

Safety and health alert

11/98 Welding on site - a real fire hazard

Incident

A fire broke out on a construction site where new extensions at a college were being erected.

The three tradesmen on site at the time were an electrician installing electrical cables to the switchboard, and a welder and rigger who were working on a new roof structure, welding cleats to join to the existing roof.

The fire started in the existing insulating material in the existing roof space just after the welding of the cleats had taken place. The central top floor area was gutted and caused extensive smoke damage to the remainder of the building.

Prior to the fire this floor was fully occupied with partition walls, ceilings and teaching aids. Note the damage to the supporting columns and roof structure. The fire took less than a minute to take hold. Evacuation of students and staff from other floors was necessary as the fire was soon out of control.

Factors

The Fire and Rescue Service has determined the cause of fire to be a spark from welding operations in the roof space. A fire hose reel and fire extinguisher were readily available, and the workers had taken what at first appeared to be adequate safety precautions. An inconsistency with the technical data in relation to the flammability of the insulation material is considered to be a main contributing factor.

Recommendations

1. Persons carrying out welding and allied processes must comply with Part 3, Division 9, Subdivision 3, of the *Occupational Safety and Health Regulations 1996* which details statutory requirements for Welding and Allied Processes. Regulation 3.96 cites Australian Standard 1674-1990, "Safety in Welding and Allied Processes". This Standard details the minimum requirements that must be observed when carrying out welding operations under various site conditions.
2. When carrying out welding and allied process work, persons must carry out a complete and thorough assessment of site conditions. Site preparation work must include protecting the surfaces of other materials from the possibility of damage or fire or the adoption of alternative methods to carry out the work. As an added precaution it may be necessary to obtain relevant up-to-date information from the manufacturer or supplier of the materials found at the workplace to determine what modifications to procedures is required to work safely.



3. For further information employers and employees should refer to the provisions of the "Health and Safety in Welding Technical Note 7 (TN 7 94)". This technical note is produced by the Welding Technology Institute of Australia and has been approved by WorkSafe Western Australia as a Code of Practice for welding and allied processes. It provides guidance information on health and safety practices in various welding, cutting and allied processes where limited information exists.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

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