



## *Floor Boxes*



## GENERAL INFORMATION

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RACO® floor boxes are ideally suited for heavy floor traffic applications, such as shopping malls, retail stores, banks and schools. Floor boxes are installed in poured concrete floors and are fed with conduit. RACO's complete line includes both single service and three-service (power and voice/data) floor boxes, which are available in cast iron, stamped steel and PVC plastic. Floor box covers and carpet flanges are offered in brushed brass and textured thermoplastic in two designer colors, ivory and gray. RACO floor boxes:

- Are used in branch circuit wiring
- Accommodate wiring devices such as receptacles for voice/data
- Provide excellent protection for wiring system or devices
- Must be closed with a cover
- Permit access to conductors for maintenance

### NON-ADJUSTABLE STYLE FEATURES

This type of box has no means for adjustment. It is usually installed in wooden floors or used for retrofit in concrete:

RACO quality non-adjustable floor boxes feature:

- Rugged cast iron for strength and ground continuity
- Factory-installed ground wire
- Simple one-piece floor box design offers flexibility for power outlet or voice/data outlets
- Conveniently positioned conduit entries are tapped and plugged

### FULLY-ADJUSTABLE FLOOR BOX FEATURES

This type of box has leveling screws for height and leveling adjustments to be made before the concrete is poured, and final leveling adjustments after the concrete is poured. The maximum leveling adjustment is a 7° tilt.

Fully-adjustable floor boxes feature:

- Concrete-tight floor boxes for use in power or voice/data
- Cast Iron boxes classified as watertight and concrete-tight, typically used below grade where excessive moisture is present.
- Choice of materials - stamped steel or cast iron
- Cast iron floor box including factory installed ground wire, and multiple gang boxes with one ground wire per gang
- Multiple gang boxes provided with low voltage partitions
- Ample wiring space for any combination of power outlet or voice/data outlets

### STANDARD MATERIALS

- Nonmetallic floor box is made of heavy-duty PVC (Polyvinyl chloride) compound. Base material is recycled
- Steel floor boxes are made of .0625 inch thick steel
- Cast iron floor boxes are made from cast iron having a high tensile strength
- Solid brass covers and carpet flanges
- Nonmetallic floor box covers and carpet flanges are made of high strength thermoplastic (ABS)

### STANDARD FINISHES

- Natural gray finish on nonmetallic floor box
- Nonmetallic floor box covers and carpet flanges are available in gray powder coat paint finish
- Steel boxes have a zinc coating
- Cast iron floor boxes have a gray powder coat paint finish
- Solid brass covers and carpet flanges have a brushed finish

### COMPLIANCES

Floor boxes are subject to the same code requirements and minimum conductor fill requirements as other boxes. RACO floor boxes carry the following compliances:

- UL Standard 514-A
- Boxes are listed for their Electrical Applications (Electrical Codes), UL Green Book
- Federal Manufacturer's number 28488

### REFERENCE DATA

- Minimum wiring capacity calculation can be found on pages A8 of this catalog

### FLOOR BOX INSTALLATION

Installing a fully-adjustable floor box in a poured concrete floor: RACO provides with all box assemblies or flanges a metallic concrete cover. The concrete cover permits pouring concrete to the top of the box. The cover is then easily removed after the pour. To install the box:

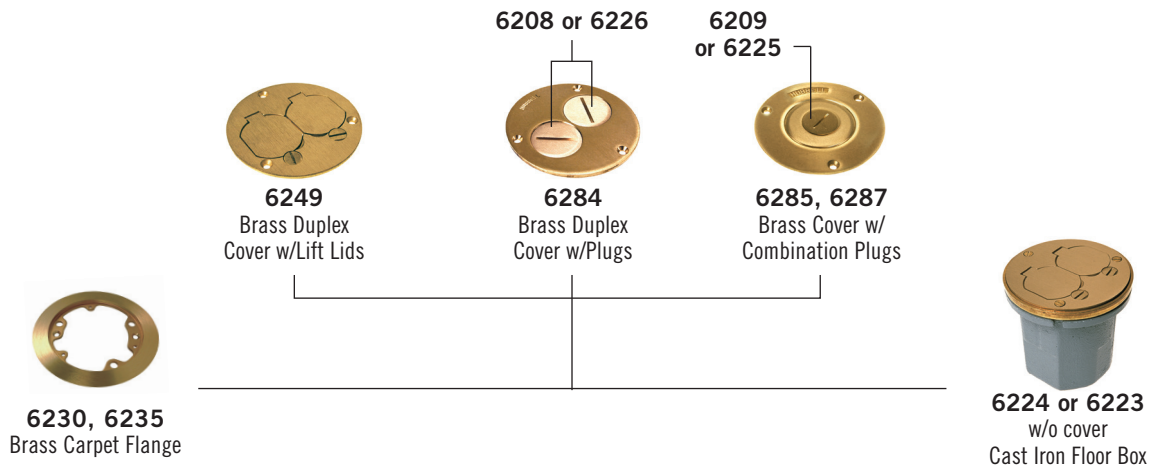
- Locate box and install conduit in accordance with local codes
- Secure box to reinforcing bar (mesh)
- Make pre-pour height and leveling adjustments
- Grease inside of cement cover and install on box
- Grease outside of cement cover
- Apply bead of grease on exposed portion of adjusting collar
- Tape cement cover to box
- Pour concrete
- After the concrete has set, remove the concrete cover
- Pull wires and install wiring device
- Make final pour adjustments, and grout around the box if required
- Install cover plates and/or accessories

