

RESIDENTIAL PROBLEM CODES

DESCRIPTION	COMMENTS
WALL BRACING INADEQUATE	Please note that the wall bracing shown on the plans does not conform to the requirements of the code. Please revise the location and length of braced panels. ((Ref. 2015 IRC R602.10, Table R602.10.3(1) - (4))
CONTINUOUS PORTAL FRAMING	Please note that the plans do not meet the requirements for Continuously Sheathed Portal Frame Panel Construction. Please revise the design. (Ref. 2015 IRC Figure R602.10.6.4)
PANEL LOCARION AND DETAILS	Please provide details to show compliance with the requirements of the code. Construction documents must clearly show all braced wall lines and braced wall panels including methods and location of panels along the braced wall lines. (Ref. 2015 IRC R602.10)
SHEAR WALL EVALUATION REPORT	Please provide the evaluation report NUMBER AND AGENCY and include details, on the plans, for installing this product that are job specific (Please refer to the Prescriptive Design Guide for the product to obtain this information). Please check that all proprietary shear wall products are identified by the manufacturer's name and model number at every location where they will be installed. (Ref. 2015 IRC R301.1.3 2015)
HOW TO COMPLY WITH WIND	For more information on how to comply with the wall bracing provisions from chapter 6 of the 2015 Virginia Residential Code, please visit https://www.fairfaxcounty.gov/landdevelopment/wall-bracing . We recommend that when you resubmit your plans you submit the wind bracing work sheet offered on our web page. You will find that we offer a great interactive work sheet that is easy to use. (Ref. 2015 IRC R602)
WIND CALCS DO NOT COMPLY	Please note that the submitted calculations for the wind bracing system provided on the plans are insufficient for the following reasons; please refer to https://www.fairfaxcounty.gov/landdevelopment/wall-bracing for more information. (Ref. 2015 IRC R301.2.1, R602.10)
WIND CALCS DO NOT COMPLY	When a building design does not allow for compliance of the prescriptive wall bracing requirements of the 2015 Virginia Residential Code, the design may need to incorporate an engineered methodology such as chapter 23 of the 2015 Virginia Construction Code. Please note that any engineered method design must include a complete wind load analysis such as described in Section 1609 in the 2015 Virginia Construction Code. Please include complete design calculations for all elements and indicate what design standard is being used. All design elements included in the calculations must be illustrated and specified as part of the building plans. Please include all fastener and connection details. When identifying hold-downs, please provide complete installation design requirements. Please identify type, size, length and embedment of anchor bolts. Please identify wood member size, grade and species. Please identify fastener schedule of shear wall panel to hold-down member. We should be able to follow the load path through every element of the design to the foundation. (Ref. 2015 IRC R301.2.1, R602.10)
LATERIAL LOAD RESISTANCE	Please note that the typical assemblage of post and beam elements are not inherently resistant to lateral loading. Please identify how this design will brace the lower area (below the first floor diaphragm) of this structure for wind loading. Provide calculations and complete details of your braced frame design in accordance with an approved design standard. (Ref. 2015 IRC R301.1.3)
INTERACTIVE WORK SHEET	Please submit a completed copy of the wind bracing work sheet offered on our web page. This spreadsheet will compile and calculate all of the data to comply with the wall bracing provisions from chapter 6 of the 2015 Virginia Residential Code for the wall bracing. This interactive work sheet is very easy to use. https://www.fairfaxcounty.gov/landdevelopment/wall-bracing . (Ref. 2015 IRC R602)
ATTIC DESIGN	Plans appear to meet the definition of "Attics, Habitable". Verify Minimum Uniformly Distributed Live Loads per Table R301.5. Provide Emergency Escape and Rescue Openings per R310.1. Provide Vertical Egress per R311.4. Provide Smoke Alarms per R314.3. (Ref. IRC R.301.5, R.310.1, R.314.3)
ATTIC HABITABLE	It appears that this design meets the definition of "Attic, Habitable". Please illustrate or otherwise provide information to show compliance with applicable code requirements. (Ref. 2015 R202, R301.5)
BLOCKING BETWEEN THE TRUSSES	When using a roof design incorporating a raised roof rafter or truss heel, blocking is required. Please show detail(s) and identify blocking/nail specifications. (Ref. 2015 IRC R602.10.8.2)
