

HUGH STUBBINS AND ASSOCIATES
ARCHITECTS 805 MASSACHUSETTS AVENUE CAMBRIDGE MASSACHUSETTS 02139 TELEPHONE (617) 491-6450

HUGH STUBBINS, F.A.S.
NORMAN WESTLAND, A.A.
EDWIN J. JONES, A.A.
STEVEN L. L. A.
TETSUO TAKA, A.A. AIA
NORMAN J. PAUL, A.A. AIA
JOHN LEE WATKINS, A.A.
JOHN B. BELLINGER, A.A.
PETER MONTUCCI, A.A.
PAUL JOHN GRAYSON, A.A.

June 19, 1969

Mr. R. Lovell Brown, Director
Building Inspection Department
Portland, Maine 04112

Re Union Mutual Project
Portland, Maine - 121

Dear Mr. Brown:

I am enclosing a copy of the letter from the State of
Maine, Insurance Department dated June 17, 1969 refer-
ring to their preliminary review of plans for the Union
Mutual Project as having complied with preliminary
recommendations made by Mr. Crowe.

Please advise if you desire to wait until the final
plans and specifications are complete *for your review*.

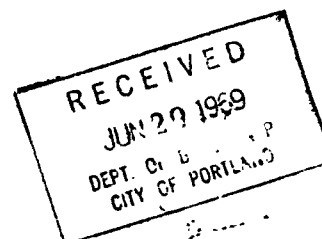
Very truly yours,

HUGH STUBBINS & ASSOCIATES

Paul J. Grayson
Paul J. Grayson

PJG/kc

cc: UM - Primm
CAM - Knowlton/enc.



COMMISSIONER
HAROLD E. TRANEY
DEPUTY COMMISSIONER

DIRECTOR
HARRY B. ROLLINS
ASSISTANT DIRECTOR

STATE OF MAINE
Insurance Department
DIVISION OF STATE FIRE PREVENTION
AUGUSTA, MAINE 04330
JUNE 17, 1969

Hugh Stubbins and Associates
806 Mass. Avenue
Cambridge, Massachusetts 02139

Re: Union Mutual Life Insurance Co., Portland, Maine

Dear Sirs:

A review of your preliminary plan for the above named project indicated that you have undertaken the recommendations made by Inspector Crowe. A detailed examination for final approval will be made upon submission of complete plans and specifications.

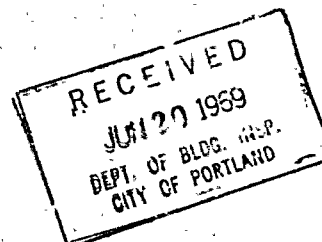
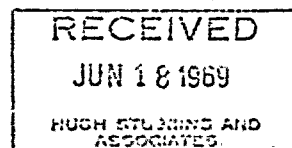
Very truly yours,

Donald M. Sisset

Donald M. Sisset
State Fire Inspector

DMB/lmw

cc: Charles E. Prinn III
Project Administrator
Home Office Project
Union Mutual Co.



cc: CILA-KNOX
CITY OF PORTLAND - Mr. Prinn
LK.

File 100-100000-100000
April 10, 1969

Keith Sanger
Francis Associates
Barnabas Road
Marion, Mass.

Dear Mr. Sanger:

In answer to your question as per our telephone conversation on this date, the Union Mutual building which is First Class will need to have a sprinkler system installed for the garage area if located below other occupancies and exceeds 5,000 square feet. (Building Code Section 503.3.3.a).

We hope that we can be of further service to you in the future if you have any more questions on this building.

Very truly yours,

A. Allan Soule
Assistant Director of Building Inspection

AAS:m

March 20, 1969

Paul J. Grayson
Hugh Stubbins and Associates, 806 Massachusetts Ave.,
Cambridge, Mass. 02139

Re: Union Mutual Office Project
Portland, Maine
Request for alternate use of
Inland Steel Deck Product

Dear Mr. Grayson:

I received your letter and information of March 14th, and have reviewed the Underwriters' report for the Inland Steel deck you proposed to use for above project as a possible alternate to the Robertson Company deck which I have previously approved in my letter of February 24th.

From this information it would appear that the criteria is the same for both inasmuch as Underwriters' has designated it as a Design Number 267-2H in each case. If the qualifications for the Inland deck are the same by their standards as for the Robertson then our conclusion could only be that the substitution would be satisfactory.

Very truly yours,

R. Lovell Brown
Director of Building & Inspection Department

RLB:m

February 24, 1969

Mr. Paul J. Grayson
Hugh Stubbins and Associates
800 Massachusetts Avenue
Cambridge, Mass. 02139

Ref: Union Mutual Office Project, Portland, Maine
Request for omission of fireproofing per
letter of Jan. 21, 1969.

Dear Mr. Grayson:

In response to your letter of Feb. 18, 1969 and the documentary report by Underwriters' Laboratories on the Robertson's C-lock floor system as proposed for use on the new Union Mutual Office Project, I have reviewed this material and feel that it meets necessary requirements for loading and fireproofing conditions.

