

Residential Drywall

This tip sheet reflects code requirements of the 2021 International Residential Code (IRC) with Washington State Amendments, the 2021 edition of the Washington State Energy Code-Residential (WSEC-R)

Drywall inspections are only required for garage separations and gypsum board shear walls. The scope of the inspections may vary per jurisdiction.

Permits and Plans

- Job address shall be posted in a visible location. (R319.1)
- Permit and approved plans are on site and accessible to the inspector. (R105.7, R106.1.1, R106.3.1)
- Previous required inspections are signed off. (R109.4)

General Nailing and Screwing

- All fasteners are approved gypsum board type. (R702.3.5, IRC Table 702.3.5)
- All screws are gypsum board type "W" or "S" unless otherwise noted and long enough to penetrate a minimum of 5/8 inch into wood and 3/8 inch into steel. (R702.3.5, IRC Table R702.3.5)
- The nailing pattern on walls is 8 inches on center at the ends and in the field. The nailing pattern on the ceilings is 7 inches on center at the ends and in the field. (IRC Table R702.3.5)
- For walls framed at 16 inches on center, the screw pattern is 16 inches on center. For walls framed at 24 inches on center framing, the screw pattern is 12 inches on center. (IRC Table R702.3.5)
- The screw pattern on the ceiling is 12 inches on center for framing spaced at 16 inches or 24 inches on center. (IRC Table R702.3.5)
- Gypsum shearwalls are installed per approved plans and the prescriptive wall bracing requirements of IRC chapter 6. (R702.3.6)
- The drywall ends break over the framing. (R702.3.5)

Water-Resistant Gypsum Backing Board

- Use of water-resistant gypsum backing board is permitted on ceilings. Cut or exposed edges, including those at wall intersections, are to be sealed as recommended by the manufacturer. (R702.3.7)
- Water-resistant gypsum backing board shall not be installed over a vapor barrier in a shower or tub compartment. (R702.3.7)
- Water-resistant gypsum backing board shall not be used where there will be direct exposure to water, or in areas subject to continuous high humidity, such as saunas, steam rooms, indoor pools, etc. (R702.3.7.1)
- Cement, fiber-cement or glass mat gypsum is to be installed in accordance with manufacturers' recommendations are to be used as backers for wall tile in tub and shower areas and wall panels in shower areas. (R702.4.2)

Garage Separation

- Garages beneath habitable rooms are separated from habitable rooms above by 5/8 inch X gypsum board or equivalent. See Construction Tip Sheet 6. (R302.6)
- The nailing pattern is 6 inches on center using 1-7/8-inch 6d cooler nails (or equivalent screws) for 5/8 inch type "X" drywall on the garage side of the ceiling separation beneath habitable rooms. (Table R702.3.5)
- Framing supporting garage ceiling separation from habitable space is protected by 1/2-inch gypsum board. (IRC Table R302.6)
- Any ducting penetrating the wall or ceiling between the house and garage, that is not a minimum 26-gauge sheet metal, is enclosed within a protective assembly such as a shaft, chase, or soffit and has no openings into the garage. (R302.5.2)