SECTION 59.—The thickness of external or party walls, when built of rubble masonry, shall be seventy-five per cent. in excess of the thickness for brick walls mentioned in the preceding tables, but in no case shall a stone wall be less than twenty inches in thickness.

In any external wall built of brick and faced with stone, ashler, or courses, the said ashler or courses shall be considered as equal to four inches of brickwork, in estimating the thickness of the wall.

SECTION 60.—In all buildings, fifty feet in width in which the external walls are not buttressed or supported by brick partition walls, or by girders running at right angles to the wall and resting upon it, they shall be increased four inches in thickness greater than mentioned in the preceding tables, and for every additional fifty feet or fraction thereof in width of said building unsupported by brick partition walls or girders, there shall be an additional increase of four inches in the thickness of said wall.

SECTION 61.—External or party walls, one hundred feet or over in length, which are not strengthened by cross walls or buttresses equal in height to the wall, shall be four inches thicker than mentioned in the preceding tables.

DIVISION OF BUILDINGS BY BRICK PARTITION WALLS.

SECTION 62.—All second class buildings, hereafter built, shall be so divided by brick partition walls, of the thickness prescribed in the preceding tables, that no space inside of such building shall exceed in area ten thousand square feet; all such partition walls shall be carried not less than twelve inches above the roof at every point.

No existing wall in any second class building shall be removed so as to leave an area not enclosed with brick-walls of more than ten thousand superficial feet.

STRENGTHENING WALLS BY PIERS OR BUTTRESSES.

SECTION 63.—The external walls of business premises, manufactories, and warehouses, in which the area of the openings is equal to sixty per cent. or over of the face of the wall, and where the wall is not supported by brick cross or partition walls, at intervals of twenty-five feet or under, the same shall be reinforced by piers or buttresses, or shall be increased in thickness.

SECTION 64.—If any storey in any building of the first or second class, used as a dwelling, exceeds in height sixteen times the thickness prescribed in the preceding table No. 3, of Section 58, the thickness of such external or party wall throughout such storey, shall be increased to one sixteenth part of the height of the storey, and in buildings used for warehouses and manufactories, the increase shall be in the proportion of one-fourteenth part of the height of the storey, but such additional thickness may be confined to piers properly distributed, of which the collective widths shall amount to one fourth part of the length of the wall.

PARTY WALLS.

SECTION 65.—Every party wall shall be built through and to at least one foot above, and distant from the roof boarding at every part of roof, and shall rise to the same height above any skylight, hatch, or other construction on the roof, which is contiguous to the wall.

SECTION 66.—Every party wall shall be corbelled to the outer edge of all eaves, or other projections, with brick, stone, or other incombustible materials, in such manner as approved, and as will effectually prevent fire from being carried from one building to another, by the eaves or cornices.

SECTION 67.—In no case shall a party wall, above the ceiling of the upper storey in a dwelling house, be less than eight inches in thickness, and in warehouses, manufactories or business premises, less than twelve inches.

SECTION 68.—The top of all party or other walls, projecting above a roof, shall be covered with incombustible material.

SECTION 69.—Openings in party walls, or in partition walls described in sections Nos. 62 and 65, shall not exceed two in number in any storey, and the combined area of such opening in each floor shall not exceed one hundred and forty superficial feet.

SECTION 70.—All such openings in party or partition walls, shall be fitted with wood doors, entirely covered with bright tin, or fitted with two iron doors, one placed on each side of the wall, said doors to be made of sheet iron not less than No. 16 guage, properly riveted to iron frames of suitable size. The said doors, whether of wood covered with tin, or wholly of iron, are to be hinged to suitable frames, firmly fixed to the wall, or they are to slide on suitable pulleys and hangers, all as prescribed by the rules of the Fire Underwriter Association.

SECTION 71.—Roof or floor timbers entering opposite sides of a party wall, shall have at least four inches of solid brickwork between the ends of said timbers.