CARBON MONOXIDE ALARMS	Show the location of the carbon monoxide alarms in accordance with R315.1, or provide details on the carbon monoxide detection system installed under R315.2. (Ref. IRC R.315.2)
CRAWL SPACE VENTILATION	Please illustrate how the required crawl space access and ventilation will be provided. For unvented crawl spaces please show how this design meets code requirements. (Ref. 2015 IRC R408.3)
EMERGENCY MEANS OF EGRESS	Emergency escape and rescue openings are required. Please illustrate or provide locations and details for compliance with the code. (Ref 2015 IRC R310.1)
ELEVATOR EQUIPMENT	The plans indicate an elevator will be installed in the proposed construction. Please identify the type of elevator to be installed and the location of the hoisting equipment. Please submit the manufacturer's installation instructions. Please ensure that the structural members used will be adequate to support the weight of the elevator and the hoisting machinery. (Ref. 2015 IRC R301.4)
DOORS TO GARAGES	Doors between garages and living spaces must be constructed of 1-3/8 inch solid wood/approved steel doors, or door with a 20 min. rating. Please ensure code compliant doors are used in these locations. (Ref. 2015 IRC R302.5)
SEPARATION OF GARAGES	Please illustrate how garages will be separated from all living spaces in this design. This protection must include all exposed beams and columns within the garage area. (Ref. 2015 IRC R302.6)
FLOOR PLANS	Please identify the use of all rooms on all floors of the proposed design, including all attic and basement areas. (Ref. 2015 IRC R301.5, R303.1, and R305.1)
HABITABLE ATTICS	Please note that habitable attics must not exceed 400 square feet in R-5 dwellings that include three stories above grade plane below the habitable attic level. (Ref. 2015 IRC R202 __)
INTERIOR EGRESS ROUTE	Please note that an interior passage route is required from certain rooms to the main egress door. All doors through which this route passes must have a minimum 34" clear opening. Please indicate the extent of the route, and door sizes on your floor plan(s). (Ref. 2015 IRC R311.2, R311.2.1)
OPENINGS IN EXTERIOR WALLS	Please note that no openings (such as windows/doors) are permitted in walls located less than 3 feet from the property line. Openings in walls between 3 and 5 feet from the property line are limited to openings not exceeding 25% of the wall area. (Ref. 2015 IRC Table R302.1)
EXT. WALLS, PROPERTY LINES	Please note that fire separation is required when portions of a building are located within 5' of the property line (non-sprinklered buildings) or 3' of the property line (sprinklered buildings). Please include the design for this fire separation in the plans, including the complete listing details when applicable. ((Ref. 2015 IRC Table R302.1(1) and (2))
ROOM FUNCTIONS	Identify the function of all rooms shown on the floor plans.
SAFETY GLAZING	Please note that safety glazing is required in hazardous locations. (Ref. 2015 IRC R308.1 and R308.4)
LOCATION OF SMOKE DETECTORS	Please show the location of the smoke detectors (Ref. R.314.3)
UNDER STAIR PROTECTION	Please note that when the enclosed area under a stair is accessible, then it must have the wall/ceiling covered with 1/2 inch gypsum board on the enclosed side. (Ref. 2015 IRC R302.7)

BASEMENT WALL ABOVE GRADE	Please note that a wall that meets the definition of "Story Above Grade Plane" shall be an above-grade wall (E.g., basement-level walk-out.). (Ref. 2015 IRC R202)
BASEMENT WALL R-VALUE	Please note that the prescriptive compliance approach requires the following R-values for insulation in the following locations: (Ref. Table N1102.1.1)
CEILING R-VALUE	Under the prescriptive compliance approach, please ensure that ceiling or roof insulation must be R38 minimum. R30 is acceptable only if "raised heel" or "energy" trusses are used for roof framing; ref. Section R1102.2.1. (Ref. IRC with Virginia Amendments Table N1102.1.1)
CRAWL SPACE WALL R-VALUE	Please note that insulated crawl spaces are permitted only when they are unvented and there is a suitable vapor barrier over exposed earth. An unvented crawl space must also have air circulation per one of the approved methods. (Ref. 2015 IRC R1002.2.10, R408.3.)
FLOOR R-VALUE	Under the prescriptive compliance approach, please note that floor insulation must be R19 minimum. This requirement applies to any floor below habitable space and above unconditioned space or above outside air, such as a cantilevered floor segment. (Ref. 2015 IRC with Virginia Amendments Table N1102.1.1)
INSUFFICIENT CAVITY DEPTH	Plans specify R19 insulation in cavities of framed walls. Minimum 2x6 wall studs are required to accommodate typical R19 fiberglass insulation. Please clarify R-value and wall construction on plans. (Ref.)
