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UNIVERSITY OF NAIROBI
HOUSING RESEARCH AND DEVELOPMENT UNIT

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K A R I O B A N G I
E X P E R I M E N T A L T I M B E R H O U S E S

User Reactions, Construction, Kitchen Design and
Climatic Performance.

ACC. No. 83/590

February, 1974.

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Typing : Alice Justin, secretary.

Nairobi, February 1974

Jon Skakke

DIRECTOR.

1.0 INTRODUCTION

The experimental timber housing project at Kariobangi was first conceived of during a symposium on "Urbanization and Timber Housing" held at City Hall Nairobi, in December 1968. The City Council and, in particular, the City Engineer committed themselves then to the construction of a timber pilot scheme. A Timber Development Committee was set up to explore the theoretical as well as the practical aspects of Timber Housing for both small and large scale construction.

The Timber Development Committee first met at Nairobi City Council in January 1969. Plans for a pilot timber housing scheme were developed at this and subsequent meetings of the committee.

The scheme was to consist of 27 different dwelling types to be executed on a grant of £10,000 from the National Housing Corporation and a loan to the City Council of £27,000. Total cost however was estimated at £42,000. Construction costs were not recorded with sufficient accuracy as to allow for meaningful cost comparisons.

The object was to develop a timber low-cost housing with the fundamental aim of getting timber accepted as a suitable material for urban housing, bearing in mind that Kenya is likely to be shortly producing a surplus of low grade timber.

After the completion of the scheme in early 1972, the National Housing Corporation requested the Housing Research and Development Unit to conduct a User Reaction Survey, once the houses had been occupied a sufficient length of time. The survey was undertaken in February 1973. The more detailed studies on kitchen design and climatic performance were carried out in support of the HRDU's current research on the development of low-cost housetypes.

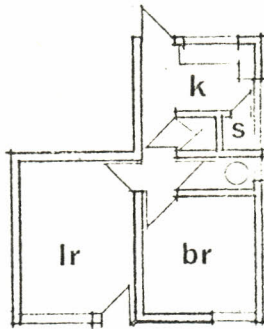
1. HOUSE PLANS AND DESCRIPTIONS

All house plans are drawn to a scale of 1:200 with north side at the top of the page.

1.1 NAIROBI CITY COUNCIL DESIGNS

1.1.1 Houses A1/A2

PLAN



DESCRIPTION

External Walls:- Prefabricated timber frame with horizontal timber weather boarding outside and 4.5. mm plywood inside.

Internal Walls:- Timber frame with plywood finish (painted with plastic emulsion) in habitable rooms and plaster (on chicken wire) finish in other rooms (kitchen, w.c. etc.)

Roof:-
A1 - Corrugated asbestos sheets, no ceiling
A2 - Asphalt shingles laid on hardboard decking.

Floor:- Cement screed on concrete raft.

Windows:- Aluminium framed glass louvres. A2 has an extra (West facing) window in the passage opposite shower door.

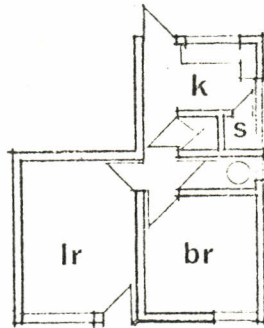
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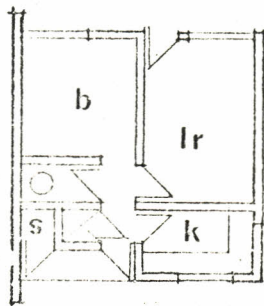
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Roof:-
A1 - Corrugated asbestos sheets, no ceiling
A2 - Asphalt shingles laid on hardboard decking.

Floor:- Cement screed on concrete raft.

Windows:- Aluminium framed glass louvres. A2 has an extra (West facing) window in the passage opposite shower door.

1.1.2 Houses B1/B2



DESCRIPTION

External Walls:- Timber frame with horizontal ship-lap boarding outside and 4.5 mm plywood inside.

Internal Walls:- Timber frame with plywood finish (painted with plastic emulsion) in habitable rooms and plaster (on chicken wire) finish in other rooms (kitchen, w.c. etc).
Concrete block (150 mm) party wall.

Roof:- Currugated asbestos cement sheets: no ceiling.

Floor:- T & g timber boards (ex 150 x 25 mm).

Windows:- Aluminium framed adjustable glass louvres plus timber framed fixed lights.