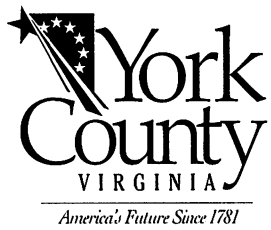
**Department of Environmental and Development Services**

**Director**
**John Hudgins**




**Utilities Engineering and Operations**
**Development and Compliance**
**Stormwater Management**
**Building Regulation**
**Waste Management**
**Mosquito Control**

The construction plans for the referenced dwelling **have been reviewed in accordance with the 2009 Virginia Residential Building Code (VRC).**

## FOOTING:

1. A continuous footing is required thru the garage door openings.
2. A continuous footing is required for bearing walls.
3. A continuous footing is required for bearing walls or engineered design.
4. If the footing contains reinforcement steel of number 4 or larger, the connection of number 4 awg. Copper conductor must be made in the footing and will be inspected at the time of the footing inspection. Rebar stubbed up out of the footing is no longer accepted as a connection method. Ground clamps approved (listed) for the connection to rebar shall be required.
5. Minimum footing depth 16", minimum footing width 16" with a minimum of 8" concrete.
6. Minimum footing depth 16", minimum footing width 24" with a minimum of 8" concrete.
7. Minimum footing depth 16", minimum footing width 12" with a minimum of 8" concrete.
8. Minimum footing depth 16", minimum footing width 14" with a minimum of 8" concrete.
9. Minimum footing depth 16", minimum footing width 20" with a minimum of 10" concrete.
10. Minimum footing depth 16", minimum footing width 20" with a minimum of 8" concrete.
11. Any lumber in contact with the masonry or concrete shall be treated.
12. Posts shall be anchored to slab with approved connectors.
13. New footing and existing footing shall tie together with 2 (two) #4 rebar embedded into each footing.
14. Existing.
15. Vapor barrier and a minimum of R-10 insulation required for floor system.
16. Anchor bolts shall be required 12" from corners, 6' o.c. and within 12" of a break in the plate.

## FOUNDATION:

1. Under Construction Elevation Certificate required prior to foundation inspection.
2. Dura wire required for 4" brick and 4" block foundation walls.
3. The garage concrete shall be 3500 psi minimum.
4. Slope the garage concrete towards overhead doors.
5. Flashing, weep holes and brick ties required for brick veneer.
6. Double floor joists required under the parallel bearing partitions.
7. The minimum net area of ventilation openings for the crawl space shall not be less than 1 sq. ft. for each 150 sq. ft. of crawl space area. One such opening shall be within three feet of each corner of the structure.
8. Piers shall be solid or shall have a solid 4" cap.

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**Website: http://www.yorkcounty.gov/eds**

9. Crawl space access shall be a minimum of 16"x24".
10. Vapor barrier and insulation required above garage slab.
11. There shall a minimum of two flood openings on different sides of each enclosed area.
12. The unsupported height of 8" plain masonry walls shall be no more than 4', the unsupported height of 8"reinforced masonry shall be no more than 8', over 8' engineered design required.
13. Where walls of masonry of hollow units or masonry-bonded hollow walls are decreased in thickness, a course of solid masonry shall be constructed between the wall below and the thinner wall above.
14. The bottom of each flood vent shall be 1' or less above the adjacent ground level.
15. Conditioned crawl space requires a letter from a certified installer to certify the conditioned crawls space meets the requirements in the 2009 IRC.
16. A letter from a certified installer required for the conditioned crawl space installation.
17. Enclosed areas below design flood elevation including crawl spaces, which are below the design flood elevation, shall be used solely for parking of vehicles, building access or storage.
18. Posts shall be anchored to the footing with approved connectors.
19. Girders bearing directly on masonry shall be treated.
20. Band boards shall be bolted to the posts.
21. Band boards against decks and porches shall be treated.

**FRAMING STAGE:**

1. Each townhouse shall be considered a separate building and shall be separated by a fire resistance rated wall assembly meeting the requirement in Section R-302, Table R-302.1 for exterior walls.
2. Section R-317 addresses roof requirements for townhouses.
3. Framing for third floor shall meet the requirements of Table R-602.3(5).
4. Load data sheets from suppliers engineer required on site for truss joist.
5. Joist shall bear on walls or masonry piers.
6. All exterior doors require a landing. The landing shall be the width of the door and 36" in the direction of travel.
7. Water resistive barriers are required behind all exterior wall coverings, **which require an exterior wall inspection before siding is installed.**
8. Fire blocking is required at openings for cables and wires.
9. Written installation and flashing instructions by the window manufacturer shall be provided at the framing inspection stage.
10. In dwelling units where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 18" above the finished floor of the room in which the window is located. Exception: Windows whose openings will not allow a 4" diameter sphere to pass through the opening, or openings that are provided with guards that comply.
11. Check the height and area of all windows for safety glazing requirements per Section R-308.
12. Attic ventilation shall be with ASTM F 2006 or F 2090.
13. All steel beams or laminated beams shall be covered with 5/8" sheetrock.
14. All beams shall be covered.

