



**FIRE SAFETY**  
**THEORY VS. REALITY**

**NATIONAL FORENSIC SERVICES**  
**FIRE SCENE INVESTIGATORS**

The purpose of this presentation is to examine how can we share experiences from fire investigations for the benefit of manufacturing, fire testing and classification of building materials.

Building material that are fire tested will - based on that be - classified and authorized for application.

We as forensic fire investigators often experience that classified and authorized building materials do not live up to the standard.

Fire testing is performed in a controlled space under set and known conditions but in real fires material will be exposed to an uncontrolled fire.

The building material may not be a fire hazard in itself but when exposed to a fire it often contributes to the fire load.

A product that is fire tested often shows different properties when exposed to an uncontrolled fire.





Some products are applied in a wrong way and therefore causes fire although they comply to the given properties.

Even if a material is applied correctly it will often contribute to the fire load which makes it difficult to predict the fire spread and velocity.







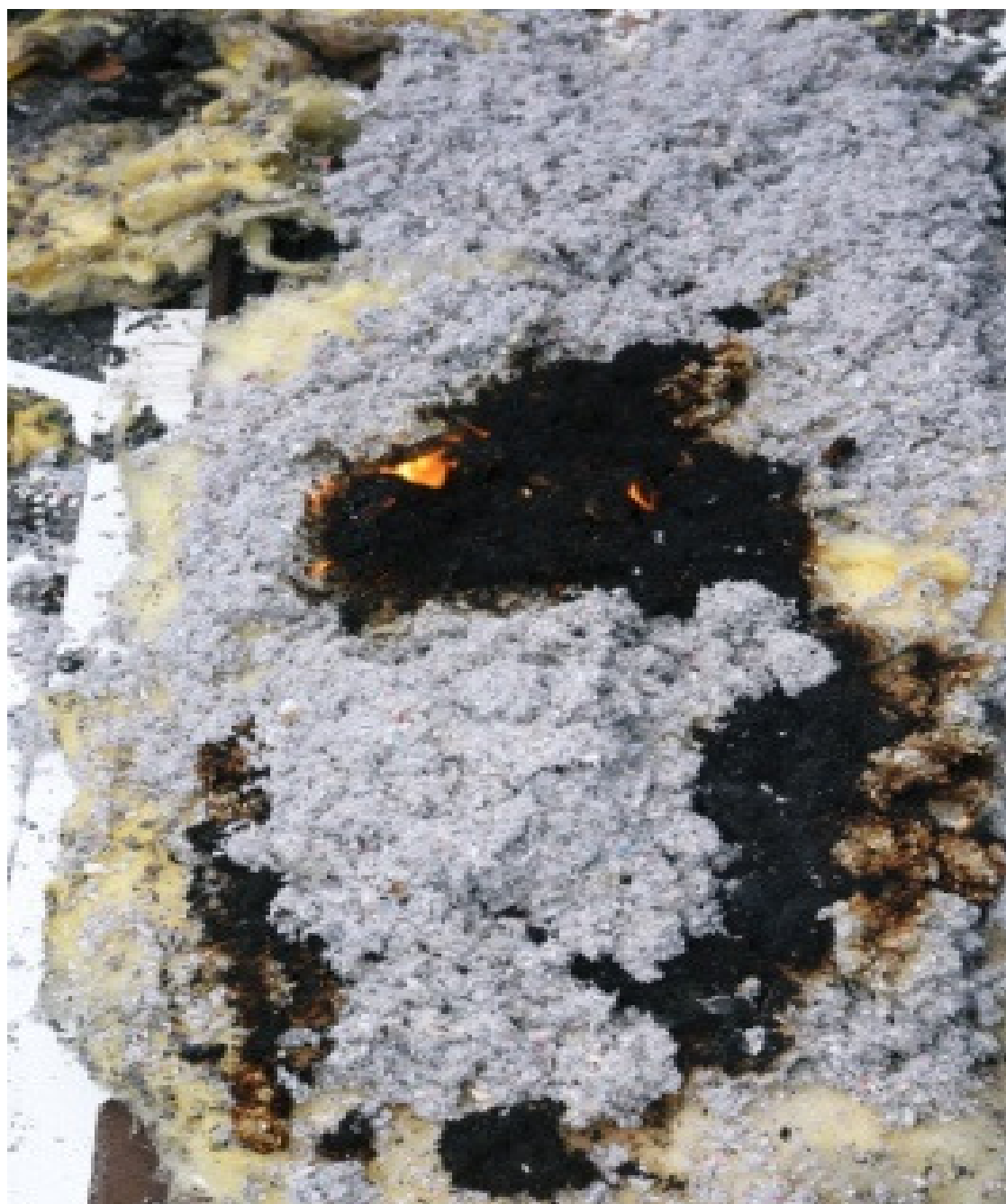


When i.e. foam insulation contributes to the fire load it often leads to hazardous situation for the residents or even fatalities and makes rescue efforts harder and create greater loss.

Even applied correctly insulation materials i.e. paper insulation can cause the fire fighters to make wrong decisions based on technical considerations and interpretations at the fire scene.







The product meets the given properties but makes fire fighting more difficult in terms of predictions on fire spread, deployment of personnel and the rescue of persons.

Decisions made on how building materials is supposed to behave in a fire can be hazardous for i.e. fire fighters, residents, livestock or environment as building materials often behave differently when exposed to a fire.





We want to share experiences from fire scene investigation on the behavior of different building materials to ensure the application of building material in a way which raises fire safety and improves the possibilities for effective fire fighting and rescue efforts

We experience that many fires could have been avoided simply by improved protection of the building materials like vertical fire stops in incombustible material preventing fire spread, avoid surfaces of flammable material to be exposed or by applying incombustible insulation materials

Discussion:

Suitable platform for sharing information.....?

Financed project... how ?

General interest?