

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS

50 SOUTH LOS ROBLES • 684-1310 • PASADENA, CALIFORNIA



REPORT OF THE TECHNICAL DIRECTOR TO THE RESEARCH COMMITTEE

SUBJECT SOUNDBLOX
COMPANY THE PROUDFOOT COMPANY
NAME Albyn Mackintosh
 Consulting Engineer
ADDRESS 306 North Vermont Avenue
 Los Angeles, California 90004

REPORT NO.
2539
DATE
August 24, 1970

1. I. SUBJECT:

2. The subject report was held for further study by the Research Com-
3. mittee at their meeting of August 7, 1970, in accordance with the
4. Technical Director's report dated July 23, 1970.

5. II. FINDINGS:

6. In a letter dated July 17, 1970, the proponent stated that he is
7. not requesting any special consideration for fire-resistive rating
8. for Soundblox units. Since, however, the 8-inch Soundblox units
9. filled with a 3-pound density mineral wool were successfully tested
10. for a three-hour fire-resistive rating we feel that the three-hour
11. fire-resistive rating has been justified. Masonry walls constructed
12. with Soundblox without the mineral wool were not fire tested. A
13. minimum of one-hour fire-resistive rating for the 6-inch and 8-inch
14. Soundblox units would appear to be acceptable since the minimum
15. equivalent thickness of the 6-inch unit is approximately 30 per cent
16. in excess of that required in Table No. 43-B for a one-hour rating.
17. The equivalent thickness of the 8-inch unit would of course be even
18. greater,

19. [In support of his request for shear values for the Soundblox units
20. additional data in the form of plans and calculations have been

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submitted. In accordance with Section 2418 (j)-3 of the 1970 Edition of the Uniform Building Code reinforcing is required at a maximum spacing of 4 feet on center in both directions. Based on this requirement panel 7B-2 most closely resembles the actual wall construction to be expected. Calculations indicate that the ultimate shear stress for the Soundblox is approximately 90 per cent of that for the standard concrete hollow masonry unit construction. Accordingly, it is recommended that Soundblox units may be used wherever standard hollow masonry units are permitted by the Code provided the shear stress does not exceed 90 per cent of the Code value. It should be noted that there is a conflict in wall dimensions between the shear test piers indicated on the California State Polytechnic College "Shear Strength of Soundblox Masonry Units" and the dimension shown on the plans. The 11-foot 4-inch by 11-foot 4-inch dimension shown on the shear test report should read 10 feet 8 inches by 10 feet 8 inches in accordance with Mr. Albyn Mackintosh's statement by telephone on August 21, 1970. He has agreed to send us a copy of the test sheet with the corrected dimensions.

III. RECOMMENDATION:

That the Proudfoot Company, Inc., Soundblox hollow concrete masonry units may be used wherever hollow masonry units are permitted by the Code provided:

1. The 6 by 8-inch Soundblox units are limited to a one-hour fire-resistive rating.
2. The 8-inch Soundblox units are limited to a three-hour fire-resistive rating when all cells are filled with a 3-pound per

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46. cubic foot density mineral wool with a phenolic resin binder.
47. [3. That the shear be limited to 90 per cent of the values for
48. standard concrete hollow masonry units.
49. 4. That Soundblox are used only in reinforced masonry construction.]
- 50.

James E. Bihr
Technical Director

51. JEB:TJK

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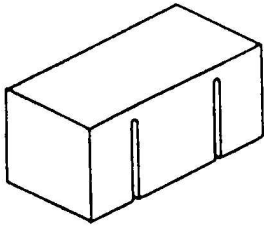
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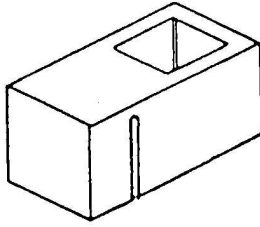
SOUNDBLOX

SOUND ABSORBING STRUCTURAL MASONRY BLOCKS

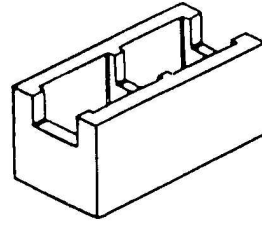
Are available in 8" TYPE A-1, 8" TYPE R, 8" TYPE Q, and 12" TYPE R
8" Type RSC and 12" Type RSC



