



HARRY J. KEEFE
BUILDING COMMISSIONER

FRANK J. COUGHLIN
CLERK OF DEPARTMENT

CITY OF BOSTON
BUILDING DEPARTMENT

OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

June 23, 1950

COMMISSIONER'S BULLETIN #24

SUBJECT: Vitroliner Prefabricated Flue, Type "E"

Approval for use in the City of Boston of VITROLINER PREFABRICATED FLUE, TYPE "E" as manufactured by the Condensation Engineering Corporation, of Chicago, Illinois, is hereby granted subject to the following provisos:

- (1) That the flue be comprised of a vitreous enameled steel liner 20 or 22 gauge, asbestos insulation and vitreous enameled steel cover supported on ceiling chimney support. A vitreous enameled steel ventilated roof jack and weather cap assembly is to be included. A vitreous enameled base tee is to be supplied if required.
- (2) That the flue liner have a diameter of not less than 5" nor more than 10"; 5" and 6" liners to be of 22 gauge and 7" to 10" liners to be of 20 gauge.
- (3) That the use of the Vitroliner Flue be restricted to one story, flat roofed structures; or to one story, pitched or sloped roofed structures, the attic of which is unoccupied.
- (4) That the method of installation conform to the requirements outlined in the Bulletin (Form STD 5) of the Board of Standards of the Massachusetts Department of Public Safety.
- (5) That the flue be used only with domestic heating appliances fired with coal, oil, gas or other commonly used fuels.
- (6) That the marking conform to the requirements of the Underwriters' Miscellaneous Hazard Report #2962, dated June 16, 1943.

This approval is granted under authority contained in Section 116, Paragraph "L" of the Boston Building Code.

HARRY J. KEEFE

Building Commissioner

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October 19, 1950

COMMISSIONER'S BULLETIN #25

SUBJECT: WELDWOOD COMPOSITE FIRE DOOR (KAYLO CORE)

Approval for use in the City of Boston of WELDWOOD COMPOSITE FIRE DOOR (KAYLO CORE) as manufactured by the United States Plywood Corporation, New York City, New York, is hereby granted subject to the following provisos:

1. Weldwood Composite Fire Door may be used in any location in which the Boston Building Code requires protection assemblies bearing Class "B" or Class "C" Fire Underwriters Label.
2. The door must bear the Underwriters Class "B" label.
3. The door size must not be greater than 3'0" x 7'0".
4. All hardware, butts, lock sets, the door buck and the method of hanging the door and of securing the butts must be identical with the method used in Underwriters Laboratory Tests (R-2876)

This approval is granted under authority contained in Section 116, Paragraph "L" of the Boston Building Code.

This approval may not be used in any way for advertising purposes.

Harry J. Keefe

Building Commissioner

fjc/bf



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October 19, 1950

COMMISSIONER'S BULLETIN #26

SUBJECT: DURISOL SOFFIT BLOCKS.

Approval for use in the City of Boston of DURISOL SOFFIT BLOCKS as manufactured by Durisol, Inc., New York City, New York, is hereby granted subject to the following provisos:

1. Soffit Blocks must be installed strictly in accordance with the manufacturer's recommendations.
2. Soffit Blocks shall not be considered as fire protection for the structural floor system.
3. The use of Soffit Blocks as structural material in combination floor construction is not permitted.

This approval is granted under authority contained in Section 116, Paragraph "L" of the Boston Building Code.

This approval may not be used in any way for advertising purposes.

Harry J. Keefe

Building Commissioner

fjc/bf



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October 19, 1950

COMMISSIONER'S BULLETIN #27

SUBJECT: SUPER-SICO STRUCTURAL INSULATION.

Approval for use in the City of Boston of SUPER-SICO STRUCTURAL INSULATION as manufactured by Sico, Inc., Portsmouth, N.H., is hereby granted subject to the following provisos:

1. This material may be used only as a structural roof plank for spans up to 4'0"
2. This material must not be considered as fire protection on buildings that require an hourly fire resistance.
3. The reinforcing rods must be galvanized.
4. This material shall be not less than 2" in thickness and 16" in width and shall be installed in accordance with the manufacturer's recommendations.

This approval is granted under authority contained in Section 116, Paragraph "L" of the Boston Building Code.

This approval may not be used in any way for advertising purposes.

Harry J. Keefe

Building Commissioner

fjc/bf



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Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

December 7, 1950

COMMISSIONER'S BULLETIN #28

SUBJECT: CONCRETE FILLED COLUMNS

Approval for use in the City of Boston of CONCRETE FILLED COLUMNS as manufactured by Superior Column Company, Chelsea, Massachusetts, is hereby granted subject to the following provisos:

1. This approval is for $3\frac{1}{2}$ " and 4" outside diameter columns only.
2. The columns must be manufactured of all new material strictly in accordance with the requirements of the Boston Building Code, and must be manufactured of the same materials that were used in the test specimen as shown in the test reports on file in the Boston Building Department.
3. The capacity of the columns must be established in accordance with the procedure outlined in the Boston Building Code.
4. The columns must bear the approved stamp which shall be secured to the columns by an assigned inspector of the Boston Building Department, in accordance with the Boston Building Code.

This approval is granted under authority contained in Section 116, Paragraph "L" of the Boston Building Code.

This approval may not be used in any way for advertising purposes.

HARRY J. KEEFE
Building Commissioner

HJK:BF



HARRY J. KEEFE
BUILDING COMMISSIONER

FRANK J. COUGHLIN
CLERK OF DEPARTMENT

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Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

April 16, 1951

COMMISSIONER'S BULLETIN #29

SUBJECT: KILNOISE ACOUSTICAL PLASTER

Approval for use as an incombustible material in the City of Boston of KILNOISE ACOUSTICAL PLASTER as manufactured by Kelley Island Lime and Transport Company, Cleveland, Ohio, is hereby granted subject to the following proviso:

Said plaster shall be prepared in accordance with the manufacturer's specifications and the data on file in this Department. It shall be applied in two coats to make the combined thickness a minimum of one-half inch.

Identification: Kilnoise is delivered to the job in fifty pound paper sacks bearing the Kilnoise trade-mark.

This approval is granted under authority contained in Section 116, Paragraph L of the Boston Building Code, and may not be used in any way for advertising purposes.

/s/ Harry J. Keefe
Building Commissioner

FJC:bf

CITY OF BOSTON
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OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

January 6, 1955

COMMISSIONER'S BULLETIN #31 (New Material)

Subject: Partition Assembly, Non-bearing PYROBAR and Plaster.

Applicant : United States Gypsum Company, (USG) Chicago, Illinois.

Approval for use in the City of Boston of the following new material is hereby granted:

ABSTRACT: USG PYROBAR is a precast, hollow, lightweight gypsum tile manufactured in accordance with section 2202 (a) (g) of the building code which requires compliance with ASTM C52-33. The gypsum mixture is in compliance with the requirements of ASTM C22-41 and Federal Spec. SS-T-316, Tile Partition Gypsum, to which is added an air entraining agent. The tile is furnished in several thicknesses, 12" x 30" in size, with indented surfaces to receive plaster, and set up in gypsum tile cement.

CLASSIFICATION: The partition assembly is hereby approved for use under Section 2212, Fire-Resistive Non-Bearing Walls and Partitions, as an interior, non-bearing partition and given fire-resistive ratings, as follows:

- FOUR HOUR RATING: 4" hollow, plastered both sides, $\frac{1}{2}$ " grounds.
- THREE HOUR RATING: 4" hollow, plastered one side, $\frac{1}{2}$ " grounds.
3" hollow, plastered both sides, $\frac{1}{2}$ " grounds.
- ONE HOUR RATING: 3" hollow, plastered both sides, $\frac{1}{2}$ " grounds.

Subject to the following provisos:

1. Tile cement shall be proportioned one part gypsum plaster to 3 parts plastering sand by weight of dry materials. Plaster shall be proportioned one part gypsum plaster to 3 parts plastering sand by weight of dry materials. (1:1.86 by volume)
2. The partition assembly shall not be supported upon wood or other combustible material; limited in height as provided in section 1406 (h); protected from moisture and the elements; and restricted to buildings of Type I and Type II construction.
3. The partition assembly shall be manufactured and erected in compliance with the test reports and related information filed by the applicant and the applicable provisions of the building code.

This approval is granted under authority contained in Section 116, paragraph L and in Section 2201 (b) of the Boston Building Code, Chapter 479, Acts of 1938 as amended. It may not be used in any way for advertising purposes.

Charles A. Callanan
Building Commissioner

Report No. M23
O'M 7-20-54
rmb



CHARLES A. CALLANAN
BUILDING COMMISSIONER

FRANK J. COUGHLIN
HEAD ADMINISTRATIVE CLERK

CITY OF BOSTON
BUILDING DEPARTMENT
OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

January 6, 1955

COMMISSIONER'S BULLETIN #32 (New Material)

Subject: Partition Assembly, Non-bearing - USG TRUSSTEEL Stud.

Applicant: United States Gypsum Company, (USG) Chicago, Illinois.

