

**ROANOKE COUNTY COMMUNITY DEVELOPMENT
INSPECTIONS DIVISION**

PROFESSIONAL SEAL ON DRAWINGS

The purpose of these charts and notes is for quick reference to determine in accordance with § 54.1 - 402 of the Code of Virginia if an architect's or engineer's (A/E) seal is required on documents for proposed construction.

CHART A - GENERAL DESIGN

A proposed structure which is classified within any of the categories marked "Yes" requires an A/E seal on the documents. Separate requirements apply as to when the electrical, plumbing or mechanical systems in such structures require an A/E seal (see Charts B and C).

GROUP	BRIEF DESCRIPTION	AREA (SQ. FT.)			HEIGHT (STORIES)	
		5,000 OR LESS	5,001 TO 15,000	OVER 15,000	3 OR LESS	OVER 3
A ¹	ASSEMBLY	YES	YES	YES	YES	YES
B	BUSINESS	-	YES	YES	-	YES
E	SCHOOLS & DAY CARE CENTERS	YES	YES	YES	YES	YES
F	FACTORY & INDUSTRIAL	-	-	YES	-	YES
H	HIGH HAZARD	YES	YES	YES	YES	YES
I	INSTITUTIONAL	YES	YES	YES	YES	YES
M	MERCANTILE	-	YES	YES	-	YES
R-1	HOTEL, MOTEL & DORMITORY	YES	YES	YES	YES	YES
R-2 ⁷	MULTI-FAMILY RESIDENTIAL	-	-	YES	YES	YES
R-3	2 FAMILY ATTACHED	-	-	YES	-	YES
R-4	RESIDENTIAL ASSISTED LIVING	-	-	YES	-	YES
R-5	1 & 2 FAMILY DWELLINGS	-	-	YES	-	YES
S	STORAGE (NON-FARM)	-	-	YES	-	YES
U	UTILITY & MISCELLANEOUS	-	-	YES	-	YES
ALL	INTERIOR DESIGN	SEE NOTE NUMBER 4				

Notes: (Apply the following notes to all categories as applicable.)

1. Churches are exempt if building does not exceed 5,000 square feet or three stories, and the occupant load does not exceed 100.
2. A local building code official may require an A/E seal even if not required to do so by this chart.
3. The law requires that, where an A/E seal is not present, the plans must be signed by the individual (not company) responsible for the design, including the individual's occupation and address.
4. Additions, remodeling or interior design defined under § 54.1-400 of the Code of Virginia might not require an A/E seal. For construction, additions or remodeling resulting in a change in occupancy, occupancy load, modification to the structural system, change in access or egress or an increase in fire hazard an A/E seal is required in accordance with § 54.1-400, although notes 1 and 2 still apply.
5. Any unique design of structural elements for floors, walls, roofs or foundations requires an A/E seal, regardless of whether or not the remainder of the plans require such certification.
6. Buildings, structures, or electrical and mechanical installations which are not otherwise exempted but which are of standard design, provided they bear the certification of a professional engineer or architect registered or licensed in another state, and provided that the design is adapted for the specific location and conformity with local codes, ordinances and regulations, and is so certified by a professional engineer or architect licensed in Virginia may not require an A/E seal.
7. One exit and three stories or less Group R-2 buildings would normally be exempted from an A/E seal except where required by Note 2. Most all other three stories or less Group R-2 multi-family buildings are required by the building officials to have A/E seals for the construction documents.

CHART B - ELECTRICAL DESIGN (cont.)

A proposed electrical system which is classified within any of the categories marked "Yes" requires an A/E seal on the construction documents. Those NOT marked "Yes" may not require an A/E seal only if designed by a licensed master electrician or Class A electrical contractor (see Notes 2 and 3). Separate requirements apply as to whether the mechanical systems or the general design of such structures require an A/E seal (see Charts A and C).

GROUP	BRIEF DESCRIPTION	HEIGHT (STORIES)		OCCUPANT LOAD		VOLTS		AMPS	
		3 OR LESS	OVER 3	100 OR LESS	OVER 100	600 OR LESS	OVER 600	800 OR LESS	OVER 800
A-1	THEATERS	-	YES	-	YES	-	YES	-	YES
A-2	RESTAURANTS, NIGHTCLUBS	-	YES	-	-	-	YES	-	YES
A-3	DANCE HALLS, CHURCHES	-	YES	-	-	-	YES	-	YES
A-5	GRANDSTANDS, ETC.	-	YES	-	-	-	YES	-	YES
B	BUSINESS	-	YES	-	-	-	YES	-	YES
E	SCHOOLS	YES	YES	YES	YES	YES	YES	YES	YES
F	FACTORY & INDUSTRIAL	-	YES	-	-	-	YES	-	YES
H	HIGH HAZARD	YES	YES	YES	YES	YES	YES	YES	YES
I	INSTITUTIONAL (I-1, I-2 & I-3)	YES	YES	YES	YES	YES	YES	YES	YES
I-4	DAY CARE/NURSERIES	-	YES	-	YES	-	YES	-	YES
M	MERCANTILE	-	YES	-	-	-	YES	-	YES
R	RESIDENTIAL	-	YES	-	YES	-	YES	-	YES
S	STORAGE	-	YES	-	-	-	YES	-	YES
U	UTILITY & MISCELLANEOUS	-	YES	-	-	-	YES	-	YES

Notes: (Apply the following notes to all categories as applicable.)

