STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ENGINEER'S DAILY REPORT

AECOM/LAN Engineering Consultant GLi 01/13/2010

REPORT NO. 122 {7-day}{ + 1210 Project Work Day}

DATE: January 08, 2010

M T W T F S S (DAY)

NORMAL WORK HOUR: START: 6:00AM STOP: 3:30PM

WEATHER: OVERCAST/SUNNY

LOCATION :

Construction Field Office : 333 Burma Road, Oakland 94607

Working Drawing Campus Office : 375 Burma Road, Oakland 94607

04-SF-80-13.2/13.9
Contract No. 04-0120F4
{SAS Superstructure}

Caltrans Supervisor:
Gary Lai
Senior Bridge Engineer

Office Work:

- **MEP CCO Status Meeting (9:00 AM – WDC Conference Room) Caltrans / Design**
  - Went over the status of the ongoing CCO's and related issues with the design groups. See attachment #1 for agenda and issues brought up during the meeting.

- **CCO / RFI – MEP Issues**
  - Reviewing the final CCO # 75 package before being issues to the contractor.
  - Reviewing CCO # 83 package and cover letter before being issued to contractor. Hold on package to include RFI #2007R0 into it. PB performing design and plan changes.
  - Discussed my review comments for CCO # 79 with Nick King and Bill Shedd. Sent the comments to Sam Patel and Sandra Michelotti to include in their package of comments. See attachment #2.

- **Shop Drawing Status List Update (PB review/comment completion list) :**
  - Updates the shop drawing list to include this week imports in PMIV and the status of PB review on the shop drawings being reviewed.

Any questions or comments you can reach me at (916) 919-7158. My E-Mail address is Mike.Travis@aecom.com or Michael_Travis@dot.ca.gov

END OF REPORT

0545-1600 @ Total 8 hours regular

RECD H32 FEB-03 #011882

Attachments:

1. CCO Meeting Agenda/Status with issues discussed and attendance.
2. Review Comments for CCO # 79 sent to Sandra Michelotti.

SIGNATURE

Michael F. Travis

Name: Michael F. Travis

TITLE: Electrical Engineer –AECOM/ LAN Engineering

BAY BRIDGE

SFOBB SELF ANCHORED SUSPENSION BRIDGE
CALTRANS PROJECT NO. 04-0120F4
ABFJV PROJECT NO. 660110

January 08, 2010 Meeting Comments

Attachment #1 (1/1)

MEP CCO WEEKLY STATUS MEETING NO. 113

December 18, 2009 - 9:00 a.m.

Attendees:

X George Bon-Ghosn (CT)	X Andrew Rauenbuehler (TYLin)	X Sandra Michelotti (CT)	Tom Ho (TYLin)
X Bill Shedd (CT)	Scott Fabel (CT)	X Rob Feather (CT)	X Sharad (Sam) Patel (CT)
X April Smith - AUTHOR (CT)	X Saeed Shalmirzai (PB)	X Martin Chandrawinata (CT)	Trish Stoops (BATA)
X Michael Travis (CT)	X Ray Morgan (PB)	X Nick King (PB)	X Alex Bisni (BATA)

Need to schedule CRM with contractor.

New Business:

Date		Issue	Action	Resolution
8/14/09	1	TARGET ISSUE SEQUENCE		New sequence of CCOs: 75, 70, 79, 83, 99, & 114 Unsequenced include: 4451, 59, 68, 73, 81, 85, 94, 110, & 130
12/18/09	2	Handhole Access on Belvedere Light Poles	TYLin to confirm why change was made on the Skyway.	

