# SOUTH AUSTRALIAN FIREBREAKS, FIRE ACCESS TRACK AND SIGN STANDARDS GUIDELINES



State Bushfire Coordination Committee

(First Prepared 1992)
As the South Australian Guidelines for State Government Agencies
Firebreaks & Fire Access Tracks

**REVIEW:** These guidelines will be reviewed within 5 years of being authorised or by 30 November 2018 whichever comes first.

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# 1. INTRODUCTION

State Government Agencies, undertaking bushfire prevention measures on land they manage, have established firebreaks and tracks used for fire access, often with varying objectives and specifications.

This document seeks to present guidelines to enable Government Agencies to achieve a consistent approach in the establishment and maintenance of firebreaks and tracks used for fire access.

Significant legislative change has occurred reflecting the community's growing concerns regarding soil conservation, water quality, native vegetation management and strategies to reduce the adverse impacts of bushfire.

These guidelines have consequently been developed to provide a consistent and practical approach to the many and varied treatments necessary to manage vegetation, associated fuel accumulation levels and to provide, as far as is practicable, safe access for bushfire suppression operations.

In the development of these guidelines, it was considered of paramount importance that they incorporate sound land management and environmental principles and that establishment and recurrent maintenance be cost effective.

This document also aims to provide a guide for private landholders enabling them to achieve a practical and consistent approach to this aspect of fire prevention.

#### 2. BACKGROUND

#### 2.1 OBJECTIVES

The guidelines have the following objectives:

- 2.1.1 To reduce the effects of fire on life, community and individual assets.
- 2.1.2 To provide a uniform approach for maintenance and construction of safe and effective firebreaks and access across a range of land forms and other land uses in a manner that is environmentally sound, cost effective and practical.
- 2.1.3 To assist fire prevention planning at District, Regional and State levels.
- 2.1.4 To be relevant to both public and private land holders and encourage said land holders to use these guidelines.

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#### 2.2 PLANNING CONSIDERATIONS

Established firebreaks and access tracks should be reviewed on a local and district basis to assess effectiveness of the whole network.

A number of outcomes may result:

- No change i.e. (the existing network meets the operational needs of the district)
- Requirement for additional firebreaks and access tracks
- Modification of existing access tracks to meet standards
- A reduction in number
- Relocation in whole or part

**Note**: all closed firebreaks and access tracks should be rehabilitated.

In reviewing firebreaks and access tracks, a number of issues need to be considered:

#### Environmental:

Firebreaks and access tracks should be located where they will have the least impact on the environment, unless there are no acceptable alternatives. Environmental considerations include - significant flora and fauna, reduced scenic values, cultural sites, wilderness value and erosion (related to soil type/steepness and rainfall).

Asset protection may require environmental compromises.

Seek expert advice regarding environmental implications of firebreaks and access tracks.

#### Safety:

Implicit in the planning process is the clear understanding of why a firebreak or access track is in a certain location and how it will perform. Included in this consideration are the limitations of a firebreak or access track, and the fire conditions when it will not be safe.

This information must be known by users of a firebreak or access track to maximise both personal safety and performance of the firebreak or access track.

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#### Effectiveness:

Like safety, effectiveness should be considered at the planning stage and is clearly a component of fire suppression planning. The effectiveness of firebreaks and access tracks will be increased by locating them in vegetation of lowest fuel load.

#### Cost:

Establishment and maintenance cost of firebreaks and access tracks should be considered during the planning stage especially where alternative locations are available.

In any specific instance, there should be minimal departure from the guidelines with special consideration given to proper land management and environmental principles.

Locating in areas of lowest fuel load will have positive outcomes on safety, effectiveness and cost of access tracks and fuel breaks.

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Photo of Fire Access Track network in Millbrook Reservoir

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#### 2.3 RELEVANT LEGISLATION

Current legislation which may influence the establishment and management of firebreaks and tracks used for fire access is listed below:

# 2.3.1 Fire and Emergency Services Act 2005

The *Fire and Emergency Services Act 2005* requires owners of land whether Councils, Government instrumentalities or private land owners, "to take reasonable steps to protect property on the land from fire and to prevent or inhibit the outbreak of fire on the land, or the spread of fire through the land".

# 2.3.2 Native Vegetation Act 1991

Within South Australia there are specific controls upon the clearance of native vegetation.

Native vegetation as defined under the *Native Vegetation Act 1991* means,

"a plant or plants of a species indigenous to South Australia including a plant or plants growing in or under waters of the sea but does not include:

- (a) A plant or part of a plant that is dead unless the plant, or part of the plant, is of a class declared by regulation to be included in this definition; or
- (b) A plant intentionally sown or planted by a person unless the person was acting in compliance with a condition imposed by the Council under this Act or by the Native Vegetation Authority under the repealed Act, or with the order of a court under this Act or the repealed Act."

Dependent upon the specific clearance proposed, close consultation with the Native Vegetation and Biodiversity Management Unit of the Department of Environment, Water, and Natural Resources may be required and in some cases application to clear will need to be submitted to the Native Vegetation Council.

Further controls are discussed in part 3.3.2 of this document.

Refer page 25 for references to Acts and Legislation dealing with provision of firebreaks and tracks used for fire access.

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# 3. FIREBREAKS

# 3.1 DEFINITION OF A FIREBREAK

A firebreak is an area or strip of land where vegetation has been removed or modified to reduce the risk of fires starting and reduce the intensity and rate of spread of fires that may occur.

A firebreak should incorporate a track used for fire access where practicable. Other purposes for firebreaks are to:

- (a) Provide protection for personnel, equipment and property from fire
- (b) Provide an edge from which fire crews can undertake fire suppression or prescribed burning.

