



Kraemer Consulting Engineers, P.L.L.C.
Mechanical & Electrical Engineers

Submittal Review

SUBMITTAL REVIEW NOTES

1. Correction or comments made on the submittals during review do not relieve the contractor from compliance and requirements of the sealed contract design drawings and specifications.
2. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents.
3. The contractor is responsible for confirming and correlating all quantities and dimensions; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.
4. The contractor is responsible for confirming the electrical requirements of each piece of equipment, including but not limited to voltage, phases and circuitry, with the electrical drawings, Electrical Engineer, and Architect prior to ordering equipment.
5. The General Contractor and the Architect are also responsible for reviewing submittals prior to issuing to the field or ordering of equipment or materials.
6. Each trade is responsible for coordinating submittal information with the other trades as required.
7. Please review submittal thoroughly for additional stamps and notes on subsequent pages. A stamp on the front page does not constitute acceptance of entire submittal.
8. Submittals returned marked "REVIEWED - MAKE CORRECTIONS NOTED" do not require resubmittal provided that the Contractor agrees to comply with all exceptions noted in the submittal, and so states in a letter to the Architect. Provide final record submittal to the general contractor.
9. Submittals marked "REVISE AND RESUBMIT" requires a subsequent review based on the submittal comments.
10. Submittals marked "REJECTED" requires a subsequent review of an alternate equipment manufacturer. The submitted manufacturer is not acceptable based on the project contract documents and/or was not prior approved.
11. Final approval of the submittal for equipment procurement is the responsibility of the submitting contractor.
12. Equipment proposed for early release by the contractor or Owner, prior to the issuance of signed and sealed set of construction documents, are to be considered "released at risk" with the understanding that possible changes to this equipment may be required based upon (1) city comments from the authority having jurisdiction, (2) information obtained from the Owner, (3) design changes based upon final coordination of the drawing set or (4) modifications based upon utility meter shop submittal review. The design consultant shall be held-harmless if additional costs or time delays are incurred due to these changes.

Job Name:

KCE Job Number:

Submittal Number:

Submittal Name:

Architect:

Reviewed - No Exceptions Taken

Reviewed - Make Corrections Noted

Reviewed – For Record Only

Revise and Resubmit

Rejected

Reviewed By:

Date:

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Kraemer Consulting Engineers, P.L.L.C.
Mechanical & Electrical Engineers

Submittal Review Comment List

SUBMITTAL CHECK LIST:

Contractor shall confirm the information below prior to equipment release:

- Lug sizes has been verified for all equipment. This includes feeders that have been increased to accommodate voltage drop as well as larger aluminum conductors in lieu of copper conductors as scheduled. Lugs shall be listed CU or CU/AL.
- Top and bottom entry for all equipment shall be coordinated with electrical contractor and methods of installation..
- Surface or flush mount has been verified for all panelboards.
- Nema rating has been verified for all equipment.
- AIC rating has been verified for all equipment based upon fault current calculations.
- Voltages, number of phases have been verified for all equipment.
- Incoming left or right orientation has been verified for Switchboards/Switchgear
- Arc flash mitigation requirements have been addressed.
- Utility fault current has been verified by contractor, either by published service standards or letter obtained from utility prior to ordering equipment.
- The contractor is responsible for confirming and coordinating the electrical requirements of each piece of equipment, lighting fixtures and HVAC equipment including, but not limited to, voltage, phase and MOCP. Contractor shall review and coordinate with the electrical drawings and provided circuiting prior to ordering equipment.
- Submit copy of electrical service equipment to utility meter shop for review and approval . Obtain written approval from utility prior to ordering equipment.
- Confirm solar provisions within main switchboard/switchgear with local utility prior to ordering/releasing equipment. If solar is not applicable to the project, please disregard request.
- Solar termination cabinet and the feeder from the termination cabinet to the solar circuit breaker shall be installed and connected complete at the same time as the utility switchgear. See solar termination cabinet detail for additional information. Termination cabinet shall be provided with additional lugs for future connections from solar distribution equipment.



