CLAY INDUSTRY (NIGERIA) LIMITED

CATALOGUE

OF MANUFACTURED BURNT CLAY PRODUCTS

RC 2610

CLAY INDUSTRY (NIGERIA) LIMITED

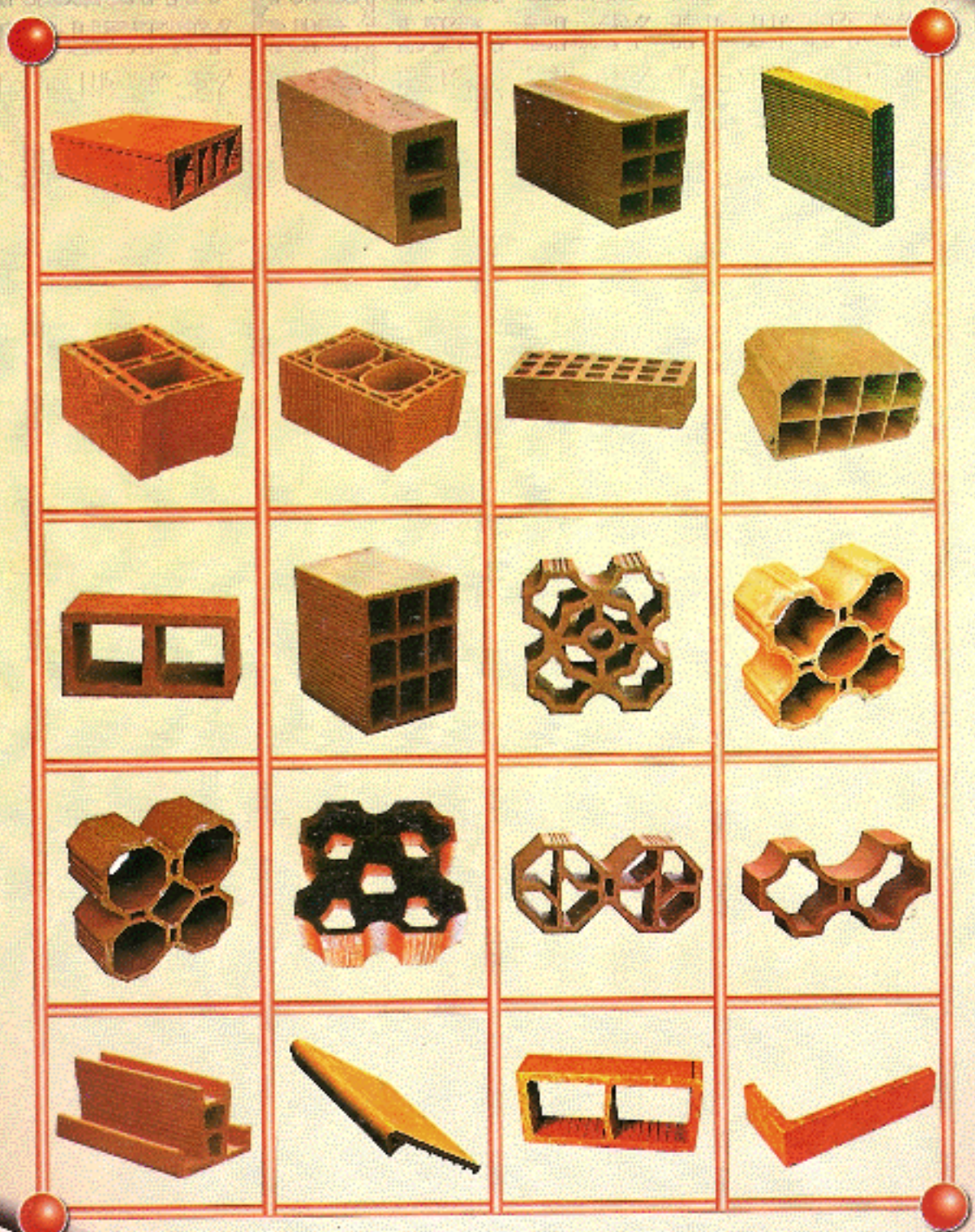
First Structural Clay Industry In Nigeria

the name that stands for quality and experience for over 40 years

RC 2610

CLAY INDUSTRY (NIGERIA) LIMITE

THE NAME AND TRADEMARK IMPRINT IN ALL OUR PRODUCTS IS A GUARANTEE OF GENUINENESS



QUALITY TESTS OF ALL OUR PRODUCTS ARE AVAILABLE FOR STRUCTURAL ENGINEERS AND ARCHITECTS.

THE UTILIZATION OF BEARING AND PARTITIONING HOLLOW CLAY WARE PRODUCTS MANUFACTURED BY CLAY INDUSTRY (NIGERIA) LIMITED

WALLS:

A burnt clay load bearing and partitioning wall is constructed exactly in the same manner as a sandcrete blocks wall, but the burnt brick wall has the following advantages:-

(a) It is lighter than a sandcrete wall, thus the imposed weight on foundations is considerably reduced.

(b) The thermal insulation is greatly superior to others forms of Construction.

(c) The conduit for electrical wiring and fittings can be easily laid in place, with adequate cover, by opening a groove in the side of the clay hollow bricks.

(d) The smaller sizes of clay hollowware, 50m/m 75m/m and 100m/m are suitable for forming partitions, and their light weight can generally be carried by suspended slabs - a beam is not needed for their support.