It is important to understand that firebreaks cannot be expected to prevent the forward movement of moderate to high intensity fires, particularly where spotting is likely to occur.

Spotting is the action of airborne firebrands or embers starting new fires ahead of the main fire front.

# 3.2 GUIDELINES FOR FIREBREAKS

Adjoining landowners (regardless of tenure) should cooperate and coordinate the establishment and maintenance of boundary firebreaks (which need not strictly follow property boundaries) to avoid additional impact on the environment.

- Firebreaks should complement any existing or planned firebreaks on adjoining lands specified in Regional and District Bushfire Prevention Plans.
- Wherever possible, firebreaks should be established on previously cleared land to minimise the impact on native vegetation and reduce establishment and maintenance costs.
- Firebreaks should be strategically placed to aid in the protection of fixed assets including dwellings and other buildings (see 3.3.5).
- Firebreaks should be positioned to aid fire suppression and should be as straight as practicable.
- As firebreaks normally include access tracks, ease of vehicle access in difficult terrain needs to be considered.
- Firebreaks should, where practicable, be located in vegetation of least fuel load to improve the chance of fire control.

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- The range of firebreak treatments can extend from total removal to partial modification of components of its vegetation; leaving trees and only reducing the understorey and fine litter fuel may achieve a significant reduction in fire intensity while retaining some vegetation to maintain soil stability and aesthetic value.
- Attention is again drawn to environmental considerations as outlined in 2.2.

#### 3.3 PRINCIPLES FOR FIREBREAKS

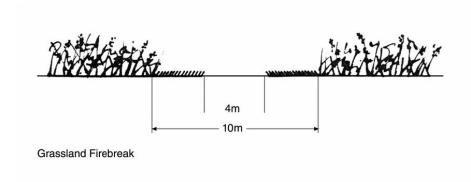
General Considerations - Fuel Free Strip

Where practicable and environmentally acceptable, a firebreak should incorporate a fuel-free strip of a minimum width of 1.8 metres; this may form part of the access track. Grading, cultivation or herbicide applications are possible treatments.

#### 3.3.1 Grassland Firebreaks

The width of a grassland firebreak should be between 4 and 10 metres including a track used for fire access. In native grasses a firebreak up to 5 metres wide is permitted, greater width requiring approval of the Native Vegetation Council.

The vegetation within a grassland firebreak should be maintained to a maximum height of 10 centimetres during the Fire Danger Season. (Note: this excludes the track used for fire access, which may be bare earth, created by grading or spraying).



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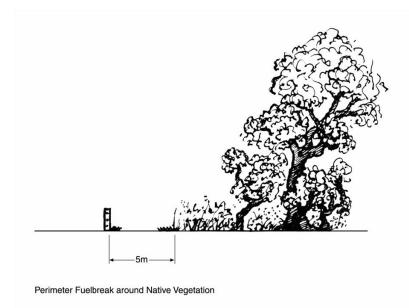
# 3.3.2 Firebreaks Associated with Native Vegetation

The *Native Vegetation Act 1991* (the Act) controls the clearance of native vegetation in South Australia. For many proposed clearance activities an application for consent to clear must be submitted to the Native Vegetation Council.

The Act allows for firebreaks up to 5 metres wide to be established through native vegetation without the need for consent from the Native Vegetation Council. However, where the clearance of native vegetation of greater width than 5 metres is proposed, an application to the Council is required, unless the greater width is authorised or required by another Act or Regulation. Contact the Native Vegetation and Biodiversity Management Unit DEWNR, for further information. Where native vegetation adjoins cleared land, the firebreak should be established on the cleared land. Specific guidance on exemptions is available through the Native Vegetation Council via obtaining a copy of the Guide to the Exemptions under the Act (as amended 2005).

For areas of native vegetation under Heritage Agreement, a perimeter firebreak up to 5 metres in width may be established during boundary fencing. Any additional clearance for firebreak purposes requires the specific approval of the Native Vegetation Council.

The intention of this legislation is not necessarily to confine native vegetation firebreaks to 5 metres, but to ensure that any greater clearance is subject to environmental assessment. Where the Native Vegetation Council receives an application, consultation with the SA Country Fire Service will occur.



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# 3.3.3 Commercial Plantations

Commercial plantations are considered to be any plantation over 100 hectares in size.

All commercial plantations need an external boundary firebreak. This shall consist of either:

- A 20m wide break (external to the plantation), or
- A 10m wide break (external to the plantation) plus a 10m fuel modified zone (within the plantation).

Pruning is a commonly used fuel modification technique throughout the Plantation Industry.

Large plantations should generally be divided into units, not exceeding 400 hectares, by firebreaks as defined above.

# 3.3.4 Farm Forestry Plantations

For plantations of 40 to 100 hectares:

A 10 metre wide break (external to the plantation)

For plantations of 40 hectares or less:

A 7 metre wide break (external to the plantation)
 This includes the tracks used for fire access which maybe bare earth created by grading or spraying.

# 3.3.5 Firebreaks for Building Protection

# Forest Plantations and Existing Buildings:

Greater than 100 hectares in size:

Set-back off plantation edge from habitable dwellings existing at the time of initial plantation development shall generally be a minimum of 50 metres.

Less than 100 hectares in size:

Set-back off plantation edge from habitable dwellings existing at the time of initial plantation development shall generally be either a minimum of 35 metres combined with fuel reduction works within the plantation to provide a total of 50 metres, or the regional standard for native vegetation and revegetation areas, whichever is the lesser.

