



DEPARTMENT OF COMMUNITY PLANNING HOUSING AND DEVELOPMENT (CPHD)
Inspection Services Division (ISD)

#1 Courthouse Plaza, Suite 1000 2100 Clarendon Boulevard Arlington, VA 22201
TEL 703.228.3800 FAX 703.228.7046 WEBSITE: building.arlingtonva.us

Common Plan Review Rejection Reasons

Submitted plans must contain sufficient information for plan reviewers to be able to verify that the proposed construction complies with the Virginia Uniform Statewide Building Code (VUSBC). When submitted plans do not meet a minimum level of completeness, ISD cannot provide detailed rejection comments.

Below is a list of common plan review rejection reasons. Please review your plans carefully before submitting for permit application.

Commercial Construction:

PROCEDURAL

1. Drawings details and calculations shall bear an original seal, signature, and date of an architect or engineer registered in the Commonwealth of Virginia in accordance with VUSBC requirements.
2. Provide the name, address, and occupation of the person responsible for designing this project in accordance with the Virginia Uniform Statewide Building Code.
3. The *Accessibility Compliance Form* is missing or is incomplete.
4. Provide a copy of the ICC Evaluation Report for any EIFS used. Include installation details on the plans consistent with the report.
5. The *Code Analysis* is missing or incomplete.

TENANT PLAN REVIEW

6. Provide key plan showing location of space in building.
7. Provide size of space in square feet.
8. Label all rooms and uses of all rooms.
9. Dead end corridors are not permitted.
10. Travel over 75 feet requires 2 remote exits.
11. Floor must have minimum 2 remote exits.
12. Over 50 people in a space requires 2 remote exits.
13. Door hardware does not conform to VUSBC requirements.
14. Exit lights required.
15. Emergency egress lighting required.
16. Provide full floor plan.
17. Provide clear scaled drawings.
18. Provide applicable seating plans (scaled).

GROUP AND CONSTRUCTION TYPE

19. Clearly show compliance with any applicable mixed-use provisions. Indicate if you have designed as separated, non-separated or accessory occupancies. Provide the required ratings for the separation assemblies.
20. The Type of Construction is missing or the one referenced is not correct. Please reevaluate the project and indicate the construction type on the plans.



DEPARTMENT OF COMMUNITY PLANNING HOUSING AND DEVELOPMENT
Inspection Services Division

#1 Courthouse Plaza, Suite 1000 2100 Clarendon Boulevard Arlington, VA 22201
TEL 703.228.3800 FAX 703.228.7046 WEBSITE: building.arlingtonva.us

21. The height and area indicated appears to exceed allowable limits for the Type of Construction selected. Provide calculations showing compliance.
22. Specific Occupancy Areas may require separations.
23. The mezzanine is not in compliance.
24. Stairs enclosures must meet VUSBC requirements.

FIRE-RESISTANT CONSTRUCTION

25. Separation may be required for mixed uses.
26. Fire-resistance design numbers are required for all rated structural elements and separations. Provide a fire-resistance design number and listing for every fire rated element.
27. The fire-resistance rating of the exterior wall is not correct. See the definition of 'fire separation distance'. Show the distance to lot lines and imaginary lines between buildings.
28. The amount of openings in the rated exterior walls exceeds allowable limits.
29. Fire walls must be rated and must allow for the collapse of the structure on either side without damaging the wall itself. The wall must meet horizontal and vertical continuity provisions.
30. Shafts must have a continuous fire-resistance rating. Any supporting or penetrating structural elements must have a rating equal to or greater than the shaft.
31. The floor opening shown must comply with VUSBC requirements. Atriums that connect more than two stories may require a smoke control system.
32. Provide details for the Through-Penetration protection system(s).
33. A Fire Suppression system may be required.
34. Monitoring of the suppression system may be required.
35. Opening protectives shall be rated. Fire doors must be self-closing and latching. Provide notes for hardware.
36. Corridors and doors are required to be rated.
37. Guestroom/dwelling demising walls shall be one hour rated.

EGRESS

38. Provide a key plan for the building showing all exits, core facilities, and the location of work.
39. The number of exits or exit width provided is not adequate for the use and occupant load.
40. The means of egress provided are not adequate for this use and occupant load.
41. The maximum length of the common path of egress has been exceeded.
42. Exits or means of egress are not remote.
43. All floor areas shall have access to the minimum number of exits required.
44. Check corridors for proper width, dead ends, and continuity.
45. Doors shall not reduce landings, aisles, and corridors to less than ½ the required width. When fully opened, the door and hardware shall not project more than 7" into the required width.
46. Doors are to incorrect size or employ improper hardware.
47. Provide a door and hardware schedule.
48. Fire doors must be self-closing and latching. Provide notes for hardware. The space between doors in series is not adequate.
49. Show number of occupants in each space. Provide a furniture plan that supports the indicated occupant load.
50. Provide notes on the plans specifying applicable code section(s) for any special locking conditions.
51. Provide guardrail details on the plans.
52. Provide handrail details on the plans.
53. Provide exit sign locations on the plans.
54. Provide means of egress illumination.