STANDARD
SOUNDBLOX

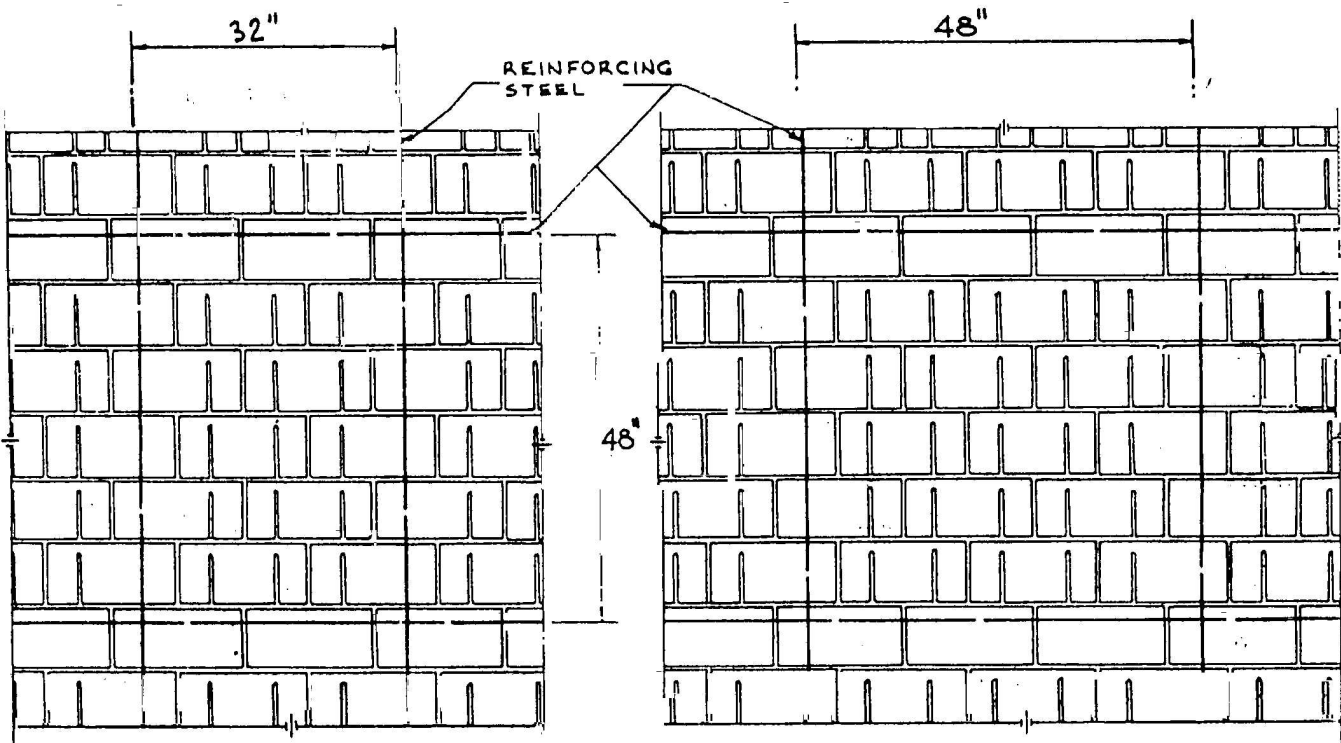


SPECIAL SOUNDBLOX
FOR USE AT VERTICAL
REINFORCING (RH AND LH
UNITS)



STANDARD
BOND BEAM

CELLS WHERE SIDE WALL OPENINGS OCCUR
HAVE SEALED TOPS. OTHER CELLS ARE OPEN
FOR REINFORCING STEEL AND GROUT. CENTER
WEBS OF SPECIAL UNITS TO BE MORTARED.



SOUNDBLOX IN REINFORCED MASONRY
SEE RESEARCH RECOMMENDATION NO. 2539 OF THE INTERNATIONAL
CONFERENCE OF BUILDING OFFICIALS



The Proudfoot Company, Inc.

ENVIRONMENTAL PRODUCTS

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