

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT

This is to certify that  
DEAN & ALLYN, INC.  
PO BOX 709 - 116 LEWISTON RD  
GRAY, ME 04039

For installation at  
4 STEPPING STONE LN  
SINGLE-FAMILY HOME

Job ID: 2011-08-2037-SF

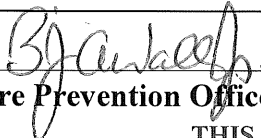
CBL: 406- F-060-001

has permission 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

  
Code Enforcement Officer / Plan Reviewer

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

SCANNED

## BUILDING PERMIT INSPECTION PROCEDURES

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

or email: [buildinginspections@portlandmaine.gov](mailto: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](http://www.portlandmaine.gov)

Director of Planning and Urban Development  
Penny St. Louis

**Job ID: 2011-08-2037-SF**  
**install NFPA 13D sprinkler system**

**For installation at:**  
**4 STEPPING STONE LN**  
**SINGLE-FAMILY HOME**

**CBL: 406- F-060-001**

## **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.

Application requires State Fire Marshal approval.

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

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

Job No: 2011-08-2037-SF 2012-41576 FAFS	Date Applied: 3/08/2012	CBL: 406- F-060-001	
Location of Construction: 4 STEPPING STONE LN -lot #9	Owner Name: KING CONSTRUCTION CORP.	Owner Address: 198 SACO AVE OLD ORCHARD BEACH, 04064 ME - MAINE	Phone:
Business Name:	Contractor Name: DEAN & ALLYN INC.	Contractor Address: 116 LEWISTON ROAD, GRAY, ME 04039	Phone: 657-5646
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE SYS WB	Zone: R-3
Past Use: <b>Single Family Dwelling (under construction)</b>	Proposed Use: <b>Same: Single Family Dwelling - to install fire suppression system</b>	Cost of Work: \$7,000.00	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>[Signature]</i> (58)	Signature:
Proposed Project Description: New 2,048 sq. ft. single family home		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Gayle	<b>Zoning Approval</b>		
<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>	<b>Special Zone or Reviews</b> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan  ___ Maj ___ Min ___ MM Date: <i>[Signature]</i> 3/8/17	<b>Zoning Appeal</b> <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:	<b>Historic Preservation</b> <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>[Signature]</i>
	<b>CERTIFICATION</b>		

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

406 F 060

11-10757  
2011-08-2037  
66

### One- or Two-family Fire Sprinkler 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.

R-3

2012-41576

Installation address: Lot #9 Stepping Stone Lane

Building owner: King Weinstein Phone: 332 7544

Installer: Dean + Allyn Inc Phone: 657 5646

Total sq/ft of building floor space per unit: See plan  Single-family home  
or

Sq/ft of sprinklered floor space per unit: \_\_\_\_\_  Two-family home

Is this a multipurpose piping system? Y /  N Sprinkler piping uses Pex? Y /  N

Water supply:  Municipal Water  Well pump  Stored water  Other

Include electronic copy of approved State Sprinkler Permit plans:

Additional cost to the owner for the home fire sprinkler system for each dwelling unit minus costs necessary for domestic needs (See below): **A=** \_\_\_\_\_

Attach cost breakdown:  A City plumbing permit has been pulled:

RECEIVED

MAR 08 2012

Dept. of Building Inspections  
City of Portland Maine

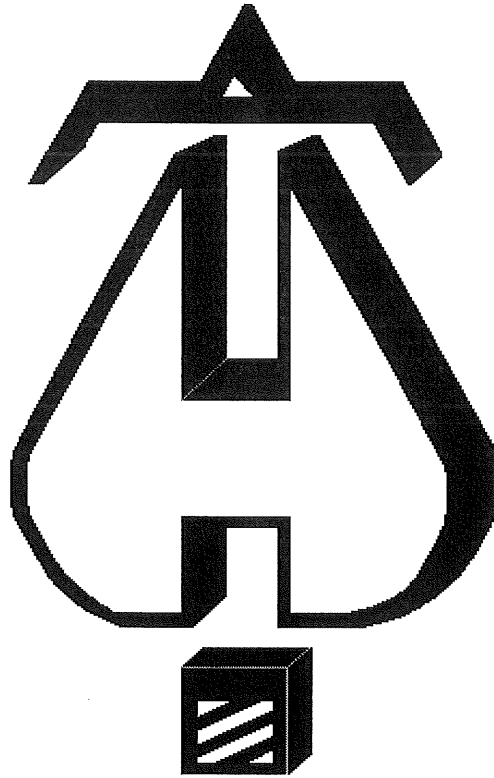
COST OF WORK: \$ 6500  
(A times number of units)

NO FEE REQUIRED

Additional information and Frequently asked questions about home fire sprinkler systems may be found at

[www.portlandmaine.gov/fireprevention](http://www.portlandmaine.gov/fireprevention).

Sprinkler system cost must deduct costs that would have been incurred if the system did not provide sprinkler service. In a well pump system it would include the difference between the well pump to be installed and the one that would have been installed if there were no sprinkler demand on the system. Includes additional piping and valves that are required only because of NFPA Standard 13D, and not already required for domestic needs. Includes cost of sprinkler heads and additional installation costs.



