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 inchs 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 ¾ 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: ½ 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 HEARTHS: 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