CONVERSIONS OR ALTERATIONS OF SINGLE-FAMILY DWELLING TO DUPLEX

Minneapolis Construction Code Services
Informational Bulletin

Revised January 2009

UNIT SEPARATION

IRC Section R317: Dwelling units in two-family dwellings shall be separated from each other by wall and/or floor assemblies having not less than 1-hour fire-resistance rating when tested in accordance with ASTM E 119.

IRC Section R317.4.1: Walls and floor-ceiling assemblies separating dwelling units from each other and common areas such as stairway, corridors, dwelling unit entrance doors, etc. shall meet Airborne Sound Transmission Class (STC) rating of STC 45 when tested in accordance with ASTM E 90.

NOTE: Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating, or exhaust ducts shall be sealed, lined, insulated, or otherwise treated to maintain the required ratings.

IRC Section R317.4.2: Floor-ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within a structure shall have an Impact Insulation Class (IIC) rating of not less 45 when tested in accordance with ASTM E492.

New construction or removal of existing plaster/wallboard requires installation of an approved design/assembly.

Where existing walls and floor-ceiling assemblies are to remain intact, the following upgrade will be permitted.

Floor-ceiling: Apply one (1) layer of 5/8" Type "X" gypsum wallboard to resilient channels, 24" o.c., over existing plaster/wallboard ceiling surface.

Walls: Apply one (1) layer of 5/8" Type "X" gypsum wallboard to resilient channels, 24" o.c. on one side. On opposite side, apply one layer 5/8" gypsum wallboard to existing plaster/wallboard wall surface.
Note: If walls are existing stair walls, apply one (1) layer of 5/8" Type "X" gypsum wallboard to resilient channels @ 24" O.C. to interior side of dwelling unit wall.

FLOOR AREA

IRC Section R304.1:
Every dwelling unit shall have at least one habitable room that shall have not less than 120 square feet of gross floor area.

IRC Section R304.2:
Other habitable rooms shall have a floor area of not less than 70 square feet.
Exception: Kitchens

IRC Section R304.3:
Habitable room shall not be less than seven (7) feet in any horizontal dimension.
Exception: Kitchens

Minneapolis Code of Ordinance Section 244.40 requires the following:

Each dwelling unit must have a kitchen with a sink, and a bathroom with a water closet, lavatory, and either a tub or shower, with both hot and cold running water.

Minneapolis Code of Ordinance Section 244.810

Room exclusively for sleeping must have a minimum of

70 sq. ft. for one person
90 sq. ft for two persons
50 sq. ft for each additional person (maximum 4)

Other habitable rooms must have a minimum floor area of 70 square feet, except kitchens, baths, closets and other similar rooms.

No habitable rooms can be less than 7 feet in width, except kitchens. (Baths are not considered habitable rooms.)

Efficiency units must have a living room of not less than 220 square feet of superficial floor area, with 100 square feet for each additional occupant in excess of two. An efficiency unit must have a separate closet and a private bathroom.

Minneapolis Code of Ordinance Section 244.830

An occupant of a dwelling unit cannot be required to pass through any bedrooms or bathrooms to get to their bedroom or bathroom, or to any other room in the unit.

Dwelling Unit Continuity:

In buildings with two or more dwellings, unit continuity is required. Dwelling unit design shall be such that access to all portions of a dwelling unit is provided without passing through common areas.

CEILING HEIGHTS

2006 IRC Section R305:

All ceiling heights must have a minimum height of seven (7) feet including kitchens, baths, halls, closets, etc.

For a sloping ceiling, the seven (7) foot dimension must be at least 50% of the floor area. The floor area is measured from where the ceiling is at least 5 feet high.

EGRESS

2006 IRC Section R310:

Every sleeping room must have at least one operable window or approved door to the exterior. A window must have MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. Within this total figure, the minimum height of the opening has to be 24 inches; the minimum width, 20 inches. The sill height of the window shall not exceed 44 inches above the finished floor.