Burton Construction
5055 East Washington Street, Suite 105
Phoenix, Arizona 85034
P: (602) 610-5100
F: N/A

Project: 40002 American Furniture Warehouse & Showroom - Surprise
Loop 303 and Waddell Road
Surprise, Arizona 85388

Submittal #26 05 01-1.0 - Floor Boxes
26 05 01 - Basic Materials & Methods

Revision	0	Submittal Manager	Parker Wayne (Burton Construction)
Status	Open	Date Created	Apr 11, 2024
Issue Date	Apr 11, 2024	Spec Section	26 05 01 - Basic Materials & Methods
Responsible Contractor	Specified Electrical Contractors, Inc.	Received From	Bob Biggs (Specified Electrical Contractors, Inc.)
Received Date		Submit By	
Final Due Date	Apr 25, 2024	Lead Time	
		Cost Code	
Location		Type	Product Information
Approvers	Toby Rogers (Butler Design Group)		
Ball in Court	Toby Rogers (Butler Design Group)		
Distribution	Jeremy Sampson (Burton Construction), Ken Foudy (Burton Construction), Nolan Morrison (American Furniture Warehouse, Co.)		
Description	Hubbell floor boxes		

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					260501 - Floor Boxes - For Approval - 4.11.24.pdf
Toby Rogers	Apr 11, 2024	Apr 25, 2024		Pending	

☐

NO EXCEPTIONS

☐

EXCEPTIONS AS NOTED

☐

REJECTED FOR RESUBMITTAL

☒

REVIEWED

☐

OTHER

NOTE:

JOB MEASUREMENTS, QUANTITIES AND CONFORMANCE WITH CONTRACT DOCUMENTS ARE THE SPECIFIC RESPONSIBILITY OF THE SUBCONTRACTOR/SUPPLIER

BY:

Parker Wayne

DATE:

4/23/24

BURTON CONSTRUCTION CO.

JOB #

40002 - AFW Surprise

SUBMITTAL #

260501 Floor Boxes



AMERICAN FURNITURE FLOOR BOXES

Table of Contents

SKU	Asset Type	Page
CFB6G30RE	Specification Page	2
CFBS1R8CVRNKL	Specification Page	3
FBMPDUP	Specification Page	4
FBMPBNK	Specification Page	5
BR20STITR	Specification Page	6
CFBS1R4PFB	Specification Page	7
CFBS1R4CVRNKL	Specification Page	8
CFBS1R4CUP	Specification Page	9
PFBSTAND	Specification Page	10
S1R4SPDUPLEX	Specification Page	11
S1R4SPQUAD	Specification Page	12
BR20STITR	Specification Page	13
PFB1	Specification Page	14
PFBA1A	Specification Page	15
SFA3925	Specification Page	16
SA5016	Specification Page	17
SA3082	Specification Page	18
SA3925	Specification Page	19

Floor Boxes

SystemOne ETERNAL™ Series Concrete Floorboxes

6-Gang Recessed



Features

- 3.75" deep wiring chambers for large AV modules and feed-thru capacity
- External High Capacity Feed-Thru Hubs Sold Separately
- Stamped steel construction, ships with Flush Installation Cover & 1/2" Prepour Cover
- Pre and post pour adjustment
- Round cover, patented labor saving easy mount device plates



Ordering Information

Cover Style	Box Type	UPC Number	Catalog Number
Round	Above Grade	783585695365	CFB6G30RE

Listings

cULus Listed
UL 514A Listed

Specifications

Box Material	16 gauge galvanized steel
Box Finish	Natural
Top Mousing Plates	16 gauge galvanized steel
Concrete Cover	16 gauge galvanized steel
Device Chamber Grounding	6" Long #12 AWG Solid Copper Wire
Wiring Chamber Depth	3.75"
Wiring Chamber Volumes	(2) 108.5 IN³ [1778 CM³] Ends, (4) 33.0 IN³ [540 CM³] Sides

Related Products

(2) 2"PVC field installed hubs, ships with (2) 1-1/2" reducer, (2) 1-1/4" reducers, and (2) 1" reducers/plugs	CFBHUB200PVC
(2) 1-1/4" PVC field installed hubs, ships with (2) 1" reducers, (2) 3/4" reducers, AND (2) 1/2" reducer/plugs	CFBHUB125PVC
2" threaded zinc hub	CFBHUB2
3/4" Prepour stackable ring extensions	CFB8RCVRR075
3-Cubes, Single Circuit	PWFBMP3R

