

## **CONSTRUCTION PLANS SHALL CONSIST OF THE FOLLOWING**

SITE PLAN  
FOUNDATION PLAN  
FLOOR PLANS  
FRAMING PLANS  
CROSS SECTION OF THE STRUCTURE  
HVAC, ELECTRICAL AND PLUMBING PLANS  
ELEVATION DRAWINGS – indicate heights and finished grade

Plans shall be to scale and all dimensions must be noted.  
Three (3) hard copies of complete construction plans shall be submitted unless otherwise instructed. Providing an electronic set of plans, if available, will help expedite the review process.

## **PLAN REQUIREMENTS**

### SITE PLAN

- Size and location of all new construction and all existing structures on the site
- Distances from lot lines
- Established street grades and proposed finish grades

### FOUNDATION PLAN

- Soil type on construction site
- Footing size – include any interior piers or any other piers
- Footer – depth below frost line: 42-inch minimum, exterior drains
- Foundation – type, wall thickness, rebar size and spacing, wall height, height of unbalanced fill, type of coating (damp-proofing, water-proofing)
- Foundation anchoring – sill plate: type and size, anchor bolts/straps, size and spacing, joist clips
- Columns/Posts – sizes and method of anchoring
- Crawl space – for access, indicate vented or conditioned; indicate method of venting or conditioning
- Concrete slab – thickness, vapor barrier

### FLOOR PLANS

- All design criteria shall be noted on the plans
- Rooms – indicate all sizes and label their use; indicate location of any fireplaces
- Windows and doors – indicate locations and sizes
- Kitchen & Bathroom and/or powder room fixture layout – to scale
- Safety glass locations – glass next to stairs, tubs/showers, doors, floors
- Fire ratings of walls and/or doors – garages and/or townhouse separations, exterior walls less

than 5 feet from a property line.

- Sleeping room emergency escape compliance – type and size of window well, if applicable
- Stairs – width, landing size and location, step rise and step run, handrails, guards
- Stair lighting – over stairs or one at each landing
- Ramps – slope, landings, handrail, guards
- Smoke Alarm – type, power source, locations

#### FRAMING PLANS/CROSS SECTION

- Beams – types, sizes, spans, loading information; engineered beams require justification
- Floor sheathing – type and thickness
- Wall construction – stud size and spacing, sheathing type and size
- Headers – size and type of typical headers; engineered lumber requires justification
- Window sill heights – for any sill height less than 24 inches off the floor and 72 inches or more above the finished grade; the window may not open greater than 4 inches or provide fall protection
- Exterior wall coverings – size and type of all coverings; provide details for masonry installations
- Ceiling joists – size, type, spacing
- Bearing walls – all bearing walls shall be within 1 foot horizontally of the beam or bearing wall below the loads shall stack
- Roof pitches – indicate pitches of all roofs
- Roof rafters – size, type, spacing; if trusses are to be used, provide the Pennsylvania engineer sealed truss designs
- Hip and valley rafters – indicate size of all hip and valley rafters; all hip and valley rafters shall be posted down to a bearing wall or properly-sized beam where the hip or valley meets the ridge
- Rafter ties – rafter ties shall be 4 feet on center to tie the rafters together where the ceiling joists are not parallel to the rafters
- Structural ridge beam – where ceiling joists are deleted, a properly-sized ridge beam shall be designed
- Attic access – size and location of opening for all attic areas
- Roof sheathing – size, type, thickness
- Roof covering – felt paper, ice guard, type of roofing material
- Roof ventilation – method of ventilation to comply with 1/150 ratio
- Insulation/Energy – provide information on which energy path will be used, along with design, notes and/or calculations to support the path – 2018 International Residential Code, chapter 11; 2018 Pennsylvania Alternative Energy Provisions, [www.dli.state.pa.us](http://www.dli.state.pa.us); RES, check
- Air leakage test agency credentials (new homes only)

#### MECHANICAL/PLUMBING/ELECTRICAL PLANS

- Heating/Air Conditioning – provide heating, ventilation and air conditioning information; indicate locations equipment, supply and return ducts and registers; provide design calculations including the type of fuel and efficiencies
- Gas piping – type of piping material, appliance loads, pipe sizing
- Plumbing – type of piping and sizing for the water supply and drainage system
- Electrical – indicate locations of all switches, receptacles, lighting outlets, appliances and service panel
- Whole house ventilation: completed form and equipment cut sheet.

PLEASE NOTE A RESIDENTIAL PLAN REVIEW TYPICALLY TAKES BETWEEN 5-15 WORKING DAYS DEPENDING UPON COMPLEXITY OF PLANS AND CURRENT WORKLOAD.

## *Residential Plan Submittal Guide*