... Fire Protection by Computer Design

DEAN & ALLYN, INC.  
PO BOX 709  
116 LEWISTON ROAD  
GRAY, MAINE 04039  
207-657-5646

Job Name : LOT 9 STEPPING STONE  
Building :  
Location : LOT #9 STEPPING STONE LANE PORTLAND MAINE  
System : ONE  
Contract : C121066  
Data File : STEPPING STONE .WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - LOT #9 STEPPING STONE LANE Date - 2-28-12  
 Location - LOT #9 STEPPING STONE LANE PORTLAND MAINE  
 Building - System No. - ONE  
 Contractor - DEAN AND ALLYN, INC. Contract No. - C121066  
 Calculated By - H. KING Drawing No. - 1 OF 1  
 Construction: (X) Combustible ( ) Non-Combustible Ceiling Height 8'  
 OCCUPANCY - RESIDENCE

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 - 12 Gpm System Type  
 Listed Pres. at Start Point - 9 Psi (X) Wet ( ) Dry  
 D MAXIMUM LISTED SPACING 14 x 14 ( ) Deluge ( ) PreAction  
 E Domestic Flow Added - Gpm Sprinkler or Nozzle  
 S Additional Flow Added - Gpm Make VIKING Model FREEDOM  
 I Elevation at Highest Outlet - 24' Feet Size K-Factor 4.0  
 G Note:CUSHION 14.3 PSI Temperature Rating 155  
 N

Calculation Gpm Required 24.2 Psi Required 39.4 PUMP  
 Summary C-Factor Used: Overhead 120 Underground 120

W Water Flow Test: Pump Data: Tank or Reservoir:  
 A Date of Test - Rated Cap. Cap.  
 T Time of Test - @ Psi Elev.  
 E Static (Psi) - 55 Elev.  
 R Residual (Psi) - 50 Other Well  
 Flow (Gpm) - 50 Proof Flow Gpm  
 S Elevation - 0

P Location: GOULDS PUMP CURVE

P Source of Information:  
 L  
 Y

# Fittings Used Summary

DEAN & ALLYN, INC.  
 LOT 9 STEPPING STONE

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 Date 2-28-12

## Fitting Legend

Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E	NFPA 13 90' Standard Elbow	1	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
S	NFPA 13 Swing Check	0	0	5	7	9	11	14	16	19	22	27	32	45	55	65					
T	NFPA 13 90' Flow thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121

## Units Summary

Diameter Units           Inches  
 Length Units             Feet  
 Flow Units                US Gallons per Minute  
 Pressure Units           Pounds per Square Inch

Note: Fitting Legend provides equivalent pipe lengths for fittings types of various diameters. Equivalent lengths shown are standard for actual diameters of Sched 40 pipe and CFactors of 120 except as noted with \*. The fittings marked with a \* show equivalent lengths values supplied by manufacturers based on specific pipe diameters and CFactors and they require no adjustment. All values for fittings not marked with a \* will be adjusted in the calculation for CFactors of other than 120 and diameters other than Sched 40 per NFPA.



Pressure / Flow Summary - STANDARD

DEAN & ALLYN, INC.  
 LOT 9 STEPPING STONE

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Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
10	24.0	4	9.0	na	12.0	0.06	196	9.0
11	24.0	4	9.38	na	12.25	0.06	196	9.0
20	16.0		13.22	na				
21	16.0		13.63	na				
22	16.0		14.65	na				
23	16.0		16.88	na				
24	8.0		22.57	na				
TR	8.0		31.49	na				
FF	0.0		38.12	na				
PUMP	0.0		39.42	na				

The maximum velocity is 9 and it occurs in the pipe between nodes 21 and 22

Final Calculations - Hazen-Williams

DEAN & ALLYN, INC.  
 LOT 9 STEPPING STONE

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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 *****
10	12.00	1.049	1E 2.0	8.000	9.000		K Factor = 4.00
to		120.0	1T 5.0	7.000	3.465		
20	12.0	0.0506	0.0	15.000	0.759		Vel = 4.45
	0.0						
	12.00				13.224		K Factor = 3.30
11	12.25	1.049	1E 2.0	8.000	9.375		K Factor = 4.00
to		120.0	1T 5.0	7.000	3.465		
21	12.25	0.0525	0.0	15.000	0.788		Vel = 4.55
	0.0						
	12.25				13.628		K Factor = 3.32
20	12.00	1.049	0.0	8.000	13.224		
to		120.0	0.0	0.0	0.0		
21	12.0	0.0505	0.0	8.000	0.404		Vel = 4.45
21	12.25	1.049	1T 5.0	0.500	13.628		
to		120.0	0.0	5.000	0.0		
22	24.25	0.1858	0.0	5.500	1.022		Vel = 9.00
22	0.0	1.049	2E 4.0	8.000	14.650		
to		120.0	0.0	4.000	0.0		
23	24.25	0.1858	0.0	12.000	2.230		Vel = 9.00
23	0.0	1.049	1E 2.0	10.000	16.880		
to		120.0	0.0	2.000	3.465		
24	24.25	0.1858	0.0	12.000	2.230		Vel = 9.00
24	0.0	1.049	2T 10.0	28.000	22.575		
to		120.0	5E 10.0	20.000	0.0		
TR	24.25	0.1858	0.0	48.000	8.920		Vel = 9.00
TR	0.0	1.049	2S 10.0	7.000	31.495		
to		120.0	0.0	10.000	3.465		
FF	24.25	0.1858	0.0	17.000	3.159		Vel = 9.00
FF	0.0	1.049	2E 4.0	3.000	38.119		
to		120.0	0.0	4.000	0.0		
PUMP	24.25	0.1859	0.0	7.000	1.301		Vel = 9.00
	0.0						
	24.25				39.420		K Factor = 3.86

# Water Supply Curve (C)

DEAN & ALLYN, INC.  
LOT 9 STEPPING STONE

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City Water Supply:  
C1 - Static Pressure : 55  
C2 - Residual Pressure: 50  
C2 - Residual Flow : 50

Demand:  
D1 - Elevation : 10.394  
D2 - System Flow : 24.248  
D2 - System Pressure : 39.420  
Hose ( Demand ) :  
D3 - System Demand : 24.248  
Safety Margin : 14.270

