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MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	2438	Press	<i>Sign</i>
B.P. No.		Mis.	
Dated	25-8-	1875	
		195	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
25th August 1875.*

No. 426 Read the following Circular letter from Colonel W. A. CROMMELIN, R.E., Deputy Secretary to the Government of India, Public Works Department (Military Works), to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and the Punjab, in the Public Works Department; the Chief Commissioners of Oudh, Central Provinces, British Burmah, Mysore and Coorg, and Assam; the Resident at Hyderabad; the Agents of the Governor-General for Central India and Rajpootana; the Superintendent of Port Blair and Chief Commissioner, Andaman and Nicobar Islands; the Inspector-General of Military Works, dated Simla, 19th July 1875, No. 45 :—

I AM directed to forward, for information and guidance, standard plan of a kneading room for a bakery for 1,500 men, with rules for calculating dimensions of kneading rooms and number of ovens with reference to strength of garrison.

No. 427. ORDER THEREON, 25th August 1875, No. 2,438.

MILITARY WORKS, No. 18.

COMMUNICATED to District Engineers
and to the Military Department for
information and guidance.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,

Secretary to Government.

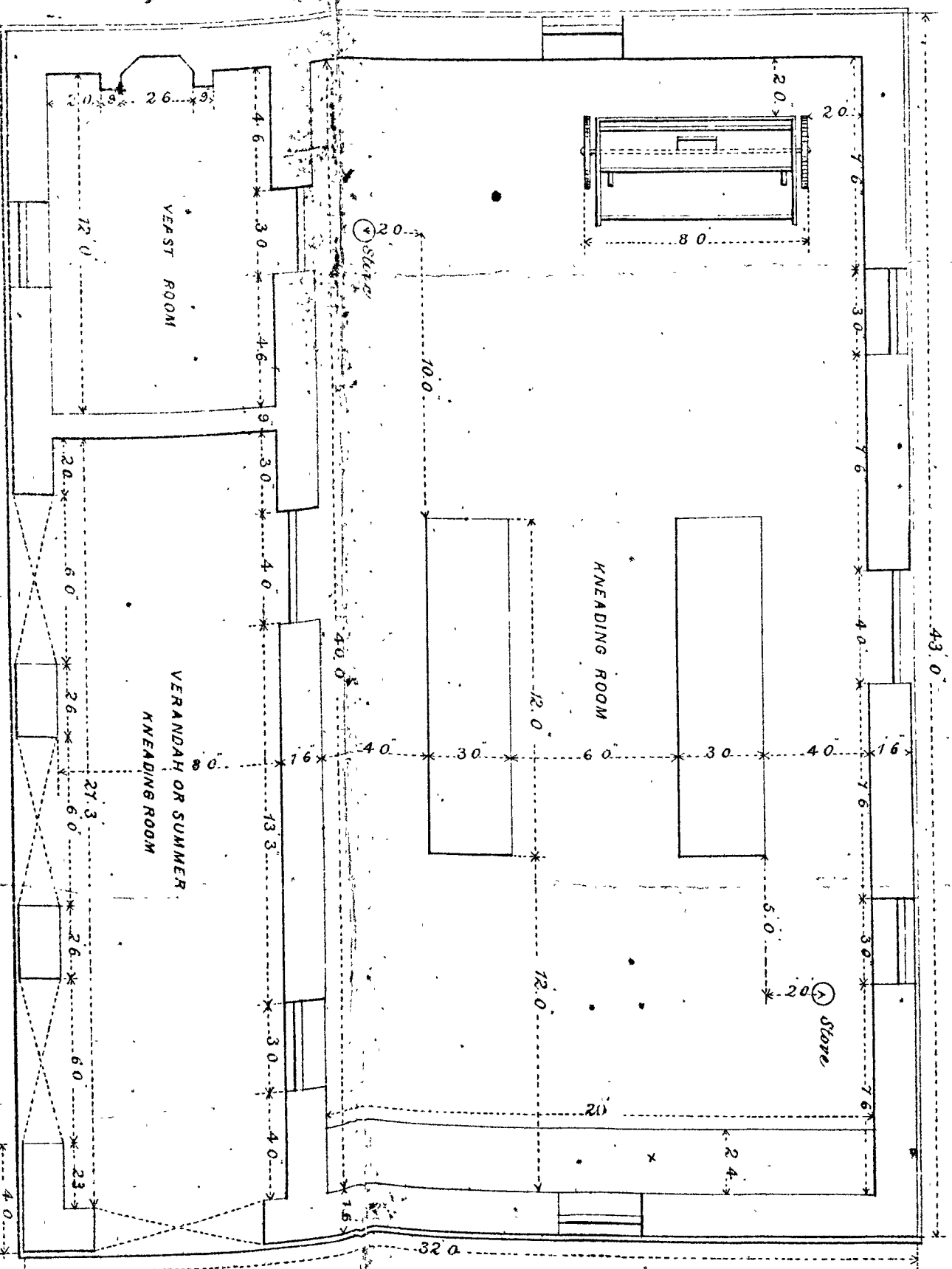
To all Superintending and District Engineers.
To the Executive Engineer, Wynaad.
„ Military Department.

Exd. E. C. Shunker.
Spare Copies

MILITARY STANDARD PLAN
KNEADING ROOM FOR A BAKERY
FOR 1500 MEN

Scale 5 feet to one inch

Main roof pent height to the beam 10 ft.
Verandah roof flat height to beam 9 ft.
The description of roofs to be suited to the locality.
The Yeast room is a portion of the verandah enclosed.
The Summer kneading room or verandah is not
required at Hill Stations.
* Shelves or dough racks 5 or 6 are required.



