

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

This is to certify that
RESIDENTIAL FIRE PROTECTION
64 DAGGETT HILL RD
GREENE, ME 04236

For installation at
54 EASTERN PROMENADE
SINGLE-FAMILY HOME

Job ID: 2011-09-2270-ALTR

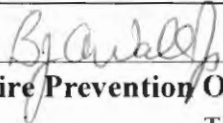
CBL: 003- F-025-001

has permission install to install NFPA 13D 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

(58)

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.

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2011-09-2270-ALTR 2012-14930-FSS	Date Applied: 1/20/2012	CBL: 003- F-025-001	
Location of Construction: 54 EASTERN PROMENADE	Owner Name: 54 EASTERN PROMENADE LLC	Owner Address: PO BOX 4271 PORTLAND, ME 04101	Phone:
Business Name:	Contractor Name: RESIDENTIAL FIRE PROTECTION LLC	Contractor Address: 64 DAGGETT HILL RD GREENE ME 04236	Phone: (207) -946-3473
Lessee/Buyer's Name:	Phone:	Permit Type: BLDG - FIRE SUPPRESSION	Zone: R-6
Past Use: Single family	Proposed Use: Same - Single family - install water based fire suppression system	Cost of Work: 11468.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type:
		Signature: <i>Bjorklund</i> (58)	Signature:
Proposed Project Description: Install water based fire suppression system		Pedestrian Activities District (P.A.D.)	
Permit Taken By:	Zoning Approval		

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <i>OK 1/20/12</i> <i>ABU</i>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input checked="" type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>ABU</i>
	CERTIFICATION		

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE



PORTLAND MAINE

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Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-09-2270-ALTR
install NFPA 13D sprinkler system

For Installation At:
54 EASTERN PROMENADE
SINGLE-FAMILY HOME

CBL: 003- F-025-001

Conditions of Approval:

Fire

The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required. All control valves shall be supervised in accordance with NFPA 13D. Pad locks shall only be installed on valves designed to be secured in the open position by pad lock.

R-6

2011-09-2270 (original)

2012-14930



Water-Based Fire Suppression System Permit

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 before permits of any kind are accepted.

Installation address: 54 Eastern Promenade CBL: 3-F-25

Exact location: (within structure) Living areas

Type of occupancy(s) (NFPA & ICC): Residential

Building owner: _____

Managing Supervisor (RMS): Stan Camic License No: 80

Supervisor phone: 946-3473 E-mail: scamic@rfpllc.net

Installing contractor: Residential Fire Protection License No: 511

Contractor phone: 946-3473 E-mail: scamic@rfpllc.net

The suppression work to be done will be: New: Renovation: Addition to existing system:

This is an amendment to an existing permit: Yes: NO: Permit no: _____

NFPA Standard this system is designed to: 13D Edition: 2007

*Non-NFPA systems are not approved for use within the City of Portland.

Download a new copy of this document from www.portlandmaine.gov/fire for every submittal. Attach all working documents and complete approved submittals as may be required by the State Fire Marshal's Office on electronic PDF's in addition to full sized plans.

Contractor shall verify location and type of all FDCs shall be approved in writing by the Fire Prevention Bureau.

COST OF WORK: <u>\$11,468</u>
PERMIT FEE: <u>140</u>
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)
RECEIVED
JAN 20 2012
Dept. of Building Inspections City of Portland Maine

Submit all information to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire protection system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with NFPA and the Fire Department Technical Standard(s).

Applicant signature: [Signature] Date: 01-19-12



State of Maine
Department of Public Safety
Fire Sprinkler System Permit



9816

54 Eastern Promenade

Located at: 54 Eastern Promenade
 In the Town of: Portland
 Occupancy/Use: Residential
 Type of System: NFPA 13D

Permission is hereby given to:

Residential Fire Protection LLC

64 Daggett Hill Road
 Greene, ME 04236
 Contractor License # **511**

to begin installation according to plans submittal approved by the Office of State Fire Marshal. The submittal is filed under log # **2121010**, 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, or other pertinent legal restrictions. This permit shall be displayed at the construction site or be made readily available.

This permit was issued on **1/19/2012** for a fee paid of **\$25.00**

*This permit will expire at midnight on **Tuesday, July 17, 2012***

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

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 for this job: Camic Stan

RMS Signature: _____

HYDRAULIC DESIGN INFORMATION SHEET

Name - 54 Eastern Promenade Date - 1-9-12
Location - 3rd Floor
Building - System No. - 1 of 1
Contractor - Residential Fire Protection Contract No. - C12003
Calculated By - JAL Drawing No. - 1 of 1
Construction: (X) Combustible () Non-Combustible Ceiling Height 8'-1"
OCCUPANCY - Residential

S Type of Calculation: ()NFPA 13 Residential ()NFPA 13R (X)NFPA 13D
Y Number of Sprinklers Flowing: ()1 (X)2 ()4 ()
S ()Other
T ()Specific Ruling Made by Date
E
M Listed Flow at Start Point - 14 Gpm System Type
Listed Pres. at Start Point - 8.2 Psi (X) Wet () Dry
D MAXIMUM LISTED SPACING 20 x 20 () Deluge () PreAction
E Domestic Flow Added - Gpm Sprinkler or Nozzle
S Additional Flow Added - Gpm Make Viking Model VK457
I Elevation at Highest Outlet - 36' Feet Size K-Factor 4.9
G Note:Safety Margin: 14.858 Temperature Rating 140
N