At this point I would assume that the live load conditions will be less than those used for the test purposes. Approval to proceed with your design using this Robertson C-lock floor system is granted and in accordance with letters and information submitted.

Very truly yours,

A. Lovell Brown
Director of Building Inspection

RIB:m

enc.-

HUGH STUBBINS AND ASSOCIATES

ARCHITECTS 806 MASSACHUSETTS AVENUE CAMBRIDGE MASSACHUSETTS 02139 TELEPHONE (617) 491-5450

ROBERT W. BROWN, FAI
WILLIAM W. BROWN, AIA
EDWARD J. JONES, RA
STEVEN S. J. RA
JESSE L. KARAYANAK, AIA
NORMAN P. LESO, AIA
JOHN LEE WACHS, AIA
JOHN REUTINGER, AIA
PETER W. W. RA
PAUL JOHN GRAYSON, AIA

February 18, 1969

Mr. R. Lowell Brown
Director of Building Inspection
City of Portland
Portland, Maine

Re: Union Mutual Office Project
Portland, Maine
Request for Omission of
Fireproofing - 121

Dear Mr. Brown:

Mr. Franz Schemmel, Project Engineer in the Offices of LeMessurier Associates, our structural engineers on the above referenced project, requested I respond to your letter to him of January 28, 1969.

As you suggested, we are enclosing herewith a copy of the documentary report prepared by the Underwriters' Laboratory (June 14, 1967) on steel form units in floor and steel construction which is pertinent to this review.

The report was prepared to determine if steel form units could be used without jeopardizing the fire resistive classification of the assembly using 3 1/4" concrete fill over the top plane of the steel cell. (See pages G1, T2-1.)

The conclusions of UL were that this assembly will afford two hour protection based on ASTM, E119 and NFPA, 251. (See page C1.)

In the matter of the trench header ducts, we propose to provide them with fireproofing throughout the building. And for the cellways, we interpret the report to indicate that fireproofing would not be required in a normal use situation with wiring.

-2-

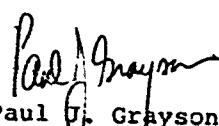
You may wish to refer to Mr. Schemmel's letter of January 21, 1969 and enclosed excerpt from H.H. Robertson's Pamphlet #5 which describes the proposed system utilizing:

1. Q-lock deck - to afford composite slab
2. Fireproofing on trench header ducts
3. 3½" slab with light weight concrete

I trust the above will assist you in your review of our request. Please advise if additional data be required.

Very truly yours,

HUGH STUBBINS & ASSOCIATES


Paul J. Grayson

PJG/t
Enc.

cc: LEM. - Schemmel
CMA - Knowlton
HHR - Butze

HUGH STUBBINS AND ASSOCIATES

ARCHITECTS, 306 MASSACHUSETTS AVENUE, CAMBRIDGE, MASSACHUSETTS 02139 TELEPHONE (617) 451-6459

HUGH STUBBINS FAIA
MERLE WESTERLE AIA
EDWIN F. JONES RA

STEVEN STILO RA
TETSUO TAKAHANAGI AIA
NORMAN J. PATTERSON AIA
JOHN LEE WACKER ASLA
JOHN REUTINGER AIA
PETER WOTLIK RA
PAUL JOHN GRAYSON AIA

March 14, 1969

Mr. R. Lovell Brown
Director of Building Inspection
City of Portland
Portland, Maine

Re: Union Mutual Office Project
Portland, Maine
Request for omission of fire proofing- 121

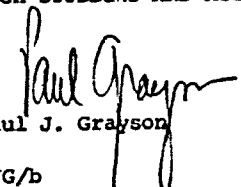
Dear Mr. Brown:

We are enclosing copies of correspondence regarding Inland Steel Company's steel deck product which is competitive with the Robertson Q-Lock floor system that you recently approved for the above project.

After you have had an opportunity to review the enclosed we would appreciate being advised if this product also meets your requirements.

Very truly yours,

HUGH STUBBINS AND ASSOCIATES


Paul J. Grayson

PJG/b

Enclosures

cc: UM - Prinn
CMA - Knowlton
LEM - Thoen



UNDERWRITER LABORATORIES, INC.

an independent, not-for-profit organization testing for public safety

U.L. 1027, Please refer to

October 22, 1968

R3789

Inland - Ryerson Construction Products Co.
Box 393
Milwaukee, Wisconsin 53201

Attention: Mr. Arthur B. Thelen
Product Development Department

Dear Mr. Thelen:

We apologize for the delay in reaching a decision with regard to your request to include your phosphatized-painted Hi-bond for use in floor and ceiling Design No. 267-2H in addition to the galvanized sections presently listed for this design.

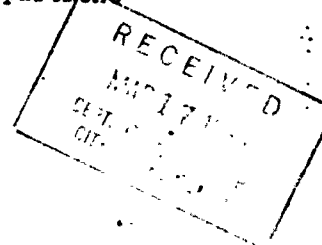
Based on the information supplied in your letters of April 18 and July 23, 1968, in addition to a study conducted in 1965 under File R3789, Assignment 65K-883, we feel that we now have sufficient information to permit interchangeability for this particular design. Of course, this assumes that the phosphatized side of the steel deck will always be in contact with the concrete. No consideration was given to using the painted side of the steel deck in contact with the concrete.

