# Application

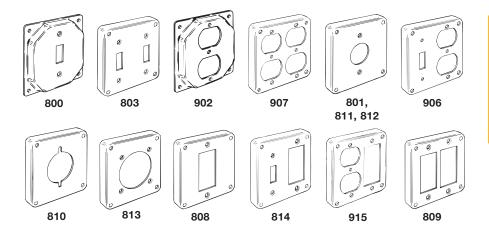
• Exposed work covers are used to support switches or receptacles independent of the box (box must still be used)

#### **Product Features**

- For easy mounting, RACO<sup>®</sup> 900 series covers include additional hardware for mounting the receptacle(s)
- RACO<sup>®</sup> 900 series covers meet NEC Article 410-56(I) for mounting the device with more than one screw
- Hardware and cover are packed in a poly-bag with printed catalog number, compliances and installation instructions
- Helpful Hint: Remove a portion of the GFCI receptacle ear to mount device to 4" square cover

# Compliances

- 🕕 File E195978
- 🚯 File LR-1082



# **ORDERING INFORMATION - DIMENSIONS**

4" SQUARE SURFACE COVERS - RAISED 1/2"						
CATALOG NUMBER	DESCRIPTION	CU. In.	STD. PKG.	UPC Bar Code		
800	1 Toggle switch, crushed corners	5.8	25			
803	2 Toggle switches	7.3	10			
902	1 Duplex receptacle, crushed corners	5.8	25			
907	2 Duplex receptacles	7.3	25			
801	1 Receptacle 1.406" dia.	7.3	10			
811	30A locking 1.719" dia.	7.3	10			
812	20A Receptacle 1.594" dia.	7.3	10			
906	1 Dup. & 1 toggle switch	7.3	10			
810	30-50A Receptacle 2.141" dia.	7.3	10			
813	30-60A Receptacle 2.625" dia.	7.3	10			
808	1 GFCI	7.3	10			
814	1 GFCI & 1 toggle switch	7.3	10			
915	1 GFCI & 1 duplex receptacle	7.3	10			
809	2 GFCI	7.3	10			



# Applications: Steel Boxes

RACO<sup>®</sup> high-quality steel boxes:

- Are used in branch circuit wiring to splice wires
- Accommodate wiring devices, such as switches and receptacles
- Most may also serve as fixture supports
- Provide excellent protection for wiring system or devices
- Must be closed with a cover, light fixture canopy or wallplate
- Permit access to conductors for maintenance
- Allow for branch circuit runs
- Provide two-hour fire rating for 4x4 or smaller wall opening

# Product Features: Outlet Boxes for Fixture or Fan Support

These high-quality boxes:

- Are listed to support lighting fixture canopies or fans
- Feature oversized #10 screws to provide strength and rigidity

#### Product Features: Patented TKO<sup>®</sup> Knockouts

- TKO<sup>®</sup> knockouts offer greater flexibility with RACO<sup>®</sup> patented combination 1/2" and 3/4" knockout
- Stock just one product instead of two or three
- One product for the installer to carry

#### TKO<sup>®</sup> Provides Reliable Grounding Path

- Independent tests conducted by UL prove that the TKO<sup>®</sup> passes the same high-current fault test used to test grounding bushings and ground lugs
- RACO<sup>®</sup> TKO<sup>®</sup> knockout is UL Listed, providing bonding without the use of bonding jumpers
- Suitable for bonding without any additional bonding means around concentric (or eccentric, TKO) knockouts where used in circuits above or below 250V
- This knockout does not impair the electrical connection to ground

#### Most RACO<sup>®</sup> Boxes Have At Least One Tapped #10-32 Grounding Hole

 The products that do not have a grounding hole are: plenum boxes catalog numbers 226 and 239

#### Product Features: Combination Screw Heads

- Cover and clamp screws have combination slotted/Phillips heads
- Self-tapping screws provide for 100% thread engagement

#### Metallic Boxes: Fire Resistance Rating Wall Penetrations\*

Listed single- and double-gang metallic outlet and switch boxes

with metallic or nonmetallic cover plates, also 4x4 and octagon boxes may be used in bearing and nonbearing wood stud and steel stud walls with ratings not exceeding two hours.

The surface area of individual metallic outlet or switch boxes shall not exceed 16 square inches through a fire rated wall. The aggregate surface area of the boxes shall not exceed 100 square inches per 100 square feet. Boxes located on opposite sides of walls or partitions shall be separated by a horizontal distance of 24 inches.

The metallic outlet or switch boxes shall be securely fastened to the studs, and the opening in the wallboard facing shall be cut so that the clearance between the box and the wallboard does not exceed 1/8 inch.

