

LEAD INDUSTRIES ASSOCIATION

420 LEXINGTON AVENUE
NEW YORK 17, N. Y.

May 2, 1956

SUBJECT: LEAD BUILDING
CONSTRUCTION BULLETIN NO. 1

To Members of the Lead Industries Associations:

We are pleased to attach a copy of the first of our series of Lead Building Construction Bulletins for distribution to the building industry. A similar format will be used for future bulletins which will cover sheet lead shower pans, lead vent stack flashings, lead in chemical laboratory plumbing systems and other specific applications of lead in the building industry.

The "Bulletins" are designed, as can be seen from the attached, to provide an architect or builder with an easy-to-use specification for lead in a particular application.

Distribution of Lead Building Construction Bulletin No. 1 - Specification for Lead Waste Connections for Plumbing Fixtures with Integral Traps, will be made to 17,000 architects and 5,000 others in the building industry. A supplementary mailing to plumbing contractors with a letter explaining how they may best use these "Bulletins" in discussions with architects and builders will also be made.

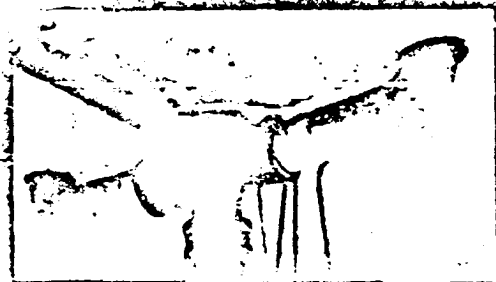
The Association would be pleased to have any suggestions or criticisms with respect to this first bulletin as an aid in planning for future publications of this series.

Extra copies are available to members in quantities up to 25 at no charge. Larger quantities are available at our cost of \$4.30 per hundred.

Sincerely yours,

Robert L. Ziegfeld
Secretary





PRACTICAL SUGGESTIONS

CONNECTIONS TO 3-IN. STACKS

Lead reducing bends, 4 in. inlet, 3 in. outlet, may be used or 3 in. bend or stub connected to a 4 in. by 3 in. brass reducing water closet floor flange.

LEAD TO CAST IRON

Lead connections to cast-iron soil pipe are made by a brass ferrule wiped to the lead and lead called into the hub of the soil pipe.

LEAD TO GALVANIZED PIPE (GUEHAM)

Lead connections to galvanized pipe are made by a brass solder bushing or nipple wiped to the lead and screwed to the galvanized piping.

LEAD TO COPPER TUBE

Lead connections to copper tubing are made by wiping the lead to a 6 in. section of copper tubing which is then sweat soldered into the drainager fitting or the lead may be wiped directly to the drainager fitting.

SIZES AVAILABLE

Lead pipe and fittings are sized according to the actual inside diameter.

Lead pipe is commonly available in all sizes from 1½ in. to 6 in. inside diameter. Other sizes may also be obtained.

Lead bends for connections to fixtures with integral traps are available in 3 and 4 in. inside diameter. Also available are lead bends with inlet or outlet dimensions larger than those included in the specification and 1½ and 2 in. bends which are particularly suited for use as vents for lead fixture connections. Lead reducing bends with 4 in. inlet and 3 in. outlet are also available for use with 3 in. stacks.

NEW

Lead bends and stubs are also available already prepared and wiped to brass fittings. These are made under ideal working conditions by skilled workmen and are sold ready for installation. Such ready-to-install lead fixture connections have the advantages of predetermined costs and quality.

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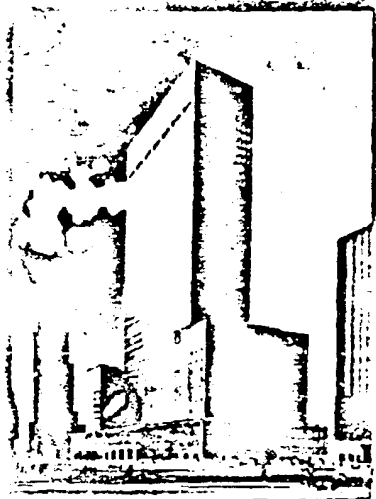


SPECIFICATION FOR
LEAD WASTE CONNECTIONS
FOR PLUMBING FIXTURES
WITH INTEGRAL TRAPS

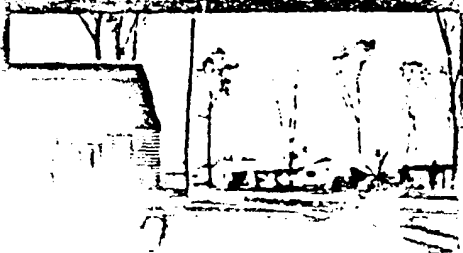
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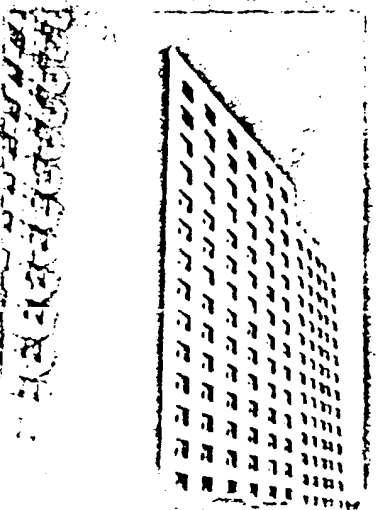
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LEAD FIXTURE CONNECTIONS



FOR ALL BUILDING TYPES



THE SPECIFICATION on the following page is provided to assist architects who wish to take advantage of lead's outstanding qualities in the plumbing system. Also on the last page are some practicable helpful suggestions for the architect and contractor in using lead for fixture connections.