We have opened a job with cost not to exceed \$150.00 to cover the time in reviewing this information and to revise your Reexamination Service Procedure R3789. Accordingly, we are now closing this assignment with this letter and are instructing our Accounting Department to bill you for the incurred charges. You should be receiving your copy of the revised pages to the Reexamination Service Procedure in the near future.

Very truly yours,

Ordean F. Johnson
ORDEAN F. JOHNSON
Project Engineer
Fire Protection Department

OFJ:ab





UNDERWRITERS' LABORATORIES, INC.
333 WESTINGHOUSE ROAD - NORTH BROOMFIELD, ILLINOIS 60062

an independent, not-for-profit organization testing for public safety

in reply, please refer to
R3789
68NK4458

October 22, 1968

Inland-Ryerson Construction Products Co
Box 393
Milwaukee, Wisconsin 53201

Attention: Mr. Arthur B. Thelen
Product Development Dept.

Subject: Engineering Study of Type 3N and 3NF
Steel Floor Units And Design No. 267-2 hr.
Your Project No. 7088

Dear Mr. Thelen:

Thank you very much for the information which accompanied your letter dated October 4, 1968. It enabled us to complete our engineering study described in the subject. As a result, we are pleased to inform you that we revised your Listing Card to indicate that your Type 3N and Type 3NF steel floor units may be used in Design No. 267 - 2 hr. You may expect to receive your copy of the Listing Card revision shortly. We shall retain your information in our file record for possible future use.

This will terminate Assignment 68NK4458.

Very truly yours,

John E. Woycheese
JOHN E. WOYCHEESE
Project Engineer
Fire Protection Department

JEW:lmf

AMERICAN INSURANCE ASSOCIATION
1500 N. W. 10th St.
Miami, Fla. 33136

AMERICAN INSURANCE ASSOCIATION
1500 N. W. 10th St.
Miami, Fla. 33136

AMERICAN INSURANCE ASSOCIATION

IN ANSWERING
PLEASE REFER TO

R2689-10
66K3271

Northbrook, Illinois
April 6, 1967

R. H. Robertson (C).
Lambert, Pennsylvania 15003

Attention: Mr. Charles R. Gray
Chief Technical Service Engineer

Dear Mr. Gray:

Please be advised that a floor and ceiling assembly constructed as shown on the enclosed copy of the construction drawing was subjected to a fire endurance test on February 28, 1967. The test was conducted in accordance with the Standard Fire Tests of Building Construction and Materials U2203, (ASTM E119, NFPA 251).

The test assembly consisted of lightweight concrete, aggregate manufactured by rotary kiln process, supported by your 1-1/2 in. deep composite form units, designated QL-UM and QL-3, and by a steel beam. The steel beam was protected with a sprayed fiber fireproofing material manufactured by U. S. Mineral Products Co., and designated Type D.

The engineering work on this fire-test investigation has not been completed, but upon completion a detailed formal Report of File R2689-10 will be prepared wherein we will classify the test assembly as a 2-hr fire-resistive construction with a 3-hr beam rating. This Report will be sent to our Fire Council for their review and acceptance. Because of excessive temperature transmission through the trench header and header ducts shown on the enclosed drawings, these components will not be included as part of the 2-hr fire resistive construction.

This construction will be subsequently shown in our Building Materials List as Floor and Ceiling Design No. 207. The Report contains all the details of the investigation and indicates the materials which are under our Factory Follow-Up Program.

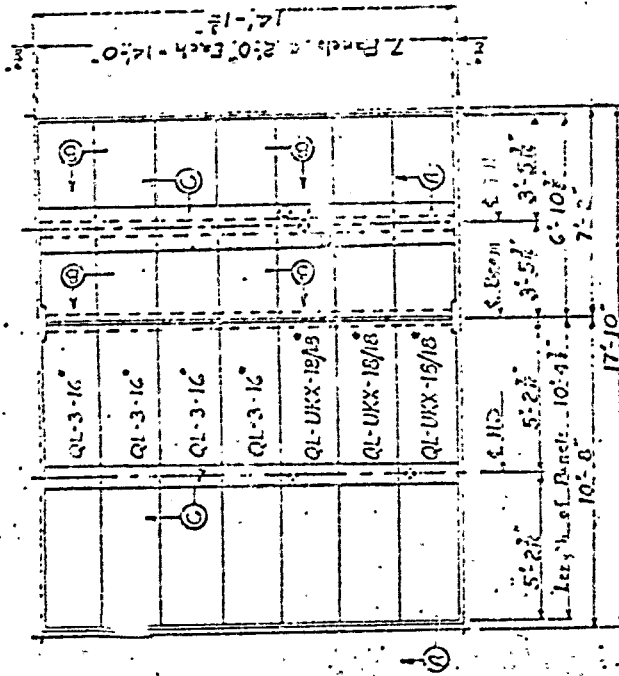
NOTE
UL #

This interim letter and the accompanying drawing are intended to confirm that a fire test of the assembly shown on the attached drawing has been conducted until the complete and formal Report of the fire test investigation is finished and published. The letter and drawing are sent with the understanding that, should they be reproduced, they will be reproduced in their entirety without changes. We anticipate the Report of the complete investigation will be available about June 1, 1967.

