



Submittal Comments

Item No: 262726-01
(CSI No:)

Item Descript: Wiring Devices

Re: **Submittal** Comments
Cascade Science Lab Renovation
2008-046.CSL 8.3

*Architecture
 Engineering
 Technology
 Interior Design
 Landscape Architecture*

*Wil-Fra-Mar Building
 320 East Vermont Street
 Indianapolis IN 46204-1640
 317.263.6226
 317.263.6224 (fax)
 www.schmidt-arch.com*

Reviewed and checked only for conformance with design concepts and with the information given in the Contract Documents. Approval does not release the Contractor from the responsibility to provide appropriate quantities, field measurements, dimensional stability, installation, anchorage, and coordination with other trades or release the Contractor from responsibility for deviations from the requirements of the Contract Documents or from responsibility for errors and omissions contained thereon.

X	Reviewed as Submitted - No Resubmittal Required.
	Reviewed as Noted - No Resubmittal Required.
	Reviewed as Noted - Revise and Resubmit.
	Rejected - Revise and Resubmit.
	Not Required for Review - Returned.
By: Aaron J. Schipp	
Date: 4/28/2009	

Comments

Copy: File

Tricia L. Smith

From: ken meiring [kenmeiring@kpmeiring.com]
Sent: Sunday, April 12, 2009 2:15 PM
To: Tricia L. Smith
Subject: Cascade Science Lab Submittal Electrical Section 262726
Attachments: 262726 Devices Submitted 3-23-09.pdf

Hello,

Cascade Science Lab Submittal Electrical Section 262726

Kenneth P. Meiring
KP Meiring Company
6519 North Carrollton Avenue
Indianapolis, IN 46220-1616
(317) 257 7506 x 3
(317) 254 1305 fax
kenmeiring@kpmeiring.com
www.kpmeiring.com



JAMES BABCOCK INC.
electrical contractors

2925 N. Mitthoeffer Place • Indianapolis, IN 46229 • tel. 317-898-1172 • fax 317-898-1185

SUBMITTAL / TRANSMITTAL RECORD

TO: Ken Meiring

DATE: 3/22/09

COMPANY: KP Meiring

RE: Cascade High School Science Lab Remodel

CONTRACTOR NAME	James Babcock Inc.
BID CATEGORY NAME & NUMBER	Electrical
SPECIFICATION SECTION NO.	262726
SECTION NAME & DESCRIPTION	Wiring Devices
MANUFACTURER/SUPPLIER	Pass & Seymour
TYPE OF SUBMITTAL & NUMBER OF COPIES	Electronic
IS THIS A RESUBMITTAL?	NO

REMARKS:

K.P. MEIRING CO *KPM*
 CHECKED BY: _____
 DATE CHECKED: April 10, 1009
 REVIEWED NO EXCEPTIONS: _____
 REVIEWED WITH EXCEPTIONS: _____
 REJECTED RESUBMIT: _____

The review is only for general conformance with design concepts given in the contract documents. Subcontractor is responsible for dimensions, quantities, coordination with other trades and performing his work in a safe manner. No change to contract requirements is intended.

Straight Blade Receptacles Industrial Extra Heavy-Duty Specification Grade Receptacles

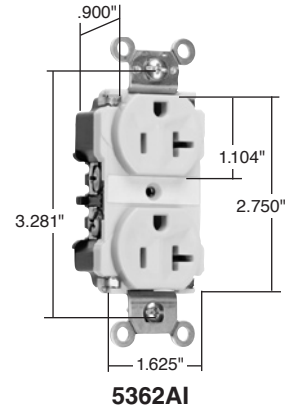
15 & 20A, 125 & 250V

Pass & Seymour



Straight Blade Receptacles

Features	
<ul style="list-style-type: none"> ■ One-piece brass mounting strap with integral ground. ■ Strap tabs wrap around and lock down on face to prevent strap from separating from face and back body. ■ Two drive screws anchor strap to back body and face. ■ Exclusive patented feature, circuit label on face allows permanent circuit identification. ■ .036 inch thick, brass, triple-wipe power contacts for lasting retention. ■ Easily accessed break-off, line-contact connecting tab for fast, easy split-circuit wiring. ■ Impact-resistant nylon face and back body. ■ Oversized #10 deep tri-drive head brass terminal and ground screws. 	<ul style="list-style-type: none"> ■ Exclusive patented feature, external screw-pressure-plate back wire clamp on ground terminal for faster, easier installation. ■ External screw-pressure-plate back wire clamps with #10 brass terminal screws for visual assurance of a good connection. ■ Line terminals accept #14 – #10 AWG stranded or solid copper clad conductors. ■ Auto-ground clip assures positive ground. ■ Corrosion-resistant models have nickel-plated straps and contacts.



