



Lead Plumbing Selected for School Laboratories

PLUMBING in the chemical laboratory and physical preparation room of the large new Mount Pleasant Regional Senior High School, Providence, R. I., was done with lead to solve the vexing problem of handling corrosive chemical wastes. About 1500 ft. of lead pipe, of which some 75 per cent is 2 in. pipe weighing 12 lb. per ft., has been used in this installation. There are 86 lead stubs and 7 lead stacks; lead bag traps are also being used.

Lead serves admirably for chemical wastes, not alone because it resists corrosion by such a variety of modern chemicals, but because it also has flexibility that is absolutely essential in any piping system if it is to endure. Building movement and settlement are taken up by lead pipe without damage or strain, an unusual feature in corrosion resistant materials. Furthermore, since joints in lead chemical wastes can be made by lead "burning", making continuous homogeneous runs of lead pipe, joint troubles may be eliminated.

Horizontal runs of lead pipe in the Providence school were hung in drop ceilings and vertical runs in brick chases. Lead stubs coming through the concrete floors were encased in sheet iron sleeves. These are excellent practices that should be followed in all piping installations wherever possible, as it removes the danger of



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Mount Pleasant Regional Senior High School,
Providence, R. I., where lead is used in the
laboratory plumbing.

damage that may result from embedding pipes directly in concrete or masonry. The horizontal runs are supported continuously on 2 x 2 in. angle irons with hangers shaped to fit the angles.

Attention should be given to the heavy weight of lead pipe used in this installation. For chemical wastes greater wall thickness is naturally required than for ordinary wastes since conditions are more rigorous. Minimum

weight of lead pipe for this purpose should be Lead Industries Association Standard B or M weight, which may be identified by the Lead Industries' "Seal of Approval", the letters B or M, the diameter and the manufacturer's name or trade mark stamped on it. This pipe weighs:

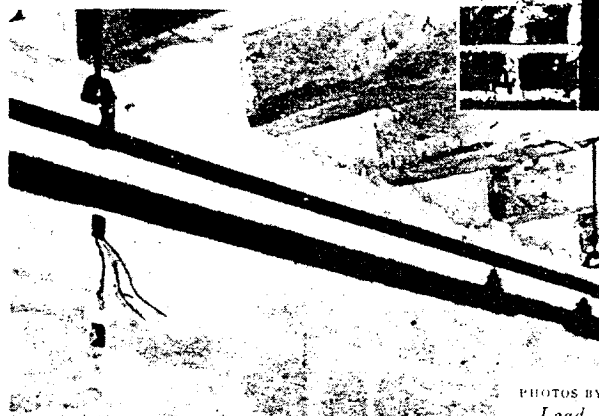
Inside Diameter Inches	Weight per Running Foot	
	Pounds	Ounces
1	3	4
1 1/4	3	12
1 1/2	5	
2	7	

Since solder is corroded by many chemicals that do not affect lead all joints in chemical work should be made by lead "burning". In this way nothing but durable lead is presented to the attack of corrosives.

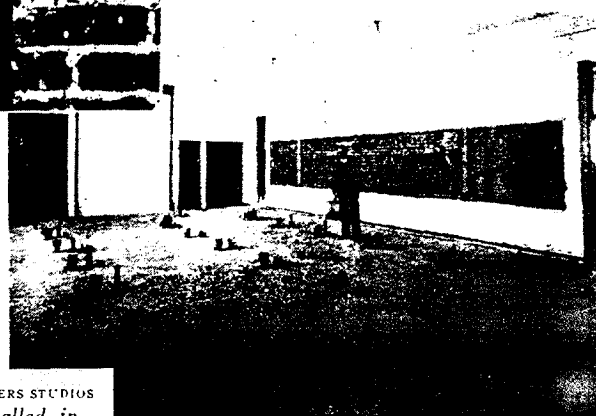
The architect for Mount Pleasant High School is Irvin Gorman, of Providence. Plumbing was done by C. H. Cronin, Inc., of Boston.



PHOTOS BY ADVERTISERS STUDIOS
Lead pipe installed in
chase in brick wall of
the Mount Pleasant School.



Lead laboratory waste pipes supported continuously on 2 x 2 in. angle irons, suspended on hangers shaped to fit the angles.



View showing some of the many lead stubs used to resist corrosive chemicals and provide flexibility in the school laboratory plumbing.