(e) The load bearing type of clayware is generally utilized for external walls or for any other type of wall where it requires a high bearing capacity; the wall external face finish gives an attractive appearance and can be left unrendered.

FACINGS:

The range of perforated or semi-solid burnt bricks available in Clay Industry (Nigeria) Limited has found many useful and decorative applications. However, in order to reduce the cost of a wall finish, a range of facing tiles is also available; these give a very pleasant finish to the building which is durable and maintenance free.

HOLLOW CLAY POTS FOR FLOORS AND CEILINGS

1. **"VELOX" TYPE, FLOORING SYSTEM:**

The system consists of:

(a) **Clay Pots Ribs (Beam)**, made up from 250m/m long burnt clay units, which are laid out to the specified length on a flat bench. The necessary steel reinforcement which is determined by the span of the slab is the placed in position and grouted with sand-cement mortar, mix, 2:1. The steel bar placed at the top of the rib is to prevent any cracking during the transportation. The rib must be cured for a period of seven days before its utilization.

(b) **Hallow Burnt Clay Filler Pot,** available in three heights, 130m/m, 165m/m and 200m/m; all units are 355m/m wide and 250m/m long.

(c) **Topping Concrete,** generally 25 or 40m/m in thickness, is cast together with the concrete of the rib. The Concrete mixture by volume is 1:2:4, with a 28-day strength of 3000 lbs/sq. in. In the calculation for Resisting moment, only the wedge of concrete above the rib is taken into account. The Serrated surface of the clay pots is ensuring an excellent bond of the latter with the concrete.

GENERAL NOTES:

Reinforcement to the concrete topping is required on suspended slabs.

Continuity over support, if necessary, can be obtained with the requisite amount of top steel reinforcement over the ribs at the supports.
Immediately before casting the concrete, the pots must be wetted with water to ensure the nonabsorbtion of pots from the concrete.

During the casting of concrete, it is essential that the precasted ribs be propped, by placing adequate props at 1.50Mtrs. centers, generally consisting of a timber bearer under the ribs which can be removed after seven days.

Thermal Insulation. The resistance to heat transmission makes a hollow clay blocks construction ideal for climate in Nigeria.

A roof of hollow clay pots, with no other insulation will have a 'U' value of 0.30 BthU/Hour/sq.ft./°F

1. "CLASSIC" TYPE, FLOORING SYSTEM:
(a) The **CLASSIC** hollow clay pot, either in 165m/m or 200m/m high which must be supported by - rough form work.

(b) The reinforcement depend on the span, is placed top and bottom of the ribs. If two bars are required in the bottom of the rib, one of them should be bent up adjacent to the support.

(c) Concrete to ribs and toppin,. Mix 1:2:4, by volume with a 28 day strength of 3000 lbs/sq. in. In the calculations of Residence Moment, only the wedge of concrete immediately above rib is taken into account. The topping concrete is generally 20 or 40m/m in thickness.

GENERAL NOTES:

For this system, full shuttering is required, although only of a rough nature. The system is, in one way, more adaptable than Velox, because the spam and load-earring capacity can easily be greatly increased by leaving a wider rib between the pots, at the same time using more reinforcement. In this manner, office floors of 20 ft. span are possible.

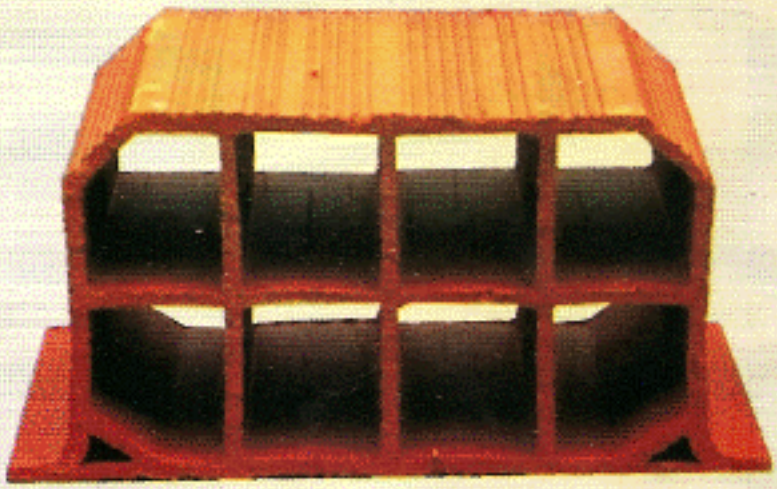
THERMAL INSULATION with less concrete for a given area, the Classic pots have a higher resistance to heat transmission than Velox. A roof of classic pots, with no other insulation, will have 'U' value of 0.28 BthU/Hour/sq.ft/°F.

