



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

August 8, 2022

Mr. Brian Heilig
Building Inspections Deputy Director
Randolph County Building Inspections
204 East Academy Street
Asheboro, NC 27203

**RE: 2018 NC Building Code
2018 NCBC Section 903.2.11.7 Woodworking operations and 903.2.11.8 Manufacture of upholstered furniture or mattresses**

Mr. Heilig:

This letter is in response to your request for formal interpretation dated May 19, 2022, that was received in NCDOI by email on May 19, 2022. Your request for formal interpretation states: "I am requesting a formal interpretation on what type of separation is required to separate 2500 sq. ft. woodworking area or areas of manufacturing for upholstered furniture or mattresses to eliminate the sprinkler requirement for that area. Is the area required to be separated by a dividing wall? And if the area is required to be separated by a wall, is that wall required to be a fire rated barrier."

Remarks:

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

Attachment A is comprised of the request for formal interpretation as well as all supporting information submitted with the request.

Code Analysis:

2018 NCBC Section 306.2 Moderate-hazard factory industrial, Group F-1 states in part:

306.2 Moderate-hazard factory industrial, Group F-1. Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Furniture

Woodworking (cabinet)

Comments: Woodworking operations and manufacturing operations for upholstered furniture or mattresses are uses that have an occupancy classification of Group F-1.

2018 NCBC Chapter 2 Definitions states the following:

FIRE AREA. The aggregate floor area enclosed and bounded by *fire walls, fire barriers, exterior walls or horizontal assemblies* of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

Comments: Fire areas are used to determine when separation and automatic sprinkler systems are required for all occupancy classifications, including Group F-1.

2018 NCBC Section 903.2.4 Group F-1 states:

903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 12,000 square feet (1115 m²).
2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

Comments: An automatic sprinkler system is required for Group F-1 occupancies if one or more of the three fire area thresholds are exceeded.

2018 NCBC Section 903.2.11.7 Woodworking operations states:

903.2.11.7. Woodworking operations. An automatic sprinkler system shall be provided throughout fire areas that contain woodworking operations in excess of 2,500 square feet in area (232 m²) that generate finely divided combustible waste or use finely divided combustible materials.

Comments: Because of the potential amount of combustible dust that could be generated, woodworking operations have more stringent fire protection requirements than those listed in 2018 NCBC 903.2.4 Group F-1.

2018 NCRC Section 903.2.11.8 Manufacture of Upholstered Furniture or Mattresses states:

903.2.11.8 Manufacture of Upholstered Furniture or Mattresses. An automatic sprinkler system shall be provided throughout fire areas that contain manufacturing operations for upholstered furniture or mattresses in excess of 2,500 square feet in area (232 m²).

Comments: Because of the types and amounts of combustible materials, manufacturing operations for upholstered furniture or mattresses have more stringent fire protection requirements than those listed in 2018 NCBC 903.2.4 Group F-1.

Comments: If the woodworking operations or manufacturing operations for upholstered furniture or mattresses area exceeds 2,500 square feet, an automatic sprinkler system is required.

Conclusions:

If the fire area exceeds 2,500 square feet, but the woodworking operations or manufacturing operations for upholstered furniture or mattresses area does not exceed 2,500 square feet, an automatic sprinkler system is not required unless one or more of the F-1 fire area thresholds of 2018 NCBC 903.2.4 Group F-1 are exceeded. If the fire area requires an automatic sprinkler system to comply with the requirements of 2018 NCBC 903.2.11.7 Woodworking operations or 903.2.11.8 Manufacture of Upholstered Furniture or Mattresses and no separation is provided or not required by other provisions of the code, the entire

fire area requires an automatic sprinkler system. Use of unrated walls to divide the woodworking operations or manufacturing operations for upholstered furniture or mattresses from other areas within the same fire area does not reduce the area of automatic sprinkler system coverage.

Please call or email if you have comments or questions.

Sincerely,

A handwritten signature in black ink that reads "D.B. Rittlinger". The signature is written in a cursive, flowing style.

David B. Rittlinger, PE, LEED AP
Chief Code Consultant
NCDOT-OSFM Engineering & Codes Division

cc: File
Bridget Herring, Chair – BCC
Nathan Childs, Assistant Attorney General, Insurance Section, NCDOT
John Hoomani, General Counsel, NCDOT

ATTACHMENT A



**APPENDIX E
APPEALS
NORTH CAROLINA
BUILDING CODE COUNCIL
325 North Salisbury Street, Room 5_44
Raleigh, North Carolina 27603
(919) 647-0095**

APPEAL TO NCDOJ/NCBCC Hearing Date _____ / _____ / _____
GS 153A-374, GS 160A-434 GS 143-140, GS 143-141
Formal Interpretation by NCDOJ Appeal of Local Decision to NCBCC _____
Appeal of Local Decision to NCDOJ _____ Appeal of NCDOJ Decision to NCBCC _____

APPELLANT BRIAN HEILIG **PHONE** (336) 318 - 6363 **X** _____
REPRESENTING RANDOLPH COUNTY BUILDING INSPECTIONS
ADDRESS 204 E ACADEMY ST
CITY ASHEBORO **STATE** NC **ZIP** 27203
E-MAIL BRIAN.HEILIG@RANDOLPHCOUNTYNC.GOV **FAX** (336) 636 - 7693

North Carolina State Building Code, Volume 2018 - Section 903.2.11.7 and 903.2.11.8

REQUEST ONE: Formal Interpretation by NCDOJ Appeal of Local Decision to NCBCC
 Appeal of Local Decision to NCDOJ Appeal of NCDOJ 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.
I am requesting a formal interpretation on what type of separation is required to separate a 2500 sq. ft. woodworking area or areas of manufacturing for upholstered furniture or mattresses to eliminate the sprinkler requirement for that area. Is the area required to be separated by a dividing wall? And if the area is required to be separated by a wall, is that wall required to be a fire rated barrier?

