



**DS 2018-043**

**FILED**

Department of Business and Professional Regulation  
Deputy Agency Clerk

CLERK Brandon Nichols  
Date 5/31/2018  
File #

**PETITION FOR DECLARATORY STATEMENT  
BEFORE THE FLORIDA BUILDING COMMISSION**

**Company:** Finfrock DMC  
**Address:** 2400 Apopka Boulevard  
Apopka, Florida 32703  
**Name:** Allen R. Finfrock, PE  
**Title:** CEO  
**Telephone:** 407-367-2401  
**Facsimile:** 407-297-0512  
**E-Mail:** [afinfrock@finfrock.com](mailto:afinfrock@finfrock.com)

**Petitioner's Attorney or representative:** Steven Lockhart  
General Counsel  
Finfrock DMC  
Telephone: 407-367-2430  
Facsimile:  
E-Mail: [slockhart@finfrock.com](mailto:slockhart@finfrock.com)

**Statute(s), Agency Rule(s), Agency Order(s) and/or Code Section(s) on which the Declaratory Statement is sought:**

2017 Florida Building Code

Chapter 7, Section 707

**Background:**

Finrock is a design/build/manufacture who has patented a precast concrete floor and ceiling assembly called the "DualDeck" that consists of two layers of concrete separated by a steel truss system. This system has a UL listing for a two hour fire rating. The bottom (ceiling) slab is the fire barrier and the top (floor) slab creates the interstitial space. Finrock is seeking clarification on the 2017 Florida Building Code, Section 707, Fire Barriers, Section 707.5, Continuity, to insure that the interpretation between various jurisdictions is consistent with the intent of the code and is also consistent with the corresponding section in the Florida Fire Prevention Code, Section 8.3 (code excerpt below). In the past, we have had different jurisdictions have varying interpretations as to the intent of the code as it applies to a floor and ceiling assembly.

**CODE EXCERPTS:****FLORIDA BUILDING CODE (FBC) – SIXTH EDITION Chapter 7 – Fire and Smoke Protection Features****Section 707 – Fire Barriers**

**707.5 – Continuity** Fire barriers shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above and shall be securely attached thereto. Such fire barrier shall be continuous through concealed space, such as the space above a suspended ceiling.

**FLORIDA FIRE PREVENTION CODE (FFBC / NFPA 101) – SIXTH EDITION Chapter 8 – Features of Fire Protection****Section 8.3 – Fire Barriers**

**8.3.1.2(2)** - The fire barriers are continuous from outside wall to outside wall or from one fire barrier to another, and from the floor to the bottom of the interstitial space, provided that the construction assembly forming the bottom of the interstitial space has a fire resistance rating not less than that of the fire barrier.

**Situation:**

Finrock is designing a nine story multifamily building for the Orlando area. This project will be constructed using precast concrete products which will include exterior walls, shear walls, supporting walls for double tees (garage area) and DualDecks (floor and ceiling assembly). The building will have an interior stairwell with a corridor leading to the exterior. The code requires that this corridor be considered as an extension of the 2 – hour rated stairway exit. As such, it is considered an "exit passageway" which is required to be constructed with a "fire barrier" in lieu of a "fire partition". Fire barrier walls have the "continuity" requirement per FBC Section 707.5. The corridor will have a precast concrete DualDeck as its' ceiling. Drawings are attached for clarification.

**Question:**

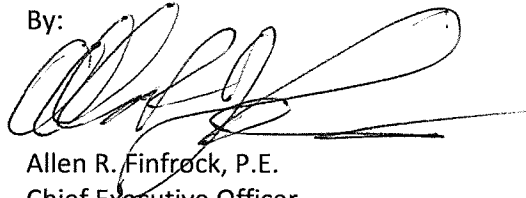
If the fire barrier of a floor and ceiling assembly is the ceiling, would the continuity of a fire barrier be maintained if the barrier stops at the ceiling and the joint is sealed in accordance with Section 707.8?

**Summary:**

Petitioner respectfully believes the answer to the question outlined above is "YES". Based upon the alignment of the Florida Building Code with the Florida Fire Prevention Code Section 8.3.1.2 item 2 which states "The fire barriers are continuous from outside wall to outside wall or from one fire barrier to another, and from the floor of the bottom of the interstitial space, provided that the construction assembly forming the bottom of the interstitial space has a fire resistance rating not less than that of the fire barrier.". This being so, then in order for the code to be uniformly interpreted, the petitioner believes that an exception should be added to Section 707.5 as follows: "Where floor and ceiling assemblies have a listed fire rating, and the bottom of the assembly provides the required fire separation, the fire barrier may terminate at the assembly in accordance with Section 707.8.".