HOLLOW CLAY POTS AND CEILINGS

Dimension in mm

TYPE "CLASSIC"

200x400x250mm
165x400x250mm
Top 100x400x250mm

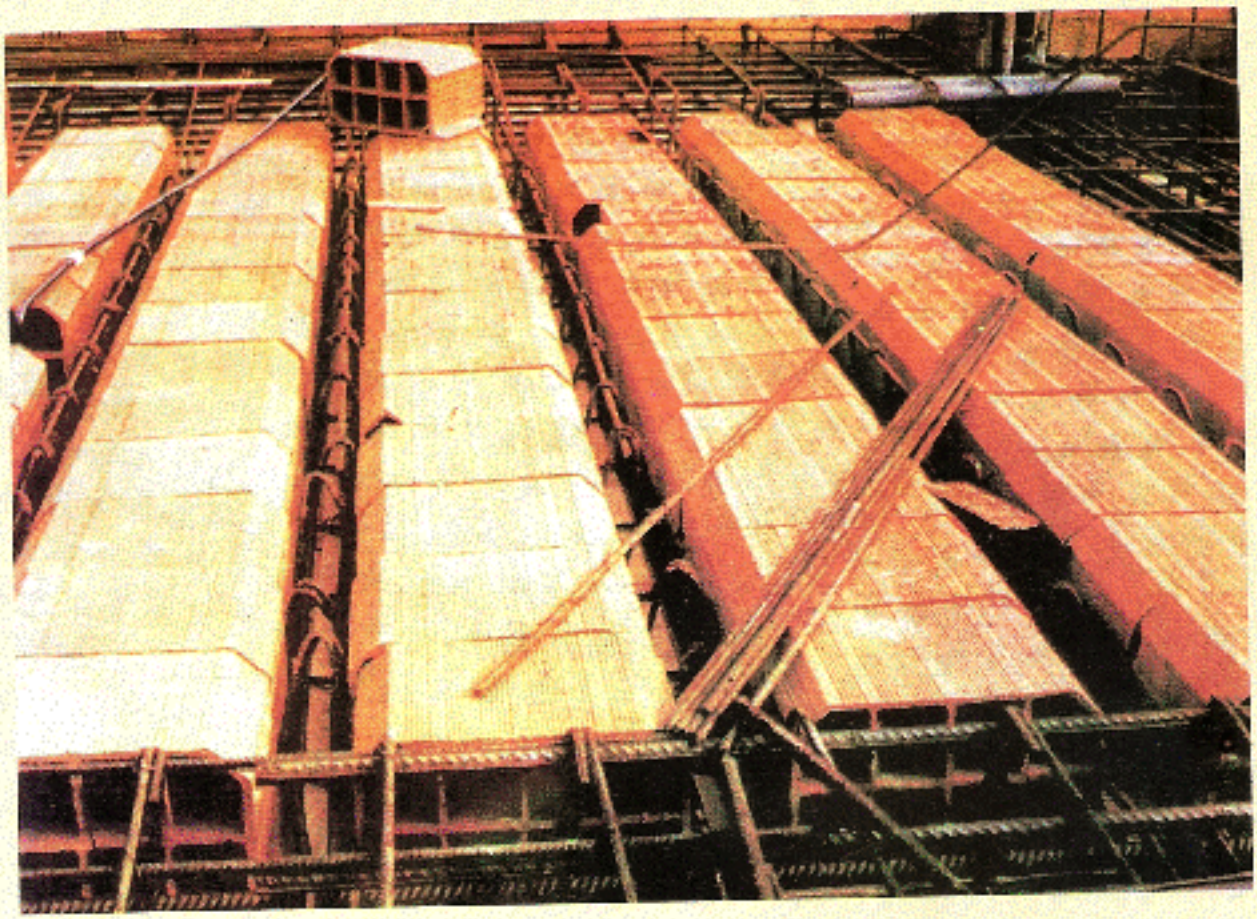


'CLASSIC' SLAB ARRANGEMENT

'CLASSIC' SLAB TYPICAL SECTION

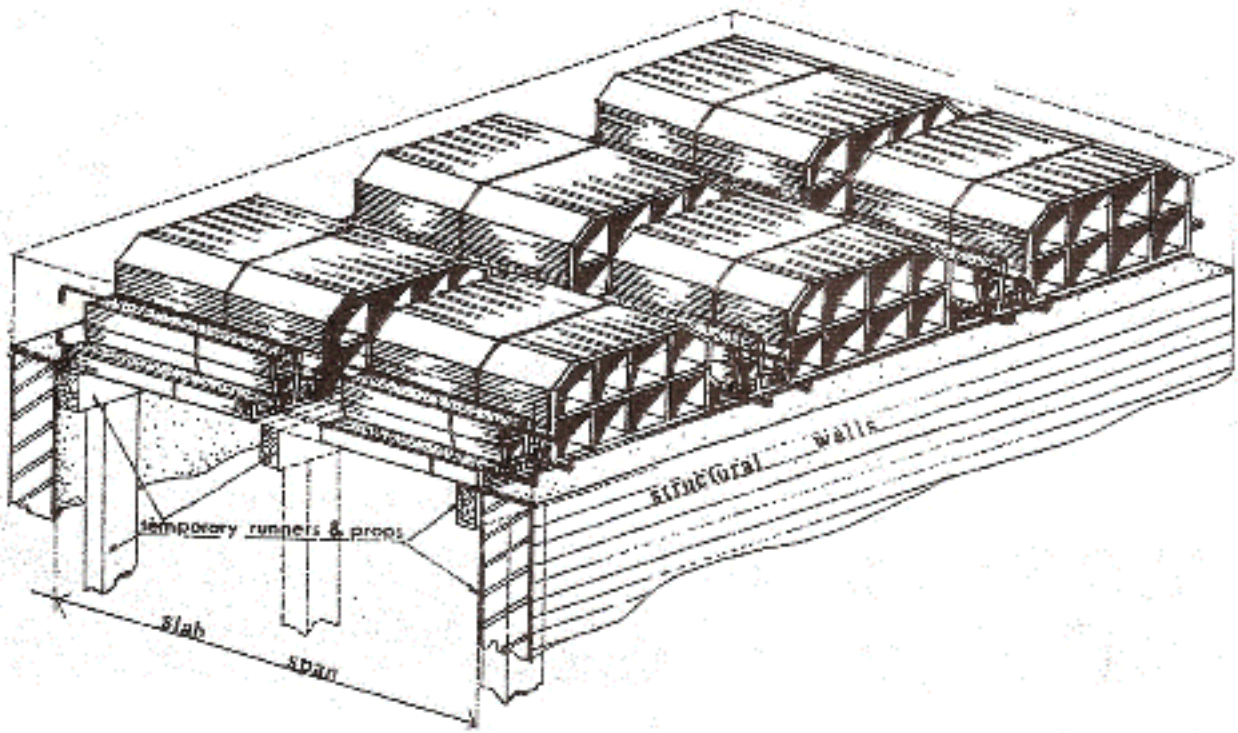
CUT VIEW OF A "CLASSIC" SLAB

STREET REINFORCEMENT TO STRUCTURAL ENGINEER SPECIFICATION DIMENSION IN MILLIMETRES (N.T.S)