Performance

Mechanical

Cover Series	CFBS1R8xx
Height	3.75"[95.3mm]
Length	19.68"[499.9mm]
Trade Size Knock-Outs: Bottom	(4) ½", ¾", 1", 1¼", (4) ½", ¾"
Trade Size Knock-Outs: Ends	(4) ½", ¾", 1", 1¼"
Trade Size Knock-Outs: Sides	(4) ¾", 1", 1¼", 2" (Field installed CFBHUB2 for 2" metallic conduit, CFBHUB200PVC for 2" PVC conduit or CFBHUB125PVC for 1¼" PVC conduit)
Width	11.54"[293.1mm]

Online Resources

Customer Sales Drawings
eCatalog
Installation Instructions



Floor Boxes

SystemOne Recessed 4, 6 and 10 Gang Floor Box Cover

For Use In Concrete, Raised Access and Wood Floors



- Features
- 180 degree cover opening to lay flat and reduce tripping hazards
 - Two large hide-away cable egress doors
 - Die cast aluminum cover construction for enhanced durability
 - UL ScrubWater Compliant
 - ADA Compliant

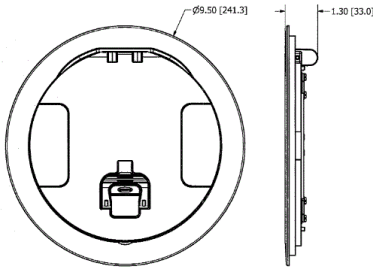
Ordering Information

Style	Finish	UPC	Catalog Number
Surface / Raised Access / Wood Cover	Aluminum	783585527918	CFBS1R8CVRAL U

- Listings
- cULus Listed
Complies with UL514A Scrubwater
ADA Compliant

Specifications

Cover Material	Die cast aluminum
Flange height	0.125 in.
Adjustment Range	NA
Load Rating	1000 lbs. (w/ 2x safety factor)
Cover Finish	Brushed Aluminum



Related Products

Compatible with RAFB4BASE,
CFB4G25R, CFB4G25RCR,
CFB4G30R, CFB4G30RCR,
Surface style typical applications: ALL

Online Resources

Customer Sales Drawings
eCatalog
Installation Instructions



SystemOne 2-, 4- and 6- Gang Floor Box Plate Single Gang Plate

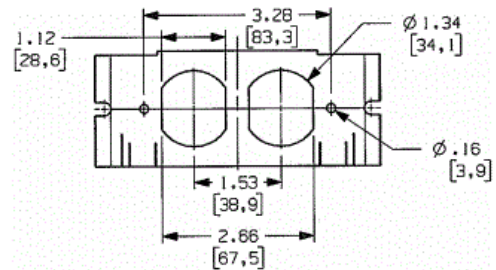


- Opening for one duplex device
- Easy to install with single screw mounting
- Mounting hardware included
- Reduces wiring and installation times

Style	Finish	UPC	Catalog Number
Single Gang	Steel Mounting Plate	783585191546	FBMPDUP

cULus Listed

Face Plate	16 gauge zinc plated stamped steel
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Compatible with AFB2G25, AFB2G50,
AFB4G25, AFB4G50, CFB2G25,
CFB2G30, CFB4G25, CFB4G30, and
Includes necessary mounting hardware

Customer Sales Drawings
eCatalog
Installation Instructions

Phone (800) 288-6000 • Fax (800) 255-1031 • Specifications subject to change without notice.



Floor Boxes

SystemOne 2-, 4- and 6- Gang Floor Box Plate

Single Gang Plate



- Features
- Blank plate with no openings
 - Easy to install with one screw mounting
 - Reduces wiring and installation times

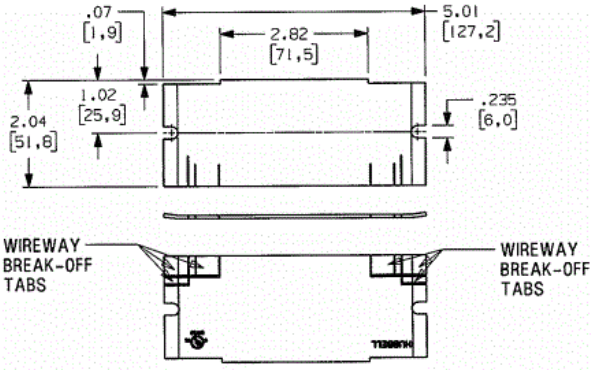
Ordering Information

- Includes necessary mounting hardware

Catalog Number	UPC
FBMPBNK	783585191560

Specifications

Face Plate	16 gauge zinc plated stamped steel
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Online Resources