Approval for use in the City of Boston of the following new material is hereby granted:

ABSTRACT: The partition assembly is steel frame, hollow, non-bearing, with facings of plaster on perforated gypsum lath having clip attachments. USG TRUSSTEEL studs are manufactured from uniform wire in the form of a truss, in several depths. Flange members consist of two #9 wires (0.148" dia.) spaced approximately 0.15" apart. The web members consist of one #7 wire (0.177" dia.) bent to form symmetrical diagonals with panel points 6½" apart and also act as the spacers which are welded to it near the angle. The angle of the web member protrudes slightly beyond the surface of the chords so as to give a large effective weld area at each connection. Flange wires are cut to accurate lengths and mechanically straightened to proper alignment and the web members are die formed. Assembly is accomplished by separate automatically controlled electric welders which make only one weld each at a time. All studs are tested during the various processes involved in the assembly for compliance with the American Welding Society Code.

The studs are spaced 16" o.c. and set in metal floor and ceiling runners, held rigidly in place with attachment shoes securely wired to the flanges of the studs on both sides at top and bottom. Perforated ROCKLATH is then applied to the face of the studs and held in place with USG BRACE-TITE clips. The joints of the lath are made to occur between studs staggered in alternate courses and joined together with USG B1 clips. Plaster is applied in ½" thickness.

CLASSIFICATION: The partition assembly is hereby approved for use under section 2212, Fire-Resistive Non-Bearing Walls and Partitions, as an interior non-bearing partition, subject to the following provisos:

1. Studs shall be USG TRUSSTEEL studs, in the following depths: 2½", 3¼", 4" and 6"; spaced 16" o.c., with supplementary accessories, as herein-before described, and subject to inspection, before lathing, by the building inspector of this department.

2. Lath shall be USG perforated gypsum ROCKLATH, 3/8" x 16" x 48", having approximately one 3/4" dia. hole per 16 sq. in. of lathing surface

in compliance with ASTM C 37-50 and Federal Spec. SS-P-431a. Lath shall be attached to studs by means of USG BRACE-TITE clips, with joints held with USG B1 clips.

3. Plaster base coat may be any of the following.

- a. Sanded gypsum plaster, proportioned one part gypsum to two parts plastering sand by weight of dry materials, $\frac{1}{2}$ " grounds.
- b. Perlited gypsum plaster, proportioned $2\frac{1}{2}$ cubic feet perlite to 100 lbs. neat gypsum plaster, $\frac{1}{2}$ " grounds.
- c. Vermiculited gypsum plaster, proportioned $2\frac{1}{2}$ cubic feet perlite to 100 lbs. neat gypsum plaster, $\frac{1}{2}$ " grounds.

4. The partition assembly shall not be supported upon wood or other combustible material; limited in height as provided in section 1416 (1); protected from moisture and the elements; and restricted to buildings of Type I and Type II construction.

5. The partition assembly shall be manufactured and erected in compliance with the test reports and related information filed by the applicant and the applicable provisions of the building code.

This approval is granted under authority contained in Section 116, Paragraph L and in Section 2201 (b) of the Boston Building Code, Chapter 479, Acts of 1938, as amended. It may not be used in any way for advertising purposes.

Charles A. Callanan
Building Commissioner



**CITY OF BOSTON
BUILDING DEPARTMENT**

OFFICE OF THE BUILDING COMMISSIONER

CHARLES A. CALLANAN
BUILDING COMMISSIONER
THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

October 8, 1956

COMMISSIONER'S BULLETIN #36

Applicant: Inland Steel Products Company, Milwaukee, Wisconsin.

Product: MILCOR CELLUFLOL AND MILCOR STEEL ROOF DECK.

Authorization for use in the City of Boston is hereby granted for the MILCOR CELLUFLOL, a steel floor deck and MILCOR STEEL ROOF DECK, as manufactured in the Inland Steel Products Company, Milwaukee, Wisconsin, subject to the following conditions:

1. The said decking shall conform to the applicable provisions of Part 28 of the Boston Building Code and to the recommendations of the "Light Gage Steel Design Manual" dated January 1949 and published by the American Steel and Iron Institute.
2. The allowable spans for the various gages and depths shall not exceed those arrived at by the application of customary methods of analysis for simple spans for stress and deflection of 1/360.
3. Any concentration on the deck shall receive the specific approval of the Building Commissioner.
4. The roof deck shall be tack welded an average of 9" o.c. at the end laps to the supporting members; and 18" o.c. to intermediate supporting members with a weld having an effective length of 3/4". Welding must be done by certified welders, approved by the City of Boston Building Department.
5. Openings shall be reinforced with compensating materials.
6. The installation must be engineered by the Inland Steel Products Co.

This authorization is granted under authority contained in Section 116, paragraph "L", Chapter 479, Acts of 1938 as amended and is based upon reports of tests and other data on file in the office of the Building Commissioner.

This authorization may not be used in any way for advertising purposes.

PJO 6-13-56
CAC:rmb

Charles A. Callanan
Building Commissioner



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FRANK J. COUGHLIN
EXECUTIVE SECRETARY

August 17, 1956

COMMISSIONER'S BULLETIN #37

APPLICANT: LAWSON MANUFACTURING CORPORATION, WAKEFIELD, MASSACHUSETTS

PRODUCT: LAWSON PRE-CAST CONCRETE PLANK

Approval for use in the City of Boston is hereby granted for the LAWSON PRE-CAST CONCRETE PLANK, as manufactured by the Lawson Manufacturing Corporation of Wakefield, Massachusetts, subject to the following conditions:

1. Said plank shall be used as a roof plank only. Its allowable span shall not exceed 6' 0" c. to c. of supports.
2. The plank shall be flat, tongue and groove (nominal $\frac{1}{2}$ " x $\frac{1}{2}$ " all sides) 16" wide and 2" thick, weighing approximately 16 psf. Lightweight concrete shall consist of HES cement, expanded shale aggregate, calcium chloride, an improved air entrainment agent and water, proportioned to produce a density of approximately 100 lbs. per cu. ft. and a minimum compressive strength of 2500 psi at 28 days. Reinforcement shall consist of cold drawn electrically welded steel wires, ten #7 wires, top and bottom, placed longitudinally and spaced by means of #7 wires, 12" o.c., top and bottom, placed transversely. Cadmium plated perpendicular spacer wires maintain approximately $\frac{3}{8}$ " clear distance between longitudinal wires and the faces of the plank. Planks are to be steam cured by continuous moist curing for several weeks prior to shipment.
3. Manufacturing processes at the plant shall be subject to inspection and test by an independent testing laboratory.
4. Said plank shall be manufactured and installed in accordance with the data filed in this Department by the manufacturer, as well as the applicable provisions of the Building Code.

This Approval is granted under authority contained in Section 116, paragraph "L", Chapter 479, Acts of 1938 as amended, and is based upon tests and other data filed in the office of the Building Commissioner.

This Approval may not be used in any way for advertising purposes.

/s/ Charles A Callanan
Building Commissioner

PJO:4-23-56
FJC:bdf



THOMAS J. HUGHES
BUILDING COMMISSIONER
THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER
FRANK J. COUGHLIN
EXECUTIVE SECRETARY

CITY OF BOSTON
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Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

March 22, 1957

COMMISSIONER'S BULLETIN #39

Product: Lightweight Sectional Masonry Chimney
Van Packer Corporation

Approval for use in the City of Boston of Van Packer Chimney, Type 1, 7" diameter as manufactured by the Van Packer Corporation, Chicago, Illinois, is hereby granted subject to the following provisos:

1. The use of said chimney is restricted to single family dwellings not exceeding two stories in height.
2. Flue gas temperatures shall not exceed 1,000° F continuously or 1,400° during intermittent use.
3. Floor joists on both sides of the base support assembly shall be doubled or otherwise reinforced as needed. Base supports assembly shall be supported by at least two 1" x 1/8" steel U bands well secured to wooden framing.
4. The required fire protection over the heater shall be extended to the vicinity of the base support assembly. Said chimney shall not be nearer than one inch from wooden floor and roof joists or nearer than one inch from wooden studding, furring or other woodwork and contiguous spaces shall be fire-stopped at each floor and ceiling level.
5. Chimney height shall be as provided in Section 2103 of the Building Code of the City of Boston, and the chimney housing shall be structurally secured to the roof deck in a manner satisfactory to the Building Department.
6. Said chimney shall be manufactured, assembled and erected in accordance with the data filed by the applicant and the applicable provisions of the Building Code.

This Approval is granted under authority contained in Section 116, Paragraph L of the Boston Building Code, Chapter 479, Acts of 1938, as amended. It may not be used in any way for advertising purposes.

FJC:bdf

/s/ Thomas J Hughes
Building Commissioner



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FRANK J. COUGHLIN
EXECUTIVE SECRETARY

April 7, 1958

COMMISSIONER'S BULLETIN No. 40

Product: FESCO BOARD ROOF INSULATION

Approval for use in the City of Boston of Fesco Board Roof Insulation as manufactured by F. E. Schundler & Company, Inc., Long Island City, New York, is hereby granted, subject to the following provisos:

1. The product may be used for roof insulation only.
2. The product may not be used as a structural component of a building for the application of load and stress.
3. The product must be installed as specified by the manufacturer.

