DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that
SIMPLEXGRINNELL
20 THOMAS DR
WESTBROOK, ME 04092

Job ID: 2012-07-4403-DRG

For installation at

19 CROSS ST

MEMIC GENERATOR BUILDING

CBL: 038- F-020-001

has permission to install pre-action sprinkler system

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

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.

Final Fire

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: <u>2012-07-4403-DRG</u> install pre-action sprinkler system

For installation at:

19 CROSS ST

MEMIC GENERATOR BUILDING

CBL: 038- F-020-001

Conditions of Approval:

Fire

See also fire alarm permit 2012-10-5247-FAFP for this job. The pre-action sprinkler and dedicated function fire alarm systems shall be tested together for operation and certified by SimplexGrinnell prior to scheduling a final inspection.

Installation shall be in accordance with the City of Portland Fire Department Regulations and NFPA 13. A copy of the State Sprinkler permit with RMS date and signature shall be provided prior to scheduling of the final inspection.

Fire department connection shall be one 2 1/2".

Sprinkler supervision shall be provided in accordance with NFPA 101, *Life Safety Code*, and NFPA 72, *National Fire Alarm and Signaling Code*.

Sprinkler protection shall be maintained. Where the system is to be shut down for maintenance or repair, the system shall be checked at the end of each day to insure the system has been placed back in service.

System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

The sprinkler system shall be maintained in accordance with NFPA 25, *Standard for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems*, 2008 edition.

A Knox Box is required.

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2012-07-4403-DRG 2012-49653 FAFS	Date Applied: 10/25/2012		CBL: 038- F-020-001					
Location of Construction: 19 CROSS ST	Owner Name: CASCO VIEW HOLDIN	NGS II LLC	Owner Address: PO BOX 1137 PORTLAND, ME 0					
Business Name:	Contractor Name: SIMPLEXGRINNE Doughty	LL –Paul	Contractor Address of THOMAS DRIV	ess: E, WESTBROOK, ME (14092	Phone: (207) -842-6440		
Lessee/Buyer's Name:	Phone:		Permit Type: FAFS					
Past Use: New Emergency	Proposed Use: Same: Emergency G	onorotor	Cost of Work: \$8,000.00		CEO District:			
Generator Building	Building – to install suppression system		Fire Dept:	mlitions	Inspection: Use Group: Type:			
			Signature:	. //	.8)	Signature:		
Proposed Project Description Ancillary Building Emergency Ge			Pedestrian Activi	ties District (P.A.D.)				
Permit Taken By: Brad			<u> </u>	Zoning Approval				
 This permit application of Applicant(s) from meeting Federal Rules. Building Permits do not septic or electrial work. Building permits are voice within six (6) months of False informatin may invegermit and stop all work. 	include plumbing, d if work is not started the date of issuance. validate a building	Special Zo Shoreland Wetlands Flood Zo Subdivisi Site Plan Maj Date:	ne	Zoning Appeal Variance Miscellaneous Conditional Use Interpretation Approved Denied Date:	Not in Dist Does not R Requires R Approved	or Landmark		
e owner to make this application as he application 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 rep	to conform to	all applicable laws of th	is jurisdiction. In addition,	if a permit for work	k described in		

ADDRESS

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE

SIGNATURE OF APPLICANT

DATE

DATE

PHONE

PHONE



Applicant signature: Que a Da

Water-Based Fire Suppression System Permit

1 state or property taxes or user charges on any property

1 state or property taxes or user charges on any property If you or the property owner owes real estate or property taxes or user charges on any property