### STANDARDS, 2020 NATIONAL ELECTRICAL CODES®

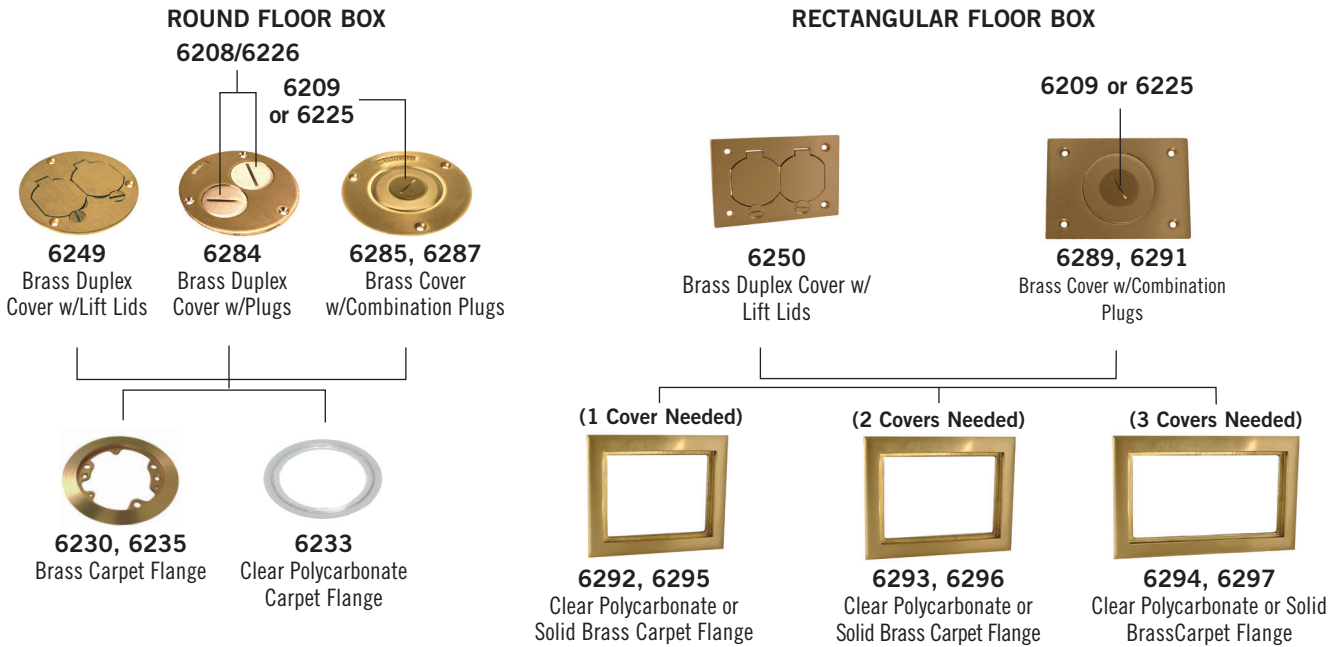
SUMMARY OF THE MOST OFTEN REQUESTED SECTIONS OF THE 2020 NATIONAL ELECTRICAL CODE®	HOW RACO® PRODUCTS HELP COMPLETE THE INSTALLATION
<p>210-52 (a) Dwelling Unit Receptacle Outlets - General Provisions. In every kitchen, family room, dining room, living room, parlor, library, den, sun room, bedroom, recreation room, or similar room or area of dwelling units, receptacle outlets shall be installed so that no point along the floor line in any wall space is more than 6 feet, measured horizontally, from an outlet in that space, including any wall space 2 feet or more in width and the wall space occupied by fixed panels in exterior walls, but excluding sliding panels in exterior walls. The space afforded by fixed room dividers, such as freestanding bar-type counters or railings, shall be included in the 6-foot measurement.</p>	<p>Every 6 feet along the wall surface there should be a receptacle outlet regardless of the room within the dwelling. The purpose of this Article is to eliminate extension cords that are used within the dwelling. Electrically overloaded extension cords are often a source of fires. Installation of a RACO floor box may help alleviate the need for extension cords by locating receptacles where no wall outlets are installed. Receptacle outlets in floors can be counted as part of the required number of receptacles if they are within 18 inches of the wall.</p>
<p>250-146 Connecting Receptacle Grounding Terminal to Box. An equipment bonding jumper shall be used to connect the grounding terminal of a grounding-type receptacle to a grounded box. Exception (c): Floor boxes designed for and listed as providing satisfactory ground continuity between the box and the device.</p>	<p>All RACO floor boxes are designed and listed for having ground continuity without an equipment bonding jumper. RACO does provide on all of its cast floor boxes a factory-installed ground wire.</p>
<p>314.27(B) Outlet Boxes —Floor Boxes. Boxes listed specifically for this application shall be used for receptacles located in the floor. Exception: Boxes located in elevated floors of show windows and similar locations where the authority having jurisdiction judges them to be free from physical damage, moisture, and dirt.</p>	<p>Only boxes that are UL Listed for the application may be fastened into the floor.</p>
<p>800.133 (A) (1) (d) Installation of Communications Wires, Cables, and Equipment — Electric Light or Power Circuits. Communications conductors shall not be placed in any raceway, compartment, outlet box, junction box, or similar fitting with conductors of electric light or power circuits or Class 1 circuits.</p>	<p>This section applies when power and voice/data are brought to one enclosure. A means of dividing the wiring is required. Voltage dividers are available for the following floor box types: PVC floor box and rectangular fully-adjustable.</p>