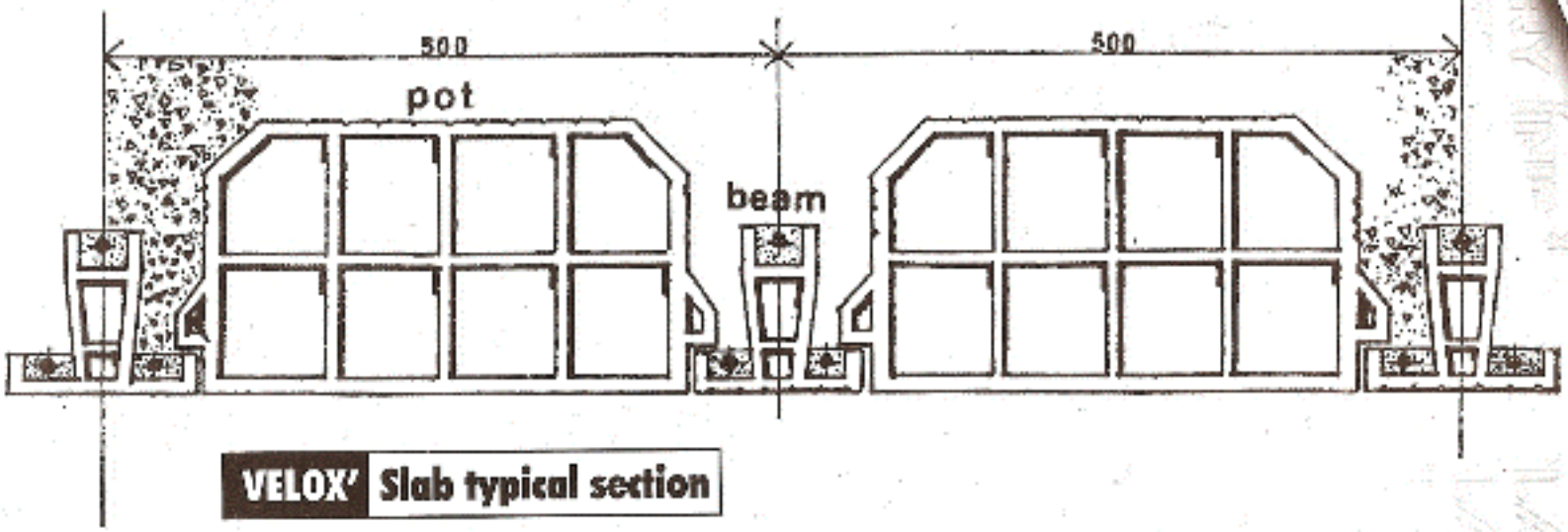


"CLASSIC" SLAB ARRANGEMENT

'VELOX' SLAB ARRANGEMENT

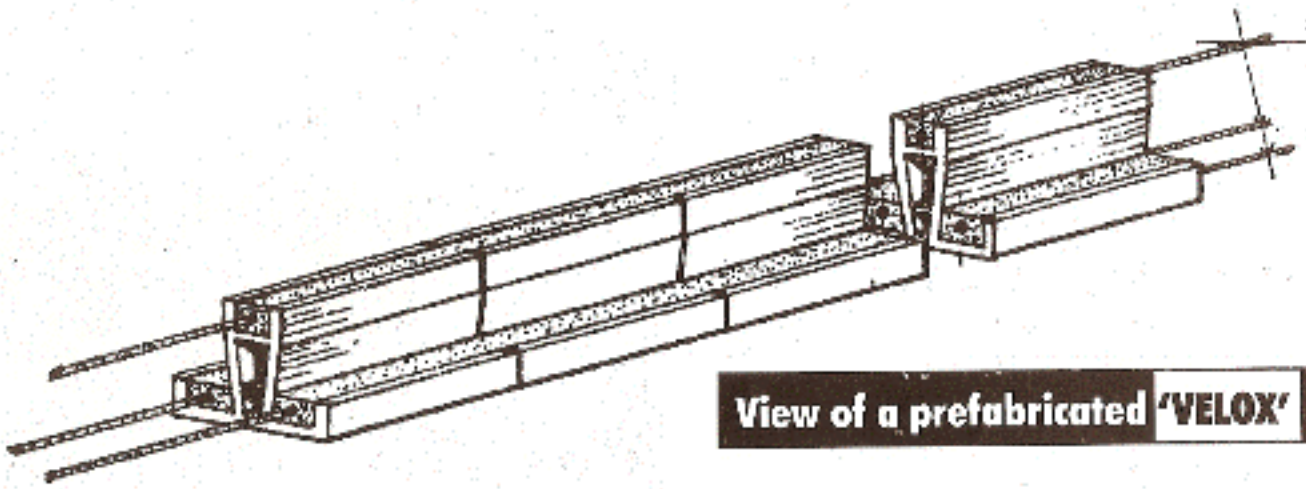


DRAWING N.T.S



'VELOX' Slab typical section

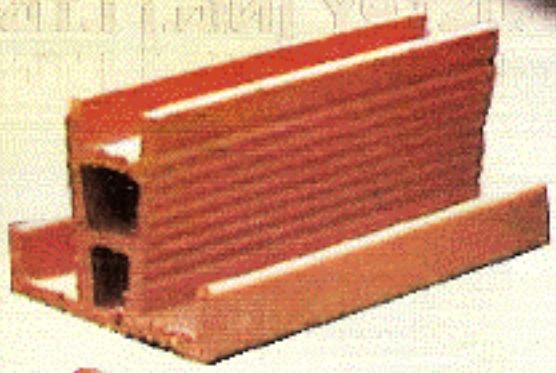
Dimensions in millimetres (N.T.S)



