

UNIFORM CODE.—TIMBER BUILDINGS.

1. Foundations shall be either continuous concrete walls not less than 8 in. in thickness, or concrete or durable timber piles having a cross-sectional area of not less than 64 sq. in., spaced not more than 4 ft. apart under wall and sleeper plates.

2. Outside foundations shall be sunk to a uniformly solid bed, but shall not be less than 18 in. in the ground in the case of piles to outer walls, and shall have the earth well rammed and consolidated round them.

3. Where foundations are in poor ground they shall be of concrete reinforced in the following manner: Continuous external walls shall have not less than two $\frac{3}{4}$ -in.-diameter steel rods embedded near the top and a similar number of $\frac{3}{4}$ -in. rods near the bottom, and these walls shall be tied to the opposite external walls at intervals of approximately 16 ft. by similar concrete walls not less than 6 in. thickness reinforced with one $\frac{3}{4}$ -in.-diameter rod at top and bottom, which shall be hooked over the rods in outer walls. Reinforcing-rods in external walls shall be bent round angles and all rods shall be hooked at ends, lapped forty diameters, securely bound with No. 14 gauge black wire at joints, and laid perfectly straight.

4. Piles extending 18 in. or more out of the ground shall have longitudinal walings of 4 in. by $1\frac{1}{2}$ in., or equivalent section, bolted with $\frac{1}{2}$ in. bolts to concrete or well spiked to wooden piles on each side of piles at ground-level, and the end bays shall have 4 in. by 3 in. diagonal braces between the bottom wallplate and these walings. Walls over 30 ft. in length shall have two similar intermediate braces in reversed directions. Similar walings and braces shall be inserted to pile rows at approximately 16 ft. intervals between external walls in each direction. If the base boards are $1\frac{1}{4}$ in. or more in thickness the outer waling may be omitted. (See fig. 1.)

5. All corners of external walls shall be diagonally braced in a horizontal plane at all floor and ceiling levels. Bracings shall extend between points distant not less than 6 ft. from the corner along each wall.

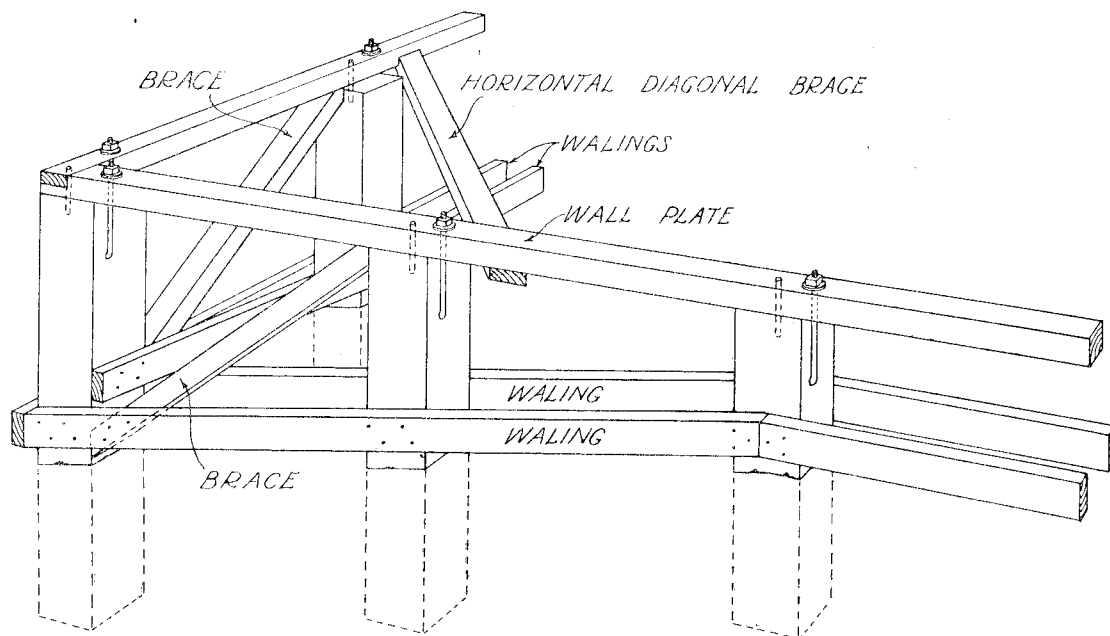
6. Bottom or bearing plates in external walls shall be not less than 3 in. in depth where piles are used or 2 in. in depth on continuous concrete foundations.

7. Bottom plates in outer walls shall be bolted to foundations at not more than 4 ft. centres. Dog-bolts and dowels shall be used for wooden piles. (See fig. 2.)

8. All external and internal walls and partitions shall be braced.

9. All floor and ceiling joists shall be properly framed to give continuous longitudinal ties not more than 9 ft. apart in both directions.

10. Gabled roofs shall be braced longitudinally. (See fig. 3.)



BRACING TO WOODEN PILES.

FIG. 1.

UNIFORM CODE.—BRICK BUILDINGS.

1. *Bricks.*—All bricks shall be sound well-burned kiln bricks, free from defects, and suitable in all respects for the work in which they are intended to be used. All bricks shall be of uniform size throughout any structure or integral portion thereof. Where bricks are made with frogs, these shall be confined to one side of the brick only, and shall not be of greater depth than $\frac{3}{8}$ in.

2. *Mortar.*—Mortar shall consist of not less than one part of cement or cement-lime mixture to three parts sand, and in no case shall the cement-lime mixture contain more than one-third lime.