Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

BUILDING INCRECTION

Permit Number: 030017

pting this permit shall comply with all

ctures, and of the application on file in

ances of the City of Portland regulating

This is to certify that Ho Duc N & /Maplewood D	opment	
has permission to Amendment to permit # 0208	change plans.	
AT 249 St John St	064 D006001	

ne and or the Qu

of buildings and

m or (

on a

provided that the person or persons, of the provisions of the Statutes of Nather construction, maintenance and uthis department.

Apply to Public Works for street line and grade if nature of work requires such information.

ication insper n must permit in procuble this is ding or in thereof sed-in.

H. R. NOT.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. - Can fine of Health Dept.

Appeal Board

Other ______ Department Name

PENALTY FOR REMOVING THIS CARD

Lessee/Buyer's Name Phone: n/a n/a	ame: N &	716 03-0017 Owner Address: 17 Allen Rd Contractor Address: Box 130 Eliot	Phone: 207-772-3038
249 St John St Ho Duc Business Name: Contract n/a Mapley Lessee/Buyer's Name n/a Phone: n/a	N & or Name:	17 Allen Rd Contractor Address:	207-772-3038
Business Name: Contract n/a Mapley Lessee/Buyer's Name Phone: n/a n/a	or Name:	Contractor Address:	
n/a Mapley Lessee/Buyer's Name Phone: n/a n/a			m
Lessee/Buyer's Name Phone: n/a n/a	ood Development	Box 130 Eliot	Phone
n/a n/a			2072520162
ıva -		Permit Type:	Zone:
Past Use:		Amendment to Commercial	182
Toposcu		Permit Fee: Cost of Work:	CEO District:
Commercial Comme	rcial / Amendment to permi	it \$30.00 , \$0	.00 3
	8. Change in structural	FIRE DEPT: Approved I	NSPECTION: AND FLOOR
plans.		Denied	Use Group: R DND FLOOR Type:
		Denied	1/21/2
Proposed Project Description:			
Amendment to permit # 020898, change in stru	ctural plans.	Signature: 4+ W S	Signature:
		PEDESTRIAN ACTIVITIES DISTR	
		Action: Approved Appro	ved w/Conditions Denied
Permit Taken By: Date Applied For:		Signature:	Date:
Permit Taken By: Date Applied For: 01/08/2003		Zoning Approval	
1. This permit application does not preclude	he Special Zone or Rev	views Zoning Appeal	Historic Preservation
Applicant(s) from meeting applicable State Federal Rules.	and Shoreland	☐ Variance	Not in District or Landmark
Building permits do not include plumbing, septic or electrical work.	Wetland	☐ Miscellaneous	☐ Does Not Require Review
 Building permits are void if work is not sta within six (6) months of the date of issuance 	e. All on 1 yro	☐ Conditional Use	Requires Review
False information may invalidate a building permit and stop all work	Subdivision	Interpretation	Approved
	Site Plan	☐ Approved	Approved w/Conditions
	Maj Minor MM	M Denied	Denied .
	Date: 1903	Date:	Date:

ADDRESS

DATE

DATE

PHONE

PHONE

SIGNATURE OF APPLICANT

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE

City of Doubland Mains Double	ar a sa s	4		Permit No:	Date Applied For:	CBL:
City of Portland, Maine - Buil	8			00.0017	01/08/2003	ł
389 Congress Street, 04101 Tel: (2		(207) 87	4-8716	03-0017	01/06/2003	064 D006001
Location of Construction:	Owner Name:		70	Owner Address:		Phone:
249 St John St	Ho Duc N &			17 Allen Rd		207-772-3038
Business Name:	Contractor Name:		(Contractor Address:		Phone
n/a	Maplewood Developm	nent	[:	Box 130 Eliot		(207) 252-0162
Lessee/Buyer's Name	Phone:		I	Permit Type:		
n/a	n/a]	[Amendment to Co	mmercial	
Proposed Use:			Proposed	d Project Description:		
Commercial / Amendment to permit #	: 020898. Change in stri	uctural	Amend	lment to permit # 02	20898, change in stru	ictural plans.
plans.				•		•
			<u> </u>			
1			l			
1			1			
Dept: Zoning Status: A	pproved	Re	viewer:	Marge Schmuckal	Approval Da	te: 01/09/2003
Note:	r C		, 10 01 1	B		Ok to Issue:
					·	OK to issue.
Dept: Building Status: Pe	ending	Re	viewer:	Mike Nugent	Approval Da	te:
Note:						Ok to Issue:
					·	OK to Issue.
Dept: Fire Status: A	pproved	Re	viewer:	Lt. McDougall	Approval Da	te: 01/14/2003
Note:				Č		Ok to Issue:
					·	OR to issue:
Comments:						
01/08/2003-gg: Applicant (Joe Desim	one) said he faxed addit	tional pla	ns to Mi	ike Nugent. /gg		
01/13/2003-gg: received additional pl		-		0 00		
	20					
01/16/2003-mjn: Need statement of de	sign on steel., Spoke w	ith Joe D). This d	ate.		