View of a prefabricated 'VELOX' beam

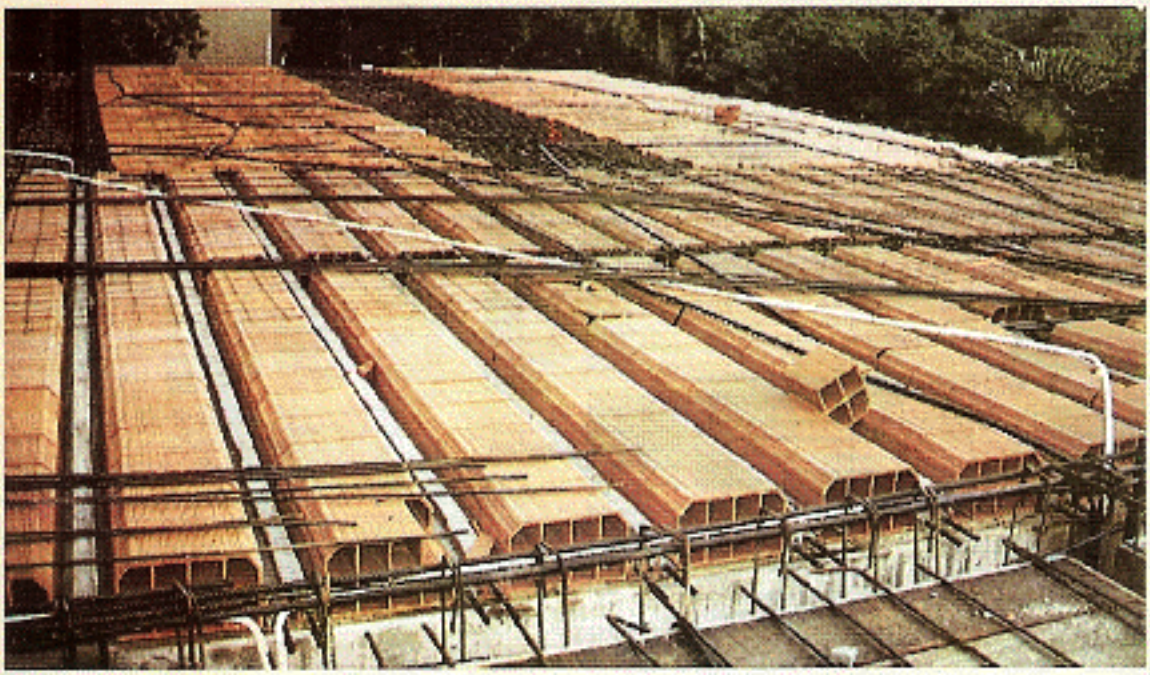
'VELOX' SLAB COMPONENTS

HOLLOW CLAY POTS FOR FLOORS AND CEILINGS



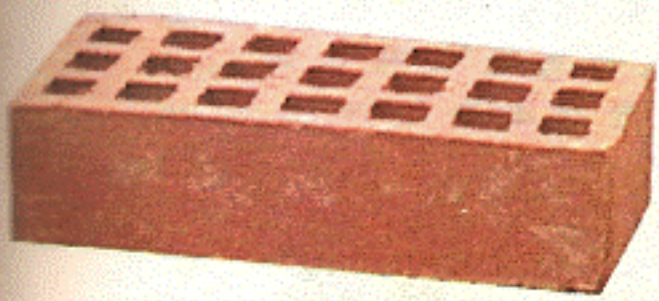
BEAM UNIT
115 x 140 x 250

TYPE "VELOX"
130 x 335 x 250
165 x 355 x 250
200 x 335 x 250
H x W x L

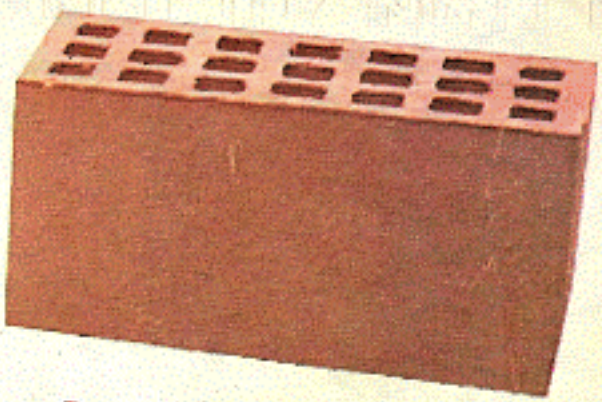


VELOX SLAB ARRANGEMENT

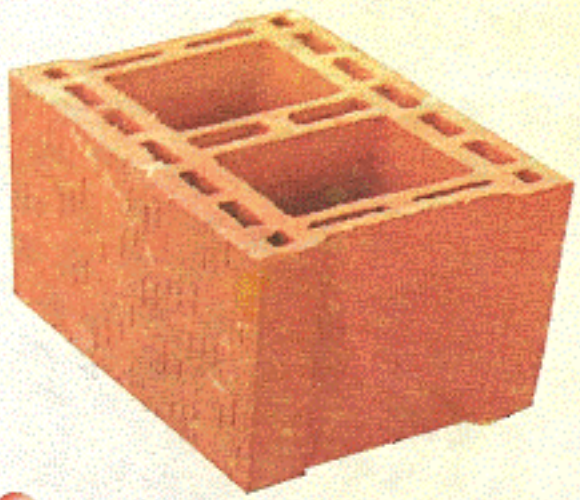
LOAD BEARING HOLLOW CLAY WARE