## QUICK SELECTION GUIDE

### NONADJUSTABLE FLOOR BOX SYSTEM

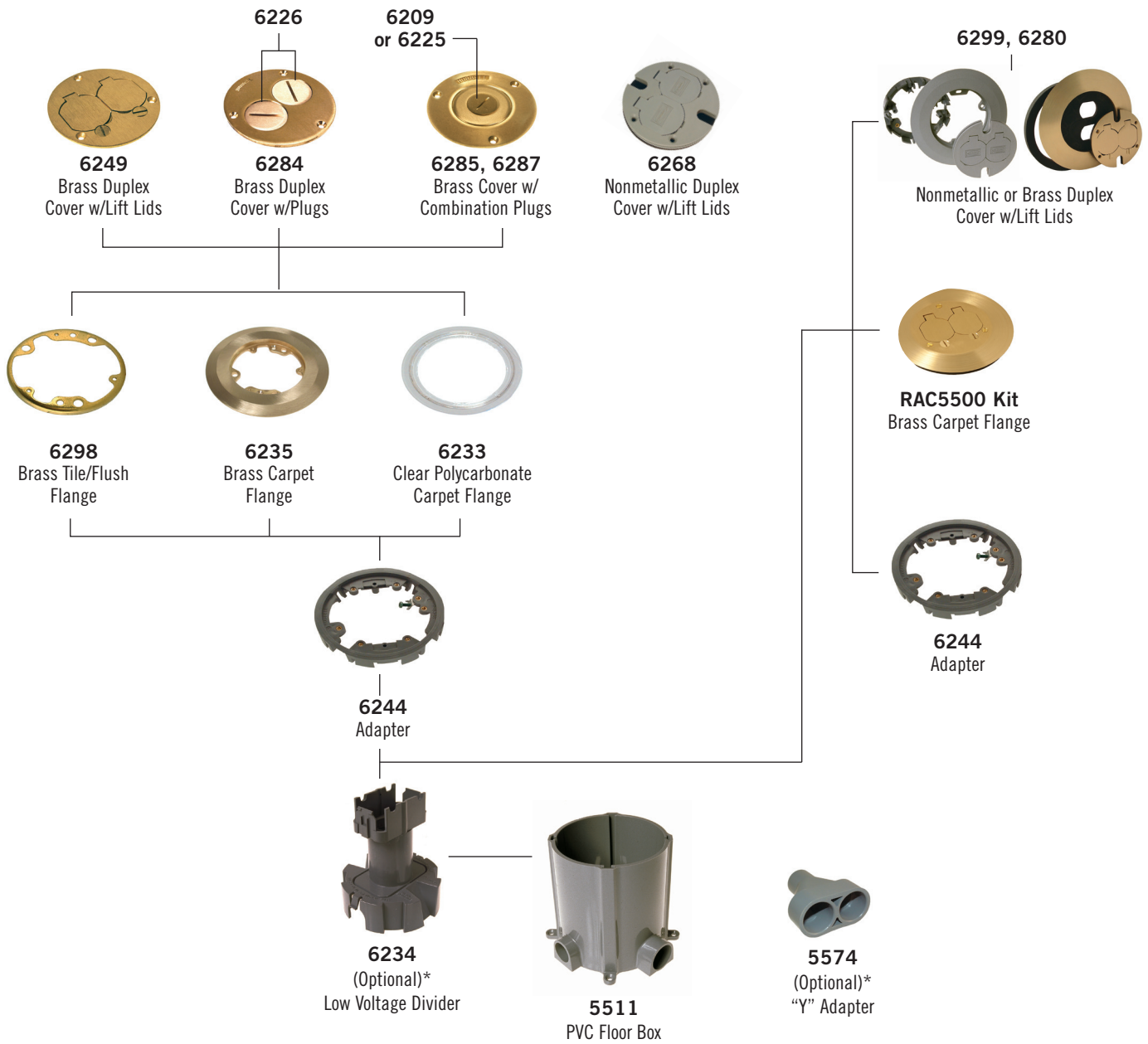


### FULLY ADJUSTABLE FLOOR BOX SYSTEM



\* Included brass tile ring must be removed and discarded before installation of brass carpet flanges. Polycarbonate flanges are installed between box and included brass ring.

PVC FLOOR BOX SYSTEM



\* Nonmetallic Box – Multi-Service Option: A voltage separation unit allows the nonmetallic box to be used for telephone/data service as well as power. As shown, the unit has two pieces. The lower portion has openings on opposite sides for power wires and ramps on the other two sides for telephone/data wires. Power wires run inside tube and attach to duplex receptacle. Telephone/data wires run outside of tube and pass through grommet(s) in the cover.

Before installing lower part of voltage separation unit, cut off the same amount from the tube as you cut off the box. Complete the installation of the carpet flange, duplex receptacle and cover.

**NONMETALLIC**

FOR CONCRETE POUR - NONMETALLIC



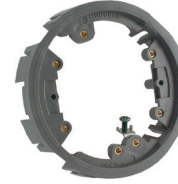
5511



6234



5574



6244

**APPLICATIONS**

- Used in branch circuit wiring
- Accommodate wiring devices for various receptacles
- Permit access to conductors for maintenance

**GENERAL FEATURES**

- RACO® Nonmetallic floor box has been engineered from the inside out with features that reduce installation time and offer increased capabilities from one box in power, voice and data
- Hubbell® nonmetallic floor boxes are economical to install and easy to level off
- A wide choice of cover materials and finishes are available
- 3" minimum pour depth