This Approval is granted under authority contained in Section 116(L) of the Boston Building Code, Chapter 479, Acts of 1938 as amended and is based on tests and other information on file in this Department. It may not be used in any way for advertising purposes.

Thomas J. Hughes
Building Commissioner

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FJC:bdf



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FRANK J. COUGHLIN
EXECUTIVE SECRETARY

April 8, 1958

COMMISSIONER'S BULLETIN NO. 41

Product: ROCKWELL TAMPERPROOF GAS COCK

Approval for use on high pressure gas services (15# or over) in the City of Boston, is hereby granted for the Rockwell Tamperproof Figure 1092 Service Cock, (working pressure 125#), semi-steel body, brass plug).

This valve is of a type designed and constructed to minimize the possibility of the removal of the core of the valve or cock, accidentally or willfully, with ordinary household tools and is as promulgated in the American Standards Code for Gas Transmission and Distribution Piping Systems, Par. 847.12 (A.S.A. B 31.1.8 1955).

This Approval is granted in accordance with the provisions of Chapter 479, Acts 1938 as amended, Sections 116 (g) and 116 (L) and in accordance with the request of the Department of Public Utilities of the Commonwealth of Massachusetts.

This Approval may not be used for advertising purposes.

Thomas J. Hughes
Thomas J. Hughes
Building Commissioner

FJC:bdf



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Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

May 1, 1958

BUILDING COMMISSIONER'S BULLETIN No. 42

Product: CAFCO SPRAY, A Fire Retardant Sprayed Directly On The Underside Of Steel Floors And Roofs And On The Beams Supporting Them.

Applicant: Columbia Acoustic and Fireproofing Company, a subsidiary of United States Mineral Wool Company.

Approval for use in the City of Boston is hereby granted for the above product, subject to the following conditions:

1. The material shall be applied to the surface to be fire retarded, according to the specifications of the manufacturer which are on file in this office except as noted below.
2. A cellular steel floor shall be finished on top with two and one half inches of 3000 lbs. per square inch concrete and on the ceiling side with not less than three quarters of an inch of Cafco Spray applied directly to the floor units. Cafco Spray used as a protection for the main steel beams supporting the floor deck shall have a minimum thickness of two and one half inches. ~~Intermediate beams shall have a thickness of one and one half inches of Cafco Spray.~~ When Cafco Spray is applied to metal lath wrapped around beams, it shall have a thickness of two inches.
3. A suspended metal lath ceiling under a cellular floor shall have a 2" thickness of Cafco Spray directly on the metal lath.
4. Ceilings under steel joist floors shall comply with Commissioner's Bulletin No. 38, and shall have a one inch thickness of Cafco Spray as protection on the wire lath.
5. It is expected that an acoustical ceiling, of incombustible material, will be constructed under all finished Cafco sprayed ceilings, unless otherwise approved by the Commissioner.
6. The underside of a Cafco Sprayed ceiling shall in no case be less than 7'0" from the top of the floor below.
7. Cafco Spray shall not be used as a fire retardant on interior columns, except the upper portion adjacent to ceiling, or on any exterior beams or columns exposed to the weather.

May 1, 1958

8. The full thickness, as specified above, shall be applied at all times throughout each application. The material shall be marked, stamped or labelled so as to be readily identified when delivered at the job site.

This Approval is granted under authority contained in Section 116, Paragraph (L) of the Boston Building Code, Chapter 479, Acts of 1938 as amended, and is based on tests and other information on file in this Department.

It may not be used in any way for advertising purposes.



Thomas J. Hughes
Building Commissioner

DM Report 2/5/58
Revised 5/1/58

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THOMAS J. HUGHES
BUILDING COMMISSIONER

THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

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Ninth Floor, City Hall Annex
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May 1, 1958

BUILDING COMMISSIONER'S BULLETIN No. 43

Product: ZONOLITE brand Vermiculite is an insulating fireproof mineral form of mica used as an ingredient in a spray for fireproofing ceilings, by applying the spray directly to the metal.

Applicant: Zonolite Company, 135 South LaSalle Street, Chicago 3, Illinois.

Approval for use in the City of Boston is hereby granted for the above product, subject to the following conditions:

1. The material shall comply with the Vermiculite Institute specifications and shall be applied to the surface which is to be fire retarded, according to the specifications of the manufacturer which are on file in this office, except as otherwise noted below.
2. An approved cellular steel floor shall have a minimum thickness of two and one half inches concrete of 3000 lbs. per square inch applied over the top of the unit; and on the ceiling side, when applied directly to the metal, it shall have a minimum thickness of three quarters of an inch below the unit.
3. All surfaces shall be galvanized before Zonolite spray is applied.
4. The main beams supporting the floor requiring a four-hour rating shall have a minimum of one and three quarter inches of Zonolite applied on self-furring metal lath wrapped around the beams or girders. All other beams not having a suspended ceiling below shall have a one and three eighths inch Zonolite concrete on wire lath wrapped around the beams. Other ceiling constructions are as given in Commissioner's Bulletin No. 38.
5. A floor consisting of steel joists shall be constructed as specified in Commissioner's Bulletin #38.
6. Zonolite spray shall not be used on exterior beams or columns exposed to weather.
7. The material shall be marked, stamped or labeled so as to be readily identified when delivered at the job site.

May 1, 1958

This Approval is granted under authority contained in Section 116, Paragraph (L) of the Boston Building Code, Chapter 479, Acts of 1938 as amended and is based on tests and other information on file in this Department.

It may not be used in any way for advertising purposes.



Thomas J. Hughes
Building Commissioner

DM/rkr



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DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

June 5, 1958

COMMISSIONER'S BULLETIN #44

Authorization for use in the City of Boston is hereby granted of steel cellular panels and sections for floors and roofs as manufactured and engineered by the following manufacturers:

Inland Steel Products Company, Milwaukee, Wisconsin
Fenestra, Inc., Detroit, Michigan
The R. C. Mahon Company, Detroit, Michigan
The Macomber, Inc., Canton, Ohio
Truscon Steel Company, Youngstown, Ohio
H. H. Robertson Company, Pittsburgh, Pennsylvania

and subject to the following conditions:

1. The said panels and sections shall conform to the applicable provision of art 28 of the Boston Building Code and to the recommendations of the American Iron and Steel Institute's "Light Gage Cold-Formed Design Manual" 1956 Edition.
2. The allowable spans for the various gages and depths shall not exceed those selected by the application of customary and acceptable methods of design analysis for simple spans and for a design stress of 18,000 pounds per square inch and a deflection of $L/360$ with a modulus of elasticity of 29,500,000 pounds per square inch.
3. Steel sheets shall conform to ASTM A-245 Grade C and shall be protected as follows:
 - a. If the panels are used as electrical raceways or where direct sprayed on fireproof is applied, it shall be galvanized with a minimum of 0.5 ounces of zinc per square foot applied by the continuous strip hot galvanizing process and shall conform to Federal Specification QQI-716 Class E-1.
 - b. When sections are not used as in "a" above and they are not galvanized the panel may be prepared as follows: After fabrication and before shipment, building panels shall receive a dipped on oven baked coat of rust inhibitive of zinc chromate paint, and after erection the exposed side of the section shall receive a field coat of paint.
 - c. Any other preparation for rust prevention of panels or sections shall be approved by the Commissioner.

4. Installation of the steel floor or roof panels and sections must be engineered by the manufacturer supplying the product and erected according to their instructions and the following:

- a. The steel floor panels and sections shall be tack welded with 3/4" structural welds to each supporting structural member (both at ends and if continuous at intermediate points) 12" o. c.
- b. Longitudinal side joints between adjacent panels shall be joined by welding with 3/4" length welds 4'-0" on centers or by Riv-clinching 3'-0" o. c. and should be so specified in the structural drawings.
- c. The panels or sections may be used for lateral restraint of the supporting structural members when specifically designed with a required effective welding pattern and approved by the Commissioner.
- d. Welding must be done by certified welders approved by the Boston Building Department.

5. Any special load concentration on the steel floor shall receive the specific approval of the Building Commissioner.

6. All openings over 30 square inches in area must be reinforced with compensating steel.

7. For fire proofing and other details of construction, see Commissioner's Bulletin #38, February 1, 1957, and addendum to above Bulletin.

8. Any other manufacturer may have a similar product approved by the Building Department by submitting specific proof and tests and also a notarized letter substantiating that his product complies with the conditions and requirements outlined in this Bulletin.

This authorization is granted under authority contained in Section 116, paragraph "L", Chapter 479, Acts of 1938 as amended and is based upon reports of tests and other data on file in the office of the Building Commissioner.

This authorization may not be used in any way for advertising purposes.



Thomas J. Hughes
Building Commissioner

DM/rkr



THOMAS J. HUGHES
BUILDING COMMISSIONER
THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER
FRANK J. COUGHLIN
EXECUTIVE SECRETARY

CITY OF BOSTON
BUILDING DEPARTMENT
OFFICE OF THE BUILDING COMMISSIONER
Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

ADDENDUM TO COMMISSIONER'S BULLETIN #44

The Tri-Rib Roof Deck as manufactured by the Wheeling Corrugating Company, Wheeling, West Virginia, for the use on roofs only of buildings in the City of Boston, is added to the list of approved steel cellular panels approved with the same conditions and provisos as enumerated in COMMISSIONER'S BULLETIN #44 dated June 5, 1958.

