

Mayor's Office-226-7601
 Administrator/Clerk-226-7606
 Assessing-226-7623
 Building Dept.-226-7640
 CFO-226-7602
 Computer Services-226-7649
 Emergency Mgmt.-226-7718
 Eng./CME Assoc.-732-727-8000
 Environmental-226-7621
 Finance-226-7615
 Fire Official-756-4761

Health-226-7630
 Library-754-7885
 Municipal Court-226-7651
 Plan Bd/Bd. of Adj.-226-7641
 Police-755-0700
 Public Works-755-2187
 Recreation-226-7713
 Recycling-226-7621
 Social Services-226-7625
 Tax/Sewer-226-7610
 Senior Center-754-1047

BOROUGH OF SOUTH PLAINFIELD
 2480 Plainfield Avenue
 South Plainfield, NJ 07080

PLEASE NOTE: THESE ARE GUIDELINES TO ASSIST HOMEOWNERS IN PREPARING DRAWINGS FOR A PERMIT AND ARE NOT TO BE CONSTRUED AS REQUIREMENTS. IF YOU ARE UNABLE TO PREPARE YOUR OWN PLANS THEN YOU MUST HAVE DRAWINGS PREPARED BY A NJ LICENSED ARCHITECT. Addition guidelines 09/09

GUIDELINES FOR ADDITIONS /ADD-A LEVEL/DORMERS/GARAGES

- A) Provide a completed zoning application along with unreduced copy of your location survey. Show the location of the proposed construction along with all other structures (pools, decks, sheds, additions etc) and the distance to the property lines.
- B) Two sets of legible plans: Single-family owner/occupant may draw their own plans if they sign the certification section on the inside of the construction jacket. Plans should include the following:
 1. Reference # for digging: you are responsible to obtain the number from the utility call 1-800-272-1000
 2. Footing and Foundation details: show minimum footing depth of 36" below grade, footing width & thickness. Concrete psi 2500 minimum. Garages 3500 psi. Show size of concrete block/foundation. No cinder block. (See detail) Any transition from 12" to 8" block requires solid or semi solid at transition. Addition footings must be stepped down to existing house footings. [R403.1.1 footing size.] [R402.2 concrete strength.] [R403.1.5 step footing] [R606.2.3 change in thickness]
 3. Foundation anchorage: ½ x 18" long hot dipped galvanized anchor bolts if using double sill plate in grouted masonry foundation. ½ x 11" hot dipped galvanized if using double plate in poured concrete foundation wall. Anchor bolts must be located within 12" of corners, ends and top sill plate splices. Minimum 2 bolts per section of plate. No anchor straps without manufacturer installation instructions and spacing. [R403.1.6 foundation anchorage]
 4. Slab on Grade Floors: minimum 8" above grade. 4" minimum slab thickness. 1 1/4" x 24" perimeter insulation, r values 4.6 minimum. 6 mil vapor barrier lapped 6" over 4 "compacted stone or gravel. [IECC energy]

5. Crawl Space: minimum 3" concrete cover. Provide cross ventilation at remote ends and within three feet of corners, 1 square foot of vent for every 150 square feet of foundation area. 18" x 24" minimum crawl space access. 18" minimum from top of crawl space slab to bottom of floor joists. Crawl space floors below grade must provide a perimeter drain to sump pit. Perimeter drains to sump pump if grade is higher than crawl space floor.[406.1.2 under floor space] [R408.1 Crawl Space Ventilation] [408.4 Access]
6. Framing: Treated sill plates 2 x 4 or 2 x 6 anchored properly (see foundation anchorage). Girders: provide size and free span; provide manufacturers specifications for any engineered system (microlams/parallams). Provide grade of lumber to be used (Douglas fir etc).
7. Ceiling Height: 7'0" minimum. Basements: 6' 4" minimum to lowest projection (girder/ductwork)
8. Sheathing floors 5/8 or 1/2 inch plywood spans rated 16" o/c. Walls 1/2 inch plywood or OSB. Roof 1/2 plywood. All sheathing must be nailed 6" o/c or less along all edges and ends. 12" o/c or less on all intermediate areas. All wall plywood must extend to the upper top plate and be nailed 6" o/c. Provide Ice Shield from the eave to 24" beyond exterior wall (recommended). Narrow wall bracing may be required around garage doors/other.
9. Insulation: Minimum R-13 in walls. R-30 Ceiling. R-19 in floors. R-30 in cathedral ceilings.
10. Attic Ventilation & Access: Ridge and eave vents recommended. Gable and roof vents. Note: Cathedral ceilings require upper and lower cross ventilation. Minimum 22" x 30" attic access for any area with 30" clear space measured from the top of the ceiling joists to the top of the roof rafters. Provide 24" walkway to any attic furnace.
11. Door sizes: 2' 8" x 6'8" all bedrooms, bathrooms, walk-in closets. Entry door minimum 3'0 x 6'8".
12. Windows: Provide one egress size window per bedroom. 3'0 x 4'6" minimum double hung type. Bring in manufacturers specs for other egress sizes. All habitable rooms must have ventilation provided by windows or mechanical ventilation.
13. Stairs: 9" treads with 1" nosing. 8 1/4 maximum and 4" minimum riser heights. All treads and risers cannot have more than 3/16 of an inch variation from tread to tread or riser to riser. All stairways with 4 or more risers must have a graspable handrail (1 1/4- 2" diameter) spaced 1 1/2 "from wall or guard rail. Provide 3'x 3' landing outside of all exterior doors with 3 or more risers.