CCO STATUS

CCO / CCR NO.	DESCRIPTION	MTG DATE	ACTIONS	CRM DATE	PRIORITY	DUE DATE	BIC	
24S1	Traveler Mechanical & Shop Test							
	Spec. Change	12/18/09	PB to submit 1 sheet by 12/31/09.		A	12/31/09	PB	
			Pipe changes deleted no longer required in agenda list					
44S1	West End Barrier Conduit							
	CCR 81, Plan Sheet	8/7/09	Reviews for info submitted complete. On hold until 11/6/09.		C	11/6/09	CT	OK
		11/6/09	On hold until 2/20/10.			2/20/10		
59	Additional OBG Penetrations							
	RFIs 834R0, R1, 1670, SUB 952	9/11/09	Labor rate with Team China still being resolved.	11/14/08	A		CT	OK
		10/30/09	Mike continues with charts of attachments and penetrations for Lifts 9 & 10					
68	Additional Tower Penetrations							
	RFIs 1029R0-R3, SUB-1160R0-R3	10/16/09	Mike & Martin continue to develop.	11/14/08	A			OK
70	Tower Utility Panels							
	CCR 42 & RFIs 1134R0, 706R0, 707R1, 994, 1932R0, Spec. Change	12/11/09	PB Draft V.4 to be submitted by 12/18/09	12/4/09	A	~~12/18/09~~ 12/24/09	~~PB~~ CT	
	CCR 42 - Tower Utility Panel changes, including panels, transformers, circuit breakers							
73	Bike Path Conduit							
	RFI 969R0, R1, Spec. Change	12/4/09	PB Draft V.1 Due Date is 1/29/10.	1/29/10	C	1/29/10	PB	OK
	Unsightly conduit on Skyway & SAS							
75	Electrical Grounding							
	CCR 58, RFI 1462R0	12/4/09	Under review by CCO Group before it is issued as an ATP.	TBD	C	11/20/09	CT	OK
79	Tower Base MEP							
	CCR 43	12/11/09	PB Draft V.3 to be submitted by 1/29/10.	TBD	C	1/29/10	PB	
	CCR 43 - Tower interior design issued at 3-9m, lighting illumination deficiency & grating for sump pump		Discussed review comments after meeting - PB to address comments.					
81	TOS Modifications							
	RFI 1133R0	10/2/09	PB Draft V.1 due date 12/2010	TBD	C	12/1/09	PB	OK
	Relocation of TOS cameras at 144.165m to include new locations and new camera. SCADA changes							
83	Miscellaneous Mechanical							
	RFIs 738, 1219, 1471, 1404R3, 1871 & CCR 80, Spec. Change	12/18/09	Will ATP 5 Sheets by 1/5/10	TBD	C	1/5/10	CT	
			Additional work to be added to CCO - RFI #2007					
85	Elevator Details							
	RFIs 536, 734R1, R2, 994, 1161R0 & SUB 235R0, Spec. Change	10/23/09	Meeting with USA Hoist on 10/27/09.	TBD	B	10/27/09	TYL PB CT	
		11/6/09	CT expecting USA Hoist shop drawings by 11/13/09. CCO development will continue with Sub review.			11/13/09		
	Posted comments on PMIV	11/20/09	CT still waiting for USA Hoist shop drawings. No date given. CCO development will continue with Sub review.					
110	MEP Integration							
		9/25/09	Target due date for 95% package delivery is 12/1/09 from PB.	6/2/09	C	12/1/09	PB	OK
		11/6/09	Target due date for 95% package delivery is 12/30/09 from PB.			12/30/09		
		12/4/09	Target due date for 95% package delivery is 1/29/10 from PB.			1/29/10		
		12/18/09	Target due date for 95% package delivery is 3/1/10 from PB.			3/1/10		
130	Dehumidifier SCADA Interface							
	RFI 1848, SUB. 129	10/9/09	PB to submit CCO package to CT 4 weeks after ABF submits the Munters Submittal.		B		PB	OK
		10/30/09	Bill to confirm Munters status.					
		11/6/09	CT waiting for submittal which is expected by 11/13/09. Shedd to confirm.			11/13/09		
		11/16/09	PB Draft V.1 to be submitted by 12/18/09.			12/18/09		
		12/4/09	PB Draft V.1 to be submitted by 1/29/10.			1/29/10		
131	MEP MOH							
	Spec. Change	10/23/09	Sam - reviewing electrical quantities, Rob - reviewing mechanical quantities, Scott - drafting CCO & Memo		B		CT	OK
		11/6/09	Draft CCO under review. Awaiting approval from Bill & Gary Pursell					
		12/11/09	ABF completed review. Bill & Scott to review.					
		12/18/09	ABF completed review. Bill & Scott to revise and ATP.					