This Approval is based on an affidavit and catalogue submitted to the Building Department as required in Paragraph 8 of the above Bulletin.

This authorization is granted under authority contained in Section 116, Paragraph L, Chapter 479 of the Acts of 1938 as amended.

Thomas J. Hughes
Thomas J. Hughes
Building Commissioner

DM: bdf

December 31, 1958



CITY OF BOSTON
BUILDING DEPARTMENT

OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex

BOSTON 8, MASSACHUSETTS

THOMAS J. HUGHES
BUILDING COMMISSIONER

THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

September 26, 1958

COMMISSIONER'S BULLETIN #45

SUBJECT: COFAR FOR USE IN REINFORCED CONCRETE FLOOR AND ROOF CONSTRUCTION


Authorization for use in the City of Boston is hereby granted for combined form and reinforcing units, herein-after noted as Cofar, for use in reinforced concrete floor and roof construction, as manufactured and engineered by the Granco Steel Products Company, St. Louis, Missouri, and subject to the following conditions:

1. The Cofar reinforced concrete slabs for floors and roofs shall conform to the applicable provision of Part 26 of the Boston Building Code and be designed in the conventional manner by engineers or architects qualified to practice structural engineering in the City of Boston.
2. Structural design of Cofar reinforced slabs shall follow the design criteria for reinforced concrete as covered by (1) above, or by the latest issue of the Cofar Product Manual published, whichever of these two governs by virtue of most stringent restrictions.
3. The Cofar units shall serve as both the permanent form and main positive and temperature reinforcing for the slabs.
4. The steel in the deep corrugated galvanized sheet supplying the main positive reinforcing shall be high-strength with a minimum yield strength (by 0.1% offset method) of 80,000 psi. Steel sheets shall conform to Federal Specification QQS-636. The allowable unit stress in tension for this reinforcing shall be limited to 20,000 psi. The units shall be hot-dip galvanized with not less than 1.5 ounce of zinc per square foot conforming to ASTM A93-55T.
5. The "T-wires" or bars are resistance welded across the corrugations by the manufacturer furnishing the necessary temperature reinforcing to comply with structural design requirements and at the same time provide mechanical anchorage between the concrete and corrugated steel.
6. The installation of the Cofar units shall be in accordance with the manufacturer's installation drawings and details. When the Cofar units are used on steel frame construction and are to be used for lateral support of those members, the units shall be welded to the supporting beams at a frequency sufficient to provide the correct amount of lateral support based on lateral shear capacity of welds. The welding must be done by certified welders approved by the Boston Building Department.

7. Fireproofing of Cofar reinforced slabs shall follow the requirements of tests conducted at the Underwriters' Laboratories and shall not be less than 3/4" below corrugations or, for conditions not covered by specific test data, shall comply to requirements as set forth by the Building Commissioner for the City of Boston.
8. The use of galvanized Cofar construction in gauges of 24 USS or heavier are allowed. However, when exposure conditions are known to be corrosive in nature, and, in the following types of buildings, garages, buildings adjacent to salt water, manufacturing facilities where corrosive fumes are present, and, if in the opinion of the Commissioner, conditions are such that heavier gauges are required, Cofar construction should not be used when units are known to be in contact with the ground or other possible corrosive substances.
9. Any other manufacturer may have a similar product approved by the Building Department by submitting specific proof and tests and also a notarized letter substantiating that his product complies with the conditions and requirements outlined in this Bulletin.

This authorization is granted under authority contained in Section 116, paragraph "L", Chapter 479, Acts of 1938 as amended and is based upon reports of tests and other data on file in the office of the Building Commissioner.

This authorization may not be used in any way for advertising purposes.


Thomas J. Hughes
Building Commissioner

DM/rkr



CITY OF BOSTON
BUILDING DEPARTMENT

OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

THOMAS J. HUGHES
BUILDING COMMISSIONER

THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

December 1, 1958

COMMISSIONER'S BULLETIN #46

SUBJECT: TUF COR FOR USE IN ROOF CONSTRUCTION

Authorization for use in the City of Boston is hereby granted for corrugated metal deck, herein-after noted as TUF COR roof construction, as manufactured and engineered by the Granco Steel Products Company, St. Louis, Missouri, and subject to the following conditions:

1. Tufcor construction to be used for roofs only and shall conform to the applicable provision of Part 28 of the Boston Building Code and be designed in the conventional manner by engineers or architects qualified to practice structural engineering in the City of Boston.
2. Structural design of Tufcor corrugated metal deck shall follow the design criteria as covered by (1) above, or by the latest issue of the Tufcor Product Manual published, whichever of these two governs by virtue of most stringent restrictions.
3. The steel used in Tufcor system of construction shall be high-strength with a minimum yield strength (by 0.1% offset method) of 80,000 psi. Steel sheets shall conform to Federal Specification QQS-636. The allowable unit stress in tension shall be limited to 18,000 psi. The units shall be hot-dip galvanized with not less than 1.25 ounce of zinc per square foot conforming to ASTM A93-55T.
4. The installation of the Tufcor units shall be in accordance with the manufacturer's installation drawings and details. When the Tufcor units are used on steel frame construction and are to be used for lateral support of those members, the units shall be welded to the supporting beams at a frequency sufficient to provide the correct amount of lateral support based on lateral shear capacity of welds. The welding must be done by certified welders approved by the Boston Building Department.
5. Fireproofing of Tufcor shall follow the requirements of tests conducted at the Underwriters' Laboratories and shall have a minimum cover of 3/4" below corrugations, and shall comply to requirements as set forth by the Building Commissioner for the City of Boston and as required in Commissioner's Bulletin #38.

6. The use of galvanized Tufcor construction in gauges of 24USS or heavier are allowed. However, in the following types of buildings, garages, buildings adjacent to salt water, manufacturing facilities where corrosive fumes are present, in general when exposure conditions are known to be corrosive in nature, the Commissioner may require heavier gauges for the protection against corrosion.
7. Any other manufacturer may have a similar product approved by the Building Department by submitting specific proof and tests and also a notarized letter substantiating that his product complies with the conditions and requirements outlined in this Bulletin.

This authorization is granted under authority contained in Section 116, paragraph "L", Chapter 479, Acts of 1938 as amended and is based upon reports of tests and other data on file in the office of the Building Commissioner.

Thomas J. Hughes
Building Commissioner

DM/rkr



CITY OF BOSTON

BUILDING DEPARTMENT

OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex

BOSTON 8, MASSACHUSETTS

ROBERT E. YORK
BUILDING COMMISSIONER
THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER
FRANK J. COUGHLIN
EXECUTIVE SECRETARY

ADDRESS REPLY TO THE BUILDING COMMISSIONER

January 6, 1959
(Reissued November 14, 1960.)

COMMISSIONER'S BULLETIN NO. 47

APPLICANT: The Flexicore Company, Incorporated (this approval supersedes all previous approvals)

Approval for use in the City of Boston is hereby granted for Flexicore floor and roof slabs as developed by the Flexicore Company, Incorporated, and the installation shall be engineered by the manufacturer supplying the product and erected according to their instructions, all under processes described in literature on file in the Building Department, subject to the following provisos:

1. Such slabs with 1-inch minimum cover of steel for fireproofing may be used in all buildings where a three-hour fire rating is required. Use of the hollow cores for passage of piping, electrical wiring, or heated air and the cutting of holes, openings, or reinforcement not provided for in the structural design is permissible only with approval of the Commissioner, under such conditions as he specifies in each case.
2. Plans filed for permit shall show the arrangement of the slabs and details of anchorage, referenced to the tables hereinafter provided, as well as all openings or special conditions. Shop drawings shall be submitted for approval before manufacture of slabs.
3. The framing at stairways or other substantial openings shall incorporate reinforced concrete or structural steel construction capable of sustaining and transferring the loading in a manner satisfactory to the Commissioner. For computation of stresses due to bending and shear, concentrated loads parallel to the length of the slab unit and for fixed partitions may be considered as evenly distributed over three adjacent grouted slabs each side of such concentration; for concentrated loads at right angles to the length of the slab units, such stress shall be computed by the standard formulas and methods as provided in Part 26, supplemented by the data herein provided. Use of Flexicore slabs in floors of garages, dance halls, or other locations where vibration exists should be avoided unless special consideration be given to design and distribution of the concentrated loads.
4. Slabs shall be aligned and leveled in accordance with the approved erection procedure of the applicant and grouted by a mixture of not less than one part cement to two parts of fine sand. Field holes in the bottom

Protect yourself before buying property. Check the records of this department for legal occupancy of, and for complaints against, the property you propose to purchase.

surface shall be located below the hollow cores, a minimum of two inches from the tensile reinforcement and under the supervision of the design engineer. Slabs are designed for simple span installation with a maximum rise of four inches per foot of run on roofs, except that cantilevers may be allowed under such conditions as the Commissioner directs. Slabs shall have at least four inches of bearing on masonry walls and shall be anchored thereto by approved anchor; slabs supported on steel beams shall have a minimum of three inches of bearing and shall extend at least to within one-quarter inch of the center line of the beam flange; slabs depended upon for lateral support to a beam shall have approved positive connection thereto, and all such anchorage shall be sufficient to resist the wind pressure specified in Part 23 applied outwardly to the walls and the uplift forces on roofs.

