

ENGINEERING

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MIKE CAUSEY, INSURANCE COMMISSIONER & STATE FIRE MARSHAL BRIAN TAYLOR, CHIEF STATE FIRE MARSHAL

January 29, 2021

Chris Schiavons Gemstone Homes 206 Raleigh Street Fuqua-Varina, NC 27526

RE: Existence of a Roll-Up Door Constitutes a Garage 2018 NCRC Section R302.5 and R302.6

Mr. Schiavons:

This letter is in response to your request for formal interpretation dated January 19, 2021 that was received in NCDOI by email on that same date. Your request for formal interpretation, in my words, states:

Does converting an exterior door opening from double swinging doors (French doors) to a roll-up door that is large enough for an automobile qualify the space as a "garage" and require compliance with Section R302.5 and R302.6 of the 2018 NC Residential Code (NCRC)?

Remarks:

Code sections noted in this letter are referring to the 2018 edition of the NCRC unless otherwise noted.

The plans provided with this request for formal interpretation do not match those provided for the informal interpretation in that the space in question is wider on the later plans than on the informal interpretation request plans (see Attachments B and C). The space is now 8'-1'' wide with a 7'-0 wide door. The original informal request showed a 7'-4'' wide space with 5'-4'' wide double swinging doors.

Attachments:

- Attachment A: As a matter of record the request for formal interpretation is provided.
- Attachment B: The as-built basement plan of the floor area in question.
- Attachment C: The original sealed plan of the floor area in question submitted with the informal request for interpretation.
- Attachment D: The rear elevation from the as-built drawings.
- Attachment E: A photograph of the rear view of the house provided by Ken Godwin in a January 7, 2021 email to Carl Martin.

Code Analysis:

The purpose of Sections R302.5.1 and R302.6 is to protect sleeping occupants of the dwelling from fire and smoke by slowing the migration of fire and smoke into the dwelling from the garage.

The purpose of Section R305.5.2 is to protect occupants from carbon monoxide poisoning at all times as well as protect sleeping occupants from fire and smoke.

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The International Code Council (ICC) commentary for Section R302.6 states in part:

"Numerous potential hazards exist within garages because occupants of dwelling units tend to store a variety of hazardous materials there. Along with this and the potential for CO build-up within the garage, the code requires that the garage be separated from the dwelling and attic as indicated in Table R302.6."

Section R201.3 states:

"Where terms are not defined in this code such terms shall have the meanings ascribed in other code publications of the North Carolina Building Code Council."

The 2017 NC Electrical Code (NEC), Article 100 defines "garage" as follows:

"A building or portion of a building in which one or more self-propelled vehicles can be kept for use, sale, storage, rental, repair, exhibition, or demonstration purposes."

Section R201.4 states:

"Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies."

Merriam-Webster online dictionary defines garage as "a shelter or repair shop for automotive vehicles". Merriam-Webster then defines "automotive vehicle" as "SELF-PROPELLED" or "of, relating to, or concerned with self-propelled vehicles or machines".

Both the 2017 NEC and Merriam-Webster reference "self-propelled vehicles".

Conclusions:

The installation of a roll-up door does not in itself determine whether a space is considered a garage. The code also does not stipulate that the room name provided on a set of plans determines whether a space is considered a garage. Based on the above code analysis the purpose of the space determines whether it is a garage. If "self-propelled vehicles" such as, but not limited to, cars, trucks, motorcycles, riding lawn equipment, golf carts, boats, and yard, garden, or farm tractors are stored or serviced in a space the code considers the space a "garage" and compliance with Sections R302.5 and R302.6 is required as well as Section R309.

Parts of this conclusion regarding "self-propelled lawn equipment" is contrary to the informal interpretation that I provided on January 8, 2021. Deeper research brought me to the conclusion provided here and supersedes any conclusion I provided on this subject prior to this letter.

Please call if you have comments or questions.