MASS WALL R-VALUE	Under the prescriptive compliance approach, a mass wall that is less than 50% below grade must be insulated to R8 minimum when all insulation is on the exterior of the wall. R13 is acceptable only if over half of the required R-value is installed on the wall interior; e.g., R7 on interior, R6 on exterior. Refer to Table footnote ". (Ref. 2015 IRC with Virginia Amendments Table N1102.1.1)
SLAB EDGE R-VALUE	Under the prescriptive compliance approach, please note that slab edge insulation must be R10 minimum at the slab perimeter, with an overall length (horizontal and/or vertical) of 2 feet. The slab edge need be insulated only when the slab (or some portion of its perimeter) is within 12" of grade; ref. Section R1102.2.9. When the slab itself is heated (e.g., via embedded hot water pipes), slab edge insulation must be increased to R15 where it is at or near grade. (Ref. 2015 IRC with Virginia Amendments Table N1102.1.1)
SOLAR HEAT GAIN COEFFICIENT MI	Under the prescriptive compliance approach, ensure that for all fenestration products solar heat gain coefficient of 0.40 (including skylights). (Ref. 2015 IRC with Virginia Amendments Table N1102.1.1. Note please do not exceed maximum SHGC on plans.
U-FACTORS MISSING	Under the prescriptive compliance approach, U factor for all fenestration products shall not exceed 0.35 (0.55 for skylights). Note applicable U-factor(s) on plans for all covered products Ref. 2015 IRC with Virginia Amendments Table N1102.1.1. Also refer to Sec. N1101.9 for definition of fenestration.
WOOD-FRAMED WALL R-VALUE	Under the prescriptive compliance approach, please ensure that wood-framed wall insulation must be R15 minimum when installed in wall cavities. R13 is acceptable in wall cavities only if R1 continuous insulation is used to sheath the entire wall surface; refer to Table footnote "h". Ref. 2015 IRC with Virginia Amendments Table N1102.1.1.
BAS'T WALL DESIGN PER R404.1	The basement wall design shall be in accordance with Section R404.1 for the soil classification found on site. If a brick ledge is used, the reduced thickness must be accounted for. Provide a detail on the plans that corresponds to the design selected.
FDN DESIGN MUST MATCH GEOT RPT	Please coordinate the foundation design with the geotechnical data provided. Design assumptions must match the geotechnical report per of. (Ref. IRC R401.4.1)
FRONT STOOP DETAIL	Please provide a complete detail for the front entry concrete stoop, including foundation. (Ref. IRC R404.1.2)
FRONT STOOP SLAB OVERSTRESSED	Please note that the front stoop slab appears to be structurally deficient. Please provide calculations for the submitted design. (Ref. IRC R301.5)
MIN. BRG CAPACITY IS 1500 PSF	Please note that the maximum permitted soil bearing capacity is 1,500 PSF. In order to use a different soil bearing capacity please provide an original copy of the geotechnical report signed and sealed by an engineer registered in Virginia with the minimum soil bearing capacity. Footing sizes must be designed based on the information provided in the geotechnical report. (Ref. IRC 401.4.)
DEPTH TO BOTTOM OF FOOTING	Please note that the minimum footing depth in Fairfax County is 2 feet, measured from finished grade to bottom of the footing. The footing must not bear on improper fill. ((Ref. IRC R301.2(1))
GARAGE SLAB OVERSTRESSED	Please note that the garage slab appears to be structurally deficient. Please provide calculations for the submitted design. (Ref. IRC R301.5)
GARAGE GRADE BEAM OVERSTRESSED	Please note that the garage grade beam(s) appear to be structurally deficient. Please provide calculations for the submitted design. (Ref. IRC R301.5)
SOIL TYPE DO NOT MATCH	Please note that the soil types shown on the grading or subdivision plan do not match the design values used for the basement wall. Please provide a design that matches the soil types found on the building site. (Ref. IRC R401.4)
FDN DESIGN MUST MATCH GEOT RPT	The foundation design assumptions must match the geotechnical report recommendations.