# Existing Forest Plantations and New Dwellings:

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New dwellings should be set back from existing forest plantations by the same distances as specified above, except that where plantations are in different ownership to the dwelling, the new dwelling should be set back a full 50 metres from the existing plantation boundary.

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# Native Vegetation and New Dwellings:

New dwellings should be established in existing cleared areas to maximise setback from native vegetation. For advice on locating dwellings and other fire prevention issues, contact the SACFS Development Assessment Unit or the Fire Prevention Officer at the Local Council Office.

# Native Vegetation and Existing Dwellings:

The SACFS recommends a firebreak around an existing dwelling of 20 metres minimum width. This fire break may be established without Native Vegetation Council Approval, native vegetation regulation 5(1)(k) permits the clearance of native vegetation (including under storey shrub and trees) within 20m of a dwelling without the need to obtain clearance consent. Larger Eucalypts (2m or more in circumference measured at 3m above ground level) within this 20m zone are not automatically exempted if they are located on the River Murray Floodplain or (2m or more in circumference measured at 1m above ground level) are located where Regulated or Significant Tree controls apply (in metropolitan Adelaide, Adelaide Hills Council townships and parts of the Mount Barker Council).

To remove or modify larger Eucalypts located on the River Murray Floodplain, contact the Native Vegetation and Biodiversity Management Unit DEWNR for further information. To remove or modify a Regulated or Significant Tree, contact your Local Council for further information on how to apply.

A firebreak of 20 metres around a dwelling may not be adequate in situations of high bushfire hazard and in such cases, clearance of native vegetation greater than 20 metres requires approval under native vegetation regulation 5A. In these instances approval is required to reduce, modify or remove native vegetation if there is no SACFS approved bushfire prevention plan in place, or if proposed fuel reduction activities are not incorporated under an approved plan. Application can be made to the SACFS Fire Prevention Officer in your CFS region.

If you require further information on application of native vegetation regulations, contact the Native Vegetation and Biodiversity Management Unit DEWNR for further information.

Note fact sheet for protection of buildings and applying to manage NV is located at: <a href="http://www.cfs.sa.gov.au/site/prepare">http://www.cfs.sa.gov.au/site/prepare</a> act survive 2012/prepare/preparing your property for bushfire/native\_vegetation\_management.jsp

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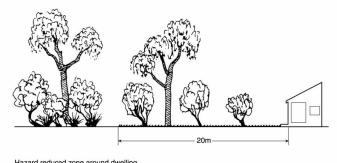
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The aim of the SACFS policy is to reduce the quantity of fine flammable fuels such as weeds and grasses and to remove accumulated litter beneath established trees.

Accordingly, in order to prevent or inhibit the outbreak or spread of bushfire, action must be taken within firebreaks to reduce grass and weeds to a maximum height of 10 cms. Remove surface litter, thin understorey, bushes and shrubs, prune limbs up to 2 metres from ground level to create a vertical firebreak and prune limbs that overhang buildings.

This does not necessarily mean that trees have to be removed, but appropriate fuel reduction must be adopted to protect life and property in a bushfire.

For advice contact the SACFS Building Fire Safety Unit or the Fire Prevention Officer at your Local Council.



Hazard reduced zone around dwelling

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# 4. FIREBREAKS IN ROADSIDE VEGETATION

Native vegetation occurring in road reserves has important value and should be protected where possible. Any modification of this vegetation requires the consent of the Local District Council and may require consent under the clearance controls referred to in part 3.3.2.

Two types of firebreaks may be considered for road reserves:

- Fence line firebreak
- Transverse firebreak

#### 4.1 GUIDELINES FOR FIREBREAKS IN ROADSIDE VEGETATION

# 4.1.1 Fence line Firebreaks:

- Where there is native vegetation on a road reserve adjoining cleared land the firebreak should be established on the cleared land and not the road reserve.
- Where there is native vegetation on a road reserve adjoining a block of native vegetation a firebreak should only be required on one side of the fence line.

# 4.1.2 Transverse Firebreaks:

- A firebreak may be established across a road verge to break a continuous length of roadside vegetation. These breaks may serve to provide access for fire fighting vehicles to adjoining paddocks.
- These breaks should be established at property access points or, where possible, sections of road reserve which do not contain native vegetation.

## 4.2 PRINCIPLES FOR FIREBREAKS IN ROADSIDE VEGETATION

# 4.2.1 Fence line Firebreaks:

If a firebreak is placed on a road reserve, it should comply with an approved management plan prepared by the local council or with guidelines issued by the Native Vegetation Council, as required under the Act.

#### 4.2.2 Transverse Firebreaks:

The maximum width of the firebreak should be 20 metres, which incorporates the width of the property access track.

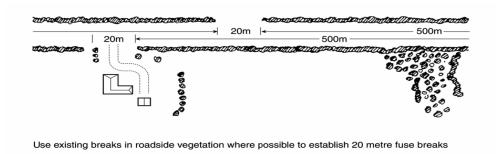
The distance between adjoining firebreaks should not be less than 500 metres.

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Use existing breaks in roadside vegetation where possible to establish 20 metre transverse firebreaks.

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# 5. ACCESS TRACKS

# 5.1 DEFINITION OF FIRE ACCESS TRACKS

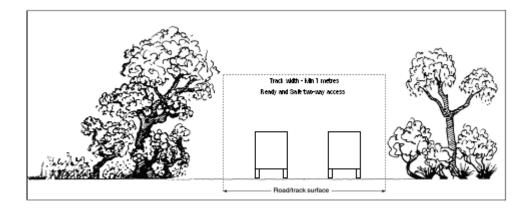
A track used for fire access is designed, constructed and maintained for the safe passage of fire fighting vehicles undertaking fire suppression activities. All designated tracks will permit access by standard 34 units (4WD vehicles capable of carrying up to 3,500 Litres).