Catalog Number	Rating		Color	NEMA Config. No.	3rd Party Compliance		
	A.	V.			UL UL498	FSUL WC596	CS C22.2 No. 42
Duplex Receptacles Back & Side Wire							
5262AI	15	125	Ivory	5-15R	•	•	•
5262AW	15	125	White	5-15R	•	•	•
5262A	15	125	Brown	5-15R	•	•	•
5262AGRY	15	125	Gray	5-15R	•	•	•
5262ABK	15	125	Black	5-15R	•	•	•
5262ARED	15	125	Red	5-15R	•	•	•
5262ALA	15	125	Light Almond	5-15R	•	•	•
CR6200*	15	125	Yellow	5-15R	•	•	•
5362AI	20	125	Ivory	5-20R	•	•	•
5362AW	20	125	White	5-20R	•	•	•
5362A	20	125	Brown	5-20R	•	•	•
5362AGRY	20	125	Gray	5-20R	•	•	•
5362ABK	20	125	Black	5-20R	•	•	•
5362ARED	20	125	Red	5-20R	•	•	•
5362ALA	20	125	Light Almond	5-20R	•	•	•
5362ABL	20	125	Blue	5-20R	•	•	•
CR6300BR*	20	125	Brown	5-20R	•	•	•
CR6300*	20	125	Yellow	5-20R	•	•	•
5662AI	15	250	Ivory	6-15R	•	•	•
5662AW	15	250	White	6-15R	•	•	•
5662A	15	250	Brown	6-15R	•	•	•
5662AGRY	15	250	Gray	6-15R	•	•	•
5662ABK	15	250	Black	6-15R	•	•	•
5662ARED	15	250	Red	6-15R	•	•	•
5862AI	20	250	Ivory	6-20R	•	•	•
5862AW	20	250	White	6-20R	•	•	•
5862A	20	250	Brown	6-20R	•	•	•
5862AGRY	20	250	Gray	6-20R	•	•	•
5862ABK	20	250	Black	6-20R	•	•	•
5862ARED	20	250	Red	6-20R	•	•	•
5862ALA	20	250	Light Almond	6-20R	•	•	•

*Corrosion-Resistant.

2 Pole, 3 Wire



NEMA
5-15R



NEMA
5-20R



NEMA
6-15R



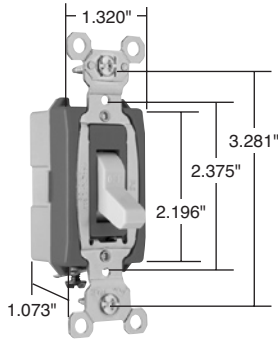
NEMA
6-20R

For Configurable Solutions, see Page U-1.

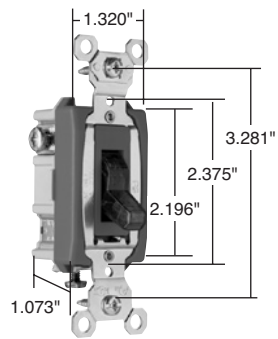
All devices listed on this page conform to NEMA WD-1 and WD-6.

Industrial EHD Spec Grade Receptacles

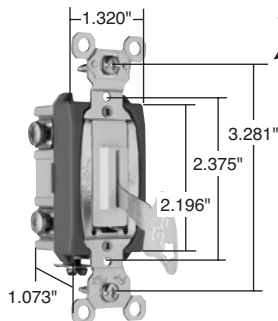
Pass & Seymour



15 & 20 Amp*



15 & 20 Amp Lighted & Pilot Lighted*



Locking*

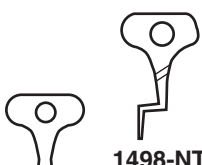
*30AC series is 1.437" wide

Lock Switch Replacement Keys

(One key furnished with each switch)

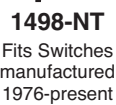


500K
Fits new Switches



1498

Fits Switches manufactured before 1976



1498-NT
Fits Switches manufactured 1976-present

All devices listed on this page conform to NEMA WD-1 and WD-6.