FDN MUST DESIGNED BY PE	Please note that in accordance with the approved plat, the foundation system must be designed by an engineer due to the presence of problem soils. (Ref. IRC R403.1.8)
SUBMIT GRADING PLAN	Please submit a copy of the approved grading plan when submitting your building plans. Please note: approved grading plans received from Site Permits must then be submitted to Zoning for approval. Building Plan Review cannot approve the building plans until Site and Zoning approval has been obtained. Houses that have septic system or wells must have the Health Department sign off before the Building Permit can be issued. (Ref. VCC R102.2 R103.10)
SUBMIT APPROVED PLAT	Please submit one copy of the approved plat and the Site and Address Approval sheet when applicable. Houses that have septic system or wells must have the Health Department sign off before the Building Permit can be issued. (Ref. VCC 103.10)
BUILDING RELATED PROFFERS	Please note that this project has proffers and/or development conditions indicated on the site plan. Any of these items that are related to the structure are required and must be incorporated into the architectural plans prior to plan approval. Please identify how this design complies with each building related proffer or development condition. (Ref. VCC 103.10)
SUBMIT SUBDIVISION PLANS	Please provide a current copy of the subdivision plan with all proffers, conditions and geotechnical information. (Ref. VCC 103.10)
PERMIT AMENDMENT REQ'D.	Please note that the revision submitted shows additional square footage when compared to the figure shown on the permit. Please apply for a permit amendment from the Permit Application Center on the 2nd floor of the Herrity Building. (Ref. VCC 103.10)
PROVIDE SEALED CALCULATIONS	Please provide complete structural calculations with an original seal, signature, and date of an architect or engineer registered in the Commonwealth of Virginia to show the structural adequacy of the proposed construction. (Ref. VCC 109.3)
COUNTY COVER SHEET	Please include a Fairfax County Plan Cover Sheet with each set of drawings. Please complete all sections, except for the commercial section, or indicate these sections as "not applicable." Our cover sheet is available online for your convenience at www.fairfaxcounty.gov/landdevelopment/land-development-services-forms . (Ref. VCC R109.1)

SPECIAL INSPECTION	Please note that per Chapter 17 of the Virginia Construction Code the following components appear to require special inspections. The Special Inspections Program Statement of Special Inspections Form available at https://www.fairfaxcounty.gov/landdevelopment/special-inspections-program needs to be submitted. Pre-construction meeting can be waived if completed Pre-Construction Meeting Attendance Form is also submitted. The building plan review for this project will be approved upon resolution of this issue. (Ref. VCC R101)
PERMIT DESCRIPTION	Please coordinate the permit description with the plans that have been submitted. The current permit does not appear to match the permit description. (Ref. VCC R103.10)
EIFS REQUIREMENT	Please clarify if you are installing an exterior insulation and finish system (EIFS) by providing the installation instructions for the product you are using. EIFS must comply with IRC Section R703.9. Please note that these systems must be inspected by a Fairfax County approved Third Party Inspector. (Ref. IRC R703.9)
ENERGY CALC. COMPLIANCE	Please note that the building thermal envelope must comply with code requirements through one of the following methods: Please refer to Fairfax County's "Energy Compliance" publication https://www.fairfaxcounty.gov/landdevelopment/publications for more details. Please clearly note the compliance method selected on the building plans. For your convenience the US DOE's REScheck software program is an acceptable method for the total UA alternative; see www.energycodes.gov for free public access to the software. (Ref. IRC N1102)
DWGS DO NOT COMPLY W/ EVAL RPT	Please note that the provided plans do not appear to comply with the requirements of the Nationally Recognized Testing Laboratory evaluation report provided. Please ensure that all items required by the report are incorporated into each plan set. (Ref. VCC R109.1)
EVALUATION REPORT OUT-OF-DATE	Please note that the submitted Nationally Recognized Testing Laboratory evaluation report is out-of-date. Please provide a Nationally Recognized Testing Laboratory report that references the code edition used for the design of the project. (Ref. VCC R109.1)
EX. BUILDING BUILD AS NEW	Please provide a signed letter titled "Building Official Residential Addition Review" for existing building renovated as new single family dwelling.
EX. FOUNDATION AND BSMT WALLS	Please provide a signed and sealed certification statement from a Virginia licensed engineer for existing structural elements of the structure that will be reused. This would include foundations, basement walls, and any other materials that will continue to be used to transfer loads. Please ensure that this letter certifies used materials to be of adequate size and condition to carry new and existing loads. The signed and sealed certification statement must be attached to the plans prior to permit approval. sec. (Ref. VCC R109.3 R112.4)
FORMS AVAILABLE ONLINE	Copies of forms and publications are available at www.fairfaxcounty.gov/landdevelopment/land-development-services-forms .