5. Precast concrete units shall be adequately braced and supported during erection to insure proper alignment and safety, and such bracing or support shall be maintained until there are adequate permanent connections.

6. The strength of concrete shall be laboratory controlled and consist of high early cement; siliceous gravel $5/8$ -inch maximum size; sand passing the No. 4 sieve; approximate mix, 1:1.96:2.25 by weight of dry loose materials with a cement factor of not less than 7.3 sacks and a water cement ratio of not more than 5.0 gallons. The compression strength as measured by a standard 6-inch diameter by 12-inch high specimen shall be not less than 3,750 lbs. per square inch at the age of shipment or twenty-eight days, whichever is the lesser. Longitudinal reinforcement shall consist of new, deformed, intermediate grade billet steel bars meeting ASTM A305; web reinforcement shall consist of No. 9 gauge (.148-inch diameter) cold-drawn wire meeting ASTM A82-34. At least one set of compression cylinders shall be taken for each 150 cubic yards of concrete by an independent testing laboratory, tested in general compliance with Section 2612, parts a. and b., of the Building Code and reports thereof filed in this department. Additional testing may be required as conditions warrant.

7. Slabs may be designed by the accepted theory of flexure supplemented by the assumptions herein specified. The symbols and notations used in the accompanying tables are defined as follows:

ALS = Suffix "S" under "Slab No." indicates slab with shear stirrups, at 3-inch o.c. for 8-inch by 16-inch units and 1-7/8-inch o.c. for 6-inch by 16-inch units. See cross-sections and tables 2A and 2B.

I = Moment of inertia of corrected transformed area about neutral axis for bending.

kd = Depth from compressive face to neutral axis.

jd = Arm of resisting couple in bending.

As = Effective cross-sectional area of steel in tension.

Tabulated maximum allowable spans are based upon the following assumptions and the applicable provisions of the Building Code.

f_c' = 3,750 psi. Ultimate compressive strength of concrete at age of twenty-eight days.

f_c = 1,500 psi. Compressive unit strength of concrete.

f_s = 20,000 psi. Tensile unit stress in longitudinal reinforcement.

f_v = 16,000 psi. Tensile unit stress in web reinforcement.

v = 112.5 psi. Shearing unit stress in concrete.

n = 8. Ratio modulus of elasticity of steel to that of concrete.

M = $\frac{wl^2}{8}$. Maximum bending moment.

= 1/360 span. Maximum deflection.

Span lengths indicated are the distances between centers of bearing.

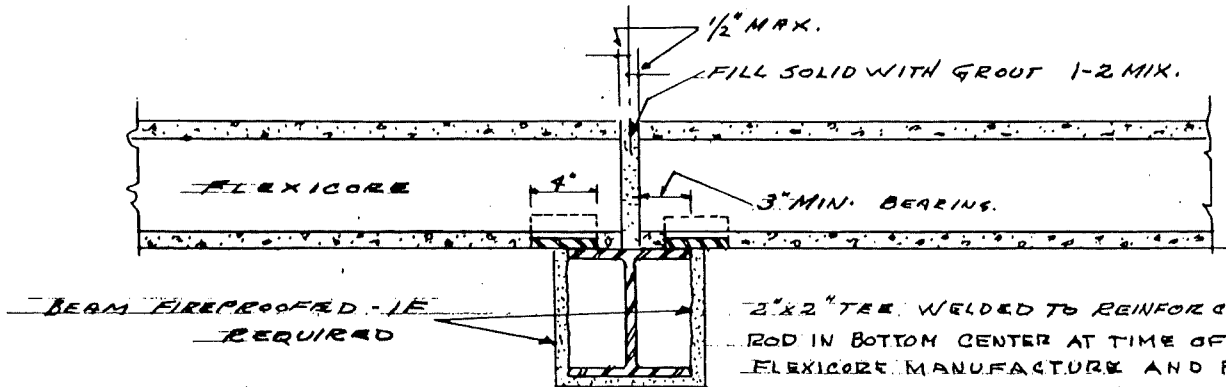
This approval is granted under authority contained in Section 116, Paragraph L, of the Boston Building Code, Chapter 479, Acts of 1938, as amended, and is based on tests, structural analysis, and other data on file in the Building Department. It may not be used in any way for advertising purposes.

RE York

Robert E. York,
Building Commissioner.

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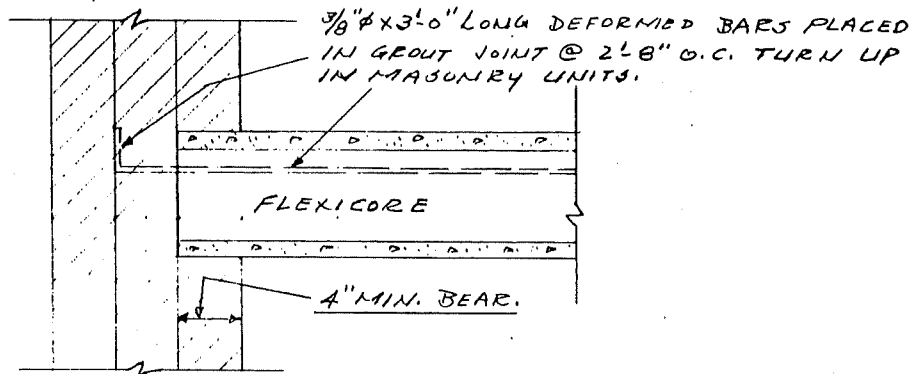
FLEXICORE DETAILS



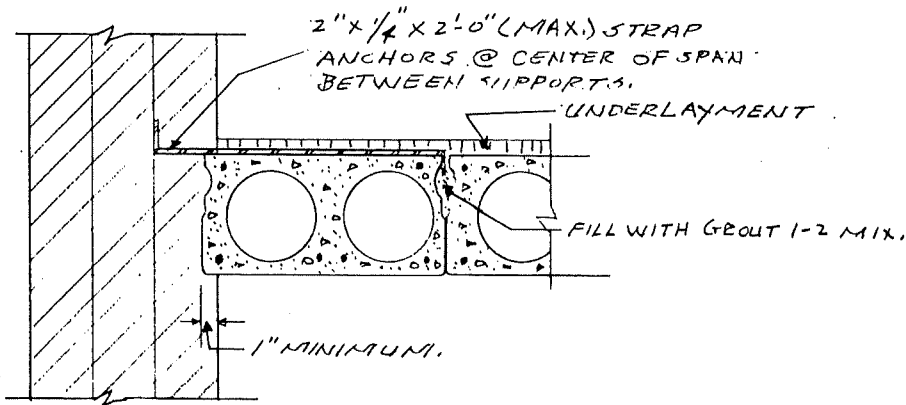
TOP BEARING ON STEEL
WITH TEES FOR LATERAL
SUPPORT

2"x2" TEE WELDED TO REINFORCING
ROD IN BOTTOM CENTER AT TIME OF
FLEXICORE MANUFACTURE AND FIELD
WELDED TO BM. FLANGE. ALL FIELD
WELDING SHALL BE DONE BY BOSTON
CERTIFIED WELDERS. (NAMES AND
LICENSE NO'S. SHALL BE SUBMITTED FOR
BUILDING DEPARTMENT FILES. TEES
SO LOCATED THAT THE MAXIMUM
UNSUPPORTED LENGTH DOES NOT EXCEED
THE SPAN "LU" AS TABULATED BY THE
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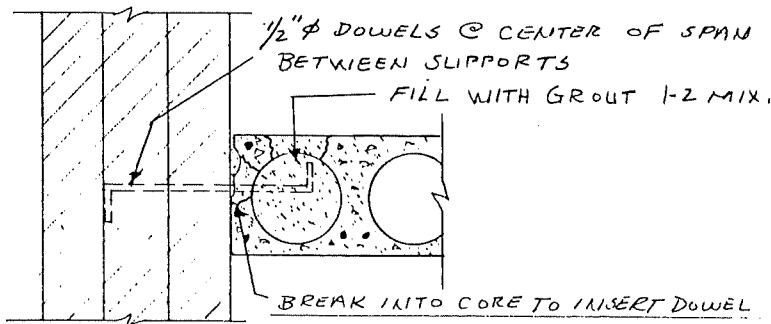
FLEXICORE DETAILS



ANCHORAGE OF WALL PERPENDICULAR TO SPAN OF SLABS.



ANCHORAGE OF WALL PARALLEL TO SPAN OF SLABS.



ANCHORAGE OF WALL PARALLEL TO SPAN OF SLABS.