Switches
Industrial Extra Heavy-Duty
Specification Grade Switches

15, 20 & 30A, 120, 277 & 120/277VAC

Features

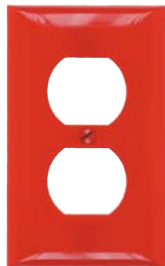
- External screw-pressure-plate back and side wired. Accepts #14 – #10 AWG copper or copper-clad conductors.
- Heavy-gauge one-piece copper alloy contact arm virtually eliminates contact bounce.
- Cam controls fast “make” and positive “break” to minimize arcing.
- Heavy-duty bumper pads for quiet operation.
- High strength thermoplastic polycarbonate toggle.
- Back body made of glass-reinforced nylon.
- Locking support provides resistance to face and back body separation.
- Oversized silver alloy contacts for long life and better heat dissipation.
- Grounding terminal is standard.
- Shallow design for ease of installation.
- Strap nickel-plated steel with integral ground.
- Auto-ground clip assures positive ground.

Catalog Number				Rating A. VAC	Color	3rd Party Compliance		
Single Pole	Double Pole	Three-Way	Four-Way			UL	FSUL	CS
Toggle Switches Back & Side Wire								
PS15AC1I	PS15AC2I	PS15AC3I	PS15AC4I	15 120/277	Ivory	•	•	•
PS15AC1W	PS15AC2W	PS15AC3W	PS15AC4W	15 120/277	White	•	•	•
PS15AC1	PS15AC2	PS15AC3	PS15AC4	15 120/277	Brown	•	•	•
PS15AC1GRY	PS15AC2GRY	PS15AC3GRY	PS15AC4GRY	15 120/277	Gray	•	•	•
PS15AC1LA	PS15AC2LA	PS15AC3LA	PS15AC4LA	15 120/277	Light Almond	•	•	•
PS20AC1I	PS20AC2I	PS20AC3I	PS20AC4I	20 120/277	Ivory	•	•	•
PS20AC1W	PS20AC2W	PS20AC3W	PS20AC4W	20 120/277	White	•	•	•
PS20AC1	PS20AC2	PS20AC3	PS20AC4	20 120/277	Brown	•	•	•
PS20AC1GRY	PS20AC2GRY	PS20AC3GRY	PS20AC4GRY	20 120/277	Gray	•	•	•
PS20AC1BK	PS20AC2BK	PS20AC3BK	PS20AC4BK	20 120/277	Black	•	•	•
PS20AC1RED	PS20AC2RED	PS20AC3RED	PS20AC4RED	20 120/277	Red	•	•	•
PS20AC1LA	PS20AC2LA	PS20AC3LA	PS20AC4LA	20 120/277	Light Almond	•	•	•
PS30AC1I	PS30AC2I	PS30AC3I		30 120/277	Ivory	•	•	•
PS30AC1W	PS30AC2W			30 120/277	White	•	•	•
PS30AC1	PS30AC2	PS30AC3		30 120/277	Brown	•	•	•
Lighted Toggle Switches (Lighted when OFF) Back & Side Wire								
PS15AC1CSL		PS15AC3CSL		15 120/277	Clear	•	•	•
PS15AC1ISL		PS15AC3ISL		15 120/277	Ivory	•	•	•
PS15AC1WSL		PS15AC3WSL		15 120/277	White	•	•	•
PS20AC1CSL		PS20AC3CSL		20 120/277	Clear	•	•	•
PS20AC1ISL		PS20AC3ISL		20 120/277	Ivory	•	•	•
PS20AC1WSL		PS20AC3WSL		20 120/277	White	•	•	•
PS20AC1LASL		PS20AC3LASL		20 120/277	Light Almond	•	•	•
Pilot Lighted Switches (Lighted when ON) Back & Side Wire								
PS15AC1CPL		PS15AC3CPL		15 120	Clear	•	•	•
PS15AC1RPL		PS15AC3RPL		15 120	Red	•	•	•
PS20AC1CPL		PS20AC3CPL		20 120	Clear	•	•	•
PS20AC1CPL7				20 277	Clear	•	•	•
PS20AC1RPL		PS20AC3RPL		20 120	Red	•	•	•
PS20AC1RPL7		PS20AC3RPL7		20 277	Red	•	•	•
	PS20AC2CPL			20 120/277	Clear	•	•	•
	PS20AC2RPL			20 120/277	Red	•	•	•
PS30AC1RPL		PS30AC3RPL		30 120	Red	•	•	•
	PS30AC2RPL			30 120/277	Red	•	•	•
Lock Switches (Key can be removed in both positions) Back & Side Wire								
PS15AC1L		PS15AC3L		15 120/277	Gray	•	•	•
PS20AC1IL	PS20AC2IL	PS20AC3IL	PS20AC4IL	20 120/277	Ivory	•	•	•
PS20AC1WL	PS20AC2WL	PS20AC3WL	PS20AC4WL	20 120/277	White	•	•	•
PS20AC1L	PS20AC2L	PS20AC3L	PS20AC4L	20 120/277	Gray	•	•	•
		PS20AC3REDL	PS20AC4REDL	20 120/277	Red	•	•	•
PS20AC1LAL	PS20AC2LAL	PS20AC3LAL	PS20AC4LAL	20 120/277	Light Almond	•	•	•