Very truly yours,
John P. McGraw
JOHN P. MCGRAW
Project Engineer
Fire Protection Department

JPM:ab

16. rll



Welding Procedure - Floor Deck To Structural Steel

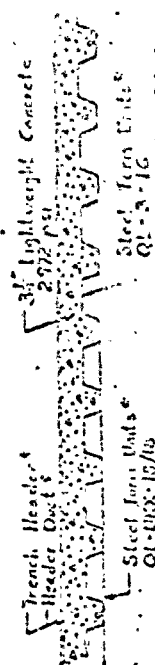
See 3 & 4 UXX shall be fastened to the steel framework at ends of rails by welds not less than $\frac{3}{16}$ " thick, placed in the first, third and fifth low corrugations.

Side Lap Connections:

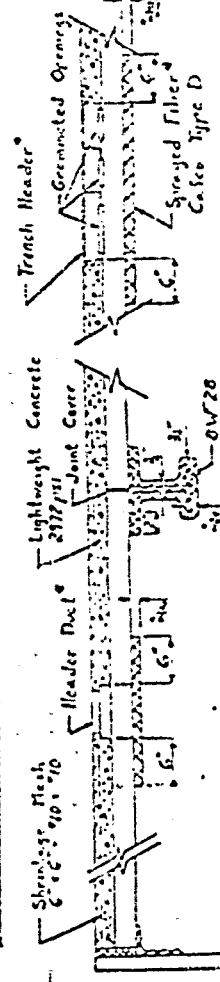
The side laps of adjacent units shall be fully punched between supports at intervals not exceeding 3'-0".



Section C-C (thru low side of Sec 2)



Section B-3



Section H.8

© Listed By Und. Lab. Inc.

MR ROBERTSON

REGISTERED PROFESSIONAL
ACCOUNTANT, P.A.

15' Deep

Comp. by the President

(proceding)

1916

1000

1946-1936-1-6.27



UNDERWRITERS' LABORATORIES, INC.

333 PRINCETON ROAD • NORTH HAVEN, CT 06472

an independent, not-for-profit organization testing for public safety

in reply, please refer to

October 22, 1968

R3789

Inland - Ryerson Construction Products Co.
Box 393
Milwaukee, Wisconsin 53201

Attention: Mr. Arthur B. Thelen
Product Development Department

Dear Mr. Thelen:

We apologize for the delay in reaching a decision with regard to your request to include your phosphatized-painted Hi-bond for use in floor and ceiling Design No. 267-2H in addition to the galvanized sections presently listed for this design. NOTE
UL #

Based on the information supplied in your letters of April 18 and July 23, 1968, in addition to a study conducted in 1965 under File R3789, Assignment 65K4883, we feel that we now have sufficient information to permit interchangeability for this particular design. Of course, this assumes that the phosphatized side of the steel deck will always be in contact with the concrete. No consideration was given to using the painted side of the steel deck in contact with the concrete.

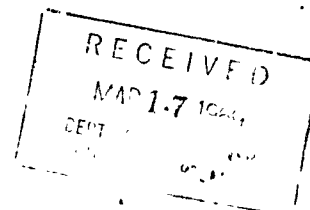
We have opened a job with cost not to exceed \$150.00 to cover the time in reviewing this information and to revise your Reexamination Service Procedure R3789. Accordingly, we are now closing this assignment with this letter and are instructing our Accounting Department to bill you for the incurred charges. You should be receiving your copy of the revised pages to the Reexamination Service Procedure in the near future.

Very truly yours,

Ordean F. Johnson

ORDEAN F. JOHNSON
Project Engineer
Fire Protection Department

OFJ:ab



CITY OF PORTLAND, MAINE
MEMORANDUM

DATE: Jan. 29, 1969

TO: Chief Cremo, Fire Department
FROM: R. Lovell Brown, Director of Building & Inspection Services
SUBJECT: In reference to proposed new Union Mutual Building

Attached is copies of the letter from LeMessurier Associates, Inc. pertinent to the floor system you and I discussed yesterday, and a copy of the letter I have submitted to them.

As agreed you would refer this information to the Insurance Bureau for their judgement. I would appreciate a reply from you as early as you can get the information.

Bob

RLB:m

enc.

January 28, 1969

Franz Schemmel, Project Engineer
LeMessurier Associates, Inc.
711 Boylston St., Boston, Mass. 02116

Re: Union Mutual Office Building, Portland, Maine
Request for Omission of Fireproofing

Dear Mr. Schemmel:

This letter is to acknowledge receipt of your inquiry of January 21, 1969 on use of 3" deep Q-Lock Floor Systems as manufactured by H. H. Robertson Company for use on above project.

