

BOROUGH OF SOUTH PLAINFIELD
Building Department
2480 Plainfield Avenue
South Plainfield, NJ 07080
908-226-7640

DECK BUILDING GUIDELINES

A. Zoning

Provide a completed Zoning Permit with fifty-dollar (\$50.00) along with a copy of your original survey that has not been reduced or expanded in size. Provide a completed Building Subcode application along with two (2) sets of detailed drawings.

It is the homeowner/contractor responsibility to obtain a utility reference number prior to digging. Call 1-800-272-1000.

Drawings shall include the following. See sheet #2.

Revised april 2011

South Plainfield Deck Guidelines

- 1) Show deck size: Length, width & height of deck above grade. Provide type of lumber (A.C.Q treated, cedar, and other naturally durable).
- 2) Provide footing layout for deck. Minimum footing size ^{14"} diameter x 36" depth below grade and show distances between footings. Concrete PSI 2500 minimum.
- 3) Provide column size and spacing (4x4) for deck heights up to 4'. (6x6) for any deck over 4' in height. Columns must be anchored to footings with post saddle or equivalent anchorage. Columns cannot be encased in concrete. Provide 45-degree lateral bracing from columns to girder for decks more than 48" above grade.
- 4) Show size, length and direction of main girder over column support. If girder is to be spliced the splice must occur over the support column/footing. No splices may occur at the outside columns. Nail girders together with 16d galvanized common nails 16" o/c staggered. Maximum free span for all girders is 10'. If over 10' provide a sealed design by NJ licensed architect or professional engineer. If girder is sandwiched between columns provide (2) 1/2" through bolts per column.
- 5) Show ledger attachment to house (If using ledger). Minimum 1/2" lag screws 16" o.c. to existing framing members for decks up to 10' span. Deck spans over 10' require tighter o.c. spacing. (see sheet). 2 lateral braces required on all decks. (see sheet) Provide copper/ice shield or other approved flashing at the ledger connection. **Aluminum flashing is not permitted with ACQ treated lumber.** If attaching to foundation wall you must provide 1/2 inch bolts through the wall to inside and support with 4x4 x1/4 inch steel plates, washers and nuts 16" o/c.
- 6) Show size, length and attachment of floor joists. Joist hangers at ledger and (3) 8d galvanized toe nailed from joist to girder. Joist hanger's at all unsupported girders and joists. Maximum free span between supports for Southern Yellow Pine #2. treated lumber 60lb live load.

2 x 6 – 16" o/c 8'8"
2 x 8 – 16" o/c 11'5"
2 x 10 – 16" o/c 14'6"
2 x 12 – 16" o/c 17'10"

- 7) Show type of decking 5/4, 2x. Note! If 5/4 decking installed on a 45 degree angle on center spacing of joists must be 12" o.c.
- 8) Guardrails: 36" minimum height above finished floor and less than 4" opening between balusters. Balusters must be installed vertically to prevent ladder effect. Provide guardrail measured 34" in height above the leading edge of tread along

stairways with 4 or more risers. Guardrails must be constructed to withstand a concentrated load of 200 pounds applied at any point and in any direction along the top-railing member.

- 9) Graspable Handrails with returned ends: 34" to 38" above leading edge of tread. Grip size 1 ¼ to 2" diameter spaced 1 and ½ inch from the side of the guardrail or support posts. Two handrails for stairways wider than 44".
- 10) Stairs (See detail) Minimum width 36". Minimum tread depth 9" with 1" nosing (1 1" recommended). Maximum riser height 8 ¼" (7" recommended). Minimum riser height 4". All treads and risers must be equal or have no more than 3/16" variation from tread to tread or riser to riser. Stair stringers must lie on concrete pad to prevent stringers from sinking into ground. The triangular openings formed by the riser, tread and guardrail bottom rail at the open side of the stairway shall be less than a 6" diameter sphere can pass through. All risers must be closed or have less than 4" opening. If using 5/4 decking stringers must be spaced 12" on center. Stringers must have a positive connection to framing. (hangers or ledger)
- 11) Estimated costs of deck \$30 per square foot (No exceptions). Provide copy of contract if available.
- 12) All fasteners must be hot dipped galvanized nails or better.