Sincerely, Marti

Carl Martin, RA Deputy Commissioner Division Chief of Engineering

cc: File

Robbie Davis, Chairman – BCC Danny Priest, Vice-Chairman – BCC David Smith, Chairman Residential Code Committee – BCC

ATTACHMENT A

	APPENDIX E APPEALS NORTH CAROLINA BUILDING CODE COUNCIL 325 North Salisbury Street, Room 5_44 Raleigh, North Carolina 27603 (919) 647-0009					
	APPEAL TO NCDOLNC	BCC Hearin	g Date	/	<u>/</u>	
GS 153A-374, GS 160A-434 GS 143 Formal Interpretation by NCDOI Appeal Appeal of Local Decision to NCDOI Appeal		GS 143-140, GS 1 Appeal of Local I Appeal of NCDO	143-141 Decision to N I Decision to	свос NCВСС		
APPELANT Gemstone Homes REPRESENTING:		PHONE	(919 <u>)355</u>	- 6549	X	
ADDRESS: 206 Raleigh St CITY: Fuquay Varina STATE:						
E-MAIL: construction	on@gemstonehomesnc.com	n	FAX: ()	-	
North Carolina State Building Code, Volume2018 NCRC - SectionR302.5 and R3					12.6	
REQUEST ONE: [X] Formal Interpretation by NCDOI [] Appeal of Local Decision to NCBCC [] Appeal of Local Decision to NCDOI [] Appeal of NCDOI Decision to NCBCC						

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

We are requesting a formal interpretation in regard to the mechanical/storage area in question of the provided as built plan. During construction we swapped out the exterior double french doors to a 8° \times 7° roll up style door. It was determined by the town of Fuquay that by simply swapping the style of the door constitutes a change of the proposed space. Their stance on the matter was that this mechanical/storage space was now a "garage". And would have to be brought up to code to be considered a separated grage.

The Inspector in question, David Ivey, stated to us in an email (attached) on 1/7 that:

National Electrical Code Article 100 defines a garage as:

"A building or portion of a building in which one or more self-propelled vehicles can be kept for use, sale, storage, rental, repair, exhibition, or demonstration purposes."

NC Residential Code requires all garages be separated from the dwelling per codes R302.5 and R302.6

At this time, we reached out directly to the NCDOI as we felt that the inspector could not take it upon himself to interpret the code in this way and that a simple change of door style does not change the intended space behind it.

We spoke with Carl Martin in regard to this decision. He asked that we provide the plans and a picture of the rear of the home (attached). He emailed us his conclusion on 1/8:

Ken,

I believe the purpose of 2018 NCRC, Section R302.6 is to separate the space intended to be used for indoor parking of a car or truck as such vehicles (because of their fuel load, potential ignition source, and production of carbon-monoxide) are considered an increased hazard to the sleeping occupants of the dwelling beyond what is normal for other storage areas.

Observations:

A roll-up door for access to a space does not necessarily constitute a "garage".

There is no drive connecting the roll-up door to a street and it does not appear that such a connection would likely ever be provided.

The attached plans indicate that the space is for mechanical equipment and storage and appears to be too narrow (7'-4") for a car or truck to be accessed if they were driven inside the space.

Conclusion:

While the space might be used for storage of self-propelled lawn equipment or flammable liquids or materials by the homeowner, it is not the purpose of Section R302.6 to address such use; therefore, I would determine that Section R302.6 does not apply to the space shown in the attached basement plan labelled as "Mech/Stor" and now accessed by a roll-up door as shown in the attached photograph.

I hope this clarifies the matter for you.

