

DESIGNERS INFORMATION FOR NEWLY CONSTRUCTED BUILDINGS & STRUCTURES
PROVIDE THE FOLLOWING ON THE PLANS (AS IT APPLIES) 10/25/24

**** ALL plans must have Property Owner, Address & Block/Lot with the Correct Adopted Codes and Must be Signed and Sealed by a License Architect or Engineer ****

****Prior approval for Zoning, Engineering, Health, Fire Safety, Somerset Soil & MUA****

****Specifications and Plans must be submitted in Duplicate****

****Responsible person in charge once work has begun
cell number and email address****

BUILDING

Use group(s) (separated or non-separated)

Construction class

Occupancy Load

Building Classification (I, II or III)

Egress Plan

Height, Area, Volume

Soil Bearing Capacity

Wind speed as per ASCE 7-16 & Chapter 16

Exposure Category

Live Load:Floors, Ceiling, Stair, Deck/Balcony

Dead Load

Ground snow Load as per ASCE 7-16

Fire Resistance ratings

Number of stories

Largest floor area

New Building Area

Is the structure going to be designed with plenum ceilings?

Is this structure going to be designed for seismic compliance?

Truss profiles floor and roof (layout do not need to be sealed) with Designer Acceptance Letter

I Joist layouts and installation guides with Designer Acceptance Letter

Proof of energy compliance

Mechanical plan including ventilation schedule

For Alteration and reconstruction 20% barrier free cost analysis

Class I Bldgs require Special Inspections

Phased projects must be indicated on the plans

Air Balance Report required for Certificate of Occupancy for B & E Use Groups

FIRE

Design Criteria:

a. Height and Area of structure.

b. Fire-Resistant Construction.

c. Dwelling/garage fire separation & opening/penetration protection

d. Wall and ceiling finishes

e. Insulation Flame spread/smoke developed index, combustible insulation clearance

Means of Egress:

a. General, emergency escape and rescue openings

Automatic Fire Sprinkler Systems(If applicable)

- a. Calculations for water
- b. Sprinkler Plans.

Smoke and Carbon Monoxide Alarms:

- a. Location
- b. 110 system or Low Volt system
- c. Fire Alarm low volt Per NJ IBC 907 1.2

Foam Plastic:

- a. Labeling, Surface burning, thermal barrier, specific approval.

Chimney and Fireplaces:

- a. Construction Type, Manufacture requirements, clearance,combustion air, fuel type

Mechanical:

- a. Appliance listed and labeled for proposed use.
- b. Duct systems designed with the Energy Code and Building Code requirements.
- c. Kitchen exhaust system information supplied.

Fuel Gas:

- a. Appliance location, combustion air
- b. Venting requirement
- c. Appliance protection

Hoods:

- a. Air Balance Report

PLUMBING/MECHANICAL (Mechanical Technical is not used on Commercial Projects)

Codes:

- a. National Standard Plumbing Code, International Fuel Gas Code, International Energy Code, International Mechanical Code, The ICC A117.1

Building Identification:

- a. Use group, class type, volume of structure, construction type, occupancy load, Number of Male and Female occupants

Plans:

- a. Two sets of spec sheets for plumbing fixtures, faucets, apparatus and gas appliances
- b. Two sets of signed and sealed plans from a NJ registered architect or NJ license engineer

Under Slab plumbing:

- a. Show all sanitary and storm drainage lines, pipe sizes, slope and material being used, discharge of drainage system, domestic water detail including pipe sizes and material

Waste & Vent Riser Diagram-Isometric:

- a. Show all pipe size, label all connected loads, fixtures, drains, vent lines, traps and required cleanouts,
- b. Waste treatment, type of pipe being used.
- c. One entire riser diagram showing how all piping interconnects to the existing system.

Supply Risers-Isometric:

- a. Show all supply piping, type and size of pipe, shut off valves, backflow prevention devices, identify all connected devices and fixtures, thermal expansion devices, incoming water supply pressure and size calculation.
- b. If a new water heater is installed where drains for the T&P relief valve and drain pan discharge.

Floor Plans:

- a. Plans must show where fixtures are located, layouts for waste,vent and water piping, location of water and vent stacks in walls.
- b. Indicate where non-metallic pipe will be installed
- c. Label all spaces and rooms as to their use
- d. Provide plumbing fixture schedule

ADA Accessible Facilities:

- a. Show dimensions on all accessible rooms- dimensions for lavatories, tubs, showers, water closet & sinks
- b. Show dimensions of walls in front of water closet and between fixtures and indicate which are accessible
- c. Indicate height for lavatories, water fountains, and wall mounted water closet
- d. Location and length of horizontal and vertical grab bars
- e. Show door swing of toilet compartments and restroom doors, and clear floor space at accessible fixtures

Site Plans-domestic water and sanitary sewer:

- a. Show outline of building, water service lines to include pipe size, type and standards of pipe,
- b. Location of thrust blocks, the size of water meter, depth of water service pipe
- c. Show pipe size, type of pipe, pipe standard for sanitary sewer
- d. Percentage of slope and drainage fixture unit calculations for each sanitary sewer
- e. Location of any manhole and how piping will connect to manholes
- f. Outside backflow prevention devices
- g. Location and size of external grease interceptors or coil separators and sizing calculations

Site Work-domestic water:

Include the following to show all calculations used to size the water service and distribution of piping

- a. Pressure at water main in street, pressure drop through water meter, backflow prevention devices
- b. Pressure drop due to static head and pipe friction
- c. Provide flow in gallons per minute, water pressure at the entrance to the building
- d. Total water fixtures units, size and types of pipe
- e. Provide maximum pressure required at the farthest fixture

GAS PIPE

Gas Riser:

- a. Show all pipe sizes, type of pipe, type of gas (natural/ propane), the lengths of all pipe including vertical runs
- b. All loads in BTU's
- c. Show pound of gas pressure on customers side of meter
- d. Location of shutoff valves and pressure regulators
- e. Type of pressure regulators and venting of the regulators to be used
- f. Show one entire riser, do not show a typical riser for various parts of the building. All riser must be connected as installed
- g. Connecting to existing system pipe sizes, footage and total BTU load must be shown on entire system

For propane

- a. Show location of tanks, pipe sizes from tank to building and location of regulators
- b. Layout including dimensions to windows, opening in the building, sources of combustion and property line

ELECTRICAL

Application signed and sealed if applicable

Code book 2020 NEC

Floor plan including receptacles, switches, smoke detectors, light fixtures, appliances, panel location, service size, load calculation, type of service (overhead or underground), conduit & wire sizes, motors, transformers etc.

Outside service disconnect location

Legend showing location of fixtures

Technical card needs to contain quantity of appliances, receptacles, switches etc. including the cost (Labor and Materials)

One line diagram of electrical service and sub-panels (commercial)

Panel size and location, breaker sizes

KW or HP of Appliance

Feeders sizes (wire)

Grounding detail

Trench detail (if applicable)

Energy code compliance (commercial comcheck, residential rescheck)

Exterior pole light locations, wire size, conduit sizes, light pole and head specifications

EV Ready provisions 5:23-2.36 (A)(B)

Contact cell #