CITY OF BOSTON APPROVAL OF FLEXICORE SLABS
to accompany Commissioners Bulletin #47
JANUARY 6, 1959

6" x 16" TABLES

ELEMENTS OF 6"x16" SECTION						SAFE LOAD TABLE - 6"x16" FLEXICORE SECTION																
SLAB NO.	BOTTOM STEEL		kd	jd	I	TOTAL UNIFORMLY DISTRIBUTED LOAD IN LBS. PER SQ. FT.																
	CONTENT	A _s				SIMPLE SPAN IN FEET																
		IN. ²	IN.	IN.	IN. ⁴	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'		
A16	4-#5	1.23	1.87	3.71	113.7					314	269	232	202	178	157	140	126	114	103	94		
A1	4-#5	1.23	1.87	3.71	113.7															89		
A2s	2-#4 & 2-#5	1.01	1.73	4.14	98.9			377	343	290	248	214	186	163	145	129	116	105	95			
A2	2-#4 & 2-#5	1.01	1.73	4.14	98.9											109	103	98	93	86		
A3s	2-#3 & 2-#5	0.83	1.59	4.16	85.7			418	346	286	240	205	177	154	135	120						
A3	2-#3 & 2-#5	0.83	1.59	4.16	85.7											115	107	95	87	79		
A4s	4-#4	0.79	1.56	4.17	82.5	472	408	330	272	229	195	168	147	129								
A4	4-#4	0.79	1.56	4.17	82.5							140	131	122	114	102	91	82				
A5s	2-#3 & 2-#4	0.61	1.41	4.24	67.7	404	319	258	214	180	153											
A5	2-#3 & 2-#4	0.61	1.41	4.24	67.7			196	178	163	151	132	115	101	89	80						
A	4-#3	0.44	1.22	4.26	56.1	292	231															
A6	4-#3	0.44	1.22	4.26	56.1	245	210	187	155	130	111	95	83									

1. TABULATED TOTAL UNIFORMLY DISTRIBUTED LOAD INCLUDES A DEAD LOAD OF SLAB AND GROUT EQUAL TO 46 LBS. PER SQ. FT.

2. SHEAR STIRRUPS ARE NEEDED FOR ALL LOADS ABOVE THE HEAVY SOLID LINE - FOR QUANTITIES REQ'D SEE TABLE NO. 2A

TABLE NO. 1A

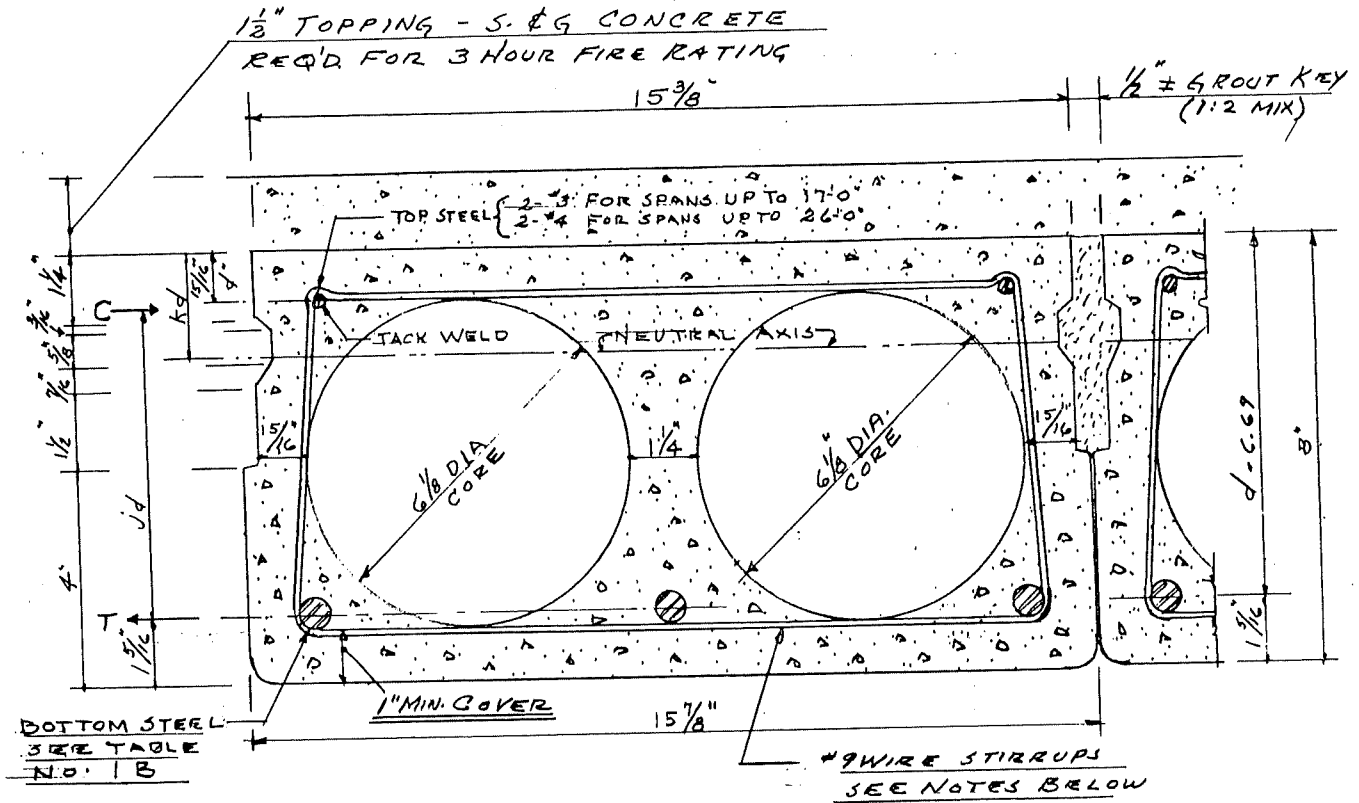
STIRRUP TABLE - 6"x16" FLEXICORE SECTION															
No. OF #9 WIRE STIRRUPS REQ'D. AT EA. END OF SLAB AT 1/8" C.C.															
SLAB NO.	SIMPLE SPAN IN FEET														
	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
A1s					19	19	18	17	16	14	13	11	9	7	4
A2s			16	17	17	17	16	15	13	11	9	7	4	2	
A3s		14	14	14	12	11	10	8	5	3					
A4s	12	14	13	12	11	10	8	6	3						
A5s	10	9	8	6	4	1									
A6s	4	2													

1. STIRRUPS INDICATED ARE FOR CLEAR SPANS - FOR EA. 2" OF SLAB BEARING ADD ONE STIRRUP.

TABLE NO. 2A

CITY OF BOSTON APPROVAL OF FLEXICORE SLABS
to accompany Commissioners Bulletin #47
JANUARY 6, 1959

8" x 16" CROSS SECTION



CROSS SECTION - 8" X 16" FLEXICORE SECTION

STIRRUP NOTES!!

1. SLAB NO'S. B1 - B2 ETC; HAVE #9 WIRE POSITIONING STIRRUPS THROUGHOUT AT 12" O.C.
2. SLABS WITH SUFFIX 'S' THUS B1S - B2S ETC; HAVE #9 WIRE POSITIONING STIRRUPS THROUGHOUT AT 12" O.C. PLUS #9 WIRE SHEAR STIRRUPS AT 3" O.C. (FOR NO. OF SHEAR STIRRUPS REQ'D; SEE TABLE NO. 2B.)

CITY OF BOSTON APPROVAL OF FLEXICORE SLABS
to accompany Commissioners Bulletin #47
JANUARY 6, 1959

8" x 16" TABLES

ELEMENTS OF 8"x16" SECTION						SAFE LOAD TABLE - 8"x16" FLEXICORE SECTIONS																				
SLAB NO.	BOTTOM STEEL		kd	jd	I	TOTAL UNIFORMLY DISTRIBUTED LOAD IN LBS. PER SQ. FT.																				
	CONTENT	As IN. ²				SIMPLE SPAN IN FEET																				
			IN.	IN.	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'					
B15	4-#5	1.23	2.39	6.02	2552						327	306	286	256	228	205	185	168	153	140	129	117				
B1	4-#5	1.23	2.39	6.02	2552														133	127	122	117	110			
B25	2-#4 & 2-#5	1.01	2.19	6.04	219.3				352	312	272	239	211	189	169	153										
B2	2-#4 & 2-#5	1.01	2.19	6.04	219.3											154	146	139	126	115	106	98	91			
B35	3-#5	0.93	2.10	6.05	204.1		417	382	329	284	247	217	192	171												
B3	3-#5	0.93	2.10	6.05	204.1										162	150	139	126	115	105	97	89				
B45	1-#4 & 2-#5	0.82	1.98	6.09	187.9	458	412	346	295	254	222	195	173													
B4	1-#4 & 2-#5	0.82	1.98	6.09	187.9						195	182	172	154	138	125	113	103	94	87						
B55	2-#4 & 1-#5	0.71	1.87	6.10	167.3	434	358	301	256	221																
B5	2-#4 & 1-#5	0.71	1.87	6.10	167.3				224	208	193	169	150	134	120	108	98	90								
B65	3-#4	0.60	1.73	6.12	145.9	367	304	255																		
B6	3-#4	0.60	1.73	6.12	145.9		266	243	217	187	163	143	127	113	102	92										
	1-#3 & 2-#4	0.51	1.60	6.15	127.9	292	260	218	186	160	140	123	109	97	87											
B8	2-#3 & 1-#4	0.42	1.46	6.17	108.6	259	214	180	153	132	115	101	89													
B9	3-#3	0.33	1.31	6.22	88.3	205	170	143	121	105	91															

- TABULATED TOTAL UNIFORMLY DISTRIBUTED LOAD INCLUDES A DEAD LOAD OF SLAB AND GROUT EQUAL TO 56.3 LBS. PER. SQ. FT.
- SHEAR STIRRUPS ARE NEEDED FOR ALL LOADS ABOVE THE HEAVY SOLID LINE - FOR QUANTITIES REQ'D. SEE TABLE NO. 2B

TABLE NO. 1B

STIRRUP TABLE - 8"x16" FLEXICORE SECTION																									
No. of #9 WIRE STIRRUPS REQ'D. AT EA. END OF SLAB AT 3' O.C.																									
SLAB NO.	SIMPLE SPAN IN FEET																								
	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'								
B15					11	11	12	11	11	10	9	8	6	5	3	1									
B25				10	10	9	8	6	6	4	2														
B35		8	9	8	8	7	5	4	2																
B45	8	8	7	7	5	4	2	1																	
B55	7	6	5	4	2																				
B65	4	3	1																						

- STIRRUPS INDICATED ARE FOR CLEAR SPANS - FOR EA. 3' OF SLAB BEARING ADD ONE STIRRUP.



