

LEAD INDUSTRIES ASSOCIATION

60 EAST 42ND STREET

NEW YORK 17, N. Y.

May 6, 1960

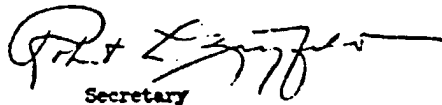
SUBJECT: LEAD-ASBESTOS PADS ISOLATE
VIBRATION OF ROOF-TOP COOLING TOWER

To Members of the Lead Industries Association
and Their Engineering and Purchasing Personnel:

A copy of the reprint, "Isolate Vibration of Roof-top Cooling Tower" is attached. The article was developed by the LIA staff and appeared in LEAD quarterly at about the same time it was published by "Plant and Power Services Engineer" (circulation of about 60,000).

A limited number of reprints have been purchased and are available to members while they last. We hope that members will fully investigate the possibility of using this lead product in their own operations.

Very truly yours,



Secretary

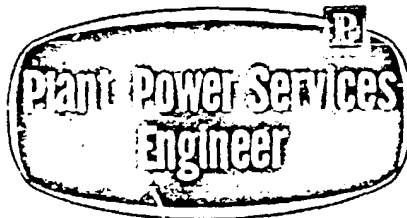
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NEW YORK 17, N. Y.

*Isolate vibration
of roof-top
cooling tower*

Reprinted from
March 1960
PLANT and POWER SERVICES ENGINEER

For
LEAD INDUSTRIES ASSOCIATION
292 Madison Avenue
New York 17, New York



Are you plagued with vibration?
If so, read how a
New York skyscraper uses
lead-asbestos pads to . . .

Isolate Vibration of Roof-top Cooling Tower



Pads' construction is shown by this cut-away view of a sample

One of the first installations using lead anti-vibration pads to damp the vibration created by air conditioning equipment was made on the roof of the new 35-story office building at 575 Lexington Ave., New York City.

The roof-top cooling tower — with a wet weight of 205,000 lb — is supported on 10 steel angle-columns resting on the building's own structural girders. Because vibration in the cooling tower would be transmitted to the

building structure, lead-asbestos pads were placed between the base of the cooling tower's supporting columns and the structural steel. Steel billets distribute the load over the pads.

The tower's corner posts are on pads measuring 8" by 8" and the remaining columns are on pads which measure 8" by 14". The ten pads provide an anti-vibration bearing surface of 928 sq ft for the 205,000-lb tower — or about 220 lb per sq in.

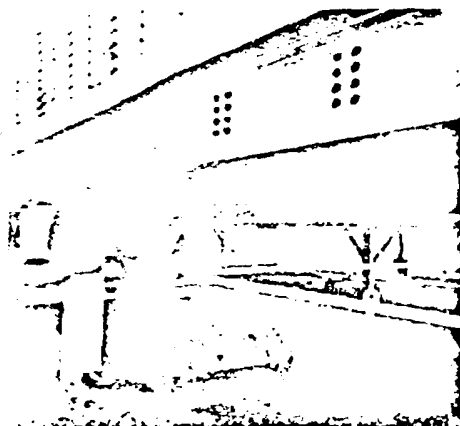
Engineers reported that the method of construction used for the supports saved considerable time and expense in that they could be placed in position while the steel work was in progress rather than waiting for the concrete to be poured and then placing the footings.

The cooling tower is equipped with three 60-hp, 1800-rpm motors with spiral bevel gears driving a 12-bladed, adjustable-pitch fan at 202 rpm, and a water pump

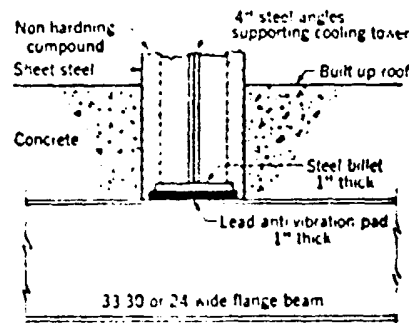
of 6000-gpm capacity.

As revealed by a recent check this past summer, the vibration created by this equipment while operating at peak load was effectively damped by the lead asbestos anti vibration pads.

(More information on anti-vibration pads may be obtained from Lead Industries Association, Dept. P&ISE, 292 Madison Ave., New York 17, New York.)



Roof top cooling tower is mounted on lead asbestos pads to isolate vibration from the building. Pads rest directly on beams.



The pads were placed between the tower's supporting columns and the structural steel. Steel billets distribute load over the pads.