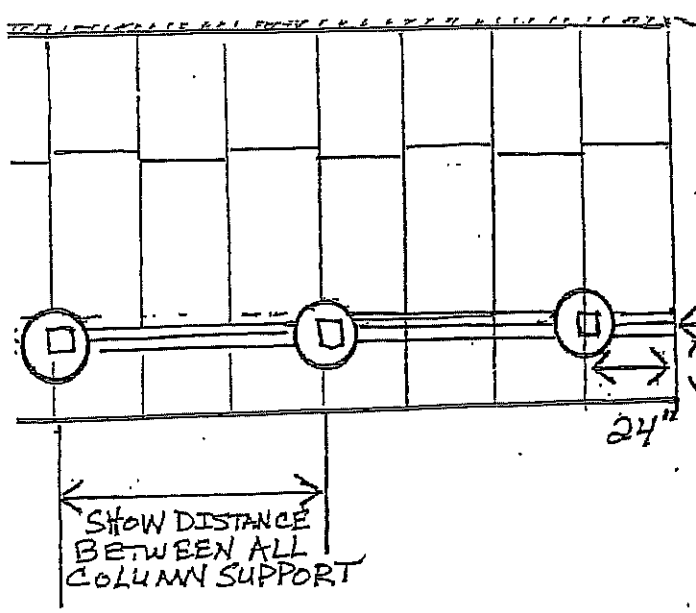
Required Inspections

- 1) Footing Inspection: before placing of concrete. To determine footing depth and diameter.
- 2) Framing Inspection: after framing of all columns, joists and girders. All flashing in place, all teco slots nailed, all columns secured to footings and all girders and joists nailed to code.
- 3) Final Inspection: when all decking, guardrails, stairs, and graspable handrails are complete for issuance of Certificate of Approval.

FAILURE TO CALL FOR REQUIRED INSPECTIONS WILL RESULT IN A PENALTY BEING ISSUED TO THE CONTRACTOR AND HOMEOWNER.

When calling for inspections have your permit number, address and type of inspection you are requesting. You must call at least a day before to request the inspection. Inspections conducted Monday through Friday between 8:30 & 3:30. We are unable to give approximate times for inspections.