**LOW VOLTAGE DIVIDER FEATURES**

- Installs inside 5511 floor box for multi-service applications. Use separate conduit runs for power and voice/data cables
- Accepts Hubbell® standard duplex receptacles or 15A Twist-Lok® duplex receptacles (HBL 4700 series)
- Power capacity - 19.6 cubic inches plus 2.40 cubic inches per inch of tube

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Round Floor Box Cover and Accessories – Nonmetallic</b>			
5511	19.5 Cu. In. Capacity per Inch of Height, 2 - 1" and 3/4" Openings	1	—
6234	Voltage Separation Unit, Optional	4	—
5574	3/4" Y Adapter, PVC	10	—
6244	Adapter Ring for all Nonmetallic and Brass Flanges	10	—

**ADAPTER RING FEATURES**

- High-strength rigid non-corrosive PVC construction
- Large capacity box: 100 cubic inches of volume (before cut)
- Molded T-slots permit the adapter ring to be secured to the box no matter where the box has been cut
- One-piece box with pre-molded conduit hubs
- RACO® Y-Adapter permits two parallel feeds of 3/4" conduit, or feed in/out of the same side

**COMPLIANCE**

- c(UL)US LISTED

NONMETALLIC / ROUND



6299



6233



6268

CAT. #	DESCRIPTION	CARPET FLANGE O.S.DIA.	STD. PKG.	BAR CODE
<b>Floor Box Cover Assembly Kits – Nonmetallic</b>				
6299	Adapter, Nonmetallic Gray Carpet Flange, Gray Duplex Cover - Kit	6-1/2"	10	
<b>Replacement Covers and Carpet Flanges – Nonmetallic</b>				
6233	Clear Polycarbonate Carpet Flange	5-1/4"	15	
6268	Gray Nonmetallic Duplex Cover with Lift Lids	—	10	—

**APPLICATIONS**

- RACO® Nonmetallic floor box covers and flanges provide a quick, simple method of completing floor box installation on carpeted floor