NEW SINGLE FAMILY HEIGHT STRUT	All addition and new detached single family dwellings shall provide the building height with elevations showing average grade around the perimeter of the dwelling and mean roof height as required by the Fairfax County Zoning Ordinance Amendment ZOA-09-419. www.fairfaxcounty.gov/dpwes/publications/lti/09-12_sfd_grade.pdf
HEIGHT OF STRUCTURE	Building height shown in grading plans and Fairfax County building planreview coversheet must correspond. The average grade around the perimeter of the dwelling and the mean roof height as required by the Fairfax County Zoning (available at www.fairfaxcounty.gov/landdevelopment).
INDUST BLDG AFFIDVT INCOMPLETE	The Industrialized Building Affidavit is incomplete. Please correct and attach it to each set of plans.
INDUST BLDG AFFIDAVIT MISSING	The Industrialized Building Affidavit is missing. Please attach a completed form to each set of plans. The form is available at www.fairfaxcounty.gov/landdevelopment/land-development-services-forms .
INDUSTRIALIZED BLDG AFFIDAVIT	Please note that The "Industrialized Building Affidavit" is missing or incomplete. This form is required for modular construction and must be attached to each set of plans. . The form is available at www.fairfaxcounty.gov/landdevelopment/land-development-services-forms . (Ref. VCC R109.1)
MASTERFILE HEIGHT	Please note that the building height for master-file plans must be shown by providing the distance from first floor to the mean elevation of the highest roof in accordance with the Zoning Ordinance. Please include the maximum allowable distance from the first floor to any grade plane based on the Zoning Ordinance. (Example: zoning height = 35' maximum, first floor to mean roof = 29'-6", maximum allowable distance from first floor to any grade plane = 35 - 29.5 = 5.5'). Please ensure that all grading plans, when submitted, show the actual distance from the first floor to the grade plane is less than or equal to 35 ft. minus the height from the first floor to the mean height of the highest roof. Please show this information on the grading plan. (Ref. VCC R103.10)
NAME ADDRESS OCCUPATION	Please clearly note the name, address, and occupation of the designer on the building plans. Virginia state law requires that the designer is listed as a person, not a company. (Ref. VCC R111.1)
OPTIONAL ITEMS	Please note that the submitted plans include items or features labeled as "optional", which are not permitted under single family custom home permits. If the "optional" item will be built, please remove all references to "optional" in the plan and include full construction details. If some things will not be built under the current permit, please remove all references to the item on all plan sets being submitted. (Ref. VCC R109.1)
PEER REVIEWER PROGRAM	When your plan is in the Expedited Building Plan Review Program, please refer to step 4 of "How the Program Works". Once all deficient items found by the county have been addressed by the designer, and the corresponding corrections have been certified by the Peer Reviewer, please resubmit the drawings to the county for approval. (Ref. VCC R109.1)
SECURED SIGNATURE	Please note that all plans, details, and calculations shall bear an original seal, signature, and date of a design professional registered in the Commonwealth of Virginia in accordance with R109.3. When certifying a set of drawings, each page must be sealed, signed, and dated unless a coversheet containing a full table of contents of the plans is certified. The remaining pages of the plan may contain a copy of the seal, signature, and date. To determine when a seal is required, see informational brochures at www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/pdf/publications/seal.pdf . (Ref. VCC R109.3)
STUCCO REQUIREMENT	Please clarify your plans. You have indicated on your plans that the exterior finish will be stucco; this does not include exterior insulation finish systems (EIFS). Provide complete details of the installation, including type of vapor barrier, the type of lath, the number of coats, and size and placement of the weep screed. See materials and components on the Fairfax County web site for more detailed information www.fairfaxcounty.gov/landdevelopment/building-permits . (Ref. VCC R109.1)
TUB INFORMATION	Over sized soaking tubs or whirlpool tub manufacturer's information showing loading requirements must be attached to the plans. Please provide one for each set of plans.

