

September 8, 2008

Agency Fights Building Code Born of 9/11

By [ERIC LIPTON](#)

WASHINGTON — A federal agency has joined some of the nation's biggest landlords in trying to repeal stronger safety requirements for new skyscrapers that were added to the country's most widely used building code last year, arguing that they would be too expensive to meet.

The new provisions, which include requiring tall office buildings to have more robust fireproofing and an extra emergency stairwell, were enacted as a result of an exhaustive federal study into the collapse of the twin towers at the World Trade Center seven years ago this week.

The [General Services Administration](#), which serves as the federal government's property manager, is now opposing the tougher standards, even though they were based on a report by the [National Institute of Standards and Technology](#), which issues recommendations for safety standards after investigating fires and other building catastrophes.

"It does not take a NIST report or a rocket scientist to figure out that requiring additional exit stairs will improve overall occupant evacuation times," David Frable, a General Services Administration fire safety engineer, wrote in a petition asking the International Code Council to rescind the changes, which go to a vote next week. "The bigger question that needs to be answered is at what economic cost to society?"

The dispute reflects a debate among safety officials and real estate executives nationwide as to how to respond adequately to the 2001 attacks.

The fireproofing and stairwell requirements alone could cost real estate developers \$13 million for a 42-story office building, as well as perhaps \$600,000 a year in lost rent because of decreased floor space, real estate industry officials estimated.

Advocates of the stronger requirements questioned those figures, saying they were inflated. Regardless, they said, they are outraged at the role the federal agency is playing in the debate.

"It is unbelievable to me that our tax dollars are being spent to fight safety improvements," said Glenn P. Corbett, an associate professor of fire science at John Jay College in New York City. "They are trying to subvert necessary change."

The challenges raised by Mr. Frable and building owners and architects focus on three safety standards drawn up by a code council committee that were based on recommendations in the final NIST report from 2005.

Under the new rules, any nonresidential skyscraper over 420 feet tall, or about 40 stories, must have a third stairwell and fireproofing capable of staying in place even if hit with 1,000 pounds per square foot of force, provisions that Mr. Frable and a real estate industry group, the Building Owners and Managers Association, want repealed. As an alternative, Mr. Frable is urging that skyscrapers include specially designed elevators that can reliably operate even during a fire.

Separately, the building owners' group has asked the organization to repeal a requirement that buildings taller than 75 feet apply glow-in-the-dark markings on stairwells as a backup if the lights go out. Such markings are credited with saving many lives on Sept. 11; they had been installed at the twin towers after the first terror attack there in 1993, even though the enhancement was not yet required by city code.

Only a small number of new towers would be subject to all three of the contested changes. Since 2000, about 10 nonresidential towers taller than 420 feet have been completed each year in the United States, according to Emporis, a German-based database of tall buildings, compared with about 750 such buildings currently standing nationwide.

The matter will go to a vote next week at a meeting of the code council in Minneapolis, where more than 1,000 building-code officials from around the nation will gather to adopt the 2009 version of the so-called model code, which serves as a template for 20,000 jurisdictions in all 50 states, including skyscraper cities like New York, Houston and Philadelphia. The council is a nonprofit association that was created in 1994 to try to develop a single national standard for building safety.

The contested provisions will now be reconsidered as part of a comprehensive review of the building code, which is conducted every three years. Most jurisdictions wait for that larger overhaul before revising their own codes; as a result, few cities have adopted the

tougher skyscraper standards.

States and cities have the option of including or excluding any provision of the model code before making it binding, and many, including New York, make such modifications. Still, the code is important because it creates a base standard that most jurisdictions try to meet.

Historically, tall buildings have not been designed to anticipate a complete evacuation, because even during an office fire generally only the several floors immediately near it are cleared. Fireproofing was also not traditionally designed with enough adhesive strength to ensure that it would stick to steel in the event of an explosion or another unexpected stress.

But dislodged fireproofing was blamed in part by federal investigators for the collapse of the twin towers. And the flow of firefighters climbing the stairs as office workers were leaving created traffic jams, the investigators found.

Jake Pauls, a code consultant specializing in stairwell safety, said he understood that the World Trade Center was a singular event. But calamities do happen — be it a terrorist attack, a blackout, an earthquake — and skyscrapers often do not have sufficient systems to protect occupants or allow them to rapidly and safely evacuate, he said.

Mr. Pauls said he believed that a bias against regulation was wrongly driving the effort to repeal the tougher standards.

“It is basically a political game that is being played here,” Mr. Pauls said. “And I find it appalling.”

But Mr. Frable of the General Services Administration and other real estate officials who have joined him in challenging the new standards rejected that charge, saying they were trying to counteract an emotional reaction to the 2001 attacks that has led to unrealistic and unnecessary new building standards.

They argue that office buildings are extremely safe, citing statistics from the National Fire Protection Association that show an average of one civilian a year died in office building fires nationwide from 2000 to 2004, excluding the Sept. 11 attacks.

“What we have had here are knee-jerk reactions without any indication that they are going to do any good,” said Ron Burton, a vice president of the Building Owners and Managers Association, whose members control nine billion square feet of office space in North America.

The costs associated with these new requirements are so significant that if major cities around the United States enact them, it could slow skyscraper construction nationwide, real estate executives predicted.

“We put up buildings to make a profit,” Mr. Burton said. “If the numbers don’t work, it won’t happen.”

S. Shyam Sunder, who led the \$16 million investigation into the World Trade Center collapse for the standards institute, said he would be in Minneapolis urging the council to honor the recommendations in his report.

“Everything is more complicated when an emergency happens in a skyscraper,” he said. “So you want to have more safeguards in taller buildings.”

The federal government itself is technically exempt from local building codes. But the General Services Administration, which has 352 million rentable square feet in 8,600 properties nationwide, generally requires that buildings it rents or buys honor building codes. Mr. Frable said that his opposition to the stairwell and fireproofing standards did not come from a directive from the White House or anywhere else in the administration.

Building officials in Chicago and New York declined in interviews to predict whether they would adopt the stairwell and fireproofing requirements if they remained in the revised model code. New York is required by law to consider the revisions, said James P. Colgate, executive architect at the New York City Department of Buildings.

New York was the first large city to require the luminous marking on stairwells, even before it became part of the model code. More than 1,500 buildings now have the markings, and the city has no plans to rescind that requirement, Mr. Colgate said.

“If everything works the way it is supposed to, then it is not necessary,” Mr. Colgate said. “But in emergencies, we know that generators fail and electrical systems quite often do not work the way they are supposed to.”

New York has demonstrated mixed emotions over tougher building standards. After the Sept. 11 attacks, city officials declined to require wider stairwells in skyscrapers, as some safety advocates had urged. But at several of the towers built since 2001, including the Bank of America building near Times Square and 7 World Trade Center near where the twin towers stood, the developers have decided on their own to include either additional stairwells or wider ones.

Gary Lewis, a construction official from Summit, N.J., who is the chairman of an International Code Council committee that translated

the NIST recommendations into the specific proposed code changes, said the meeting was an important test of the integrity of the national building code system.

“We want buildings that stand long enough for people to get out and stairs that allow people to get out quickly,” Mr. Lewis said. “If we reverse any of those improvements, we are not learning from the lessons of Sept. 11.”

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