14. Chimneys and Vents: All bathroom exhaust fans must be 75 cfm and vented to the exterior air (no venting to attic or soffit). Minimum 2" clearance from combustibles to all masonry chimneys and manufacturers clearances to all-metal chimneys or vents. Chimney outlets shall be located a minimum of 3 feet above where the chimney penetrates or passes the roofline and a minimum of 2 feet higher than any portion of the structure within 10 feet.

15. Smoke Detectors: Any increase in size over 5% of the original footprint or floor area requires A/C interwired smoke detectors with battery backup on each level of the building including the basement. These detectors must be located within 10 feet of the sleeping rooms. Any increase in size over 25% of the footprint or floor area requires A/C interwired smoke detectors with battery backup on each level including the basement and in each new and existing bedroom.

16. Heating /Ventilation: provide location of all supply and return air ducts. Verify with your heating contractor or supplier that your existing furnace/boiler is sized to meet your additional heating area.

17. Attached Garages: Must have 1 ¾ solid core wood doors or equivalent rated metal door. All garages attached side by side to rooms in residential uses shall be completely separated from the interior spaces and attic area by means of ½ -inch gypsum board. If garages are located beneath rooms in residential uses the ceiling, all walls supporting the ceiling and all walls adjacent to the garage shall be one-hour fire resistance rated assemblies.

18. Detached Garages: Maximum height of 15' to peak.

19. Interior/Exterior Finishes: ½ "gypsum board on all walls. Type of exterior siding & roofing. Kitchens and bathrooms must have water impervious floors. Provide gutters, leaders, and splash blocks.

20. Roof Covering: Provide roll roofing or rubber roofing on any roof with a slope of 2 on 12 or less. Underlayment as per manufacturer's installation instructions on roofs with slopes between 2 on 12 and 4 on 12. Ice shield is recommended at all roof eaves as per figure shown.

Required Inspections: Have permit number, address and type of inspection when calling for inspection: 226-7640

1. Footing before placement of concrete
2. Backfill
- 2A. Sill Plate: Sill plates must be anchored within 12" of ends, corners and top sill plate splices.
3. Sheathing: Sheathing must extend and be nailed to upper top plate along exterior bearing walls 6"o.c. Nail all sheathing 6"o.c. along all edges, corners, and around all window/door openings. 6"o.c. along bottom edge of sheathing to sill plates. 12"o.c. all other areas.
4. Basement or Garage Slabs before placement of concrete
5. Rough Plumbing & Rough Electric must be approved before Rough Framing
6. Rough Framing: Have all penetrations between levels firestopped. This includes all electrical, plumbing, and HVAC penetrations
7. Insulation: No rips in vapor barrier and all ducts must be covered with vapor barrier. Perimeter basement insulation must be unfaced insulation. Vapor barrier must be stapled adequately so it covers all the insulation
8. Final Plumbing & Final Electric
9. Final Fire
10. Final Building for Certificate of Occupancy

N.J State Law/N.J.A.C. 13:45 A-16.2

Final Inspections are required before final payment is made to contractor

Note: Failure to call for required inspections will result in penalty to contractor and homeowner

Span Table Guidelines

Floor Joists 40 LB Live Load for Douglas fir

2x8's 16" o/c. maximum free span 12' or less

2x10's 16' o/c. maximum free span 16' or less

Ceiling Joists 20 LB Live Load for Douglas fir (Supporting Gypsum ceiling)

2x6's 16" o/c. maximum free span 13' or less

2x8's 16" o/c. maximum free span 17' or less

2x10's 16" o/c. maximum free span 22' or less

Roof Rafters 25 LB Live Load for Douglas fir (Light roof covering)
(Roof slopes over 3 in 12)

2x6's 16" o/c. maximum free span 13' or less

2x8's 16" o/c. maximum free span 17' or less

2x10's 16" o/c. maximum free span 21' or less

Note: Add Levels: Must provide size of existing girder in basement and spacing of Columns. Show span from existing girder to exterior bearing walls.

Bearing Headers (spans based on No. 2 grade lumber with 10-foot tributary floor/roof loads. All tributary loads must be shown.