15. Hurricane clips are required for each truss.
16. Double band boards are required and shall be bolted to the posts.
17. Deck shall be attached to the primary structure without the use of nails which are subject to withdrawal. Deck shall be lag bolted to primary structure per table R502.2.2.1 (attached to permit).
18. Hurricane clips are required for each rafter.
19. Maximum riser height is 8 ¼".
20. Minimum tread depth is 9".
21. Minimum attic access is 22"x30".
22. Minimum headroom in stairway is 6'8".
23. The maximum grip size for handrails is 2 5/8".
24. Joist hangers or ledger strips required for floor joist.
25. The required exit stairway is required to be positively anchored to the primary structure to resist vertical and lateral forces. Such attachment shall not be accomplished by use of toenails or nails subject to withdrawal.
26. Ramps shall have a maximum slope of one unit vertical in twelve units horizontal.
27. A minimum 3'x3' landing shall be provided at the top and bottom of ramps, where doors open onto ramps and where ramps change direction.
28. Handrails on ramps shall be continuous for the full length of the ramp. Handrail ends shall be returned or shall terminate in newel posts or safety terminals.
29. Ramps located 30" above the floor or grade below shall have guards not less than 36" in height.
30. Posts shall be attached to the roof header with approved connectors.
31. Where ceiling joists or rafter ties are not provided at the top plate the ridge formed by these rafters shall be supported by a girder designed in accordance with accepted engineering practice.
32. All wood beams, joists, studs and other combustible materials shall have a clearance of not less than 2" from the front face and sides of masonry fireplaces and not less than 4" from the back faces of masonry fireplaces.
33. Chimneys shall extend at least 2' higher than any portion of a building within 10', but shall not be less than 3' above the highest point where the chimney passes through the roof.
34. Both sides of the bathroom walls require ½" sheetrock.
35. Perimeter foundation of bathroom shall be rated.

**INSULATION:**

1. Supply and return ducts outside the thermal envelope must be insulated to a minimum of R-8.
2. R-13 insulation is required for walls, R-19 for garage ceiling and crawl space and R-38 for attic.
3. Attic access hatches or doors require weather stripping.

**SMOKE ALARMS AND BEDROOMS:**

1. Smoke alarms must be listed per UL217 and installed per the NFPA72.
2. Arc fault circuit interrupters are required for bedrooms.
3. One window in each bedroom shall meet the emergency egress requirement.
4. Smoke alarms shall be installed in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedroom; on each additional story of the dwelling, including basement.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms.

5. Basements and each sleeping room designated on the construction documents shall have at least one operable emergency escape and rescue opening. Such opening shall be directly to the exterior of the building or to a deck, screen porch or egress court, all of which shall provide access to a public street, public alley or yard. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44" above the floor.
6. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 sq feet including the tilting or removal of the sash as the normal operation.
7. The net clear openings height shall be 24" the minimum net clear opening height shall be 20".
8. **An approved Carbon Monoxide Alarm per Section R-315 shall be installed** outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwellings units within which fuel fired appliances are installed and in dwelling units that have attached garages.

**GARAGE:**

1. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8" type x gypsum board. Where the separation is a floor-ceiling assembly the structures supporting the separation shall also be protected by not less than ½" gypsum board.
2. Common walls and garage Ceiling require ½" sheetrock.
3. The door between the garage and the habitable space shall be 20 minute rated.
4. Any appliance with an ignition device installed in the garage shall be elevated 18" above finished floor.
5. Appliances shall not be installed in a location subject to vehicle damage except where protected by approved barriers.
6. **Automatic garage door openers, if provided, shall be installed in accordance with UL325 per Section R-315.**

**BATHROOMS:**

1. Each compartment of a bathroom requires an exhaust fan.
2. Exhaust fans in bathrooms shall vent to the exterior.
3. Any window within 60" of the tub or shower shall be safety glazed.
4. Shower and tub areas require cement, fiber cement or glass mat gypsum backing for wall tile in shower areas.
5. Bathroom shall be heated to protect from freezing.