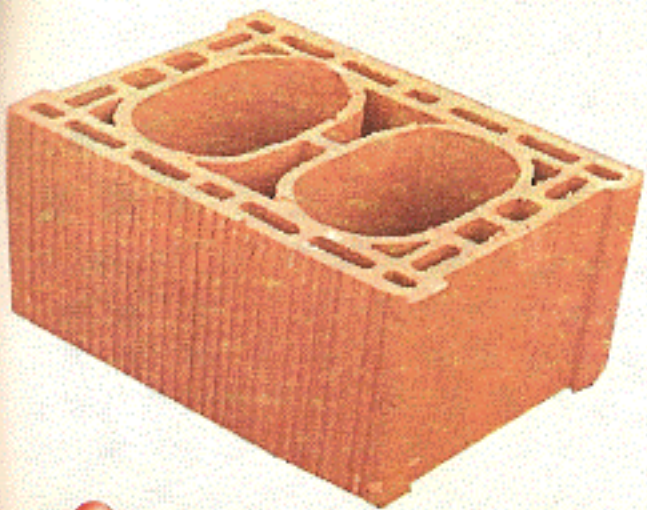
BURNT BRICK *(Single)*
(60 x 120 x 250)



BURNT BRICK *(Double)*
(120 x 120 x 250)

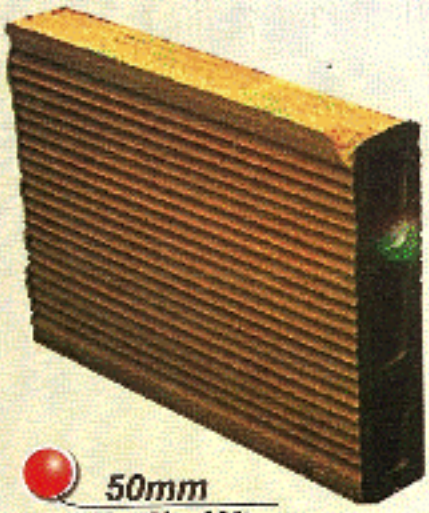


LOAD BEARING *(150mm)*
(200mm x 150mm x 330mm)

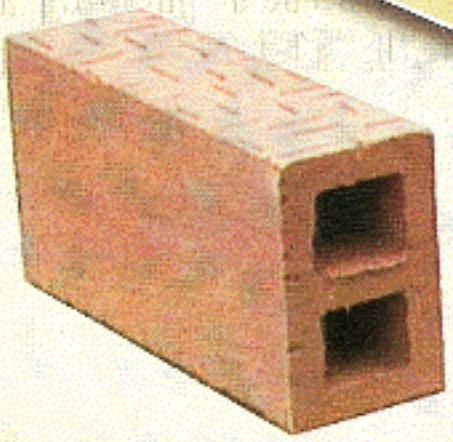


LOAD BEARING *(225mm)*
(200mm x 225mm x 330mm)

PARTITIONING CLAY WARES

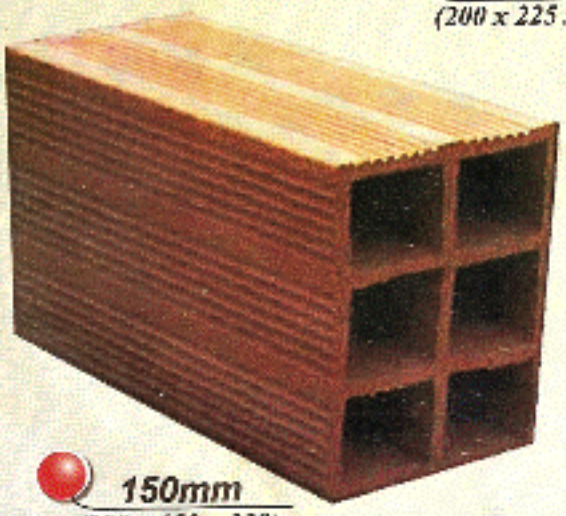


50mm
(200 x 50 x 330)



75mm
(125 x 75 x 250)

200mm
(200 x 225 x 330)

