

Central Keystone Council of Governments

Residential Plan Checklist

Use this checklist to review your building plans.

References to IRC 2006 Code page numbers

Square Footage For:

Main Floor: _____	Carport Or Covered Deck: _____
Second Floor: _____	Deck: _____
Rough Basement: _____	Remodel: _____
Finished Basement: _____	Addition: _____
Garage: _____	Other: _____

- ___ 1. APPLICATION FOR PERMIT: description of work, contractors license numbers or owner builder, signed R105.1 pp3
- ___ 2. WORK EXEMPT FROM PERMITS R105.2 pp3
- ___ 3. SITE PLAN & GRADING: setbacks, liquefaction, over-pressure zone, slope and drainage R106.2 & FIGURE R403.1.7.1 pp5 & pp73
- ___ 4. CLIMATIC AND GEOGRAPHICAL DESIGN CRITERIA TABLE 301.2(1) pp24
- ___ 5. WATER SERVICE SIZE P2903.1 pp441
- ___ 6. INSPECTIONS REQUIRED & INSPECTION REQUESTS: R109 pp6
- ___ 7. EXTERIOR WALLS AND OPENINGS: fire separation distance from property lines R302.1 & R302.2 pp47
- ___ 8. HABITABLE ROOMS AND BATHROOMS: 8% of area in glazing and 4% in openings and 3 sqf window opening in bathrooms or exhaust fan R303.1 pp47-48
- ___ 9. REQUIRED HEATING: heating facility to maintain 68 degrees R303.8 pp48
- ___ 10. MINIMUM AREA DIMENSIONS AND HEIGHTS: (1) 120 sf room, 70 sf bedrooms, 50 sf kitchen, 7 feet min. heights, sloping to 5 feet min. 3 feet min. passageways in kitchens R304 & R305 pp48-49
- ___ 11. GLAZING IN HAZARDOUS LOCATIONS: bathtubs, showers, within 24 inches of doors, within 18 inches of floors and greater than 9 sq ft, within 60 inches of stairway landings, within 36 inches of walkways R308 pp50-51
- ___ 12. GARAGE SEPARATION FROM DWELLING: 1/2 inch gypsum wall board between the garage and residence, drywall to extend to gable peak or the residence sidewall and garage ceiling can be covered with 1/2 inch drywall. Garage beneath habitable rooms shall be separated from all habitable rooms by no less than 5/8 inch Type X gypsum board or equivalent. Openings between the garage and residence shall be equipped with a 1 3/8 inch thick solid or a 20 minute fire rated door R309.2 pp52-53
- ___ 13. EMERGENCY ESCAPE AND RESCUE OPENINGS: 44 inches max above floor, in every sleeping room, 5.7 sq ft or 5 sq ft if within 44 inches of grade, 20 inch min width, 24 inch min height R310 pp52-53
- ___ 14. WINDOW WELLS AND LADDERS: 9 sq ft min area, 36 inches out from window, if deeper than 44 inches affix a ladder R310.2 pp53
- ___ 15. EXIT DOORS AND HALLWAYS: at least one 36 x 80 door required, 36 inch min. width in hallways R311.4 pp53
- ___ 16. LANDINGS AT DOORS AND STAIRWAYS: 36 inches min. out from door and door width min. R311.4.2 pp53-54
- ___ 17. RAMPS, SLOPES AND RAILS: max slope 1 & 8, railing with ramps over 1 & 12 R311.6 pp55
- ___ 18. STAIRWAY WIDTH: 36 inches, TREADS AND RISERS: 8 inch rise and 9 inch tread, HEADROOM: 6 foot 8 inch, UNDER STAIR PROTECTION: ½ inch sheetrock, HANDRAILS: (2) or more risers, 34 to 38 inches in height and 1 ¼ to 2 5/8 inches in diameter if circular R311.5.3 pp54

