



LEE'S SUMMIT
MISSOURI

CODE MODIFICATION REQUEST
(COMMERCIAL)

BUILDING/STRUCTURE NAME: _____

PREMISE ADDRESS: _____

PERMIT NUMBER (if applicable): _____

OWNER'S NAME: _____

TO: Director of Development Services

In accordance with the Lee's Summit Building Code, I wish to apply for a modification to one or more provisions of the code as I feel that the spirit and intent of the Lee's Summit Building Code are observed the public health, welfare and safety are assured. The following articulates my request for your review and action. (NOTE: ATTACH ANY ADDITIONAL INFORMATION NECESSARY)

SUBMITTED BY:

NAME: _____

() OWNER () OWNER'S AGENT

ADDRESS: _____

Tel.# _____

CITY, STATE, ZIP: _____

SIGNATURE: _____

TRACY DEISTER – MANAGER OF CODES ADMINISTRATION: () APPROVAL () DENIAL

SIGNATURE: _____ DATE: _____

AIMEE NASSIF – DEPUTY DIRECTOR OF DEVELOPMENT SERVICES: () APPROVED () DENIED

SIGNATURE: _____ DATE: _____

COMMENTS: _____

A COPY MUST BE ATTACHED TO THE APPROVED PLANS ON THE JOB SITE

9/18/2023 N:\CODES ADMIN\Forms 2019

August 27, 2025
(Revised September 2, 2025)

Garret Wilson
NSPJ Architects
9415 Nall Avenue, Suite 300
Prairie Village, Kansas 66207

RESIDENCES AT BLACKWELL LEE'S SUMMIT, MISSOURI ENGINEERING JUDGMENT

Dear Garret,

This letter is to address the issue of fire separation distance between the Residence at Blackwell and adjacent building. The justification for this condition is intended to be specific to this instance and is not meant to be applied in other conditions.

CODE REQUIREMENT / CONDITION

The Residences at Blackwell building is of Type VA construction and primarily contains Group R-2 occupancy. The fire separation distance (FSD) between this building and the adjacent building is not a straight line, due to the footprint that the two buildings occupy. At its shortest, the FSD is 27 feet – 5 ¼-inches. Both buildings are sprinklered throughout and primarily Group R-2. Per 2018 IBC Table 602, a 1-hour fire-resistance rating is required when distance is between 10 and 30 feet.

DISCUSSION / EVALUATION

If we assume that the 10-foot condition corresponds to a full 1-hour rating and the 30-foot condition corresponds to a 0-hour rating, we can interpolate the requirement for intermediate distances. 27 feet – 5 ¼-inches, the required rating is calculated as follows:

Reduction per Foot: $\frac{0-60}{30-10} = -3$ minutes/foot

Required Rating: $60 - 3 \times (27.4375' - 10') = 60 - 52.3125 = 7.6875$ minutes

The wood stud frame alone contributes 20 minutes of fire resistance per IBC Table 722.6.2(2). The exterior side of the wall is also provided with exterior cladding over 2-sided LP Flameblock sheathing. The shortened FSD only occurs along a span that is less than 5 feet long. The rest of the building's nearly 60-foot perimeter has at least 30 feet of FSD.

Finally, Sections 5.6.3 and 5.6.4 of 2017 NFPA 80A, *Recommended Practice for Protection of Buildings from Exterior Fire Exposures*, provide the following insight when both buildings are sprinkler protected.

5.6.3* Exposing Building. Where the exposing building or structure is protected throughout by an approved, properly maintained automatic sprinkler system or other approved automatic fire suppression system of adequate design for the hazard involved, no exposure hazard should be considered to exist.

5.6.4* Exposed Building. Where the exposed building or structure is protected throughout by an approved, properly maintained automatic sprinkler system or other approved automatic fire suppression system of adequate design for the hazard involved, the exposure hazard to the total exposed building and its contents should be considered to be substantially reduced, depending upon the construction of the exterior wall.

CONCLUSION

A portion of the Residences at Blackwell building perimeter is within the distance that would require a 1-hour exterior wall rating; however, given the fact that IBC Table 602 has a 20-foot increment requiring this 1-hour rating, it is reasonable to consider that a lesser rating can be applied when FSD is closer to 30 feet than 10 feet. The result is a required rating just below 8 minutes, which is exceeded by the construction of the wall. The majority of the perimeter is still above 30 feet FSD, and the sprinkling of both buildings provides an additional safety measure.

If you have any questions or comments, please feel free to contact me.

Sincerely,
FP&C Consultants KC, LLC


Justin Burton

JB/amr

Reviewed under supervisory control by:
Brett Christianson, PE