- Customer Use Drawing
- eCatalog
- Installation Instructions



Straight Blade Devices

20A 125V, 2-Pole 3-Wire, 5-20R

EdgeConnect™ Commercial Specification Grade Duplex Receptacle



Features

- Back wired screwless termination for faster termination time
- No need for screwdriver and torque wrench
- Spring Termination eliminates strand relaxation
- Triple and Double Wipe Contacts
- Easy access split circuit tab

Ordering Information

Description	Device Color	UPC Number	Catalog Number
Smooth Face, Tamper Resistant, Back Wired	Ivory	78358572801	BR20STITR

Listings

UL Listed to UL498 File No. E2186
Certified to CSA 22.2, No. 42 File 285
NEMA® WD-6 Compliant

Specifications

Face	Polycarbonate
Base	Polycarbonate
Mounting Strap	Galvanized Steel
Ground Contact	Copper Alloy
Mounting Screws	Plated Steel

Online Resources

Customer Sales Drawings
eCatalog
Installation Instructions



Performance

Electrical	
Current Interrupting	Certified for current interrupting at full rated current
Dielectric Voltage	Withstands 2,000V minimum
Mechanical	
Product Identification	Ratings are a permanent part of the device
Terminal Accommodation	#14 (Solid and Stranded) - #10 (Stranded) Copper Wire Only, Consult Factory for #10 Applications
Terminal Identification	Terminals Identified in Accordance with UL 498 and CSA
Environmental	
Flammability	UL 94 V-2
Operating Temperatures	Maximum continuous 75°C; minimum -40°C (w/o impact)



Floor Boxes

SystemOne 4" Round Recessed Floor Box

Concrete Floor Boxes



- Features
- Corrosion resistant for on-grade applications
 - Concrete cover, conduit reducers and conduit hub plugs included

Ordering Information

Description	Device Color	UPC Number	Catalog Number
Non-Metallic, Floor Boxes	Gray	783585544656	CFBS1R4PFB

Listings

UL File Number E92074
CSA File Number LR18416

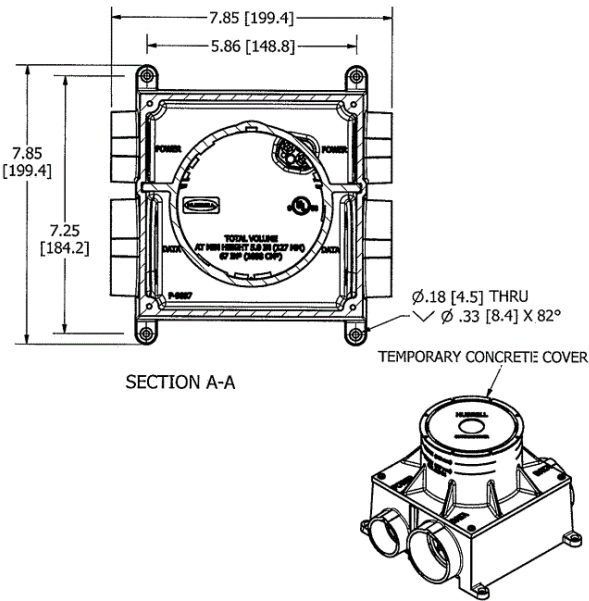
Specifications

Box Base	PVC
Box Riser	PVC
Concrete Cover	PVC
Power Entries	½", ¾", 1" & 1¼"
Data Entries	1", 1¼", 1½" & 2"

Performance

Installation Information

Cubic Inch Capacity	67.0 cu. in. (1098 cm3)
Min. Depth of Pour	5.00" (127.0)



Complementary Products

Mounting Cup (Required)	CFBS1R4CUP
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Online Resources

Customer Use Drawing
eCatalog
Installation Instructions



Floor Boxes

SystemOne 4" Round Recessed Floor Box Cover

Concrete Floor Box Covers



Features

- 0.15" flange thickness complies with ADA requirements
- 180 degree cover opening to lay flat and reduce tripping hazards
- Durable plated finish
- UL 514A listed and meet UL Scrubwater requirements