All other tracks that do not meet the above standard will be classified as Service Tracks. Service tracks will have restricted access and should only be used in emergency operations with absolute caution.

For the purposes of these guidelines there will be 3 classifications of Fire Access Tracks: major, standard and minor, which meet the following minimum requirements:

# 5.1.1 Major Fire Tracks:

- Will be maintained to a minimum width of 7 metres.
- Sufficiently clear of vegetation (both sides and overhead) to allow ready and safe two-way access.



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# **Examples of Major Fire Track**





## 5.1.2 Standard Fire Tracks:

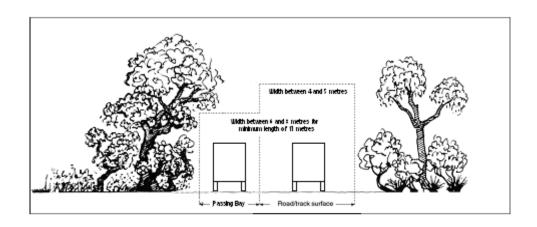
- The track shall be maintained to a width between 4 and 5 metres.
- Sufficiently clear of vegetation (both sides and overhead) to allow ready and safe access.
- Shall be constructed with passing bays permitting two-way access.

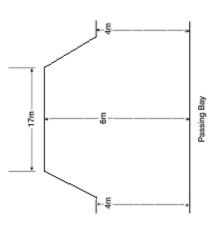
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- Passing bays shall have a minimum length of 17 metres, a minimum width of 6 metres and a maximum width in native vegetation of 8 metres.
- Maximum intervals between opportunities to pass should be 400 metres.

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**Examples of Standard Fire Track** 



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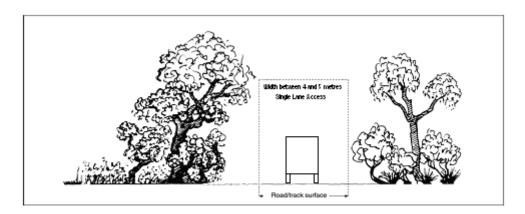
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# **5.1.3 Minor Fire Tracks:**

- The track shall be maintained to a width between 4 and 5 metres.
- Sufficiently clear of vegetation (both sides and overhead) to allow ready and safe access.
- Single lane access is permitted on through roads.



**Examples of Minor Fire Track** 

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# **5.2 SERVICE TRACKS (RESTRICTED ACCESS):**

- Not maintained to any standard for access or clearance and may not be trafficable.
- Marked on maps, but may only be used with the approval of the Incident Controller.
- Entry points to service tracks, <u>MAY</u> be signposted.
- Should only be used during emergency operations with <u>absolute</u> <u>caution</u> under suitable fire behaviour or weather conditions.

# **Examples of Service Track**

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# **IMPORTANT NOTES:**

- All tracks that do not fit within the Major, Standard, Minor or Service Tracks should be barricaded at their entrances and not shown on fire maps.
- All Tracks should be classified to a lower standard if the gradient or surface condition is such that it will compromise vehicle safety.
- Any track may only be used for fire access if conditions permit safe access & egress.

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# 5.3 GUIDELINES FOR LOCATING FIRE ACCESS TRACKS

- Wherever possible, tracks used for fire access should be established on cleared land to minimise damage to native and other vegetation.
- Where practicable, a track used for fire access should be incorporated within a firebreak.
- Tracks used for fire access should complement existing or planned tracks outlined in Regional / District Bushfire Prevention Plans or SACFS Group Response Plans.
- When constructing a fire access track, attention is again drawn to planning considerations outlined in 2.2.

# 5.4 PRINCIPLES FOR CONSTRUCTION AND MAINTENANCE OF FIRE ACCESS TRACKS (excluding Service Tracks)

# 5.4.1 Erosion Control

Access tracks should be located to minimise soil disturbance and to retain sufficient vegetation cover to reduce erosion, where possible.

Track design should include appropriate erosion control measures. Formed or cut tracks should be designed and constructed to maintain natural drainage lines.

Provision should be made for run-off from tracks. Watercourse crossings should allow vehicular access whilst not interfering with stream flow.

## 5.4.2 Vehicle Trafficability:

Tracks used for fire access should be readily trafficable by all fire fighting vehicles and be as straight as practicable.

Tracks should have minimal slope across their width (side-slope). Tracks should be constructed so that the gradient is such that it will compromise vehicle safety.

# 5.4.3 Clearance:

Fire tracks are to be sufficiently clear of vegetation (both sides and overhead) to allow ready and safe two-way access. (Two way access only applies to major tracks)

Overhead clearance should be to a height of 5 metres for the width of the fire track surface.

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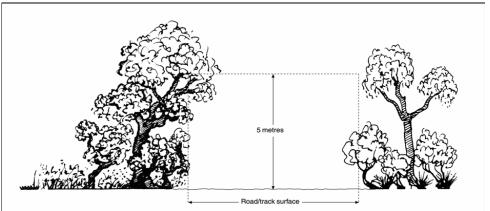
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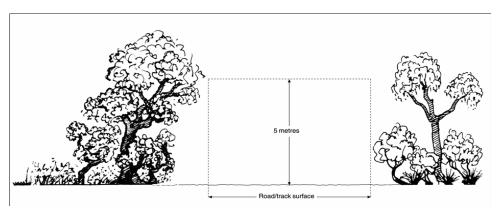
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Example of where a limb can be removed and branches trimmed. Where a trunk of a tree is within 5-metre area above, it may be removed.