Revised april 2011



LEDGER LAG SCREWED TO HOUSE STAGGERED. SEE SPACING CHART.
 PROVIDE NON ALUMINUM FLASHING

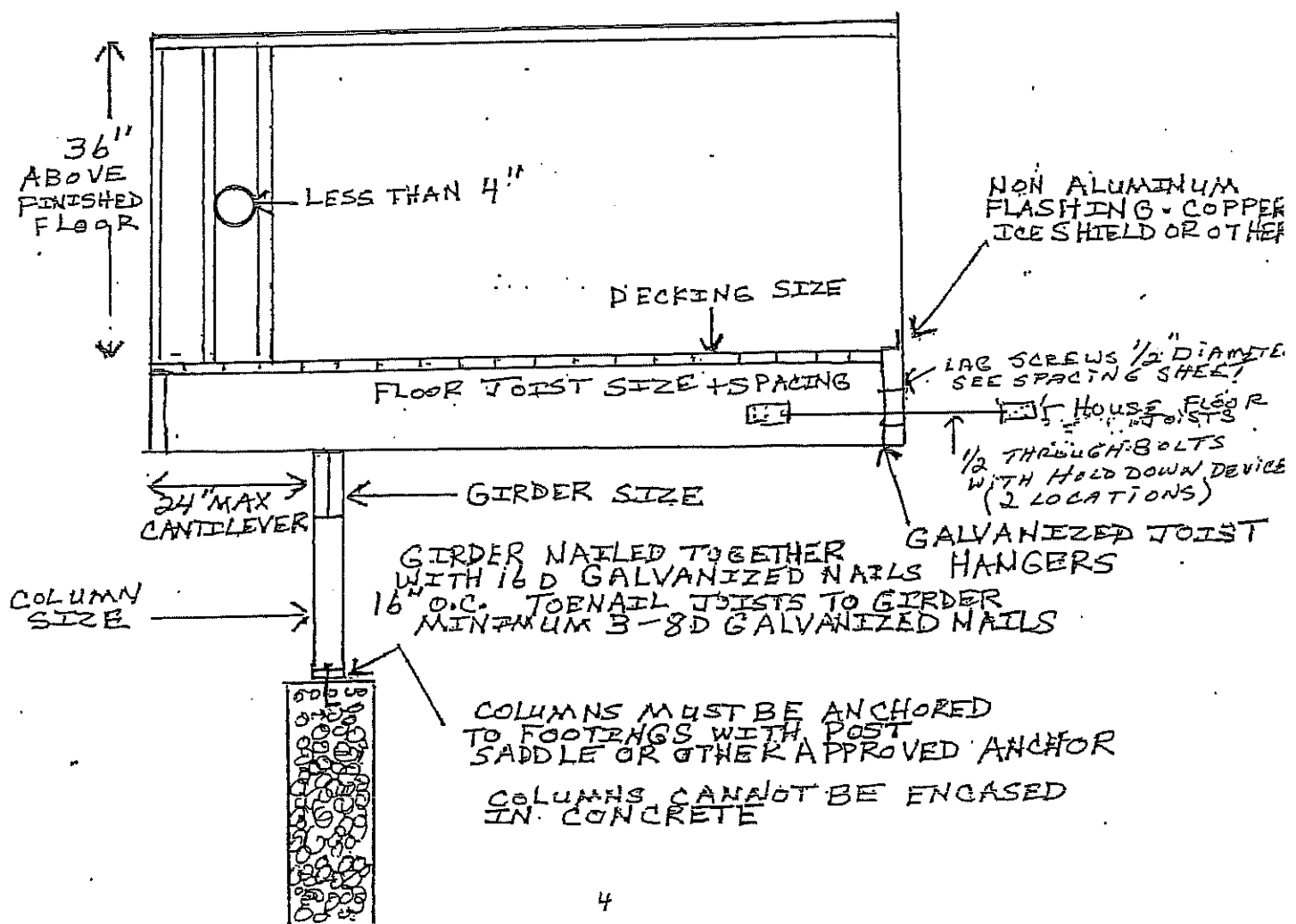
MIDSPAN BLOCKING FOR ANY SPAN OVER 8'

GIRDER SIZE
 24" MAXIMUM CANTILEVER OF JOISTS OR GIRDER

SHOW DISTANCE BETWEEN ALL COLUMN SUPPORT

NOTE: ANY GIRDER SPECIES MUST BE DIRECTLY OVER COLUMN SUPPORTS. NO SPLICES AT OUTSIDE COLUMNS

ALL LUMBER ACQ TREATED OR OTHER NATURALLY DURABLE
 ALL FASTENERS MUST BE HOT DIPPED GALVANIZED OR BETTER



36" ABOVE FINISHED FLOOR

LESS THAN 4"

NON ALUMINUM FLASHING - COPPER ICE SHIELD OR OTHER

DECKING SIZE

FLOOR JOIST SIZE + SPACING

LAG SCREWS 1/2" DIAMETER SEE SPACING SHEET

HOUSE FLOOR JOISTS

1/2" THROUGH-BOLTS WITH HOLD DOWN DEVICE (2 LOCATIONS)

24" MAX CANTILEVER

GIRDER SIZE

GALVANIZED JOIST

GIRDER NAILED TOGETHER WITH 16D GALVANIZED NAILS HANGERS
 16" O.C. TOENAIL JOISTS TO GIRDER
 MINIMUM 3-8D GALVANIZED NAILS