SECTION 72.—No recess shall be made in any party wall which is only eight inches thick, and in no case shall a recess be made of more than four inches in depth in any party wall which is twelve inches thick, nor more than eight inches in depth in any wall that is sixteen inches or over in thickness.

No such recess shall be over six feet in width and in all cases such recesses must be made vertical.

Should it be necessary to make recesses of greater depth than above mentioned, or should it be necessary to make them diagonally across the wall, they can only be so made by consent of the inspector.

The aggregate area of recesses in any wall shall not exceed one-fourth of the whole area of the face of the wall, on any storey, nor shall any recess be made within a distance of 6 feet from any other one in the same wall, without the approval of the building inspector.

SECTION 73.—In all party or division walls in buildings used as business premises, manufactories, or warehouses, and in all public buildings, the walls shall be corbelled on each side not less than three inches, to receive the floor joists, said corbelling not to be less in height than four courses.

SECTION 74.—In the case of buildings expropriated by the corporation for the widening of streets, or when from any other cause it is necessary to remove one-third of the depth of any existing building, the party wall of the remaining portion of said building, if not already built in conformity with this by-law, shall be demolished throughout its whole extent, and rebuilt in compliance with the provisions of the said by-law.

And should the remaining portion of said building other than the party wall not be in accordance with this by-law, it shall be demolished, and if rebuilt it shall be built in conformity with the provisions of this by-law.

HOLLOW WALLS AND WALLS LINED WITH POROUS TERRA COTTA.

SECTION 75.—External walls may be built hollow, provided the said walls contain not less than sixteen inches in thickness of solid brick, say eight inches of solid brick on each side of an air space, or with twelve inches on the outside and four inches of solid brick work on the inside of an air space; the walls on each side of the air space are in all cases to be securely tied together with brick or metal ties, placed not more than two feet apart.

SECTION 76.—External or party walls lined on the inside with porous terra cotta shall be of the thickness prescribed by this by-law, exclusive of the thickness of the terra cotta. In all cases where a wall is lined with terra cotta, the terra cotta is to be firmly secured to the solid wall by headers of brick or terra cotta, or by iron cramps, placed not more than two feet apart.

PIERS OR COLUMNS SUPPORTING WALLS.

SECTION 77.—When any external wall or portion thereof is supported on piers, columns, or pillars, such pier, column, or pillar shall be of stone, brick, steel, iron, or other incombustible material, and of sufficient size and strength to safely carry the load upon them. Should the piers be of brick, and less than nine square feet in area, they shall be capped with a stone not less than six inches thick, or an iron plate not less than 1½ inches thick, and the full size of the piers; said piers, if over six feet in height, shall have bond stones of the full size of the pier built into them at intervals of not over three feet apart; should the piers front on a street, the bond stones may conform to the kind of stone used for the trimmings of the front.

SECTION 78.—Any column or pillar of metal, supporting an external wall or portion thereof, shall rest upon a dressed stone base not less than twelve inches thick, or upon an iron plate and stone base combined, and the said base shall be of such dimensions as will safely support the column and wall resting upon it; the said column or columns, if supporting a wall twenty inches or over in thickness, shall be either constructed double, that is, an outer and inner column, the two combined to be of sufficient strength to sustain safely the weight to be imposed thereon, or such other iron or steel column of sufficient strength, and so protected as to secure resistance to fire.

METAL COLUMNS SUPPORTING BEAMS OR INTERNAL WALLS.

SECTION 79.—Iron or steel columns supporting beams or girders, elsewhere than in external walls, shall rest upon stone blocks or iron plates of sufficient size and thickness to properly distribute the load upon the wall on which the column rests; if the load is to be distributed directly on the ground, footings of stone are to be made below the column, as provided for in section No. 46.

Cast iron columns set one above the other shall have proper flanged connections, and bolted together; all bearing parts of columns or plates shall be planed or turned to true surfaces; no