CCR STATUS

31	East Span Light Poles & Luminaires							
	RFIs 159R0, R1	11/20/09	Scott refining draft CCO. Target for 12/01/09 for Gary's review.			12/1/09	CT PB	OK
		12/4/09	Meeting is scheduled with Bleyco for next week. Will consider alternate lighting sources (LED)					
		12/11/09	Saeed to meet with Bleyco & CT Maintenance (lighting) on 12/16 to explore LED options.					
		12/18/09	Saeed to meet with Bleyco & CT Maintenance (lighting) on 3/8/10 to status action items and monitor LED technology.					

Review Comments for CCO#79 - MFT

PB Response: Agree. Penetration plate will be relocated at the location specified on shop drawing ED1-A27A/E.

- At what elevation is detail 1 and detail 2 located (9.350)?
  PB Response: Detail 1 is a partial plan of Elevation 11.000 m and Detail 2 is a partial plan of Elevation 9.350 m. Drawing will be revised to reflect the elevation information accordingly.

Sheet 273S1

- See general comment # 1.
  PB Response: Agree.
- Detail 1
  - There could be a conflict with the pedestal location.
  - Field wield is not possible, see RFI # 1426R0.
  - There should be only one option, either detail 1 or detail 2.

  PB Response: Agree. The information depicted on Detail 1 will be completely eliminated.
- Detail 2
  - Field wield is not possible, see RFI # 1426R0.
    PB Response: Agree. Drill and tap holes will be used in lieu of field welds.
  - There should be only one option, either detail 1 or detail 2.
    PB Response: Detail 2 will be used for light switches installation and will be renamed to Detail 1 since the original Detail 1 will be deleted.

Sheet 274R1

- See general comment # 1.
  PB Response: Agree.
- Note #2 calls for a "straight-blade plug" to be installed but note #3 calls for a "locking" receptacle to be installed. Please verify with the approved T. Y. Lin submittal regarding the cord and plugs.
  PB Response: The requirement of twist-lock type plug has been addressed by PB in the response to RFI-124R0. In addition, receptacle and plug NEMA type designation were changed from L6-20 to L5-20 on this plan sheet. This is because NEMA type "L6" is for 250V and "L5" is for 125V. Per the contract design requirement, only 120V is required.
- Has it been coordinated with Structures to weld to the tower shaft/skin?
  PB Response: Drill and tap holes will be used in lieu of field welds.
- Detail 1 – Where on the tower is "F4" light located?
  PB Response: Detail 1 is no longer applicable thus, it will be deleted. This detail was originally intended for the light fixture mounted on a folding handrail at tower platform elevation 53.85 at the OBG/tower access area.
- Detail 2
  - Please verify that the brackets are in the shop drawings.
  - Where is the railing located?

  PB Response: Detail 2 is no longer required since this detail is solely used for Detail 1 which is being deleted.

Plug CAN NOT Be Twist Lock From manufacturer Do NOT WANT To Field modify Spec Receptacle For STRAIGHT Blade

NOT RFI Sub-12HRO See ATTached

Have 'Wink in use Cover' See ATTached

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SF	80	13.2/13.9	274	1204

Attachment #2 (2/7)

12-6-04
PLANS APPROVAL DATE

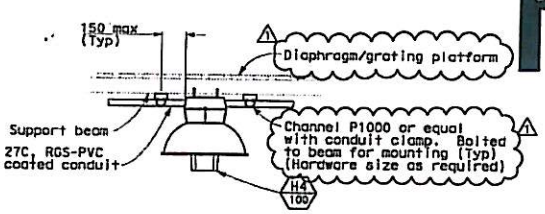
PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — ELECTRICAL

