



**SOUND AND FIRE-RATED ASSEMBLIES
AT COMMON WALLS AND FLOOR/CEILINGS**
Minneapolis Construction Code Services
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**DRYWALL / PLASTER REMOVAL OR REPLACEMENT AT COMMON WALLS OR AT
CEILINGS COMMON TO UNITS OR COMMON AREAS ABOVE:**

When 50% or more of the drywall or plaster finish on an existing common wall or ceiling in any room is removed, the entire wall or ceiling of that room must meet sound and fire rated construction requirements as required per the IBC (or per the IRC for two-family dwellings or townhouses).

Sound Transmission, IBC Section 1207.2 Air-borne sound: Walls, partitions and floor-ceiling assemblies separating dwelling units from each other or from public or service areas such as stairway, corridors, etc. shall meet Airborne Sound Transmission Class (STC) rating of STC 50 (45 if field tested) 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. This requirement shall not apply to dwelling unit entrance doors; however, such doors shall be tight fitting to the frame and sill.

Fire- Resistance-Rated Construction, IBC Section 708.1 and 711.3:

Walls and floor assemblies separating dwelling units in the same building or sleeping units in occupancies in Group R-1, hotel occupancies, R-2 and I-1 shall be a minimum of 1 hour fire-resistance-rated construction.

Exception:

Dwelling unit and sleeping unit separations in buildings of Type IIB, IIIB and VB construction shall have fire-resistance ratings of not less than ½ hour in buildings equipped throughout with automatic sprinkler system in accordance with IBC Section 903.3.1.1.

Note: When repairs are to buildings with existing rated assemblies, those assemblies shall not be reduced.

FLOORING / FLOOR COVERING:

When carpeting is removed from a floor (at a common floor/ceiling) and is to be replaced with a hard surface flooring (wood, vinyl, tile etc.) an impact sound assembly meeting 1207.3 is required.

Sound Transmission, IBC Section 1207.3 Structure-borne sound: 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 50 (45 if field tested) when tested in accordance with ASTM E492.

Assemblies listed by Underwriter Laboratories or other approved testing agencies can be found in a variety of sources including the UL Manual, Gypsum Association Manual (GA Manual) and others.