DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



## CITY OF PORTLAND BUILDING PERMIT



This is to certify that CENTRAL SECURITIES CORPORATION

Located At 138 CANCO RD

Job ID: 2012-11-5327-ALTCOMM

CBL: 148- A-006-001

has permission to Renovate kitchen; construct new conference room

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

11/19/2012

**Fire Prevention Officer** 

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY PENALTY FOR REMOVING THIS CARD

#### BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- Please read the conditions of approval that is attached to this permit!! Contact this
  office if you have any questions.
- Permits expire in 6 months. If the project is not started or ceases for 6 months.
- If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.
- 1. Close In Elec/Plmb/Frame prior to insulate or gypsum
- 2. Final Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.

# PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

Director of Planning and Urban Development Jeff Levine

Job ID: 2012-11-5327-ALTCOMM Located At: 138 CANCO RD

CBL: 148- A-006-001

#### **Conditions of Approval:**

#### Building

- Application approval based upon information provided by the applicant or design professional. Any deviation from approved plans requires separate review and approval prior to work.
- 2. Permit approved based on the plans submitted and reviewed w/owner/ contractor, with additional information as agreed on and as noted on plans, for all steel stud construction.
- 3. Equipment shall be installed in compliance with the manufacturer's specifications and the UL listing.
- 4. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
- 5. Approval of City license is subject to health inspections per the Food Code.

#### Fire

- 1. All construction shall comply with City Code Chapter 10. The occupancy shall comply with City Code Chapter 10 upon inspection.
- 2. Any Fire alarm or Sprinkler systems shall be reviewed by a licensed contractor(s) for code compliance. Compliance letters are required.
- 3. A separate Fire Alarm Permit is required for new systems; or for work effecting more than 5 fire alarm devices; or replacement of a fire alarm panel with a different model. This review does not include approval of fire alarm system design or installation. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.
- 4. Fire Alarm system shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.
- A separate Suppression System Permit is required for all new suppression systems or sprinkler work effecting more than 20 heads. This review does not include approval of sprinkler system design or installation.
- 6. The building requires a Knox Box.
- 7. Fire extinguishers are required per NFPA 1.
- 8. Emergency lights and exit signs are required. Emergency lights and exit signs are required to be labeled in relation to the panel and circuit and on the same circuit as the lighting for the area they serve.

Job ID: 2012-11-5327-ALTCOMM Located At: 138 CANCO RD CBL: 148- A-006-001

- 9. Any cutting and welding done will require a Hot Work Permit from Fire Department.
- 10. Walls in structure are to be labeled according to fire resistance rating. IE; 1 hr. / 2 hr. / smoke proof.
- 11. A single source supplier should be used for all through penetrations.
- 12. Installation of a kitchen hood and exhaust system shall require a separate permit. Dan Spaulding (engineer of record) indicates that the hood is existing, as is the cooking equipment. This review does not include approval of any hood or exhaust system design or installation.

#### City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

ESPONSIBLE PERSON IN (	CHARGE OF WORK T	TTLE		DATE	<u> </u>	PHONE
IGNATURE OF APPLICAN	Г АІ	DDRESS		DATE		PHONE
nereby certify that I am the owner of a e owner to make this application as he e appication is issued, I certify that the enforce the provision of the code(s) a	is authorized agent and I agree the code official's authorized re	or that the prope to conform to	all applicable laws of t	his jurisdiction. In addition	on, if a permit for we	ork described in
			112/12/BIN	Date:	Date: ABI	Λ
permit and stop an work.			Min MM		Denied	
False informatin may inv permit and stop all work	•			Denied		d w/Conditions
within six (6) months of	the date of issuance.	Site Plan	n	Approved	Approve	
septic or electrial work.  3. Building permits are void		Subdivis	sion	Interpretation	Requires	
2. Building Permits do not		Flood Z	one	Conditional Use		Require Review
Applicant(s) from meeting Federal Rules.	_	Wetland	ds	Miscellaneous		ist or Landmark
This permit application of	loes not preclude the	Shorelar		Variance	/	
		Special Z	one or Reviews	Zoning Appeal	Historic P	reservation
Permit Taken By: Brad				Zoning Approv	al	
Proposed Project Description Renovate kitchen; construct new of			Pedestrian Activ	ities District (P.A.D.	)	11/13/12
			Signature:	enalp.	(30)	Signature:
			05-	- N/A	(50)	MUBEC'09
	existing kitchen & ad conference room	ld	11/15/12	Approved W( Denied N/A	Conduction	Inspection: Use Group: Type: 38 51
Utility Company	Utility company - ren	ovate	Fire Dept:	\ Amr	0.000	Inspection
Central Maine Power –	Same – Central Maine	Power	140000.00			
Past Use:	Proposed Use:		Cost of Work:			CEO District:
	-		BLDG - Building			I-M
Lessee/Buyer's Name:	Phone:		Permit Type:			Zone:
Business Name:	Contractor Name: TBD		Contractor Addr	ess.		riione.
D. Janes Marrie	Contractor Name		AUGUSTA, ME 04  Contractor Addr			Phone:
138 CANCO RD	CENTRAL MAINE POV	WER CO.	83 EDISON DR			207-623-3521
Location of Construction:	Owner Name:		Owner Address:			Phone:
2012-11-5327-ALTCOMM	11/2/2012		148- A-006-001			

5 M

# General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any operty within the City, payment arrangements must be made before permits of any kind are accepted.

2012-11-5327-A	Honn	
Location/Address of Construction: 138	CANCO ROAD	
Total Square Footage of Proposed Structure/A KITCHEN = 4005F 15 PR COWF RO	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# Block# Lot#  148 Aco6 001	Applicant *must be owner, Lessee or Buyer  Name CENTRAL MAINE POWER CO.  Address 83 EDISON DRIVE  City, State & Zip Augusta, ME 04336	(207) 623-3521 EXT. 2390 BOB MENDER
Lessee/DBA (If Applicable)  N/A	Owner (if different from Applicant)  Name  Address NA  City, State & Zip	Cost Of Work: \$ 140,000  C of O Fee: \$  Total Fee: \$
Current legal use (i.e. single family)  If vacant, what was the previous use?  Note that Proposed Specific use: KITCHEN RENOVE Is property part of a subdivision?  Project description:  Renovate existing kitchen to a code and construct a new room	If yes, please name  get in compliance with the M  570 SF, 1 ST FLOOR hard walls	ICE ROOM CONST.
Contractor's name: Project 13 Curre	ently out to bid	
City, State & Zip	To	elephone:
Who should we contact when the permit is read		•
Mailing address: Spaulding Engineerin		
Please submit all of the information do so will result in the In order to be sure the City fully understands the may request additional information prior to the is this form and other applications visit the Inspecti Division office, room 315 City Hall or call 874-8703. If hereby certify that I am the Owner of record of the rethat I have been authorized by the owner to make this laws of this jurisdiction. In addition, if a permit for we authorized representative shall have the authority to exprovisions of the codes applicable to this permit.	full scope of the project, the Planning and D suance of a permit. For further information ons Division on-line at <a href="https://www.portlandmaine.gov">www.portlandmaine.gov</a> , named property, or that the owner of record application as his/her authorized agent. I agree took described in this application is issued, I certify	evelopment Department  No download copies of or stop by the bential as of Building Misbential as of Portland Maine butes the proposed work and to conform to all applicable that the Code Official's
Signature: Robet Mecal	Date: 10/19/12	

This is not a permit; you may not commence ANY work until the permit is issue

# PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

#### Receipts Details:

Tender Information: Check, Check Number: 267728

Tender Amount: 1420.00

Receipt Header:

Cashier Id: bsaucier Receipt Date: 11/2/2012 Receipt Number: 49899

Receipt Details:

Referance ID:	8632	Fee Type:	BP-Constr
Receipt Number:	0	Payment Date:	
Transaction Amount:	1420.00	Charge Amount:	1420.00

Job ID: Job ID: 2012-11-5327-ALTCOMM - Renovate kitchen; construct new conference room

Additional Comments: 138 Canco

Thank You for your Payment!



## Certificate of Design

Date:	10/17/12			
From:	Spaulding Eng	ineering	5	
These plans and / or	r specifications cov	vering cons	truction work on:	
Kitchen ren	ovations and	d new !	st floor hard walled	
Conference	vec			
Engineer according  DANIELE SPAULDIN No. 6097	to the 2003 Intern	Signature:	gned, a Maine registered Architect / wilding Code and local amendments.  Daniel E. Spaulding  President	
(SEAL)			Spaulding Engineering & Construction Street  24 Common Street  Waterville, ME 04901  (207) 861-9923	674

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

## Spaulding Engineering and Construction Services, Inc.

24 Common Street ~ Waterville, Maine 04901 Phone (207) 861-9923 ~ Fax (207) 861-9923

October 29, 2012

Building Inspections Division City of Portland Maine 389 Congress Street Portland, Maine 04101-3509

RE: Central Maine Power Company – 138 Canco Road, Kitchen Renovations and New First Floor Conference Room – Building Permit Application

Dear sir or Madame,

Spaulding Engineering and Construction Services, Inc. on behalf of Central Maine Power Company is submitting a Building Permit Application for the renovation of the existing kitchen to get in compliance with current codes and standards and the construction of a new hard walled conference room on the first floor at their service building at 138 Canco Road. The kitchen renovation area is approximately 400 square feet and the new first floor conference room will be approximately 570 square feet. The project General Contractor will be H.E. Callahan Construction, 2664 Turner Road, Auburn, Maine 04212-0677. All electrical work will be performed by Wiswell Electric, 17 Pleasant Street, Clinton, Maine 04927. Sprinkler head and device relocations/modifications will be performed by Eastern Fire Services Incorporated, 170 Kittyhawk Avenue, Auburn, Maine 04211-1582.

#### Please find enclosed the following:

- 1. A check made out to the City of Portland in the amount of \$ 1420.00 for the "Building Permit"
  - a. Estimated construction costs = \$140,000
  - b. Fee:
    - $$30 \text{ for } 1^{\text{st-}} $1000 = $30$
    - \$10.00 for each additional \$1000 = \$139,000/\$1000 X \$10 = \$1390.00
    - Total Fee: \$1420.00
- 2. One (1) hard copy of the Building Permit Application.
- 3. One (1) full size 24" x 36" hard copy of the following design drawings:

•	742-61-35 Existing Kitchen & Closet Plan View	0	10-10-12
•	742-61-36 New Kitchen Plan View	1	10-19-12
•	742-61-37 New Kitchen Elevation	1	10-19-12
•	742-65-17 New Kitchen Plumbing Plan and Diagrams	2	10-19-12
•	742-61-38 New 1st Floor Conference Room		
	Existing Plans	0	10-10-12
•	742-61-39 New 1st Floor Conference Room		
	Plans and Section	0	10-10-12
•	742-65-022 First Floor Office & Basement Part Plan		
	HVAC Plan	2	10-10-12

## Spaulding Engineering and Construction Services, Inc.

24 Common Street ~ Waterville, Maine 04901 Phone (207) 861-9923 ~ Fax (207) 861-9923

- 4. One (1) hard copy of the "Issued for Bid" Project Specifications and Addendum #1.
- 5. One (1) Cd with the application, drawings and bid specifications in electronic format.

We believe that we have provided all of the information required to process the Building Permit. If you should have any questions, comments or require any further information regarding the proposed development, please contact me at (207) 861-9923.

Sincerely:

Dan Spaulding

Daniel E. Spaulding P.E.

CC: R. Meader, CMP

G. Mirabile, CMP

## Spaulding Engineering and Construction Services, Inc.

24 Common Street ~ Waterville, Maine 04901 Phone (207) 861-9923 ~ Fax (207) 861-9923

October 19, 2012

RE: Addendum No. 1 – Specification Number 742-60 Central Maine Power Company (CMP) Specification 742-60, Kitchen/Cafeteria Renovations and First Floor Conference Room at the Portland Service Center, 162 Canco Road, Portland, Maine

Sir or Madam:

This correspondence shall serve as Addendum #1 to Specification 742-60, Kitchen/Cafeteria Renovations and First Floor Conference Room at the Portland Service Center, 162 Canco Road, Portland, Maine

#### CHANGES/QUESTIONS/ANSWERS AND CLARIFICATIONS:

- 1. Revision 1 "New Kitchen Plumbing Plan & Diagrams" dated 10/18/12 was handed out at the prebid meeting. A pdf copy is attached.
- 2. Based on site vent issues the "New Kitchen Plumbing Plan & Diagrams" drawing has been additionally revised and is at Revision #2 status, dated 10/19/12. A pdf copy is attached.
- 3. A materials list with additional mechanical/ plumbing materials was handed out at the prebid meeting. A pdf copy is attached.
- 4. Drawing "New Kitchen Plan View" is at revision 1 status dated 10/19/12. The back room kitchen areas wall needs to have an 18" clear area between the top of the wall and the ceiling. A pfd copy is attached.
- 5. Drawing "New Kitchen Elevation" is at revision 1 status date 10/19/12. Receptacle type and style has been revised. A pdf copy is attached.
- 6. The Contractor will need to assume that a minimum two (2) foot high band of drywall will need to be removed and replaced in the kitchen area to accommodate the new plumbing and electrical in the kitchen area.
- 7. CMP is requesting that the Contractor provide the additional cost as Alternate #1 to completely remove the ceiling grid and tile and provide and install a new ceiling grid and tile. New grid and tile shall be 2' x 2' Certainteed 1 ½" x 15/16" heavy duty suspended 0.020" white ceiling grid and Certainteed Baroque PBT Protectone 24" x 24" x 5/8" reveal edge ceiling tile. Reuse and reinstall existing supply and exhaust ceiling diffusers. A revised copy of the Proposal Form is attached.

If you should have any questions or comments regarding this addendum, please contact Dan Spaulding at (207) 861-9923. The Contractor shall acknowledge receipt of Addendum #1 on their Proposal Form.

CC: B. Meader, CMP

## I. PROPOSAL FORM

#### PROPOSAL FORM

# KITCHE/CAFETERIA RENOVATIONS AND FIRST FLOOR CONFERENCE ROOM AT THE PORTLAND SERVICE CENTER 162 CANCO ROAD PORTLAND, MAINE SPECIFICATION # 742-60

A. Contractor agrees to provide all labor, materials, tools, equipment, skill, transportation, supervision, and services in accordance with all documents included in this Request for Proposal.

KIT	CHEN/CAFETERIA RENOVATIONS:	
Item	No. Item Description	Amount
1.	Remove and dispose of existing equipment as designate Specifications and on the Drawings.	
		\$
		Words
2.	Reconstruct kitchen back room. Including new door, frame and hardware, patching as required for new electrorime and paint.	rical, \$
		Words
3.	Perform all wall modifications and patching in the kitchen area for new walls, to accommodate new plumbing and new electrical. Prime and paint.	\$
		Words
4.	Provide and install new 3 bay sink and hand wash sink.	\$
5.	Provide and install all required plumbing for the new 3 bay sink, hand wash sink, Owner –Furnished mop sin Owner-Furnished dishwasher and Owner-Furnished col serving station drain.	
		Words

Including wall construction, new ceiling system, new do		frame, hardware
r	\$_	
	-	Words
countertops to be provided by Stainless Steel Kitchens.	ned \$	stainless steel cabinets and
		Words
serving stations, dishwasher and misc. equipment to be provided by Caprara indicated in the Specifications and		
	\$_	
the renovation work including freezer, refrigerator,	ate	Words
fryolators, coffee machine, etc.	\$_	
	-	Words
TOTAL PORTLAND KITCHEN/CAFETERIA OVATION LUMP SUM		
	\$	
-		Words
	Including wall construction, new ceiling system, new do Prime and paint.  Provide all that is required to install new Owner-Furnish countertops to be provided by Stainless Steel Kitchens.  Provide all that is required to install new Owner-Furnish serving stations, dishwasher and misc. equipment to be provided by Caprara indicated in the Specifications and on the Drawings.  Reinstall all equipment that was removed to accommod the renovation work including freezer, refrigerator, fryolators, coffee machine, etc.	Provide all that is required to install new Owner-Furnished countertops to be provided by Stainless Steel Kitchens.  Provide all that is required to install new Owner-Furnished serving stations, dishwasher and misc. equipment to be provided by Caprara indicated in the Specifications and on the Drawings.  \$  Reinstall all equipment that was removed to accommodate the renovation work including freezer, refrigerator, fryolators, coffee machine, etc.  \$  TOTAL PORTLAND KITCHEN/CAFETERIA

NE	W FIRST FLOOR CONFERRENCE ROOM:	
Iten	1 No. Item Description	Amount
1.	Construct new conference room walls	\$
		Words
2.	Provide and install two (2) -3'-0" x 6'-8" doors, frames and hardware.	\$
		Words
3.	Prime and paint walls and door frames	\$
		Words
4.	New ceiling grid and tile in conference room, reconfigure existing grid and reinstall tile in corridor disturbed areas on the outside of the conference room	
5.	Provide and install new return and diffuser. Modify	Words
	HVAC as required and relocate thermostat.	\$
	,	Words
	TOTAL NEW FIRST FLOOR NFERENCE ROOM LUMP SUM	
		\$
		Words
-	TAL KITCHEN/CAFETERIA RENOVAT D FIRST FLOOR CONFERENCE ROOM	
		\$
		Words

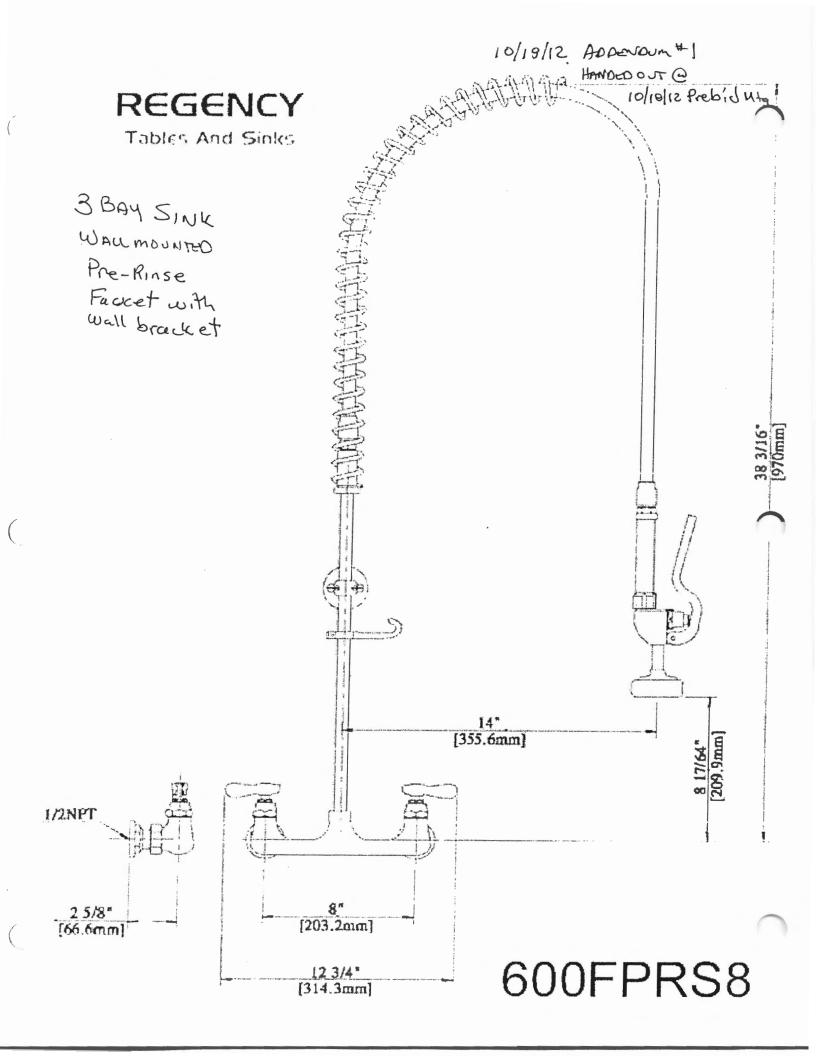
B.	Time and Material:
	Extra work may be authorized on a T & M basis as approved by the Owner. The Contractor shall include the cost for labor and equipment to be utilized on this Project. The Contractor shall also include the percentage mark-up to be applied to materials%, subcontractors% and rental equipment%.
C.	Alternates:
	<ol> <li>As Alternate #1, The Owner is requesting the lump sum costs to have all of the ceiling grid and ceiling tile be completely removed and disposed of in the kitchen/cafeteria and new ceiling rid and tile installed.</li> </ol>
	Alternate #1 New ceiling grid and tile in the kitchen/cafeteria area:  /Lump Sum
D.	Exception to the Request for Proposal:
	e Contractor shall state any exceptions to this Request for Proposal. If the Contractor es no exceptions to the Request for Proposal, they shall indicate "NO EXCEPTIONS".
E.	Acknowledgment of Addendum:
<u>A</u> d	dendum Number Date
_	
	<del></del>

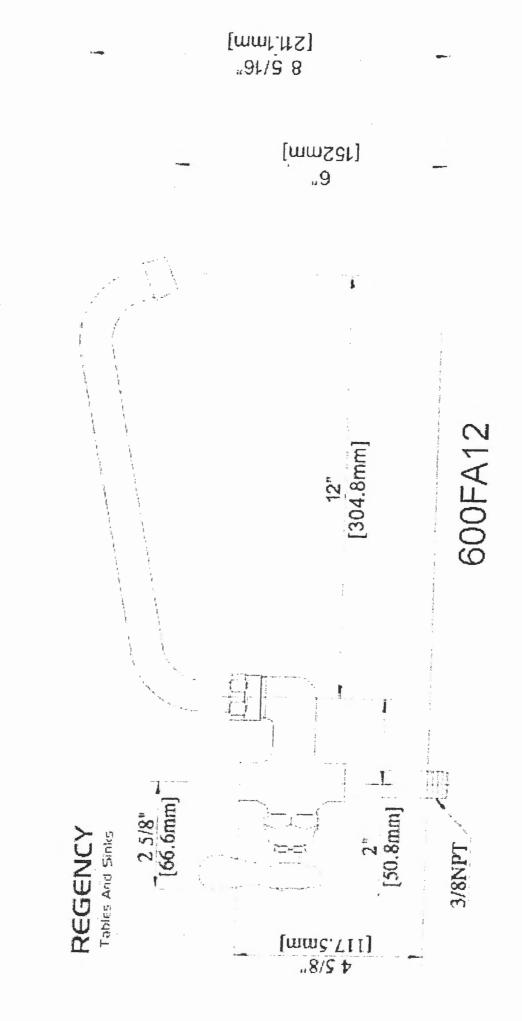
subcontractors involved.
Bidder:
Signature:
Name:
Title:
Address:
Date:
E-mail Address:
Tel. No.:
Fax Number:

F. All invoices associated with this job shall include a breakdown of materials, labor, and

The Contractor shall include with their bid the following:

- 1. A list of all subcontractors proposed for this project.
- 2. Milestone schedule.
- 3. List of foreman/superintendent with resume to be used on this Project.