I have reviewed the use of the proposed system with the Chief of the Fire Department and he wishes to have more time to review this with the Insurance Rating Bureaus. It would be appreciated if you could forward to us a copy of the documentary report pertinent to this floor system as tested by Underwriters' Laboratories, Inc.

There is some question in our mind as to whether or not the omission of fire-proofing in areas where electric runs do not occur at this time, completely advisable inasmuch as things have a way of expanding in the future and new ones have a way of being used which might not be fireproofed thus causing a major repair at a future date, however, we prefer to hold our judgment a little longer until we can further review this with more facts. We will try not to detain your progress on this project any longer than is necessary.

Yours truly,

R. Lovell Brown
Director of Building Inspection Department

RLB:m

**LeMessurier
Associates, Inc**

711 Boylston Street, Boston, Massachusetts 02116

(617) 262-9300

January 21, 1969

Mr. R. Lovell Brown
Director of Building Inspection
City Hall
Portland, Maine

Re: Union Mutual Office Building
Portland, Maine
Request for Omission of Fireproofing

Dear Mr. Brown:

On the above named project we intend to use 3" deep Q-Lock floor systems as manufactured by H. H. Robertson Company. The conventional way of construction would call for a sprayed-on fireproofing at the underside of the deck in order to obtain the required fire rating of 2 hours.

For reducing the cost and speeding up construction, H. H. Robertson Company recommends the use of 3-1/4" concrete fill of lightweight type employing expanded clay, shale or slate aggregate in lieu of the sprayed-on fireproofing. The testing of this type of floor construction has been fully underwritten by Underwriters' Laboratories Inc. Copies of the report can be obtained from the H. H. Robertson Company. In case you are not in possession of pamphlet 5 on metal decking by Robertson Company I am enclosing a xerox copy of the page with all the pertinent information. The lightweight concrete used on this project will be Masslite, which uses expanded shale as its main aggregate. Fireproofing will still remain at locations of electrical trench headers.

Since the omission of sprayed-on fireproofing constitutes a definite saving in time and materials, we request permission to omit the fireproofing and proceed with the design as recommended

William J. LeMessurier William L. Thoen Emil C. Hervol John E. Brennan Wilson C. Barnes
Kenneth B. Wiesner Juris E. Anderson A. Allen Gacs James McCune Hans William Hagon Dana P. Birch Robert V. Minchello

**LeMessurier
Associates, Inc**

Mr. R. Lovell Brown
Page 2
January 21, 1969

above. Should anything else be in question, we will be glad to furnish you with further details.

Very truly yours,

LeMESSURIER ASSOCIATES, INC.

Franz Schemmel

Franz Schemmel
Project Engineer

FS/pam

c: Mr. Paul Grayson - Hugh Stubbins & Associates
Mr. Donald Knowlton - Carl Morse & Associates

December 26, 1968

William L. Thoen
LeMessurier Associates, Inc.
711 Boylston Street, Boston, Mass.
02116

Re: Union Mutual Office Bldg. Live Load Reduction Request

Dear Mr. Thoen:

Your letter of Dec. 17th and request for change in code use for Live Load Reduction Formulas has been received and reviewed by this office.

As per our Code Appendix A under Section 211 we recognize the use of BOCA Basic Code as an interpretation of application of the Portland Code when the Portland Code is not sufficient to "cover a given project or situation or part thereof". With this in mind we accept the formula as denoted in the BOCA Code 1965 edition under Section 721 LIVE LOAD REDUCTION. These formula are in line with those stated in the National Code which you have requested use of.

The use of the BOCA Code with Live Load Reduction formulas is therefore acceptable, and with the exception as noted in your letter that the Live Load Reduction not be greater than 50% as a limiting value.

Very truly yours,

R. Lovell Brown
Director of Building Inspection

RLB:m

**LeMessurier
Associates, Inc**

711 Boylston Street, Boston, Massachusetts 02116

(617) 262-9300

December 17, 1968

Mr. R. Lovell Brown
Director of Building Inspection
City Hall
Portland, Maine

Re: Union Mutual Office Bldg.
Live Load Reduction Request

Dear Mr. Lovell:

The City of Portland Building Code allows live load reductions on members, which are expressed in terms of a percentage of the live load, for various supported tributary areas and this has been a common way of recognizing that tributary areas will probably not be fully loaded (except warehouses) in most of the old codes.

A more recent way of recognizing the probability of a tributary area being fully loaded has been developed as a function of dead and live loads which are formulated to maintain an adequate factor of safety, should accidental overload occur.

These live load reduction formulas are in effect in the current issues of the National Building Code, the Uniform Building Code, and the BOCA Building Code which are all well known and widely accepted codes.

