

SAFETY MEETING

Company Name: Superior Waterproofing Job Name or #: _____ Date: _____

12/28/18

NOT IN REAL LIFE

52

Here's something just for fun. We all know that movies aren't "real." But here are a few common violations of the laws of physics and reality that are safety/health related. (I hope this doesn't ruin the next action/adventure film you watch!)

- A real person trying to jump through a safety-glass window would knock themselves out; if they jumped through a typical 1/4 inch plate-glass window, they would tear themselves to shreds. In films, they escape unhurt through a shower of broken glass.
- A real person cannot outrun an explosion and dive for cover before the blast reaches them-- explosions occur at more than 135,000 mph (217,260 kmph) and the current 100 m record is less than 23 mph (37 kmph).
- It's very improbable that a real cigarette would ignite a pool of gasoline.
- Real cars don't explode as soon as they hit something. Even if the car does catch fire, explosions are rare and delayed. (For a car to explode during impact the tank must catastrophically rupture and spew a fine mist of gasoline over a large area so it can vaporize and mix with air in exactly the right proportions. The mixture must then find a source of ignition.)
- A real vehicle can only jump a gap with a steep launching ramp, but movie vehicles often do so from a shallow incline or, as in *Speed*, with no incline at all.
- Real bullets do not pack enough punch to hurl a victim backward through the air.
- Typical handgun bullets don't flash whenever they hit an object, even a metal one. They're made of lead and sometimes clad with copper, neither of which sparks when impacting on steel. (In the chemical industry it's commonplace to limit maintenance workers to copper-alloy or lead hammers when they are working in areas where flammable fumes may be present. Hammers made of these materials do not produce sparks when they strike objects, while steel hammers can.)
- You know that superheroes don't exist, but they're portrayed as existing in the real world and operating in cities populated by real humans. If a superhero were able to catch a falling heroine, the chances are that the sudden deceleration would break her neck.
- Victorian London smogs were a dirty greenish- yellow (hence the name "pea souper"), not white, as in films like *From Hell*.
- Large asteroids are thousands of miles apart, which means that spaceships would not have to dodge continuously to avoid them.

Sources: *Insultingly Stupid Movie Physics* by Tom Rogers, *Take Me To Your Leader* by Ian Harrison, "Wikipedia.com"

Reviewed MSDS # _____ Subject _____

Meeting Attended By _____

Supervisor's Signature _____