Calculation Gpm Required 28.498 Psi Required 60.128 At Test
Summary C-Factor Used: Overhead 150 Underground 150

W Water Flow Test: Pump Data: Tank or Reservoir:
A Date of Test - 9-13-11 Rated Cap. Cap.
T Time of Test - @ Psi Elev.
E Static (Psi) - 75 Elev.
R Residual (Psi) - 64 Other Well
Flow (Gpm) - 1034 Proof Flow Gpm
S Elevation - 0

P Location:
P
L Source of Information:
Y

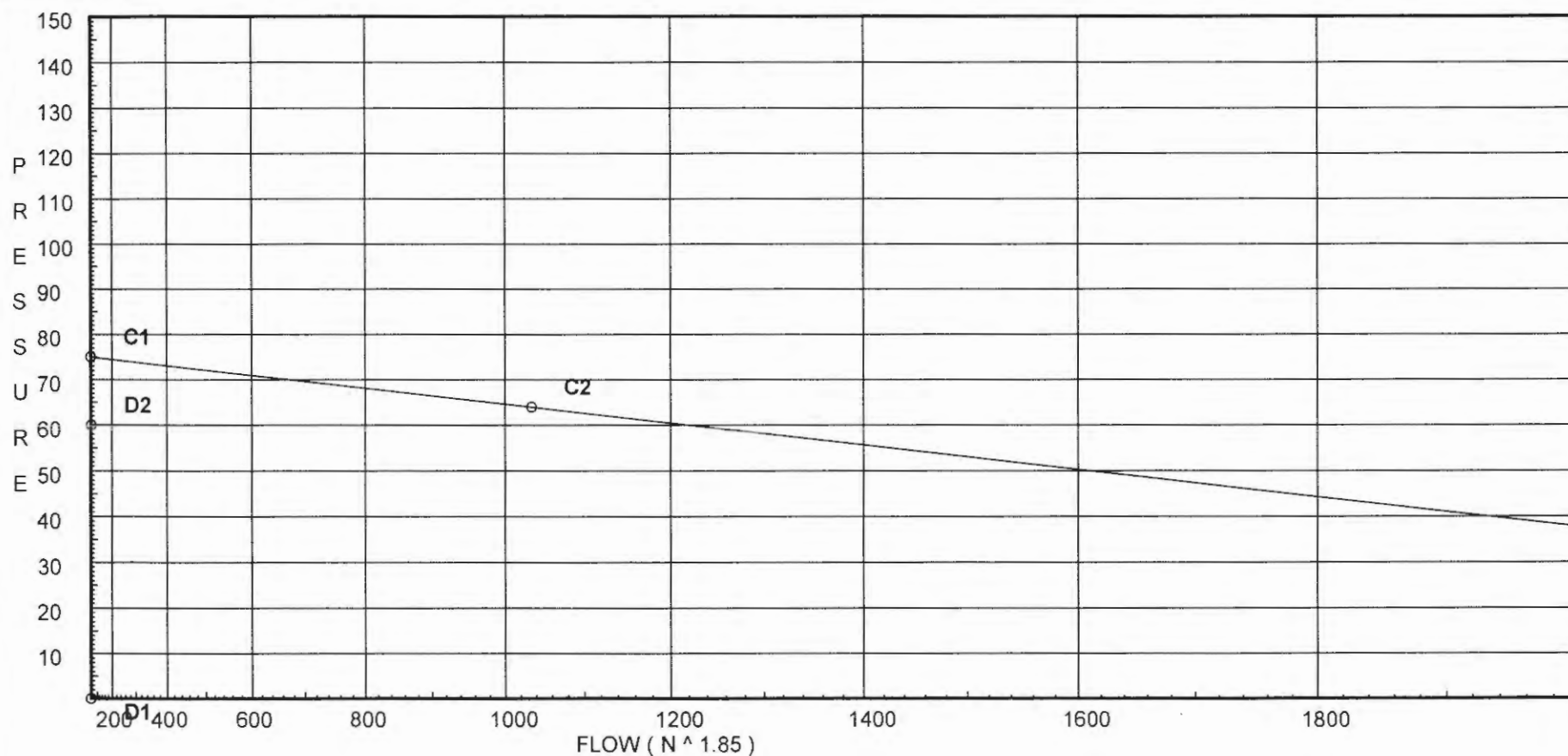
Water Supply Curve (C)

RESIDENTIAL FIRE PROTECTION
54 Eastern Promenade

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City Water Supply:
C1 - Static Pressure : 75
C2 - Residual Pressure: 64
C2 - Residual Flow : 1034

Demand:
D1 - Elevation : _____
D2 - System Flow : 28.498
D2 - System Pressure : 60.002
Hose (Adj City) : _____
Hose (Demand) : _____
D3 - System Demand : 28.498
Safety Margin : 14.983