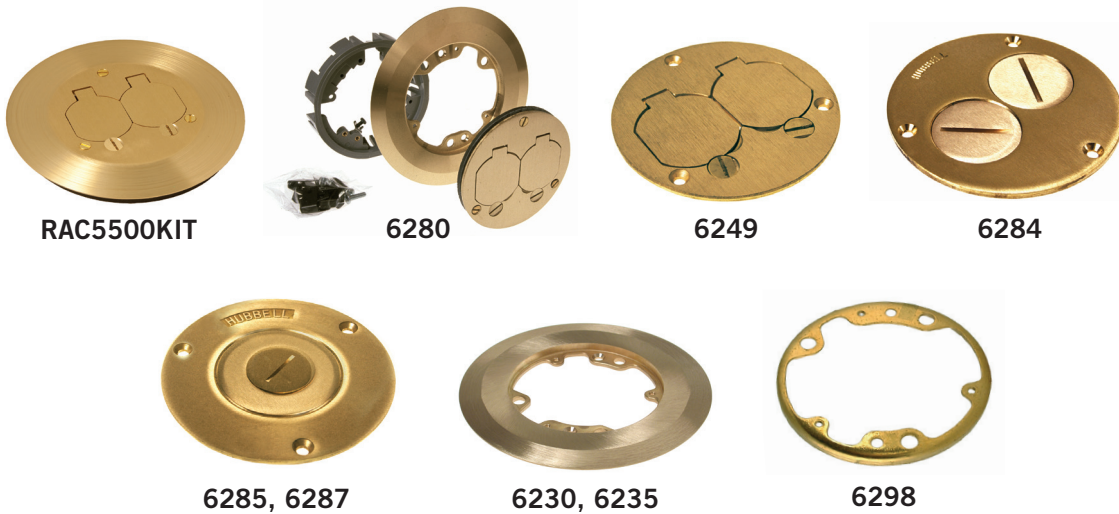
**PRODUCT FEATURES**

- RACO® Nonmetallic carpet flanges and covers are available in gray or in ivory finish
- Covers are outfitted with duplex flaps that automatically close when not in use, preventing breakage and eliminating a potential trip hazard
- Cover design keeps debris out when receptacles are not in use
- Hubbell® RACO® carpet flanges and covers install quickly and easily with provided screws
- 3-service floor box cover with duplex flap, two 1/2" diameter low-voltage knockouts. Each low-voltage knockout can accommodate up to (1) 25 pair telephone cable or (1) 50 wire data communication cable NOTE: Brass cover is not 3-service

**COMPLIANCE**

- cUL<sub>us</sub> LISTED

FLOOR BOX COVERS AND FLANGES



**APPLICATIONS**

- Floor box flanges and covers are used to complete floor box installations on either carpet or tile

**PRODUCT FEATURES**

- Brass floor box covers are designed to be used with round RACO® carpet and tile flanges and RACO round full adjustable stamped steel and cast iron floor boxes
- Flanges are designed to be installed to RACO adapter ring, catalog number 6244
- 6230 is not designed to work with RACO 5511 nonmetallic floor box
- Hubbell® RACO® carpet flanges, tile flanges and covers install quickly and easily with provided screws
- Order of installation:
  1. Install RACO floor box
  2. Install nonmetallic adapter ring (if round 5511 nonmetallic box is used)
  3. Install device to box or 6244 adapter
  4. Install carpet or tile flange
  5. Install cover to carpet or tile flange

**COMPLIANCE**

- LISTED

CAT. #	DESCRIPTION	CARPET FLANGE O.S. DIAMETER	STD. PKG.	BAR CODE
<b>Round, Solid Brass Floor Box Cover Kit</b>				
RAC5500KIT	Round, Brass Cover Kit	6-1/4"	10	
6280	Brass Carpet Flange, Adapter and Duplex Cover Kit	6-1/2"	10	

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>3-7/8" Dia., Round Covers – Brass</b>			
6249	Brass Duplex Cover with Lift Lids	40	
6284	Brass Duplex Cover with 2, 1-1/2" Threaded Plugs	40	
6285	Brass Cover with 2-1/8" x 1" Combination Plugs	40	
6287	Brass Cover with 2-1/8" x 3/4" Combination Plugs	40	

CAT. #	DESCRIPTION	CARPET FLANGE O.S. DIAMETER	STD. PKG.	BAR CODE
<b>Carpet Flanges</b>				
6230	Brass Carpet FLange, Mop-tight	5-1/4"	10	
6235	Brass Carpet Flange*	6-1/4"	10	

\*6235 not UL Listed

CAT. #	DESCRIPTION	TILE FLANGE O.S. DIAMETER	STD. PKG.	BAR CODE
<b>Tile Flange</b>				
6298	Brass Tile/Flush Application Flange	4-3/16"	15	



## FLOOR BOXES FOR WOOD FLOORS



6224



6223

CAT. #	THREADED / HUBS		CUBIC INCHES	STD. PKG.	BAR CODE
	SIDE	BOTTOM			
<b>Duplex Receptacle Assembly</b>					
6224	—	2-1/2"	18.5 (303.1 cm <sup>3</sup> )	4	
<b>Floor Box</b>					
6223	—	2-1/2"	18.5 (303.1 cm <sup>3</sup> )	4	

### APPLICATIONS

- RACO® wood floor boxes provide flush service for power or voice/data
- Non-adjustable floor boxes may be used in wood or concrete floors and are suitable for carpet, tile or wood floor applications