AMENDED

All Purpose Building

If you or the property owner owes real estate or personathe City, payment arrangements must be ma

If you are in a Historic District you may be sub

Planning Department or

rmi Application

party towns or user charges on any property within

to additional permitting and fees with the

⇒ 4th floor of City Hall

fore petroits of any kind are accepted.

				,	
Location/Address of Construction: 249	STI	THN ST	PORTC	AND.	MAINE
Total Square Footage of Proposed Structure		uare Footage	e of Lo t		
Tax Assessor's Chart, Block & Lot Chart# Block# Lot#		NCHO MLE		Telepho	one: 3038
te	17 AL	e, addre:: & DUC HO LEN RON 1AND, MA	ED F	Cost Of 9 Work: \$ 9 Fee: \$ \$ 3	1000 5.00
Current use: VACAUT		879-19	12	need	s to zu
If the location is currently vacant, what was p	prior use:	OFFICE	Space	2 W	hen Rick
Approximately how long has it been vacant:	:8n	nonths		<i>S</i> ~~~	NT
Proposed use: <u>(SEE PREVIOUS APPLIC</u> Project description: STRUCTURAL CH SUBMITTALS ATT A	ANGES	SEE CO	MENO 1 UTRACTO	O ADI	D> 0.908
Contractor's name, address & telephone:	MAPLE	-ELIOT, N		902 20	PHONE 77-408-6217
Who should we contact when the permit is re Mailing address:	eady: <i>D</i>		TOE DESIL		252-0162 40all
We will contact you by phone when the period review the requirements before starting any and a \$100.00 fee if any work starts before the	work, wit		A stop wor PHONE: 77	k order will	be issued
IF THE REQUIRED INFORMATION IS NOT INCLUDI DENIED AT THE DISCRETION OF THE BUILDING/PI INFORMATION IN ORDER TO APROVE THIS PERM	LANNING	ISSIOŅS THE A rtme nt, We	PERMIT WILL MAY REQUI		
I hereby certify that I am the Owner of record of the name have been authorized by the owner to make this applicationistiction. In addition, if a permit for work described in this shall have the authority to enter all areas covered by this to this permit.	tlon às his/: is applicat	: th orized a gent. I rued, I ce rtify tha	agree to confo t the Code Offi	orm to all appl cial's authorize	ed work and that I licable laws of this ed representative codes applicable
Signature of applicant:	w/	D	ate: {	16	103
This is NOT a permit, you may not	com m	э ANY work	until the p	ermit is is	ssued.

AMERICAN

STEEL AND ALUMIUM CORPORATION

115 Wallace Ave.~ South Portland, Maine 04106 (207)772-4641 FAX (207)772-0359

1/3/2002

Certificate of Compliance

Your Purchase Order# Greg Paquette

Our Work Order# 0587321

Hr WF Beam 5 x 19# x 20' A36

Hr WF Beam 5 x 19# x 40' A36

I certify that the material and process employed, to the best of my knowledge, comply with all requirements of your order, including relevant specifications and standards.

