



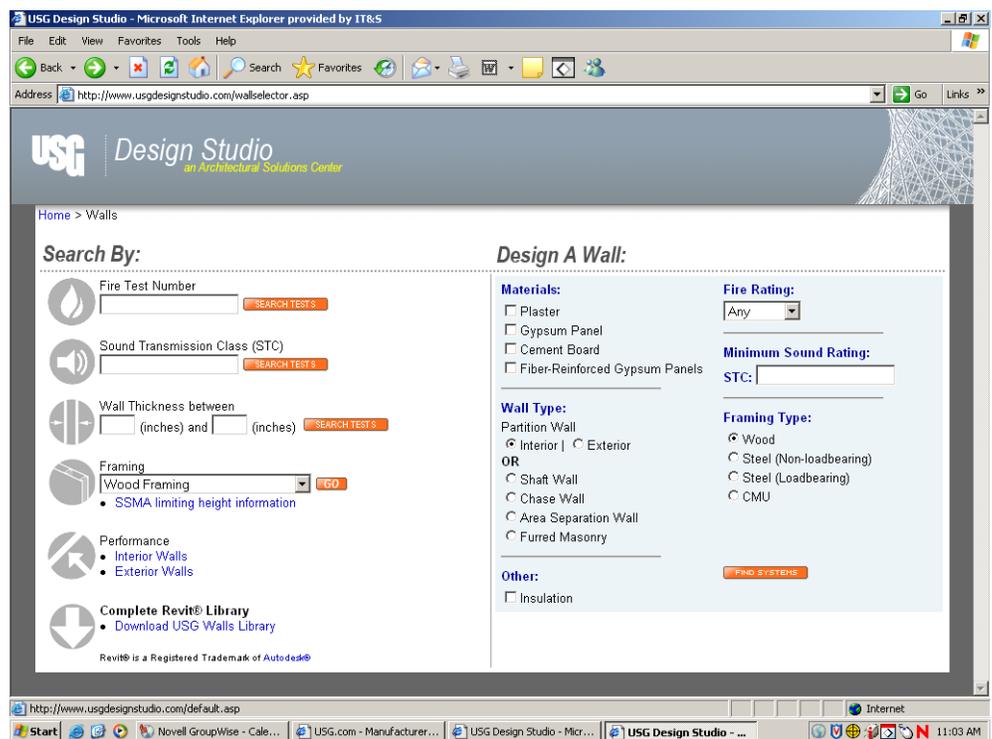
CITY OF HELENA BUILDING DIVISION



Miscellaneous "BITS" of information that may be of interest to the City of Helena Contractors and Design Professionals December 2007



FIRE RATED ASSEMBLIES used in construction must comply with type of wall requirements of Section 704 through Section 710 and for horizontal assemblies of Section 711. Each section contains a sub-section on "Continuity". The assembly continuity is what makes the effective barrier in the migration of fire in a structure. Please review these subsections carefully to understand the full continuity requirements of each rated assembly in your building. There are several approved agencies with assemblies that could be used in addition to Section 720 in the 2006 International Building Code. Assembly numbers and types will be reviewed during the plans review process for type and location. Sufficient details must be provided on the plans in order to review the assemblies and how the continuity is achieved through the structure, (wall-to-floor-to wall, etc). Penetrations into or through rated assemblies shall comply with rated penetration requirements as listed in Section 712 and R317.3. Copies of the approved listed assemblies must be on site for the City Inspectors to verify the installation of the rated assembly and to ensure compliance with the continuity requirements. There are several other resources available for selecting assemblies including those listed in the codebook. The following is a web site for US Gypsum that could assist in selecting an assembly for your project - <http://www.usgdesignstudio.com/wallselector.asp>.