within the city, payment arrangements must be made t	before permits of any kind are accepted.
# 2012-07-4403-D	16 000 5000
	CBL: 038 FO20
Exact location: (within structure) New Generator Building	2012-49653
Type of occupancy(s) (NFPA & ICC): Mechanical space	ce Collins
Building owner: Memic ASCO Vew Hadrand	SILLC POISON 115 GAION
Managing Supervisor (RMS): Rory Goff	License No: RMS #546
Supervisor phone: 603-289-0490	E-mail: ricsprinkler@gmail.com
	License No: RMS #398
Contractor phone: 207-842-6440	E-mail: pdoughty@simplexgrinnell.com
The suppression work to be done will be: New: Renov	ation: Addition to existing system:
This is an amendment to an existing permit: Yes: NO	Permit no:
NFPA Standard this system is designed to: NFPA 13	Edition: 2010
*Non-NFPA systems are not approved for use within the City of Portland.	COST OF WORK: 8000.00
Download a new copy of this document from	PERMIT FEE: 100.00
www.portlandmaine.gov/fire for every submittal. Attach all working	(\$10 PER \$1,000 + \$30 FOR THE FTRST \$1,000)
documents and complete approved submittals as may be required by	
the State Fire Marshal's Office on electronic PDF's in addition to	RECEIVED
full sized plans.	OCT 2 5 2012
Contractor shall verify location and type of all FDCs shall	Dept. of Building Inspections
be approved in writing by the Fire Prevention Bureau.	City of Portland Maine
Submit all information to the Building Inspections Department, 389 Con	gress Street, Room 315, Portland, Maine 04101.
Prior to acceptance of any fire protection system, a complete commiss	cioning and acceptance test must be coordinated with
all fire system contractors and the Fire Department, and proper docum	nentation of such test(s) provided.
All installation(s) must comply with NFPA and the Fire Department T	echnical Standard(s).

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Receipts Details:

Tender Information: Check, Check Number: 74397

Tender Amount: 100.00

Receipt Header:

Cashier Id: bsaucier Receipt Date: 10/25/2012 Receipt Number: 49654

Receipt Details:

Referance ID:	8537	Fee Type:	BP-FIRE
Receipt Number:	0	Payment Date:	
Transaction Amount:	100.00	Charge Amount:	100.00

Job ID: Job ID: 2012-07-4403-DRG - Ancillary Building Emergency Generator

Additional Comments: 19 Cross St.

Thank You for your Payment!



State of Maine Department of Public Safety



Fire Sprinkler System Permit

10297

MEMIC Emer. Generator

Located at:

261 COMMERCIAL STREET

In the Town of: Portland

Occupancy/Use: Emergency Generator

Type of System: NFPA 13

Permission is hereby given to:

Simplex Grinnell

Att: Jennifer Dow, 20 Thomas Drive Westbrook, ME 04092 Contractor License # 398

to begin installation according to plans submittal approved by the Office of State Fire Marshal. The submittal is filed under log # 2121485, and no departure from the application submittal shall be made without prior approval in writing. This permit is issued under the provisions of Title 32, Chapter 20, Section 12004-I. Nothing herein shall excuse the holder of this permit from failure to comply with local ordinances, zoning laws, o other pertinent legal restrictions. This permit shall be displayed at the construction site or be made readily available.

This permit was issued on 10/20/2012 for a fee paid of \$100.00

This permit will expire at midnight on

Thursday, April 18, 2013

The expiration date applies only if the installation has not begun by that date and no permission has been granted to extend the date. Once installation begins, then the permit is valid for however long it takes to complete the installation, assuming that the work is fairly continuous.

John E. Morris Commissioner

Am & monio

The type of Fire Department Connection and its location is to be according to the Local Fire Department

Within 30 days of the completion of a new fire sprinkler system or an addition to an existing fire sprinkler system, a fire sprinkler system contractor shall provide to the Office of State Fire Marshal a copy of this permit signed and dated by the certified Responsible Managing Supervisor representing that the fire sprinkler system has been installed according to specifications of the approved plan to the best of the supervisor's knowledge, information, and belief. This requirement is part of the sprinkler law, and neglect of this duty is grounds to not renew the contractor's license to do work in the State of Maine. All renewed sprinkler licenses are good for two years and expire on a June 30th.