LIGHT AND VENTILATION

2006 IRC Section R303:

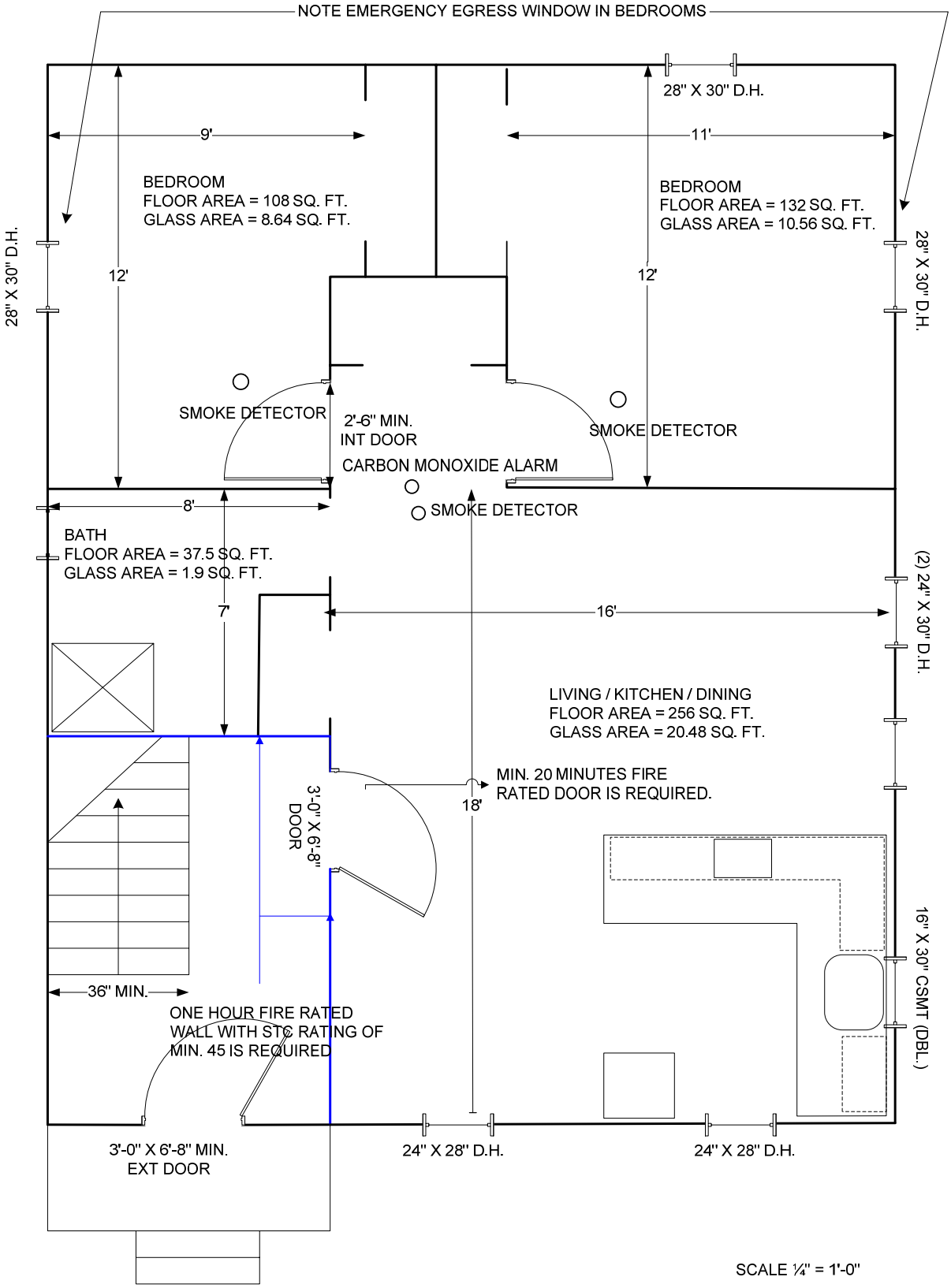
For light, there must be glass totaling 8% of the floor area in every habitable room of the dwelling unit.

For ventilation, an amount equal to half (1/2) of the total area of the glass must be openable (4% of the floor area). Bathrooms, laundries, and similar rooms must be provided with exterior openings of an area not less than three (3) square feet, unless there is an adequate mechanical ventilation system.

For purposes of light and ventilation, if rooms adjoin, they can be considered a room if one half of the area of the common wall is open and unobstructed and is 10% of the floor area of the interior room or 25 square feet, whichever is greater.