- ___ 19. GUARDRAILS (GUARDS): at floors over 30 inches above grade, 36 inches min. height, a 4 inch sphere shall not pass through [R312](#) [pp55](#)
- ___ 20. SMOKE DETECTORS: inside each sleeping room, outside sleeping rooms, on each level, all wired in series with battery backup [R313](#) [pp55-56](#)
- ___ 21. INTERIOR MOISTURE VAPOR RETARDERS: on warm-in-winter side of wall [R316](#) [pp55](#)
- ___ 22. LUMBER PROTECTION AGAINST DECAY: 18 inch min. under floor joists, 12 inch min. under floor girders, on concrete slab less than 8 inches above exposed ground, framing and siding less than 6 inches from the ground, TREATED PLATE or redwood. [R319](#) [pp60-61](#)
- ___ 23. WOOD COLUMNS: 1 inch above the floor or finish grade, CONNECTION TO FOUNDATION [R319.1.4](#) [pp61](#)
- ___ 24. SOIL TESTING: 1500 psf soil load pressure without soils report, CONCRETE: 2500 psi in slabs and footings, 3000 psi in foundation walls, 3500 psi in garage slab and exterior steps [TABLE 401.4.1 & R402.2](#) [pp67](#)
- ___ 25. CONCRETE FOOTING SIZES AND DEPTH: min. footing size 8 inches by 20 inches, min depth 40 inches, MINIMUM REBAR as required by soils type [R403.1.1 & TABLE 403.1](#) [pp68-69](#)
- ___ 26. ANCHOR BOLTS TO FOUNDATION: max spacing 72 inches on center & not more than 12 inches from each end of plate section and or corners. Anchor straps may be substituted for bolts as long as they provide equivalent anchorage. [R403.1.6](#) [pp72](#)
- ___ 27. CONCRETE FOUNDATION WALLS: 8 feet tall, 8 inches thick, #4 rebar at 24 inches on center vertical, (5) #4 rebar horizontal, (2) #4 rebar above openings, CONTINUOUS GRADE BEAM at garage door [R404.1.2](#) [pp79](#)
- ___ 28. HEIGHT ABOVE FINISHED GRADE: 4 inches min concrete, 6 inches min., treated sill plate [R401.1.6](#) [pp81](#)
- ___ 29. FOUNDATION WALL DAMP-PROOFING: bituminous coating on basement walls [R406.1](#) [pp90](#)
- ___ 30. STRUCTURAL COLUMNS: 4x4 inch min. wood, 3 inch min. pipe [R407.3](#) [pp93](#)
- ___ 31. UNDER-FLOOR VENTILATION: 1 sq ft for each 150 sq ft of underfloor space [R408.1](#) [pp93-94](#)
- ___ 32. UNDER-FLOOR ACCESS: 24 inch by 18 inch [R408.4](#) [pp95](#)
- ___ 33. FLOOR JOISTS: double under bearing partitions, blocking at bearing walls [R502.4 & R502.7](#) [pp97-103](#)
- ___ 34. DRAFT-STOPPING: concealed spaces over 1000 sq ft [R502.12](#) [pp106](#)
- ___ 35. FIREBLOCKING: in concealed spaces at 10 feet on center [R502.13 & R602.8](#) [pp106 & pp133](#)
- ___ 36. SUBFLOOR SHEATHING: 5/8 inch thick tongue & groove for joists at 16 to 20 inches on center, and 3/4 inch thick tongue & groove to 24 inches on center [R503](#) [pp106-107](#)
- ___ 37. FLOOR JOIST BEARING, OVERLAP, RESTRAINT & BRIDGING: [R502.6, R502.6.1, R502.6.2, R502.7 & R502.7.1](#) [pp103](#)
- ___ 38. EXPOSED LAMINATED TIMBERS: pressure treated, naturally durable or preservative treated wood [R504](#) [pp108](#)
- ___ 39. WALL STUD SPACING, TOP PLATES, BOTTOM PLATES: 2x4 at 24 inch on center if supporting roof only, 2x4 at 16 inch on center if supporting one floor and roof, double top plate, 2x bottom plate, balloon framing at rake walls 2x6 framing if over 10 feet tall [R602.3.1](#) [pp123](#)
- ___ 40. INTERIOR NON-BEARING WALLS: 2x3 at 24 inch on center with one top plate [R602.5](#) [pp132](#)
- ___ 41. MID-HEIGHT BRIDGING (Fireblocking): in unfinished walls [R602.8](#) [pp133](#)
- ___ 42. BRACED WALL LINES AND PANELS: within 12.5 feet of wall corner, 4 feet in length for plywood with nailing at 6 inches on center at edges and 12 inches on center in field, 8 feet for sheetrock with screws at 7 inches on center edges and field [R602.10.3](#) [pp136](#)
- ___ 43. FASTENER SCHEDULE: [TABLES R602.3\(1\) & TABLE 602.3\(2\)](#) [pp124-126](#)
- ___ 44. INTERIOR WALL COVERINGS: 1/2 inch sheetrock [R702.1 & R702.3.1](#) [pp229-230](#)