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

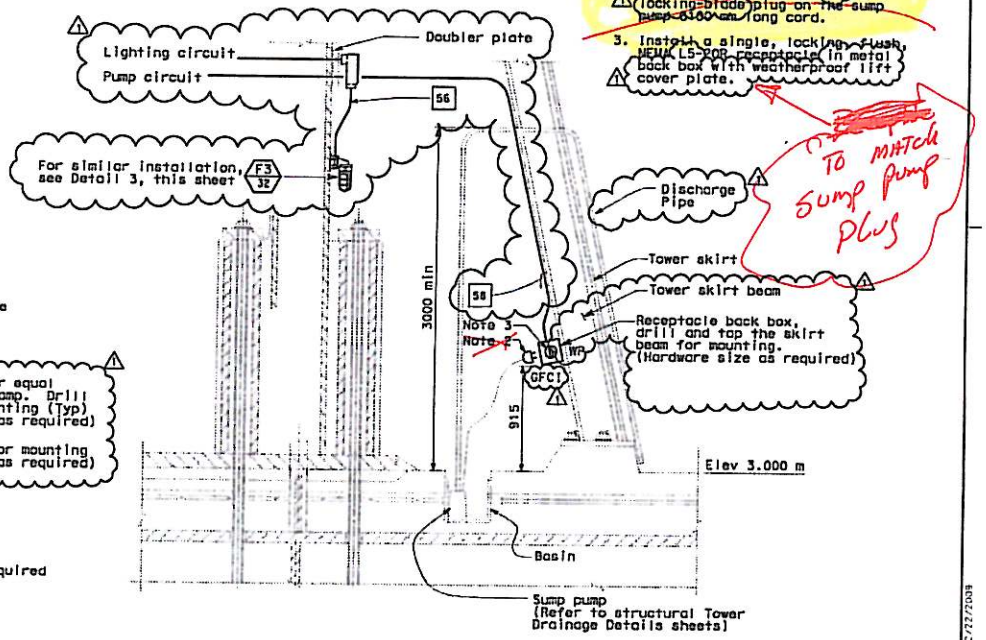
Caltrans Metric



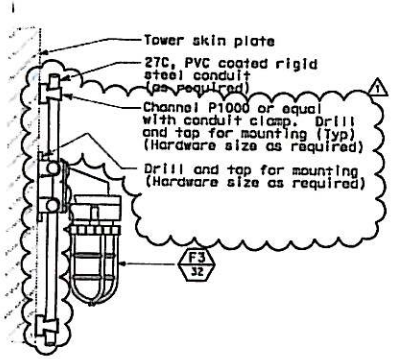
DETAIL 5
CEILING MOUNT
NO SCALE

NOTES:

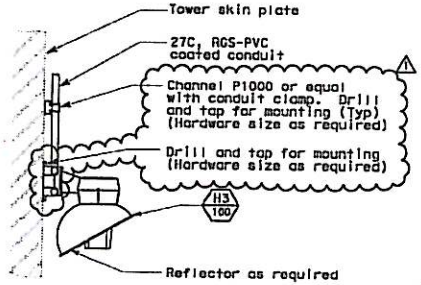
1. Fittings and mounting hardwares shall be stainless steel. For additional requirements, see Electrical Special Provisions.
2. Install a 20 amp, 125 V, 2-pole, 3-wire grounding, NEMA L5-20P locking-blade plug on the sump pump 6100 cm long cord.
3. Install a single, locking, flush, NEMA L5-20R receptacle in metal back box with weatherproof lift cover plate.



To match sump pump plug



DETAIL 3
ACCESS LIGHTING
TOWER SKIN/SHAFT MOUNTED
NO SCALE



DETAIL 4
WALL MOUNT
NO SCALE

REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — ELECTRICAL

FOR REVISION ONLY

DETAIL 6
SUMP PUMP BASIN INSTALLATION
NO SCALE

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS ECO REMAIN IN FORCE

MARK	DATE	REVISIONS DESCRIPTIONS	BY	CH'D	ECO#
1	12/23/08	TOWER BASE MEP	AM ANG	RG FW	79

CONTRACT CHANGE ORDER NO._____
SHEET_____ OF _____

DETAILS
TOWER AND SUSPENSION CABLE
TYPICAL LIGHTING INSTALLATION
SCALE AS NOTED

E-267

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN OVERSIGHT	CALCULATED/DESIGNED BY	CHECKED BY	DATE	REVISED BY
Caltrans	BEHZAD GOLEMOHAMMADI	AB	AB	10/01	JE
				11/01	DATE REVISED 2/04

FOR REDUCED PLANS ORIGINAL 0 20 40 60 80

DGN FILE ...\eco-79\04-0120f1_0274r01.dgn

DATE PLOTTED = 12/22/2008

Recommends TO ABF (1/2)

"Quality Pumps Since 1939"

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

ZOELLER PUMP CO.