Wall Plates Specifications



Thermoset SP Series



Nylon TP Series



Screwless Polycarbonate SWP & SW Series

Application

Pass & Seymour/Legrand's broad line of Standard Size Plastic and Metal Wall Plates features the most complete range of types, sizes, colors, and finishes available. Choose from more than 1,900 standard plates in non-combustible thermoset plastic material, self-extinguishing nylon material, screwless polycarbonate material, or attractively finished metal, for residential, commercial, institutional, and industrial applications. All plastic wall plates color match to Pass & Seymour/Legrand devices.

Thermoset Plastic Wall Plates Features

- Molded of non-combustible mar-proof material.
- Available in "SP" series in Standard, Junior-Jumbo, and Jumbo sizes.
- Seven standard colors available – Ivory, White, Brown, Gray, Black, Red, and Light Almond.
- Individually wrapped with color-matching screws.
- Resistant to discoloration, grease, oil, solvent and moisture.
- Nominal thickness, .070"

TradeMaster® Thermoplastic Wall Plates Features

- Molded of rugged, practically indestructible self-extinguishing nylon. ("TP" series only.)
- Available in "TP" series, extra 3/16" width and height than Standard size plates; and "TPJ" series, extra 3/16" width and height than Junior-Jumbo size plates.
- Available in Ivory, White, Brown, Gray, Black, Blue, Orange, Red, and Light Almond.
- Preferred for hospital, industrial, institutional, and other high-abuse applications.
- Nominal thickness, .070"

Screwless Polycarbonate Wall Plates Features

- Molded of .065" thick polycarbonate with matte finish.
- 2-piece plastic subplate made of polycarbonate ("SWP" Series only).
- Metal subplate made of .042" zinc-plated steel ("SW" Series only).
- Extra 1/8" width and height than Standard size plates.
- Available in Ivory, White, Brown, Gray, Black, and Light Almond.
- Oversized opening to accommodate all NEMA 26 decorator-style openings.

Metal Wall Plates Features

- Constructed of corrosion-resistant stainless steel, brass, aluminum, chrome, brushed bronze or galvanized steel.
- Standard, Jumbo, and Tandem size plates available, as well as special Panel size plates up to 5-gangs high and 10-gangs wide.
- Packaged in protective film, with finish-matching screws.
- Variety of special plated finishes. Paintable to match plastic plates.
- Can be silk-screened or engraved, and custom punched with over 300 opening styles.

Materials

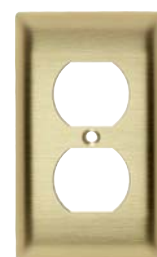
- Type 302 Stainless Steel, non-magnetic, .032" nominal thickness, brushed finish. This alloy contains 18% chromium and 8% nickel for superior resistance to corrosion. Recommended for use in food processing plants, dairies, chemical plants, and other industrial, institutional, and commercial applications where corrosive atmospheres exist.
- Type 430 Stainless Steel, magnetic, .032" nominal thickness, brushed finish. Less corrosion-resistant than Type 302, but ideal for general service in high abuse applications in industrial plants, commercial, and institutional buildings.
- Chrome, Brushed and Polished Brass, .040" thick. 70% copper, 30% zinc alloy gives warm, appealing finish to modern decor as well as retrofit applications. Lacquered to prevent corrosion.
- Aluminum, .040" thick. Lustrous satin finish. Lacquered to prevent corrosion.
- Galvanized Steel. Used only for Handy Box Plates.
- Brushed Bronze, .040" thick. 90% copper, 10% zinc. Lacquered to prevent corrosion.