Job completed, tested and verified by date of	
RMS Signature:	

RMS for this job: Goff Rory

Hydraulic Calculations

Project Name: MEMIC Emergency Generator Location: 261 Commercial St, Portland, ME,

Drawing Name: 101812-MEMIC Calculation Date: 10/18/2012

Design

Remote Area Number:

MEMIC-1

Remote Area Location:

GENERATOR ROOM

Occupancy Classification:

Extra Hazard Group I

Commodity Classification:

N/A

Density:

0.250gpm/ft²

Area of Application:

2500.00ft2 (Actual 369.06ft2)

Coverage per Sprinkler:

92.26ft²

0.0 gpm

Type of sprinklers calculated:

Upright

No. of sprinklers calculated:

4

Type of System:

PRE-ACTION Volume of Dry or PreAction System:

N/A

In-rack Demand: Hose Streams:

N/A gpm at Node:

N/A

1 Type:

Allowance at Source

Total Water Required

(including Hose Streams where applicable):

at Node:

From Water Supply at Node 1:

92.70 @ 23.100

Name of Contractor: Simplex Grinnell - ME

Address:

20 Thomas Dr, Westbrook, ME

Phone Number:

603-289-0490

Name of designer:

Rory Goff

Authority Having Jurisdiction:

Notes:

Automatic peaking results

Left: N/A

Right: N/A



Summary Of Outflowing Devices

Job Number: 1 Report Description: Extra Hazard Group I

Devic	е	Actual Flow (gpm)	Minimum Flow (gpm)	K-Factor (K)	Pressure (psi)	Density (gpmpft2)	
Sprinkler	101	23.22	23.07	8	8.422	0.252gpm/ft ²	
Sprinkler	102	23.28	23.07	8	8.470	0.252gpm/ft ²	
Sprinkler	103	23.13	23.07	8	8.360	0.251gpm/ft ²	

A Most Demanding Sprinkler Data

Job Name: MEMIC Emergency Generator

Remote Area Number: MEMIC-1 Date: 10/18/2012

Supply Analysis												
Node	Name	Static (psi)	Residual (psi) @	Flow (gpm)	Availa (ps	@	Total Demand (gpm)	Required Pressure (psi)				
1	Water Supply	25.000	24.000	100.00	24.1	31	92.70	23.100				
			Node A	nalys	is							
Node Number	Elevation (Foot)	Node Type	Pressure at Node (psi)	Discharge at Node (gpm)		Notes						
1	1-0	1-0 Supply		92.7	0							
101	11-8	Sprinkler	8.422	23.22		Density: 0.252gpm/ft²						
102	11-8	Sprinkler	8.470	23.2	8	Density:	0.252gpm/ft²					
103	11-8	Sprinkler	8.360	23.13		Density: 0.251gpm/ft²						
104	11-8	Sprinkler	8.313	23.07		Density: 0.250gpm/ft²						
4	11-8		8.727									
5	3-0		17.619									

Job Name: MEMIC Emergency Generator Remote Area Number: MEMIC-1

Remote Area Number: MEMIC-1 Date: 10/18/2012

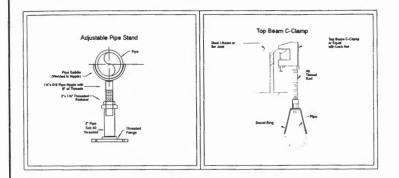
Node 1	Elev 1 (Foot)	K-Factor	Flow added this step	Nominal ID	Fittings & Devices	Length (Foot)	C Factor	Total(Pt)	Notes Fitting/Device (Equivalent		
		15-03	(q)		Equiv.	Fitting (Foot)	Pf Friction	Elev(Pe)	Length) Fixed Pressure Losses, when		
Node 2	Elev 2 (Foot)			= 1	Total Flow (Q)	Actual ID	Length (Foot)	Total (Foot)	Loss Per Unit (psi)	Friction(Pf)	applicable, are added directly to (Pf) and shown as a negative value.
104	11-8	8	23.07	2	(See	7-7	120	8.313	Sprinkler		
103	11-8		23.07	2.0670	Notes)	7-7	0.006229	0.047			
103	11-8	8	23.13	2	(See	6-31/2	3½ 120 8.360		Sprinkler		
					Notes)	10-0	0.000540				
4	11-8		46.20	2.0670		16-31/2	0.022516	0.367	T(10-0)		
4	11-8			2	(See	11-41/2	120	8.727			
					Notes)	27-0	0.004004	3.757			
5	3-0	lac-	92.70	2.0670		38-41/2	0.081661	5.135	2E(5-0), CV(11-0), DelV(-2.000), BV(6-0), BC		
5	3-0			2	(See	36-6	120	17.619			
-					Notes)	20-0	0.081661	0.867			
1	1-0		92.70	2.0670		56-6	0.001001	4.614	4E(5-0), S		
			0.00					23.100	Hose Allowance At Source		
1			92.70				-		Total(Pt) Route 1		
101	11-8	8	23.22	2	(See	7-7	120	8.422	Sprinkler		
					Notes)		0.006305		-		
102	11-8		23.22	2.0670		7-7	0.00000	0.048			
102	11-8	8	23.28	2	(See	1-31/2	120	8.470	Sprinkler		
					Notes)	10-0	0.022789		T(10-0)		
4	11-8	46.50 2.0670		11-31/2	3.022,00	0.257	1(10-0)				