CITY OF BOSTON
BUILDING DEPARTMENT

OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex

BOSTON 8, MASSACHUSETTS

THOMAS J. HUGHES
BUILDING COMMISSIONER
THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FEB 10 1959

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

COMMISSIONER'S BULLETIN NO. 48

SUBJECT: "NORLITE Aggregate.

Approval is hereby granted for use in the city of Boston of a lightweight aggregate known as "NORLITE," as manufactured by the Northern Lightweight Aggregate Inc., of Cohoes, New York, for a structural lightweight concrete in floors, beams and columns, also as a roof and floor fill concrete, as well as its use for approved concrete masonry.

This approval is granted subject to the following provisos:-

1. That "NORLITE" aggregate be manufactured in accordance with the specifications and methods described in the reports submitted to and on file with the Building Department of the city of Boston.
2. That reinforced concrete using "NORLITE" aggregate shall always be controlled concrete with proper field and plant inspection as required and specified in the Boston Building Code.

This approval is granted under the authority contained in Sec. 116, paragraph L, of Chapter 479 of the Acts of 1938 as amended, and is based on reports of tests and studies on file in the office of the Building Commissioner.

DM:dl

Thomas J. Hughes
Building Commissioner.



CITY OF BOSTON
BUILDING DEPARTMENT

OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex

BOSTON 8, MASSACHUSETTS

THOMAS J. HUGHES
BUILDING COMMISSIONER

THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

March 2, 1959

COMMISSIONER'S BULLETIN NO. 49

Subject: COPPER TUBING FOR WATER SUPPLY SYSTEMS

Pursuant to authority granted under Chapter 479, Acts of 1938, as amended, particularly Section 116 (g), the following regulation is hereby made applicable to the City of Boston:

Copper tubing, when used in a water supply system from City mains, shall be of a grade or quality known to the trade as "TYPE K" or "TYPE L".

Thomas J. Hughes
Building Commissioner

TJH:bdf



CITY OF BOSTON
BUILDING DEPARTMENT
OFFICE OF THE BUILDING COMMISSIONER

ROBERT E. YORK
 BUILDING COMMISSIONER
THOMAS L. FLYNN
 DEPUTY BUILDING COMMISSIONER
FRANK J. COUGHLIN
 EXECUTIVE SECRETARY

Ninth Floor, City Hall Annex
 BOSTON 8, MASSACHUSETTS

February 1, 1960.

COMMISSIONER'S BULLETIN NO. 50.

SUBJECT: INSULROCK SLABS ON ROOF DECKS AND
 INSULROCK NONBEARING FIREPROOF PARTITIONS.

Authorization for use in the City of Boston is hereby granted for insulrock slabs on roof decks and insulrock nonbearing fireproof partitions as manufactured by the Insulrock Company, a division of the Flintcote Company, East Rutherford, New Jersey.

The incombustible roof decking is permitted only where no specified fire-resistive time period is required by the Boston Building Code, and in Type I or Type II construction where the height of 25 feet 0 inches exists between the lower chord of the trusses as provided in Section 1701 "B" of the Code.

(1) The roof deck shall be designed as simple spans and shall be anchored to the joists, purlins, or tees according to the manufacturer's specifications and to be constructed as limited by the following table:

<u>Slab Thickness</u> <u>Inches</u>	<u>Weight Per Sq. Ft.</u> <u>Pounds</u>	<u>Length of Span</u> <u>Inches</u>	<u>Load per Sq. Ft. Including Weight of Slab</u> <u>Pounds</u>
2	6.2	32 o.c.	42
2½	7.5	42	44
3	8.2	48	45

Insulrock nonbearing fireproof partitions which consist of 3-inch insulrock blocks laid up in cement mortar and plastered both sides are approved for not more than a two-hour fire rating.

The use of insulrock as the inner wythe in insulated nonbearing cavity wall construction is approved.

This approval is granted under the authority contained in Section 116, paragraph L, of the Boston Building Code, Chapter 479, Acts of 1938, as amended, and is based on tests and other information on file in the office of the Building Commissioner.

This approval may not be used in any way for advertising purposes.

DM/rkr

Robert E. York,
 Building Commissioner.

Reprint of bulletin dated 5/1/59

May 21, 1959

BUILDING COMMISSIONER'S BULLETIN No. 52

Product: "Sprayed Limpet Asbestos" - A Fire-retardant Sprayed Directly on the Under Side of Steel Deck Floors and Roofs and on the Beams Supporting Them.

Applicant: Keasbey & Mattison Company,
Ambler, Pennsylvania.


Approval for use in the City of Boston is hereby granted for the above-named product, subject to the following conditions:

1. The material shall be applied to the surface to be fire-retarded according to the specifications of the manufacturer which are on file in office of the Building Commissioner, and to the conditions noted below:
2. A cellular steel floor shall be finished on top with 2-1/2 inches of 3000 psi concrete and on the ceiling side with not less than 3/4 of an inch of "Limpet Asbestos Spray" applied directly to the floor units. "Limpet Spray" used as a protection for the steel beams supporting the floor deck shall have a minimum thickness of 2-1/2 inches. When "Limpet Spray" is applied to metal lath wrapped around beams it shall have a thickness of 2 inches.
3. A suspended metal lath ceiling under a cellular floor shall have a 1-1/2 inch thickness of "Limpet Asbestos Spray" directly on the metal lath.
4. Ceilings under steel joist floors shall comply with the Commissioner's Bulletin No. 38 and shall have a 1-1/2 inch thickness of "Limpet Asbestos Spray" as protection on the wire lath.
5. It is expected that an acoustical ceiling, of incombustible material, will be constructed under all finished "Limpet" sprayed ceilings, unless otherwise approved by the Building Commissioner.
6. The under side of a "Limpet Sprayed" ceiling shall in no case be less than 7' 0" from the top of the floor below.
7. "Limpet Spray" shall not be used as a fire-retardant on interior columns, except the upper portion adjacent to ceiling, or on any exterior beams or columns exposed to the weather.

May 21, 1959

This approval is for a period of three years from date of approval and the applicant should apply for extension of approval after that date.

This approval is granted under authority contained in Sec. 116, paragraph L, of the Boston Building Code, Chapter 479, Acts of 1938 as amended, and is based on tests and other information on file in the Building Department. It may not be used in any way for advertising purposes.


Thomas J. Hughes
Building Commissioner

DM/rkr



THOMAS J. HUGHES
BUILDING COMMISSIONER

THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

FRANK J. COUGHLIN
EXECUTIVE SECRETARY

CITY OF BOSTON
BUILDING DEPARTMENT
OFFICE OF THE BUILDING COMMISSIONER

Ninth Floor, City Hall Annex
BOSTON 8, MASSACHUSETTS

May 26, 1959

BUILDING COMMISSIONER'S BULLETIN No. 53

Product: "Gold Bond Fire Shield Plaster" - A fire-retardant material machine applied directly to the underside of metal deck floors and roofs and to the steel beams supporting them.

Applicant: National Gypsum Company, Buffalo, New York.


Approval for use in the City of Boston is hereby granted for the above-named product, subject to the following conditions:

1. The material shall be applied to the surface to be fire-retarded according to the specifications of the manufacturer which are on file in office of the Building Commissioner, and to the conditions noted below:
2. A cellular steel floor shall be finished on top with 2-1/2 inches of 3000 psi concrete and on the ceiling side with not less than 3/4 of an inch of "Gold Bond Fire Shield Plaster" applied directly to the floor units. "Gold Bond Fire Shield Plaster" used as a protection for the steel beams supporting the floor deck shall have a minimum thickness of 2-1/2 inches. When "Gold Bond Fire Shield Plaster" is applied to metal lath wrapped around beams it shall have a thickness of 2 inches.
3. A suspended metal lath ceiling under a cellular floor shall have a 1-1/2 inch thickness of "Gold Bond Fire Shield Plaster" directly on the metal lath.
4. Ceilings under steel joist floors shall comply with the Commissioner's Bulletin No. 38 and shall have a 1-1/2 inch thickness of "Gold Bond Fire Shield Plaster" as protection on the wire lath.
5. It is expected that an acoustical ceiling, of incombustible material, will be constructed under all finished "Gold Bond Fire Shield Plaster" sprayed ceilings, unless otherwise approved by the Building Commissioner.
6. The under side of a "Gold Bond Fire Shield Plaster" ceiling shall in no case be less than 7' 0" from the top of the floor below.
7. "Gold Bond Fire Shield Plaster" shall not be used as a fire-retardant on interior columns, except the upper portion adjacent to ceiling, or on any exterior beams or columns exposed to the weather.