3 BAY SINK FAUCET

- CAP NUT USED FOR NON

**OVERFLOW APPLICATIONS** 

BE ORDERED SEPARATELY

- CSA COMPLIANT

- OVERFLOW HEAD AND TUBE TO

2100 SOUTH CLEARWATER DRIVE

DES PLAINES, ILLINOIS 60018-5999

**CHICAGO** 

IS ASSUMED FOR USE OF SUPERCEDED OR VOIDED DATA

ROUGHING IN DIJJEMSIONS MAY VARY AND ARE SUBJECT TO CHANGE. NO RESPONSIBILITY

**TECHNICAL DATA** 

-1-1/2" OR 2" OUTLETS

-FLAT STRAINER PLATE

-TWIST HANDLE COMMERICAL WASTE DRAIN

·SLIP NUT USED FOR OVERFLOW APPLICATIONS

FITTING NO.

1366 - NF

1-1/4 " DIA.

4-1/2 [114mm]

5-14-02

JAR

Α

DATE: BY:

CHK'D:

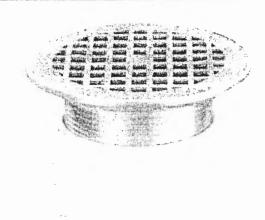
APP'D:

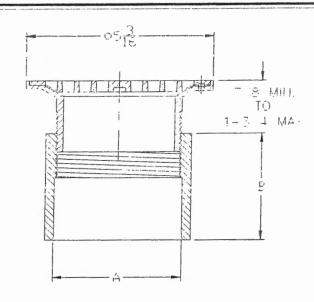
REV:

[32mm] OVERFLOW OUTLET



## FD-2210 Adjustable Floor Drain TAG





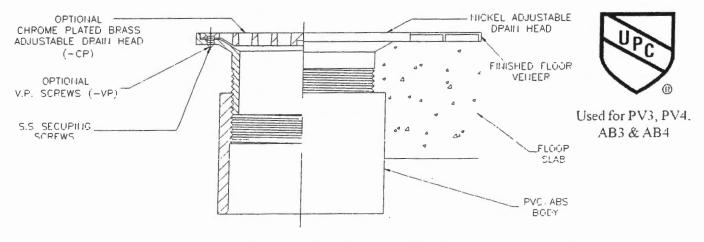
#### FD-2210 Adjustable Floor Drain

Recommended for finished floor areas. This drain is designed for foot traffic and light-duty applications. It consists of PVC or ABS body with adjustable nickel head and heel-proof grate.

Options:	
CP	Chrome Plate
-VP	Vandal Proof

	Product	'A' Connections	'B' Dimension
-	FD-2210-PV2	2"[51mm] PVC Hub	1-7/8[48mm]
		3"[76mm] PVC Hub	3-5/16[84mm]
		4"[102mm] PVC Hub	3-5/16[84mm]
	FD-2210-AB2	2"[51mm] ABS Hub	1-7/8[48mm]
		3"[76mm] ABS Hub	3-5/16[84mm]
	FD-2210-AB4	4"[102mm] ABS Hub	3-5/16[84mm]

#### Typical installation



ZURN LICHT COMMERCIAL PLUMBING PRODUCTS 2855 GIRTS ROAD , JAMESTOWN, NY 14701 PHONE: 716-665-1131 FAX: 716-665-3126 World Wide Web: WWW.ZURN.COM

Rev.

Date: 5/16/03

Dwg. No. 69953

C.N. No. 90514 Product No. FD-2210

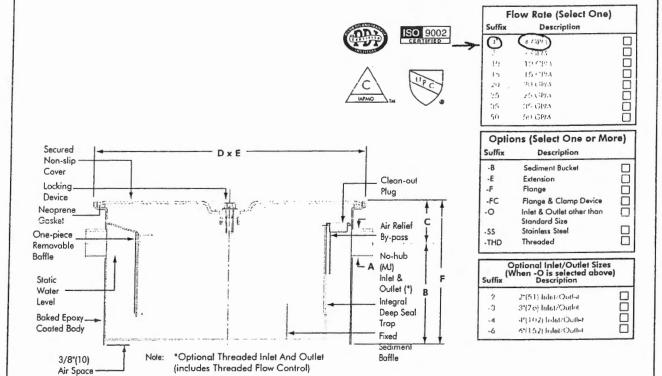


## WD Series

#### PDI Certified Grease Interceptor

**SPECIFICATION:** Watts Drainage Products WD Series PDI Certified recessed or floor mounted epoxy coated steel grease interceptor with gasketted solid steel cover, hex head center boli(s), removable baffle assembly, deep seal trap with cleanout, no hub connections, and external cast iron flow control fitting.

#### SINK GREASE INTERCEPTOR



	Interceptor	Flow	Grease	A	ß	C	D	E	F
	Catalog Number	Rate GPM	Capacity	Inlet & Outlet	Base to Center	Top to Center	Length	Width	Height
-	WD-4	4	8	2"(51)	7-3/4"(197)	3-1/4"(83)	16"(406)	10"(254)	11"(279)
	WD-7	7	14	2"(51)	8-1/2"(216)	3-1/2"(89)	18"(457)	13"(330)	12"(305)
- 1	WD-10	10	20	2"(51)	8-1/2"(216)	3-1/2"(89)	21-3/4"(552)	14"(356)	12"(305)
	WD-15	15	30	2"(51)	10-1/2"(267)	3-1/2"(89)	22"(559)	15"(381)	14"(356)
1	WD-20	20	40	3"(76)	11-1/2"(292)	3-1/2"[89]	24"(610)	15-3/4"(400)	15"(381)
1	WD-25	25	50	3"(76)	12"(305)	4-1/2"(114)	26"(660)	16-1/2"(419)	16-1/2"(419)
- 1	WD-35	35	70	3"(76)	14"(356)	5"(127)	. 30"(762)	18"(457)	19"(483)
1	WD-50	50	100	4"(102)	16"(406)	5-1/2"(140)	32"(813)	22"(559)	21-1/2"(546)

Job Name	Controctor
Job Location	Contractor's P.O. No.
Engineer	Representative

WATTS Drainage reserves the right to modify or change product design or construction without prior notice and without incurring any obligation to make similar changes and modifications to products previously or subsequently sold. See your WATTS Drainage representative for any clarification. Dimensions are subject to manufacturing tolerances.



USA: 100 Watts Road, Spindale, NC, 28160 TEL: 828-288-2179 TOLL-FREE: 1-800-338-2581 Website: www.wattsdrainage.com



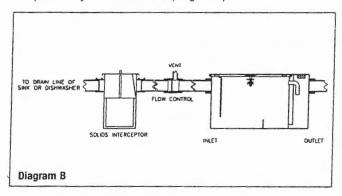
#### INSTALLATION

Installation is no less critical than design for efficient operation of a grease interceptor. No matter how superior the design, if improperly installed, the unit's efficiency will be drastically reduced.

The interceptor should be installed as close as possible to the fixture(s) being served, as high temperature enhances grease separation. This also protects the internal piping system from grease buildup. The interceptor may be placed on the floor, partially recessed in the floor, recessed with top flush with the floor, or fully recessed below the floor, in order to accommodate piping and structural conditions. Anticipate sufficient clearance for removal of the interceptor cover and baffle for cleaning. Also, take into consideration the possibility of pipelines becoming clogged with congealed grease that may collect before reaching the grease interceptor.

Grease interceptors are not designed to perform with solid debris entering the unit. Solid material should not be permitted to enter the grease interceptor. In an application where solids are present, a solids interceptor is recommend to be used in conjunction with the grease interceptor. Grease tends to attract solid particles, growing in size and promoting decay, leading to unpleasant odor and unsanitary conditions. Under these conditions, pipes can readily become clogged and even the grease interceptor itself may fill up with debris.

All sink and garbage grinder waste must pass through a solids interceptor because rapid accumulation of solid matter will greatly reduce the grease interceptor efficiency, preventing operation in compliance with its rated capacity. A separate grease interceptor is recommended for each commercial dishwasher. The size of the interceptor is determined by the discharge rate of the dishwasher as specified by the manufacturer (Diagram B).

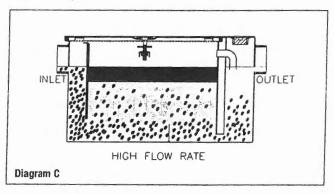


Placement of the interceptor in a high traffic area is an important concern. If the interceptor is to be installed flush with the floor, it is necessary to determine whether or not the interceptor will experience heavy-duty load traffic. The standard grease interceptor is designed for foot and light traffic only. If a greater load rating is required, the interceptor must be constructed accordingly to accept the higher load.

#### FLOW CONTROL

The use of a flow control device (Z1108), furnished with all grease interceptors, is an important factor in the operation of the interceptor. Grease interceptors are designed to work properly within certain flow conditions. A flow control device placed as close to the source of liquid as possible is an important component of the assembly. The flow control device should be installed in the waste line upstream of the grease interceptor. It should be placed beyond the last connection from the fixture(s) and as close as possible to the underside of the lowest fixture. When two or more sinks or fixtures are combined and served by one interceptor, a single flow control fitting can be used. Air intake for the flow control device may terminate under the sink drain board, as high as possible, to prevent overflow or terminate in a return bend at the same height outside of the building. When a fixture is individually trapped and backvented, air intake may intersect the vent stack. All installation recommendations are subject to approval of code authority.

The air intake of the flow control must be plumbed in to either the vent stack or above the flood rim of the sink. Without a properly vented flow control device, effluent flows may exceed the rated capacity of the interceptor, causing incoming fluids to be passed through the unit before proper separation can be achieved (Diagram C). The result would be grease buildup downstream, defeating the purpose of the interceptor.



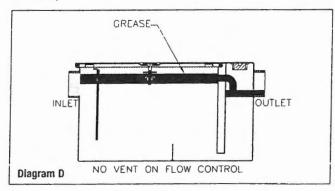
Equilibrium in the separation chamber of the interceptor is maintained by air pressure. The Zurn interceptor design incorporates two features to maintain equilibrium: 1) Vented flow control device, and 2) Air relief by-pass.



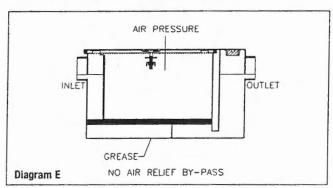
#### INSTALLATION

#### FLOW CONTROL, Continued

The flow control device must be properly vented to permit air to properly mix with the fluid entering the interceptor. Air facilitates separation and, more importantly, is necessary to maintain the proper pressure and thus the proper operating level within the separation chamber. For example, without a properly vented flow control device, little or no air would be drawn into the interceptor during use, causing the operating level to rise, pushing the grease cake toward the cover (Diagram D). If the grease layer reaches the air relief by-pass, grease could be pushed on into the outlet.



If air enters an interceptor that does not utilize an air relief by-pass, the buildup in air pressure has nowhere to go and begins pushing the grease and water layers downward toward the bottom of the interceptor (Diagram E). If pressure continues to build, grease would eventually be forced under the baffle plate and out of the unit.



The presence of a vented flow control device and air relief by-pass is a key element in the efficient operation of a grease interceptor. If one or both of these items are not present, flow rate through the interceptor and operational performance can be severely compromised.

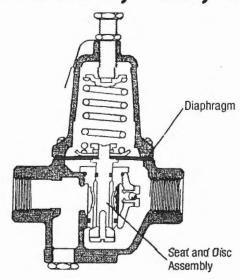
#### **NEED FOR A FLOW CONTROL DEVICE**

A grease interceptor, correctly designed to separate light density substances from wastewater, will not by itself govern or regulate the flow of water through the interceptor at all times to sufficiently assure the "flotation" separation of the substances which are to be intercepted at maximum efficiency. The flow control device is designed with an integral orifice to give a predetermined optimum flow rate and air intake to the interceptor. The orifice openings are related to the size and flow rating of the grease interceptor.

Standard orifice sizing is for gravity flow conditions where no pressure buildup is considered. If an interceptor is operating at maximum flow levels, a head may develop, in which case overload conditions may still exist.

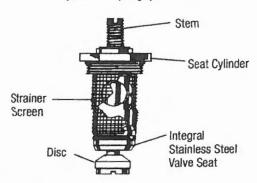
Trap Flow Rate Size GPM	Standard Size Orifice Inches
4	5/8
7	5/8
10	15/16
15	15/16
20	1-1/4
25	1-1/4
35	1-1/2
50	1-3/4
75	2-1/4
100	2-1/4
125	2-5/8
150	2-5/8
200	3-1/4
250	3-1/4
300	4
400	4-1/2
450	4-1/2
500	4-7/8

## Series 23, 123, N250



Ordering Code No.	Kit No.	Valve Series	Size Inches	
878377	1/2" N250RK	23, 123, N250	1/2	
878339	3/4" N250RK	23, 123, N250, N256	3/4	

## Complete Replacement Assembly (Includes Diaphragm)



#### When Ordering, Specify:

- 1. Ordering Code Number
- 2. Size of Valve
- 3. Type Number
- 4. Model Shown on Nameplate

Kit for No. 23, 123, N250, N250B includes all items shown.

#### What is - thermal expansion?

The use of a water pressure reducing valve normally creates a closed system. When water is heated in a closed system, it expands causing an increase in pressure. This pressure may increase to the set pressure of the relief valve (on the water heater) causing it to drip, thus releasing the expanding water and protecting the system against excessive pressure. This increase in the system pressure over that regulated by the reducing valve is call. "thermal expansion pressure".

Watts thermal expansion bypass model water pressure reducing valve is an economical solution of this annoyance, since under certain conditions it allows the expanding water to escape back into the supply main before it can affect the relief valve.

Watts Thermal Expansion "Bypass" model water pressure reducing valves not only control high water service pressure but also contain an "integral thermal expansion bypass check valve" which reduces the frequency of relief valve dripping caused by thermal expansion.

The built-in thermal expansion bypass, another Watts first, operates on the principle of a check valve in reverse. Normally, the check is held closed by the street main pressure, preventing any flow of water through it into the system. However, when thermal expansion pressure increases to just 1 lb. to 2 lbs. higher than the main pressure, the check valve opens passing the expanding water back into the supply main at the rate it is expanded. Thus, the expanding water is dissipated (as in an open system) and the relief valve is not affected.

\*Note: Effectiveness of the thermal expansion bypass feature is limited to systems where the street main pressure is less that the allowable setting of the pressure relief valve. Therefore, its use can be broadened by using a relief valve with higher pressure setting (providing the working pressure of the tank permits). While this feature limits the conditions causing relief valve dripping, it in no way replaces a pressure relief valve which is necessary to protect against other causes of excessive pressure.

NOTE: For additional detailed information on thermal expansion send for folder F-RV.

LIMITED WARRANTY: Watts Regulator Co. (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANT-ABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverses water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, m

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights. SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL SHIPMENT.



ISO 9001-2000

Water Safety & Flow Control Products

USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.watts.com Canada: 5435 North Service Rd., Burlington, ONT, L7L 5H7; www.wattscanada.ca

## Series 23B, 123LP, N250, N250B

#### Water Pressure Reducing Valves

#### Installation Instructions

Install Valve in the line with arrow on valve body pointing in the direction of flow.

This valve should be installed where it is accessible with sufficient clearance for cleaning, service or adjustment. Install the reducing valve, when possible, before the sill cock line as shown in diagram. Before installing the reducing valve. flush out the line to remove loose dirt and scale which might damage valve disc and seat.

Horizontal installation is recommended. However, valve can be installed in a vertical position. Regulator must be installed in an accessible location to facilitate servicing the regulator.

To readjust reduced pressures, loosen adjusting screw nut and turn adjusting screw clockwise to raise reduced pressure and counterclockwise to lower reduced pressure.

When reducing valve is used, it makes a closed system; therefore, pressure relief protection must be provided on the downstream side of the reducing valve to protect equipment.

**CAUTION:** Anytime a reducing valve is adjusted, the use of a pressure gauge is recommended to verify correct pressure setting. Do not bottom out adjusting screw or spring cage.

#### Servicing

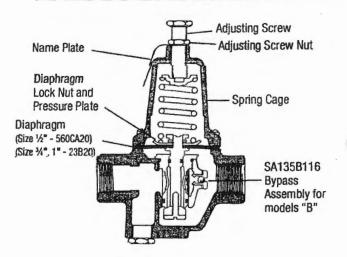
This series is a new development for standard capacity domestic water regulation service. It has special unitized construction which consists of the seat, disc and stem assembly, and strainer screen all together in one unit for complete replacement maintenance.

#### To clean or replace parts.

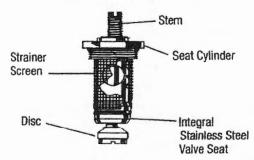
- 1. Remove spring cage and all parts above diaphragm.
- Loosen and remove diaphragm lock nut, lock washer, pressure plate, and diaphragm from valve stem.
- Unscrew seat cylinder from body and remove entire assembly. For diaphragm replacement only, see part number.
- While disassembled open gate valve to flush out collected sediment.

NOTE: Cast iron body regulators (N250/N250B) are not intended for buried or pit services.

# To Sill Cock From Street Main Reducing Valve



#### Complete Replacement Assembly See reverse side for ordering information



#### **CALIFORNIA PROPOSITION 65 WARNING**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65



#### For Residential and Point of Use Applications

Job Name	Contractor
lob Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

#### Series 123LP

#### Water Pressure Reducing Valves

Size: 1/2" - 3/4" (15 - 20mm)

Series 123LP Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. This series is suitable for water supply pressures up to 200psi (13.8 bar) and may be adjusted from 10 – 30psi (69 – 207 kPa). The standard setting is 30psi (207 kPa). All parts are quickly and easily serviceable without removing the valve from the line.

#### **Features**

- · High performance
- · High flow capacity
- · Integral stainless steel valve seat
- · Integral stainless steel strainer
- · Bronze body construction
- · Serviceable in-line

#### Specifications

A Water Pressure Reducing Valve and strainer shall be installed to reduce pressures of 35psi (241 kPa) or less. The valve shall have a stainless steel seat with EPDM seat disc and diaphragm. Valve shall be a Watts Regulator Company Series 123LP.

#### Materials

Body:

Bronze

Seat:

Stainless steel

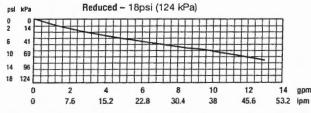
Integral Strainer: Diaphragm:

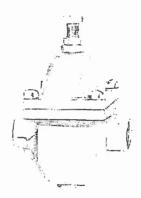
Reinforced EPDM

Valve Disc: EPDM

#### Capacity

Inlet - 83psi (572 kPa)





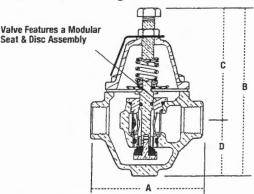
Pressure - Temperature

Temperature Range: 33°F – 180°F (0.5°C – 82°C) Maximum Working Pressure: 200psi (13.5 bar)

Adjustable Reduced Pressure Range: 10 - 30psi (69 - 207 kPa)

Standard Reduced Pressure Setting: 30psi (207 kPa)

#### Dimensions - Weights



SIZE	(DN)				DIMEN	ISIONS				WE	IGHT
		1	Α	ВС			D				
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Ibs.	kgs.
1/2	15	31/16	78	5	127	33/8	86	15/8	41	1.6	.73
3/4	20	31/16	78	5		33/8		1	41	1.6	.73

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.





A Watts Water Technologies Company

#### For Commercial Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

## LEAD FREE\*

#### Series LF15M2

Water Hammer Arrestors

Sizes: ½" - 1" (15-25mm) What is Water Hammer?

The noise from banging pipes is caused by shocks of high speed water flowing in the piping system when a fixture is suddenly closed. Sudden stoppage of the water (a non-compressible liquid) flowing at a given pressure and velocity causes a surge or spike of water and is called water hammer. When this occurs, a pressure wave travels back through the piping until it finds a point of relief. The LF15M2 and LF15M2S Water Hammer Arrestors are designed to elliminate this effect. The LF15M2 and LF15M2S features Lead Free\* construction to comply with Lead Free\* requirements.

Dishwashers, clothes washers, fast closing positive shutoff valves incorporated in the system all contribute to creating water shock which is not only annoying but damaging to pipes and appliances. The Watts Series LF15M2 and LF15M2S incorporates a precharged, permanent sealed air chamber to absorb the shock. The sealed chamber prevents the loss of air to the water and assures long and trouble-free life.

#### Features

- NPT solid hex brass adapter or solder end connection for easy installation
- · Approved for installation with no access panel required
- May be installed in new or existing plumbing systems with a standard pipe tee vertically, horizontally or at any angle
- PDI Listed (PDI WH201)
- · Maintenance free piston is the only moving part
- · Air pre-load is 60psi (4.2 bar)
- · Factory air charged and permanently sealed

#### Standards







Standard: Listed by IAPMO, ASSE 1010 approved, ANSI A112.26.1M approved, PDI WH201 approved and certified.





LF15M2S

#### Pressure - Temperature

Operating Pressure: Designed to operate on all domestic and commercial lines @ 150psi (10.6 bar) working pressure.