TYPE OF CONSTRUCTION	Please note that the R-5 use group is limited to 3 stories above grade. Please provide complete elevations and calculations to show that this structure will be 3 stories or less above grade plane. Any design that is in excess of 3 stories would be considered outside the scope of the R-5 use group and the Virginia Residential Code. When the design is outside the scope of the Virginia Residential Code the plans shall note, "A fire sprinkler system will be installed throughout this structure in accordance with the design use group requirements in the 2015 Virginia Construction Code." (Ref. IRC R101.2)
CODE OF VIRGINIA 54.1-406	Please note that the Code of Virginia section 54.1-406 requires that "Any person, partnership, corporation or other entity who promotes through the use of the words "architecture" , "engineering" or any modification or derivative there of in its name or description of its business activity to be licensed with DPOR." Please be aware that building plans designed by a registered design professional must have the original signature and be sealed and dated. (Ref. IRC R102.2, R103.10)
TOWN OF VIENNA ZONING	Please note that the Town of Vienna Zoning and Public Works review approvals must be complete prior to any further building plan submissions or reviews. Please submit the Town of Vienna approved grading plan with the building plans. (Ref. 2015 VCC R102.2, R103.10)
2-STORY FOYER CONSTRUCTION	Please provide construction details of the exterior wall for the two story open foyer. The exterior wall does not appear to meet requirements for wind loads acting perpendicular to the wall face. Studs must be full length or an alternative compliance technique must be provided. Please show the construction details of the exterior two story wall. Please insure wall design is adequate for required perpendicular wind load, roof load, and wall height. (Ref. IRC Table R602.3.(5), R602.10)
AREAWAY DESIGNS	Please provide complete details of the proposed areaway design to include but not limited to: areaway base size, slab thickness, stair pocket size at base, rebar size and spacing through out, slab and wall details, clearances of rebar to concrete edge, concrete thickness on stair, tread depth and riser height, landing top and bottom, guard rail design, connection, spans, member sizes and material specifications. (Ref. IRC R402, R403, R404)
LEDGER BOLT SPACING INADEQUATE	Please clarify the bolt/lag spacing at the ledger attachment. The plan design appears to be insufficient to carry the applied loads. When not following a prescriptive design, please provide calculations in accordance with the current National Design Specification (NDS) for the proposed design. (Ref. IRC R507.2.2)
BOLT/LAG SCREW ATTACHMENT	Please clarify the edge distance of the bolt/lag screws at the ledger attachment. Please explain how the ledger board is attached to the supporting structure. Please clearly identify the structure: solid masonry, rim board, etc. Please specify type of hardware used and hardware spacing. The plan design appears to be inadequate. When not following a prescriptive design, please provide calculations in accordance with the current National Design Specification (NDS). (Ref. IRC R507)
BAS'T WALL DESIGN PER R404.1	Please note that the proposed basement wall design must be constructed in accordance with R404. If a brick ledge is used, please account for the reduced thickness. Please provide details on the plans that provide complete information for the proposed design. This should include material specifications, reinforcement type and spacing, lintels and reinforcement around openings, wall height and thickness, maximum backfill height, drainage and waterproofing, connections at the top and bottom. (Ref. IRC, R404, R405, R606 - R611)
COLLAR TIES PER R802.5	Please provide complete details for all wood framed roofs. All prescriptive wood frame rafter roof designs must have both collar ties, and ceiling joist or rafter ties. Collar ties must be located in the upper 1/3 of the rafter span. Please note that when rafter ties are located above the rafter bearing points, the rafter sizes shall be increased in accordance with the rafter span adjustment factor. Please include details to address rafter/ceiling joist heel joint connections. ((Ref. IRC Table R802.5.1(3) and R802.5.1(5), R802.5.1(9))
INDICATE COLUMN SIZES	Please indicate column sizes under beams and/or headers. (Ref. IRC R109.3)
DECK LATERAL LOADS	Please show how decks attached to the primary structure will be anchored for both vertical and lateral loads. The Virginia Residential Code specifies that the lateral load design capacity must be not less than 1500 pounds. Please detail how you will resist lateral loads on the plans. (Ref. IRC R507.2.3)
DECK LATERAL LOAD CONNECTION	Please note that building code specifies 2 1500 lb hold down tension devices per deck diaphragm as a prescriptive means to achieve compliance with the minimum lateral load connection requirements without requiring engineering. In lieu of the prescriptive hold down tension device specified, an alternate engineered connection detail is permitted, or the deck can be designed to be free-standing. Please show how this design will comply. (Ref. IRC R507.2.3)
ELEVATED SLAB	Please note that when using elevated (cast in place concrete) slabs without steel deck in the design, the Critical Structures Inspections Section must approve the design, and special inspections will be required. You must request Pre-Construction meeting online at https://www.fairfaxcounty.gov/landdevelopment/special-inspections-program . At the bottom of this page request to waive critical structural meeting. There are two required form that must be attached when submitting. Please attach the following completed forms 1) The Special Inspections Program Statement of Special Inspections and 2) Pre-Construction Meeting Attendance Form. (Ref. 2015 VRC/IRC R101)
FRAMING PLAN REQUIRED	Provide a complete framing plan for the following construction. (Ref. VCC R 109.3)
FRAMING PLAN REQUIRED	Please provide a complete framing plan for the proposed design. (Ref. VCC R109.3 2015)
FOOTING DESIGN INADEQUATE	It appears that the design of the footing may be inadequate. The minimum depth to the bottom of the footing is required to be 2'. The maximum permitted soil bearing capacity is 2,000 PSF. Please provide an original copy of the geotechnical report signed and sealed by an engineer registered in Virginia. Please design the footing accordingly. (Ref. IRC R403 2015)
GRADE BEAM/STOOP OVERSTRESSED	Provide a detail for front entry concrete stoop. Garage grade beams/ garage framed slab appear overstressed. Provide calculations for the submitted design.
