



MELBOURNE AIRPORT - FIRE SAFETY GUIDELINE **FSG13**
PORTABLE / TEMPORARY STRUCTURES ON APRON LEVEL

1.0 General

This document sets out guidance for fire safety precautions relating to portable or temporary site facilities which are used by builders / contractors as a site establishment base. These facilities are typically delivered to site as completed structures and positioned on Apron level in the vicinity of the project area, and may be used for office, amenities or storage purposes. The structures used are typically sandwich panel and therefore may pose a fire risk under some circumstances.

The intent of this guideline is to identify and minimise the terminal fire risk associated with these structures, and provide a clear, simple procedure for their use.

For the purposes of this guideline, sandwich panels are the generic name for a composite panel comprising metal faced external skin which is adhered to an internal core material. The core material may vary – combustible (EPS), limited combustible (PIR) or non-combustible (Rockwool). The majority of sandwich panels used for temporary or portable site structures are manufactured from EPS sandwich panels. During the construction period, it is inevitable that fire safety systems will be impaired or isolated. The construction process may also introduce additional fire safety risks which do not exist in the normal day to day operations of the airport, for example, hot works.

2.0 Fire Hazards

The fire hazards associated with sandwich panels vary considerably depending upon the core material. At elevated temperatures which can occur during a fire, EPS core can melt or ignite. This results in the metal skin delaminating such that the core is exposed and the panel loses structural stability. Once ignited, EPS can produce large volumes of toxic, acrid smoke, and can melt to form droplets and pool fires thereby spreading the fire. A temporary or portable structure positioned in the vicinity of the terminal may therefore have an impact on terminal fire safety.

The location of the structures also presents a hazard in relation to external impedance of exit routes (e.g. site structure may obstruct discharge path from an exit) and access to fire-fighting equipment – this is to be reviewed prior to implementation with exit widths and access maintained, with additional signage to locate fire-fighting equipment as necessary.

3.0 Melbourne Airport Requirements

Proximity to Terminal

Temporary / portable structures on Apron level can be accommodated in one (1) of the following ways:

1. At least 10 m clearance is provided between the closest part of the portable / temporary structure to the terminal; or
2. The portable / temporary structure is sprinkler protected.

Exit discharge paths

If the structure is located between an exit point and open space, a clear path of at least the width of the exit doors shall be maintained to open space. For large site structures which result in extended travel distances around them, two (2) directions of travel may be required to reach open space.

Access to fire-fighting equipment

The structure shall not obstruct the location of installed fire-fighting equipment to impact on its safe use. Clear space of at least 2 metres shall be maintained in front of installed fire hydrants and fire hose reels.

If the structure obstructs the visibility of these items, additional location signage shall be installed to direct occupants / fire-fighters to the equipment location. This shall be reviewed in conjunction with ARFF.

Any queries should be referred to the relevant APAM Project Manager, who will consult the Melbourne Airport Fire & Life Safety Manager.