



**INSPECTION CHECKLIST
Residential Insulation**

January 2005

2003 Codes

Please verify the following before calling for the insulation inspection. This checklist is intended for use to prepare for an inspection. This is only a general list and is not intended to address all possible conditions. References are to the 2003 International Residential Code (IRC), and the 2003 Washington State Energy Code (WSEC). (IRC sections referenced as (R)).

Permits and Plans

- Job address is posted in a visible location. (R321.1)
- Permit and approved plans are on the site. (R106.3.1 and R105.7 or local ordinance)
- Previous required inspections are signed off. (R109.4 or local ordinance)
- Note corrections left which need to be addressed at this time.
- Plans have been reviewed for insulation requirements. (WSEC 104)

General

- The newly constructed area is dried in (roofing is complete and exterior moisture barriers are installed). (R701.2)
- Insulation is installed at roof, walls, and floors at the thickness indicated per prescriptive requirements unless superseded by the approved plans. (WSEC 104 & 602)
- Prescriptive Insulation Requirements for Residential Occupancies. (WSEC Table 6-1)

Ceilings ¹	Vaulted Ceilings ²	Wall Above Grade	Wall interior Below Grade ³	Wall exterior Below Grade ³	Floor	Slab on Grade ³
R-38	R-30	R-21	R-21	R-10	R-30	R-10

1. Requirement applies to all ceilings except single rafter or joist vaulted ceilings.
2. Requirement applicable only to single rafter or joist vaulted ceilings.
3. Below grade walls shall be insulated either on the exterior to a minimum level of R-10, or on the interior to the same level as walls above grade. Exterior insulation installed on below grade walls shall be a water resistant material, manufactured for its intended use, and installed according to the manufacturer's specifications.

- Any insulation with facings, vapor barriers, or breathable papers, installed within floor/ceiling or roof/ceiling assemblies, walls, crawl spaces, under-stair voids, or attics, has a flame spread rating of less than 25 and a smoke density not to exceed 450. (Exception: Limits don't apply when facing is installed in substantial contact with the unexposed surface of ceiling, floor, or wall.) Unfaced insulation is okay when concealed in areas previously mentioned. (WSEC 502.1.4.2 & R316.1)
- Insulation is securely installed at walls not being fully enclosed (fireplaces, crawl space walls, etc.). (WSEC 502.1.4.2)
- Insulation clearances are maintained according to manufacturer's specifications. Clearances for loose fill insulation are maintained through installation of permanent barriers. (WSEC 502.1.4.3)
- All recessed light fixtures are IC (insulation contact) rated or enclosed within a sealed assembly. (WSEC 502.4.4)

Access Hatches and Doors

- Access doors from conditioned spaces to unconditioned spaces are weather-stripped and insulated to a level equal to the insulation at surrounding surfaces. (WSEC 502.1.4.4)
- Wood framing, or equivalent retainer, is installed around the perimeter of the attic access to the height of surrounding insulation to prevent insulation from spilling and to maintain the R-value at the access. (WSEC 502.1.4.4)
- Access is provided to all equipment which prevents damaging or compressing the insulation. (WSEC 502.1.4.4)

Attic Insulation

- Baffles are installed that allow ventilation into the attic space through eave vents. There is a minimum 1" clear over the top of baffles, extending 6" vertically over the top of uncompressed insulation, and 12" vertically over the top of loose fill insulation. (WSEC 502.1.4.5)
- Baffles are made of rigid material resistant to wind driven moisture. (WSEC 502.1.4.5)
- R-Value markers installed in the attic, showing the installed thickness and maximum settling thickness, and installed every 300 square feet facing the access. (WSEC 502.1.4.1)
- Loose fill insulation may be used in attic spaces where the slope does not exceed 3 in 12 and where there is at least 30" of clear distance from the top of the bottom chord of the truss or ceiling joist to the underside of the sheathing at the roof ridge. (WSEC 502.1.4.5)

Wall and Ceiling Insulation

- All faced insulation is stapled over the face of the framing member. Insulation may also be unfaced with visqueen vapor barrier installed over the whole wall, or unfaced with a PVA primer used to seal drywall. (WSEC 502.1.4.6)
- Vapor barrier is installed to warm side of wall, floor, or ceiling. See Moisture Control section. (WSEC 502.1.6)
- Vapor barriers are not required in roof/ceiling assemblies where the ventilation space above the insulation averages 12" or greater. (WSEC 502.1.6.4)

Floor Insulation

- The floor insulation is installed in substantial contact with the surface being insulated. (WSEC 502.1.4.7)
- Insulation supports are installed at a maximum of 24" on center. (WSEC 502.1.4.7) Crawl space insulation typically checked at final inspection
- Insulation is not blocking the foundation vents. NOTE: The permanent baffle may be installed at 30 degrees from horizontal to divert airflow below the lower surface of insulation. (WSEC 502.1.4.7) Typically checked at final inspection.

Slab Insulation (on-grade and below-grade)

- Slab insulation, if installed inside the foundation wall, extends down from the top of the slab for 24", or extends down from the top of the slab and horizontally beneath the slab for total of 24". (WSEC 502.1.4.8)
- Slab insulation, if installed on exterior of foundation wall, extends down a minimum of 24" below grade or to the frostline. (Exception: For monolithic slabs, verify the insulation extends downward from the top of the slab to the bottom of the footing.) (WSEC 502.1.4.8)
- The entire area of a radiant slab is thermally isolated from the soil with a minimum of R-10 insulation approved for the use. A mechanical rough-in inspection must be approved before the slab/foundation pour when a radiant heat system is being used. (WSEC 502.1.4.9)
- Exposed above-grade insulation is protected from physical and ultraviolet damage. (WSEC 502.1.4.10)

- Insulation installed on the cold side of a wall extends from the top of the below-grade wall to the top of the footing. (WSEC 502.1.4.10)
- Insulation installed on the warm side of a wall extends from the top of the below-grade wall to the below-grade floor level. (WSEC 502.1.4.10)

Moisture Control

Vapor Retarder

- Vapor retarder is installed. See Wall and Ceiling Insulation Section. (WSEC 502.1.6)
- Vapor retarder has a one perm dry cup rating or less (typically 4-mil polyethylene, kraft-faced material, or PVA). (WSEC 502.1.6)
- Vapor retarder is not required when all of the insulation is installed between the roof membrane and the roof deck. (WSEC 502.1.6.5)

Roof/Ceilings

- Faced batt insulation, where used as a vapor retarder, is face stapled. (WSEC 502.1.4.5)
- There is a minimum 1" vented air space above insulation. (WSEC 502.1.6.3)
NOTE: Vapor retarder is not required in roof/ceiling assemblies when the vented space above the insulation averages 12" or more. (WSEC 502.1.6.4)
NOTE: Vapor retarder is not required when all of the insulation is installed between the roof membrane and roof deck. (WSEC 502.1.6.5)

Ground Cover

- 6-mil black plastic is installed at the crawlspace, overlapped a minimum 12" and running wall to wall. (Exception: ground cover may be omitted if the crawlspace has a concrete slab floor with a minimum thickness of 3 ½ ".) (WSEC 502.1.6.7)

Seals and Weather-stripping

- Exterior joints around windows, door frames, openings between walls and foundations, openings at utility services through walls, floors, and roofs are sealed, caulked, gasketed, or weatherstripped to limit air leakage. (WSEC 502.4.3)
- Bottom plates and corners at insides of exterior walls have been caulked. (WSEC 502.4.3)
- All exterior doors, and doors serving as access to enclosed unheated areas, are weatherstripped. (WSEC 502.4.3)