EXIST. CONSTRUCTION INADEQUATE	Please provide complete information about all existing headers, beams, columns and/or footings that will support the loads from the new and existing construction. Please make sure all existing framing details are shown, including spans, and that all members can support any additional loads being applied. (Ref. VCC R109.3, sec. R112.4)
NAME, SIZE, SERIES OF I-JOIST	Please provide the manufacture's name, size and series number for the manufactured floor joists (I-joists) and engineered beams. (Ref. IRC R502.1)
PROVIDE LOAD PATH	Please ensure framing plans show an adequate load path to the foundation. (Ref. 2015 VCC R109.3)
LEDGER ATTACHMENT	Please explain how the ledger board is attached to the supporting structure. Clearly identify the structure: solid masonry, rim board, etc. Specify type of hardware used and hardware spacing. (Ref. IRC ___)
LINTEL SIZES	Lintel sizes for brick or stone veneer are not provided, or are incomplete. (Ref. IRC ___)
DESIGN LOAD CRITERIA MISSING	Please provide missing design load criteria for this design. Please check to see that live load, dead load, snow load, wind load, soil bearing capacity at footings and lateral earth pressure on basement walls have been provided in an appropriate location. All designs must meet or exceed the minimum code requirements. (Ref. IRC R301.1)
PROVIDE LIST OF MATERIAL SPECS	Please provide a list of material design specifications used, to include minimum wood species & grade, concrete strength, grade of structural steel, brand and series of any engineered wood products. (Ref. IRC R402.2, R502.2, R602.3 and R802.2)

STRUCTURAL ELEMENTS MISSING	Please note that there appear to be structural members missing or under designed. Please provide size and material specifications and/or calculations for the following members: (Ref IRC R301.1)
NAIL PLATE TO STEEL BEAM	Please provide a detail or narrative to explain how the 2x wood plate is connected to the top flange of the steel beam(s) to insure continuous lateral support of top flange, and positive connections to the beam. (Ref. IRC R301.1)
WOOD ALLOWABLES NOT PER NDS	Please note that the wood allowable stresses noted on the drawings do not appear to be in compliance with the 2005 NDS. Please provide design criteria that meets minimum code requirements. (Ref. IRC R502.1)
SOIL TYPE DO NOT MATCH	The soil types shown on the grading or subdivision plan do not match the design values used for the basement wall. Provide a design that matches the soil types.
NAME, SIZE, SERIES OF LVL	Provide the manufacture's name, size and series number for the laminated composite beams (LVL's).