DEPARTMENT OF COMMUNITY PLANNING HOUSING AND DEVELOPMENT
Inspection Services Division

#1 Courthouse Plaza, Suite 1000 2100 Clarendon Boulevard Arlington, VA 22201
TEL 703.228.3800 FAX 703.228.7046 WEBSITE: building.arlingtonva.us

ACCESSIBILITY

55. The *Accessibility Compliance Form* is not filled out correctly.
56. Restrooms are not accessible.
57. Counter height is not accessible.
58. Ramps are not accessible.
59. Drinking fountains shall be accessible.
60. Door approaches shall comply with VUSBC requirements.
61. Exits must be accessible in accordance with VUSBC requirements.
62. An accessible changing room must be provided.
63. Indicate which units/ rooms are accessible and ensure the minimum required number has been provided.
64. Dwelling units must comply with VUSBC requirements.

STRUCTURAL

65. Submit an original copy of the geotechnical report signed and sealed by an architect or engineer registered in the Commonwealth of Virginia. The maximum assumable soil bearing capacity without a geotechnical investigation is 2,000 PSF (95 kN/m²).
66. Specify the allowable bearing pressure on the plans and coordinate the foundation design assumptions with the geotechnical report if applicable.
67. The construction documents shall clearly indicate all structural design loads and related factors.
68. Provide Structural calculations with an original seal, signature and date of an architect or engineer registered in the Commonwealth of Virginia showing the structural adequacy of the proposed construction.

ELECTRICAL

1. Provide service outlets on the roof for HVAC equipment.
2. Indicate how the service equipment and/or transformer is grounded by providing size of the grounding electrode conductor and type(s) of grounding electrode(s).
3. Provide original seal and signature of the design professional architect/engineer licensed to practice electrical engineering in the state of Virginia.
4. Provide overcurrent protection on the primary and/or secondary sides of the transformer.
5. Provide lockable breakers for separate branch circuits that feed unit equipment for emergency lighting.
6. Provide an electrical floor plan.
7. Provide panel schedules, load calculations, size and the location of the main overcurrent devices for all panels used for this project.
8. Provide a complete electrical riser diagram to each panel. Indicate the size, number of conductors and conduits to each panel, transformer and electrical equipment used.
9. Ductwork/piping is located over electrical panel(s). Relocate the ductwork/piping or panel(s).
10. Identify and show the branch circuits, indicating the size and number of conductors and/or conduits.
11. Identify and show the location of the electrical panels.
12. Identify and show the location of the electrical equipment.
13. Provide the minimum working space clearance in front of electrical equipment.
14. Provide lighting fixture schedules.
15. Feeder conductors to panels are undersized.
16. Provide an Emergency Power-Off (EPO) switch.



DEPARTMENT OF COMMUNITY PLANNING HOUSING AND DEVELOPMENT
Inspection Services Division

#1 Courthouse Plaza, Suite 1000 2100 Clarendon Boulevard Arlington, VA 22201
TEL 703.228.3800 FAX 703.228.7046 WEBSITE: building.arlingtonva.us

MECHANICAL

1. Exits and exit access corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts or plenums.
2. All toilet room exhaust shall discharge to the exterior of the building. No less than 75 cfm per water closet or urinal is required.
3. Equipment with a capacity of 3,000 cfm and 90 MBH total cooling capacity or greater shall be equipped with an economizer.
4. Air distribution systems with a capacity greater than 2,000 cfm shall be equipped with an approved smoke detector. Smoke detectors shall be installed on the return air side, within the duct or plenum upstream of any outdoor air connections.
5. Provide fire dampers where air distribution system penetrates assemblies that are required to be fire rated. Ductwork located within a rated floor/ceiling or roof/ceiling assembly shall conform to all the requirements of the listed assembly.
6. Provide a UL or ICC Evaluation Report for factory built grease hoods.
7. Provide a Type I commercial kitchen hood at or above all commercial food heat processing appliances that produce grease vapors or smoke.
8. Type II hoods shall be installed at or above all commercial food heat processing equipment which produces fumes, steam, odor, or heat.
9. Provide smoke dampers at air transfer openings in required smoke partitions. The smoke damper shall be listed and labeled. A smoke detector shall activate the smoke damper.
10. Provide ceiling radiation dampers where the air distribution system penetrates the ceiling of a floor/ceiling or roof/ceiling assembly which is required to be fire resistant rated. The ceiling radiation dampers shall be listed and labeled. Ductwork located within a rated floor/ceiling and roof/ceiling assembly shall conform to the requirements of the listed assembly.
11. Provide adequate tempered makeup air to replace the amount being exhausted. The temperature differential between the makeup air and air in the conditioned space shall not exceed 10 degrees F.
12. Provide smoke dampers where the air distribution system penetrates smoke barriers. The smoke damper shall be listed and labeled.
13. Provide the R-value of all building components on the architectural plans.
14. Provide at least the minimum CFM per person of outdoor air based on the maximum estimated occupant load in persons per 1,000 square feet for this occupancy classification.
15. Provide and indicate on the plans the means of return air from all spaces to the main HVAC equipment.
16. Provide adequate means of combustion and dilution air for all fuel fired appliances or equipment taking into consideration the simultaneous operation of all like appliances.
17. The mechanical plans shall bear the original seal and signature of a licensed design professional in the Commonwealth of Virginia. However, if exempted under state law, the plans may be prepared by a master level or Class A mechanical contractor in the Commonwealth of Virginia who will supervise the actual field installation. In this case, the plans shall bear his or her name, address and license number.