### PRODUCT FEATURES

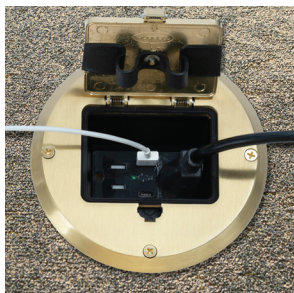
- Boxes are non-adjustable
- Cast iron, water-tight
- Gray powder coat paint inside and out for additional corrosion resistance
- 1/2" and 3/4" threaded conduit openings are standard; all bottom openings are accessible
- If floor covering is used, discard included brass flush ring and replace with RACO® 6230 or 6235 brass carpet flange
- RACO® 6224 includes box, 6249 brass duplex cover with lift lids, and brass tile flange. Receptacle is not included
- RACO® 6223 - for use with any RACO 3-7/8" diameter brass cover (6249, 6284, 6285, 6287). Cover must be ordered separately, brass tile flange included

### COMPLIANCE

- LISTED

FLOOR BOX ASSEMBLIES WITH USB PORTS

**NEW!**



6239ACBP



6239ACNI



6239ACBK

**APPLICATIONS**

- Place power and charging on wood floor for lighting, entertainment and mobile devices

**PRODUCT FEATURES: 6239CBP, 6239CNI AND 6239CBK**

- High power USB ports: one Type A and one Type C
- 15A, 125V tamper resistant receptacle
- Removable neoprene gaskets allow for independent use of either side of the receptacle with cover closed
- Recessed receptacle minimizes plug protrusion

**COMPLIANCE**

-  LISTED

CAT. #	DESCRIPTION	CUBIC INCHES	STD. PKG.	BAR CODE
<b>Round, Recessed Floor Boxes – Brass, Nickel or Black Finish</b>				
6239ACBP	Round, Brass Finish	28.0 (458.9 cm <sup>3</sup> )	1	050169993545
6239ACNI	Round, Nickel Finish	28.0 (458.9 cm <sup>3</sup> )	1	050169993231
6239ACBK	Round, Black Finish	28.0 (458.9 cm <sup>3</sup> )	1	050169993224

## FLOOR BOX ASSEMBLIES



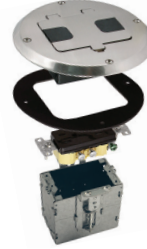
6500BR-5



6500NI-5



6239BP



6239NI,  
6239SS



6239BK



6RF151SR

CAT. #	KNOCKOUTS / HUBS		CUBIC INCHES	STD. PKG.	BAR CODE
	SIDE CONDUIT	SIDE CONDUIT			
<b>Rectangular, Metallic Floor Box Kit – Brass Finish or Nickel Finish Cover Plate</b>					
6500BR-5	2 - 1/2"	4 - 1/2"	18.5 (303.1 cm <sup>3</sup> )	5	
6500NI-5	2 - 1/2"	4 - 1/2"	18.5 (303.1 cm <sup>3</sup> )	5	

CAT. #	DESCRIPTION	CUBIC INCHES	STD. PKG.	BAR CODE
<b>Round, Recessed Floor Boxes – Brass, Nickel, Stainless or Black Finish</b>				
6239BP	Round, Brass Finish	28.0 (458.9 cm <sup>3</sup> )	10	
6239NI	Round, Nickel Finish	28.0 (458.9 cm <sup>3</sup> )	10	
6239SS	Round, Stainless Steel Finish	28.0 (458.9 cm <sup>3</sup> )	10	
6239BK	Round, Black Finish	28.0 (458.9 cm <sup>3</sup> )	10	
<b>Round, Recessed Floor Boxes – Brass, Nickel, Stainless or Black Finish</b>				
6RF151SR	Round, Drop-in, Brass	16.0 (262.1 cm <sup>3</sup> )	10	

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Replacement Plug for Floor Box Assemblies</b>			
RP6239BP	Replacement Plug for 5236/6236	50	
RP6500BR	Replacement Plug for 6500BR-5	50	
RP6500NI	Replacement Plug for 6500NI-5	50	

### APPLICATIONS

- Floor box kits are used to complete floor box installations on either carpet, tile, or wood floors

### PRODUCT FEATURES: 6236 AND 5236

- back wiring - clamp type terminals accepts up to #10 wire
- 15A, 125V tamper resistant receptacle
- Brass finish cover plate is .058" thick, and 2-3/4" wide x 4-1/2" long
- 6236 includes 3-1/2" deep box

### PRODUCT FEATURES: 6500BR

### ANS 6500NI

- Contains low profile, 15A 125V tamper resistant receptacle

### PRODUCT FEATURES: 6239BP, 6239NI, 6239SS AND 6239BK

- Can be used for power/data
- 15A, 125V tamper resistant receptacle
- Removable neoprene gaskets allow for independent use of either side of the receptacle with cover closed
- Recessed receptacle minimizes plug protrusion