Specific formulas which govern live load reductions under these codes are "For live loads of 100 pounds or less per square foot, the design live load in any member supporting a floor area of 150 square feet or more may be reduced percentagewise by the least of the following percentages:

1. 0.08 times square feet of area supported by the member, per cent
2. $R = 100 \times \frac{D+L}{4.33L}$

William J. LeMessurier William L. Thoen Emil C. Hervel John E. Brennan Wilson C. Barnes
Kenneth B. Wiesner Jurlis D. Anderson A. Allen Gass James McCune Hans William Hagen Dana P. Beach Robert V. Minchello



**LeMessurier
Associates, Inc**

Mr. R. Lovell Brown
Page 2
December 17, 1968

in which: R = reduction in percent
D = dead load per square foot
of area supported by the member
L = design live load per square
foot of area supported by the
member.

3. 60 percent

No reduction of live load shall be applied to
roof live load, to places of assembly, and
for parking of motor vehicles..... "

The structural members for the above project have generally
large spans and significant steel economy will result if we
are allowed to use the National Building Code for live load
reduction formulas in lieu of those specified in the 1965
Portland Code.

We request, therefore, that a modification to the Portland
Building Code requirements be considered to allow us to base
our design on the above National Building Code live load re-
duction formulas with the exception that the live load re-
duction not be greater than 50% as a limiting value.

Very truly yours,

LeMESSURIER ASSOCIATES, INC.

William L. Thoen / pam

William L. Thoen

WLT/pam

cc: Mr. Paul Grayson, Hugh Stubbins & Associates

File 12689-10

New Union Mutual Bldg. - Floor System
Proposed.
See H.S.A. Letter of Feb 18, 67

File R2689-10

Page T2-3

Issued: 6-14-67

RESULTS

The furnace fires for each test were luminous and well-distributed and the temperatures following the Standard Time-Temperature Curve.

The average temperatures of the unexposed surfaces of the samples are plotted in ILL. 13. Based on a maximum average temperature rise of 250 F and a minimum individual temperature rise of 325 F, the temperature end-point time for the samples is tabulated below. In each case the end-point time was reached for the average limiting condition.

QL-3 (1-1/2 in. fluted)	- 105 min
QL-21 (3 in. fluted)	- 105 min
QL-UKX (1-1/2 in. cellular)	- 115 min
QL-NKX (3 in. cellular)	- 118 min
QL-NKC (3 in. air cell)	- 115 min

The internal concrete temperatures developed in the small-scale samples are plotted in ILL. 14 for general fire-performance information.

JPMcG

Data Derived From
Underwritten Lab Test For
Robinson Q Floor - Proposed
For Union Mutual Bldg.

U.L. FILE R2689-10 } REPORT
JAN 19, 1967

See Letter Sent 2/24/69 RLB to H.C. Gannon

C O N C L U S I O N S

The following conclusions represent the judgment of Underwriters' Laboratories, Inc., based upon the results of the examination and tests presented in this Report as they relate to established principles and previously recorded data.

FIRE-RESISTANT PROPERTIES:

It is judged that floor and ceiling assemblies, constructed of the materials and in the manner herein described, will afford 2-hr protection against the passage of flame and dangerous transmission of heat. The beam, protected as described, will afford 3-hr protection against structural failure. This classification is based on the "Conditions of Acceptance" for tests of floors and roofs in the Standard, Fire Tests of Building Construction and materials, UL263 (ASTM E119, NFPA No. 251).

Since the temperatures on the unexposed surface of the trench header and standard header duct were excessive, as evidenced by the ignition of cotton waste over the trench header at 74 min, these electrical components are not being included in the 2-hr fire-resistance classification for the assembly.

Passage of flame through the assembly did not occur during the fire exposure. Transmission of heat through the assembly did not raise the temperature of the unexposed surface the allowable 250 F average, or 325 F individual, above the initial temperature during the 2-hr classification period. The test assembly carried the rated live load during the fire endurance test.

**CERTIFICATE OF APPROVAL
FOR INTERNAL PLUMBING**

TOWN/CITY CODE 05178 LPI NUMBER 00123 DATE PERMIT ISSUED 110218 THE TOWN/CITY OF Portland NO 67537 IC

Installer's Name A. C. J. B. L. F.I. M.I. 12 Certificate of App. Number

Owner Mr. M. J. L. Address 2211 St./Lot Number 1234 Street/Road Name 1234 Subdivision 1234

(Location where plumbing was done and inspected)

1. Owner
2. Licensed Master Plumber
3. Licensed Oil Burner
4. Employee of Public Utility
5. Manufactured Housing Dealer
6. Manufactured Housing Mechanic
7. Limited License

THE INTERNAL PLUMBING INSTALLED PURSUANT TO THE ABOVE CERTIFICATE OF APPROVAL NUMBER HAS BEEN TESTED IN MY PRESENCE, FOUND TO BE FREE FROM LEAKS, AND WAS INSTALLED IN COMPLIANCE WITH THE MUNICIPAL AND STATE PLUMBING RULES.