Fittings Used Summary

RESIDENTIAL FIRE PROTECTION
54 Eastern Promenade

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Fitting Legend

Abbrev.	Name	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24
E	90° Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
N	CPVC 90° Ell Harvel-Spears	7	7	7	8	9	11	12	13	0	0	0	0	0	0	0	0	0	0	0	0
O	CPVC Tee - Branch	3	3	5	6	8	10	12	15	0	0	0	0	0	0	0	0	0	0	0	0
T	90° Flow thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121
Y	Mechanical Tee	2	4	5	6	8	10.5	12.5	15.5	0	22	0	0	0	0	0	0	0	0	0	0
Zwa	Watts 007	Fitting generates a Fixed Loss Based on Flow																			

Pressure / Flow Summary - STANDARD

RESIDENTIAL FIRE PROTECTION
54 Eastern Promenade

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Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
HD1	36.0	4.9	8.2	na	14.03	0.1	140	8.2
HD2	36.0	4.9	8.2	na	14.03	0.1	140	8.2
1	0.0	K = K @ DRP1	24.61	na	14.03			
2	0.0	K = K @ DRP2	25.69	na	14.47			
10	0.0		30.25	na				
11	0.0		31.93	na				
21	0.0		34.68	na				
31	0.0		37.24	na				
32	0.0		41.18	na				
33	0.0		42.32	na				
34	0.0		43.41	na				
TR	0.0		45.09	na				
BR	1.0		50.08	na				
UG1	0.0		59.99	na				
UG2	0.0		59.99	na				
TEST	0.0		60.0	na				

The maximum velocity is 10.58 and it occurs in the pipe between nodes 31 and 32

Final Calculations - Hazen-Williams

RESIDENTIAL FIRE PROTECTION
54 Eastern Promenade

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
HD1 to DRP1	14.03 14.03	0.874 150 0.1087	1N	7.0 0.0 0.0	0.500 7.000 7.500	8.200 15.592 0.815			K Factor = 4.90 Vel = 7.50	
	0.0 14.03						24.607		K Factor = 2.83	
HD2 to DRP2	14.03 14.03	0.874 150 0.1086	1O	3.0 0.0 0.0	0.500 3.000 3.500	8.200 15.592 0.380			K Factor = 4.90 Vel = 7.50	
	0.0 14.03						24.172		K Factor = 2.85	
1 to 2	14.03 14.03	0.874 150 0.1087		0.0 0.0 0.0	10.000 0.0 10.000	24.607 0.0 1.087			K Factor @ node DRP1 Vel = 7.50	
2 to 10	14.47 28.5	1.101 150 0.1310	1N 2O	7.0 10.0 0.0	17.750 17.000 34.750	25.694 0.0 4.553			K Factor @ node DRP2 Vel = 9.60	
10 to 11	0.0 28.5	1.101 150 0.1310	1O	5.0 0.0 0.0	7.850 5.000 12.850	30.247 0.0 1.683			Vel = 9.60	
11 to 21	0.0 28.5	1.101 150 0.1310	2O	10.0 0.0 0.0	11.000 10.000 21.000	31.930 0.0 2.751			Vel = 9.60	
21 to 31	0.0 28.5	1.101 150 0.1310	1O	5.0 0.0 0.0	14.500 5.000 19.500	34.681 0.0 2.555			Vel = 9.60	
31 to 32	0.0 28.5	1.049 120 0.2505	2E 1T	4.0 5.0 0.0	6.750 9.000 15.750	37.236 0.0 3.946			Vel = 10.58	
32 to 33	0.0 28.5	1.38 120 0.0659	1T	6.0 0.0 0.0	11.250 6.000 17.250	41.182 0.0 1.136			Vel = 6.11	
33 to 34	0.0 28.5	1.38 120 0.0659	1T	6.0 0.0 0.0	10.500 6.000 16.500	42.318 0.0 1.088			Vel = 6.11	
34 to TR	0.0 28.5	1.38 120 0.0659	2E	6.0 0.0 0.0	19.500 6.000 25.500	43.406 0.0 1.680			Vel = 6.11	
TR to BR	0.0 28.5	1.38 120 0.0659	1Zwa 1Y 1E	0.0 6.0 3.0	5.000 9.000 14.000	45.086 4.067 0.922			* Fixed loss = 4.5 Vel = 6.11	
BR to UG1	0.0 28.5	1.051 150 0.1681	1Bvb 1T	0.0 7.626 0.0	25.000 7.625 32.625	50.075 4.433 5.485			* Fixed loss = 4 Vel = 10.54	
UG1 to UG2	0.0 28.5	8.27 140 0.0	1T	55.354 0.0 0.0	50.000 55.354 105.354	59.993 0.0 0.001			Vel = 0.17	
UG2 to TEST	0.0 28.5	6.16 140 0.0		0.0 0.0 0.0	250.000 0.0 250.000	59.994 0.0 0.008			Vel = 0.31	

Final Calculations - Standard

RESIDENTIAL FIRE PROTECTION
54 Eastern Promenade

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
	0.0 28.50								
					60.002			K Factor =	3.68