Carl Martin, RA

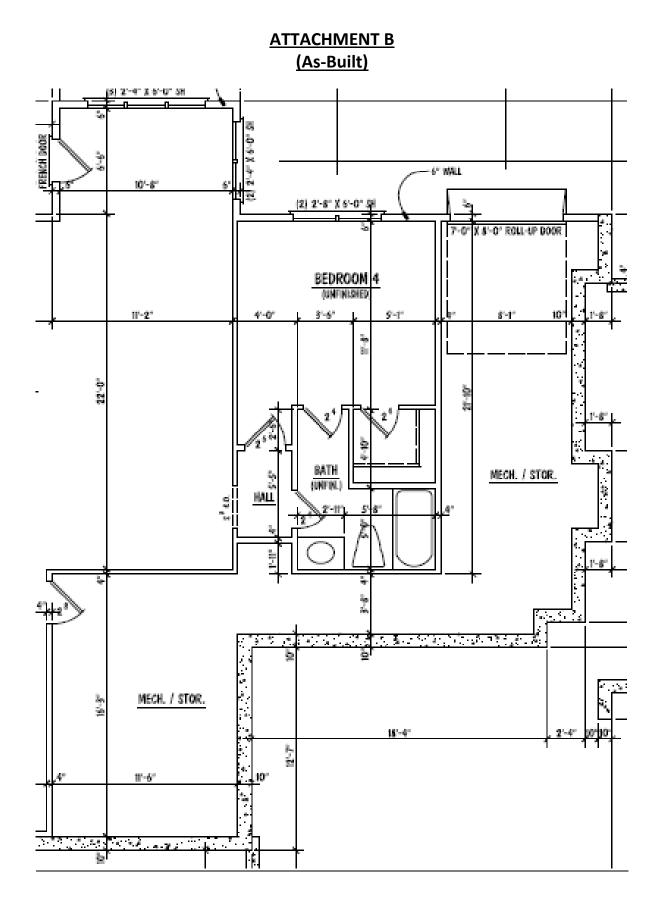
Chief Code Consultant

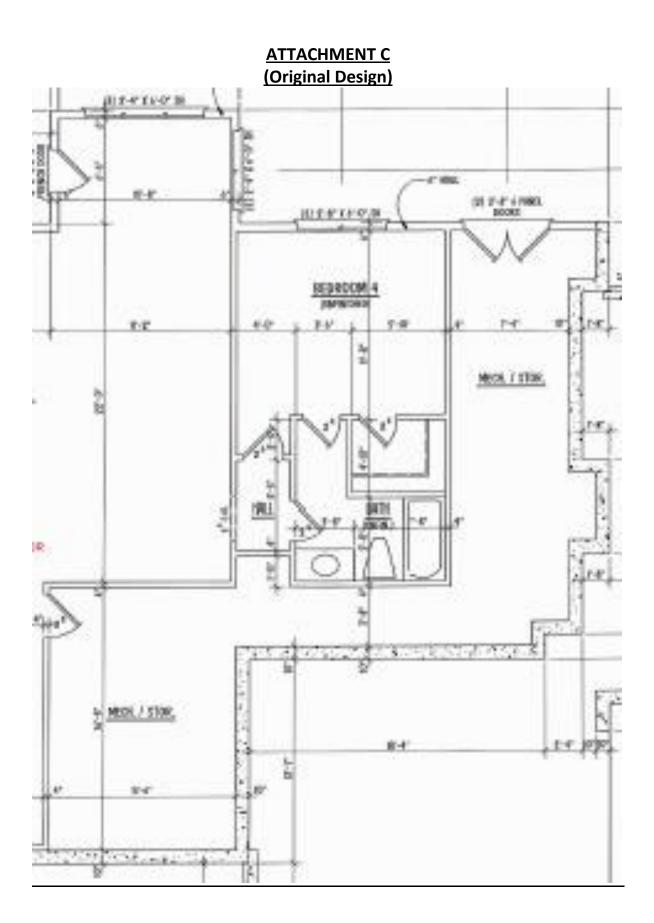
This information was relayed to David Ivey on 1/8. Over a week passed and when we requested the final re-inspect Mr. Ivey again failed the final inspection as he would require a formal interpretation. Therefore, withholding the final CO of the home forcing the occupants to be granted a temporary 30 day CO as they would be without anywhere to live.

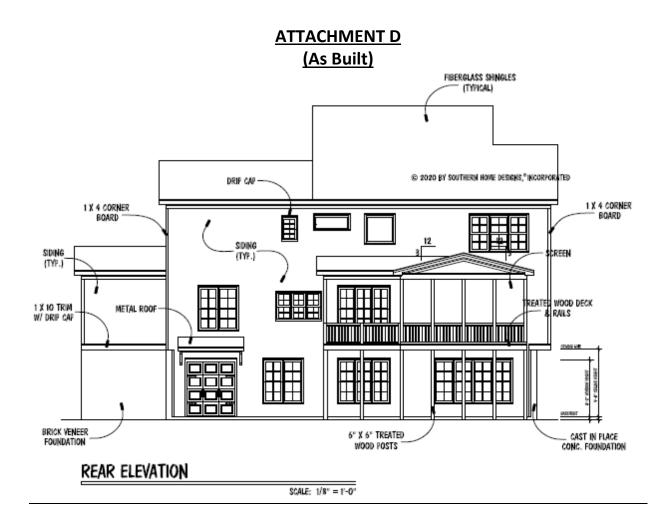
It is our stance that based on the topography of the home as well as the code itself that switching the style of the door from a double French doors to a roll up style door does not in itself change the intended use of the space from Mechanical/Storage to a "Garage".

REASON:

Signature: Chris Schisvone Date: 1/19/21 APPEAL TO NCDOL/NCBCC FORM 3/14/17







ATTACHMENT E (Rear View)