Temperature Range: 33°F to 180°F (0.5°C to 82°C).

#### Materials

Body:

Copper tubing

Piston:

Polypropylene

Adapter:

Lead Free\* Brass

O-ring:

**EPDM** 

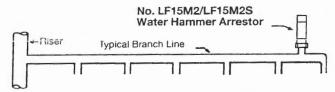
\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



NOTE: The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

#### Sizing and Placement



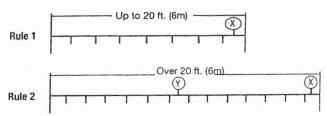
As shown, it has been established that the preferred location for the water hammer arrestor is at the end of the branch line between the last two fixtures served

The location of the water hammer arrestor shown above applies to branch lines that do not exceed 20 ft. (6m) in length, from the start of the horizontal branch line to the last fixture supply on this branch line. When the branch line exceeds the 20 ft. (6m) length, an additional water hammer arrestor should be used. This practice is best defined by two rules which have been established to cover the placement of water hammer arrestors.

#### Dimensions - Weight



	SIZE (DN)	-10	DIM	WEIGHT			
			A		В		
		in.	mm	in.	mm	(lbs)	(kgs)
Threa	ded						
1/2"	LF15M2-A	11/8	28.5	515/16	150.9	0.5	0.2
3/4"	LF15M2-B	13/8	34.9	89/16	218.0	0.9	0.4
1"	LF15M2-C	15/8	41.3	813/16	223.5	1.3	0.6
1"	LF15M2-D	21/8	54.0	915/16	252.5	2.0	0.9
1"	LF15M2-E	21/8	54.0	1211/16	322.5	2.3	1.1
1"	LF15M2-F	25/8	66.7	115/32	283.5	2.7	1.2
Solde	r						
1/2"	LF15M2-AS	11/8	28.5	81/4	210.0	0.44	0.2
3/4"	LF15M2-BS	11/8	28.5	10	254.0	0.54	0.2
1"	LF15M2-CS	13/8	34.9	121/2	317.5	0.92	0.4
1"	LF15M2-DS	21/8	54.0	11	280.0	1.63	0.7
1"	LF15M2-ES	21/8	54.0	131/2	343.0	1.98	0.9
1"	LF15M2-FS	21/8	54.0	16	406.5	2.32	1.1



Rule 1 covers multiple fixture branch lines which do not exceed 20 ft. (6m) in length.

**Explanation** - Fixture-unit sizing and selection table is used to select the required PDI unit (water hammer arrestor).

Rule 2 covers multiple fixture branch lines which do exceed 20 ft. (6m) in length.

**Explanation -** Fixture-unit sizing and selection table is used to select the required PDI unit (water hammer arrestor). The sum of the fixture units rating of units X and Y shall be equal to or greater than the demand of the branches.

#### Sizing and Selection Table

SIZE (DN)		MODEL	ORDER CODE	MODEL	ORDER CODE	CROSS FIXTURE UNITS	REF. PDI STANDARD
in. m	m	Threaded		Solder			
1/2" 1	15	LF15M2-A	0750160	LF15M2-AS	0750150	1-11	Α
3/4" 2	20	LF15M2-B	0750161	LF15M2-BS	0750151	12-32	В
1" 2	5	LF15M2-C	0750162	LF15M2-CS	0750152	33-60	С
1" 2	5	LF15M2-D	0750163	LF15M2-DS	0750153	61-113	D
1" 2	5	LF15M2-E	0750164	LF15M2-ES	0750154	114-154	Ε
1" 2	5	LF15M2-F	0750165	LF15M2-FS	0750155	155-330	F

#### **Fixture Units Sizing Information**

	ON SECOND	178		IXTUR	UNITS		750
	TYPE OF SUPPLY		PUBLIC			PRIVAT	E
FIXTURE	CONTROL	TOTAL	C.W.	H.W.	TOTAL	C.W.	H.W.
Water Closet 1.66 PF	Flush Valve	8	8	-	5	5	-
Water Closet 1.66 PF	Flush Tank	5	5	-	2.5	2.5	-
Pedestal Urinal 1.06 PF	Flush Valve	4	4	_	_	-	-
Stall or Wall Urinal	Flush Valve 1.06 PF	4	4	-	-	-	-
Stall or Wall Urinal	Flush Tank 1.06 PF	2	2	-	_	_	-
Lavatory	Faucet	2	11/2	11/2	1	1	1
Bathtub	Faucet	4	2	3	2	11/2	11/2
Shower Head	Mixing Valve	4	2	3	2	1	2
Bathroom Group	Flush Valve Closet	_	-	-	8	8	3
Bathroom Group	Flush Tank Closet	-	-	-	6	6	3
Separate Shower	Mixing Valve	-	_	-	2	1	2
Service Sink	Faucet	3	3	3	-	-	-
Laundry Tubs (1-3)	Faucet	-	~	-	3	3	3
Combination Fixture	Faucet	-	_	-	3	3	3





#### For Light Commercial and Residential Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

### **LEAD FREE**\*

## Series LF7 Dual Check Valves

LF7 Sizes: 1/2" - 11/4" (15 - 32mm)

LF7C Sizes: %" (10mm)

Series LF7 Dual Check Valves are designed for non-health hazard residential water system containment and continuous pressure applications, such as the drinking water supply service entrance or individual outlets. Series LF7 uses two compact replaceable check modules and is installed immediately downstream of the residential water meter. The LF7 features Lead Free\* construction to comply with Lead Free\* installation requirements.

#### **Features**

- · Can be installed vertically or horizontally
- Available with combination of inlet/outlet sizes, types or thread and end connection including retrofit compression fittings and hose connections
- Can be installed in many piping configurations and with a wide range of meter horns, copper setters and meter boxes

#### Specifications

The dual check backflow preventer shall meet the domestic requirements of ANSI/ASSE Standard 1024, and bear the seal of approval. It shall be bronze-bodied and include not less than one union, with the union nut drilled to accept a tamper-proofing lock wire. A brass identification tag indicating direction of flow shall be securely attached to the valve body by corrosion-resistant mechanical fasteners. The Lead Free\* Dual Check Valve shall comply with state codes and standards, where applicable, requiring reduced lead content. The dual check shall be Watts Series LF7. (Please select the model best suited to your application.)

#### Pressure - Temperature

Temperature Range: 33°F – 180°F (0.5°C-82°C) continuous Maximum Working Pressure: 150psi (10.3 bar)

#### Approvals

1024 B64.6



\*The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.



Series 7: Inlet/Outlet Connections - Types available, ordering code, sizes available.

CONNECTION TYPE	CONNECTION CODE	SIZES AVAILABLE			
		in.	mm		
National Pipe Thread Female	2	1/2.3/4.1	15, 20, 25		
National Pipe Thread Male	. 3	1/2.3/4.1, 11/4	15, 20, 25, 32		
Meter Thread Male*	5	3/4. 1, 11/4	20, 25, 32		
Female Meter Thread (Swivel)	10	3/4.1, 11/4	20, 25, 32		

\* When ordering Series LF7 Valves with Meter Thread Connections, be sure to order connection size one size larger than meter thread. Examples:

Meter Size	Order
½" (15mm) and ½" (16mm)	3/4" (20mm)
%" (16mm) and 3/4" (20mm)	1" (25mm)
1" (25mm)	11/4" (32mm)

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#### Materials

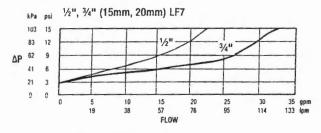
 Body: LF7 Lead Free\* bronze LF7C chrome-nickel plated Lead Free\* brass

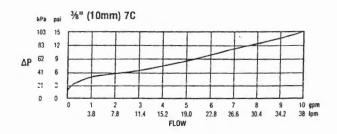
· Check Modules: Durable plastic

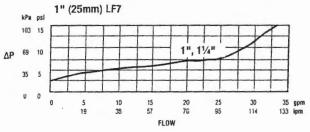
Discs: SiliconeSeals: Buna-N

· Springs: Stainless steel

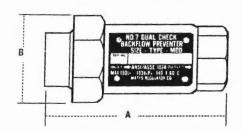
#### Capacity







#### Dimensions - Weight



MODEL	SIZ	(DN)		DIMEN	WEIGHT			
			A		В			
	in.	mm	in.	mm	in.	mm	lbs.	kgs.
LF7C	3/8	10	27/8	73	11/4	32	.13	0.29
LF7U2-2	1/2	15	43/8	111	23/8	60	1.75	0.8
LF7U2-2	3/4	20	43/8	111	23/8	60	1.75	0.8
LF7U2-2	1	25	43/8	111	23/8	60	1.75	0.8





#### For Health Hazard and Continuous Pressure Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

#### Series 008PCQT

#### Health Hazard, Anti-Siphon, Spill-Resistant Backflow Preventer

Sizes: 3/8", 1/2", 3/4" and 1" (10, 15, 20, 25mm)

Series 008PCQT is designed for indoor point-of-use applications to prevent backsiphonage of contaminated water back into the potable water supply. Separation of the water supply from the air inlet is accomplished by means of a diaphragm seal. This feature protects against any spillage during start-up or operation.

#### **Features**

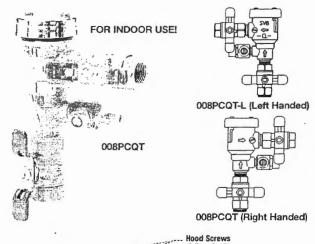
- · Standardly supplied with internal polymer coating
- · Standardly supplied with Tee handles
- Available less Tee handle with stem wrench flats. For use where space is limited
- · Available in left-handed or right-handed outlet
- · Spill-resistant design for indoor use
- Affordable design
- Modular cartridge for ease of service
- · Vent uses an O-ring for reliable operation
- · Bronze body for durability
- · Compact space saving design
- · Satin chrome finish available
- · Available with strainer

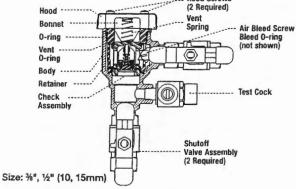
#### Installation

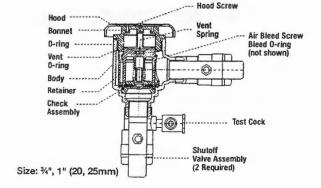
The 008PCQT is designed to be installed at the point of use. When factory installed deck/machine mounted on machines or equipment, the critical level of the 008PCQT shall be not less than 1" (25mm) above the flood rim. If field applied for general plumbing applications, the critical level of the 008PCQT shall be a minimum of 6" (150mm) above the flood rim.

#### Specifications

A spill-resistant vacuum breaker (SVB) shall be installed, in accordance with the manufacturer's instructions, as noted on the plans. The valve shall consist of a one-piece modular check and float assembly made of engineered thermoplastic and housed in a bronze body. Springs shall be stainless steel. The valve shall be constructed with a molded diaphragm separating the air inlet from the potable water supply to prevent spillage. The valve shall be a Watts Series 008PCQT.







Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incuming any obligation to make such changes and modifications on Watts products previously or subsequently sold.



#### Materials

Springs:

Stainless steel

Bonnet:

PPO **EPDM** 

Vent Disc: Disc Holder: PPO

Check Disc:

Silicone rubber

Body:

Bronze

#### Pressure - Temperature

Temperature Range: 33°F - 180°F (0.5°C - 83°C) Maximum Working Pressure, 150psi (10.3 bar)

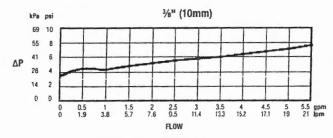
#### **End Connections**

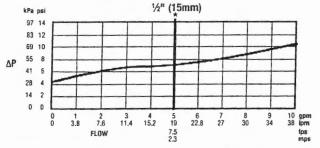
Female NPT - Ball Valve shutoffs

#### Capacity

As compiled from documented Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California lab tests.

\*Typical maximum system flow rate (7.5 feet/sec.)





#### Standards

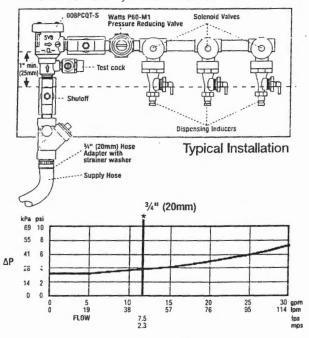
Meets requirements of IAPMO.

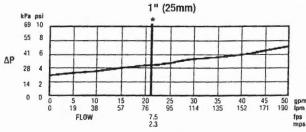
#### Approvals



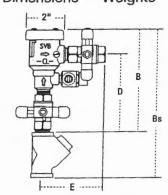


Listed by IAPMO, Approved by the Foundation for Cross-Connection Control & Hydraulic Research at USC.





#### Dimensions - Weights



Note: A strainer is recommended to be installed ahead of the backflow preventer to prevent the fouling of the check assembly and resulting spillage from the valve during repressurization. Do not install in concealed locations or areas where water leakage due to normal wear of the internal parts can cause damage.

SIZ	E (DN)			DIMEN	ISIONS			W	EIGHT
in. mm			В		D		E		
	mm	ın.	mm	in.	mm	in.	mm	lbs.	kgs.
3/8	10	51/2	140	315/16	100	31/8	79	1.6	.73
1/2	15	53/4	146	43/16	106	33/8	86	1.7	.77
3/4	20	7	178	45/8	117	41/2	114	3.8	1.72
1	25	71/2	191	51/8	130	47/8	124	4.8	2.18
008PC	OT-S	В	s						
3/8	10	77/8	200	315/16	100	31/8	79	3.4	1.54
1/2	15	81/2	216	43/16	106	33/8	86	3.5	1.59
3/4	20	101/4	260	45/8	117	41/2	114	5.6	2.54
1	25	113/16	284	51/8	130	47/8	124	7.6	3.45





ISO 9001-2008

#### For Liquid and Steam Service

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

## Series 777S, S777S

#### Wye-Pattern Bronze Strainers

Sizes: 1/2" - 4" (15-100mm)

Series 777S S777S Wye-Pattern Bronze Strainers are designed to protect system components from dirt, rust and other damaging debris in the piping system. This series features a retainer cap tapped for closure plug.

#### **Features**

- Bronze body
- Wye-pattern
- · Retainer cap tapped for closure plug

#### Models

 $777S_1 - \frac{1}{2}" + 4"$  (15 – 100mm) threaded connections  $8777S_1 - \frac{1}{2}" - 2"$  (15 – 50mm) solder connections

#### Specifications

A wye-pattern bronze strainer to be installed as indicated on the plans. The strainer must have retainer cap tapped for closure plug. Strainer shall be rated to 400psi (27.6 bar) WOG @ 210°F (99°C): 125psi (8.6 bar) WSP @ 353°F (178°F) for sizes 1/2" – 3" (15 – 75mm) and 300psi (20.7 bar) WOG @ 210°F (99°C): 125psi (8.6 bar) @ 353°F (178°C) for size 4" (100mm). Strainer shall be a Watts Regulator Company Series 777S (threaded ends) or S777S (solder ends).

#### Materials

Body:

Bronze

Retainer Cap:

1/2" (15mm): Brass

%" - 4" (20-100): Bronze

Cap Gasket:

1/2" - 2" (15-50mm): EPDM

Other sizes consult factory

Standard Screen:

1/2" - 21/2" (15-65mm): 304 stainless

steel #20 mesh,

3" (75mm): 3/64" (1.2mm) 304 stainless

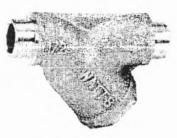
steel perforated screen

4" (100mm): 1/s" (3mm) 304 stainless

steel perforated screen



777S



S777S

#### BAA/ARRA Compliant

\*This product complies with the Buy American Act and The American Recovery and Reinvestment Act. For more information, visit watts.com.

#### Pressure - Temperature

Maximum Working Pressure:

1/2" - 3" (15-75mm)

400psi (27.6 bar) WOG @ 210°F (99°C) 125psi (8.6 bar) WSP @ 353°F (178°F)

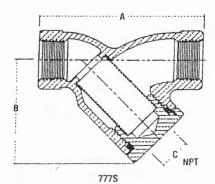
4\* (100mm)

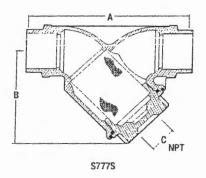
300psi (20.7 bar) WOG @ 210°F (99°C) 125psi (8.6 bar) WSP @ 353°F (178°F)

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Warts Technical Service. Watts reserves the right to change or modify product design, construction, specifications or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



#### Dimensions - Weights



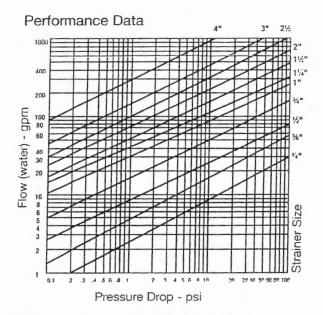


#### Screen Options

304 Stanless Steel Wire Mesh Liners: (#30, #40, #60, #80, #100)

304 Stainless Steel Perforated Screens: (½½\*, ½4\*, ½4\*, ½\*, ½\*)

Consult factory for ordering codes



#### 777S

SIZE (DN)					DIMEN	SIDNS		W.	IGHT	
		A		В		C (NPT)				
in.	mm	in.	mm	ın.	mm	ın.	ınm	ths.	kgs.	
1/4	8	21146	68	111/16	43	3%	10	1.7	0.77	
3/e	10	211/15	68	111/16	43	3/6	10	1.7	0.77	
1/2	15	3	76	2	51	3/4	10	1.7	0.77	
32	20	3716	84	29/16	59	1/2	15	1.7	0.77	
1	25	41/2	114	25/16	59	3/4	20	2.7	1.22	
11/4	32	51/6	130	31/8	79	3/4	20	3.0	1.36	
11/2	40	57/4	149	33/4	95	1	25	4.0	1.81	
2	50	63/16	157	47/8	124	11/4	32	7.4	3.36	
21/2	65	81/8	206	415/16	125	11/4	32	12.0	5.44	
3	75	101/4	257	611/16	170	11/2	40	24.0	10.90	
4	100	13	325	101/2	267	11/2	40	41.0	18.60	

#### S777S

SIZE (DN)		View Miles	DIM	ENSIONS	WEIGHT				
			A	1	3	C(I	IPT)		
m.	וונוח	in,	nını	in.	ınm	in.	กากา	Ins.	kgs.
1,4,	15	3%	86	21/16	52	W <sub>8</sub>	10	1.5	0.68
3/4	20	33/4	95	29/16	65	1/2	15	1.6	0.73
1	25	5	127	3	76	44	20	2.5	113
11/4	32	55%	143	31/4	82	1/2	20	2.8	1.25
11/2	40	6.	164	3116	97	1	25	4.0	1.81
2	50	714	191	45%	118	11/4	32	7.4	3.39







### Spaulding Engineering and Construction Services, Inc.

24 Common Street ~ Waterville, Maine 04901 Phone (207) 861-9923 ~ Fax (207) 861-9923

# Central Maine Power Company Portland Service Center (NASC) 2012 Kitchen/Cafeteria Renovations and New 1<sup>st</sup> Floor Conference Room CONTRACTOR LIST

October 10, 2012

Lajoie Brothers Inc. 36 Mount Vernon Avenue P.O. Box 5428 Augusta, Maine 04330 Attn: John Lajoie

Tel. (207) 622-5875 Fax: (207) 622-1764

Email: jlajoie@lajoiebros.com

H.E. Callahan Construction Company Turner Road, P.O. Box 677 Auburn, Maine 04212-0677 Attn: John Blanchard Tel. (207) 784-6927 Fax (207) 784-0769 email: jblanchard@hecallahan.com

Ganneston Construction Corp.
P.O. Box 27
North Belfast Avenue
Augusta, Maine 04332-0027
Attn: Mike Adams
Tel. (207) 621-8505
Fax (207) 621-8508
Email: mikeadams@gannestonconstruction.com

C:2012 CMP Facilities\Portland Kitchen Renovations and New Conference Room/Contractor Bid List Revision 0, October 10, 2012

### Spaulding Engineering and Construction Services, Inc.

24 Common Street ~ Waterville, Maine 04901 Phone (207) 861-9923 ~ Fax (207) 861-9923

**Building Solutions LLC** 

248 King St.

Oxford Maine 04270

Attn: Mr. Bob Hale

Senior Project Manager

Phone: 207-539-8787

Fax: 207-539-2489

Cell: 207-890-0745

Email: bhale@buildingsolutionsusa.com

Consolidated Constructors & Builders, Inc.

65 Bradley Drive

Westbrook, Maine

Attn: Mark Belanger

Tel(207) 464-2626

Email: mbelanger@ccb-inc.com

## Spaulding Engineering and Construction Services, Inc.

24 Common Street ~ Waterville, Maine 04901 Phone (207) 861-9923 ~ Fax (207) 861-9923

October 10, 2012

RE: Central Maine Power Company (CMP) Request for Quotation for Kitchen/Cafeteria Modifications and New First Floor Conference Room at the Portland Service Center located at 162 Canco Road in Portland, Maine

Dear Madame or Sir:

Spaulding Engineering and Construction Services, Inc. on behalf of Central Maine Power Company (CMP) is requesting a Lump Sum Price quotation to provide all that is required to perform renovations to the kitchen/cafeteria and construct a new first floor conference room at the Portland Service Center at 162 Canco Road in Portland, Maine. The work shall include all that is required to complete the renovations to the main kitchen area, kitchen back room and new janitor's closet. The work shall also include the construction of a new first floor conference room. All work shall be in accordance with the attached Specifications and Drawings.

Price quotations shall be submitted to:

Mr. Bob Meader
Manager of Facilities
Central Maine Power Company
83 Edison Drive
Augusta, Maine 04330
Tel. (207) 621-3521 ext 2390
Fax (207) 621-4737
Email: robert.meader@cmpco.com

(1) Original and (1) copy of your proposal for the services shall be received at the above location by Thursday, October 25, 2012 at 2:00 p.m. E-mail and/or faxes will be allowed provided they are followed up with a hard copy to the address listed above within one (1) business day.