\*Reference: UL Fire Resistance Directory (Orange Book)

#### Standard Material: Steel Covers, Outlet And Switch Boxes

- Steel boxes and covers are made of .0625 inch thick pre-galvanized sheet steel
- Handy Box covers are made of .030 inch thick galvanized sheet steel

RACO STEEL BOXES & COVERS

#### Compliances

RACO<sup>®</sup> steel boxes and covers generally carry the following compliance ratings. Check specific catalog pages for individual compliances.

- UL Listed Standard 514-A, file E195978 ("QCIT" Category)
- Boxes are listed for their Electrical Applications (electrical codes), UL Green Book
- Boxes are listed for mechanical properties, including the Two-Hour Fire Rating, (building codes) UL Orange Book
- CSA Certified C22.2 #18, CSA File LR-1082
- U.S. Federal Specification and Standards W-J-800
- ANSI/NEMA OS1
- Federal Manufacturer's number 28488

#### **Reference Data**

- TKO<sup>®</sup> knockout U.S. Patent 4,640,433; Canada Patent 1,260,597
- Ceiling fan outlet box U.S. Patent 4,892,211; Canada Patent 1,324,360; Mexico Patent 166,125
- Far-side support (#978) U.S. Patent 4,898,357
- BOX-LOC<sup>®</sup> U.S. Patent 5,408,045 MEXICO Patent 186848
- Adjust-A-Brace<sup>®</sup> U.S. Patent 5,330,137 and 5,927,667 U.S.
- Steel Stud box Support (#978) 4,898,357 U.S.
- W.P. self tap holes 4,898,453 U.S. and 4,906,206 U.S.



For installation guidelines and to learn more about RACO products, visit the NEMA website at http://www.nema.org.

The National Electrical Manufacturers Association (NEMA) website is a valuable electrical resource providing the information you need - quickly. Standards and technical information, installation guides, industry news and economic trends, events/meetings, the latest electoindustry, and legislative and regulatory information for more than fifty-one product areas ranging from arc welding to x-ray machines can be found with just a few clicks of your mouse.

NEMA, celebrating its 75th anniversary in 2001, is the leading trade association in the United States representing the interests of electroindustry manufacturers. Founded in 1926 and headquartered near Washington, D.C., its 500 member companies manufacture products used in the generation, transmission and distribution, control, and enduse of electricity. Annual shipments of these products total \$100 billion.



# Application

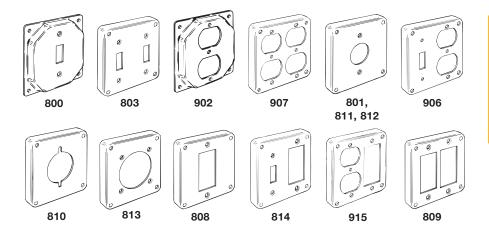
• Exposed work covers are used to support switches or receptacles independent of the box (box must still be used)

#### **Product Features**

- For easy mounting, RACO<sup>®</sup> 900 series covers include additional hardware for mounting the receptacle(s)
- RACO<sup>®</sup> 900 series covers meet NEC Article 410-56(I) for mounting the device with more than one screw
- Hardware and cover are packed in a poly-bag with printed catalog number, compliances and installation instructions
- Helpful Hint: Remove a portion of the GFCI receptacle ear to mount device to 4" square cover

# Compliances

- 🕕 File E195978
- 🚯 File LR-1082



# **ORDERING INFORMATION - DIMENSIONS**

4" SQUARE SURFACE COVERS - RAISED 1/2"						
CATALOG NUMBER	DESCRIPTION	CU. In.	STD. PKG.	UPC Bar Code		
800	1 Toggle switch, crushed corners	5.8	25			
803	2 Toggle switches	7.3	10			
902	1 Duplex receptacle, crushed corners	5.8	25			
907	2 Duplex receptacles	7.3	25			
801	1 Receptacle 1.406" dia.	7.3	10			
811	30A locking 1.719" dia.	7.3	10			
812	20A Receptacle 1.594" dia.	7.3	10			
906	1 Dup. & 1 toggle switch	7.3	10			
810	30-50A Receptacle 2.141" dia.	7.3	10			
813	30-60A Receptacle 2.625" dia.	7.3	10			
808	1 GFCI	7.3	10			
814	1 GFCI & 1 toggle switch	7.3	10			
915	1 GFCI & 1 duplex receptacle	7.3	10			
809	2 GFCI	7.3	10			



# Applications: Steel Boxes

RACO<sup>®</sup> high-quality steel boxes:

- Are used in branch circuit wiring to splice wires
- Accommodate wiring devices, such as switches and receptacles
- Most may also serve as fixture supports
- Provide excellent protection for wiring system or devices
- Must be closed with a cover, light fixture canopy or wallplate
- Permit access to conductors for maintenance
- Allow for branch circuit runs
- Provide two-hour fire rating for 4x4 or smaller wall opening

# Product Features: Outlet Boxes for Fixture or Fan Support

These high-quality boxes:

- Are listed to support lighting fixture canopies or fans
- Feature oversized #10 screws to provide strength and rigidity

#### Product Features: Patented TKO<sup>®</sup> Knockouts

- TKO<sup>®</sup> knockouts offer greater flexibility with RACO<sup>®</sup> patented combination 1/2" and 3/4" knockout
- Stock just one product instead of two or three
- One product for the installer to carry

#### TKO<sup>®</sup> Provides Reliable Grounding Path

- Independent tests conducted by UL prove that the TKO<sup>®</sup> passes the same high-current fault test used to test grounding bushings and ground lugs
- RACO<sup>®</sup> TKO<sup>®</sup> knockout is UL Listed, providing bonding without the use of bonding jumpers
- Suitable for bonding without any additional bonding means around concentric (or eccentric, TKO) knockouts where used in circuits above or below 250V
- This knockout does not impair the electrical connection to ground

#### Most RACO<sup>®</sup> Boxes Have At Least One Tapped #10-32 Grounding Hole

 The products that do not have a grounding hole are: plenum boxes catalog numbers 226 and 239

#### Product Features: Combination Screw Heads

- Cover and clamp screws have combination slotted/Phillips heads
- Self-tapping screws provide for 100% thread engagement

#### Metallic Boxes: Fire Resistance Rating Wall Penetrations\*

Listed single- and double-gang metallic outlet and switch boxes

with metallic or nonmetallic cover plates, also 4x4 and octagon boxes may be used in bearing and nonbearing wood stud and steel stud walls with ratings not exceeding two hours.

The surface area of individual metallic outlet or switch boxes shall not exceed 16 square inches through a fire rated wall. The aggregate surface area of the boxes shall not exceed 100 square inches per 100 square feet. Boxes located on opposite sides of walls or partitions shall be separated by a horizontal distance of 24 inches.

The metallic outlet or switch boxes shall be securely fastened to the studs, and the opening in the wallboard facing shall be cut so that the clearance between the box and the wallboard does not exceed 1/8 inch.

\*Reference: UL Fire Resistance Directory (Orange Book)

#### Standard Material: Steel Covers, Outlet And Switch Boxes

- Steel boxes and covers are made of .0625 inch thick pre-galvanized sheet steel
- Handy Box covers are made of .030 inch thick galvanized sheet steel

RACO STEEL BOXES & COVERS

#### Compliances

RACO<sup>®</sup> steel boxes and covers generally carry the following compliance ratings. Check specific catalog pages for individual compliances.

- UL Listed Standard 514-A, file E195978 ("QCIT" Category)
- Boxes are listed for their Electrical Applications (electrical codes), UL Green Book
- Boxes are listed for mechanical properties, including the Two-Hour Fire Rating, (building codes) UL Orange Book
- CSA Certified C22.2 #18, CSA File LR-1082
- U.S. Federal Specification and Standards W-J-800
- ANSI/NEMA OS1
- Federal Manufacturer's number 28488

#### **Reference Data**

- TKO<sup>®</sup> knockout U.S. Patent 4,640,433; Canada Patent 1,260,597
- Ceiling fan outlet box U.S. Patent 4,892,211; Canada Patent 1,324,360; Mexico Patent 166,125
- Far-side support (#978) U.S. Patent 4,898,357
- BOX-LOC<sup>®</sup> U.S. Patent 5,408,045 MEXICO Patent 186848
- Adjust-A-Brace<sup>®</sup> U.S. Patent 5,330,137 and 5,927,667 U.S.
- Steel Stud box Support (#978) 4,898,357 U.S.
- W.P. self tap holes 4,898,453 U.S. and 4,906,206 U.S.



For installation guidelines and to learn more about RACO products, visit the NEMA website at http://www.nema.org.

The National Electrical Manufacturers Association (NEMA) website is a valuable electrical resource providing the information you need - quickly. Standards and technical information, installation guides, industry news and economic trends, events/meetings, the latest electoindustry, and legislative and regulatory information for more than fifty-one product areas ranging from arc welding to x-ray machines can be found with just a few clicks of your mouse.

NEMA, celebrating its 75th anniversary in 2001, is the leading trade association in the United States representing the interests of electroindustry manufacturers. Founded in 1926 and headquartered near Washington, D.C., its 500 member companies manufacture products used in the generation, transmission and distribution, control, and enduse of electricity. Annual shipments of these products total \$100 billion.