302 Stainless Steel



Polished Brass



Brushed Brass



Aluminum



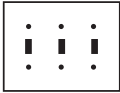





Wall Plates

Toggle Switch Openings

Standard Size Plastic & Metal

Pass & Seymour



Description	Color	Nylon	Thermoset	Metal	
		TradeMaster® Plates	Smooth	Material	Smooth
Toggle Switch Openings					
One Gang 	Ivory White Brown Gray Black Red Light Almond	TP1I TP1W TP1 TP1GRY TP1BK TP1RED TP1LA	SP1I SP1W SP1 SP1GRY SP1LA	Aluminum Brass Polished Brass 430S/S 302S/S Brushed Bronze Chrome	SA1 SB1 SB1PB SL1 SS1 SB1BZ SB1CH
Two Gang 	Ivory White Brown Gray Black Red Light Almond	TP2I TP2W TP2 TP2GRY TP2BK TP2RED TP2LA	SP2I SP2W SP2 SP2GRY SP2LA	Aluminum Brass Polished Brass 430S/S 302S/S Brushed Bronze Chrome	SA2 SB2 SB2PB SL2 SS2 SB2BZ SB2CH
Three Gang 	Ivory White Brown Gray Black Red Light Almond	TP3I TP3W TP3 TP3GRY TP3BK TP3RED TP3LA	SP3I SP3W SP3 SP3GRY SP3LA	Aluminum Brass Polished Brass 430S/S 302S/S Brushed Bronze Chrome	SA3 SB3 SB3PB SL3 SS3 SB3BZ SB3CH
Four Gang 	Ivory White Brown Gray Black Red Light Almond	TP4I TP4W TP4 TP4GRY TP4BK TP4RED TP4LA	SP4I SP4W SP4 SP4GRY SP4LA	Aluminum Brass Polished Brass 430S/S 302S/S	SA4 SB4 SB4PB SL4 SS4
Five Gang 	Ivory White Brown Gray Black Light Almond	TP5I TP5W TP5 TP5GRY TP5BK TP5LA	SP5I SP5W SP5 SP5GRY SP5LA	Brass Polished Brass 302S/S	SB5 SB5PB SS5
Six Gang 	Ivory White Brown Gray Black Light Almond	TP6I TP6W TP6 TP6GRY TP6BK TP6LA	SP6I SP6W SP6GRY SP6LA	Polished Brass 302S/S	SB6PB SS6
Seven Gang 				302S/S 302S/S Painted Ivory 302S/S Painted White	SS601 SS601I SS601W
Eight Gang 				302S/S 302S/S Painted Ivory 302S/S Painted White	SS602 SS602I SS602W

Description	Color	Nylon	Thermoset	Metal	
		TradeMaster® Plates	Smooth	Material	Smooth
Duplex Receptacle Openings					
One Gang 	Ivory White Brown Gray Black Red Light Almond Blue Orange	TP81 TP8W TP8 TP8GRY TP8BK TP8RED TP8LA TP8BL TP8OR	SP81 SP8W SP8 SP8GRY SP8LA	Aluminum Brass Polished Brass 430S/S 302S/S Brushed Bronze Chrome	SA8 SB8 SB8PB SL8 SS8 SB8BZ SB8CH
Two Gang 	Ivory White Brown Gray Black Red Light Almond Orange	TP821 TP82W TP82 TP82GRY TP82BK TP82RED TP82LA TP82OR	SP821 SP82W SP82 SP82GRY SP82LA	Aluminum Brass Polished Brass 430S/S 302S/S Brushed Bronze Chrome	SA82 SB82 SB82PB SL82 SS82 SB82BZ SB82CH
Three Gang 	Ivory White Brown Gray Light Almond		SP831 SP83W SP83 SP83GRY SP83LA	Brass Polished Brass 302S/S	SB83 SB83PB SS83
Four Gang 	Ivory White Brown Gray		SP841 SP84W SP84 SP84GRY	Polished Brass 302S/S	SB84PB SS84
Five Gang 				302S/S	SS85
Six Gang 				302S/S	SS86
Decorator Openings					
One Gang 	Ivory White Brown Gray Black Red Light Almond Blue Orange	TP261 TP26W TP26 TP26GRY TP26BK TP26RED TP26LA TP26BL TP26OR	SP261 SP26W SP26 SP26GRY SP26BK SP26LA	Aluminum Brass Polished Brass 430S/S 302S/S Brushed Bronze Chrome	SA26 SB26 SB26PB SL26 SS26 SB26BZ SB26CH