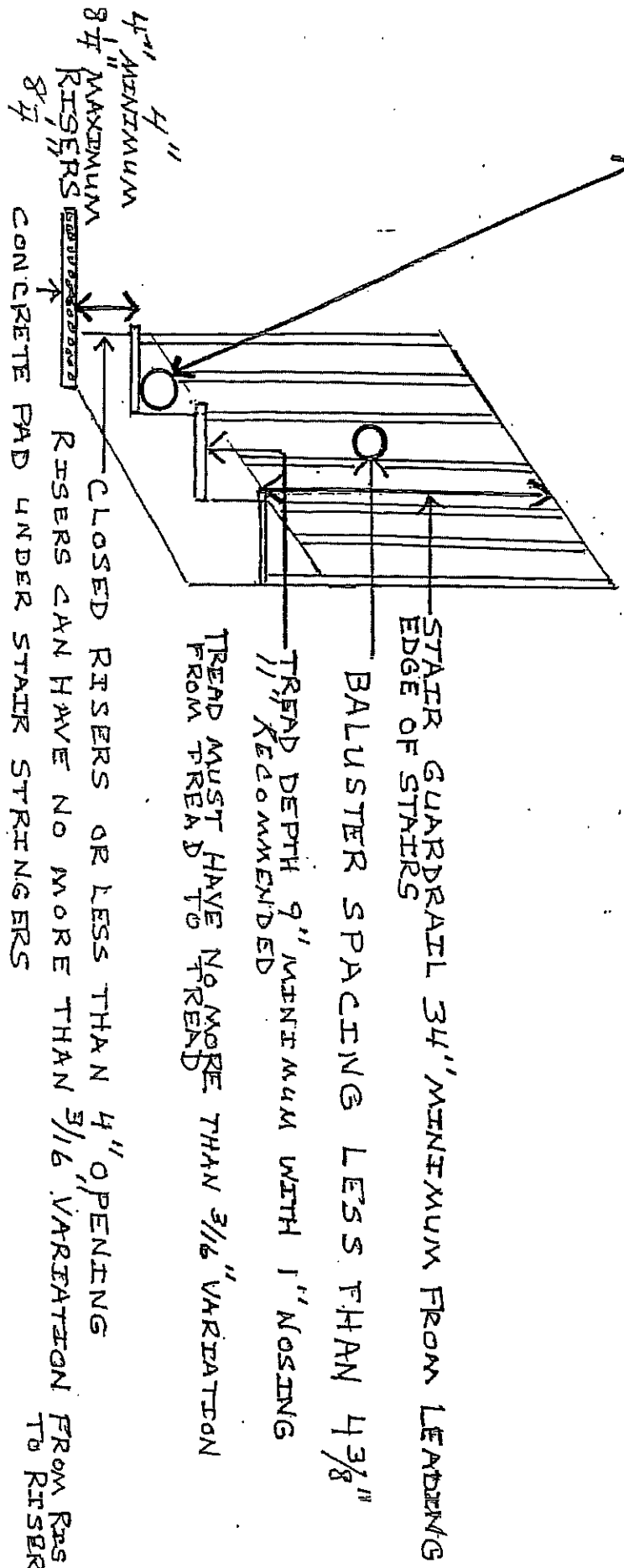
COLUMN SIZE

COLUMNS MUST BE ANCHORED TO FOOTINGS WITH POST SADDLE OR OTHER APPROVED ANCHOR

COLUMNS CANNOT BE ENCASED IN CONCRETE

STAIRWAY GUIDELINES

NOTE: GUARDRAIL REQUIRED ON STAIRS " AND ABOVE GRADE AND WALKING SURFACES MORE THAN 30" ABOVE GRADE
 TRIANGULAR OPENING FORMED BY GUARDRAIL AND STAIRS MUST BE LESS THAN 6" SPHERE



STAIR GUARDRAIL 34" MINIMUM FROM LEADING EDGE OF STAIRS

BALUSTER SPACING LESS THAN 4 3/8"

TREAD DEPTH 9" MINIMUM WITH 1" NOSING RECOMMENDED

TREAD MUST HAVE NO MORE THAN 3/16" VARIATION FROM TREAD TO TREAD

CLOSED RISERS OR LESS THAN 4" OPENING

RISERS CAN HAVE NO MORE THAN 3/16" VARIATION FROM RISER TO RISER
 CONCRETE PAD UNDER STAIR STRINGERS

36" MINIMUM STAIRWAY WIDTH

CONTINUOUS GRASPABLE HANDRAIL SPACED 1 1/2" FROM WALL OR GUARDRAIL 1/4" TO 2" DIAMETER WITH RETURNED ENDS