**GENERAL COMMENTS:**

1. **Note:** The addition shall not block the existing emergency egress windows.
2. Electrical systems, equipment, components and heating, ventilating, air conditioning and plumbing appliances, plumbing fixtures, duct systems and other service equipment shall be located at one and one half feet ( 1 ½') above base flood elevation.
3. Any window within 24" of a door shall be safety glazed.

4. Any opening within 24" of a corner requires the corner to be engineered to meet the wall bracing requirements.
5. Materials and installation methods used for flooring and interior and exterior walls and wall coverings shall conform to the provisions of FEMA/FIA-TB.
6. Finished construction Elevation Certificate required prior to final building inspection.
7. Any lumber below base flood elevation shall be treated.
8. No plumbing, electrical or mechanical below base flood elevation.
9. Porches, balconies, ramps or raised floor surfaces located more than 30" above the floor or grade below shall have guards not less than 36" in height.
10. Required guards on opening sides of stairways, raised floors areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4" or more in diameter.
11. A light switch for an interior stairway is required at each level only if there are six or more risers.
12. Porch posts shall be anchored to the foundation with approved connectors.
13. If porch is 30" or more off grade rails and pickets required.
14. Minimum headroom is 7'. For rooms with sloped ceilings, at least 50 % of the required floor area of the room must have a ceiling height of at least 7' and no portion of the required floor area may have a ceiling height of less than 5'.
15. Guard rail pickets shall be spaced not more than 4" o.c.
16. Porch roof headers shall be attached to posts with approved connectors.
17. Closet under stairs shall be rated with ½" sheetrock.
18. All interior stairways shall be provided with a means to illuminate the stairs, including the landings and treads. Interior stairways shall be provided with an artificial light source located in the immediate vicinity of each landing of the stairway. The artificial light source shall be capable of illuminating treads and landings to levels not less than 1' candle measured at the center of treads and landing. There shall be a wall switch at each level to control the lighting outlets where the stairway has six or more risers.
19. Alterations shall meet all electrical, mechanical and plumbing code requirements.
20. Ash dump cleanouts shall be accessible and located so that ash removal will not create a hazard to combustible materials.
21. When the winter design temperatures is below 60 degrees Fahrenheit every dwelling unit shall be provided with heating facilities capable of maintaining a minimum room temperature of 68 degrees Fahrenheit at a point 3' above the floor and 2' from exterior walls in all habitable rooms at the design temperature. The installation of one or more portable space heaters shall not be used to achieve compliance.
22. If it is contemplated to change the storage space to habitable space at a future date permits will have to be obtained. In addition, the plans submitted for the detached garage will not comply with code requirements for habitable space.
23. The exit door shall provide for direct access from the habitable portions of the structure to the exterior without requiring travel through a garage.
24. Openings between the garage and habitable space shall be equipped with solid wood doors not less than 1 3/8" in thickness, solid or honeycomb core steel doors not less than 1 3/8" in thickness or 20 minute fire rated door.

25. **A Fire Extinguisher having a rating of "2-A: 10-B: C" or an approved equivalent type of fire extinguisher shall be installed in the kitchen area per Section R-329.**
26. **The building address number shall be a minimum of 4" per Section R-319.**
27. Deck to be built per York County Deck Detail.
28. Grade shall fall 6" in the first 10'.
29. All exterior receptacles shall be listed weather proof.
30. All receptacles shall be tamper resistant.
31. Please be advised that the dwelling cannot be occupied without the required final building inspection and it is the permit holder's responsibility to schedule the required inspections.
32. A dumpster or a screened area shall be provided for the construction debris per Sec.7.1-14 of the York County Ordinance.
33. Portable toilet facilities shall be provided within 500 ft of the construction site.
34. All exterior wall coverings (brick, stone or concrete) shall be securely fastened with aluminum, stainless steel, zinc coated or other approved corrosion resistive fastener to the structure.
35. **A copy of the approved building plans with review comments shall be on site for all inspections.**

The General Contractor or Permit Holder shall insure that all Sub-Contractors are aware of the additional requirements set forth in this letter. This notification of review will in no way relieve the owner or contractor from compliance of noted violations during field inspections.

Please feel free to contact Richard Veditz or myself at (757) 890-3573 if you have any questions.

Sincerely,

Marianne G. Harris

Marianne G. Harris
Building Code Official

I have **received and reviewed** the plan review comments and agree to comply:

Signature / Date: _____

Printed Name: _____

Rev.7/18/12