Central Maine Power Company Portland Service Center Kitchen and Cafeteria Renovations/1<sup>st</sup> Floor Conference Room Page 2

Please also e-mail a copy of your proposal to Dan Spaulding, Spaulding Engineering and Construction Services, Inc. E-mail address dan@spauldingengineering.com

### PROPOSAL FORM – PART I TECHNICAL SPECIFICATIONS- PART II: Section 01000 – General Requirements

#### DRAWINGS: APPENDIX A

CMP Drawing	No. <u>Title</u>	Revision	Date.
742-61-35	Existing Kitchen & Closet Plan View	0	10-10-12
742-61-36	New Kitchen Plan View	0	10-10-12
742-61-37	New Kitchen Elevation	0	10-10-12
742-61-38	New 1st Floor Conference Room		
	Existing Plans	0	10-10-12
742-61-39	New 1 <sup>st</sup> Floor Conference Room		
	Plans and Section	0	10-10-12
742-65-022	First Floor Office & Basement Part Plan		
	HVAC Plan	2	10-10-12

There will be a mandatory prebid meeting on site on Thursday, October 18 at 1:00 p.m.

Work will be performed under a Central Maine Power Company – Agreement for Service which is attached as Appendix B. The Contractor shall also insure that they have the proper insurance coverage to perform work on this Project.

All OSHA, Federal, State, Local and Owner Safety Instructions, rules, regulations, codes and ordinances shall be adhered to.

Contractor shall require that all personnel assigned to the project read and abide by Central Maine Power Company/Iberdrola - Contractor Safety Requirements and have them sign where indicated. The Working Rules for Contractors is included as Appendix C in the Specifications.

Non-adherence to the above safety regulations and requirements is just cause for the Owner to remove the Contractor from the work without recourse from the Contractor

The Contractor shall submit a work schedule with their proposal.

Spaulding Engineering and Construction Services Inc. has been retained by CMP to act as their Representative for this Project. There will not be a full time representative of either Spaulding Engineering or CMP at the site. The successful Contractor is expected to contact Spaulding Engineering if there are questions or concerns and no representative is on site.

Bids are due by 2:00 p.m. on Thursday, October 25, 2012.

Central Maine Power Company Portland Service Center Kitchen and Cafeteria Renovations/1<sup>st</sup> Floor Conference Room Page 3

Attachments:

Proposal Form Part I

Technical Specifications Part II

Appendix A: Drawings

Appendix B: Sample Agreement for Services

# I. PROPOSAL FORM

#### PROPOSAL FORM

#### KITCHE/CAFETERIA RENOVATIONS AND FIRST FLOOR CONFERENCE ROOM AT THE PORTLAND SERVICE CENTER 162 CANCO ROAD PORTLAND, MAINE SPECIFICATION # 742-60

A. Contractor agrees to provide all labor, materials, tools, equipment, skill, transportation, supervision, and services in accordance with all documents included in this Request for Proposal.

KITO	CHEN/CAFETERIA RENOVATIONS:	
Item	No. Item Description	<b>Amount</b>
1.	Remove and dispose of existing equipment as designated in Specifications and on the Drawings.	n
	\$_	
	· <u>-</u>	Words
2.	Reconstruct kitchen back room. Including new door, frame and hardware, patching as required for new electrical prime and paint.	ıl,
	_	Words
3.	Perform all wall modifications and patching in the kitchen area for new walls, to accommodate new plumbing and new electrical. Prime and paint.	
	-	Words
4.	Provide and install new 3 bay sink and hand wash sink. \$_	
5.	Provide and install all required plumbing for the new 3 bay sink, hand wash sink, Owner –Furnished mop sink, Owner-Furnished dishwasher and Owner-Furnished cold serving station drain.	Words
	-	Words

6.	Provide and install all that is required to construct a new Including wall construction, new ceiling system, new d Prime and paint.		frame, hardware
		\$_	
			Words
7.	Provide all that is required to install new Owner-Furnis countertops to be provided by Stainless Steel Kitchens.		stainless steel cabinets and
		_	Words
8.	Provide all that is required to install new Owner-Furnis serving stations, dishwasher and misc. equipment to be provided by Caprara indicated in the Specifications and on the Drawings.		
	-	\$_	
0		1	Words
9.	Reinstall all equipment that was removed to accommod the renovation work including freezer, refrigerator, fryolators, coffee machine, etc.	iate	
		\$_	
			Words
	TOTAL PORTLAND KITCHEN/CAFETERIA OVATION LUMP SUM		
		\$	
			Words

	V FIRST FLOOR CONFERRENCE ROOM: No. Item Description	Amount
Item	item bescription	Amount
1.	Construct new conference room walls	\$
		Words
2.	Provide and install two (2) -3'-0" x 6'-8" doors, frames and hardware.	\$
		Words
3.	Prime and paint walls and door frames	\$
		Words
4.	New ceiling grid and tile in conference room, reconfigure existing grid and reinstall tile in corridors disturbed areas on the outside of the conference room	
		Words
5.	Provide and install new return and diffuser. Modify of HVAC as required and relocate thermostat.	\$
	TOTAL NEW FIRST FLOOR	Words
CON	FERENCE ROOM LUMP SUM	\$
		Words
	TAL KITCHEN/CAFETERIA RENOVATI D FIRST FLOOR CONFERENCE ROOM	
		\$
		Words

В.	Time and Material:		
	Extra work may be authorized on a T of Owner. The Contractor shall include to be utilized on this Project. The Contractor percentage mark-up to be applied to make a position of the contractor	the cost for labor and equactor shall also include thaterials%, subcon	uipment to
C.	Exception to the Request for Pr	oposal:	•
	Contractor shall state any exceptions to so no exceptions to the Request for Prop		
D.	Acknowledgment of Addendum	<u>ı:</u>	
Ad	dendum Number		<u>Date</u>
	,		

subcontracto	ors involved.	
Bidder:		
Signature:		
Name:		
Title:		
Address:		
_		
_		
Date:		
E-mail Address:		
Tel. No.:		
Fax Number: _		

E. All invoices associated with this job shall include a breakdown of materials, labor, and

The Contractor shall include with their bid the following:

- 1. A list of all subcontractors proposed for this project.
- 2. Milestone schedule.
- 3. List of foreman/superintendent with resume to be used on this Project.

# II. TECHNICAL SPECIFICATION

#### CENTRAL MAINE POWER COMPANY

#### **SPECIFICATION NO. 742-60**

#### KITCHEN/CAFETERIA RENOVATIONS PRTLAND SERVICE CENTER 162 CANCO ROAD PORTLAND, MAINE

Project/Construction Management By:

Spaulding Engineering and Construction Services, Inc. 24 Common Street Waterville, Maine 04901 (207) 861-9923

#### TABLE OF CONTENTS

#### IV. TECHNICAL SPECIFICATION

Division 1 - General Requirements

Section 01000

General Requirements

#### TECHNICAL SPECIFICATION

#### SECTION 01000

#### GENERAL REQUIREMENTS

#### PART 1 GENERAL

#### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions (if any) apply to work of this section.

#### 1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Kitchen/Cafeteria Renovations Scope of work:
  - 1. In November of 2011, the city of Portland conducted an inspection of the existing kitchen and noted several problem areas with the kitchen. Areas in violation related to not having a three (3) compartment wash sink, no hand wash sink, broken floor tiles, no mop sink in the immediate area and cabinets with back splashes that were not adequately caulked. In order to correct the non-compliance issues the following work will be completed:
    - Remove the existing floor tile and asbestos containing mastic and install a new vinyl composition tile (VCT) flooring with rubber cove base.
    - b. Perform a general clean-up of the area and repaint the walls.
    - c. Install a new three (3) bay wash sink.
    - d. Install a new a new hand wash sink.
    - e. Construct a janitor's closet in the corner of the kitchen and install a new mop sink.
    - f. Replace the existing 20 year old dishwasher.
    - g. Replace all cabinets and lunch line stations.
    - h. Extend the back room wall out and provide new storage cabinetry with additional counter space.
    - i. Replace the counter mounted food heating tray.
    - j. Paint out entire cafeteria area with two (2) coats of paint.
  - 2. Kitchen/kitchen backroom and new janitor's closet area:
    - a. Remove all equipment from the kitchen area. All equipment and cabinets except for the stove, freezer, stand-up refrigerator, freestanding shelves and fryolators shall be disposed of by the Contractor. The Contractor shall reinstall equipment to be reused.

- b. Demolish and dispose of the existing back room walls and door.
- The Contractor shall demolish the back room wall prior to floor tile and mastic asbestos abatement.
- d. The existing floor tile and mastic will be removed by Acadia Contractors.
- e. Replumb the area to accept the new three (3) bay sink, new hand wash sink, dishwasher and cold serving station drain.
- f. Provide and install a new backroom wall with new studs, ½" drywall each side and 1" x 4" top and top sides painted poplar trim. Leave a space of eight inches between the top of the new wall and ceiling for ventilation.
- g. New electrical outlets will need to be installed by the Owner's electrical contractor, Wiswell Electric. The Contractor shall schedule all electrical removals and installations with Wiswell Electric so as not to delay their work or cause rework.
- h. Provide and install new 3'-0" x 7'-0" 16 gauge steel door frame and 18 gauge 1 34" thick steel door with 4" x 25" wire mesh vision panel. Provide 1 ½ pair heavy duty stainless steel hinges, 3 silencers and Sargent Line 10 lockset with lever handle.
- Door and frame shall be shop primed and field painted with two
   (2) coats of Devoe Devflex 4216HP water-borne acrylic semigloss paint.
- j. Prime walls with Glidden 9116 LIFE MASTER No VOC interior primer and paint walls and doors with two coats of Glidden 9200 LIFE MASTER No VOC semi-gloss paint. Color by Owner.
- k. Modify as required, clean, patch and paint out all main kitchen walls with two (2) coats of Glidden 9200 LIFE MASTER No VOC semi-gloss paint. Color by Owner.
- 1. New electrical outlets will need to be installed by the Owner's electrical contractor, Wiswell Electric. The Contractor shall schedule all electrical removals and installations with Wiswell Electric so as not to delay their work or cause rework.
- m. Provide and install a new janitor's closet with new studs, fiberglass insulation and 5/8" drywall each side. Provide moisture resistant gypsum board on inside faces. Construct new wall to 6 inches above existing finished ceiling. Modify existing ceiling grid and tile. Install new ceiling grid and tile on the inside of the new janitor's closet. New electrical outlets and lights will need to be installed by the Owner's electrical contractor, Wiswell Electric. Existing lights will also need to be removed. The Contractor shall schedule all electrical removals and installations with Wiswell Electric so as not to delay their work or cause rework.

- n. Provide and install new 3'-0" x 7'-0" 16 gauge steel door frame and 18 gauges 1 34" thick solid steel door. Provide 1 ½ pair heavy duty stainless steel hinges, closer and three (3) silencers and Sargent Line 10 lockset with lever handle.
- Door and frame shall be shop primed and field painted with two
   (2) coats of Devoe Devflex 4216HP water-borne acrylic semigloss paint.
- p. Prime new janitor's closet inside and out with Glidden 9116 LIFE MASTER No VOC interior primer and paint walls and doors with two coats of Glidden 9200 LIFE MASTER No VOC semi-gloss paint. Color by Owner.
- q. Provide and install new 3'-0" x 7'-0" 16 gauge steel door frame and 18 gauges 1 ¾" thick solid steel door. Provide 1 ½ pair heavy duty stainless steel hinges, closer and three (3) silencers and Sargent Line 10 lockset with lever handle.
- r. Paint entire back room walls with two (2) coats of Glidden 9200 LIFE MASTER No VOC semi-gloss paint.
- s. The Owner will add and/or relocate sprinkler heads as required. The relocation and/or addition of new sprinkler heads will be by Eastern Fire Protection, Inc.
- t. The following equipment will be purchased by the Owner for installation by the Contractor:
  - 1) Item #1: 24" wide x 24" deep x 34 ½" high stainless steel base cabinet with top drawer, door with two (2) shelves. 1 ½" thick stainless steel counter with 8 inch backsplash on back and right side. Provide cabinet end closure on left and right sides. Provide and install floor kick plate. Caulk back splash and cabinet to wall surface with food grade, mildew resistant caulking
  - 2) Item #4: Hobart SR24H undercounter dishwasher with factory installed detergent pump and stainless steel side panel on sink side. Voltage 120/208 or 120/240, 60 cycle, single phase. (verify voltage with Wiswell electric prior to ordering).
  - 3) Item #5: 24" wide x 24" deep x 34 ½" high stainless steel base cabinet with top drawer and door with two (2) shelves. Cabinet shall have side finish on both sides. 48 inch wide x 25 inch deep x 1 ½" thick stainless steel countertop with an 8 inch backsplash to span over new dishwasher. Provide cabinet end closure on left and right sides. Provide kickplates. Caulk back splash and cabinet to wall surface with food grade, mildew resistant caulking.

- 4) Item #6: Two (2) 36" wide x 24" deep x 34 ½" stainless steel base cabinets with top drawer and doors with two (2) shelves. 1½" thick countertop with 8 inch high backsplash on back. Provide cabinet closure panel on right and left side. Provide and install floor kick plates. Caulk back splash and cabinet to wall surface with food grade, mildew resistant caulking.
- 5) Item #7: Two (2) 33" wide x 24" deep x 34 ½" stainless steel base cabinets with top drawer and doors with two (2) shelves. 1 ½" thick countertop with 8 inch high backsplash back and right side. Provide cabinet closure panel on left side. Provide and install floor kick plate. Caulk back splash and cabinet to wall surface with food grade, mildew resistant caulking.
- 6) Item #8: Two (2) 33" wide x 12" deep x 30" high stainless steel top cabinets with doors and shelves. Cabinet shall have side closure panel on left side. Caulk cabinet to wall surface with food grade, mildew resistant caulking.
- 7) Item #9: 74" Long x 36" high Delfield Model No. SC-74 all-purpose counter with dry under storage with stainless steel counter top, stainless steel end panel on wall side, Electrical pedestal outlet. Drawers & doors with shelf. Provide closure kick plates on both sides. Provide stainless steel tray slide customer side.
- 8) Item #10: 52" Long x 36" high Delfield Model No. SCSC-60-B cold pan serving counter with non-refrigerated dry storage base. Provide four (4) drop in NSF7 salad bar cold pan 10" with 24 inch high buffet canopy with unlighted recessed angle food pan display and breathe shield customer side only. Provide stainless steel tray slide customer side.
- 9) Item #11: 60" Long x 36" high Delfield utility serving counter, two (2) top drawers and lockable doors with shelf, stainless steel end panel on wall side, and stainless steel tray slide on customer side.
- 10) Item #12: Hatco Glo-Ray buffet warmer model GRBW-24.
- 11) Item #13: 74" Long x 36" high Delfield utility serving counter with drawers & lockable doors with shelf. Provide stainless steel tray slide on kitchen side.
- 12) Item #14: one (1) stainless steel mop sink Advance Tabco 9-OP-40, 16" x20" x12" bowl with 16 inch overall height. Service faucet with mop hanger. Mop hanger and mop bucket holder.

- u. The following equipment shall be provided and installed by the Contractor:
  - 1) Item #2: 16 gauge Regency three (3) compartment stainless steel commercial sink with two (2) drain boards 58" long x 19 ½" deep x 43 ¾" tall with deck height at approximately 34 inches. Provide and install 12" T&S wall mounted swivel faucet on 8" c/c with paddle faucet handles.
  - 2) Item #3: Regency wall mounted hand sink with paddle faucets and side splash 12" x16" model number 600 HSS12SP/HS-12-SP.
- v. The floor will be retiled with Vinyl Composition Tile (VCT) with cove base by Others.
- w. All hot and cold water piping shall be type "L" copper. No lead solder shall be used.
- x. Jet all existing drain piping.
- y. All plumbing shall be completed in accordance with the Maine State Internal Plumbing Code and in requirements with the State of Maine Food Code.

#### B. First Floor Conference Room Scope of work:

- 1. Contractor to provide and install 6 inch steel stud walls with insulation and 5/8 inch drywall on each side.
- 2. Reinforce south wall with fire rated plywood to allow future wall mounting of smart boards.
- 3. Prime walls with Glidden 9116 LIFE MASTER No VOC interior primer and paint walls and doors with two coats of Glidden 9200 LIFE MASTER No VOC semi-gloss paint. Color by Owner.
- 4. Paint out all new conference walls with two (2) coats of Glidden 9200 LIFE MASTER No VOC semi-gloss paint. Color by Owner.
- 5. Provide and install two (2) new 3'-0" x 6'-8" 1 ¾ inch thick Marshfield Red Oak doors, and 16 gauge steel door frame. Provide 1 ½ pair heavy duty stainless steel hinges, 3 silencers and Sargent Line 10 locksets with lever handles.
- 6. Provide and install new HVAC air return in conference room.
- 7. Provide and install new diffuser and ductwork in corridor.
- 8. Relocate thermostat form open office area to conference room.
- 9. Provide and install new ceiling grid and tile.
- 10. New ceiling lights in the new conference room area and corridors will be by the Owner's electrical contractor, Wiswell Electric. The Contractor shall schedule all electrical installations with Wiswell Electric so as not to delay their work or cause rework.
- 11. New wall electrical and telecommunications will be by Wiswell Electric. The Contractor shall schedule all electrical installations with Wiswell Electric so as not to delay their work or cause rework.

- 12. The Owner will add and/or relocate sprinkler heads as required. The relocation and/or addition of new sprinkler heads will be by Eastern Fire Protection, Inc.
- 13. New floor carpet tiles and rubber cove base will be installed by Gary Norris Flooring.
- C. Tentative construction schedule of activities for Kitchen/Cafeteria Renovations:
  - 1. Cafeteria Shuts down on Friday, 11/2.
  - 2. Contractor removes all equipment and completes demolition of back room walls. Monday, 11/5 to Friday, 11/9.
  - 3. Acadia Contractors completes all floor tile and mastic asbestos abatement. Monday, 11/12 to Friday 11/16.
  - 4. Eastern Fire Protection modifies and provides additional sprinkler heads. Monday, 11/19 to Friday, 11/30
  - 5. Owner-Furnished stainless steel cabinets and counters arrive onsite on/or before Friday 11/30.
  - 6. Owner-Furnished Caprara equipment arrives onsite on or before Friday 11/30.
  - Wiswell Electric installs all required electrical construction. Monday 11/19 to Friday 12/9.
  - 8. Contractor completes all new construction including plumbing. Monday 11/19 to Friday, 12/7.
  - 9. Floor tile installed by Gary Norris Flooring, Monday, 12/9 to 12/11.
  - Contractor installs all Owner-Furnished equipment and misc. equipment that was removed to complete renovations. Monday, 12/10 to Friday, 12/21.
- D. Tentative construction schedule of activities for new Conference Room:
  - Contractor constructs new conference room walls. Monday, 11/5 to Friday, 11/30
  - 2. Wiswell Electric installs new wall electric and communications. Monday, 11/12 to Friday, 11/30
  - 3. Eastern Fire Protection modifies and provides additional sprinkler heads. Monday, 11/12 to Friday, 11/30
  - 4. Contractor makes HVAC modifications and provides and installs new ceiling grid and tile. Monday 11/26 to Friday, 12/7.
  - 5. Wiswell installs new ceiling lights. Monday 12/3 to Friday, 12/7.
  - 6. Contractor completes final paint-out. Monday, 12/10 to Wednesday, 12/12.
  - 7. Gary Norris installs New floor carpet tiles and cove base. Monday 12/17.
- E. All electrical work will be performed by the Owner's electrical subcontractor, Wiswell Electric and is not part of the Contractor's work. The Contractor shall schedule all electrical removals and installations with Wiswell Electric so as not to delay their work or cause rework.

#### 1.03 CONTRACT METHOD

A. Construct the work under a single lump sum Contract.

#### 1.04 CONTRACTOR USE OF PREMISES

- A. Limit use of premises for work and for construction operations, to allow for Owner occupancy, and work of other Contractors.
- B. Coordinate use of premises under direction of Owner.
- C. The Owner will occupy premises during the entire period of construction for the conduct of their normal operations. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- D. The Contractor shall take all precautions to control dust throughout the Project.

#### 1.05 APPLICATION FOR PAYMENT

A. Submit each application for payment in accordance with the Agreement for Independent Contractor Services.

#### 1.06 COORDINATION

A. Coordinate work shown on the Drawings to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed by others.

#### 1.07 FIELD ENGINEERING

A. Provide all field-engineering services necessary for construction; establish grades, lines and levels, by use of recognized engineering survey practices.

#### 1.08 REFERENCE STANDARDS

- A. For products specified by association or trade standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the date of Agreement for Independent Contractor Services.
- C. Obtain copies of standards when required by Contract Documents. Maintain copy at job site during progress of the specific work.

D. Should specified reference standards conflict with Contract Documents, request clarification from the Owner before proceeding.

#### 1.09 SUBMITTAL PROCEDURES

- A. Deliver submittals to Owner at address listed in Instructions to Bidders.
- B. Provide submittals for the following:
  - Kitchen 3 bay sink
  - · Hand wash sink
  - · Doors, frames and hardware
  - Primer
  - Paint
  - HVAC return
  - HVAC diffuser
- C. Transmit each item under Owner-accepted form. Identify Project, subcontractor, major supplier; identify pertinent Drawing sheet(s) and detail number, and Specification Section number, as appropriate. Identify deviations from Contract Documents. Provide space for subcontractor and Owner review stamps.
- 1.10 SUBMITALS (SHOP DRAWINGS, EQUIPMENT & MATERIAL PRODUCT DATA)
  - A. Contractor-Furnished Submittals
    - 1. Submittals for Review
      - a. Submit one (1) pdf copy of submittals to the Owner.
      - b. If the submittal is returned to the Contractor stamped "EXCEPTIONS AS NOTED" and "RESUBMIT FOR ACCEPTANCE", Contractor shall not proceed with the work, but shall make the corrections and resubmit the revised submittal to the Owner for review.
      - c. When the submittal is resubmitted, the resubmittal shall incorporate all of the marked revisions. Where exceptions are taken to the marked revisions, the Contractor shall state their reasons for omitting and/or modifying the marked revisions in their transmittal letter. Resubmittals shall be made in the same manner as the original submittal.

