

WTC Construction Certifiers Say Towers Should Have Easily Withstood Jet Fuel Temperatures

[Kevin Ryan/Underwriters Laboratories | November 12 2004](#)

The following letter was sent today by Kevin Ryan of Underwriters Laboratories to Frank Gayle of the National Institute of Standards and Technology (NIST). Underwriters Laboratories is the company that certified the steel components used in the construction of the World Trade Center towers. The information in this letter is of great importance.

Dr. Gayle,

Having recently reviewed your team's report of 10/19/04, I felt the need to contact you directly.

As I'm sure you know, the company I work for certified the steel components used in the construction of the WTC buildings. In requesting information from both our CEO and Fire Protection business manager last year, I learned that they did not agree on the essential aspects of the story, except for one thing - that the samples we certified met all requirements. They suggested we all be patient and understand that UL was working with your team, and that tests would continue through this year. I'm aware of UL's attempts to help, including performing tests on models of the floor assemblies. But the results of these tests appear to indicate that the buildings should have easily withstood the thermal stress caused by pools of burning jet fuel.

There continues to be a number of "experts" making public claims about how the WTC buildings fell. One such person, Dr. Hyman Brown from the WTC construction crew, claims that the buildings collapsed due to fires at 2000F melting the steel (1). He states "What caused the building to collapse is the airplane fuel...burning at 2,000 degrees Fahrenheit. The steel in that five-floor area melts." Additionally, the newspaper that quotes him says "Just-released preliminary findings from a National Institute of Standards and Technology study of the World Trade Center collapse support Brown's theory."

We know that the steel components were certified to ASTM E119. The time temperature curves for this standard require the samples to be exposed to temperatures around 2000F for several hours. And as we all agree, the steel applied met those specifications. Additionally, I think we can all agree that even un-fireproofed steel will not melt until reaching red-hot temperatures of nearly 3000F (2). Why Dr. Brown would imply that 2000F would melt the high-grade steel used in those buildings makes no sense at all.

The results of your recently published metallurgical tests seem to clear things up (3), and support your team's August 2003 update as detailed by the Associated Press (4), in which you were ready to "rule out weak steel as a contributing factor in the collapse." The evaluation of paint deformation and spheroidization seem very straightforward, and you noted that the samples available were adequate for the investigation. Your comments suggest that the steel was probably exposed to temperatures of only about 500F (250C), which is what one might expect from a thermodynamic analysis of the situation.

However the summary of the new NIST report seems to ignore your findings, as it suggests that these low temperatures caused exposed bits of the building's steel core to "soften and buckle." (5) Additionally this summary states that the perimeter columns softened, yet your findings make

clear that "most perimeter panels (157 of 160) saw no temperature above 250C." To soften steel for the purposes of forging, normally temperatures need to be above 1100C (6). However, this new summary report suggests that much lower temperatures were able to not only soften the steel in a matter of minutes, but lead to rapid structural collapse.

This story just does not add up. If steel from those buildings did soften or melt, I'm sure we can all agree that this was certainly not due to jet fuel fires of any kind, let alone the briefly burning fires in those towers. That fact should be of great concern to all Americans. Alternatively, the contention that this steel did fail at temperatures around 250C suggests that the majority of deaths on 9/11 were due to a safety-related failure. That suggestion should be of great concern to my company.

There is no question that the events of 9/11 are the emotional driving force behind the War on Terror. And the issue of the WTC collapse is at the crux of the story of 9/11. My feeling is that your metallurgical tests are at the crux of the crux of the crux. Either you can make sense of what really happened to those buildings, and communicate this quickly, or we all face the same destruction and despair that come from global decisions based on disinformation and "chatter".

Thanks for your efforts to determine what happened on that day. You may know that there are a number of other current and former government employees that have risked a great deal to help us to know the truth. I've copied one of these people on this message as a sign of respect and support. I believe your work could also be a nucleus of fact around which the truth, and thereby global peace and justice, can grow again. Please do what you can to quickly eliminate the confusion regarding the ability of jet fuel fires to soften or melt structural steel.

1. <http://www.boulderweekly.com/archive/102104/coverstory.html>
2. CRC Handbook of Chemistry and Physics, 61st edition, pg D-187
3. <http://wtc.nist.gov/media/P3MechanicalandMetAnalysisofSteel.pdf>
4. <http://www.voicesofsept11.org/archive/911ic/082703.php>
5. <http://wtc.nist.gov/media/NCSTACWTCStatusFINAL101904WEB2.pdf> (pg 11)
6. <http://www.forging.org/FIERF/pdf/ffaaMacSleyne.pdf>

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