DURABLE Lead has long been considered one of the most durable of the common metals.

FLEXIBLE It provides a flexible connection that can take up uneven building settlement, vibration and differential expansion or contraction without damage to itself, the fixture or the rigid drain.

FREE FLOWING It has an unusually smooth inner bore and wiped joints used with lead pipe offer no obstructions to which solids can cling and cause clogging.

BONDED JOINTS The wiped joint used with lead connections provides an integral bond that cannot, when subject to vibration or other strains, come loose and leak.

LOW COST The cost of lead connections is generally as low or lower than other types of connections. One reason is that no expensive fittings are required when changes of direction are made as the pipe itself is easily bent to conform.

COMPENSATES FOR INACCURACIES Lead's flexibility permits the connection to be bent by hand to compensate for slight inaccuracies in measurements when the fixtures are set, reducing the cost of setting fixtures.

PLUMBING CODE ACCEPTANCE Lead connections are accepted by practically all plumbing ordinances and required by many. They are used in all types of structures from the tallest skyscraper to the smallest cottage.

VENTS Lead pipe is ideally suited for the individual venting of waste fixtures for the same reason its use is desirable for connecting the fixtures to the drainage system. A point very often overlooked is the fact that vents are more subject to corrosion than waste lines, particularly that area of the vent below the rim of the fixture where moisture may collect.

TECHNICAL ASSISTANCE The technical staff of the Association is at your disposal in helping you solve your lead problems. Please address your inquiries to: Architectural Dept., Lead Industries Association, 420 Lexington Avenue, New York 17, N. Y.

**Specification for
LEAD CONNECTIONS TO WATER CLOSETS
AND OTHER FIXTURES WITH INTEGRAL TRAPS**

All waste and vent connections to fixtures having integral traps shall be extra-heavy lead bends or at least 6 in. measured between joints of "D" or "XL" weight lead pipe meeting the requirements of Federal Specification WW-P-325.*

Connections for floor fixtures shall be made by means of brass floor flanges soldered to the bend or pipe, and the fixtures bolted to the floor flanges with red brass bolts.

Wall-hung fixtures shall be rigidly supported by concealed metal supporting members so that no strain is transmitted to the fixture waste connection.

The lead shall be turned over adjustable brass bushing to form flange connection.

An approved gasket (washer) (setting compound) (white lead putty) shall be used between the fixture and the connection to insure a gas and water-tight connection.

The individual vents for such fixtures shall be wiped to the lead waste connection and the lead vent extended above the fixture rim.

Connections between lead and other metals shall be made with a wiped joint to copper or brass fitting which shall then be soldered, calked or screwed to the other metal.

*FEDERAL SPECIFICATION WW-P-325 (Excerpts)

**DIMENSIONS AND WEIGHTS OF CLASS "B"
OR "XL" LEAD SDR AND WASTE PIPE**

The wall thickness of lead pipe shall be not more than 0.008 in. under, nor more than 0.012 in. over, the specified wall thickness.

Size (nominal inside diameter)	Wall Thickness	Outside Diameter	Minimum outside circumference	Nominal weight per foot
Inches	Feet	Inches	Inches	Pounds
1 1/2	.180	1.770	55 1/2	8.50
2 1/2	.182	2.294	73 1/2	14.75
3 1/2	.185	2.770	87 1/2	21.00
4	.188	3.250	101 1/2	27.25
5	.190	3.730	115 1/2	33.50
6	.192	4.210	129 1/2	39.75

DIMENSIONS AND WEIGHTS OF LEAD BENDS

Lead bends shall be of 0.125 in. nominal wall thickness. The wall thickness at no point shall be less than 0.110 in.

1 1/2 inch nominal inside diameter		2 inch nominal inside diameter		3 inch nominal inside diameter	
Dimensions	Total Weight	Dimensions	Total Weight	Dimensions	Total Weight
Inches	Lb. oz.	Inches	Lb. oz.	Inches	Lb. oz.
4 x 7	2 12	5 1/2 x 10	7 2	5 1/2 x 10	9 6
4 x 12	4 1	5 1/2 x 12	8 0	5 1/2 x 12	10 20
4 x 16	4 13	5 1/2 x 16	9 12	5 1/2 x 16	12 20
4 x 20	5 10	5 1/2 x 20	11 0	5 1/2 x 20	14 20
5 x 7	3 2	6 x 10	10 0	6 x 10	12 6
5 x 12	5 0	6 x 12	11 0	6 x 12	13 20
5 x 16	5 10	6 x 16	12 0	6 x 16	15 20
5 x 20	6 0	6 x 20	13 0	6 x 20	17 20
6 x 7	4 11	6 x 20	14 0	6 x 20	19 15