Why We Planned a Building Like the New 1YA Studio

Specially Written by the Architect, Norman Wade, of Messrs. Wade and Bartley, Auckland.

THE factors which had to be considered in connection with the 1YA studio building, Shortland Street, Auckland, were twofold—the first being the site. This was a precipitous piece of land that had lain unused for a considerable period, though situated in an elevated part of the city and conveniently central. It had become overgrown with trees and undergrowth, and on casual inspection appeared to possess disadvantages which doubtless accounted for it remaining practically in its virgin state for such a long period.

The requirements from the administrative and programme aspects were developed by the general manager of the New Zealand Broadcasting Board, Mr. E. C. Hands; and the board's engineer, Mr. J. R. Smith, was responsible for the special acoustical and technical features. The chairman and members of the board conferred with the architects and the board's officers as the plans progressed, and decisions were made as a result. The desirability of having all the studios controlled from one floor determined the size of the building. The next consideration was the accommodation required for the business of broadcasting and the administration of broadcasting services, and to design a structure that would be capable of serving its purpose. A study of these requirements showed that the planning of the studios, control room, announcer's room, and for the installation of the technical equipment, were the first essentials and of the greatest importance. The grouping of the studios with the control room centrally positioned formed the key to the whole scheme. The shape and size of the site made it possible to arrange these on one floor. It was important to provide protection against inter-studio interference, and for the exclusion of extraneous noises.

The development of the plan proved that the Broadcasting Board had chosen a site possessing many virtues for its special uses, and these became more and more apparent as the work of planning proceeded. Each studio required to be insulated from sound, and brickwork of considerable thickness was the medium adopted to surround the studios—the customary steel frame or reinforced concrete methods of construction were eliminated. Artificial illumination, ventilation and heating of the studios and other adjacent accommodation were necessarily resorted to, because of the difficulty of making windows or other openings soundproof. In effect, each room is an airtight compartment. The doors are a special feature, and required to be made soundproof as each studio had to be sound insulated one from another. To obtain the maximum efficiency in doorways, it was necessary to break the contact between the different materials by the use of acoustical insulating products of varying nature.

The control operator has a clear vision from the control room of the many separate studios—this is obtained by means of large observation windows, carefully placed in walls with specially-made frames, each of which is glazed with three thicknesses of plateglass of varying thicknesses, and so spaced to exclude sound. The Broadcasting Board, having determined the particular use that each studio was to serve, and incidentally the optimum reverberation time required, calculations were then made and suitable material selected with which to clothe the designs to obtain the required acoustic quality.

The main entrance lounge is not entirely treated in this manner, and obtains natural light by means of a circular glazed dome, which forms a feature of the ceiling. A wide staircase descends to the artists' lounge on the floor below, from which entrance to the large studio thereon is gained. The dimensions of this particular studio are 60ft. long, 40ft. wide, and is the height of two storeys of the structure. Entry to the other studios which are situated on the top floor is from the main lounge, and separated therefrom by lobbies, each of which is furnished with soundproof doors fixed in two places. An echo room has also been provided on this floor.

The first floor down contains the administration offices, director's room, relay equipment, library, programme organiser's room, and records library, together with a specially insulated record testing room, the walls and ceilings of which are treated where necessary to reduce the noise level in the respective departments, and to further protect the studios above. The

On the Air Next Week

New 1YA and Test Transmissions

THE finishing touches are now being put to the new Auckland studios in Shortland Street and the transmitting plant at Henderson, and, on Monday next, December 17, the new 1YA will take over from the old station.

"We want the listening public to understand, however, that the new station is merely on test transmissions for a week or two," said the general manager of the New Zealand Broadcasting Board (Mr. E. C. Hands) to a "Radio Record" representative this week. "Should the engineers find it necessary to make any adjustments during the running of a programme the new station will go off the air and the old 1YA transmitter will temporarily resume the service. The official opening of the new station will take place in January at a date yet to be fixed."