American Steel & Aluminum

Q.A. Manager

Jim Fortin

AMERICAN STEEL AND ALUMIUM CORPORATION

115 Wallace Ave. - South Portland, Maine 04106 (207)772-4641 FAX (207)772-0359

1/3/2002

Certificate of Compliance

Your Purchase Order#

Maplewood Development

Our Work Order#

0589034

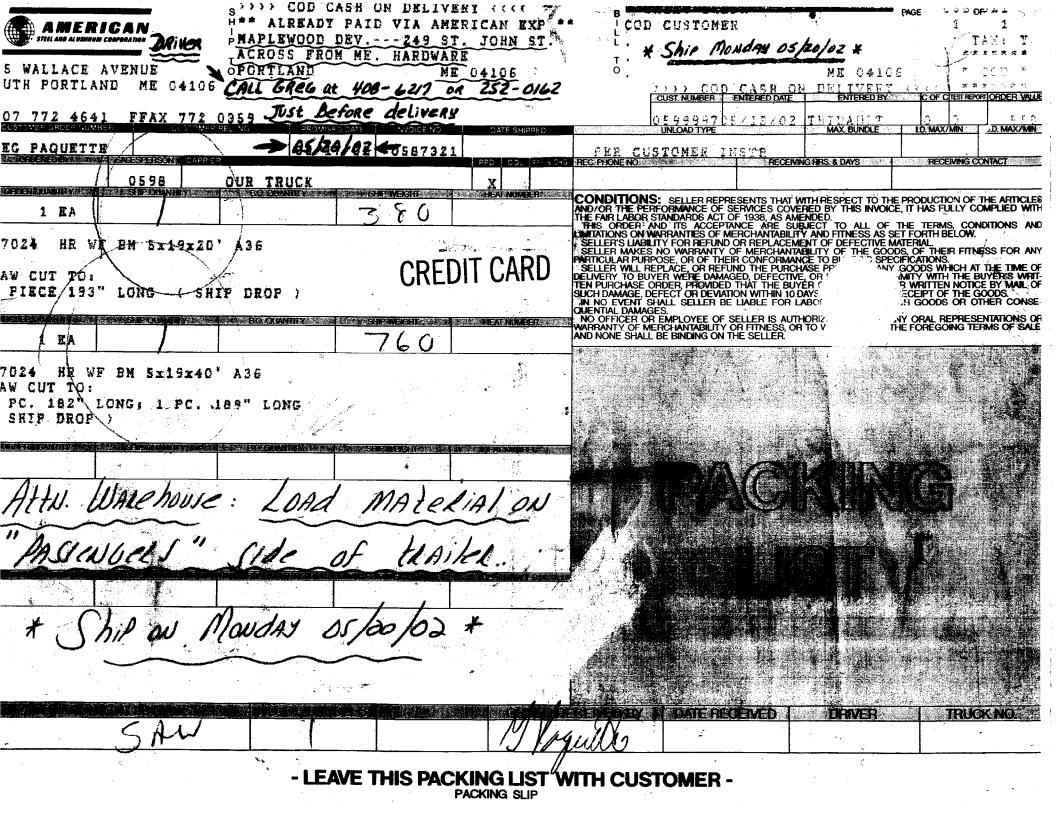
Hr WF Beam 5 x 19# x 20' A36

I certify that the material and process employed, to the best of my knowledge, comply with all requirements of your order, including relevant specifications and standards.

American Steel & Aluminum

Q.A. Manager

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0.85	
E TORO	
	QUENTIAL DIMINGES. NO OFFICERIOR EMPLOYEE OF SELLER SUTHORIZERITO MAKE MY ORAL REPRESENTATIONS OF WARRANTY OF MECHANIABILITY OR FITNESS, OR TO WAVE ANY OF THE FOREGOING TERMS OF SALE AND NONE SHALL, BE BINDING ON THE SELLER.
Mud (4) They @ 25 - 063 or	
before derivery	
The as deple sule.	
SAY	
LEWE THIS BLOGGE SUST	METH CUSTOMER -



January 30, 2003

Duc Ho and Yem Le c/o Maplewood Development 249 St. John Street Portland, ME 04101

22 MONUMENT SQ., SUITE 300 PORTLAND, ME 04101 TEL 207 775-1969 800 922-1969 FAX 207 775-4115

Structural Design - 249 St. John Street, Portland, Maine

CME Project No. 03-012

Dear Duc Ho and Yem Le:

Thank you for giving us the opportunity to be of service to you. As we discussed with Gregg Paquette of Maplewood Development, I performed a comparison of two materials to demonstrate that the materials used to replace some existing structural members have a greater strength than the original materials.

The original material is assumed to be a 6x8 #2 Douglas Fir timber. The new material is an A36 steel W5x19 beam. The materials were compared by evaluating the maximum load per linear feet for a 15-foot, 0-inches beam. The beams were evaluated using Strucalc 5.0, a structural analysis software. The codes used are the 1997 NDS for wood and the AISC 9th Edition, ASD for steel.

As shown in the attached printouts, the timber is adequate for a load of 82 pounds per linear foot (plf) of imposed load, and the steel beam is adequate for an imposed load of 481 plf, approximately six times greater.

Please call me if you have any questions concerning these observations. Thank you for allowing Criterium - Mooney Engineers to help you. OF MANININ

Yours truly,

Helen C. Watts, P.E.