### PRODUCT FEATURES: 6RF151SR

- Has solid brass cover and flange
- 15A, 125V tamper resistant receptacle
- Self leveling, easy screw fastening

### COMPLIANCE

- cUL<sup>us</sup> LISTED

FLOOR BOX COVERS AND FLANGES



6250



6288



6289, 6291



6292, 6295



6293, 6296



6294, 6297

**APPLICATIONS**

- RACO® rectangular floor box brass covers and flanges are used to complete floor box installations

**PRODUCT FEATURES**

- Rectangular brass covers are used with RACO single-gang, two-gang, and three-gang rectangular floor boxes
- Covers are 3" wide x 4-5/32" long
- Cover screw centers are 3-5/32" x 2-1/8"
- Rectangular carpet flanges are available in brass or clear polycarbonate

**COMPLIANCE**

-  LISTED

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Rectangular Floor Box Covers – Brass</b>			
6250	Brass Duplex Cover with Lift Lids	40	
6288	Brass Duplex Cover with 2, 1-1/2" Threaded Plugs	40	
6289	Brass Cover with 2-1/8" x 1" Combination Plugs	40	
6291	Brass Cover with 2-1/8" x 3/4" Combination Plugs	40	

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Rectangular Carpet Flanges – Polycarbonate and Brass</b>			
6292	1-Gang, Brass	20	
6295	1-Gang, Clear Polycarbonate	10	
6293	2-Gang, Brass	10	—
6296	2-Gang, Clear Polycarbonate	10	—
6294	3-Gang, Brass	10	
6297	3-Gang, Clear Polycarbonate	15	—

ACCESSORIES AND REPLACEMENT COVERS



6209, 6225



6208, 6226



RP6236BP



RP6500BR



RP6500NI

CAT. #	DESCRIPTION	THREAD TYPE	FITS RACO BRASS COVER	STD. PKG.	BAR CODE
<b>Fully Adjustable Floor Box – Stamped Steel</b>					
6209	3/4" Crowned, Slotted Plug	—	6287, 6291	30	
6225	1" Crowned, Slotted Plug	—	6285, 6289	20	
6226	1-1/2" Flush Slotted Plug	Fine	6284, 6288	25	
6208	2-1/8" Flush, Slotted Plug	Fine	6284, 6288	30	

**APPLICATIONS**

- Brass abandon plugs are sold separately for replacement in brass covers
- Split nozzle for 2-1/8" threaded cover consists of interlocking halves that provide a protective housing when assembled. The nozzle may be easily installed without removing an electrical plug from cord. Nozzle is brass colored plastic

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Replacement Plugs</b>			
RP6236BP	Replacement Plug for 5236/6236	50	—
RP6500BR	Replacement Plug for 6500BR-5	50	—
RP6500NI	Replacement Plug for 6500NI-5	50	—

SERVICE PEDESTALS AND ACCESSORIES



CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Low-profile Service Pedestal Housing – Single Service for Power or Voice/Data</b>			
6300	Frame Housing, 3/4" Chase Nipple, w/o Plates	4	IIIIIIII
6301	Frame Housing, 1" Chase Nipple, w/o Plates	4	IIIIIIII

CAT. #	DESCRIPTION	STD. PKG.	BAR CODE
<b>Face Plates</b>			
6310	Rectangular Cover Flange	25	IIIIIIII
6311	Telephone Bushing with 1.00" ID and (2) 3/8" KO for Coaxial	25	IIIIIIII
6312	Single Receptacle Plate with 1.39" Opening	25	IIIIIIII
6313	Duplex Receptacle Plate	25	IIIIIIII
6314	Decorator Style Receptacle Plate	25	IIIIIIII
6315	Aluminum Plate with 1.11" KO	25	IIIIIIII

MAX. # OF RECEPTACLES	DESCRIPTION	PLATE(S) QTY.	REQUIRED RACO CAT.#
<b>Voice/Data Combinations</b>			
1	Duplex Jack Outlet	1	6313, 6310
1	Decorator Style of Telephone Outlet	1	6314, 6310
2	Decorator Style of Telephone Outlet	2	6314
0	Bushed Opening	1	6311, 6310
<b>Power Combinations</b>			
2	Duplex Receptacles	2	6313
1	GFCI Receptacles	1	6314, 6310
1	Surge Duplex Receptacles	1	6314, 6310
2	Decorator Receptacles	2	6314
2	Single Receptacles	2	6312

**SERVICE PEDESTALS APPLICATIONS**

- RACO® above-the-floor pedestals satisfy most service requirements
- These are the traditional metallic pedestals, offered as component parts to satisfy any combination of power or voice/data requirements