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

SECTION: 2.20.035
FM0973
0304
Attachment #2 (3/7)
0403

visit our web site:
http://www.zoeller.com

COMPARE THESE FEATURES

- Non-clogging engineered plastic vortex impeller design.
- Corrosion resistant powder coated epoxy finish.
- Durable cast construction. Cast switch case, motor, pump housing and base. No sheet metal parts to rust or corrode.
- Castings - All cast iron class 25-30 25000# tensile strength.
- Stainless steel screws, guard, handle, arm and seal assembly.
- Float operated submersible (NEMA 6) 2-pole mechanical switch.
- Motor - Permanent split capacitor, 60 Hz, 1725 RPM, oil-filled, hermetically sealed, automatic reset thermal overload protection.
- Bearings - Upper & lower oil fed cast iron.
- Carbon and ceramic shaft seal.
- Entire unit pressure tested after assembly.
- Watertight neoprene "□" ring between motor and pump housing.
- Maximum temperature for effluent or dewatering 130°F - 54°C.
- Passes ½ inch spherical solids.
- No screens to clog.
- Standard cord length 15 ft. (UL Listed).
- 1½" NPT Discharge (1½" X 2" PVC Adapter included with BN & BE Models).
- On point - 9½"
- Off point - 3"
- Major width - 10 ⅛"
- Height - 12"

SIMPLEX AND DUPLEX SYSTEMS AVAILABLE

PACKAGED SYSTEMS AVAILABLE

Note: The sizing of effluent systems normally requires variable level float(s) controls and properly sized basins to achieve required pumping cycles or dosing timers with nonautomatic pumps.

98 Cast Iron Series

"FLOW-MATE"

(FOR PUMP PREFIX IDENTIFICATION SEE NEWS & VIEWS 0052)

FOR SEPTIC TANK
LOW PRESSURE PIPE (LPP)
AND ENHANCED FLOW STEP SYSTEMS

EFFLUENT
OR DEWATERING PUMP

SUBMERSIBLE
1½" NPT DISCHARGE

Tested to UL Standard UL778 and Certified to CSA Standard C22.2 No. 108

MODELS AVAILABLE

- Automatic or Nonautomatic
- ½ HP, 1 Ph., 115V or 230V
- Available with Piggyback Variable Level Float Switch.

SSPMA MEMBER SUMP AND SEWAGE PUMP MFRS. ASSN.

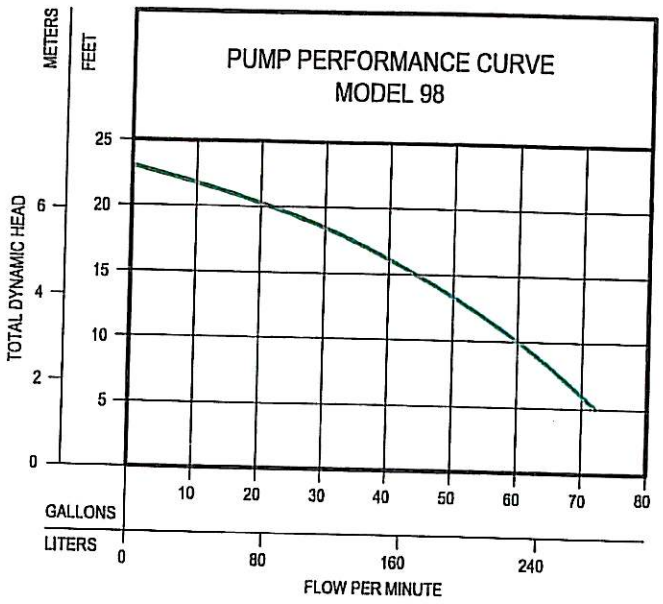
MODEL 98

POWDER COATED TOUGH™

MODEL BN98

Recommended to ABF 2/2

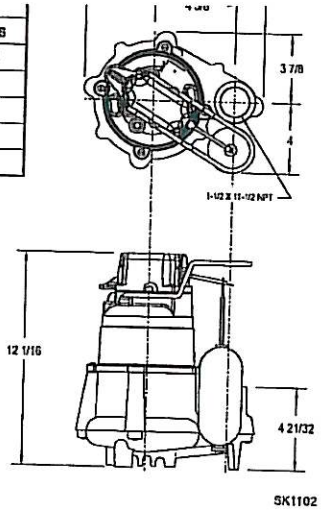
Attachment #2 (4/7)