- ___ 45. EXTERIOR WALL COVERINGS AND WEATHER BARRIERS: 15# felt paper or vapor barrier [R703.1 & R703.2](#) [pp232-233](#)
- ___ 46. STONE, MASONRY VENEERS, AND TIES: brick ties at 16 inches on center in either direction, with horizontal 9 gage wire mechanically attached to ties [R703.7.4.1](#) [pp241](#)
- ___ 47. LINTELS: [R703.7.3](#) [pp241](#)
- ___ 48. ROOF FRAMING: truss lay-out, RIDGES: 1x with width to match rafter cuts, PURLINS: 4 foot on center max. and 8 feet max length, CONNECTIONS & RAFTER TIES: at 4 feet max on center, hurricane ties (H-1), ROOF SHEATHING, and size and spacing of rafters at OVER-BUILDS [R802](#) [pp243](#)
- ___ 49. ATTIC VENTILATION: 1 to 150 sq ft or 1 to 300 sq ft if 50% is in soffit and 50% to 80% located more than 3 feet above soffits, insulation baffles [R806](#) [pp286-287](#)
- ___ 50. ATTIC ACCESS: 22 x 30 inches with 30 inches of vertical clearance above [R807.1](#) [pp287](#)
- ___ 51. ROOF SLOPES and DRAINAGE: felt paper, ¼ inch per foot min. [R903.4](#) [pp289](#)
- ___ 52. ICE DAM PROTECTION: ice and water shield at eaves to 24 inches inside the wall plane of the building [R905.2.7.1](#) [pp291](#)
- ___ 53. MASONRY CHIMNEY TERMINATION: 2 feet higher than any portion of building within 10 feet, 3 feet tall min., masonry chimney cross-section [R1001.11](#), [1003.9](#) & [G2427.5.3](#) & [figure 2425.5.3](#) [pp304](#), [pp306](#) & [pp398](#)
- ___ 54. FACTORY-BUILT CHIMNEYS: Listed and labeled [R1005](#) [pp309-310](#)
- ___ 55. FIREPLACE HEARTH: 16 inches in front and 8 inches beyond each side of firebox less than 6 sq ft, or 20 inches in front and 12 inches beyond with firebox greater than 6 sq ft [R1001.9](#) [pp304](#)
- ___ 56. Climatic Design Zone; Snyder, Union & Upper Northumberland Counties=Zone 5 Average heating degree day design factor 6,000 - 6499 [N1101.2](#) & [TABLE N1102.1](#) [pp311](#) & [pp315](#)
- ___ 57. INSULATION VALUES IN WALLS, FLOORS, CEILINGS, WINDOWS AND DOORS: Basement walls = R-10, Crawl Space Walls = R-10/13, Walls = R- 19, Floors = R-21, Ceilings = R-38, Windows = U- 0.350, doors = U-0.350 OR RES-CHECK 2006 IECC. Contact office for basement insulation requirements as applied to conditioned/un-conditioned spaces. [N1102.1](#) OR [PA ALTERNATIVE RESIDENTIAL ENERGY PROVISIONS](#) [pp318](#)
- ___ 58. CENTRAL FURNACE, CLEARANCE, ACCESS, PLATFORM, LIGHT: 3 inches side and rear, space is 12 inches wider than furnace, 6 inches in front if door or 30 inches in front, 30 x 30 inch access platform with light for servicing [M1305](#) [pp325-326](#)
- ___ 59. BTU SIZES OF WATER HEATERS, FURNACES rule of thumb for furnace size = heated area / 350 sq ft = tons, tons X 12,000 BTU/h = furnace size in BTU's / h [M1401.3](#) [pp331](#)
- ___ 60. COMBUSTION AIR IN CONFINED SPACES: duct or opening within 12 inches of ceiling and size of 1 sq inch for every 3000 btu/h [M1702.2](#) [pp341](#)
- ___ 61. ELEVATION OF COMBUSTION SOURCE OF APPLIANCES: in garages 18 inch min. platform [G2408.2](#) & [M1307.3](#) [pp374](#) & [pp329](#)
- ___ 62. APPLIANCE PROTECTION FROM IMPACT: in garages [G2408.3](#) & [M1307.3.1](#) [pp374](#) & [pp329](#)
- ___ 63. CONDENSATE DISPOSAL: to an indirect drain, secondary condensate if located in attic or on wood floor [M1411.3](#) & [M1411.3.1](#) [pp333](#)
- ___ 64. GAS LINE SIZING: [G2413](#) [pp378](#) through [pp387](#)
- ___ 65. WATER HEATERS, LOCATIONS, EXPANSION TANKS, AND PRESSURE RELIEF VALVES: not in closets, in bedrooms or bathrooms within sealed enclosures with combustion air vent, direct vent water heaters ok [M2005.1](#), [M2005.2](#), [M2003](#), [M2002.4](#) & [P2803](#) [pp353](#) & [pp437](#)
- ___ 66. WATER HEATER, FLOOR DRAIN, AND PANS FOR DRAINAGE: indirect drain, pan for water heaters on wood floor [P2801.5](#), [P2801.5.1](#) & [P2801.5.2](#) [pp437](#)
- ___ 67. CLOTHES DRYER EXHAUST: 25 feet to outside with 5 foot reduction for 90 degree bends [M1502.6](#) [pp335](#)
- ___ 68. VENT TERMINATIONS: vent terminal shall be located not less than 4 feet below, 4 feet horizontally from, or 1 foot above any door, window or gravity air inlet into a dwelling [M1804.2](#) THROUGH [M1804.2.6](#) [pp349](#)