Ordering Information

Description	Device Color	UPC Number	Catalog Number
4" Recessd Cover	Satin Nickel	783585544793	CFBS1R4CVRNKL

Listings

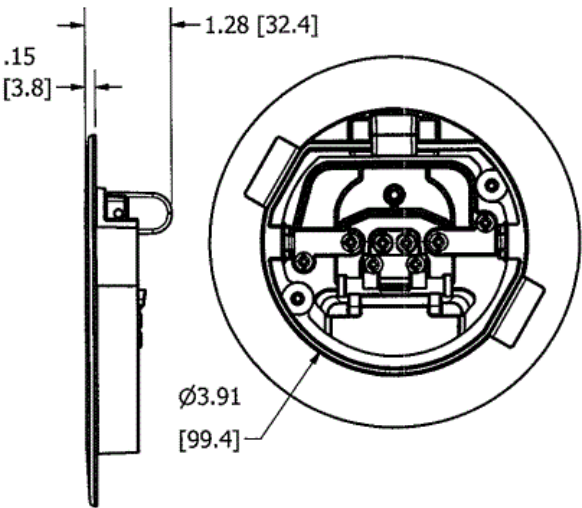
UL 514A listed and meet UL Scrubwater requirements
ADA complinat flange

Specifications

Cover Flange	Aluminum
Cover	Aluminum
Access Door	Aluminum
Mounting Hardware	Zinc Plated Steel

Performance

Performance	
Cover Load Rating	1000 lbs. for a static load applied through a 3 inch mandrel



Online Resources

Customer Use Drawing
eCatalog
Installation Instructions



Floor Boxes
SystemOne 4" Round Recessed Floor Box
Floor Box Accessories

HUBBELL

Features

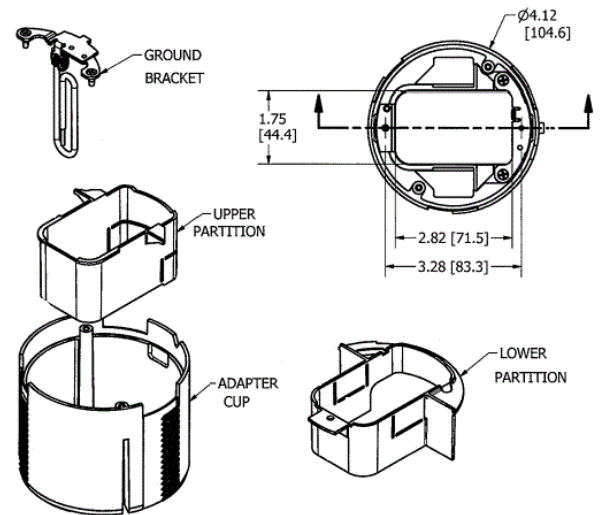
- Required Adjusting Mounting Cup For CFBS1R4xx Series Boxes
- Purchased Separately



Ordering Information

UPC Number
783585544694

Catalog Number
CFBS1R4CUP



Online Resources

Customer Use Drawing
eCatalog
Installation Instructions

Floor Boxes / Fire-Rated Poke-Throughs

SystemOne Recessed

Sub-Plate



Features

- White Powder Coated

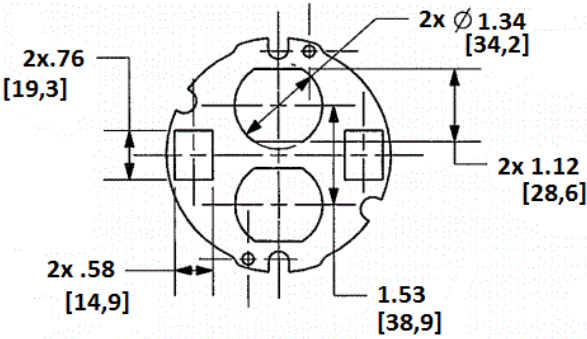
Ordering Information

- Includes necessary mounting hardware

Catalog Number	UPC	Description
S1R4SP2X2DUPLEX	783585446042	Sub-plate with opening for 1 duplex device & 2 Keystone jacks

Standards

cULus Listed



Online Resources

- Customer Use Drawing
- eCatalog
- Installation Instructions



Floor Boxes / Fire-Rated Poke-Throughs

SystemOne Recessed

Sub-Plate



Features

- White Powder Coated

Ordering Information

- Includes necessary mounting hardware



Catalog Number	UPC	Description
S1R4SPQUAD	783585446080	Sub-plate with 20A quad receptacle