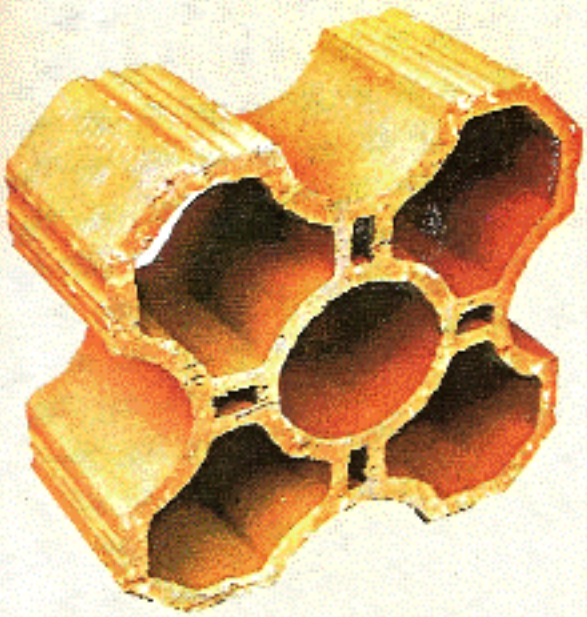


150mm
(200 x 150 x 330)

100mm
(200 x 100 x 330)

SUN BREAKERS

DOUBLE CURVED OCTAGONAL 79
(160 x 100 x 320)

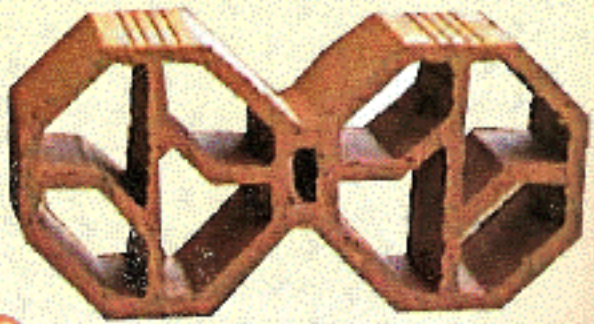


FLEDOR TYPE 83
(225 x 100 x 225)

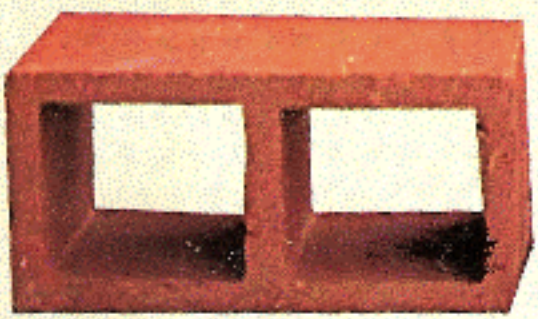
SHAMROCK TYPE 80
(225 x 100 x 225)

SUN BREAKERS

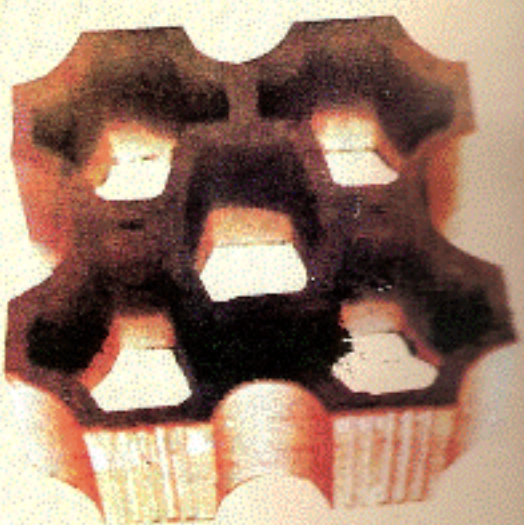
SINGLE RECTANGULAR 99
(195 x 100 x 195)



DOUBLE STRAIGHT OCTAGONAL 2001
(160 x 100 x 320)

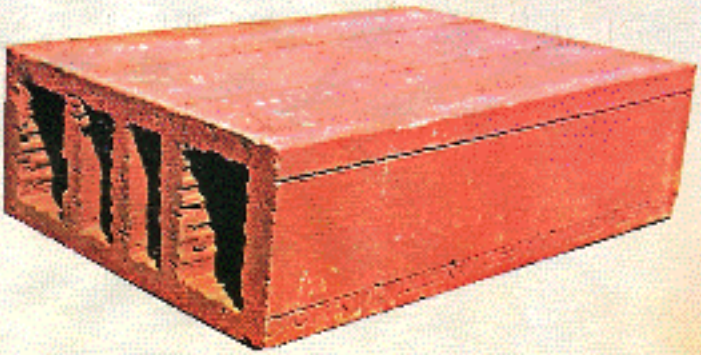


OPEN WINDOW 96
(260 x 130 x 150)



FLEDOR TYPE 94
(225 x 100 x 225)

