

Owner / Applicant Information

Neal Burnett
MWA LLC
535 KENTUCKY AVE

INDIANAPOLIS IN 46225

Phone 3172610070

Email NBURNETT@MIDWESTGC.COM

Submitter Information

Crystal Kent
Prince Alexander
850 S Meridian St

INDIANAPOLIS IN

Phone 3172610070

Email crystal@princealexander.biz

Designer Information

Stephen Alexander
PRINCE ALEXANDER
850 S Meridian St

INDIANAPOLIS IN

Phone 3172610070

Email STEVE@princealexander.biz

Project Information

Tru by Hilton Stadium Village
601 Russell Ave

INDIANAPOLIS IN 46225

County MARION

Project Type New Addition Alteration Existing Change of Occupancy

Project Status F=F=Filed U or Null=Unfiled

IDHS Issued Correction order? No Has Violation been Issued? yes

Violation Issued by: LBD

Local Building Official

Phone: Email:

Local Fire Official

Phone: Email:

Variance Details

Code Name: Other Code (Not in the list provided)

2014 InBC 717.5

Conditions: A variance (20-04-26) was granted for a Type I-B, steel-framed hotel to permit 2-hour fire partitions to serve as the required shaft for bathroom exhaust ducts, with a sprinkler at the top of the ducts. The previous application stated the ducts lie fully within the wall cavity of guest room demising walls. During construction, suitable collector boxes that fit within the wall cavity as designed were not available. This forced the ducts, at the top of their runs, to turn out of the wall before being collected and discharging through the roof. One of the penetrated walls is a corridor wall rather than a demising wall. Request is to re-affirm previous variance (20-04-26) under this condition and address protection of related duct penetrations with through-penetration firestop systems.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

1=Non-compliance with the rule will not be adverse to the public health, safety or w

2

2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts: Alternative actions previously approved are in place. Construction of these 4" steel ducts adheres to the previous variance, including sprinkler protection at the top, except for the relatively short legs between the 2-hour fire partition serving as a shaft and the rooftop fan (see photos). Ducts are already permitted by code to enter and exit their corresponding shafts as needed, however they are no longer "fully contained within the wall" as previously stated in the variance application, prompting this request to affirm. To maintain the promised sprinkler protection of the ducts, applicant proposes to protect the bathroom exhaust duct penetrations with 2-hour through-penetration firestop systems like those used to protect steel pipe penetrations in similar conditions. This protection is proposed because fire dampers will greatly hamper sprinkler waterflow in the duct, are often not required in fire partitions, would not fit in the assembly where the ducts turn, and offer no advantage when the penetrated membrane is already permitted to end just inches above the penetration.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.

Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts: In their attempts to honor the letter of the previous variance, the applicant evaluated modifying the framing, roof, insulation, and fans to allow the ducts to run as originally shown, turning into side intakes at (replaced) fans above the roof. GC estimated this cost to be \$35,360 plus \$2500 in cold-formed steel engineering fees, assuming they would allow the modification. In consultation with the local inspector, applicant began extending 2-hour enclosures beneath these horizontal sections of duct, however this proved impossible to complete, due to lack of space above the ceiling for the requisite framing and 4 layers of gypsum wall board. Because the ducts convey only environmental air--neither grease, steam, products of combustion, dryer exhaust, nor any other substance these rules are designed to defend against--this solution both honors the spirit of the previous variance and maintains life safety.