- 2. Review of the submittals by the Owner shall be general only and shall not relieve the Contractor and subcontractors in any way from their responsibilities or proper detailing of the design furnished by the Owner, satisfactory construction, compliance with the Drawings, Specifications and applicable codes, or for errors or omissions of any kind in the final installed work.
- Timely submission of submittals, samples and models is required by the Owner to insure compliance with the Drawings and continued progress of the work. The Contractor shall allow five (5) working days for Owner's review.

#### 1.11 SAMPLES

- A. Submit full range of manufacturer's standard colors, textures, and patterns for Owner's selection. Submit samples for selection of finishes within 10 calendar days after the date of the Agreement.
- B. Submit samples to illustrate functional characteristics of the product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.
- C. Include identification on each sample, giving full information.

#### 1.12 PRODUCT DATA

- A. Mark each copy to identify applicable products, models, options and other data; supplement manufacturers' standard data to provide information unique to the work.
- B. Submit the number of copies, which the subcontractor requires, plus three copies, which will be retained by Owner unless otherwise specified under various sections.

#### 1.13 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, subcontractors, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturer's instructions conflict with Contract Documents, request clarification from Owner before proceeding.

- D. Comply with specified standards as a minimum quality for the work, except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

#### 1.14 TEMPORARY ELECTRICITY

- A. The Owner will furnish single phase, 60 HZ power at a nominal 120 volts.
- B. All temporary wiring shall be by the Contractor and shall conform to the National Electrical Code and Occupational Safety and Health Act (OSHA) for temporary construction wiring.
- C. The power and facilities as outlined in 1.14A above will be provided at no charge to the Contractor. Any alterations or additions to the above will be at the Contractor's expense.

#### 1.15 TELEPHONE SERVICE

A. The Contractor shall be responsible for their own telephone service.

#### 1.16 TEMPORARY WATER SERVICE

- A. Water is available at the site for the Contractor's use.
- B. The Contractor shall provide hoses and fittings as required.

#### 1.17 TEMPORARY SANITARY FACILITIES

A. The Owner will allow the use of existing facilities. The Contractor shall use extreme care to keep existing facilities clean.

#### 1.18 BARRIERS

- A. Provide all necessary barriers to prevent unauthorized entry to construction area, to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

#### 1.19 CONSTRUCTION LAYDOWN/STORAGE AREA

A. Construction lay down/storage area will be provided in Owner-designated areas.

#### 1.20 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection where specified in individual specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

#### 1.21 PARKING

A. Parking for construction personnel will be provided in Owner-designated areas.

#### 1.22 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Remove waste materials, debris, and rubbish from site daily.

#### 1.23 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary above grade or buried utilities, equipment, facilities, and materials, prior to Final Application for Payment. Owner will conduct a final inspection of the work before approving final payment.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

#### 1.24 ABATEMENT OF AIR POLLUTION

- A. The Contractor shall comply with the applicable federal, state, and local laws and regulations concerning the prevention and control of air pollution.
- B. In their conduct of construction activities and operation of equipment, the Contractor shall utilize such practicable methods and devices as are reasonably available to control, prevent, and otherwise minimize atmospheric emissions or discharges of air contaminants. Equipment and vehicles that show excessive emissions of exhaust gases due to poor engine adjustments, or other inefficient operating conditions, shall not be operated until corrective repairs or adjustments are made.
- C. During the performance of the work required by the Drawings and Specifications, any operations appurtenant thereto, whether on right-of-way provided by the Owner or elsewhere, the Contractor shall furnish all the labor, equipment, materials, and means required, and shall carry out proper and efficient measures wherever and as often as necessary to reduce the dust nuisance, and to prevent dust which has originated from his operations from property and dwellings, or causing a nuisance to persons or damaging equipment. The subcontractor will be held liable for any damage resulting from dust originating from his operations.

#### 1.25 NOISE CONTROL

A. The Owner will be occupying and working in adjacent areas. Exercise care to limit loud noise activities as much as possible. Notify onsite coordinator of approximate times and durations of work that is expected to produce loud noise levels.

#### 1.26 POLLUTION CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

#### 1.27 PRODUCTS

- A. Products include material, equipment, and systems.
- B. Comply with materials as specified on the Drawings and referenced standards as minimum requirements.

#### 1.28 TRANSPORTATION AND HANDLING

- A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct and products are undamaged.

#### 1.29 STORAGE AND PROTECTION

- A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- B. For exterior storage of fabricated products, place on sloped supports, above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
- C. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.

#### 1.30 PRODUCT OPTIONS

A. Products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not specifically named.

#### 1.31 SUBSTITUTIONS

- A. Only within 10 days after issuance of a purchase order for the work will Owner consider requests in writing from subcontractors for substitutions. Subsequently, substitutions will be considered only when a product becomes unavailable due to no fault of the subcontractor.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. Request constitutes a representation that the subcontractor:

- 1. Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product.
- Will provide the same warranty for substitution as for the specified product.
- 3. Will coordinate installation and make other changes, which may be required for work to be complete in all respects.
- 4. Waives claims for additional costs, which may subsequently become apparent.
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals without separate written request, or when acceptance will require revision of Contract Documents.
- E. The Owner will determine acceptability of proposed substitution and will notify the subcontractor of acceptance or rejection in writing within a reasonable time.
- F. Only one request for substitution will be considered for each product. When substitution is not accepted, provide specified product.

#### 1.32 PRE-CONSTRUCTION CONFERENCES

A. The Owner will administer a pre-construction meeting with the Owner, Contractor, and subcontractors prior to the start of work for clarification of Owner, Contractor, and subcontractor responsibilities in use of site and for review of administrative procedures.

#### 1.33 PROJECT SAFETY

- A. The Contractor shall be responsible to ensure that all of their work force and all subcontractors perform all work in accordance with Iberdrola USA, CMP, local, state, federal and OSHA safety requirements.
- B. The Contractor shall ensure that all workers wear hard hats, safety glasses and steel-toed shoes.
- C. The Owner will ensure that the Owner's electrical subcontractor's work force is dressed with the appropriate OSHA required fire retardant clothing to perform the electrical work.
- D. Violations of any of the Project Safety requirements may result in the immediate shutdown of the Project until such violations are corrected. Any

costs associated with the shutdown of the project due to safety issues will be borne by the Contractor at no cost to the Owner.

#### 1.34 SYSTEM DEMONSTRATION

- A. Prior to final inspection, demonstrate operation of each system to the Owner.
- B. Instruct Owner's personnel in operation, adjustment, and maintenance of equipment and systems, using the operation and maintenance data as the basis of instruction.

#### 1.35 WARRANTIES

A. Upon written notice from Owner, Contractor shall make promptly and without charge, all necessary changes, corrections, and replacements (including installation of replacement parts) required to correct all defects in the material or equipment for a period of one year from the date of final acceptance of the project by the Owner. Owner shall notify the Contractor of all such defects within three months of discovery of the defects. Contractor shall make good all defects of which it has received notice from the aforementioned one-year period.

#### 1.36 CONTRACT DRAWINGS

A. The following drawings and sketches are included and made part of this Specification:

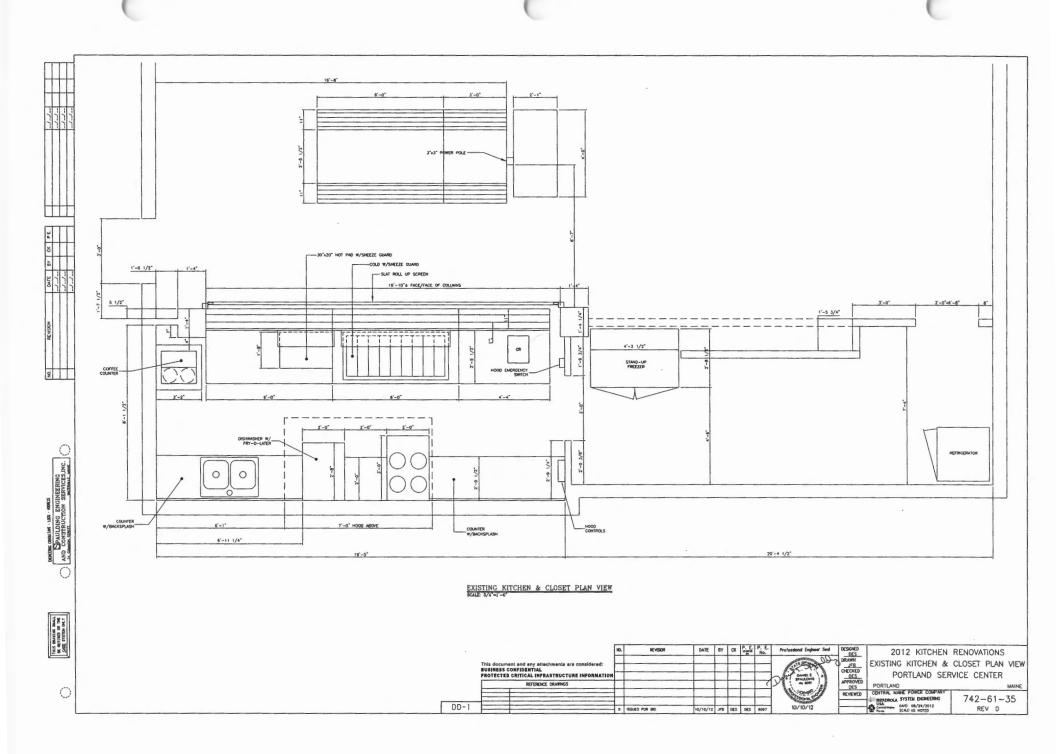
CMP Drawing	No. <u>Title</u>	Revision	Date.
742-61-35	Existing Kitchen & Closet Plan View	0	10-10-12
742-61-36	New Kitchen Plan View	0	10-10-12
742-61-37	New Kitchen Elevation	0	10-10-12
742-61-38	New 1 <sup>st</sup> Floor Conference Room		
	Existing Plans	0	10-10-12
742-61-39	New 1 <sup>st</sup> Floor Conference Room		
	Plans and Section	0	10-10-12
742-65-022	First Floor Office & Basement Part Plan		
	HVAC Plan	2	10-10-12

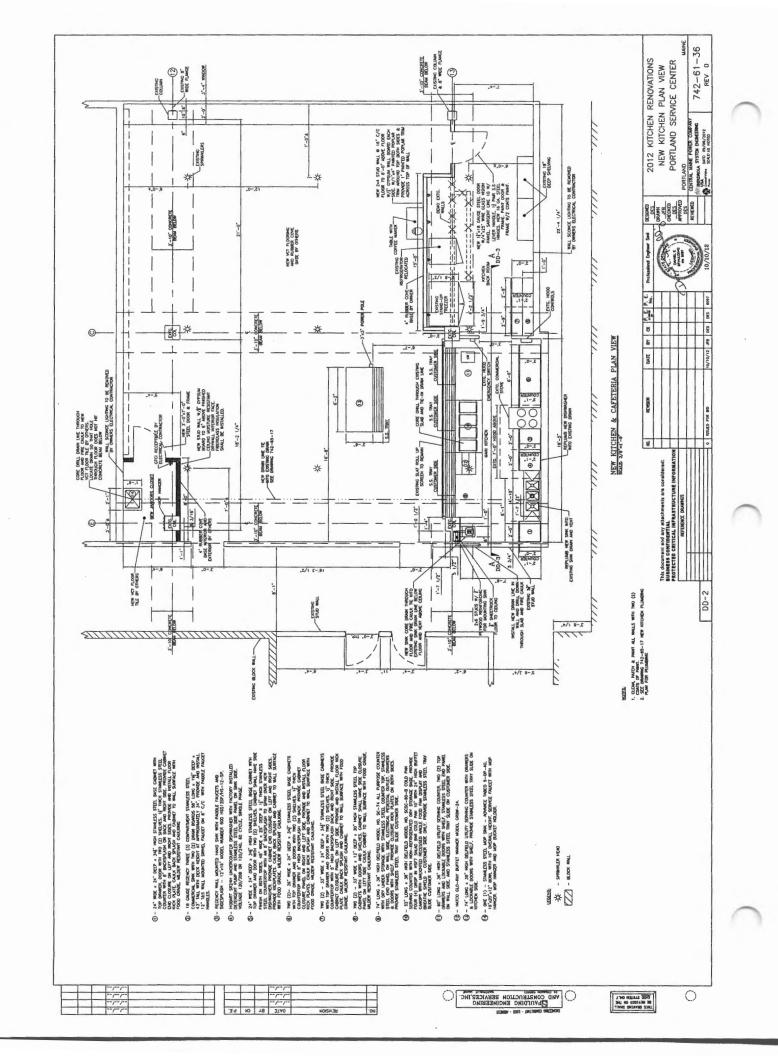
#### 1.37 PERMITS

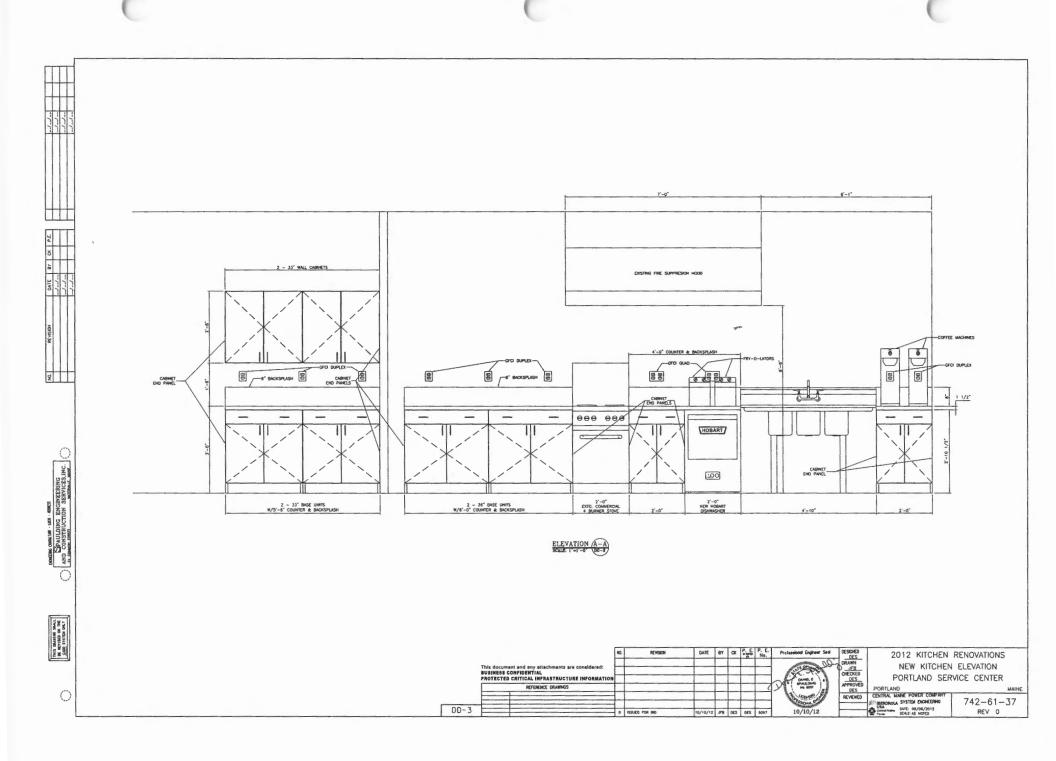
A. The Owner will get the Building Permit. The Contractor shall be responsible for all other permits including plumbing and any other permits required to accomplish the work.