1. A local building official may require an A/E seal for electrical work even if not required to do so by this chart.
2. The law requires that, where an A/E seal is not present, the plans must be signed by the individual (not company) responsible for the design, including the individual's occupation and address.
3. The above chart applies both to new construction and to additions or remodeling.
4. The exemption for electrical contractors and electricians is applicable only when both design and installation are under their direction or control.

CHART C - PLUMBING AND MECHANICAL DESIGN (cont.)

A proposed plumbing or mechanical system which is classified within any of the categories marked "Yes" requires an A/E seal on the construction documents. Those NOT marked "Yes" may not require an A/E seal only if designed by a person licensed as a master plumber, master mechanical worker, or Class A contractor in those specialties by written examination (see Notes 3 and 5). Separate requirements apply as to whether the electrical system or the general design of such structures requires an A/E seal (see Charts A and B).

GROUP	BRIEF DESCRIPTION	HEIGHT (STORIES)		OCCUPANT		THRESHOLD LEVEL ¹	
		3 OR LESS	OVER 3	100 OR LESS	OVER 100	BELOW	ABOVE
A-1	THEATERS	-	YES	-	YES	-	YES
A-2	RESTAURANTS, NIGHTCLUBS	-	YES	-	-	-	YES
A-3	DANCE HALLS, CHURCHES	-	YES	-	-	-	YES
A-5	GRANDSTANDS, ETC.	-	YES	-	-	-	YES
B	BUSINESS	-	YES	-	-	-	YES
E	SCHOOLS	YES	YES	YES	YES	YES	YES
F	FACTORY & INDUSTRIAL	-	YES	-	-	-	YES
H	HIGH HAZARD	YES	YES	YES	YES	YES	YES
I	INSTITUTIONAL (I-1, I-2 & I-3)	YES	YES	YES	YES	YES	YES
I-4	DAY CARE	-	YES	-	YES	-	YES
M	MERCANTILE	-	YES	-	-	-	YES
R	RESIDENTIAL	-	YES	-	YES	-	YES
S	STORAGE	-	YES	-	-	-	YES
U	UTILITY & MISCELLANEOUS	-	YES	-	-	-	YES

Notes: (Apply the following notes to all categories as applicable.)

1. The "Threshold Level" is defined in the law as "Plumbing and mechanical systems using packaged mechanical equipment, such as equipment of cataloged standard design which has been coordinated and tested by the manufacturer, which comply with all applicable codes. These mechanical systems shall not exceed gauge pressures of 125 pounds per square inch, other than refrigeration, or temperatures other than flue gas of 300° F (150° C)"
2. A local building official may require an A/E seal for plumbing and mechanical systems even if not required to do so by this chart.
3. The law requires that, where an A/E seal is not present, the plans must be signed by the individual (not company) responsible for the design, including the individual's occupation and address.
4. The above chart applies to both new construction and to additions or remodeling.
5. The exemptions for plumbers, HVAC workers, and mechanical contractors are applicable only when both design and installation are under his/her direction or control.

Additional Local Requirements

Roanoke County policy also requires an A/E seal on the following submissions:

1. Retaining Walls exceeding 6 feet in height or 4 feet of unbalanced fill
2. Bridges, towers and similar structures.
3. Any unique or unusual structure that, in the opinion of the building official, requires professional design.

Examples of Use as Defined by the Virginia Uniform Statewide Building Code

Use Group	Description	Example of Uses*
A	Assembly –the use of a structure or portions thereof for the gathering together of persons	Theaters, concert halls, banquet halls, restaurants, night clubs, taverns and bars, arcades, bowling alleys, churches, courtrooms, exhibition halls, libraries, museums, gymnasiums, arenas, rinks, bleachers, grandstands, stadiums.
B	Business – the use of a structure for office or professional services	Banks, barber and beauty shops, car wash, professional services, clinic, adult education, testing labs, vehicle showrooms, print shops, radio and TV stations, fire and police stations, general office use.
E	Educational	Schools and daycare over 2 ½ years, 12th grade level and under.
F	Factory/Industrial	Assembly, manufacturing, fabricating, finishing, packaging, processing
H	High-Hazard	Any use that includes materials which constitute a physical or health hazard. Explosives, combustible and flammable materials in significant quantities, corrosive or toxic materials.
I	Institutional – persons in a supervised environment	Hospitals, nursing homes, infant care, jails, prisons, detention centers.
M	Mercantile – display and sale of merchandise	Department stores, markets, drug stores, gas stations, retail/wholesale sales.
R-1	Residential - Transient	Boarding houses, hotels, motels. Length of stay usually less than 30 days.
R-2	Residential – Permanent	Apartments, dormitories, fraternities, sororities, hotels and motels. Length of stay usually more than 30 days.
R-3	Residential - Other	Permanent residential uses with no more than 2 units per building and over 3 stories.
R-4	Residential – Assisted	Residential care, assisted living facilities.
R-5	Residential – Single Family	1 and 2 family dwellings less than 3 stories.
S	Storage	Warehouses, mini-storage, storage of non-hazardous materials.
U	Utility/Miscellaneous	Towers, tanks, bridges, fences, signs, accessory structures, retaining walls.

*Examples given above are non-inclusive and meant to be representative only. The final determination of the applicable use shall be as determined by the local building official.