Standards

cULus Listed

Online Resources

- Customer Use Drawing
- eCatalog
- Installation Instructions



Floor Boxes

Flush Round Single or Multi-Service

Non-Metallic Concrete Floor Box



- Features
- Concrete cover, conduit reducers and conduit hub plugs included
 - Economical, easy to install, in-floor delivery system for open plan spaces
 - Universal Cover mounts eliminate the need of additional adapter collar

Ordering Information

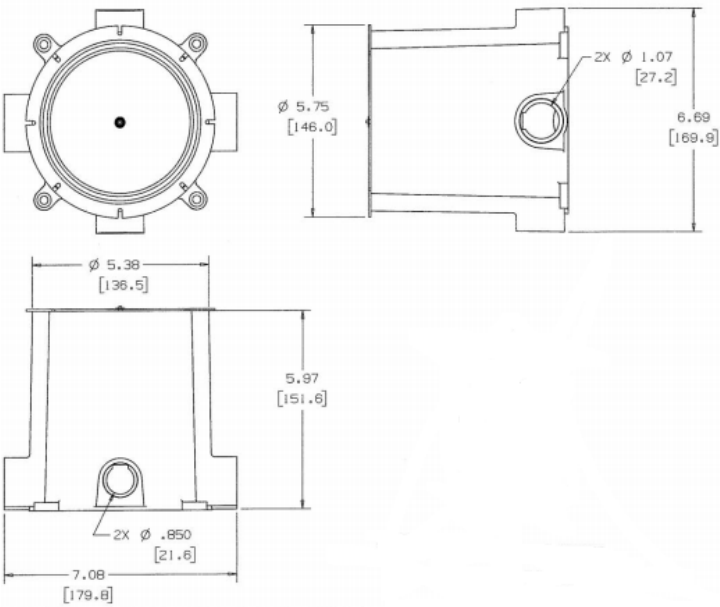
Description	Device Color	UPC	Catalog Number
Non-Metallic, Concrete	Gray	783585342757	PFB1



- Listings
- UL File Number E92074
- CSA File Number LR18416

Specifications

Material	PVC
Min. Depth of Pour	3.00" (76.2)
Hubs	1.0" and 3/4" conduit hubs
Capacity	100 cubic inches prior to cutting level to floor



- Online Resources
- Customer Use Drawing
- eCatalog
- Installation Instructions



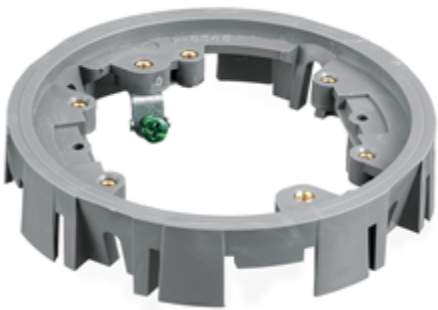
Floor Boxes

Flush Round Single or Multi-Service

Plastic Floor Box Adapter Ring



- Features
- Four hangers snap onto adapter and provide added support
 - Includes four hangers for tile floors, four retainer clips and screws
 - Accepts plastic and metallic floor box covers



Ordering Information

Description	Device Color	UPC	Catalog Number
Plastic Floor Box	Gray	783585342474	PFBA1A

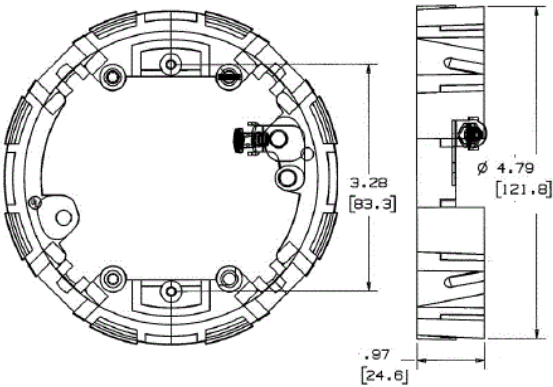
Listings

UL File Number E92074

CSA File Number LR18416

Specifications

Material	PVC
Retainer Clips	Clips slide into slots in box wall
Adapter Version	Round