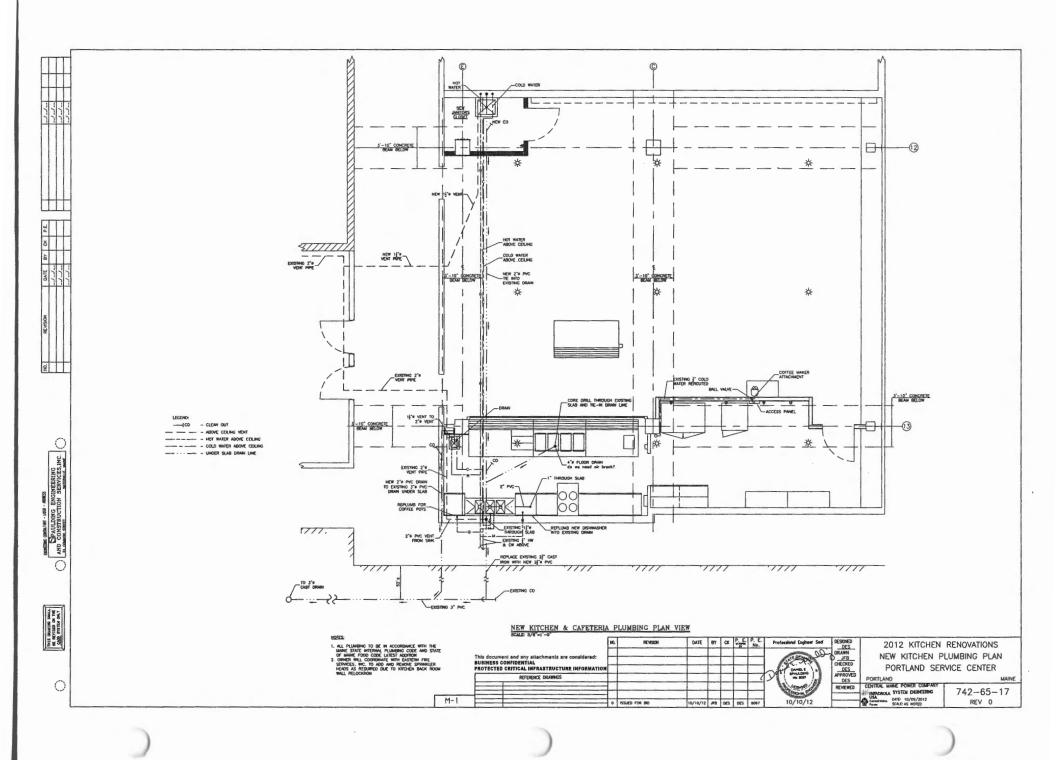
#### **END OF SECTION**

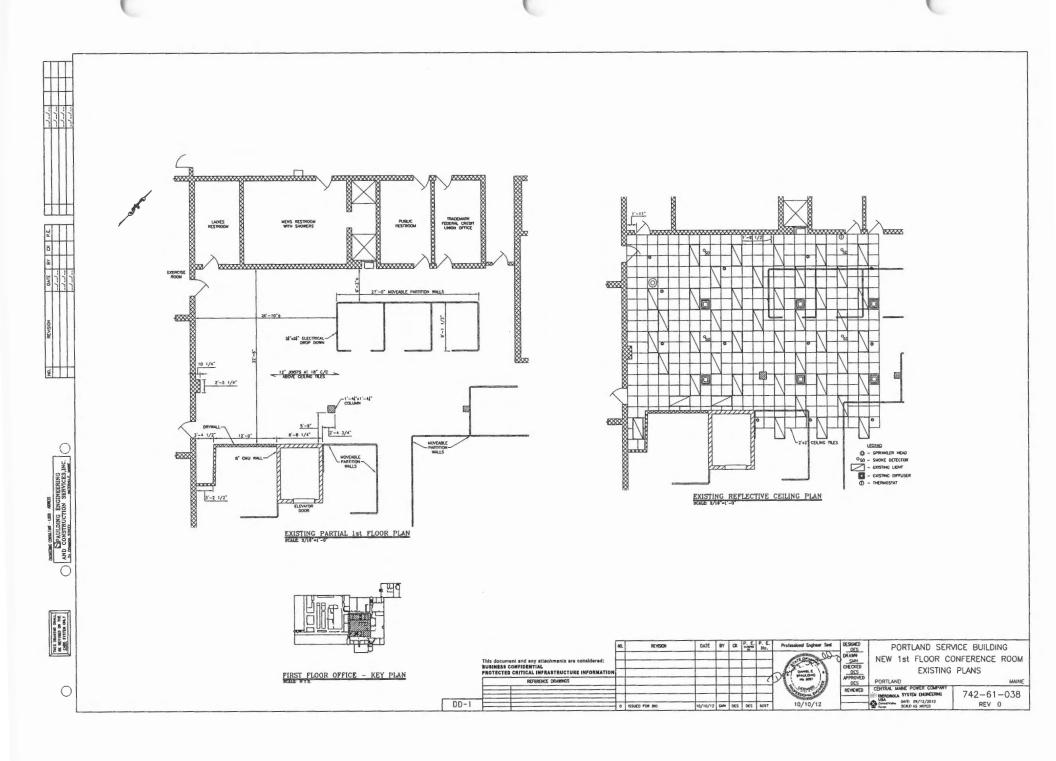
# APPENDIX A DRAWINGS

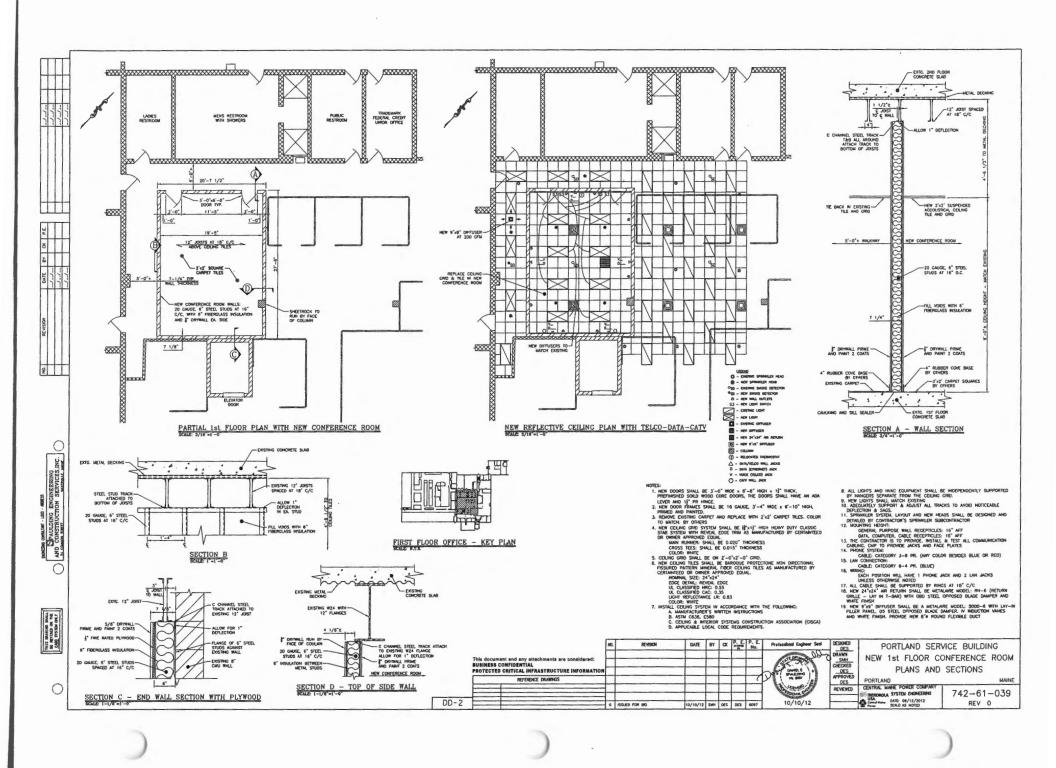


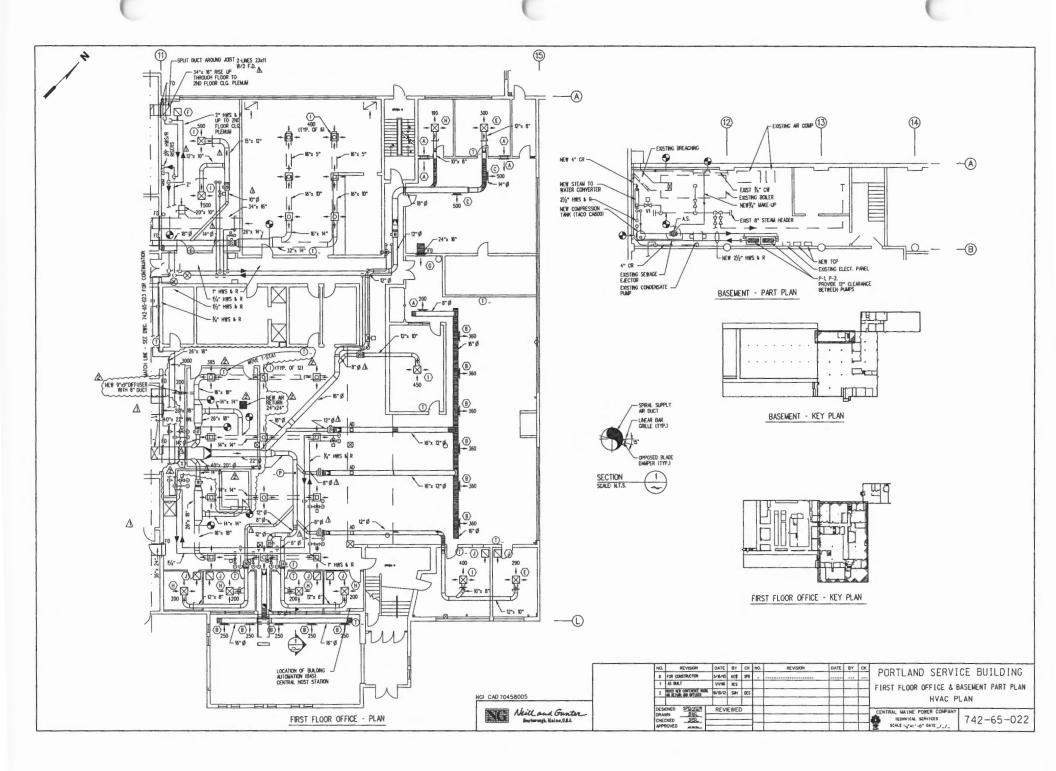




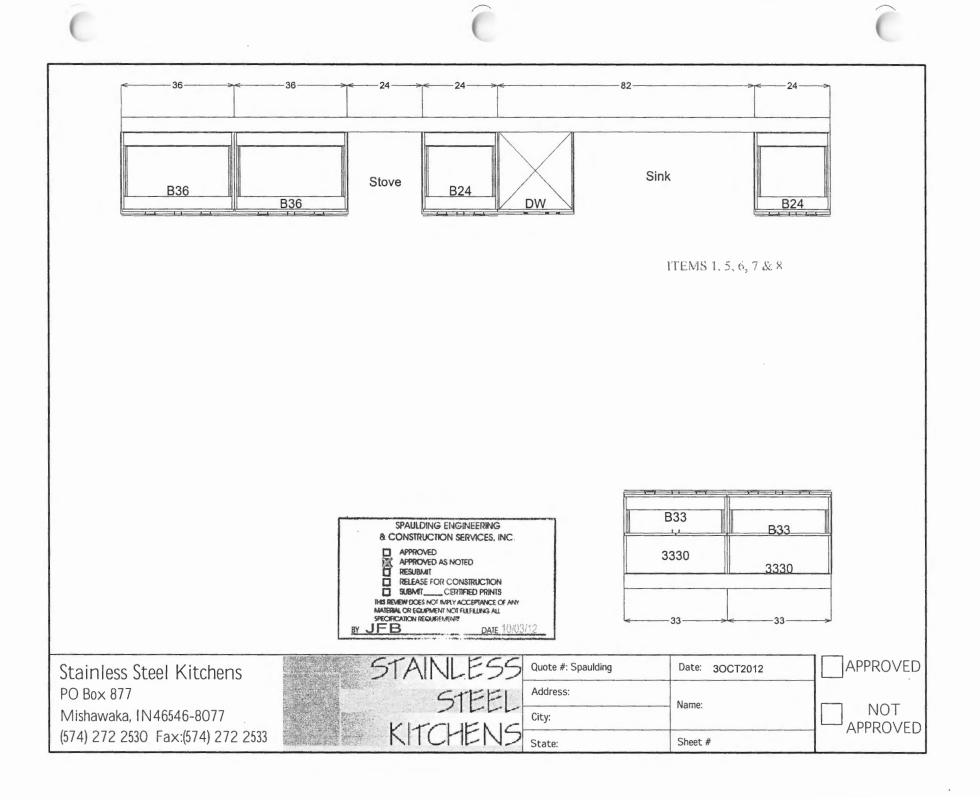


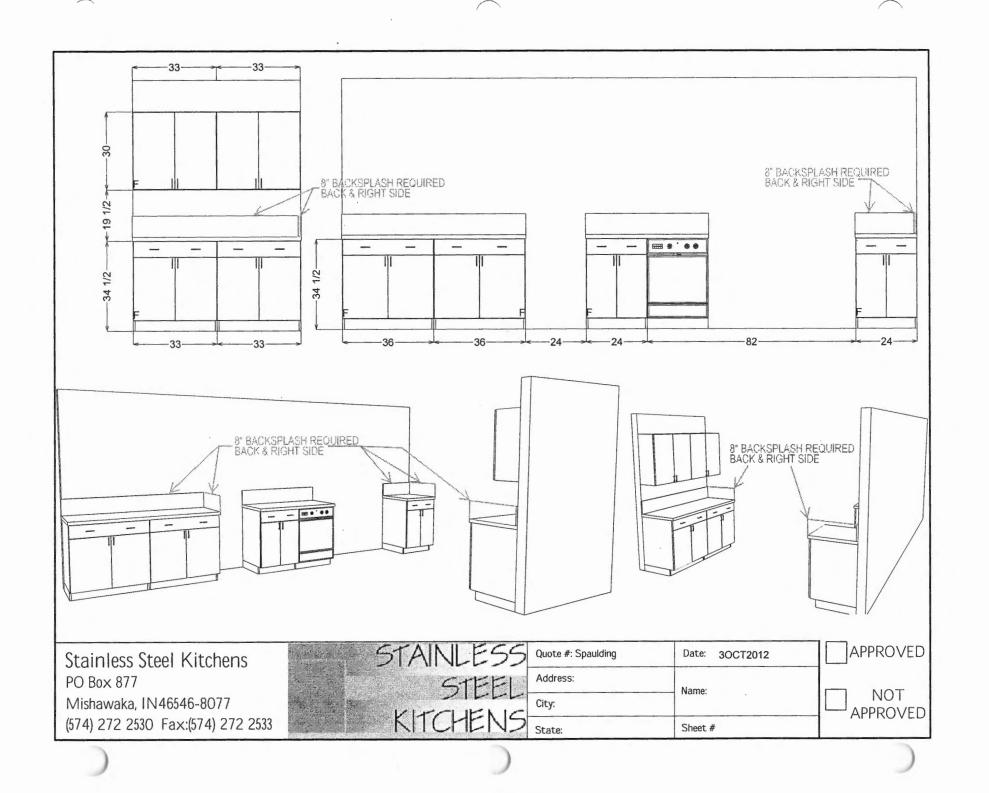




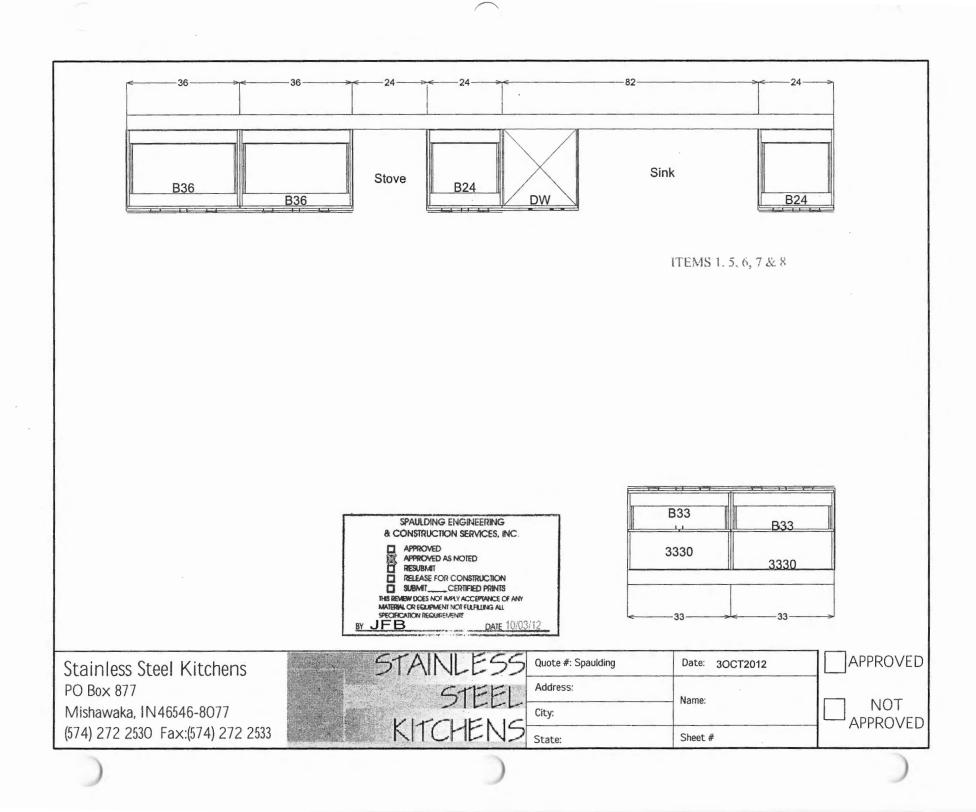


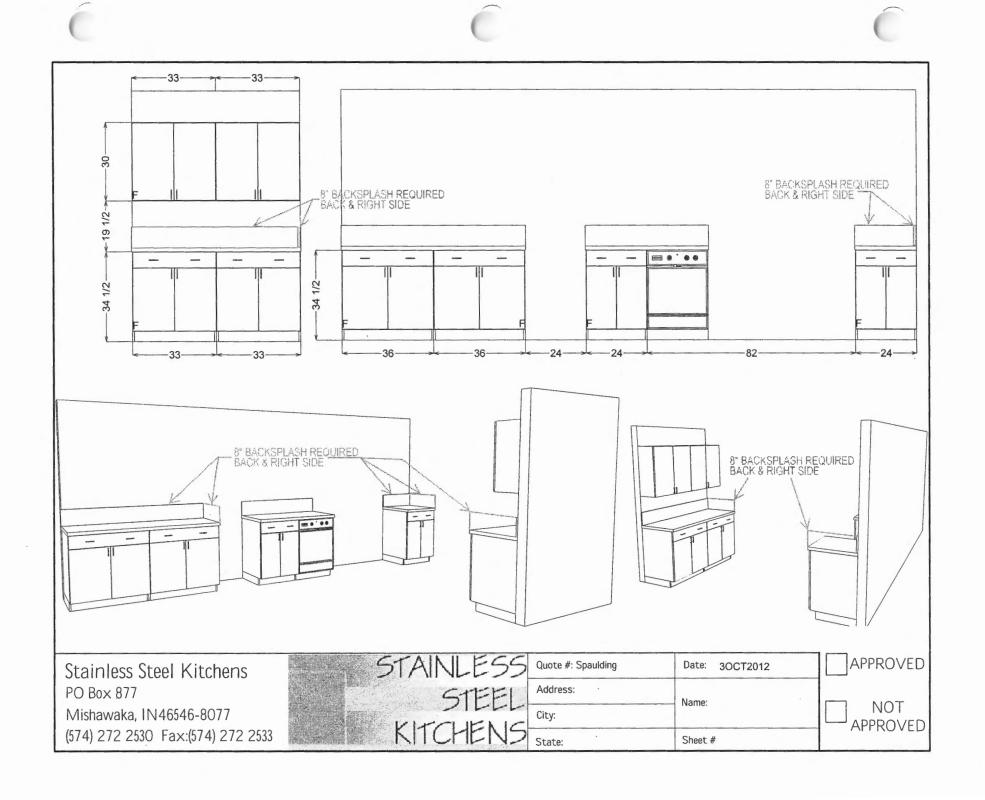
# APPENDIX D EQUIPMENT AND FIXTURES





# APPENDIX D EQUIPMENT AND FIXTURES





16GA,304S/S sink

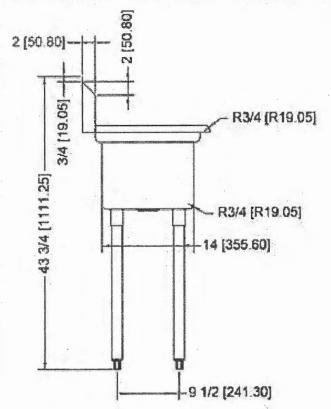
3comp:10"X14"X10"

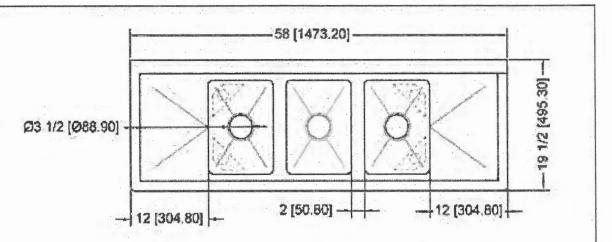
16GA.galvanized leg and socket

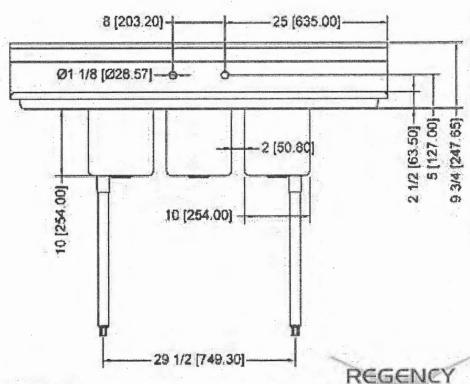
Plastic bullet feet

12" left and 12" right drainboards

Centered drain with 3.5" drain basket

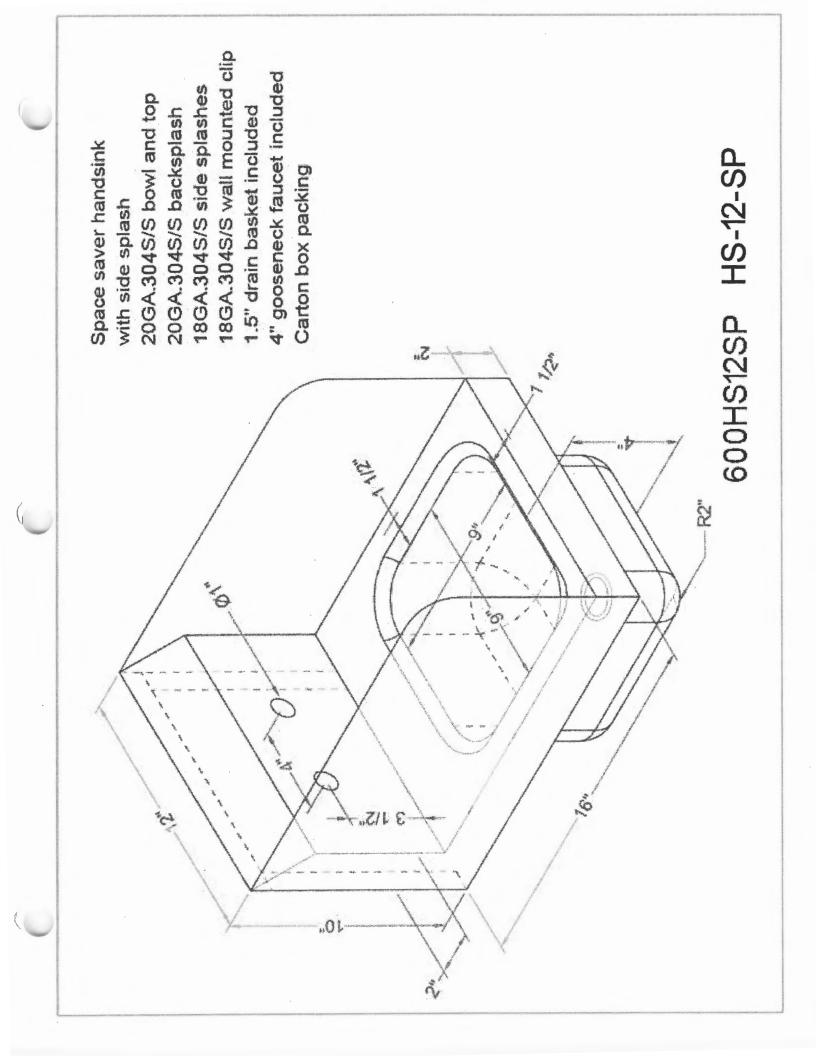






Tables And Sinks

600S31Q14212



Hobart

Item # \_\_\_\_ITEM #4

Quantity\_

C.S.I. Section 114

Item#: 4



701 S Ridge Avenue, Troy, OH 45374 1-888-4HOBART • www.hobartcorp.com

## SR24 DISHMACHINE

#### STANDARD FEATURES

- SR24H 19 racks per hour; SR24C - 14 racks per hour
- Hot water or chemical sanitizing
- 70°F rise booster heater on SR24H
- 16 gauge stainless steel tank bottom with 18 gauge stainless steel base, chamber and door
- Pumped final rinse
- Stainless steel lower front panel
- SR24H 2.4 gallons per rack SR24C - 2.4 gallons per rack
- Cord and plug (SR24C model)
- Revolving upper and lower anti-clogging wash/rinse arms
- Removable stainless steel scrap screen
- Automatic fill
- Corrosion resistant pump
- Flexible fill and drain hoses supplied
- Automatic pumped drain
- 16%" high door opening
- Two dishracks one peg and one combination
- Chemical sensing module (SR24C)

#### STANDARD VOLTAGES

- ☐ 120/60/1 (SR24C model only)
- ☐ 120/208(3W)/60/1 (SR24H model only)
- 120/240(3W)/60/1 (SR24H model only)

#### **OPTIONS**

 Detergent pump - factory installed (chemical sensing module included)





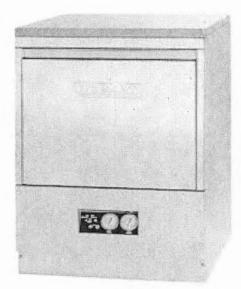
#### **MODELS**

- ☐ SR24H High Temperature Sanitizing
- ☐ SR24C Chemical Sanitizing

#### **ACCESSORIES - field installed**

- Detergent and/or rinse agent pump (chemical sensing device suggested)
- ☐ Chemical sensing device (SR24H only)
- ☐ Stainless steel top and side panels
- ☐ Stainless steel base with 6" legs
- ☐ 17" stainless steel stand
- ☐ Pressure regulator valve

Specifications, Details and Dimensions on Inside and Back.



Model SR24H
Built in Booster 180°F Rinse
(Shown with optional side and top panels)

F-40028 - SR24 Dishmachine

Page 1 of 4

SR24 DISHMACHINE

## SR24 DISHMACHINE



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#### **DETAILS AND DIMENSIONS**

#### WARNING:

REQUIRED FLOWING WATER PRESSURE TO THE DISHWASHER IS TO BE 25 PSI +/- 3 PSI IF FLOW PRESSURE IS BELOW 22 PSI, THE SUPPLY LINE PRESSURE MUST BE INCREASED. IF FLOW PRESSURE IS ABOVE 28 PSI, A PRESSURE REDUCING VALVE (NOT SUPPLIED) MUST BE INSTALLED IN THE LINE.

#### SR24C ONLY

IMPORTANT: THE SODIUM HYPOCHLORITE (LIQUID BLEACH) CONTAINER SHOULD BE PLACED ON THE FLOOR.

IF BLEACH CONTAINER IS TO BE PLACED IN CABINET ADJACENT TO MACHINE, A 1/2" DIA HOLE IS REQUIRED IN THE CABINET TO RUN BLEACH SUPPLY LINE. USE ONLY 6% OR 8.4% SODIUM HYPOCHLORITE (LIQUID BLEACH) AS SANITIZING CHEMICAL TO INSURE PROPER OPERATION OF DISHMACHINE.