PLUMBING

1. Provide separate facilities for each sex.
2. The plumbing drawings shall bear the original seal and signature of a registered professional licensed in the Commonwealth of Virginia or when applicable the drawings shall be prepared by and shall bear the name, address, and license number of the master level or Class A plumbing contractor licensed in the Commonwealth of Virginia who will supervise the actual field installation.
3. Provide a grease trap connecting to the drainage system by means of a direct connection and vented on the discharge side.
4. Flat venting is prohibited. Vents shall rise vertically (at least 45 degrees) to a point at least 6" above the trap or fixture flood level rim, before offsetting horizontally.



DEPARTMENT OF COMMUNITY PLANNING HOUSING AND DEVELOPMENT
Inspection Services Division

#1 Courthouse Plaza, Suite 1000 2100 Clarendon Boulevard Arlington, VA 22201
TEL 703.228.3800 FAX 703.228.7046 WEBSITE: building.arlingtonva.us

5. Provide a riser diagram of the water, storm, sanitary, and gas piping system(s).
6. Provide a plan view of the water, storm, sanitary, and gas piping system(s).
7. Identify all pipe sizes, stacks, conductors, risers, fixtures, and equipment.
8. Coordination is required between the plumbing plans and plumbing riser diagrams.
9. Traps shall not exceed the trap-to-vent distance.
10. Fixtures, equipment, and appliances not having air gaps shall be protected with an approved backflow preventer.
11. Provide sufficient toilet facilities.
12. Provide a plumbing demolition plan (sanitary and water) for fixture unit credits.
13. A complete gas plan and riser diagram is required. Show all loads, pipe sizes, pressure, and fully developed length.
14. Gas pipe sizes are inadequate.
15. Improper system venting: wet vent, common vent, circuit vent, or other.
16. Provide the following water heater details: capacity, recovery rate, supporting information (if not on floor).
17. Drainage pipe sizes are inadequate.
18. Cleanouts are required for the drainage system.
19. Anti-scald shower controls are required.
20. Developed length of hot water piping exceeding 100 feet requires a means of maintaining temperature to within 100 feet of the farthest fixture.
21. A separate compartment is required for water closets when more than one water closet or urinal is indicated in a toilet room.
22. Provide a Hazardous Material Report for all hazardous substances.
23. Coordination is required between the site plan and plumbing plan.
24. Provide tempered water to accessible lavatories.
25. Provide and identify a shutoff valve for each appliance.
26. Provide and identify a shutoff valve immediately ahead (upstream) of each MP regulator.
27. Regulator vents shall not be interconnected. The venting of each regulator shall be separate and independent, and shall terminate outside the building.
28. Provide and identify that the underground plastic piping has a tracer wire or other approved material adjacent to the underground plastic piping.
29. Provide a service sink and a drinking fountain.

FIRE ALARM SHOP DRAWINGS

1. Submittal is incomplete:
 - a. symbols list/legend not provided.
 - b. battery calculations not provided.
2. Provide manufacturer's cut sheets for all new devices being provided.
3. The spacing of your audible/visual units does not comply.
4. Provide the sequence of operation for this system.
5. Wiring diagram incorrect or unclear.
6. Pull stations to be no more than 5 feet from exit door.
7. Provide fire alarm speakers.

RANGE HOODS

1. Provide three copies of plans showing the locations and dimensions of all appliances.
2. Provide/show a manual actuation device > 10 & < 20 feet from the hood.
3. Note on plans that all fuel/electric supply will be arranged to shut down upon system activation.
4. Hood overhang does not meet the required six inches beyond cooking surface.
5. Non-canopy hood must be so labeled. Must have proper setback and height above cooking surface.



DEPARTMENT OF COMMUNITY PLANNING HOUSING AND DEVELOPMENT
Inspection Services Division

#1 Courthouse Plaza, Suite 1000 2100 Clarendon Boulevard Arlington, VA 22201
TEL 703.228.3800 FAX 703.228.7046 WEBSITE: building.arlingtonva.us

6. Plans do not match the manufacturer's design manual.

SPRINKLER SHOP DRAWINGS

1. Provide proper key plan showing location of work in building.
2. Provide location including street address and suite number.
3. Show all pipe sizes and types on drawings.
4. Plans as shown do not match base building piping/layout/head type.
5. Sprinkler coverage inadequate.
6. Limited area sprinkler system requires hydraulic calculations.
7. Proper coverage required in **all** adjacent spaces.
8. Provide legible, current manufacturer's cut sheets for all system components.