TOTAL DYNAMIC HEAD/FLOW
PER MINUTE
EFFLUENT AND DEWATERING

MODEL		98	
Feet	Meters	Gal.	Liters
5	1.5	72	273
10	3.0	61	231
15	4.6	45	170
20	7.1	25	95
Shut-off Head:		23 ft.(7.0m)	

009971



SK1102

CONSULT FACTORY FOR SPECIAL APPLICATIONS

- Electrical alternators, for duplex systems, are available and supplied with an alarm.
- Mechanical alternators, for duplex systems, are available with or without alarm switches.
- Variable level float switches are available for controlling single and three phase systems.
- Double piggyback variable level float switches are available for variable level long cycle controls.
- Refer to FM1922 and FM0806 for temperatures above 130°F.

98 Series				Control Selection	
Model	Volts-Ph	Mode	Amps	Simplex	Duplex
M98	115 1	Auto	9.4	1	4
N98	115 1	Non	9.4	2 or 3	4
D98	230 1	Auto	4.7	1	4
E98	230 1	Non	4.7	2 or 3	4

SELECTION GUIDE

1. Integral float operated mechanical switch, no external control required.
2. For automatic use single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. See FM1228 for correct model of simplex control panel.
4. See FM0712 for correct model of duplex control panel or FM1663 for a residential alternator system.

For information on additional Zoeller products refer to catalog on Piggyback Variable Level Switches, FM0477; Electrical Alternator, FM0486; Mechanical Alternator, FM0495; Sump/Sewage Basins, FM0487; Single Phase Simplex Pump Control, FM1596; Alarm Systems, FM0732.

CAUTION

All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).

RESERVE POWERED DESIGN

For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.

http://www.zoeller.com

ZOELLER PUMP CO.

MAIL TO: P.O. BOX 16347
Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road
Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP
FAX (502) 774-3624

Manufacturers of...
"Quality Pumps Since 1939"

"While-in-Use" Covers

EXAmple

Attachment #2 (5/7)

Elastomeric "While-in-Use" Covers

- Intended for use with watertight and dust-tight elastomeric plugs
- Provides weather protective thermoplastic elastomer seal around receptacle and plug while-in-use
- Stainless steel spring loaded cover
- Mounts to FS and FD boxes
- Available with or without receptacle
- Can be panel mounted to any flat service

NEMA	Rating	Description	Catalog Number
5-15R	15A 125V	Cover, seal and single straight blade receptacle	60W47BRY
—	—	Cover and seal only. Fits single 15A & 20A straight blade and single 15A locking receptacles	6500BRY
5-20R	20A 125V	Cover, seal and single straight blade receptacle	65W47BRY
—	—	Cover and seal only. Fits single 20A & 30A 3-wire locking receptacles	6700BRY
L5-20R	20A 125V	Cover, seal and single locking receptacle	67W47BRY
—	—	Cover and seal only. Fits single 20A & 30A 4-wire locking receptacles	6800BRY

60W47BRY

67W47BRY

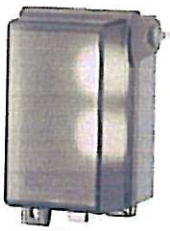
6700BRY

Polycarbonate "While-in-Use" Covers

- Durable corrosion-resistant polycarbonate construction
- Large cord openings
- NEMA 3R rated
- Modular interchangeable device configuration inserts
- Box or device mount
- Latching cover with lockout/tagout capability

Description	Catalog Number Standard	Deep
Single gang, horizontal mount. Supplied with GFCI/Fashion Series and duplex receptacle insert	RB57610	—
Single gang, vertical mount. Supplied with GFCI/Fashion Series and duplex receptacle insert	RB57520	RB57810
Single gang, vertical mount. Supplied with single 1.406" dia. and single 1.595" dia. inserts.	RB57530	RB57800
2-gang, vertical mount. Supplied with (2) GFCI/Fashion Series and (2) duplex receptacle inserts	RB57700	RB57890

RB57610



RB57520

WR & TWR Receptacles

Project Name:	Prepared By:
Project Number:	
Catalog Number:	