<u>Size of Header</u>	<u>Supporting Roof only</u>	<u>One Story Above</u>	<u>Two stories above</u>
(2) 2x4's	4'	not allowed	not allowed
(2) 2x6's	6'	4'	not allowed
(2) 2x8's	8'	6'	not allowed
(2) 2x10's	10'	8'	6'
(2) 2x 12's	12'	10'	8'

①

CALL BEFORE YOU DIG
1-800-272-1000
FOR UTILITY LOCATIONS.

10 RIDGE BEAM- SHOW SIZE

⑩ ATTIC CROSS VENTILATION REQ'D

2 x 4 COLLAR TIES (32" O.C.)

INDICATE TYPE OF ROOFING

⑧ 1/2" EXT. GR. PLYWOOD SHEATHING

SHOW INCLINE OF ROOF

RAFTER - SHOW SIZE, SPAN & SPACING

CEILING JOIST - SHOW SIZE, SPAN & SPACING

DBL 2 x 4 PLATE

ICE SHIELD

GUTTER & LEADER
SPLASH BLOCKS

⑩ VENTED SOFFIT

DBL HEADER - SHOW SIZE

R-30 CEILING INSULATION ⑨

1/2" SHEETROCK - WALLS & CEILING

R-13 WALL INSULATION

⑧ 1/2" EXT. GR. PLYWOOD SHEATHING

SHOW TYPE OF SIDING

④ 2 x 4 (16" O.C.)

2 x 4 SOLE PLATE

RIM JOIST - SHOW SIZE

TYPE OF SUB-FLOOR ⑧
1/2" PLYWOOD (MINIMUM)

FLOOR JOIST - SHOW SIZE & SPAN

R-19 FLOOR INSULATION ⑨

⑥ GIRDER - SHOW SIZE & SPAN

7'-6" CEILING HEIGHT (MIN.)

8" MIN.

FINISH GRADE

C.C.A. TREATED SILL - SHOW SIZE

FOUNDATION VENTS & CRAWL SPACE ACCESS REQ'D ⑤

⑤ 18" MIN.

③ ANCHOR BOLTS
1/2" DIA. & 15" LG.
LOCATED 6" ON CENTER &
12" FROM CORNERS (MAX.)

3" CONCRETE SLAB IN CRAWL SPACE ⑤

CONCRETE BLOCK ②

② CONCRETE FOOTING
2500 LB. P.S.I. (MIN)

8" MIN. FOR 8" CONCRETE BLK.
12" MIN. FOR 12" CONCRETE BLK.

16" MIN. FOR 8" CONCRETE BLK.
20" MIN. FOR 12" CONCRETE BLK.

36" MIN.

--NOT TO BE SUBMITTED FOR PERMIT--

HOMEOWNER MUST PREPARE HIS OWN DRAWINGS

6-10-92 2:27 PM

Where ice dams may be formed along the eave because of continual thawing and freezing of snow or the backing up of frozen slush in gutters, the underlayment application in the area of the eaves is modified to prevent ice dams from forcing water under the roofing, thereby damaging ceilings, wall and insulation. Two layers of underlayment should be cemented together with asphalt cement from the edge of the roof and continue up the roof to a point that is at least 24 inches (610 mm) inside the interior wall line of the building as shown in commentary Figure 903.3c. The environment within the envelope of the building provides adequate warmth to prevent ice dams from forming above the heated space; therefore, the two layers of cemented underlayment are permitted to terminate 24 inches (610 mm) inside the interior wall line of the building. The code official is responsible for determining if the eave flashing is required based on weather records and the history of ice formation.

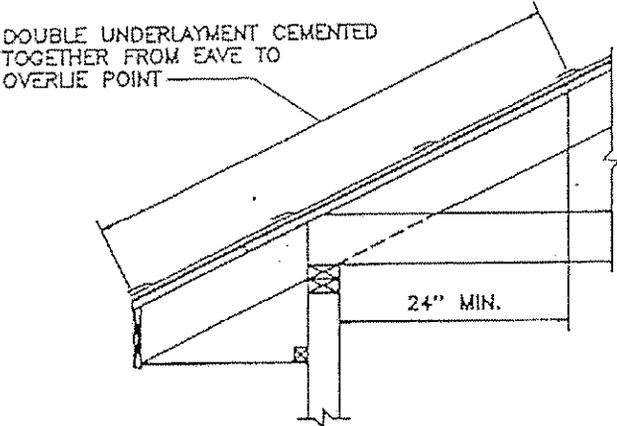


FIGURE 903.3c
EAVE FLASHING FOR ASPHALT SHINGLES

Scheduling Inspections

When Work is complete please contact the
South Plainfield Building Department for Inspections

Please have your permit # available when calling

Phone # - (908) 226-7640

Inspection Hours

Building	Monday thru Friday	9:30 am to 3:00 pm
Electric	Monday thru Friday	1:00 pm to 4:00 pm
Plumbing	Monday, Wednesday and Friday	10:30 am to 4:00 pm

For Fire Inspections please call – (908) 756-4761