

Warning devices for emergency stations

Operational Instruction 2.30

April 2025



Government of South Australia
Department for Infrastructure
and Transport

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4	20 March 2017	Minor correction to Section 4.6
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6	28 January 2021	Format updates
7	23 April 2025	Updated to reflect AS 1742.2 (2022) and format updates

Approvals record

Approver	Position	Date	Signature
Stephen Pascale	Manager, Traffic Services	17 April 2025	Digital Approval 48180

We acknowledge the Traditional Custodians of the Country throughout South Australia and recognise their continuing connection to land and waters. We pay our respects to the diversity of cultures, significance of contributions and to Elders past, present and emerging.



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1 Introduction

This document provides guidance on the use of the warning signs for emergency stations (fire and/or ambulance) and warning signs with built in alternating flashing yellow lights (TES 13697).

This document shall be read in conjunction with Australian Standard *AS 1742.2 Manual of Uniform Traffic Control Devices Part 2: Traffic Control Devices for General Use (2022)* Clause 4.11.4(c).

The traffic control devices in this Operational Instruction may be installed under the Minister's *Instrument of General Approval and Delegation to Council*, or the Instrument of Authorisation and Delegation to the Department for Infrastructure and Transport's Network Management Services. Traffic control devices which vary from this Operational Instruction require the separate approval of the Manager, Traffic Services for each location prior to installation.

For guidance on the use of emergency service traffic signals, refer to *AS 1742.14 Manual of Uniform Traffic Control Devices Part 14: Traffic Signals (2014)* Clause 7.1, the Department's *Operational Instruction 14.2 Traffic Signal Faces* and the Department's *Code of Technical Requirements*.

2 Standard warning signs

2.1 Application for warning sign

All applications for signs on roads maintained by the Department should be directed to the Manager, Traffic Services. All costs associated with the sign manufacture, installation, relocation, or removal of these standard signs shall be met by the Department.

2.2 Types of signs



W5-36



W5-37



W5-SA70

2.3 Guidelines to the use of warning signs

These signs are only to be used in advance of the entrance to a fire station (Metropolitan Fire Services (MFS) or Country Fire Services (CFS)), or ambulance station where it may not be readily apparent that a

station exists, to warn traffic in time to avoid an emergency vehicle that may exit suddenly from the station. Where two or more emergency services are co-located then a W5-SA70 should be used.

Under no circumstances should the signs be used for intersections that are used by general road users. In such cases, intersection warning signs should be considered where the stopping sight distance cannot be achieved (refer to *Austrroads Guide to Road Design, Part 3: Geometric Design (2021)* Table 5.5.).

2.4 Sizes of standard warning signs

The W5-36 sign can be specified in two (2) sizes as detailed in Table 2.1:

85 th percentile speed (km/h)	Size (mm)
<90	750 ('B')
≥ 90	900 ('C')

Table 2.1: Size of Warning Signs

2.5 Installation of signs

Where sites assessed in accordance with Section 2.3 require signs, they should be installed prior to the entry points used by the emergency vehicles at the appropriate distance shown in Table 2.2:

85 th percentile speed (km/h)	Distance (m)
<75	80 – 120
75 – 90	120 – 180
≥ 90	180 - 250

Table 2.2: Location of Warning Signs

These distances reflect the 'Must or may need to stop' situation in *AS 1742.2 (2022)* Appendix D Table D1.

For sign mounting and installation details refer to *DIT Master Specification RD-LM-C4 Sign Installation*.

Where the sign is located on a multi lane divided road, it may be duplicated on the median.

3 Alternating Flashing Yellow Light (AFYL) warning sign

3.1 Application for AFYL sign

All applications for AFYL warning signs on roads maintained by the Department should be directed to the Manager, Traffic Services. All costs associated with manufacturing, installation, relocation, and removal of the AFYL warning signs shall be the responsibility of the emergency service authority. The maintenance of these AFYL warning signs will be undertaken by DIT and all associated costs are to be met by the emergency service authority.

The emergency service authority should be advised of the operating procedures as detailed in this instruction, refer to Section 3.6.

3.2 Description of AFYL warning sign

TES 13697 is the only sign available for use at locations which meet the criteria detailed in Section 3.3. Sign details are provided in Appendix A.