Project Engineer

HCW/

Enclosures: Strucalc analysis printout

j:\data\projects\proj03\249 St John.ltr.doc

PROFESSIONAL ENGINEERS

BUILDING DIAGNOSTICS INSPECTIONS **ENVIRONMENTAL SERVICES** MAINTENANCE PLANNING **DESIGN**



Uniformly Loaded Floor Beam[99 BOCA National Building Code (97 NDS)] Ver: 5.04 By: Helen Watts , Helen Watts Engineering on: 01-29-2003 : 7:58:15 PM

Project: - Location: Summary: 5.5 IN x 7.5 IN x 15.0 FT /#2 - Douglas Fir-South - Dry Use Section Adequate By: 0.9% Controlling Factor: Section Modulus / Depth Required 7.47 In Deflections: 0.54 DLD= Dead Load: Live Load: IN = L/180000000 0.00 LLD= TLD= 0.54 IN = L/332 Total Load: Reactions (Each End): LB LB LL-Rxn= Live Load: DL-Rxn= 690 Dead Load: LB 690 TL-Rxn= 0.24 ĪÑ Bearing Length Required (Beam only, Support capacity not checked): BL= Beam Data: 15.0 FT L= Span: FT 0.0 Lu= Unbraced Length-Top of Beam: U 360 Live Load Deflect. Criteria: L 240 Total Load Deflect. Criteria: Floor Loading: PSF PSF 0.0 Floor Live Load-Side One: DL1= 0.0 Floor Dead Load-Side One: 0.0 FT TW1= Tributary Width-Side One: Floor Live Load-Side Two: PSF LL2= 0.0 **PSF** 0.0 DL2= Floor Dead Load-Side Two: TW2= 0.0 FT Tributary Width-Side Two: 1.00 Cd= Live Load Duration Factor: PLF + 82 WALL= Wall Load: Beam Loading: 0 **PLF** wL= Beam Total Live Load: **PLF** BSW= 10 Beam Self Weight: PLF 92 wD= Beam Total Dead Load: **PLF** 92 wT= Total Maximum Load: Properties For. #2- Douglas Fir-South Bending Stress: PSI 675 Fb= PSI 85 Fv= Shear Stress: PSI 1000000 E= Modulus of Elasticity: PSI 520 Fc perp= Stress Perpendicular to Grain: Adjusted Properties 608 **PSI** Fb'= Fb' (Tension): Adjustment Factors: Cd=0.90 Cf=1.00 Fv'= **PSI** 77 Adjustment Factors: Cd=0.90 Design Requirements: 2588 FT-LB M= Controlling Moment: 7.5 ft from left support Critical moment created by dead loads only on all span(s). LB 690 Controlling Shear: At support. Critical shear created by dead loads only on all span(s). Comparisons With Required Sections: IN3 51.13 Sreq= Section Modulus (Moment): 51.56 IN3 S= 13.53 41.25 IN₂ Areq= Area (Shear): IN₂ A= 139.74 IN4 Ireq= Moment of Inertia (Deflection): IN4 193.36

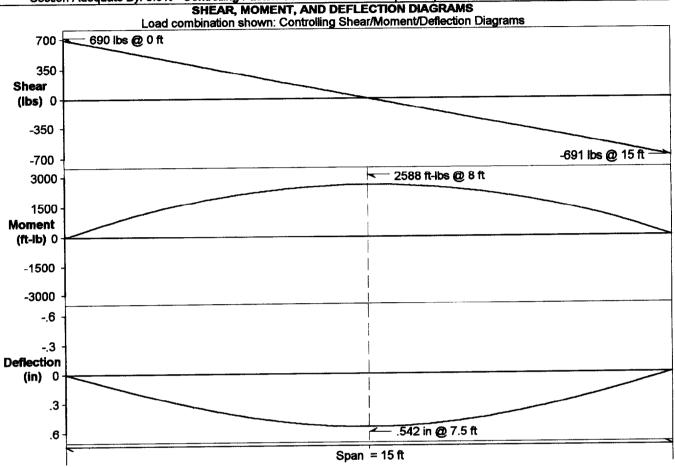
Uniformly Loaded Floor Beam[99 BOCA National Building Code (97 NDS)] Ver: 5.04 By: Helen Watts , Helen Watts Engineering on: 01-29-2003

Project: - Location:

Summary:

5.5 IN x 7.5 IN x 15.0 FT /#2 - Douglas Fir-South - Dry Use

Section Adequate By: 0.9% Controlling Factor: Section Modulus / Depth Required 7.47 In



Controlling Load Cases:

Shear: Critical shear created by dead loads only on all span(s).

Moment: Critical moment created by dead loads only on all span(s).

Deflection: Critical deflection created by combining all dead and live loads.