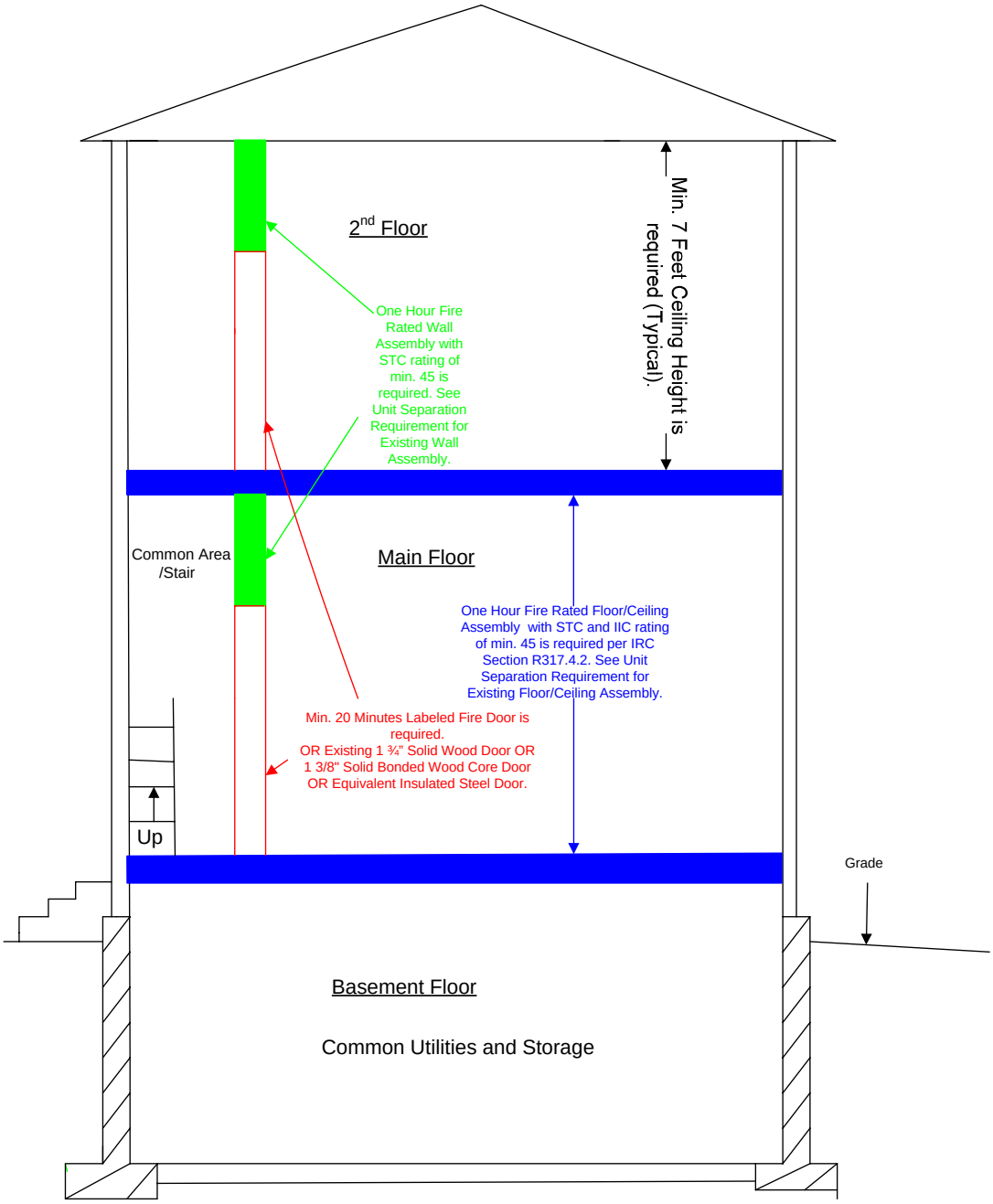
NOTE: A sewer availability charge (SAC) will be added to the permit cost at the current adjusted calendar rate.

Floor Plan



(Include Plans for all other floors).

Typical Dwelling Unit Section Plan with Fire and Sound Separations.



(Not to scale).