TOWN'S COPY

Signature of LPI

AUG 25

Date Inspected

ORIGINAL—To be sent to: Department of Human Services
Division of Health Engineering

INTERNAL PLUMBING PERMIT FOR THE TOWN/CITY OF

Town/City Code 05178 LPI Number 00123 Date Issued 110218 INSTALLER'S License No. 67537 IP

Address of Where Plumbing Done 2211 St./Lot Number 1234 Street/Road Name 1234 Subdivision 1234

Name of Owner Mr. M. J. L. Last Name 1234 F.I. M.I. 12 Mailing Address 1234 Zip Code 1234

1. Owner
2. Licensed Master Plumber
3. Licensed Oil Burner
4. Employee of Public Utility
5. Manufactured H. using Dealer
6. Manufactured Housing Mech
7. Limited License

Type of Construction	1 New	2 Remodeling	3 Addition	4 Remodeling & Addition	5 Replacement of Hot Water Heater	6 Hook-up of Mobile Home	7 Hook-up of Modular Home	8 Other (Specify)
Plumbing To Serve	1 Single (Res)	2 Multi-Fam (Res)	3 Mobile Home	4 Modular Home	5 Commercial	6 School	7 Other (Specify)	
Number of Fixtures or Hook-Ups	Sink(s) <u>1</u>	Toilet(s) <u>1</u>	Bathtub(s) <u>1</u>	Lavatory(s) <u>1</u>	Shower(s) <u>1</u>	Urinal(s) <u>1</u>		
	Clothes Washer(s) <u>1</u>	Dish-Washer(s) <u>1</u>	Hot Water Heater(s) <u>1</u>	Floor Drain(s) <u>1</u>	Hook-Up(s) <u>1</u>			

TOWN'S COPY

OCT 28 1982
NOV 2 - 1982
NOV 12 1982
DEC 8 1982
FEB 7 1983
FEB 14 1983

IMPORTANT: Note the following conditions
1. This Permit is non-transferable to another party.
2. If construction has not started within 6 months from the date of issue, this Permit becomes invalid.
JAN 18 1983
MAR 21 1983
Dept. of Human Services
Div. of Health Engineering

Signature of LPI

Fee 144
Hook-Up Fee 00
Total Fee 144
If Double Fee Check Box ☐



APPLICATION FOR PERMIT
DEPARTMENT OF BUILDING INSPECTION SERVICES
ELECTRICAL INSTALLATIONS

Date Jan. 12, 19 83
Receipt and Permit number A 92531

To the CHIEF ELECTRICAL INSPECTOR, Portland, Maine:

The undersigned hereby applies for a permit to make electrical installations in accordance with the laws of Maine, the Portland Electrical Ordinance the National Electrical Code and the following specifications:

LOCATION OF WORK: 2211 Congress St. - New Addition

OWNER'S NAME: Union Mutual Life Ins. ADDRESS: same

	FEE
OUTLETS:	
Receptacles <u>219</u> Switches <u>132</u> Plugmold _____ ft TOTAL <u>351</u>	<u>34.10</u>
FIXTURES: (number of)	
Incandescent <u>239</u> Fluorescent <u>1173</u> (not strip) TOTAL <u>1485</u>	<u>150.50</u>
Strip Fluorescent _____ ft	
SERVICES:	
Overhead _____ Underground <u>1200</u> Temporary _____ TOTAL amperes <u>1200</u>	<u>7.00</u>
METERS: (number of) <u>1</u>	<u>.50</u>
MOTORS: (number of)	
Fractional <u>64</u>	<u>32.00</u>
1 HP or over <u>15</u>	<u>15.00</u>
RESIDENTIAL HEATING:	
Oil or Gas (number of units) _____	
Electric (number of rooms) _____	
COMMERCIAL OR INDUSTRIAL HEATING:	
Oil or Gas (by a main boiler) <u>X</u>	<u>5.00</u>
Oil or Gas (by separate units) _____	
Electric Under 20 kws _____ Over 20 kws _____	
APPLIANCES: (number of)	
Ranger _____	
Cook Tops _____	
Wall Ovens _____	
Dryers _____	
Fans _____	
Water Heaters _____	
Disposals _____	
Dishwashers _____	
Compactors _____	
Others (denote) _____	
TOTAL _____	
MISCELLANEOUS: (number of)	
Branch Panels <u>31</u>	<u>31.00</u>
Transformers <u>13</u>	<u>26.00</u>
Air Conditioners Central Unit <u>1</u>	<u>5.00</u>
Separate Units (windows) _____	
Signs 20 sq. ft. and under _____	
Over 20 sq. ft. _____	
Swimming Pools Above Ground _____	
In Ground _____	
Fire/Burglar Alarms Residential _____	
Commercial <u>1</u>	<u>5.00</u>
Heavy Duty Outlets, 220 Volt (such as welders) 30 amps and under _____	
over 30 amps _____	
Circus, Fairs, etc. _____	
Alterations to wires _____	
Repairs after fire _____	
Emergency Lights, battery _____	
Emergency Generators _____	

INSTALLATION FEE DUE: _____
FOR ADDITIONAL WORK NOT ON ORIGINAL PERMIT DOUBLE FEE DUE: _____
FOR REMOVAL OF A "STOP ORDER" (304-1(c))
TOTAL AMOUNT DUE: 311.10

INSPECTION:

Will be ready on _____, 19 ____; or Will Call XX

CONTRACTOR'S NAME: Milliken Bros.