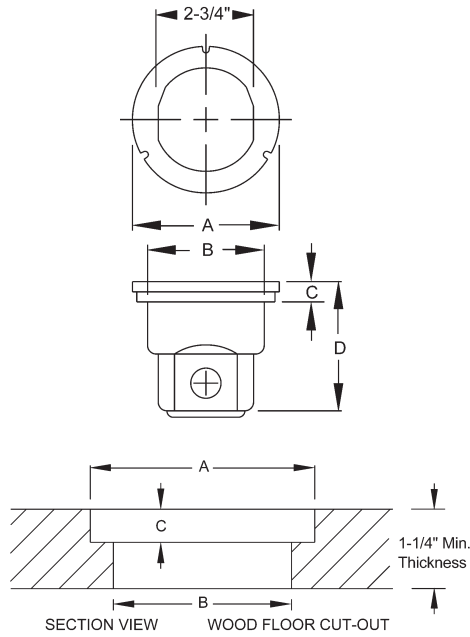
**PRODUCT FEATURES**

- Service pedestal housing die cast aluminum frame, aluminum housing
- Stainless steel face plates

**PEDESTAL CAPACITY CHART**

- (Power or voice/data devices) In certain cases, the pedestal will accommodate two receptacles. In other cases, a device may be too deep, and the maximum capacity is one receptacle

FLOOR BOXES



**Cast Iron Floor Boxes - Non Adjustable**

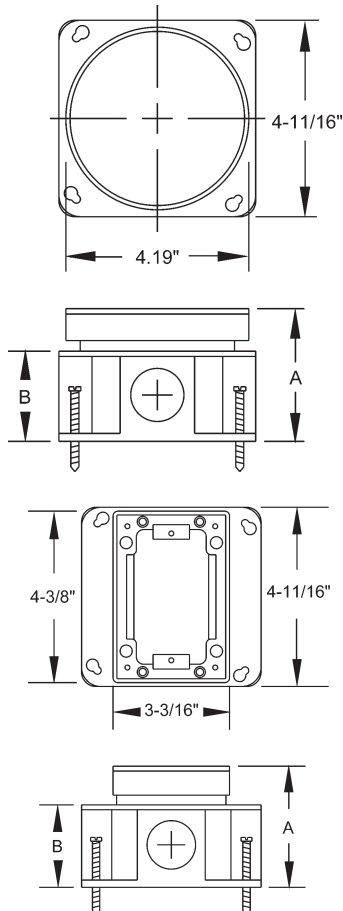
CATALOG NUMBER	A	B	C	D
6223	4.19"	3.39"	0.59"	3.75"
6224	4.19"	3.39"	0.59"	3.75"

**Cast Iron Floor Boxes - Non Adjustable- Floor Cut-out Dimensions**

Catalog Number	A	B	C
6224	4.1875"	3.4375"	0.625"

\* If floor covering is used, vary counter bore depth accordingly.

NOTE: Minimum floor thickness is 1-1/4". You may need to add support under the floor around the floor box opening.



**Round Floor Boxes - Adjustable**

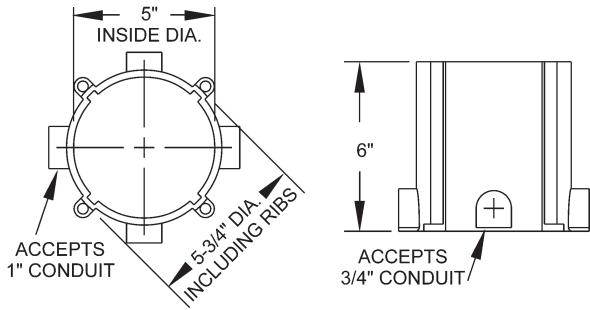
CATALOG NUMBER	A (MIN.)	A (MAX.)	B
6263	2.86"	3.19"	1.69"
6257	2.91"	3.29"	1.69"

**1-Gang Floor Boxes - Adjustable**

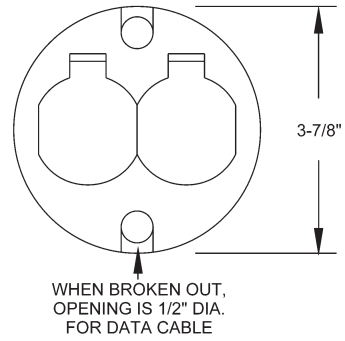
CATALOG NUMBER	A (MIN.)	A (MAX.)	B
6256	3.90"	4.28"	2.83"

FLOOR BOXES

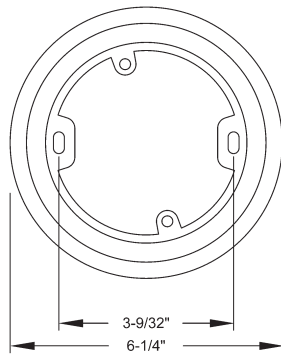
**NONMETALLIC FLOOR BOX**



**REPLACEMENT COVERS**



**REPLACEMENT CARPET FLANGES**



**SERVICE PEDESTAL**