GFCIs TradeMaster® & Specification Grade GFCI Receptacles

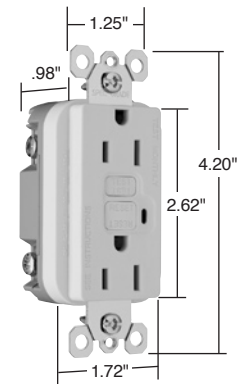
2 Pole, 3 Wire Grounding 15 & 20A, 125VAC

Pass & Seymour

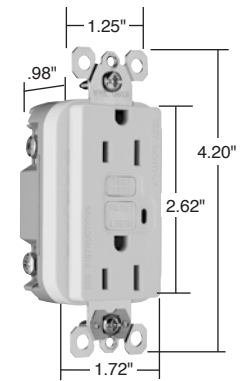


GFCIs

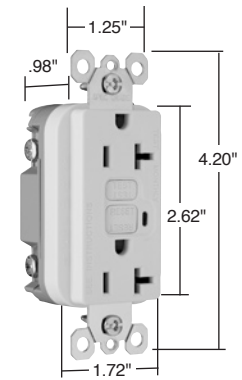
Features	
<ul style="list-style-type: none"> SafeLock™ Protection: if critical components are damaged and ground fault protection is lost, power to receptacle is disconnected. Prevents line-load reversal miswire: no power to the face or downstream receptacles if wired incorrectly. Exceeds UL943 voltage surge requirements; survives 100x the required UL 3kA/6kV voltage surge test cycles. FSUL Listed (Federal Specification WC596). Trip indicator light (red LED). Side or internal screw-pressure-plate back wire with #10 – #14 AWG solid or stranded copper wire. Two back wire holes per terminal. Ground screw has a back wire clamp for easy installation. 	<ul style="list-style-type: none"> 1/4" thinner than competitors' GFCIs; leaves more room for wires in the box. Mounting screws are shipped captive in the device and wall plate for easier installation. High-impact-resistant thermoplastic construction. Extra-long strap. Button colors match the device face. Dual-direction test and reset buttons. Class A rated GFCI. Supplied with matching TP26 nylon wall plate. Tri-drive screws. GFCIs with Auto-Ground assure a positive ground to metal box.
Specifications	
<ul style="list-style-type: none"> Supply Voltage: 125VAC, 60 Hz Supply Voltage Range: 102-132 VAC Trip Threshold: 5± 1mA 	<ul style="list-style-type: none"> Trip Time: 0.025 sec., nominal per UL Standard 20 Amp feed-thru capacity



1595W



1595SW



2095W



NEMA 5-15R



NEMA 5-20R

Catalog Number	Rating A.	VAC	Color	NEMA Config. No.	3rd Party Compliance		
					UL943 C22.2 No. 144	UL498 C22.2 No. 42	FSUL WC596
TradeMaster®/Spec Grade 15 Amp Duplex GFCI							
1595I	15	125	Ivory	5-15R	•	•	•
1595W	15	125	White	5-15R	•	•	•
1595	15	125	Brown	5-15R	•	•	•
1595GRY	15	125	Gray	5-15R	•	•	•
1595BK	15	125	Black	5-15R	•	•	•
1595RED	15	125	Red	5-15R	•	•	•
1595LA	15	125	Light Almond	5-15R	•	•	•
TradeMaster®/Spec Grade 15 Amp Duplex GFCI with Auto-Ground							
1595SI	15	125	Ivory	5-15R	•	•	•
1595SW	15	125	White	5-15R	•	•	•
1595SLA	15	125	Light Almond	5-15R	•	•	•
Specification Grade 20 Amp Duplex GFCI							
2095I	20	125	Ivory	5-20R	•	•	•
2095W	20	125	White	5-20R	•	•	•
2095	20	125	Brown	5-20R	•	•	•
2095GRY	20	125	Gray	5-20R	•	•	•
2095BK	20	125	Black	5-20R	•	•	•
2095RED	20	125	Red	5-20R	•	•	•
2095LA	20	125	Light Almond	5-20R	•	•	•
Specification Grade 20 Amp Duplex GFCI with Auto-Ground							
2095SI	20	125	Ivory	5-20R	•	•	•
2095SW	20	125	White	5-20R	•	•	•
2095SLA	20	125	Light Almond	5-20R	•	•	•

For Configurable Solutions, see Page U-1.

Available in Bulk Packaging, i.e. 1595W20 is 20 pack, 1595W100 is 100 pack. Please contact Customer Support at 1-800-223-4189.

All devices listed on this page conform to NEMA WD-1 and WD-6.

TradeMaster® & Spec Grade GFCI Receptacles