ADDRESS: 474 Riverside

TEL: 797-8375

MASTER LICENSE NO.: 3604

LIMITED LICENSE NO.: _____

SIGNATURE OF CONTRACTOR:
Michael R. Milliken, Inc.

INSPECTOR'S COPY — WHITE

OFFICE COPY — CANARY

CONTRACTOR'S COPY — GREEN

ELECTRICAL INSTALLATIONS —

Permit Number 92551
 Location 2211 Congress St.
 Owner Union Mutual
 Date of Permit 1-12-83
 Final Inspection 9-15-83
 By Inspector Libby
 Permit Application Register Page No. 137

INSPECTIONS: Service

Service called in

Closing-in

by Service taken from existing vault
 below by no one

PROGRESS INSPECTIONS:

1-12-83, 4-27-83, 8-18-83
1-24-83, 5-17-83, 8-24-83
2-10-83, 5-27-83, 9-15-83
2-14-83, 6-14-83
3-15-83, 6-27-83
4-6-83, 7-22-83

CODE

COMPLIANCE

COMPLETED

DATE 9-15-83

DATE:

REMARKS:



APPLICATION FOR PERMIT
DEPARTMENT OF BUILDING INSPECTIONS SERVICES
ELECTRICAL INSTALLATIONS

Date March 19 1982
Receipt and Permit number 60167
AR5193

To the CHIEF ELECTRICAL INSPECTOR, Portland, Maine:

The undersigned hereby applies for a permit to make electrical installations in accordance with the laws of
Maine, the Portland Electrical Ordinance, the National Electrical Code and the following specifications:
LOCATION OF WORK: 2211 Congress St. - Computer Building
OWNER'S NAME: Union Mutual Life Ins. ADDRESS: same

		FEES
OUTLETS:		
Receptacles	Plugs	
Switches	Plugmold	
ft TOTAL	164	19.50
FIXTURES (number of)	both inc & fl	
Incandescent	Flourescent	
Strip flourescent	(not strip) TOTAL	482
		50.20
SERVICES:		
Overhead	Underground	x
Temporary		
METERS: (number of)		
MOTORS: (number of)		
Fractional		4000
1 HP or over		x2999
	TOTAL amperes	12.00
RESIDENTIAL HEATING		
Oil or Gas (number of units)		
Electric (number of rooms)		
COMMERCIAL OR INDUSTRIAL HEATING:		
Oil or Gas (by a main boiler)	x	
Oil or Gas (by separate units)		
Electric Under 20 kws	Over 20 kws	
APPLIANCES (number of)		
Ranges	2	
Cook Tops		
Wall Ovens		
Dryers		
Fans		
Water Heaters	x	
Disposals		
Dishwashers		
Compactors		
Others (denote)		
TOTAL		4.50
MISCELLANEOUS: (number of)		
Branch Panels	33	
Transformers	15	
Air Conditioners Central Unit	x	
Separate Units (windows)		
Signs sq. ft. and under		
Over 20 sq. ft.		
Swimming Pools Above Ground		
In Ground		
Fire/Burglar Alarms Residential		
Commercial	x	
Heavy Duty Outlets, 220 Volt (such as welders)	30 amps and under	
over 30 amps		
Circus, Fairs, etc.		
Alterations to wires		
Repairs after fire		
Emergency Lights, battery		
Emergency Generators		
INSTALLATION FEE DUE:		
DOUBLE FEE DUE:		
FOR ADDITIONAL WORK NOT ON ORIGINAL PERMIT		
FOR REMOVAL OF A "STOP ORDER" (304-16.b)		
TOTAL AMOUNT DUE:		194.20

INSPECTION:

Will be ready on _____, 19__; or Will Call xxx
CONTRACTOR'S NAME: E. S. Boulos Co.
ADDRESS: 40 Circus Time Rd. So. Portland
TEL.: 772-3706
MASTER LICENSE NO.: 3291
LIMITED LICENSE NO.: _____

SIGNATURE OF CONTRACTOR:

E. S. Boulos

INSPECTOR'S COPY — WHITE
OFFICE COPY — CANARY
CONTRACTOR'S COPY — GREEN

ELECTRICAL INSTALLATIONS —

Permit Number 88193
 Location 2211 Congress St.
 Owner Union Mutual
 Date of Permit 3-19-82
 Final Inspection 8-11-82
 By Inspector Libby
 Permit Application Register Page No 112

INSPECTIONS: Service ✓ by Libby
 Service called in 7-7-82

Closing-in by
 PROGRESS INSPECTIONS: 3-22-82 7-26-82
4-8-82 8-3-82
5-3-82 8-11-82
5-27-82
6-2-82
6-16-82

CODE
 COMPLIANCE
 COMPLETED
 DATE 8-11-82

REMARKS

Basement trans. fr. to building steel
 not correct, EMT not continuous.