Attachment #2 (6/7)

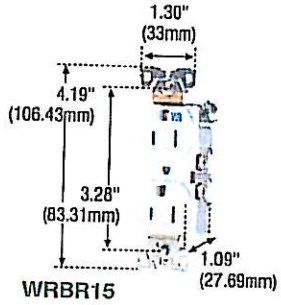
Weather Resistant and Tamper & Weather Resistant Receptacles

2-Pole, 3-Wire
15A 125V/AC
20A, 125V/AC

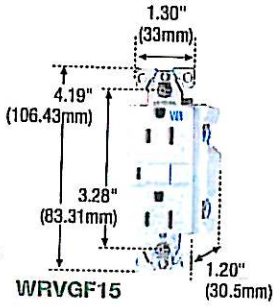
Duplex Receptacles

FEATURES

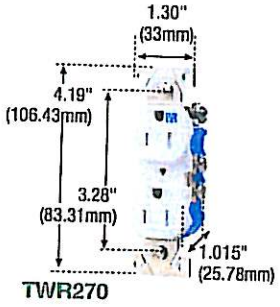
- Provides compliance with 2008 NEC® Article 406.8 that states that all receptacles installed in wet and damp locations must be weather resistant.
- Manufactured with the highest grade materials; durable impact-resistant thermoplastic face and back body is virtually unbreakable.
- "TR" and "WR" designations provide visual identification.
- Terminal screws are backed out and ready to wire.
- Extra-long and extra-wide mounting straps.
- Patented built-in wire stripper for #14 and #12 wire to speed installation.
- Side-wire terminals accept up to #10 solid or stranded wire.
- Push-in terminals accept #14 solid wire (TWR270 duplex devices only).



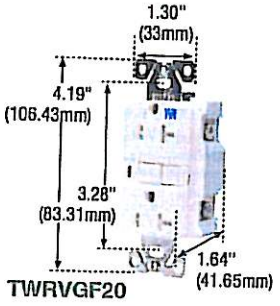
WRBR15



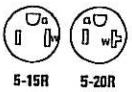
WRVGF15



TWR270



TWRVGF20


5-15R 5-20R

WR Commercial Grade

Rating: A/V		NEMA	Description	Catalog No.	Available Colors
15	125	5-15R	Duplex Receptacle	☐ WRBR15__	W
20	125	5-20R	Duplex Receptacle	☐ WRBR20__	W

WR Specification Grade GFCI

Rating: A/V		NEMA	Description	Catalog No.	Available Colors
15	125	5-15R	Duplex GFCI	☐ WRVGF15__	W
20	125	5-20R	Duplex GFCI	☐ WRVGF20__	W

TWR Residential Grade

Rating: A/V		NEMA	Description	Catalog No.	Available Colors
15	125	5-15R	Duplex Receptacle	☐ TWR270__	W

TWR Commercial Grade

Rating: A/V		NEMA	Description	Catalog No.	Available Colors
15	125	5-15R	Duplex Receptacle	☐ TWRBR15__	W
20	125	5-20R	Duplex Receptacle	☐ TWRBR20__	W

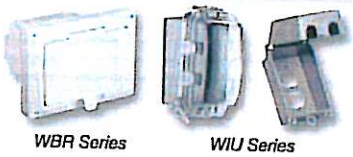
TWR Specification Grade GFCI

Rating: A/V		NEMA	Description	Catalog No.	Available Colors
15	125	5-15R	Duplex GFCI	☐ TWRVGF15__	W
20	125	5-20R	Duplex GFCI	☐ TWRVGF20__	W

For ordering, include Cat. No. followed by the color code: W (White)