Example where no trimming or removal is required

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#### 5.4.4 Curves:

All tracks used for fire access should have curves with a minimum inside radius of 8.5 metres.

# 5.4.5 Passing Bays:

Passing bays should be constructed to enable vehicles to pass one another. Passing bays should have a minimum length of 17 metres, a minimum width of 6 metres and a maximum width in native vegetation of 8 metres. The maximum intervals between opportunities to pass should be 400 metres.

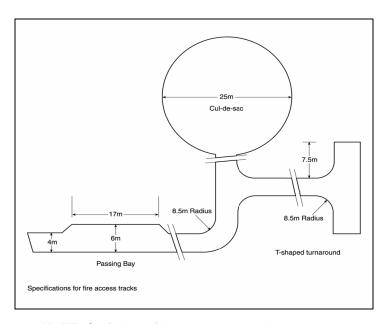
# 5.4.6 No-through Roads:

Ideally, construction of tracks with "dead-ends" should be avoided. No-through Roads are only permitted within each track classification provided appropriate signage and Turnaround Points are in place.

# 5.4.6.1 Turnaround Points

Where dead-end tracks are unavoidable, safe, suitable turnaround points must be provided to accommodate large fire fighting vehicles by the construction of either:

- i. A turnaround point with a minimum diameter of 25 metres, or
- ii. A "T" or "Y-shaped" turnaround point with minimum leg lengths of 7.5 metres and a minimum inside road radius of 8.5 metres.



**NOTE**: Surfacing of these areas may be necessary. Distances shown are minimum allowable.

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Any track that does not have a properly constructed turnaround point will be classified as a Service track and may have other warning signs displayed as appropriate.

## 5.4.6.2 Dead Ends

Any track that does not have properly constructed turnaround points will be classed as a Service Track and may have other warning signs displayed as appropriate. These may be barricaded at their entrances and not included on fire maps.

# 5.4.7 Fire Track Sign Standards:

Agencies will endeavour to sign post all major tracks and all other named tracks.

Signage should include the following where applicable:

- Track name, or number signs.
- Access gate signs with grid references.
- Service track signs.
- · Water point signs.
- No Through Road signs.
- One-way track signs.
- Steep gradient
- Hazard signs (e.g. Roads Narrows, Localised Hazard, etc)
- Load limits (e.g. for bridges)
   Optional
- Destination signs (if specifically named).
- Turnaround signs and distance to turnaround.

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Signage used should either comply with the standards set in Appendix 1 or meet Australian Standards.

# 5.4.8 Maps:

Track classifications shall be shown on maps.

Track names/numbers (where specifically named) shall be shown on maps.

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#### 6. **CONTACT AGENCIES**

SACFS Director Operations Capability Planning **GPO Box 2468** ADELAIDE SA 5001

Senior Fire & Land Management Officer SA Water GPO Box 1751, Adelaide SA 5001

Native Vegetation and biodiversity Management unit DEWNR Department Environment, Water and Natural Resources **GPO Box 1047** ADELAIDE SA 5001

Senior Fire Management Officer- Operations Fire Management Branch Department for Environment, Water and Natural Resources **GPO Box 1047 ADELAIDE SA 5001** 

Forest Resources Group ForestrySA **GPO Box 2284 ADELAIDE SA 5001** 

SACFS Building Fire Safety Unit 75 Gawler St **MOUNT BARKER SA 5251** 

#### 7. **REFERENCES**

Fire and Emergency Services Act 2005

Native Vegetation Act 1991

A guide to the Exemptions under the Native Vegetation Act 1991

Fire Management and Protection Manual, National Parks & Wildlife

Design Layout Chapter 2 Plantation Establishment Forestry Manual Volume 2 ForestrySA

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Forest Owners Conference Plantation Design Guidelines

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# South Australian Guidelines for State Government Agencies – Firebreaks & Fire Access Tracks

# Firetrack Sign Standards

# 1. Summary

The Firetrack Sign Standards have been developed by the Government Agencies Fire Management working Group based on guidelines for firetrack sign posting identified in the South Australian Guidelines for State Government Agencies – Firebreaks & Fire Access Tracks (Government Agencies Fire Liaison Committee (GAFLC) 2005). These standards will form appendix 1 of this document and are also linked to project objectives and grant funding identified in fire mitigation programs.

# 2. Background

The South Australian Guidelines for State Government Agencies – Firebreaks & Fire Access Tracks contains a range of information including guidelines for firetrack sign posting identified under section 55.4.7 of the document.

The Firetrack Signs Working Group was established in January 2005 with the following purpose:

- To develop a sign standard for fire tracks and other fire related structures/features on government agency land.
- Standard to be included as an attachment to the South Australian Guidelines for State Government Agencies – Firebreaks & Fire Access Tracks (GALFC 2005).

The working group included representatives from SACFS, DEWNR, SA Water and ForestrySA.

Fire track signs have been developed in line with Australian Standards and also contain elements of highway signage standards developed by the then Department of Transport, Energy and Infrastructure (DTEI) now Department of Planning, Transport and Infrastructure (DPTI). Representatives from this agency were consulted as part of the process to develop the firetrack signs. This sign standard has also been designed to enable its use on other land tenures such as local government reserves or private lands.

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#### 3. Discussion

The outcomes of the firetrack sign standard development process are as follows:

The working group has developed the following signs:

- Gates:
- Fire Tracks:
- Service Track:
- Assemble Point:
- The existing water point 'Fire Water' signs have also been included into this standard.

It should be noted that there will be some minor variations in detail contained on signs due to differing agency requirements. Although every effort has been made to have a standard across agencies the Working Group believes these variations do not significantly detract from the objective of improving fire fighter navigation and improving firetrack signage.

