

Conversion of Class "B" fuel to Class "A" fuel Structure Renovation Requirements

The following outlines the requirements of converting a Class "B" fuel Live Fire Training Structure to Class "A" fuel Live Fire Training Structure. All conversions requests shall be approved by the committee and subsequently the Virginia Fire Services Board. For converted structures to remain grant eligible they must adhere to the following requirements.

- A. Remove all gas lines and sensors from within and around the burn building prop. Penetrations in the exterior walls must be parged solid.
- B. Reconstruct gable "A" framed roof to be constructed out of non-combustible material, including fire- retardant treated plywood or galvanized metal roof deck.
- C. Provide loosely laid firebrick along the entire floor surface within the burn rooms. Please note that the metal building manufacturer will need to be contacted to determine the structural requirements, if any, for strengthening the existing framing. However, in lieu of firebrick throughout, a mobile burn crib lined along the bottom of the crib with firebrick and raised above the floor 8" can be utilized.
- D. Remove all sections of thermal lining to facilitate inspection of structural components behind the thermal protection in each burn room by a professional engineer with live fire training structure experience registered within the Commonwealth of Virginia. A letter signed and sealed by the professional engineer must include photographs of the structural components as well as any recommendations for potential remedial repairs.
- E. If remedial repairs are required, documentation proving that such repairs have been completed will be required, such as photographs and/or invoices.
- F. Update the exterior mounted signage to reflect the maximum sustained and spike temperature requirements and maximum number of live fire training days per year as required by the Program Criteria portion of the "Summary of Burn Building Prop Grant Program".
- G. Install thermal protection at jambs and headers of all window and door openings leading into burn rooms. This includes exterior thermal protection as well as interior rollover thermal protection.
- H. Calibrate Temperature Monitoring System (TMS) prior to conducting first live fire training evolution with the Class "A" fuel.
- I. Contact the metal building manufacturer for specific recommendations beyond those required by VDFP. A letter must be obtained by the specific metal building manufacturer stating that switching fuel types would not void the existing warranty on the structure.
- J. A packet must be issued by the locality with the above described requirements to the committee along with the official conversion request
- K. * It must be noted that utilizing Class "A" fuel has its limitations. Most significant, is the inability to regulate constant Class "A" fuel temperatures during live fire training. Strict conformance to NFPA 1403 must be taken with regard to the required documentation of each live burn evolution.