# Fire & Rescue NSW Safety Bulletin 2012/06 2012 Structural Firefighting Uniform



#### **Issue**

Some firefighters wearing the new (mustard coloured) structural firefighting uniform have reported the following issues:

- thermal discomfort on their lower legs while working on top of high temperature fire debris
- coat zipper coming apart.

The bulletin outlines actions required while the reports are being further investigated.

#### **Background**

The previous structural firefighting uniform required the duty wear to be worn at the same time as the firefighting coat and trousers to achieve the specified thermal protection.

The new structural firefighting uniform complies with AS/NZS 4967 and is required to achieve the specified thermal protection as a stand-alone garment. Approximately 25% of firefighters have been issued with this new uniform.

Firefighters at two incidents have reported that, while working on top of high temperature fire debris, an increased sensation of heat was felt on part of their lower legs. Also, some firefighters have reported the coat zipper comes apart from the bottom up.

Preliminary investigations suggest that:

- heat / steam can sometimes move up between the leg and the trousers, producing an increased sensation of heat
- depending on the length of the firefighter's body, sufficient force can be applied to the bottom of the zip while squatting pulling it apart, or
- the bottom of the zipper is sometimes not being correctly engaged before being zipped up allowing it to be pulled apart.

The risk to the health and safety of firefighters in relation to the trousers has been assessed as low because:

- the thermal discomfort only occurs while working on top of high temperature fire debris
- the thermal discomfort has resulted in firefighters moving out of the area of high temperature and/or to cool the debris on which they are working.

Because there is a risk that a firefighter could attend a structure fire with a coat that is not properly secured, this issue has been determined to have a higher risk.

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### **Actions required**

Until investigations are finalised, Duty and Station Commanders must ensure that:

- 1. Firefighters who have been issued with the new Structural Firefighting Uniform **must wear their duty wear trousers** underneath the Structural Firefighting Trousers, as specified in the *Recommended Practice Wearing personal protective clothing, equipment and uniform (Version 02)*. This will provide additional thermal protection beyond that required by the Standard.
- 2. Sufficient cooling of fire debris occurs before firefighters are tasked to work on top of fire debris, regardless of what type of structural firefighting uniform is being worn.
- 3. The performance of the zipper should be tested to confirm that, when the zipper is engaged properly, it is not likely to come undone. To test the zip:
  - i. Put on the structural FF trousers over the top of the duty wear trousers
  - ii. Put on the structural FF coat. Before zipping up, ensure that the zipper is properly engaged by using the thumb loop to hold the 'pin' of the zipper in place before pulling the slider.
  - iii. Zip the coat up all of the way, but do not close the velcro flap
  - iv. Perform a deep squat with knees to the side (see attached video for how this part of the test is performed).
  - v. If the zipper comes apart at the bottom the coat has failed the test.
- 4. If the coat zipper does not pass the test, the coat should be temporarily removed from service and held at the Station awaiting further instruction. The old firefighting ensemble should then be worn.
- 5. If a firefighter does not have sufficient structural firefighting uniform, the Station Commander must contact the MICC on 02 9318 4850 which will be staffed at the two changes of shift on 7 and 9 October 2012. Alternatively, contact the Response Coordinator on 02 9318 4802.
- 6. Firefighters must 'dress down' and remove their structural firefighting uniform when the officer in charge considers it safe to do so.

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Noted: Station Commander	A	В	С	D	Other
Checked: Duty Commander					

**Previous Safety Bulletin:** 2012/05, Asbestos risk – Great Wall and Chery motor vehicles