May 26, 1959

This approval is for a period of three years from date of approval and the applicant should apply for extension of approval after that date.

This approval is granted under authority contained in Sec. 116, paragraph L, of the Boston Building Code, Chapter 479, Acts of 1938 as amended, and is based on tests and other information on file in the Building Department. It may not be used in any way for advertising purposes.


Thomas J. Hughes
Building Commissioner

DM/rkr



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EXECUTIVE SECRETARY

July 7, 1959.

COMMISSIONER'S BULLETIN NO. 54.

SUBJECT: "Waylite" (lightweight aggregate for use in concrete)

Approval is hereby granted for use in the City of Boston of a lightweight aggregate known as "Waylite," as manufactured by the Waylite Company, Bethlehem, Pennsylvania, for a structural lightweight concrete in floors, beams, and columns, also as a roof and floor fill concrete, as well as its use for approved concrete masonry, and as requested by Frederick Starr Contracting Company, 424 Madison Avenue, New York 17, New York.

This approval is granted subject to the following provisos:

1. That "Waylite" aggregate be manufactured in accordance with the specifications and methods described in the reports submitted to and on file with the Building Department of the City of Boston.
2. That reinforced concrete using "Waylite" aggregate shall always be controlled concrete with proper field and plant inspection as required and specified in the Boston Building Code.

This approval is granted under the authority contained in Section 116, Paragraph L, of Chapter 479 of the Acts of 1938 as amended, and is based on reports of tests and studies on file in the office of the Building Commissioner.

Thomas J. Hughes,
Building Commissioner.



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FRANK J. COUGHLIN
EXECUTIVE SECRETARY

August 5, 1959.

COMMISSIONER'S BULLETIN NO. 56

PRODUCT: "STRONGBORD" INSULATING BOARD SHEATHING

APPLICANT: Johns-Manville Sales Corporation
Jarrall, Virginia

Main Office: 22 East 4th Street
New York 16
New York

Local Office: 100 Newbury Street
Boston 16
Massachusetts

Approval for use in the City of Boston is hereby granted for their $\frac{1}{2}$ -inch high density board known as "Strongbord," subject to the following conditions:

1. It may be used as an exterior sheathing on one- or two-story single residences of Type VI construction only.
2. The "Strongbord" shall be applied in accordance with the manufacturer's specifications with 0.102-inch aluminum wire nails of 1 3/8-inch length, needle-pointed and having 20 sharp double-ring barbs per inch and with wall studs spaced not over 16 inches on center.
3. The installation shall be inspected during construction for the first two years of use in the City of Boston by the architect or an independent agency and a written report shall be submitted to the Building Department in compliance with approved use.

This approval is granted under authority contained in Section 116, Paragraph L, of the Boston Building Code, Chapter 479, Acts of 1938, as amended. It may not be used in any way for advertising purposes, and is based on information, tests, and other data submitted, and is on file at the Commissioner's office.

DM: bdf

Thomas J. Hughes,
Building Commissioner.



THOMAS J. HUGHES
BUILDING COMMISSIONER
THOMAS L. FLYNN
DEPUTY BUILDING COMMISSIONER

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September 17, 1959.

COMMISSIONER'S BULLETIN NO. 58.

Product: Double-Walled Insulated Metal Pipe Gas Vent, Type B-1

(This Bulletin supersedes Bulletins No. 55 and No. 57)

Approval for use in the City of Boston of a double-walled insulated metal pipe from 3 to 20" diameter and fittings for gas venting gas appliances known as Type B-1, subject to the following provisos, is hereby granted.

1. The use of said gas vent is restricted to buildings not over one story in height, single family dwellings, and in the top story of all buildings where gas appliances are used.
2. Flue gas temperatures shall not exceed 550 degrees.
3. Said gas vent shall not be nearer than one inch from wooden floor and roof joists or nearer than one inch from wooden studding, furring or other woodwork and contiguous spaces shall be fire-stopped at each floor and ceiling level.
4. Gas vent height shall be as provided in Section 2103 of the Building Code of the City of Boston for chimneys, and the vent housing shall be structurally secured to the roof deck in a manner satisfactory to the Building Department.
5. The above gas vent may be used as a liner in any existing chimney or with the approval of the Building Department in any ventilating air-shaft.
6. Said gas vent shall be manufactured, assembled and erected in accordance with the data filed by the applicant and the applicable provisions of the Building Code and shall have an Underwriters' Laboratory label on each gas vent.

This approval is granted under authority contained in Section 116, paragraph L of the Boston Building Code, Chapter 479, Acts of 1938 as amended. It may not be used in any way for advertising purposes, and is based on information and other data submitted, and is on file at the Commissioner's Office.

DM: bdf

Thomas J. Hughes
Thomas J. Hughes,
Building Commissioner



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Ninth Floor, City Hall Annex
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FRANK J. COUGHLIN
EXECUTIVE SECRETARY

September 28, 1959.

Commissioner's Bulletin No. 59.

Product: "PYRACOTE" Vermiculite Plaster, a factory-mixed, setting type plaster for trowel or machine spray-on applications to steel surfaces.

Applicant: California Products, Inc.
169 Waverly Street
Cambridge 39, Massachusetts.

Approval for use in the City of Boston is hereby granted for the above product, subject to the following conditions:

1. The material shall comply with the specifications of the Vermiculite Association and shall be applied to the surface which is to be fire retarded, according to the specifications of the manufacturer which are on file in this office, except as otherwise noted below.
2. An approved cellular steel floor using a Pyracote vermiculite plaster ceiling shall have a minimum thickness of $2\frac{1}{2}$ inches of concrete and f'_c of at least 3,000 pounds per square inch applied over the top of the unit; and on the ceiling side, when applied directly to the metal, it shall have a minimum thickness of $\frac{3}{4}$ inch below the unit.
3. All surfaces shall be galvanized before Pyracote spray is applied.
4. Girders and columns supporting a floor requiring a four-hour rating shall have a minimum of $1\frac{3}{4}$ inches of Pyracote plaster applied on self-furring metal lath wrapped around the girders or columns. Other beams requiring a rating of less than four hours and not having a suspended ceiling below shall have $1\frac{3}{8}$ inches Pyracote plaster on wire lath wrapped around the beams. Ceiling construction when used should be constructed as provided in Commissioner's Bulletin No. 38.
5. A ceiling below a floor consisting of steel joist and using Pyracote plaster shall be constructed as specified for Gypsum Perlite in Commissioner's Bulletin No. 38.

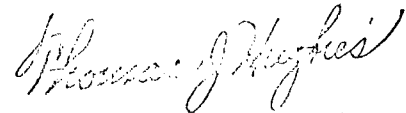
Commissioner's Bulletin No. 59.

September 28, 1959

6. Pyracote spray shall not be used on exterior beams or columns exposed to weather.
7. The material shall be marked, stamped, or labeled so as to be readily identified when delivered at the job site.
8. This approval is for a period of three years from above date and may be renewed after that date if the applicant demonstrates that his product conforms with the specifications as set forth for the product as a sprayed plaster.

This approval is granted under authority contained in Section 116, Paragraph L, of the Boston Building Code, Chapter 479, Acts of 1938 as amended, and is based upon tests and other information on file in this department.

It may not be used in any way for advertising purposes.



Thomas J. Hughes,
Building Commissioner.

DM:bdf



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October 29, 1959

COMMISSIONER'S BULLETIN NO. 60

Product: "HAYDITE" (Expanded Shale Lightweight Aggregate for use in Concrete)

Applicant: Onondaga Brick Corp.
Warners, New York

Approval is hereby granted for use in the City of Boston for a Lightweight Aggregate known as "Haydite" as manufactured by the Onondaga Brick Corp., Warners, New York, for a structural lightweight concrete in floors, beams, and columns, also as a roof and floor fill concrete, as well as its use for approved concrete masonry, as requested by Mr. Kenneth C. Oelfke, Sales Manager and Engineer.

This Approval is granted subject to the following provisos:

1. That "Haydite" aggregate be manufactured in accordance with the specifications and methods described in the reports submitted to and on file with the Building Department of the City of Boston.
2. That reinforced concrete using "Haydite" aggregate shall always be controlled concrete with proper field and plant inspection as required and specified in the Boston Building Code.

This Approval is granted under authority contained in Section 116, Paragraph L of the Boston Building Code, Chapter 479, Acts of 1938 as amended, and is based upon tests and other information on file in this Department.

It may not be used in any way for advertising purposes.

DM:bdf

Thomas J. Hughes
Building Commissioner