# 4. Firetrack Sign Standards

The following information relates to detail contained on signs that have been developed for SA Water, DEWNR and ForestrySA:

# 4.1 Gate Signs:

These signs have been developed to assist in navigation and will clearly identify external entry and exit points into reserves.

# Sign information:

- Size 500mm x 400mm;
- Material 0.08mm sign white metal;
- Colours & Layout Sign colours and layout are based on highway signs developed by the Department of Transport Energy & Infrastructure – Black, White class 1, Red class 1, Yellow class 1 and Green class 1;
- Letters & Numerals AS1744;
- Attachment point Usually attached to gates with a stainless steel band, rivets or screws.

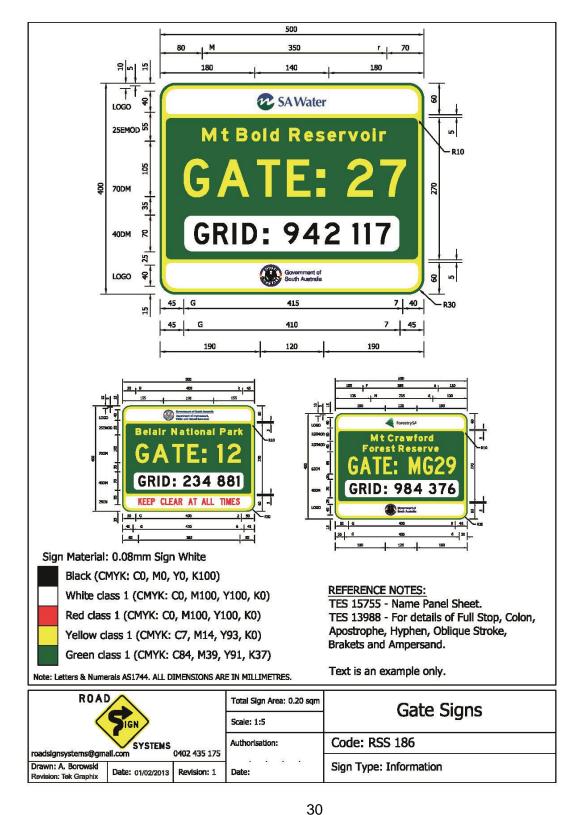
#### Gate signs contain the following detail:

- Logo Agency branding;
- Text Reserve name:
- Gate number or alpha numeric code (the gate number may be omitted and replaced with a location name where a gate number doesn't exist e.g. in more remote locations such as the Rangelands. A concept sign for these locations has been developed);

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- Grid reference;
- Logo Government branding;
- Text The DEWNR sign also includes the text "KEEP CLEAR AT ALL TIMES".



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# 4.2 Fire Track Signs:

- The working group agreed to implement a track sign posting system that identifies the track name, number or alpha numeric code to assist with navigation on the firetrack network;
- This will be achieved with existing signage such as wooden routed and finger board signs as well as additional fingerboard signs;
  - DEWNR will continue to use wooden routed and other existing signs for all named/major tracks. Fingerboard blade signs can be used as an alternative where signs do not currently exist on major or named tracks.
  - SAWater will continue to use fingerboard blade signs and include new signs at other locations which do not currently have track signage.
  - ForestrySA will use a combination of existing wooden routed signs and install fingerboard blade signs for all named/major tracks as well as the majority of tracks located in Native Forest Reserves (Navigation in other areas will be assisted by the installation and /or upgrade of plantation and native forest reserve compartment coding signs);
- Please note that the working group decided not to include track classification information on signs in case the classification system is changed or the track is not maintained to the appropriate standard. Fire response agencies will need to refer to fire response maps for information regarding track classification. However as all GAFMWG classified fire tracks are trafficable by Heavy Firefighting Unit it was agreed that this should not be a problem.

#### **Sign information:**

- Size Single ended fingerboard blade signs are either 150 mm or 200mm wide x 1000mm (max). A double ended fingerboard blade sign for use at t–junctions has also been included into the standard. This sign is 150mm wide x 500mm 1500mm (max);
- Material Extruded Aluminium Plate;
- Colours Yellow class 1 text on a Deep Brunswick Green background;
- Letters & Numerals AS1744
- Attachment point Single fingerboard blades signs are attached with an aluminium bracket (1 way, 2 way & 3 way options are available) to a 60mm outside diameter (50mm nominal bore) x 2.8m galvanised iron post with the option of heritage green powder coating. (It is recommended that posts are inserted into a 400mm or 600 mm sleeve secured with a wedge). Double ended fingerboard blade signs are attached to the post with a top cap fitting. (Refer to 4.6 Fire Track Signage Posts and Fittings for further detail on brackets etc);
- Posts are sealed with a cap (Refer to 4.6 Fire Track Signage Posts and Fittings for further detail on brackets etc).