Related Products

WeatherBox™


WBR Series WIU Series

Weather protective covers


WLR Series 7400 Series

Wallplates


PJS Series 93000 Series 5100 Series

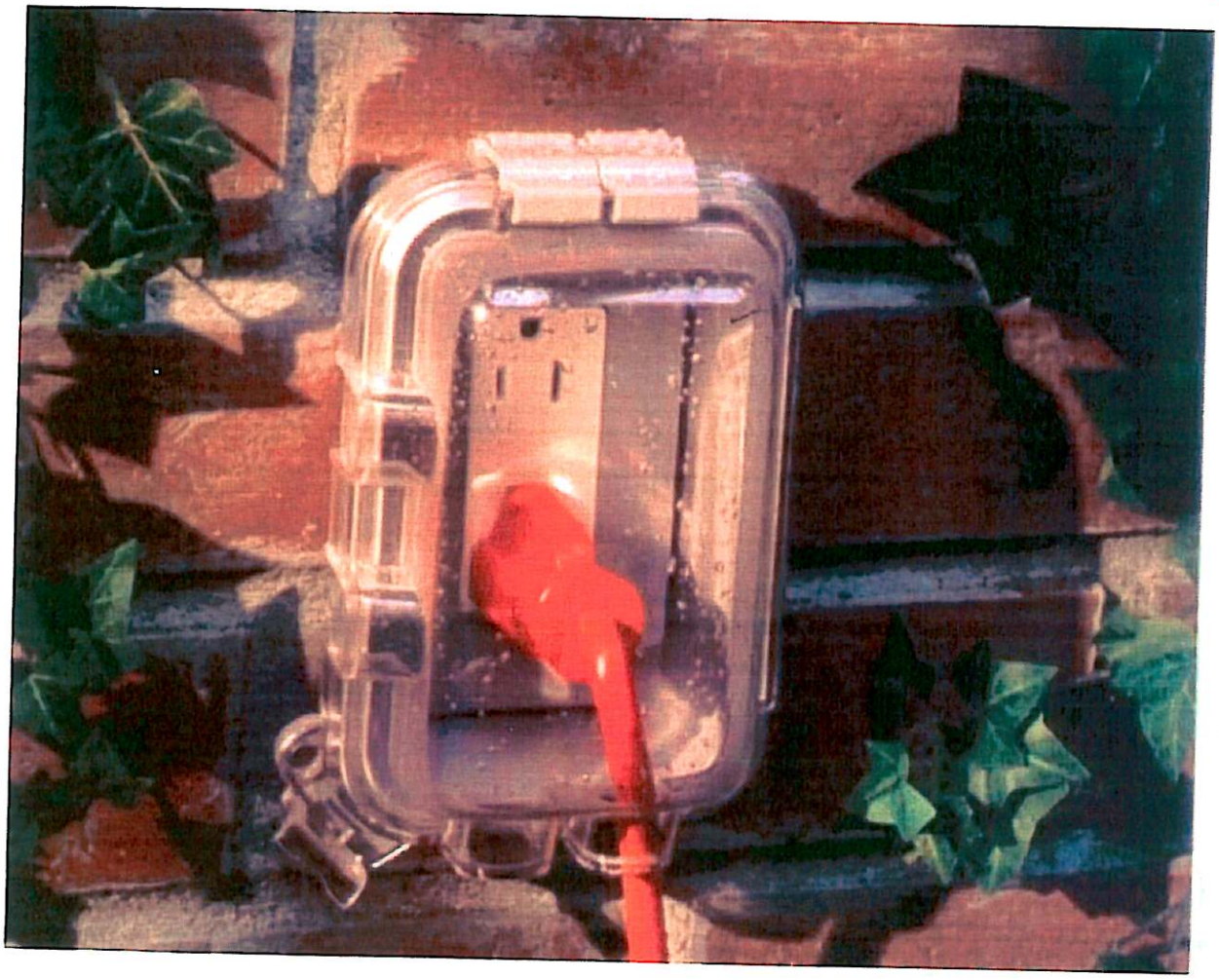
TESTING & CODE COMPLIANCE

- cULus Listed to UL498.
- UL Certified to CSA C22.2, no. 42.
- WRVGF & TWRVGF meet all UL943 (GFCI) and UL498 (Receptacles) requirements.
- WRBR and TWRBR UL verified to Fed. Spec. WC-596G.
- NOM/ANSI Certified.

MATERIAL CHARACTERISTICS

- Environmental: Flammability meets UL94 requirements; TWR270 V0 rated; WRVGF, WRBR, TWRBR, TWRVGF V0 rated.
- Temperature Rating: TWR270: -20°C to 60°C (-4°F to 140°F), WRVGF, TWRVGF: -35°C to 66°C (-31°F to 150.8°F).

Attachment #2 (7/7)



Example