DO NOT PRE-MIX WETTING AGENT AND SODIUM HYPOCHLORITE (LIQUID BLEACH).

CERTAIN MATERIALS INCLUDING SILVER PLATE, ALUMINUM AND PEWTER ARE ATTACKED
BY SODIUM HYPOCHLORITE (LIQUID BLEACH). SEE INSTRUCTION MANUAL.

#### NOTES:

- ALL VERTICAL MACHINE DIMENSIONS TAKEN FROM FLOOR MAY BE INCREASED OR DECREASED BY 1/2\* (FOOT ADJUSTMENT).
- MOIST AIR ESCAPES FROM THE DOOR. USE ONLY MOISTURE RESISTANT MATERIALS ADJACENT TO SR24 SIDES AND TOP.

#### PLUMBING NOTES:

- WATER HAMMER ARRESTOR (MEETING ASSE-1010 STANDARD OR EQUIVALENT) TO BE SUPPLIED (BY OTHERS) IN COMMON WATER SUPPLY LINE AT SERVICE CONNECTION:
- 2. RECOMMENDED WATER HARDNESS TO BE 4-6 GRAINS FOR BEST RESULTS.
- 3. MINIMUM WATER CONDUCTIVITY REQUIRED 30 MICRO-MHOS/CM.

4. IF DRAIN HOSE IS LOOPED ABOVE A SINK, THE LOOP MUST NOT EXCEED 38" AFF.

#### LEGEND:

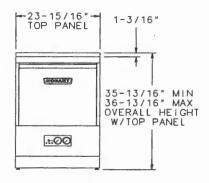
- E1 ELECTRICAL CONNECTION: SR24C: CORD AND PLUG SUPPLIED. SR24H: 1-1/8" DIA HOLE FOR 3/4" ELECTRICAL CONNECTOR; 4" AFF.
- P1 SINGLE FILL AND RINSE PIPE CONNECTION: 3/4"
  FEMALE GARDEN HOSE FITTING ON 6' LONG HOSE
  SUPPLIED. SUPPLY WATER TEMPERATURE MUST BE
  A MIN. OF 120°F FOR SR24C; 110°F FOR SR24H;
  2-1/2" AFF.
- P2 DRAIN CONNECTION: 3/4" MPT FITTING WITH 10' HOSE SUPPLIED: 4-3/8" AFF.

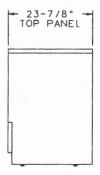
#### WARNING

ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

PLUMBING CONNECTIONS MUST COMPLY WITH APPLICABLE SANITARY, SAFETY AND PLUMBING CODES. DRAIN AND FILL LINE CONFIGURATIONS VARY, SOME METHODS ARE SHOWN ON THIS DRAWING.

#### DIMENSIONS WITH TOP & SIDE PANELS





MODEL	RATED	MINIMUM SUPPLY CIRCUIT CONDUCTOR AMPACITY	MAXIMUM TIME DELAY FUSE	SPECIFICATIONS
SR24C	9.0	15	15	120/60/1
SR24H	42.0	50	50	*120/208(3W)/60/1
SR24H	37.6	50	50	* 120/240(3W)/60/1

DISH	WASHER WEIGHTS -	lbs.
MODEL	SHIPPING WEIGHT	NET WEIGHT
SR24C	155	135
SR24H	166	146

\*IHESE ARE 3 WIRE SYSTEMS THAT REQUIRE (3) #8AWG COPPER WIRES (90°C) INCLUDING A CURRENT CARRYING NEUTRAL. IN ADDITION, A FOURTH WIRE MUST BE PROVIDED FOR MACHINE GROUND.

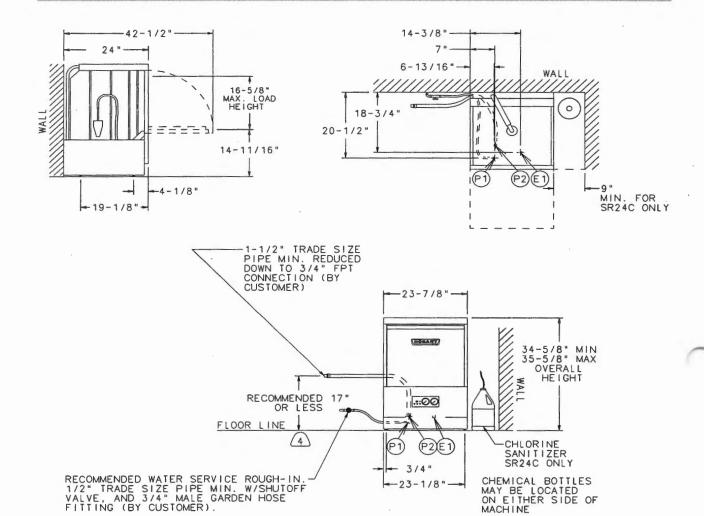
DO NOT CONNECT THESE MACHINES TO A 120 VAC CIRCUIT.



701 S Ridge Avenue, Troy, OH 45374 1-888-4HOBART • www.hobartcorp.com

## **SR24** DISHMACHINE

Item#: 4



MODELS:SR24C, SR24H D-892993

MACHINE

#### INSTALLATION REQUIREMENTS AND INSTRUCTIONS

- A single fill and rinse pipe connection is required. 6' flex hose supplied. 1.
- The electrical connection location for a 3/4" electrical connector (11/6" diameter hole) is provided for the SR24H model only.
- The required electrical cord and plug are supplied on the SR24C model only. 3.
- 4. Important: The sodium hypochlorite container should be placed on the floor (SR24C model only).
- If the sodium hypochlorite container is to be placed in a cabinet adjacent to the machine, a 1/2" diameter hole is required in the cabinet to run the bleach supply line through.
- Pumped drain 3/4" MPT fitting 10' hose supplied.
- 7. A supply line strainer is required. (By others)
- If water flowing pressure is over 28 psi, install a PRV (not supplied). If water flowing pressure is under 22 psi, the supply line pressure must be increased.

F-40028 - SR24 Dishmachine

Page 3 of 4

## SR24 DISHMACHINE



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#### **SPECIFICATIONS**

**DESIGN:** Front opening, equipped with stainless steel front. **Freestanding Models** – Top and side panels are optional. **Undercounter Models** – Not equipped with side or top panels. Adjustable feet lower overall height to 34% minimum and raise it to 35% maximum.

**CONSTRUCTION:** 16 gauge stainless steel tank bottom with 18 gauge stainless steel base, chamber and door.

**PUMP:** Centrifugal-type, integral with motor, vertically mounted. Pump capacity is 45 U.S. gallons per minute.

**MOTOR:** Built to Hobart specifications, ½ H.P., single phase, furnished for 120/60/1, 120/208(3W)/60/1 or 120/240(3W)/60/1 electrical specification. Factory sealed lubrication.

**RACKING:** Will accommodate most racks from 10" x 20" (half racks) to 20" x 20". Will also accept 16" x 18" cafeteria trays.

WASH AND RINSE CYCLE: Completely automatic, controlled by an electrically energized synchronous timer. Closing the door actuates the operating cycle. When the amber cycle light goes out, the operating cycle is complete (185 seconds for the SR24H models and 215 seconds for the SR24C model). The cycle may be interrupted at any time by opening the door. Cycle continues when the door is closed.

**WASH:** Revolving upper and lower hydrosweep wash arms with unrestricted openings provide thorough distribution of water and are easily removed for cleaning. Uses a single water fill connection.

#### RINSE AND SANITATION:

**SR24H Model** – Sanitation accomplished by means of a built-in 7 kW electric booster (with stainless steel tank) designed to raise the water to 180°F (based on incoming water temperature of 110°F).

SR24C Model – Low temperature/chemical sanitizing: Accomplished by filling the sump with 120°F fresh water and pumping it through revolving wash arms. The required amount of 6.0% sodium hypochlorite (liquid bleach) is dispensed into the final rinse water from a container to achieve a minimum 50 PPM sanitizing solution. Injection of the sodium hypochlorite is accurately accomplished by a Hobart sanitizing chemical pump. The chemical sensing module signals the operator by a flashing light and a periodic alarm, when the sanitizer solution has been depleted. The customer must supply sanitizer solution and container. NOTE: NSF minimum 120°F.

MACHINE RA	TINGS	SR24H	SR24C
Racks per Hou	ur	19	14
Dishes per Ho	ur (average of 25 per rack)	475	350
Glasses per H	our (average of 45 per rack)	855	630
Overall Dimen	sions (width x depth x height) – inches nels)	24 x 24 x 34% min. (35% max.)	24 x 24 x 34% min. (35% max.)
(with top &	side panels)	24 x 24 x 3513/16 min. (3613/16 max.)	24 x 24 x 35 <sup>13</sup> / <sub>16</sub> min. (36 <sup>13</sup> / <sub>16</sub> max.)
Wash Motor -	HP	1/2	1/2
Tank Capacity	– U.S. Gallons	1.8	1.8
Pump Capacit	y - U.S. Gallons per minute - Weir Test	45	45
7 KW Electric	Booster Heater	Standard	N/A
Sanitizing Chemical Pump with a Chemical Alarm		N/A	Standard
Hot Water	Wash Cycle - U.S. Gallons per rack	1.2	1.2
Consumption	Rinse Cycle - U.S. Gallons per rack	1.2	1.2
at 22 psi	U.S. Gallons per hour	46	34
Hot Water	Wash Cycle - U.S. Gallons per rack	1.4	1.3
Consumption	Rinse Cycle - U.S. Gallons per rack	. 1.4	1.3
at 28 psi	U.S. Gallons per hour	53	36
Minimum Flow	Rate - U.S. Gallons per minute	4.5	4.5
Peak Rate of [	Orain Flow – U.S. Gallons per minute (Initial rate with full tank)	10	10
Minimum Wate	er Temperature – Wash Cycle – Rinse Cycle	150°F 180°F	120°F
Shipping Weig	ht Crated - Approximate lbs.	166	155
	Water Supply Temperature	110°F	120°F
Detergent Pun	np - If Factory Installed, a Chemical Alarm is Included	Optional	Optional
Rinse Aid Pur		Accessory	Accessory

As continued product improvement is a policy of Hobart, specifications are subject to change without notice.



PROJECT	
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QUANTITY	DATE
APPROVAL	

SC & SC-NU

**Mobile All Purpose Counters** 

#### **Short Form Specifications**

Exterior body is constructed of 18-gauge stainless steel side panels and 14-gauge galvanized bottom. All exterior side panels are reinforced with overlapping corners and are welded in place. All body cutouts are reinforced with 14-gauge galvanized channel supports.

Exterior top is constructed of 14-gauge stainless steel, welded, ground and polished into one integral unit. Top is fabricated with square exterior corners.

Casters unit is mounted on 5" (12.7cm) diameter swivel casters with non-marking polyolefin tires and plate brakes. Overall height of caster assembly is 6" (15.2cm).

## The following applies to SC Series only

SC units have a one or two door dry compartment(s) constructed of 18-gauge stainless steel. Each compartment is equipped with stainless steel shelf; door(s) are double-wall construction, with stainless steel front panel.

- SC-28, one compartment, 18" wide with one diir
- SC-36, one compartment, 24" wide with one door
- SC-50, one compartment, 36" wide with two doors
- SC-60, one compartment, 48" wide with two doors
- SC-74, one compartment, 48" wide with two doors
- SC-96, two compartments, each 36"
   wide with two doors each

#### Optional Accessories and Modifications

- A) 12" (30.5cm) wide stainless steel fold-down tray slide
- 9" (22.9cm) wide three-bar folddown tray slide
- D) 10" (25.4cm) wide composite fold-down cutting boards
- E) 10" (25.4cm) wide stainless steel fold-down work shelf
- F) Line-up interlock device
- G) Glass-front counter protector
- Two tier display with glass shelves and sneezeguards
- HD) Dual service two tier display with sneezeguards
- Three tier display with glass shelves and sneezeguards
- J) 12" (30.5cm) wide 18-gauge stainless steel overshelf
- KS) Single service flip-up sneezeguard
- KD) Double service flip-up sneezeguard
- t) \*Fluorescent or incandescent light fixtures (specify which)
- M) \*Radiant heat lamps
- MB) \*Bullet-style heat lamps
- P) Open understorage with shelf (SC-NU Series only)
- \*120V/60Hz/1ø, 10 amp convenience outlet with breaker
- SG5A) Single dry insert with doors (SC-NU Series only)
- SG5B) Double dry insert with doors (SC-NU Series only)
- ST) Stainless steel trim strips
- U) 14" x 30" (35.6cm x 76.2cm) stainless steel end drop shelf
- V) 6" (15.2cm) high adjustable stainless steel legs in lieu of

\*Inclusion of these options will alter the electrical specifications of unit.



Model SC-36-NU shown with options A, F, G and P







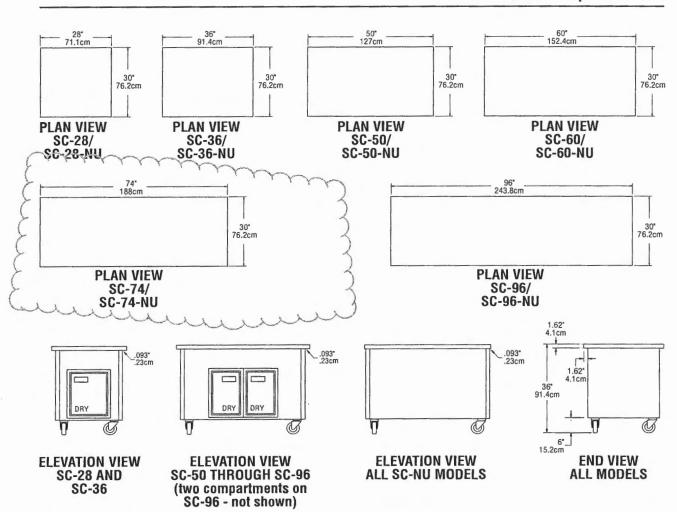


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## SC & SC-NU

#### **Mobile All Purpose Counters**



#### Mechanical Data-Standard Unit

MODEL NUMBER	# 0F DOORS	# OF SHELVES	SHIP WEIGHT	MODEL NUMBER	SHIP WEIGHT
SC-28	1	1	165 lbs/75 kg	SC-28-NU	120 lbs/54 kg
SC-36	1	1	185 lbs/84 kg	SC-36-NU	160 lbs/73 kg
SC-50	2	1	205 lbs/93 kg	SC-50-NU	180 lbs/82 kg
SC-60	2	1	240 lbs/109 kg	SC-60-NU	210 lbs/95 kg
SC-74	2	1	270 lbs/123 kg	SC-74-NU	240 lbs/109 kg
SC-96	4	2	310 lbs/141 kg	SC-96-NU	280 lbs/127 kg

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Mobile Self-Contained Cold Pan Serving Counters

#### **Short Form Specifications**

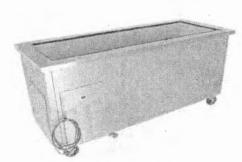
Exterior body is constructed of 18-gauge stainless steel side panels and 14-gauge galvanized bottom. All exterior side panels are reinforced with overlapping corners and are welded in place. All body cutouts are reinforced with 14-gauge galvanized channel supports.

Exterior top is constructed of 14-gauge stainless steel, welded, ground and polished into one integral unit.

The refrigerated cold pan is 7" (17.8cm) deep and constructed of stainless steel. The cold pan is separated from the exterior top by a thermal break. Copper refrigeration tubing is attached to the sides and bottom of the cold pan and is fully insulated with foamed in place polyurethane insulation. Cold pan is equipped with a 1" (2.5cm) I.P.S. drain with drain valve located at the bottom of the unit. Temperatures of 33°F (1°C) to 41°F (5°C) are maintained with pans recessed 3" (7.6cm) at 86°F ambient room temperature. Pans rest on a stainless steel bracket. Pans by others.

Refrigeration system uses HFC-404A refrigerant and has a self-contained 115 volt, 60 Hertz, single phase hermetically sealed condensing unit with adjustable cold pan pressure control. Unit is wired with a 3-wire, grounded, maximum 10' (3m) cord and plug. Unit has an on/off switch mounted on the exterior.

Casters: Unit is mounted on 5" (12.7cm) diameter swivel casters with non-marking polyolefin tires and plate brakes. Overall height of caster assembly is 6.00" (15.2cm).



Model SCSC-50-B

#### **Optional Accessories and Modifications**

- 12" (30.5cm) wide stainless steel fold-down tray slide
  - 10" (25.4cm) wide three-bar fold-down tray slide
- C) 10" (25.4cm) wide composite fold-down cutting boards D)
  - 10" (25.4cm) wide stainless steel fold-down work shelf
- E) F) Line-up interlock device
- Glass-front counter protector G)
- Two tier display with glass shelves and sneezeguards
- HD) Dual service two tier display with sneezeguards
- Three tier display with glass shelves and sneezeguards
- 12" (30.5cm) wide 18-gauge stainless steel overshelf
- Single service flip-up sneeze guard KS)
- KD) Double service flip-up sneeze guard
- L) \*Fluorescent or incandescent light fixtures (specify which)
- P) Open understorage with shelf
- \*120V/60Hz/1ø, 10 amp convenience outlet with breaker Q)
- SG5A)
- Dry storage compartment single door Dry storage compartment double door SG5B)
- SG20) \*Refrigerated understorage (60" unit or longer only)
- ST) Stainless steel trim strips
- U) 14" x 30" (35.6cm x 76.2cm) stainless steel end drop shelf
- V) 6" (15.2cm) high adjustable stainless steel legs in lieu of casters
- X) Laminate exterior panels in lieu of stainless steel
- Adapter bars (specify length)
  - \*Inclusion of these options will alter the electrical specifications of unit.







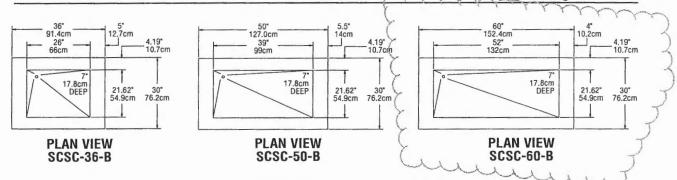


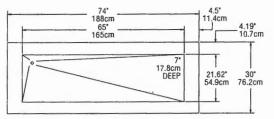
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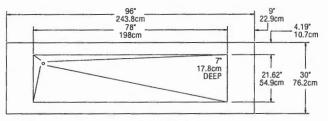
SCSC-B

## Mobile Self-Contained Cold Pan Serving Counters

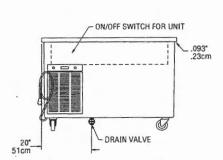




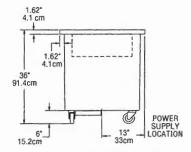
PLAN VIEW SCSC-74-B



PLAN VIEW SCSC-96-B



TYPICAL ELEVATION VIEW ALL SCSC-B MODELS



TYPICAL END VIEW ALL SCSC-B MODELS

#### Mechanical Data-Standard Unit

MODEL NUMBER	VOLTAGE 60 HZ/ 1 Ø	AMP	HORSEPOWER	NEMA PLUG	SHIP WEIGHT
SCSC-36B	115	7.0	1/4	5-15P	350 lbs/ 159 kg
SCSC-50B	115	7.0	1/4	5-15P	425 lbs/ 193 kg
SCSC-60B	115	7.0	1/4	5-15P	500 lbs/ 227 kg
SCSC-74B	115	7.0	1/4	5-15P	575 lbs/ 261 kg
SCSC-96B	115	7.0	1/4	5-15P	650 lbs/ 295 kg

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SC & SC-NU

**Mobile All Purpose Counters** 

#### **Short Form Specifications**

Exterior body is constructed of 18-gauge stainless steel side panels and 14-gauge galvanized bottom. All exterior side panels are reinforced with overlapping corners and are welded in place. All body cutouts are reinforced with 14-gauge galvanized channel supports.

Exterior top is constructed of 14-gauge stainless steel, welded, ground and polished into one integral unit. Top is fabricated with square exterior corners.

Casters unit is mounted on 5" (12.7cm) diameter swivel casters with non-marking polyolefin tires and plate brakes. Overall height of caster assembly is 6" (15.2cm).

## The following applies to SC Series only

SC units have a one or two door dry compartment(s) constructed of 18-gauge stainless steel. Each compartment is equipped with stainless steel shelf; door(s) are double-wall construction, with stainless steel front panel.

- SC-28, one compartment, 18" wide with one diir
- SC-36, one compartment, 24" wide with one door
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- SC-60, one compartment, 48" wide with two doors
- SC-74, one compartment, 48" wide with two doors
- SC-96, two compartments, each 36" wide with two doors each

## Optional Accessories and Modifications

- A) 12" (30.5cm) wide stainless steel fold-down tray slide
- 9" (22.9cm) wide three-bar folddown tray slide
- D) 10" (25.4cm) wide composite fold-down cutting boards
- E) 10" (25.4cm) wide stainless steel fold-down work shelf
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- G) Glass-front counter protector
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- KD) Double service flip-up sneezeguard
- t) \*Fluorescent or incandescent light fixtures (specify which)
- M) \*Radiant heat lamps
- MB) \*Bullet-style heat lamps
- P) Open understorage with shelf (SC-NU Series only)
- \*120V/60Hz/1ø, 10 amp convenience outlet with breaker
- SG5A) Single dry insert with doors (SC-NU Series only)
- SG5B) Double dry insert with doors (SC-NU Series only)
- ST) Stainless steel trim strips
- U) 14" x 30" (35.6cm x 76.2cm) stainless steel end drop shelf
- V) 6" (15.2cm) high adjustable stainless steel legs in lieu of casters

\*Inclusion of these options will alter the electrical specifications of unit.