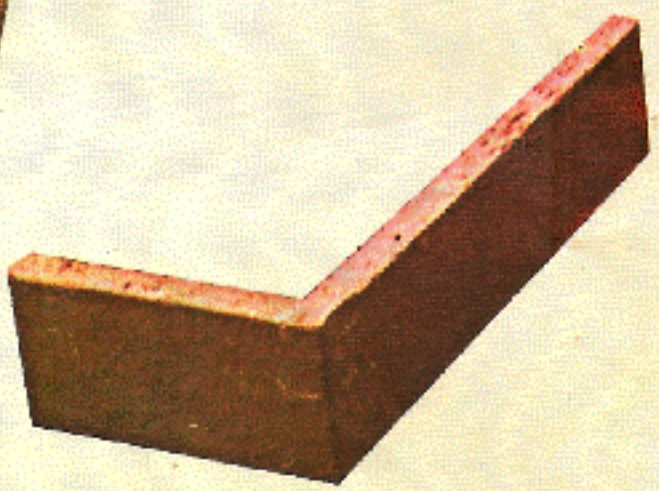
CLAY FACING FOR EXTERNAL FINISHING



Wall Facing x 11

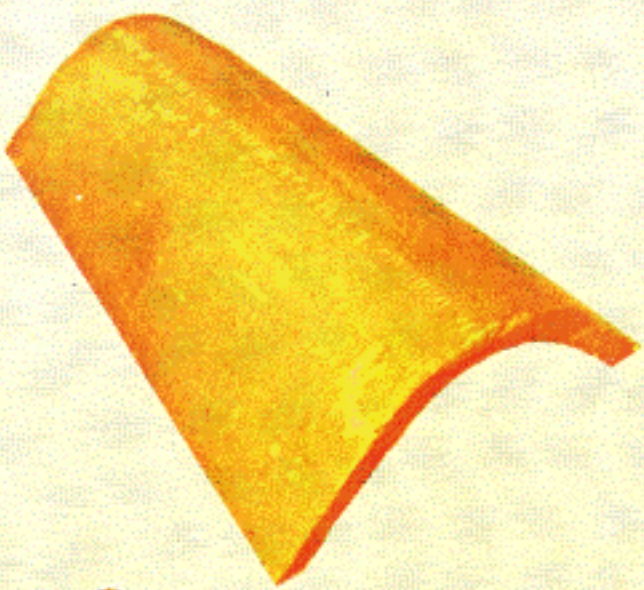
Single Facing Tile

(60 x 15 x 250)



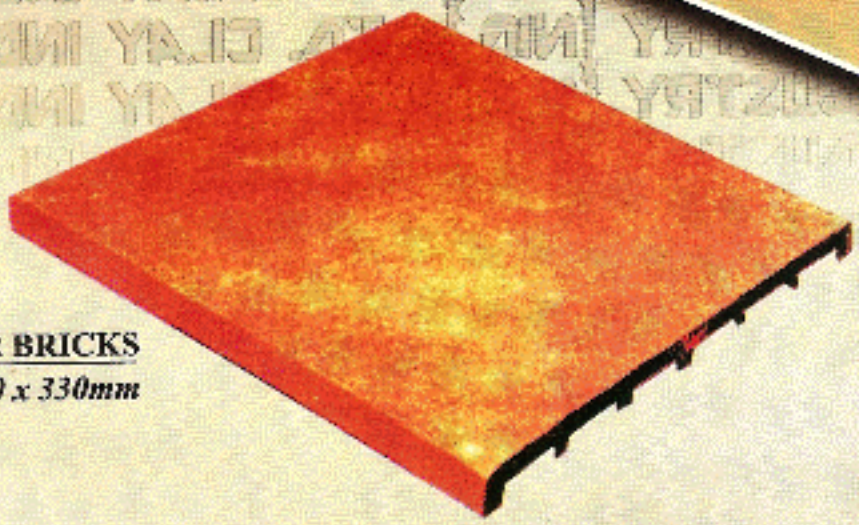
Corner Units x 2

(60 x 125 x 250)

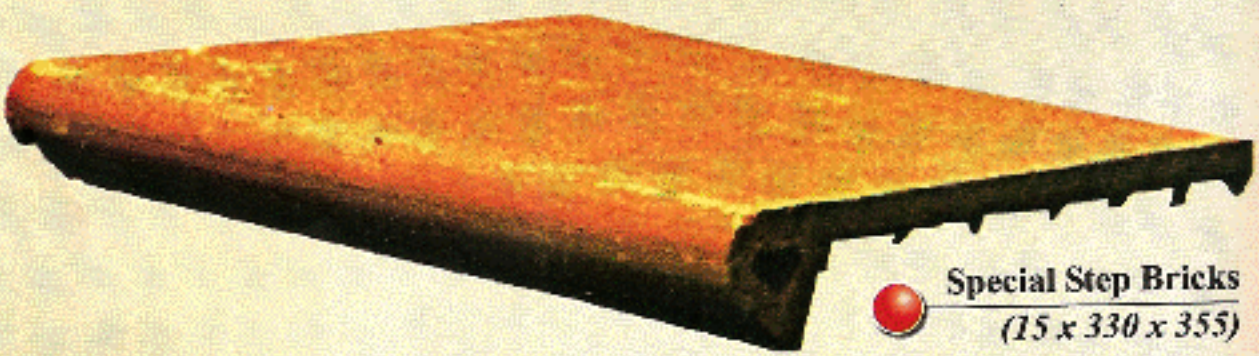


Burnt Roof Bricks

(30 Number Pieces x Mtr. Sq)



BURNT FLOOR BRICKS
15 x 330 x 330mm



Special Step Bricks
(15 x 330 x 355)

FLOWER POTS

RC 2610

ROOFING BRICKS

ECONOMICAL - MAINTENANCE FREE-NON RUSTING-LONG OUTSTANDING BEAUTY-COOLESS AND DURABILITY

ROOFING BRICKS

DETAILS AT EAVES