Does Molten Aluminum Glow?

By Adam Taylor

I was recently asked about this issue from someone on YouTube. Here's what I wrote to him:

In regards to the temperature of aluminum, it can make a difference. Aluminum can glow if it's heated to high enough temperatures, as this chart shows:

http://drjudywood.com/articles/aluminum/alumpics/htchar1.gif

The fact is that basically any metal will glow if you heat it to high enough temperatures. HOWEVER, there are several factors to consider. First, it has to be emphasized that NIST has no evidence that the fires in the Towers were hot enough to cause aluminum to glow in the first place. See pages 6-8 of this article:


But even granting that the fires were hot enough, the second point to consider is that aluminum is a metal of fairly high heat conductivity but low heat capacity. This means that in order for aluminum to glow brightly, and to sustain the glow, the heat source must be constantly applied to it. This is essentially the opposite case for metals like steel or iron, which both have fairly high capacity but low conductivity, and can glow for longer periods of time even after they leave the heat source. This is a strong reason we can be very sure that the material pouring out of WTC2 was not aluminum, since the material continued to glow as it flowed all the way down the tower. It was most likely steel or iron, or a combination of the two. Had the material been high-heated aluminum, it should have turned silver after dropping only one to two stories at most. But this clearly didn't happen: http://youtu.be/22eKBTfW2zY

A third point to consider is the fact that aluminum is a metal that is highly reflective but has low emissivity. What this means is that aluminum reflects ambient light in low-lite environments. The picture shown in the link you provided is indoors in what appears to be a low-lite environment, meaning that any ambient light is reflected in the aluminum and causes it to glow. However, 9/11 was a bright sunny day and the sun was shining in the direction of the spout of molten metal from WTC2. So if the metal really was aluminum, it should have been silvery in daylight conditions. This link explains this point very well:

If any "debunker" wanted to prove that the material flowing out of the South Tower was actually aluminum, then they could conduct a very simple experiment: get a sizable amount of molten aluminum, heat it to temperatures that would cause it to glow, and then pour it out in daylight conditions from a height of around a few stories. See what happens. I can guarantee it won't look anything like what was seen coming from the South Tower.

If you would like more information on this topic, I recommend you read this post of mine where I responded to science blogger Myles Power on this same topic. In it I provide several links to sources which back up what I say, including videos and technical information on the emissivity and reflective properties of aluminum.

http://adamtaylor42.blogspot.com/2013/01/speaking-truth-to-power.html