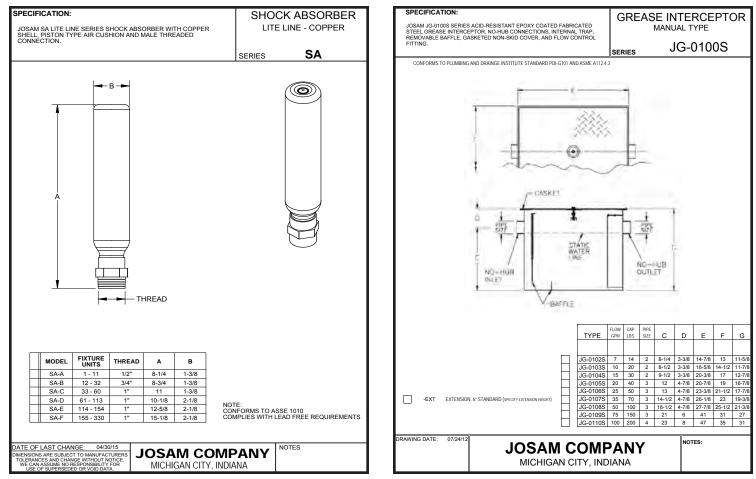














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