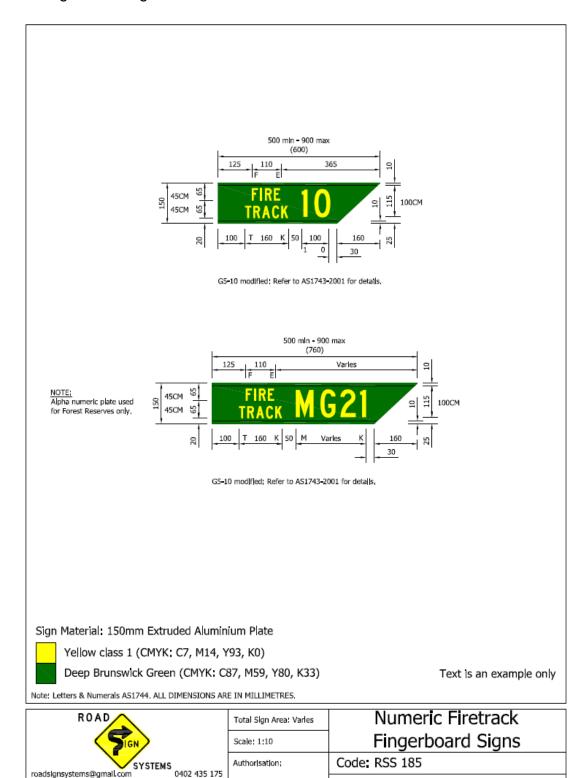
Fingerboard signs contain the following detail:

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• Text - Track name ,number or alpha numeric code;

Attached are specification drawings which identify the five options available for fingerboard signs.



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Drawn: A. Borowski

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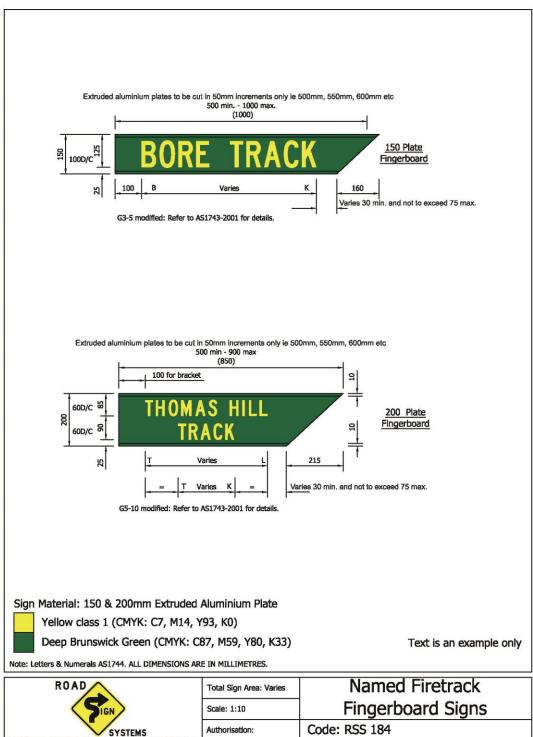
Date: 24/6/2008 Revision: 0

Sign Type: Information

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First Created: 1992

Date Modified: February 2015



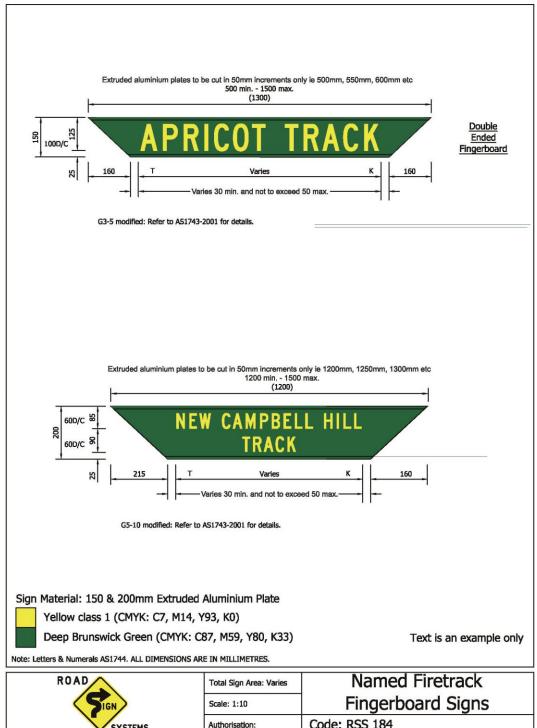
| ROAD   | Total Sign Area: Varies | Named Firetrack        |
|--|-------------------------|------------------------|
| Sign   | Scale: 1:10             | Fingerboard Signs      |
| roadsignsystems@gmail.com 0402 435 175                                   | Authorisation:          | Code: RSS 184          |
| Todosignsystems@gmail.com 0402 433 173                                   | 4                       | WARRY                  |
| Drawn: A. Borowski<br>Revision: Tek Graphix Date: 01/02/2013 Revision: 1 | Date:                   | Sign Type: Information |

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| ROAD   | Total Sign Area: Varies | Named Firetrack        |
|--|-------------------------|------------------------|
| Sign   | Scale: 1:10             | Fingerboard Signs      |
| roadsignsystems@gmail.com 0402 435 175             | Authorisation:          | Code: RSS 184          |
| Drawn: A. Borowski                                 |                         | Cian Type, Information |
| Revision: Tek Graphix Date: 01/02/2013 Revision: 1 | Date:                   | Sign Type: Information |

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# 4.3 Service Track Signs:

These signs have been developed to identify service tracks.