NAME, SIZE, SERIES OF I-JOIST	Please provide the manufacture's name, size and series number for the manufactured floor joists (I-joists) and laminated composite beams (LVL's). (Ref. IRC ___)
JOIST ATTACHED TO STEEL BEAM	When attaching joist to the side of steel beams, please provide details of the web filler attachment; include size and spacing of fasteners. This detail is often provided by the manufacturers for I joist. (Ref. IRC R502)
STR. ELEMENTS UNDERDESIGNED	Some of the structural framing elements appear to be undersized. Provide calculations for the following members: (Ref. IRC ___)
TRUSS LAYOUT PLAN	Please include a truss layout drawing on the plans. This drawing must include the location of any proposed girder trusses and show a complete load path to the foundation. (Ref. IRC R802.10.1)
JOISTS UNDER OVERSIZED TUBS	Floor joists under oversized tubs must be doubled or calculations must be submitted to show adequacy of the floor system provided. (Ref. IRC ___)
EASY THE PROCESS	Please consider hiring a licensed contractor or design professional to help you with preparing the plans. Their knowledge and expertise will make this process much easier for you. (Ref. VCC 108.4)
MINIMUM PLAN REQUIREMENTS	Please review and incorporate this minimum required information into your building plans. For more information please see our website at https://www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/forms/permit-plan-checklist.pdf (Ref. IRC R109.1)
MIN PLAN REQ. FINISH BSMT	Please review and incorporate this minimum required information into your building plans. https://www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/forms/permit-plan-checklist.pdf (Ref. VCC 109.1)
PROFESSIONAL HELP	You may want to consider hiring a licensed contractor or design professional to help you with preparing the plans, their knowledge and expertise will make this process much easier for you. (Ref. VCC 108.4)
2-STORY FOYER CONSTRUCTION	If the exterior wall does not meet requirements for wind loads acting perpendicular to the wall face. Please provide full length studs must be full length in accordance with Table R602.3.(5) or an alternative compliance technique must be provided. Please show the construction details of the exterior wall for the two story wall. (Ref. IRC 602.3)
BLOCKING BETWEEN TRUSSES	Where roof trusses or rafters bear on exterior braced wall panels, blocking between the trusses or rafters shall be attached to the wall top plate in accordance with IRC Sec. R602.10.8.1. If the distance from the top of the braced wall panel to the top of the rafter or truss is 9.25" or less, measured in the exterior plane of the braced wall panel, no blocking is required. Please show detail(s) at all braced wall panel / roof intersections where blocking is required, identifying blocking to be provided and required nailing.
WALL BRACING INADEQUATE	The wall bracing shown on the plans does not conform to the requirements of the IRC Section R602.10. Please show location and length of braced panels in accordance with Table R602.10.3(1) - (4). (Ref. IRC 602.10.3)
CONTINUOUS PORTAL FRAMING	The plans do not meet the requirements of the 2015 IRC Figure R602.10.6.4 for Continuously Sheathed Portal Frame Panel Construction. Please revise plans to comply with IRC R602.10.6.4
PANEL LOCATION AND DETAILS	Please show all braced wall lines and braced wall panels including methods and location of panels along the braced wall lines. (Ref. IRC R 602.10)
SHEAR WALL EVALUATION REPORT	Please provide the evaluation report NUMBER AND AGENCY and include details, on the plans, for installing this product that are job specific (Please refer to the Prescriptive Design Guide for the product to obtain this information). Please check that all proprietary shear wall products are identified by the manufacturer's name and model number at every location where they will be installed. (Ref. IRC ___)
HOW TO COMPLY WITH WIND	For more information on how to comply with the wall bracing provisions of the IRC, please visit: https://www.fairfaxcounty.gov/landdevelopment/wall-bracing resubmit your plans with the wind bracing work sheet available our web page. You will find that we offer a interactive work sheet that is easy to use.
WIND CALCS DO NOT COMPLY	The submitted calculations for the wind bracing system noted on the drawings are insufficient for the following reasons; please refer to https://www.fairfaxcounty.gov/landdevelopment/wall-bracing for more information.
WIND LOAD METHODOLOGY	When you can not follow the prescriptive wall bracing requirements of the IRC, you have to follow an engineered methodology such as chapter 23 of the VCC. The engineered method must include a complete wind load analysis such as described in Section 1609 in the IBC. Please include complete design calculations for all elements and indicate what design standard you used. All design elements included in the calculations shall be included on the plans. Please include all fastener and connection details. When identifying hold-downs, provide complete installation design requirements. Identify type, size, length and embedment of anchor bolts. Identify wood member size, grade and species. Identify fastener schedule of shear wall panel to hold-down member.
LATERAL LOAD RESISTANCE	The typical assemblage of post and beam elements are not inherently resistant to lateral loading . How will you brace the lower area of this structure for wind loading? Please provide calculations and complete details of your braced frame in accordance with an approved design standard.
INTERACTIVE WORK SHEET	We recommend that when you resubmit your plans you submit the wind bracing work sheet offered on our web page. You will find that we offer an interactive work sheet that is very easy to use. Please follow this link: https://www.fairfaxcounty.gov/landdevelopment/wall-bracing