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FIREBLOCKING – Definition: "Building materials installed to resist the free passage of flame to other areas of the building through concealed spaces." IBC Section 717 and IRC, Section R602.8. See specific code sections for exact wording. Fire blocking shall be provided in the following location:

- In concealed spaces of walls and partitions, furred spaces and parallel rows or staggered studs,
- Vertically at the ceiling and floor levels, and horizontally at intervals not to exceed 10 feet,
- At all interconnections between concealed vertical and horizontal spaces, (ex. soffits, drop ceilings and cove ceilings),
- At concealed spaces between stair stringers at the top and bottom of the run,

- At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, at chimneys and fireplaces and at cornices of multi-family dwelling units in line with dwelling unit separation.
- IBC Section 717 and IRC, Section R602.8.1 – Acceptable materials for fire blocking shall consist of:
- 2” nominal lumber or 2 thicknesses of 1” nominal lumber with broken lap joints or
 - 1 thickness of $2\frac{3}{32}$ ” wood structural panels or $\frac{3}{4}$ ” particle board with joints backed by the same or
 - $\frac{1}{2}$ ” gypsum board or $\frac{1}{4}$ ” cement-based millboard or
 - Batts or blankets of mineral wool or glass fiber shall be installed in a manner as to be securely retained in place, (just friction-fit is not acceptable), and is permitted for compliance with the 10’ horizontal fire blocking of parallel rows or staggered studs. Insulation shall fill the entire cross section of the wall cavity. Where batts or blankets of mineral wool or glass fiber are used as fire blocking, it shall be densely compacted into the void so that materials installed prevents the movement of fire, smoke and gases to other areas through concealed spaces.
 - Spray foam materials may only be used if the product has been tested and approved for use as a fire blocking material. Manufacturer’s data must be on site and available for inspector to review when the inspection is made.



During the construction phase of a project, the electrical panel boards shall have an OSHA approved cover installed at all times and only accessible only to qualified persons, (29 CFR 1926 OSHA, Construction Industry Regulations, Section 1926.405(d)). The use of a cardboard front is not an approved method. Though the City of Helena does not enforce OSHA requirements, we believe this information is important to share with the building community. OSHA approved temporary panel covers are available through the electrical supply warehouses. These are a magnetic type with specific instructions that must be followed to comply with the OSHA requirements.



Placing the main electrical panel box in the garage/dwelling separation wall creates installation problems and questions and should be avoided if at all possible. When unavoidable, where electrical service panels are located in the garage/dwelling separation wall, the wall construction behind the panel box must still have at a minimum, 2x2 framing and one layer of $\frac{1}{2}$ ” gypsum board on the garage side. On each stud face of the electrical panel cavity, there shall be $\frac{1}{2}$ ” gypsum board. Any penetrations of the gypsum board from the garage to the residence shall be treated as required in Section R309.1.2. The Building Division may approve other protection applications when submitted for review.



For those who are doing commercial projects and the project includes a handicap accessible toilet room, the ICC/ANSI A117.1 – 2003, Section 604.5.1 now requires a vertical grab bar to be installed above the sidewall grab bar.



INSPECTIONS - Building and utility inspections are to be scheduled through the Building Division main office at 447-8437 or 447-8438. Inspections will be scheduled for AM or PM only. Inspectors will organize their inspections by route on a daily basis to ensure efficiency through the day. Required inspections are listed on the Inspection Record Card or on the permit stamp. IBC Section 109.6 and IRC Section R109.4 states, “work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official.” Any portions of an inspection that does not comply with code requirements shall be corrected and shall not be covered or concealed until approved by the inspector. Failure to call for inspections and obtain approval of required inspections may result in the required removal of material to inspect areas of the structure for which the inspection was not approved.

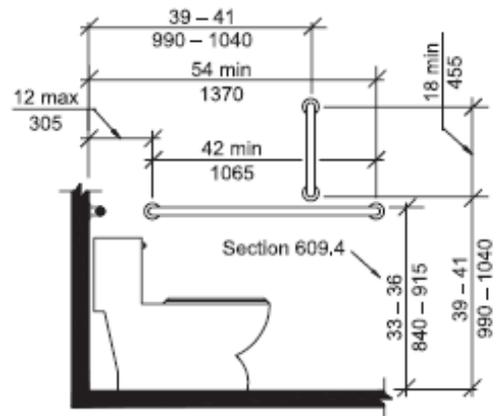


Fig. 604.5.1
Side Wall Grab Bar for Water Closet

Please help us to serve you better by calling for inspections when the work is complete and you are ready. Inspection requests made when you are not ready wastes valuable inspection time and limits our ability to perform inspections efficiently throughout the day.