REASON: The reason for this request is to alleviate any confusion on to what is required so all departments can enforce the rule uniformly across the State.

APPEAL TO NCDOJ/NCBCC
Signature Brian Heilig DATE: 5-19-22 FORM 3/14/17

202.9 Appeals

202.9.1 Engineering Division. A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision, or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within ten (10) days after the order, decision, or determination. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140, 153A-374 and 160A-434)

203.2.1 Interpretations

203.2.1.1 Informal Interpretations. The Engineering Division shall provide informal interpretations on code related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the code.

203.2.1.2 Formal Interpretations. Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the Department website. (General Statute 143-140)

203.2.2 Appeals. Any person may appeal in writing an order, decision, or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within ten (10) days after the order, decision, or determination. The appeal shall contain the type and size of the building in question, the location of the building, and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. A copy of the appeal and written decision shall be furnished to each party. (General Statutes 153A-374 and 160A-434)

202.9.2 Building Code Council. The Building Code Council shall hear appeals from the decisions of State enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a State enforcement agency to the Building Code Council shall give written notice of appeal as follows:

202.9.2.1 Twenty one (21) copies including an original of the Notice of Appeal shall be filed with the Building Code Council c/o NC Department of Insurance, Engineering Division, 325 North Salisbury Street, Room 5_44, Raleigh, NC 27603 and one (1) copy shall be filed with the State enforcement agency from which the appeal is taken.

202.9.2.2 The Notice of Appeal shall be received no later than thirty (30) days from the date of the decision of the State enforcement agency.

202.9.2.3 The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following:

- (1) Name, address of the party or parties requesting the appeal.
- (2) The name of the State enforcement agency, the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency.
- (3) The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
- (4) The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
- (5) The original Notice of Appeal shall be signed by the party or parties filing appeal.
- (6) The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The Chairman may schedule a special meeting to hear an appeal.

202.9.2.4 Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one (1) copy of the Notice of Appeal to each member of the Building Code Council. The Chairman may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least fifteen (15) days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven Council members, it will constitute a quorum of the full Council. Further appeals shall be as specified in Section 202.9.3.

202.9.2.5 The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

- (1) Not pursued by the appellant or withdrawn;
- (2) Appeal not filed in accordance with these rules; or
- (3) Lack of jurisdiction.

202.9.2.6 When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the State enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

202.9.2.7 The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the State enforcement agency from which the appeal was taken.

202.9.3 Superior Court. Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the Superior Court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.
(General Statute 143-141(d))

FW: [External] Formal Interpretation request



Yip, Pak
To: Heilig, Brian K.
Cc: Rittlinger, David B

Reply Reply All Forward ...
Thu 5/19/2022 9:30 AM

- Woodworking Area Formal Interpretation (Signed).pdf .pdf File
- RE: woodworking area _ fire areas_ 5,7,15 Outlook Item
- Woodworking 2500 sq ft interpretation(2007).pdf .pdf File
- RE: Wood Working Separation Outlook Item
- Fwd: [External] No divider wall needed! Outlook Item

Good morning Brian,

I am forwarding your formal interpretation request to David Rittlinger, our Chief Code Consultant.

I hope the information above is helpful to you. Please let me know if you have any questions.

Pak Keung Yip, P.E.
Chief Building Code Consultant



FW: [External] Formal Interpretation request



Yip, Pak
To: Heilig, Brian K.
Cc: Rittlinger, David B

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From: Heilig, Brian K. <Brian.Heilig@randolphcountync.gov>

Sent: Thursday, May 19, 2022 9:01 AM

To: Yip, Pak <pak.yip@ncdf.com>

Cc: Bryant, David G. <David.Bryant@randolphcountync.gov>; Beard, Erik C. <Erik.Beard@randolphcountync.gov>

Subject: [External] Formal Interpretation request

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

Good Morning Pak,

I am submitting a request for a formal interpretation on the 2500 square foot, wood working area required to be sprinklered. In the past our department has received conflicting guidance on the issue and I think it would be good to have this noted as a formal interpretation so everyone in the State can work from the same interpretation and hopefully enforce the rule the same. This will help contractors, designers, and owners also looking to build or find a building suitable for these types of businesses. I have also attached some correspondence we have had in the past and some correspondence forwarded to me from a business owner to show why we feel clarification is necessary.

Please let me know if you are not able to need anything else.

Thank you,

Brian Heilig
Randolph County
Building Inspection Deputy Director
204 E. Academy St. Raheboro, NC 27205
Office: 336-315-6365
Mobile: 336-736-7925
Fax: 336-656-7635

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