Figure 3.1: TES 13697 with Flashing Light Supplementary Plate TES 18580

3.3 Guidelines to the use of AFYL sign

AFYL warning signs shall only be used where there is historical evidence (e.g. crash data) that the standard warning signs have not been successful (due to safe stopping distance, sight distance, topography of the area, other roadside distractions etc).

AFYL warning signs should not be provided where the emergency vehicle is clearly visible from the distances shown in Table 2.2.

Under no circumstances should the AFYL warning sign be used for intersections that are used by general road users. In such cases intersection warning signs should be considered where the stopping sight distances cannot be achieved (refer to *Austrroads Guide to Road Design, Part 3: Geometric Design (2021)* Table 5.5).

3.4 Sizes of AFYL warning signs

TES 13697 sign details can be found in Appendix A. A smaller 'S' size is available for locations with site restrictions, refer to Appendix B.

Flashing light supplementary plate (TES 18580) details can be found in Appendix C.

3.5 Installation of AFYL warning signs

The AFYL warning sign may be used on the approach to an emergency station as described in Section 3.3. Where used, the TES 13697 sign shall be installed prior to the entry point used by the emergency vehicles at a distance shown in Table 2. The AFYL warning sign should only be installed on the necessary approach. It need not be installed on both approaches.

For other installation details, the Department's Technical Services will need to be contacted to determine the correct post, selection of cabling, ducting etc.

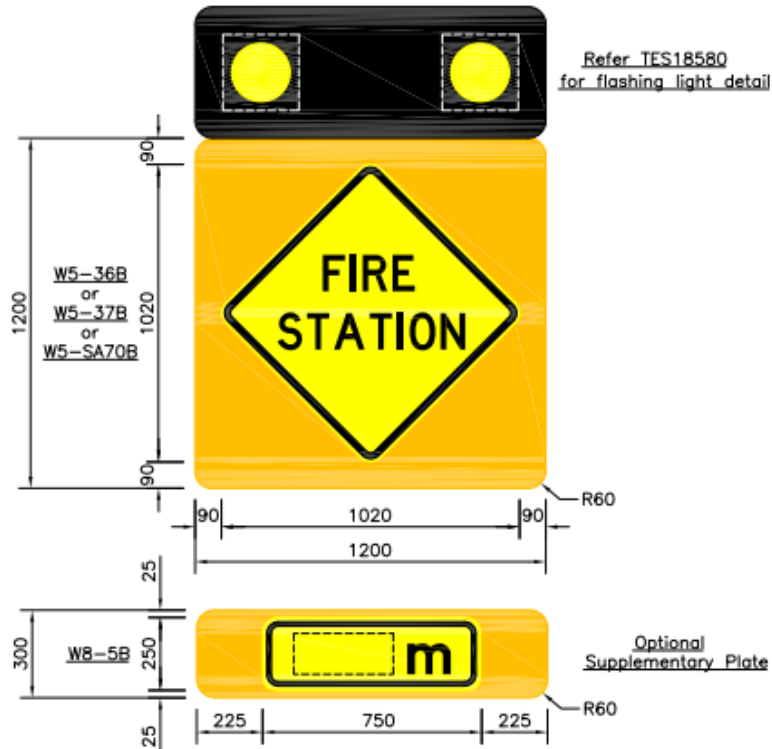
3.6 Operation of AFYL warning sign




An operating procedure for the AFYL warning sign shall be developed in conjunction with the Department, and the emergency station shall be responsible to ensure that any persons who operate the signs have been given safe work instructions in regard to operating the sign and working near the road. Note that the AFYL shall not be operated in non-emergency situations.

The Department shall be responsible for ongoing maintenance of the devices on roads under its care.

Appendix A – TES 13697

Safety & Service Division
Traffic Operations, Traffic Solutions Unit
 Specific Road Signs - Specifications, South Australia



-  Black
-  Yellow class 1
-  Yellow class 2

Scale: 1:20
 ALL DIMENSIONS ARE IN MILLIMETRES
 Total Sign Area: 1.44 sqm
 Sign Type: Warning
 Location: Various