Rules, &c., for guidance in calculating size of Kneading Rooms and number of Ovens with reference to strength of Garrison.

- I.—Each Soldier receives one loaf daily.
II.—One man of flour represents about 100 loaves, rather more than less.
III.—Each kneader kneads 10 seers of flour per batch, or equal to 25 loaves.
IV.—Each oven (standard blast pattern) holds 125 loaves at a batch.
V.—A kneader requires 18 inches square of table. Thus a table 3 feet broad and 12 feet long would accommodate 16 kneaders = 400 loaves per batch.
VI.—For calculating permanent space, reckon 2 batches of bread, though on emergency, such as a temporary increase of Garrison, 3 batches would answer.
This margin also permits of a portion of the table or ovens being under repair, which is almost always the case with ovens.
VII.—The tables should be of masonry with stone slabs as tops, and it is important that the top should overtop the masonry, as it is found that, if it does not, the dough sticks to and corrodes the mortar, which rapidly falls away.
VIII.—Having determined the extent of table required, then arrange them in the best way possible, either in one or two rows, leaving about 6 feet between the rows, and say 4 feet between them and the walls, so that the kneaders may have sufficient working room.
IX.—At one end of the room, at least 2 feet from the wall, place the kneading machine, which, if of large size, would occupy say 5 feet of length of room, 4 feet from this the head of the kneading table (or table if in two rows) may be placed (6 feet would be better); one or more American stoves should be placed in the room, so as to keep up, as far as possible, an equal temperature of 82° to 84° Fahr., and yet not to be too close to the kneaders to inconvenience them. From the end of the furthest table or tables, leave a space of 10 feet to the end wall, and along the end wall arrange 5 or 6 rows of skeleton shelves 21 inches or, if necessary, 28 inches deep, for the dough cakes to be placed on whilst undergoing fermentation. The space 83" thus left free, with the spaces on either side of the
- kneading tables, will be sufficient for the process of weighing out the dough and breaking it into dough cakes, each of which occupies a space 7 inches square, &c., a dough cake 7" diameter.
NOTE.—The kneaders perform this duty, so that, until it is completed, the kneading tables for the succeeding batch are not again occupied.
- Example in illustration.
For a Garrison of 1500 men.
Rule I.—1,500 soldiers = 1,500 loaves.
2.—1,500 loaves = 15 manna flour.
3.—15 mds. flour = 60 kneaders, or 30 men per batch. (there being two batches).
4.—1,500 loaves = 750 loaves per batch.
118 loaves = 6 ovens.
118 loaves = 2 spare.
Total 8 ovens required.
5.—eg. = 15 men x 17.6" = 226" of kneading table 3 feet broad, or say two rows of table 12 feet long.
Total of room ... 40
- | | Feet. |
|--|-------|
| X.—From end wall to kneading machine | 2 |
| Kneading machine and tubs | 8 |
| From ditto to kneading table say | 6 |
| Kneading table | 12 |
| Space for stoves (if necessary, to divide the length of the tables) | 2 |
| From end of kneading table to end wall and including space for dough racks | 10 |
| Total of room | 40 |

L. R. CHRISTOPHER, Colonel,

Deputy Commissary General C. C.

W. A. CROMMELIN, Colonel, C. B., R. E.,

Inspector General of Military Works and Deputy Secretary.

15/25/95

90-25 August 1955

15/25/95

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At the geographic Dept

No 2231

P. W. 1875 Sept
No: 5527

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
MILITARY WORKS.

To

THE GOVERNMENTS OF MADRAS, BOMBAY,
BENGAL, THE NORTH WESTERN PROVINCES
AND THE PUNJAB, IN THE PUBLIC WORKS
DEPARTMENT.

THE CHIEF COMMISSIONERS OF OUDH, CENTRAL
PROVINCES, BRITISH BURMAH, MYSORE AND
COORG, AND ASSAM.

THE RESIDENT AT HYDERABAD.

THE AGENTS OF THE GOVERNOR GENERAL FOR
CENTRAL INDIA AND RAJPOOTANA.

THE SUPERINTENDENT OF PORT BLAIR AND
CHIEF COMMISSIONER, ANDAMAN AND NICO-
BAR ISLANDS.

THE INSPECTOR GENERAL OF MILITARY WORKS.

CIRCULAR No. 45 PUBLIC WORKS.

Dated Simla, July 19, 1875.

Received

Aug 1. 27 - 3 M 11

Kneading-room for a bakery for 1,500 men.

No. 139, P. W. D. Press—28-7-75—553.

With Order

Nothing kept for information and guidance.

Communicated to Richard Rogers and to the

No. 2438

July 1875

25 Aug 75

170

and

and

2426/7

24. Sept 19 Aug 75

25 Aug 75 50 with the usual 200 P. W. D. Press 28-7-75-553

10552

Sept. of 1875

PUBLIC WORKS.

To

Dated

Issued

Recd.

Each

U. S. 35th Regt. 1868

Box 437-43

Standard Plan of a Breaching
Room for a Battery for 1500
men. - Letter from the Comdg.
Genl. forwarding - with
rules for calculating dimensions
with reference to strength of
garrison, Comm'd to the B. Regt.
& the only kept for information
and guidance.

2 copies of the order - 1 from

at 29-45
as directed