Job Name: MEMIC Emergency Generator Remote Area Number: MEMIC-1

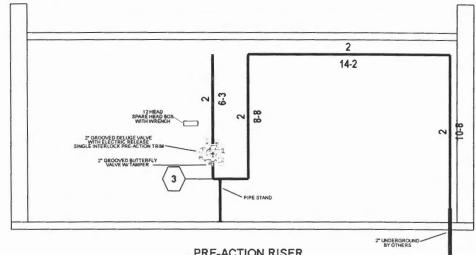
emote Area Number: MEMIC-1 Date: 10/18/2012

Equivalen	t Pipe Lengths of Valves and Fittings (C=120 o	nly)	C Value Multiplier				
1	Actual Inside Diameter	4.87	Value Of C	100	130	140	150
(Schedule 40 Steel Pipe Inside Diameter	= Factor	Multiplying Factor	0.713	1.16	1.33	1.51

	Fittings Legend				
ALV	Alarm Valve	AngV	Angle Valve	b	Bushing
BalV	Ball Valve	BFP	Backflow Preventer	BV	Butterfly Valve
С	Cross Flow Turn 90°	cplg	Coupling	Cr	Cross Run
CV	Check Valve	DelV	Deluge Valve	DPV	Dry Pipe Valve
E	90° Elbow	EE	45° Elbow	Ee1	11¼° Elbow
Ee2	22½° Elbow	f	Flow Device	fd	Flex Drop
FDC	Fire Department Connection	fE	90° FireLock(TM) Elbow	fEE	45° FireLock(TM) Elbow
flg	Flange	FN	Floating Node	fT	FireLock(TM) Tee
g	Gauge	GloV	Globe Valve	GV	Gate Valve
Но	Hose	Hose	Hose	HV	Hose Valve
Hyd	Hydrant	LtE	Long Turn Elbow	mecT	Mechanical Tee
Noz	Nozzle	P1	Pump In	P2	Pump Out
PIV	Post Indicating Valve	PO	Pipe Outlet	PRV	Pressure Reducing Valve
PrV	Pressure Relief Valve	red	Reducer/Adapter	S	Supply
sCV	Swing Check Valve	Spr	Sprinkler	St	Strainer
T	Tee Flow Turn 90°	Tr	Tee Run	U	Union
WirF	Wirsbo	WMV	Water Meter Valve	Z	Сар



TYPICAL HANGER DETAILS



PRE-ACTION RISER

FIRE DEPT. CONN. STORZ 4" N P.T. ALARM BELL T.O.S. 12'-8" 2432 101 103 104 7-7 2-31/2 6-31/2 T.O.S. 12'-8" 14-2 10.8

FIRE SPRINKLER

Remote Area: GEN. BLDG. CALCULATION DESIGN CRITERIA NFPA #13-2010 CUPANCY CLASS EXTRA HAZARD I MAX COVERAGE PAR HEAD 92.26 SITY 25 GPM/FE IN ENTIRE RINKLER TYCO FR-B ORIFICE 17/32" к- 8.0 WATER FLOW INFORMATION RESIDUAL FLOW 1 UNDERGROUND CONNECTION REQUIRES. 92.7 GPM @ 23.1 PM MICLUDES 500

WATER SUPPLY:

1. WATER SUPPLY SHALL BE PROVIDED BY OWNER.

2. A MINIMUM FLOW OF 100 GPM AT 25 PSI IS REQUIRED AT THE UNDERGROUND CONNECTION PROVIDED BY OWNER.

3. 500 GPM OUTSIDE HOSE IS REQUIRED.

GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 2010 NFPA-13. 2009 IBC, 2009 IFC, AND STATE OF MAINE REQUIREMENTS.

2. FIRE PROTECTION SHALL START WORK AT 1' A.F.F. AT A FLANGE

PROVIDED BY OTHERS.

PROVIDED BY O'HERS.
3. DESIGN SHALL BE .25 DENSITY OVER THE ENTIRE AREA PER 2010
NFPA-13 PARAGRAPH 21.27.1.7 (STANDBY EMERGENCY DIESEL GENERATORS).
4. ALL SPRINKLER PIPE 2* AND SMALLER SHALL BE THREADED BLACK SCHE-40

WITH BLACK THREADED STANDARD WEIGHT FITTINGS.

5. SYSTEM SHALL BE SINGLE INTERLOCK PRE-ACTION.

6. ALL SPRINKLER MAINS SHALL BE PITCHED A MINIMUM OF 1/8" PER 10"-0".
7. ALL SPRINKLER LINES SHALL BE PITCHED A MINIMUM OF 1/4" PER 10"-0".
8. ALL SPRINKLER DEFLECTORS IN OBSTRUCTED AREAS SHALL BE

INSTALLED WITH DEFLECTORS A MAXIMUM OF 22' BELOW CEILING.

9. ALL ELECTRIC DETECTION DEVICES, RELEASING PANEL, AND WIRING

SHALL BE BY OTHERS.



SYMBOLS (0)

HYDRAULIC NODE

CENTER LINE OF PIPE ABOVE F F CENTER LINE OF PIPE BELOW

(3)
NORTH

SIMPLEX GRINNELL LP 20 THOMAS DRIVE WESTBROCK, ME 04092

Project se 96676190

Drawn by. J.R.A.

Scale 1/2" = 1'-0"

Date 10/16/12 Approved by Fee Dept.

NOMINAL PIPE SIZE (IA.)	34.	г	1 144	1 1/2 *	2"	21/2"	r	110	4*	B*	•
STEEL PIPE EXCEPT THREADED LIGHTWALL	MA	12-0	12-6	15-0	16-0	18-0	16-0	16-0	18-0	18-0	18-0
THREADED LIGHTWALL STEEL PIPE	MA	12-0	12-0	12-0	12-0	12-0	12-6	MA	MM	MA	AMA
COPPER TUBE	8-0	8-0	10-0	10-0	12-0	120	12-0	15-0	16-0	16-0	15-0
CPVC	54	6-0	6-6	7.0	8-0	8-0	10-0	NIA	NA	NA	N/A
POLYBUTYLENE (IPS)	HAA	3-8	4-7	6.0	6-11	N/A	NA	NIA	NIA	NM.	NA
POLYBUTYLENE (CTS)	2-11	3-4	3-11	4.5	5-6	N/A	NIA	NA	NA	NA.	NA

MAXIMUM DISTANCE BETWEEN HANGERS

SPRINKLER LEGEND REVISIONS													
JOBMY	DESCRIPTION	SIN #	ORIFICE	K	TEMP	ESC	FINISH	OTY	NC	DATE	DESCRIPTION	BY	CONTRACT NUMBER
0	DESCRIPTION	TY4151	17/32*	80	296	H/A	BRASS	4	Λ				966761901
									A				
									A				DRAWING FILE NAME
								T	1				FLOOR / AREA
							TOTAL	4	14				GEN. BLDG.

MEMIC EMERGENGY GENERATOR BUILDING

261 COMMERCIAL STREET PORTLAND, ME 04101

SHEET NUMBER FP-1 I OF I