NWCG Equipment Technology Committee

Safety Warning: 23-001

March 8, 2023

To: Wildland Firefighting Community

From: Bill Yohn, Acting Chair, NWCG Equipment Technology Committee (ETC)

Subject: Non-specification fire shelters





Issue: Non-specification fire shelters are being advertised and sold on the open market as the M-2002 fire shelter, that do not meet Forest Service (FS) specification 5100-606 requirements.

The non-specification fire shelters are made from unknown materials and components that do NOT meet specification 5100-606. Use of the non-specification fire shelter may result in serious injury or death during an entrapment or burnover. For federal agencies, the Interagency Standards for Fire and Aviation Operations (Red Book), <u>Chapter 7: Safety and Risk Management</u> states that firefighters must carry an M-2002 fire shelter built to FS specification 5100-606 while on the fireline.

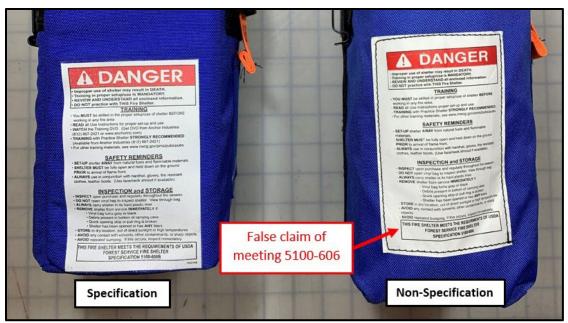


Image 1: Not all specification fire shelters will have the DANGER label on the side.

Background: The National Technology and Development Program (NTDP) was alerted on February 22, 2023, of fire shelters purchased on the open market that did not look correct. Subject matter experts from NTDP evaluated the shelters and determined they did not meet FS specifications. Fire shelters are built to FS specification 5100-606. This specification governs the materials and components that are safe for fire shelter use. Specification fire shelter materials are tested for toxicity and found they do not release toxicants in quantities that would be harmful to a shelter occupant. Shelters constructed with materials that do not meet the FS specification requirements have not been tested and may release hazardous toxicants to the shelter occupant. NTDP has not had the opportunity to test the thermal performance of the non-specification fire shelter. However, a visual inspection shows deviations from the specification that will result in the shelter not deploying as designed.

NWCG standards are interagency by design; however, the decision to adopt and utilize them is made independently by the individual member agencies and communicated through their respective directives systems.

Action: Any non-FedMall (open market) fire shelter purchases should be inspected to verify they are built to specification 5100-606. Any non-specification fire shelter should be removed from service and NOT CARRIED ON THE FIRELINE. IN THE EVENT OF AN ENTRAPMENT OR BURNOVER, SERIOUS INJURY OR DEATH COULD OCCUR.

The noticeable differences between specification and the non-specification fire shelters can be identified by the following:

Carry case

- Absence of hard plastic liner
- Missing stenciling on Use Instructions pocket
- Missing sewn in label

Polyvinyl chloride (PVC) bag

- For the Large Fire Shelter, the pull strap is missing LARGE stenciling (For information, the pull strap for Regular specification fire shelters is yellow and not labeled)
- Missing paper insert label

Fire shelter

- Missing LEFT HAND and RIGHT HAND stenciling on shake handles
- Uneven and loose folding of the shelter not in a brick shape

Images 2-6 show the differences between the known non-specification fire shelters and specification fire shelters.



Image 2

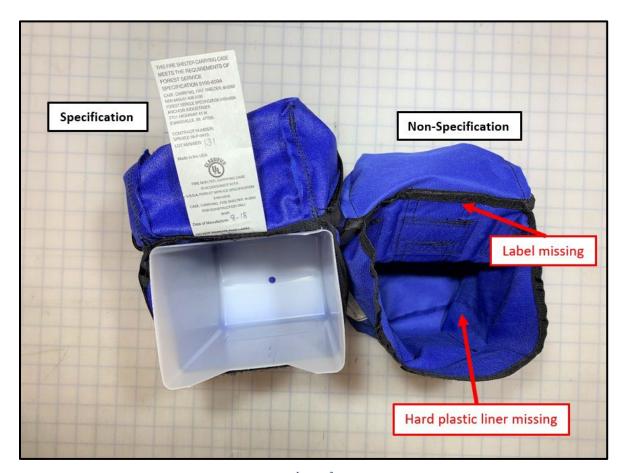


Image 3



Image 4



Image 5: Labels for Large specification fire shelters may be blue or orange.



Image 6

Additional Information: All Federal firefighters should purchase shelters directly from FedMall. State and local government firefighters may be able to register for FedMall access through the State and Local Government Purchasing Program. Those purchasing outside of FedMall should ensure they purchase fire shelters from reputable suppliers.

NTDP was informed of the non-specification fire shelters by a contractor who inspected their shelters upon delivery. The fire shelters identified in this Safety Warning are the only known non-specification fire shelters being sold on the open market, that does not mean there may not be others. All fire shelters, regardless of supplier, should be inspected upon receipt to ensure that all shelter components are accounted for, the shelter meets specification requirements, and that no damage occurred during shipping or storage.

Contact NTDP if you suspect you have purchased a non-specification fire shelter. Additional information on fire shelters can be found on the <u>Fire Shelter and Personal Protective Equipment Subcommittee website</u>.

Contact: David Maclay-Schulte, Equipment Specialist, U.S. Forest Service, NTDP, at <u>david.j.maclay-schulte@usda.gov</u>, or by phone (406) 329-3965 or (406) 396-4919.