Model SC-36-NU shown with options A, F, G and P

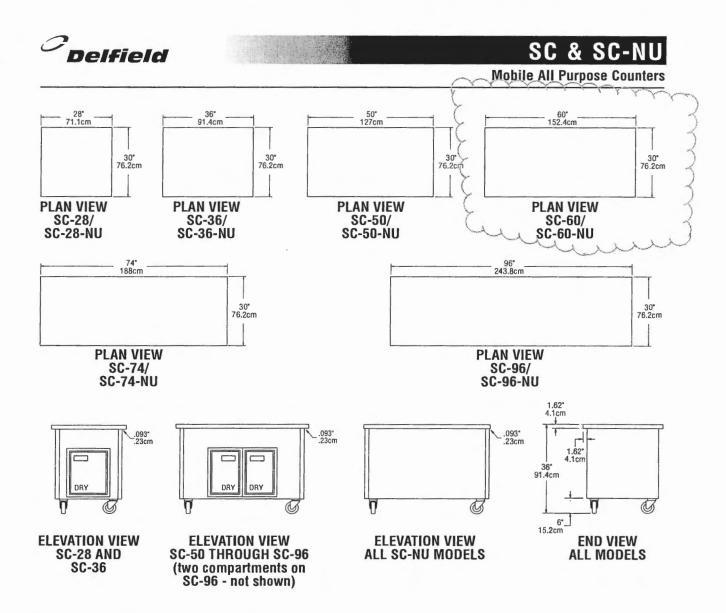








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#### Mechanical Data-Standard Unit

MODEL NUMBER	# 0F DOORS	# OF SHELVES	SHIP WEIGHT	MODEL NUMBER	SHIP WEIGHT
SC-28	1	1	165 lbs/75 kg	SC-28-NU	120 lbs/54 kg
SC-36	1	1	185 lbs/84 kg	SC-36-NU	160 lbs/73 kg
SC-50	2	1	205 lbs/93 kg	SC-50-NU	180 lbs/82 kg
SC-60	2	1	240 lbs/109 kg	SC-60-NU	210 lbs/95 kg
SC-74	2	1	270 lbs/123 kg	SC-74-NU	240 lbs/109 kg
SC-96	4	2	310 lbs/141 kg	SC-96-NU	280 lbs/127 kg

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ITEM#



**GLO-RAY® BUFFET WARMERS** Models GRBW -24, -30, -36, -42, -48, -54, -60, -66, -72

Glo-Ray Buffet Warmers are the perfect alternative to "canned heat." Ideal for holding hot food on buffet lines or at temporary serving areas. These Glo-Ray foodwarmers feature a specially designed heated base, sneeze guard(s), soft incandescent lighting, and cord and plug set.

#### **FLEXIBILITY**

A metal sheathed element directs heat from above while the thermostatically-controlled base conducts heat below at temperatures of 80° to 200°F (27°-93°C). This combination extends food holding time. Buffet Warmers are available from 25" through 73" (638-1857 mm) wide and have an optional hardcoated base. Accessory front and side enclosures provide a safe serving environment for the products being displayed.

All models are shipped with sneeze guard(s), display lights, and 6' (1829 mm) cord and plug attached. Seven optional Designer powdercoated colors coordinate these warmers with the décor while providing a durable, easy-to-clean surface.

The following features assure the finest performance for years to come:

- All models feature a thermostaticallycontrolled heated base to extend the holding times of most food, and a 6' (1829 mm) cord and plug set.
- The Glo-Ray Warmers have prefocused infrared top heat directing heat to the outer edges of the holding surface where heat loss is the greatest.
- Shatter-resistant incandescent lights enhance product display while safeguarding food products from bulb breakage.
- Sturdy acrylic front and side enclosures or sneeze guards provide a safe environment when serving food.





Model GRBW-30 with optional front and side enclosures and accessory sign holder (graphic not included) and pans







HATCO CORPORATION P.O. Box 340500 Milwaukee, WI 53234-0500 U.S.A. (800) 558-0607 • (414) 671-6350 • Fax (800) 543-7521 • Int'l. Fax (414) 671-3976 www.hatcocorp.com • E-mail: equipsales@hatcocorp.com

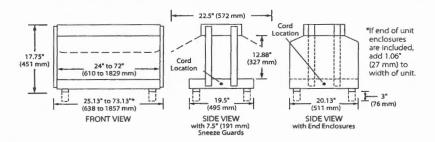
Form No. GR8W Spec Sheet

Printed in U.S A April 2009

METAL SHEATHED HEATING ELEMENTS GUARANTEED AGAINST BURNOUT AND BREAKAGE FOR TWO YEARS, BLANKET ELEMENTS FOR ONE YEAR.



#### **GLO-RAY® BUFFET WARMERS** Models GRBW -24, -30, -36, -42, -48, -54, -60, -66, -72



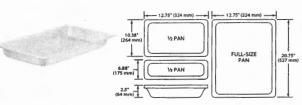
#### SPECIFICATIONS

Model	Watts	Width*	Shipping Weight
GRBW-24	970	25.13" ( 638 mm)	48 lbs. (22 kg)
GRBW-30°	1230 )	\$1.13" ( 791 mm))	52 bs, (24 kg)
GRBW-36	1530	37.13" ( 943 mm)	58 lbs. (26 kg)
GRBW-42°†	1730	43.13" (1095 mm)	68 lbs. (31 kg)
GRBW-48 <sup>†</sup>	2040	49.13" (1248 mm)	74 lbs. (34 kg)
GRBW-54**	2290	55.13" (1400 mm)	81 lbs. (37 kg)
GRBW-60 <sup>†</sup>	2600	61.1" (1553 mm)	90 lbs. (41 kg)
GRBW-66*†	2860	67.13" (1705 mm)	96 lbs. (44 kg)
GRBW-72 <sup>†</sup>	3125	73.13" (1857 mm)	107 lbs. (49 kg)

- If end enclosures are included, add 1.06° (27 mm) to width of unit.
   Indicates models that accommodate multiple food pans: 30° (762 mm) = 2 pans, 42° (1067 mm) = 3 pans, 54° (1372 mm) = 4 pans, and 66° (1676 mm) = 5 pans.
- † NSF requires units over 36\* (914 mm) in width or weighing more than 80 lbs. (36 kg) to be either sealed, or raised on the installation surface with the 4\* (102 mm) legs included.

#### Stainless Steel Food Pans

Stainless steel food holding pans are available in a 2.5" (64 mm) depth. These pans are offered in full-size, half-size, or third-size. Optional wire trivets prevent foods from touching pan bottom.



#### DIMENSIONS

GRBW: 25.13" – 73.13"W x 22.5"D (including sneeze guards) or 20.13"D (including front enclosure) x 17.75"H\*

) (638 – 1857 x 572 or 511 x 451 mm). Base Depth: 19.5"D (495 mm).

\*Add 3" (76 mm) to height when using 4" (102 mm) legs.

#### **VOLTAGE**

GRBW-24 to -42: 120 volts (uses NEMA 5-15P, models 36-42 NEMA 5-20P for Canada).

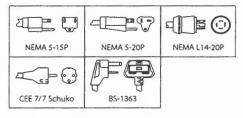
GRBW-48: 120 volts (uses NEMA 5-20P not available for Canada).
GRBW-54 to -72: 120/208, 120/240 volts only, (uses NEMA L14-20P).
All GRBW models available in 120/208 volts or 120/240 volts, single

phase (uses NEMA L14-20P). Export voltages available.

#### CORD LOCATION

Base end plate, same side as switch.

#### PLUG CONFIGURATIONS



#### OPTIONS (NOT FOR RETROFIT)

- Designer Colors: Warm Red, Black, Gray Granite, White Granite, Navy Blue, Hunter Green, and Antique Copper
- Acrylic Front and Side Enclosures
- ☐ Hardcoat Surface
- ☐ Infinite Control (GRBW-24 through GRBW-60 models only)
- ☐ 9.38" (238 mm) Sneeze Guard
- ☐ 14" (356 mm) Sneeze Guard
- ☐ Halogen Bulbs in lieu of Standard Display Lights

#### **ACCESSORIES**

- 4" (102 mm) Adjustable Legs (Standard on units over 36" (914 mm) in width or weighing more than 80 lbs. (36 kg))
- Pan Rai
- ☐ Sign Holder with Acrylic Window (graphic not included)
- ☐ Stainless Steel Food Pans
- Wire Trivets

#### PRODUCT SPECS

#### **Buffet Warmer**

The infrared Buffet Warmer shall be a Glo-Ray\* Model ... as manufactured by the Hatco Corporation, Milwaukee, WI 53234 U.S.A. With 24/7 service (U.S. and Canada only), the warmer shall be rated at ... watts, ... volts, and be ... inches (millimeters) in overall width. It shall consist of a thermostatically- controlled heated base, breath protector(s), and incandescent display lights.

The infrared heating element shall be tubular metal sheathed and the warmer shall have a cord with plug attached.

Accessories shall include pan rail, 4" (102 mm) adjustable legs, sign holder, stainless steel food pans, and wire trivets.

HATCO CORPORATION P.O. Box 340500 Milwaukee, WI 53234-0500 U.S.A. • (800) 558-0607 • (414) 671-6350 Fax (800) 543-7521 • Int'l. Fax (414) 671-3976 • www.hatcocorp.com • E-mail: equipsales@hatcocorp.com

Form No GRBW Spec Sheet

Printed in U.S.A. April 2009

# <sup>O</sup>Shelleysteel<sup>®</sup>

PROJECT		
ITEM #		
QUANTITY	DATE	
APPROVAL		

## SC & SC-NU

**Mobile All Purpose Counters** 

#### **Short Form Specifications**

Exterior body is constructed of 18-gauge stainless steel side panels and 14-gauge galvanized bottom. All exterior side panels are reinforced with overlapping corners and are welded in place. All body cutouts are reinforced with 14-gauge galvanized channel supports.

Exterior top is constructed of 14-gauge stainless steel, welded, ground and polished into one integral unit. Top is fabricated with square exterior corners.

Casters unit is mounted on 5" (12.7cm) diameter swivel casters with non-marking polyolefin tires and plate brakes. Overall height of caster assembly is 6" (15.2cm).

## The following applies to SC Series only

SC units have a one or two door dry compartment(s) constructed of 18-gauge stainless steel. Each compartment is equipped with stainless steel shelf; door(s) are double-wall construction, with stainless steel front panel.

- SC-28, one compartment, 18" wide with one dilr
- $\bullet$  SC-36, one compartment, 24" wide with one door
- SC-50, one compartment, 36" wide with two doors
- SC-60, one compartment, 48" wide with two doors
- SC-74, one compartment, 48" wide with two doors
- SC-96, two compartments, each 36"
   wide with two doors each

## Optional Accessories and Modifications

- A) 12" (30.5cm) wide stainless steel fold-down tray slide
- 9" (22.9cm) wide three-bar folddown tray slide
- D) 10" (25.4cm) wide composite fold-down cutting boards
- E) 10" (25.4cm) wide stainless steel fold-down work shelf
- F) Line-up interlock device
- G) Glass-front counter protector
- Two tier display with glass shelves and sneezeguards
- HD) Dual service two tier display with sneezeguards
- Three tier display with glass shelves and sneezeguards
- J) 12" (30.5cm) wide 18-gauge stainless steel overshelf
- KS) Single service flip-up sneezeguard
- **KD)** Double service flip-up sneeze-
- t) \*Fluorescent or incandescent light fixtures (specify which)
- M) \*Radiant heat lamps
- MB) \*Bullet-style heat lamps
- P) Open understorage with shelf (SC-NU Series only)
- \*120V/60Hz/1ø, 10 amp convenience outlet with breaker
- SG5A) Single dry insert with doors (SC-NU Series only)
- SG5B) Double dry insert with doors (SC-NU Series only)
- ST) Stainless steel trim strips
- U) 14" x 30" (35.6cm x 76.2cm) stainless steel end drop shelf
- V) 6" (15.2cm) high adjustable stainless steel legs in lieu of

\*Inclusion of these options will alter the electrical specifications of unit.



Model SC-36-NU shown with options A, F, G and P







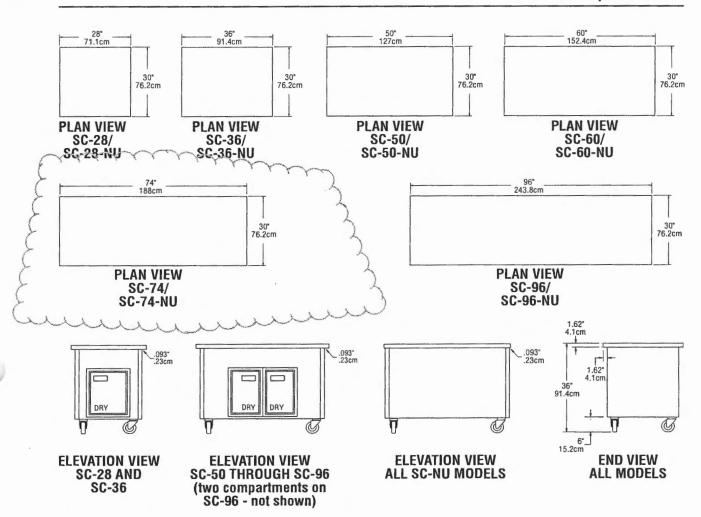


The Delfield Company, 980 S. Isabella Rd., Mt. Pleasant, MI 48858, U.S.A. • (800) 733-8821 • Fax (800) 669-0619 • www.delfield.com
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## SC & SC-NU

#### **Mobile All Purpose Counters**



#### Mechanical Data-Standard Unit

MODEL NUMBER	# OF DOORS	# OF SHELVES	SHIP WEIGHT	MODEL NUMBER	SHIP WEIGHT
SC-28	1	1	165 lbs/75 kg	SC-28-NU	120 lbs/54 kg
SC-36	1	1	185 lbs/84 kg	SC-36-NU	160 lbs/73 kg
SC-50	2	1	205 lbs/93 kg	SC-50-NU	180 lbs/82 kg
SC-60	2	1	240 lbs/109 kg	SC-60-NU	210 lbs/95 kg
SC-74	2	1	270 lbs/123 kg	SC-74-NU	240 lbs/109 kg
SC-96	4	2	310 lbs/141 kg	SC-96-NU	280 lbs/127 kg

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SSSC 02/02



STAINLESS STEEL

## SERVICE & MOP SINKS



9-OP-20 Shown





Notched Out Front Allows Ease of Emptying Mop Bucket

\_\_\_\_\_ Otv #: \_\_\_ Model #:\_\_ Project #:\_

## FLOOR UNITS

#### FEATURES:

Floor mounted unit eliminates the need of lifting heavy containers.

Tile edge furnished on the rear.

Bowls rectangular in design for increased capacity.

#### CONSTRUCTION:

All TIG welded.

Welded areas blended to match adjacent surfaces and to a satin finish.

#### **MATERIAL:**

- 16 Gauge type "304" series stainless steel sink bowl.
- 18 Gauge type "304" series stainless steel sink apron.

## STANDING UNITS

#### **FEATURES:**

Leg mounted design. High back splash.

9-OP-40 Shown

#### CONSTRUCTION:

All TIG welded.

Welded areas blended to match adjacent surfaces and to a satin finish.

#### MATERIAL:

Heavy gauge type "304" series stainless steel.



Conventional



#### 16" HIGH SIDE & BACK SPLASHES FOR 9-OP SERIES MOP SINKS

16 Gauge, 300 Series Stainless Steel Available with Back & Left Side, Back & Right Side or Back & Both Sides (Mounting Hardware Included)

A 17 (5) (10) (10) (10) (10) (10) (10) (10) (10			<b>Height Above</b>
	MODEL	Fits Units:	Finished Floor (A.F.F.)
	K-288LorR	9-OP-20	26"
		9-OP-40	32"
	K-290LorR	9-OP-28	26"
		9-OP-48	32"
	Splashes Available on All 3 Sides		
	K-298	9-OP-20	26"
		9-OP-40	32"
	K-299	9-OP-28	26"
		9-OP-48	32"

#### SERVICE & MOP SINK ACCESSORIES

4-OP-18



#### MOP DRAINAGE TRAY

- 16 Gauge, 300 Series Stainless Steel
- Includes Cast 1/2" Drain & Plastic Hose
- · Wall Mounted (Hardware not Included) · 2" Tray Height with 6" Rear Splash (Overall Height)

Approx. MODEL LXWXH K-243 32" x 4" x 6"





REPLACEMENT DRAIN



K-242 MOP HANGER - 23" Wide





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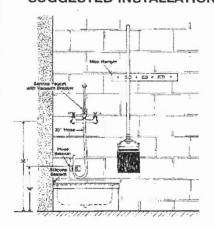
TEXAS Fax: (972) 932-4795

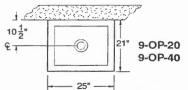
NEVADA Fax: (775) 972-1578

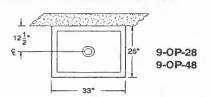
## DIMENSIONS

TOL Overall: ± .500" Interior: ± .250" ALL DIMENSIONS ARE TYPICAL

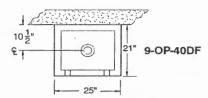
#### SUGGESTED INSTALLATION

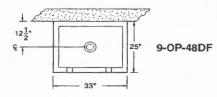






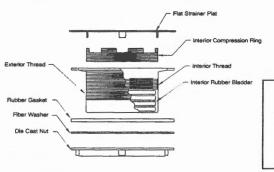
9-OP-20: 16" x 20" x 6" Bowl with 10" Overall Height. Wt. 26 lbs. 9-OP-28: 20" x 28" x 6" Bowl with 10" Overall Height. Wt. 35 lbs. 9-OP-40: 16" x 20" x12" Bowl with 16" Overall Height. Wt. 45 lbs. 9-OP-48: 20" x 28" x 12" Bowl with 16" Overall Height. Wt. 63 lbs.

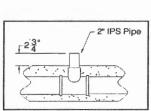


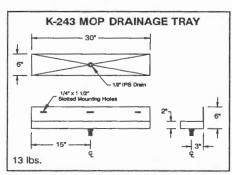


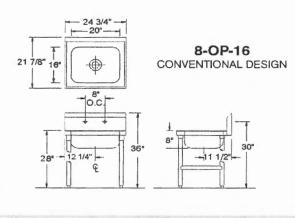
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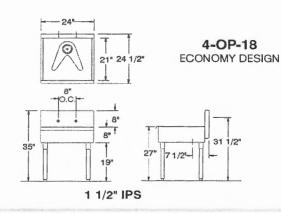
#### MOP SINK DRAIN ASSEMBLY













200 Heartland Boulevard, Edgewood, NY 11717-8380

ADVANCE TABCO is constantly engaged in a program of improving our products. Therefore, we reserve the right to change specifications without prior notice.

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STAINLESS STEEL

## **SERVICE & MOP SINKS**



9-OP-20 Shown



Notched Out Front Allows Ease of Emptying Mop Bucket

 Item #: \_\_\_\_\_\_ Qty #: \_\_\_\_\_

 Model #: \_\_\_\_\_\_

 Project #: \_\_\_\_\_\_

## FLOOR UNITS

#### **FEATURES:**

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Tile edge furnished on the rear.

Bowls rectangular in design for increased capacity.

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Welded areas blended to match adjacent surfaces and to a satin finish.

#### MATERIAL:

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- 18 Gauge type "304" series stainless steel sink apron.

## STANDING UNITS

#### **FEATURES:**

Leg mounted design. High back splash.

9-OP-40 Shown

#### **CONSTRUCTION:**

All TIG welded.

Welded areas blended to match adjacent surfaces and to a satin finish.

#### MATERIAL:

Heavy gauge type "304" series stainless steel.





#### 16" HIGH SIDE & BACK SPLASHES FOR 9-OP SERIES MOP SINKS

16 Gauge, 300 Series Stainless Steel Available with Back & Left Side, Back & Right Side or Back & Both Sides (Mounting Hardware Included)

**Height Above** MODEL Fits Units: Finished Floor (A.F.F.) K-288LorR 9-OP-20 26" 32" 9-OP-40 K-290LorR 9-OP-28 26" 9-OP-48 32" Splashes Available on All 3 Sides K-298 9-OP-20 26" 9-OP-40 32" K-299 9-OP-28 26" 9-OP-48 32"

#### **SERVICE & MOP SINK ACCESSORIES**

4-OP-18

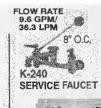


#### MOP DRAINAGE TRAY

- 16 Gauge, 300 Series Stainless Steel
- Includes Cast 1/2" Drain & Plastic Hose
- Wall Mounted (Hardware not Included)
   2" Tray Height with 6" Rear Splash

(Overall Height)

MODEL L x W x H Wt. K-243 32" x 4" x 6" 13 lbs.







K-242 MOP HANGER - 23" Wide





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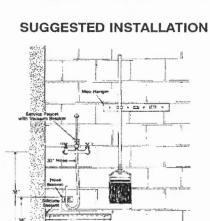
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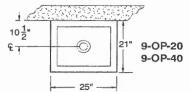
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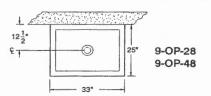
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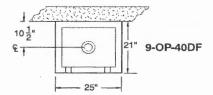
ALL DIMENSIONS ARE TYPICAL

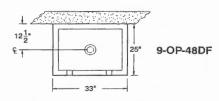






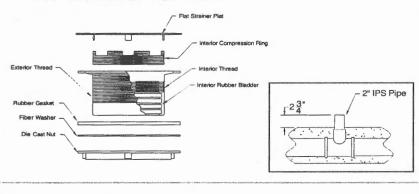
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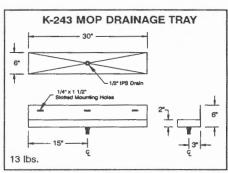


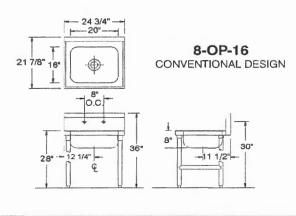


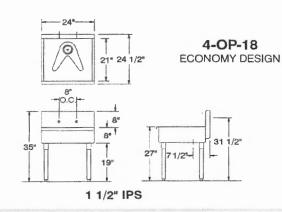
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