Respectfully submitted,  
Finfrock DMC

By:

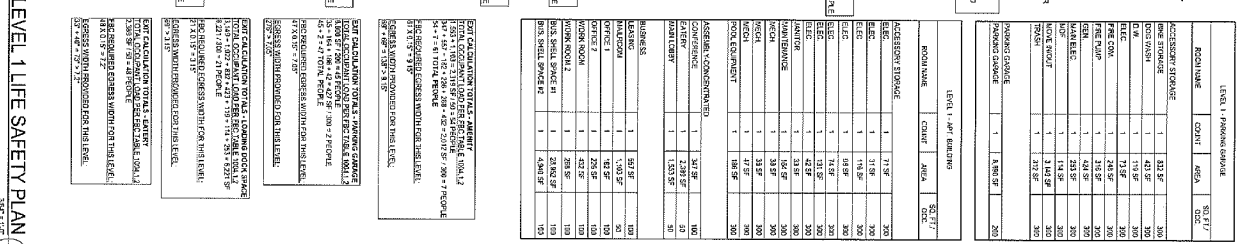
A handwritten signature in black ink, appearing to read 'A. Finfrock', with a long horizontal flourish extending to the right.

Allen R. Finfrock, P.E.  
Chief Executive Officer

CONCRETE TYPE	1 hour	1 1/2 hours	2 hours	3 hours	4 hours
Siliceous	3.5	4.3	5.0	6.2	7.0
Carbonate	3.2	4.0	4.6	5.7	6.6
Standard light weight aggregate	2.7	3.3	3.8	4.6	5.4
Lightweight	2.5	3.1	3.6	4.4	5.1

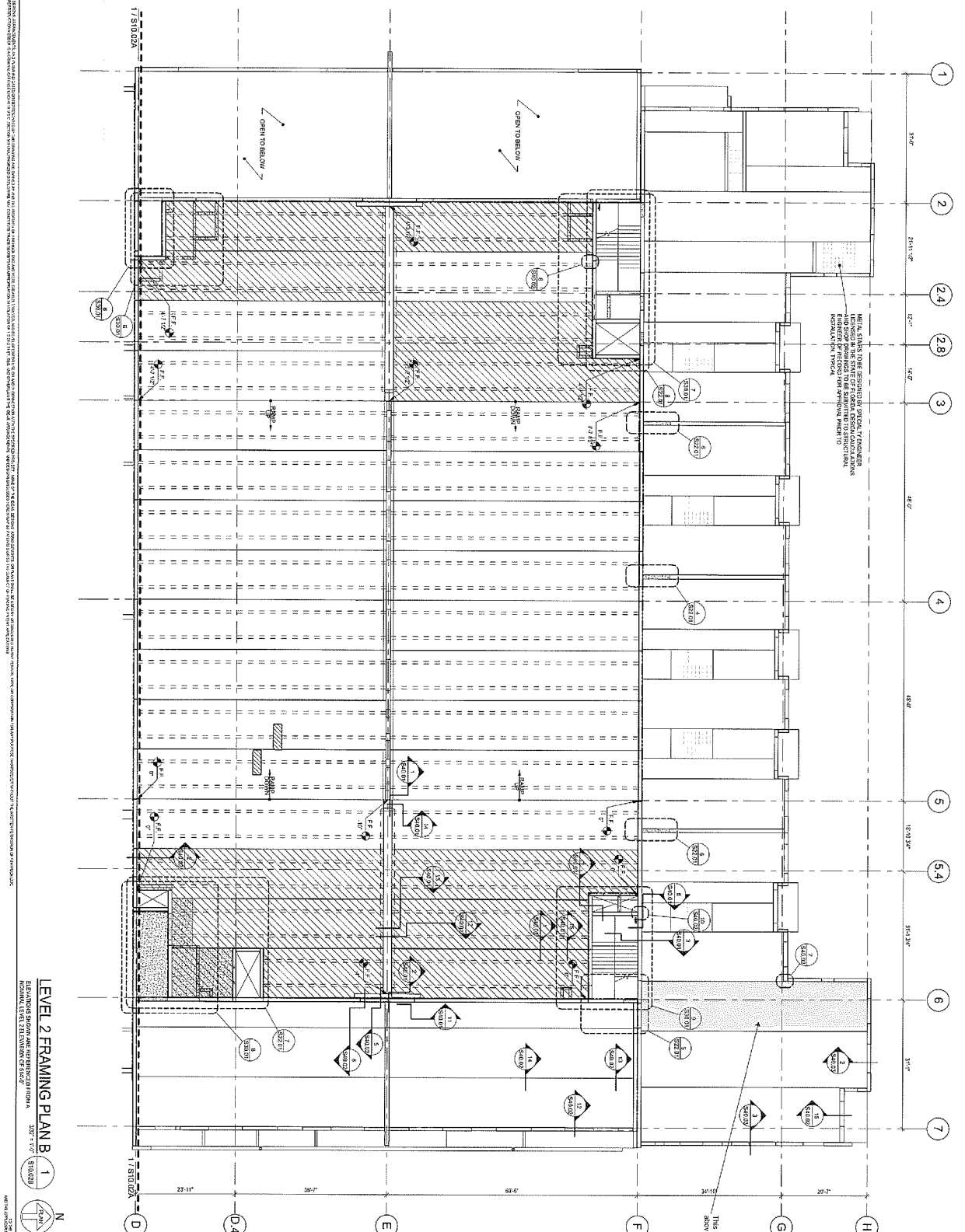
CONCRETE TYPE	FIRE RESISTANCE RATING (hours)				
	1	1½	2	3	4
Siliceous	3.5	4.3	5	6.2	7
Carbonate	3.2	4	4.6	5.7	6.6
Semi-siliceous	2.7	3.3	3.8	4.6	5.4
Lightweight	2.5	3.1	3.6	4.1	5.1