- Online Resources
- Customer Use Drawing
- eCatalog
- Installation Instructions



Floor Boxes

Accessories

Cover and Carpet Flange



Features

- One Piece Cover Carpet Flange
- Durable Cast Aluminum Construction
- Brushed Finish
- UL 514A listed and meet UL Scrubwater requirements

Ordering Information

Description	Material	UPC Number	Catalog Number
One Piece, Combo Cover/Flange, Aluminum	Cast Aluminum	783585222141	SFA3925

Listings

cULus Listed
UL514A listed and meet UL Scrubwater requirements
ADA compliant flange

Specifications

Cover Style	Round
Cover Finish	Brushed Aluminum
Cover Opening	Duplex Flap
Offering	6.25" Diameter

Performance

Electrical	
Cover Load Rating	300 lbs. for a static load applied through a 3 inch mandrel



Online Resources

Customer Sales Drawings
eCatalog
Installation Instructions





Ordering Information

Description	Material	UPC	Catalog Number
Round Cover Flange,	Aluminum	783585134208	SA5016

Online Resources

[eCatalog](#)

Specifications

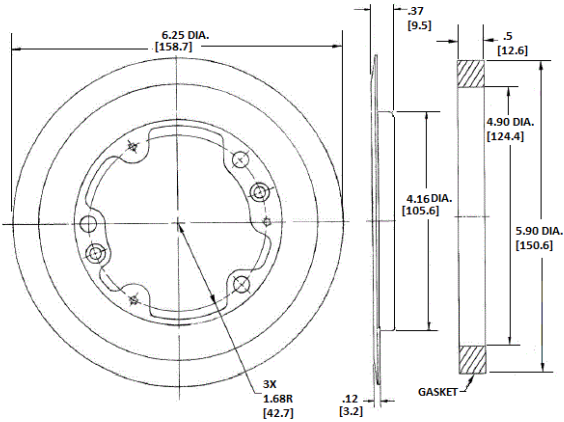
Accessory Type	Replacement Cover Flanges
For Use With	Full Size Round Boxes
Box Type	Round
Dimension	4.19" (106.4) diameter

Ordering Information

Description	Material	UPC	Catalog Number
Round Aluminum	Aluminum	783585315843	SA3082

Specifications

Cover Style	Round
Cover Finish	Aluminum
Offering	6.25" Diameter



Online Resources

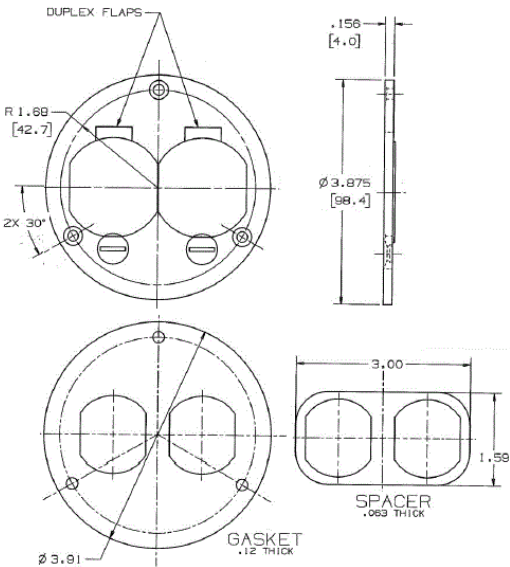
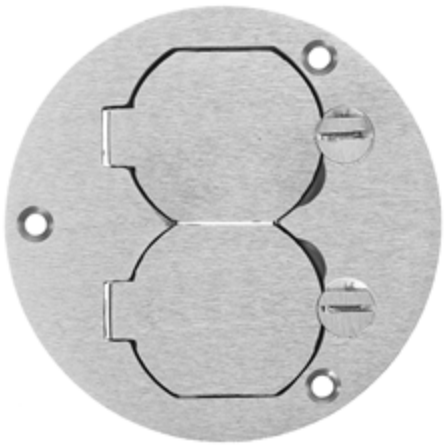
- Customer Use Drawing
- eCatalog
- Installation Instructions

Ordering Information

Description	Material	UPC	Catalog Number
Round Floor Box	Aluminum	783585133508	SA3925

Specifications

Cover Style	Round
Cover Finish	Aluminum
Cover Opening	Duplex Flap



Online Resources

- Customer Use Drawing
- eCatalog
- Installation Instructions