Uniformly Loaded Floor Beam[AISC 9th Ed ASD] Ver. 5.04 By: Helen Watts , Helen Watts Engineering on: 01-29-2003 : 7:46:33 PM

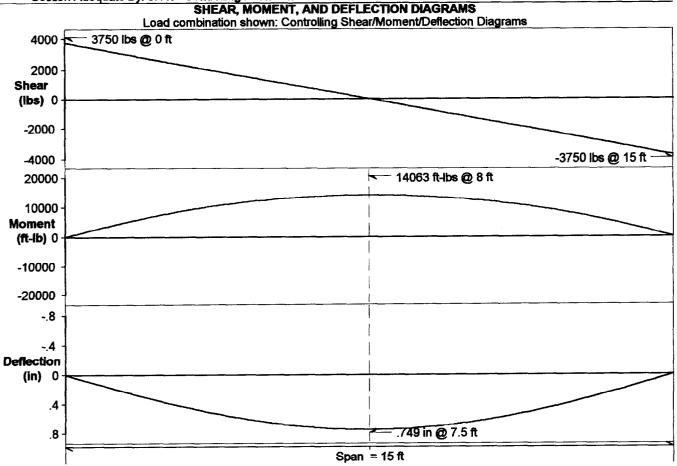
Project: - Location: Summary: 15.10 x 15.0 FT Section Adequate By: 0.1% Controlling Factor: Moment of Inertia Deflections: 0.75 0.00 DLD= Dead Load: IN = L/180000000 LLD= Live Load: IN = L/240TLD= 0.75 Total Load: Reactions (Each End): LL-Rxn= Live Load: LB DL-Rxn= 3750 Dead Load: LB TL-Rxn= 3750 Total Load: 0.81 IN Bearing Length Required (Beam only, Support capacity not checked): BL= Beam Data: 15.0 FT L= Span: 0.0 FT Lu= Unbraced Length-Top of Beam: 360 L Live Load Deflect. Criteria: L 240 Total Load Deflect. Criteria: Floor Loading: PSF PSF 0.0 Floor Live Load-Side One: DL1= 0.0 Floor Dead Load-Side One: TW1= 0.0 FT Tributary Width-Side One: **PSF** LL2= 0.0 Floor Live Load-Side Two: **PSF** DL2= 0.0 Floor Dead Load-Side Two: TW2= 0.0 FT Tributary Width-Side Two: PLF WALL= 461 Wall Load: Beam Loading: 0 PLF wL= Beam Total Live Load: BSW= 19 PLF Beam Self Weight: **PLF** 500 Beam Total Dead Load: wD= PLF 500 wT= Total Maximum Load: Properties for: W5x19/A36 36 KSI Fv= Yield Stress: 29000 É= KSI Modulus of Elasticity: 5.15 IN d= Depth: 0.27 IN tw= Web Thickness: IN bf= 5.03 Flange Width: tf= 0.43 IN Flange Thickness: 0.81 IN k= Distance to Web Toe of Fillet: 26.20 IN4 lx= Moment of Inertia About X-X Axis: 10.20 IN₃ Sx= Section Modulus About X-X Axis: Radius of Gyration of Compression Flange + 1/3 of Web: Design Properties per AISC Steel Construction Manual: 1.38 IN rt= 5.85 FBR= Flange Buckling Ratio: 10.83 AFBR= Allowable Flange Buckling Ratio: Web Buckling Ratio: 19.07 WBR= AWBR= 106.67 Allowable Web Buckling Ratio: Lb= 0.0 FT Controlling Unbraced Length: 5.31 Lc= Limiting Unbraced Length for Fb=.66*Fy: Fb= KSI 23.76 Allowable Bending Stress: Web Height to Thickness Ratio: Limiting Web Height to Thickness Ratio for Fv=.4*Fy: 15.89 h/tw= 63.33 h/tw-Limit= KSI 14.4 Allowable Shear Stress: Fv= Design Requirements Comparison: 14063 FT-LB M= Controlling Moment: 20196 FT-LB Mr= Nominal Moment Strength: V= 3750 LB Controlling Shear: 20023 LB Vr= Nominal Shear Strength: 26.18 IN4 Irea= Moment of Inertia (Deflection): 26.20 **IN4 |=**

Uniformly Loaded Floor Beam[AISC 9th Ed ASD] Ver: 5.04 By: Helen Watts , Helen Watts Engineering on: 01-29-2003

Project - Location: Summary:

A36 W5x19 x 15.0 FT

Section Adequate By: 0.1% Controlling Factor: Moment of Inertia



Controlling Load Cases:

Shear: Critical shear created by combining all dead and live loads.

Moment: Critical moment created by combining all dead and live loads.

Deflection: Critical deflection created by combining all dead and live loads.