Fig. 5E. 1 test = 25.4 mm.



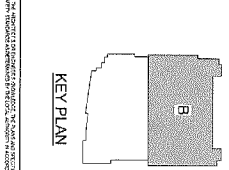
1. STAIRWELL & ELEVATOR HOISTWAYS TO BE 2-HR. FIRE-RATED
2. CORRIDOR WALLS ADJACENT TO RESIDENTIAL UNITS TO BE 1-HR. FIRE-RATED PARTITIONS. 30-MIN. PARTITION REQUIRED FOR PER FORC. 3.1 (TABLE 701.1); 1-HR. PROVIDED IN BALCONY.
3. WALLS SEPARATING SLEEPING UNITS FROM ANOTHER 1-PURPOSE OTHER OCCUPANCIES TO BE 1-HR. FIRE-RATED PARTITIONS. 30-MIN. WALLS NEEDED PER FORC. 3.1 (HR. PROVIDED)
4. MECHANICAL SHAFTS IN APARTMENT BUILDINGS ARE AT TOP OR SHUT IT ON ALTERNATE FLOOR LEVEL. PER FORC. 303.11.2, MECHANICAL SHAFTS IN NONRESIDENTIAL ARE 2-HR. FIRE-RATED 1-HR. SHAFTS ALLOWED IN APARTMENT BUILDING

[illegible]



**LEVEL 2 FRAMING PLAN B**  
 ELEVATION SHOWN ARE REFERENCE FROM A  
 FINFROCK LEVEL 1 ELEVATION OF 34'-0"

1 / S10.02A  
 1 / S10.02B  
 1 / S10.02C



PROJECT NUMBER	1331
DATE	05/14/2018 10:18:30 AM
PROJECT NAME	S10.02B
PROJECT ADDRESS	1331
PROJECT CITY	JACKSONVILLE
PROJECT STATE	FL
PROJECT ZIP	32216
PROJECT PHONE	407.293.4000
PROJECT FAX	407.293.4000
PROJECT EMAIL	info@finfock.com
PROJECT WEBSITE	www.finfock.com

LEVEL 2 FRAMING PLAN B

- LEGEND:**
- PRECAST CONCRETE
  - CAST-IN-PLACE CONCRETE
  - REINFORCED MASONRY
  - CEILING WITH A BEAM AND JOIST
  - CEILING ANCHORS
  - MASONRY
  - SPRINKLER DUCT
  - 2 INCH PRECAST INSULATED TIE

**FINFROCK**  
 FINFROCK DESIGN, INC.  
 2410 APOLLO BOULEVARD • JACKSONVILLE, FLORIDA 32216  
 407.293.4000 • 800.756.7224 • www.finfock.com