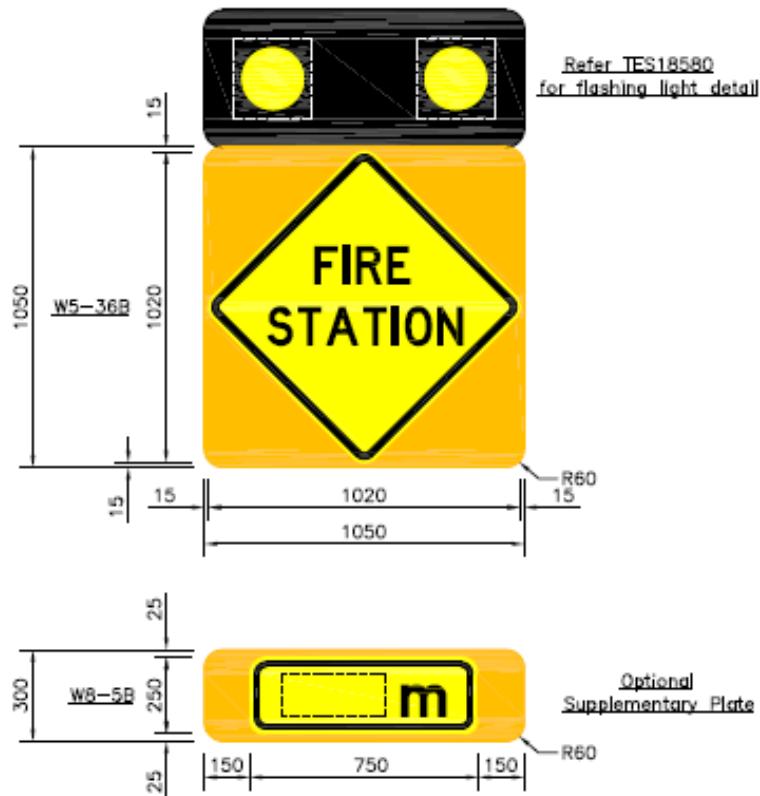
Drawn: A. Simister
 Edition: A Rev: 6
 Date: 7 August, 2017




Authorisation:
 Date:

TES 13697

Appendix B – TES 13697s

Transport Services Division
Traffic & Access Standards Section
Specific Road Signs - Specifications, South Australia



-  Black
-  Yellow class 1
-  Yellow class 2

Scale: 1:20
 ALL DIMENSIONS ARE IN MILLIMETRES
 Total Sign Area: 1.10 sqm
 Sign Type: Warning
 Location: Various

Drawn: A. Simister
 Edition: A Rev: 5
 Date: 25 September, 2013

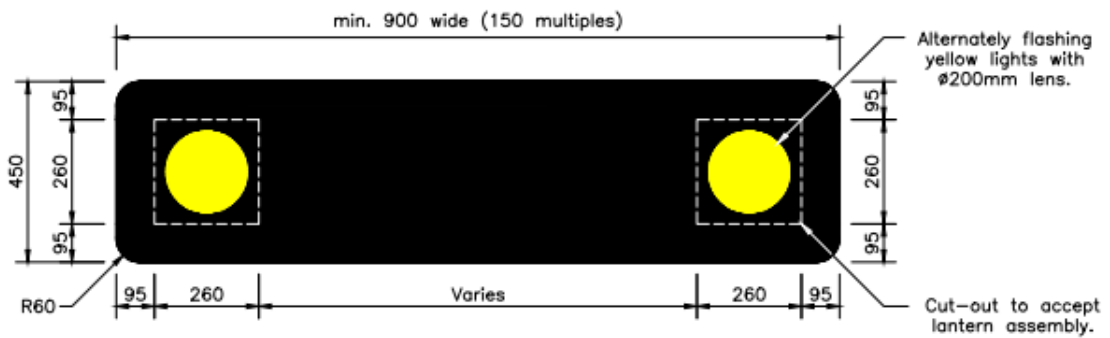
Authorisation:
 Date:



TES 13697s

Appendix C – TES 18580

Road and Marine Services
Network Management Services, Traffic Solutions Unit
Specific Road Signs - Specifications, South Australia



TES 18580 may be mounted above back board signs or regulatory signs to provide additional warning (Refer AS 1742.2-2022).

NOTE:

TES 18580 only to be produced in widths \geq 900mm (multiples of 150mm).



Scale 1:15

ALL DIMENSIONS ARE IN MILLIMETRES

Total Sign Area: Varies

Sign Type: Warning (Flashing Lights)

Location: Various

Drawn: M. Douglas Authorisation:
 Edition: A Rev: 3
 Date: 27 September, 2023 Date:

TES 18580