- ___ 69. SHOWER SIZE AND DOOR: 900 sq inches and 30 inch diameter, door swings outward P2708.1 pp433
- ___ 70. WHIRLPOOL BATHTUB ACCESS PANEL P2720.1 pp435
- ___ 71. HOSE CONNECTION BACKFLOW PREVENTER P2902.2.3 pp439
- ___ 72. ELECTRICAL SERVICE PANEL LOCATION AND SERVICE PANEL LIGHT: not in bathroom or firewall, 30 inch clearance side to side 36 inches in front, and 6.5 feet in height E3305.2 pp472
- ___ 73. RECEPTACLE OUTLETS IN WALLS, COUNTERS, ISLANDS, FLOORS, BATHROOM, OUTDOORS, LAUNDRY, BASEMENT, GARAGE, HALLWAYS, AND MECHANICAL ROOM E3801 pp505
- ___ 74. ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION IN BEDROOMS E3802 & NEC210-12b pp507-508
- ___ 75. GFCI PROTECTION IN BATHROOM and jetted tub motors, GARAGE, OUTDOOR, CRAWLSPACE, UNFINISHED BASEMENT, KITCHEN COUNTERS, ISLANDS, AND BAR SINKS E3802 pp507
- ___ 76. LIGHTING WITH WALL SWITCHES IN BEDROOMS, BATHROOMS, HALLWAYS, STAIRWAYS OF 6 STEPS OR MORE, ATTACHED GARAGE, STORAGE ROOM, AND OUTSIDE EACH EXIT DOOR E3802.2 THROUGH E3803.4 pp507=508
- ___ 77. RECEPTACLES AND LIGHTING IN DAMP AND WET LOCATIONS: weatherproof covers for outlets, lighting to be listed for wet or damp locations E3901.7 pp527
- ___ 78. LIGHT FIXTURES IN CLOSETS: incandescent fixtures 12 inch min. to storage, fluorescent fixtures 6 inch min. to storage E3903.11 pp529
- ___ 79. SUPPORT OF CEILING FANS E4001.6 pp533