# **Sign information:**

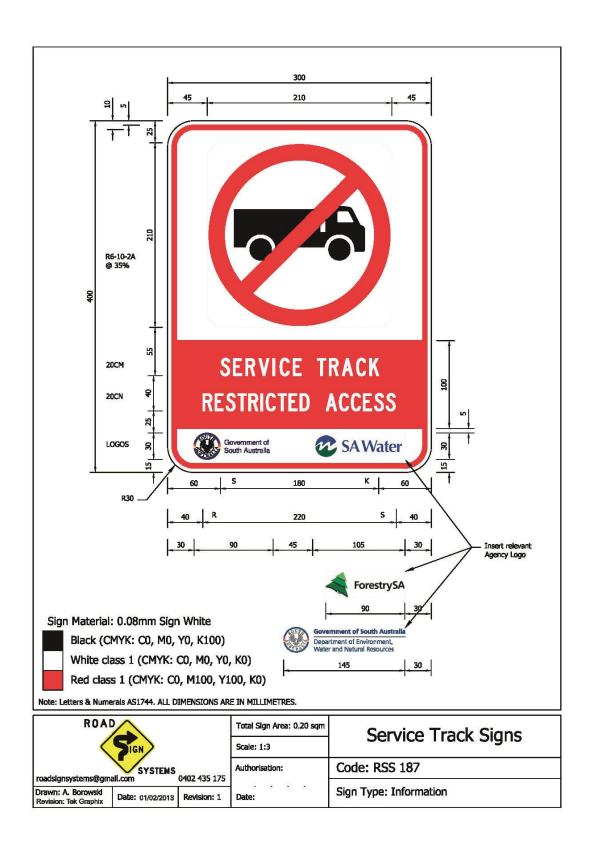
- Size 300mm x 400mm;
- Material 0.08mm sign white metal;
- Colours Black, White class 1 and Red class 1;
- Letters & Numerals AS1744;
- Attachment point The sign is attached with two aluminium brackets with a anti - vandal proof triobular bolt to a 60mm outside diameter (50mm nominal bore) x 1.8 m galvanised iron post with the option of a heritage green power coating (It is recommended that posts are inserted into a 400mm or 600 mm sleeve secured with a wedge). Alternatively, the sign can be attached to the gate of a track that has been barricaded. (Refer to 4.6 Fire Track Signage – Posts and Fittings for further detail on brackets etc);
- Posts are usually sealed with a cap (Refer to 4.6 Fire Track Signage Posts and Fittings for further detail).

Service track signs contain the following detail:

- Pictogram Black truck (representing a Heavy Firefighting Unit) overlayed with red line:
- Text 'SERVICE TRACK RESTRICTED ACCESS';
- Logos Government & agency branding.

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# 4.4 Assembly Point Sign:

These signs have been developed to identify assembly points and are a modification of existing signs used in the Green Triangle Region of the State.

# **Sign information:**

- Size 400mm x 450 mm;
- Material 0.08mm sign white metal;
- Colours Black, White class 1 and Red class 1;
- Letters & Numerals AS1744;
- Attachment point Signs are attached with two aluminium brackets with an anti - vandal proof triobular bolt to a 60mm outside diameter (50mm nominal bore) x 2.4m galvanised iron post with the option of powder coating (It is recommended that posts are inserted into a 400mm or 600mm spike and secured with a wedge) (Refer to 4.6 Fire Track Signage – Posts and Fittings for further detail on brackets etc);
- Posts are usually sealed with a cap (refer to 4.6 Fire Track Signage Posts and fittings for further detail).

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Assembly point signs contain the following detail:

- Text 'Assembly Point';
- Alpha numeric code;
- Grid reference;

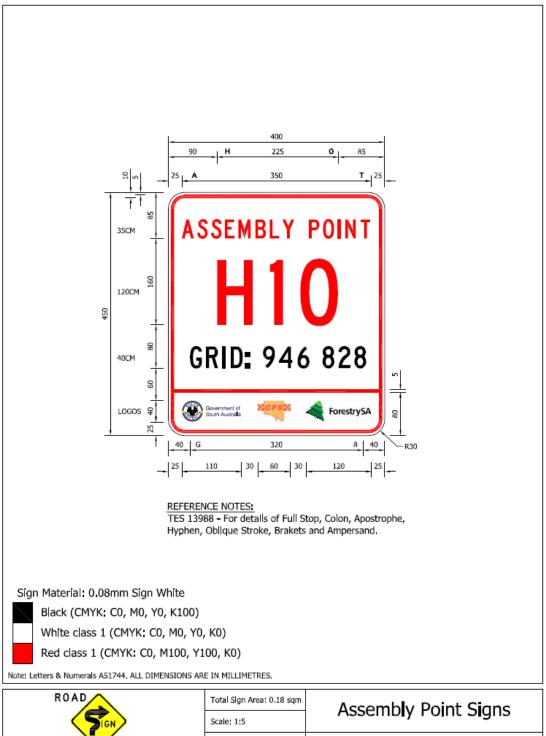
Logos - Government and agency branding.

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| ROAL                 |                 |                | Total Sign Area: 0.18 sqm | Assembly Point Signs   |
|----------------------|-----------------|----------------|---------------------------|------------------------|
|                      | SIGN            |                | Scale: 1:5                | Assembly Folia Signs   |
| SYSTEMS 0402 435 175 |                 | Authorisation; | Code: RSS 188             |                        |
| Tobusignayacema@gm   | an.com          | 0102 133 173   |                           | 0 - 16 1               |
| Drawn: A. Borowski   | Date: 13/6/2008 | Revision: 0    | Date:                     | Sign Type: Information |

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# 4.5 Water Point Signs:

These signs are currently in use and have been included as part of the sign standard.

# Sign information:

- Size 150mm x 500mm –1100mm (max);
- Material Extruded Aluminium Plate;
- Colour White class 1 text on a Blue class 1 background;
- Letters & Numerals AS1744
- Attachment point The water point fingerboard blade sign is attached to a 60mm outside diameter (50mm nominal bore) x 2.4m galvanised iron post with the option of powder coating. (It is recommended that the post is inserted into a 400mm or 600 mm spike and secured with a wedge) (Refer to 4.6 Fire Track Signage – Posts and Fittings for further detail on brackets etc);
- Posts are usually sealed with a cap (Refer to 4.6 Fire Track Signage Posts and Fittings for further detail.

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Water point signs contain the following detail:

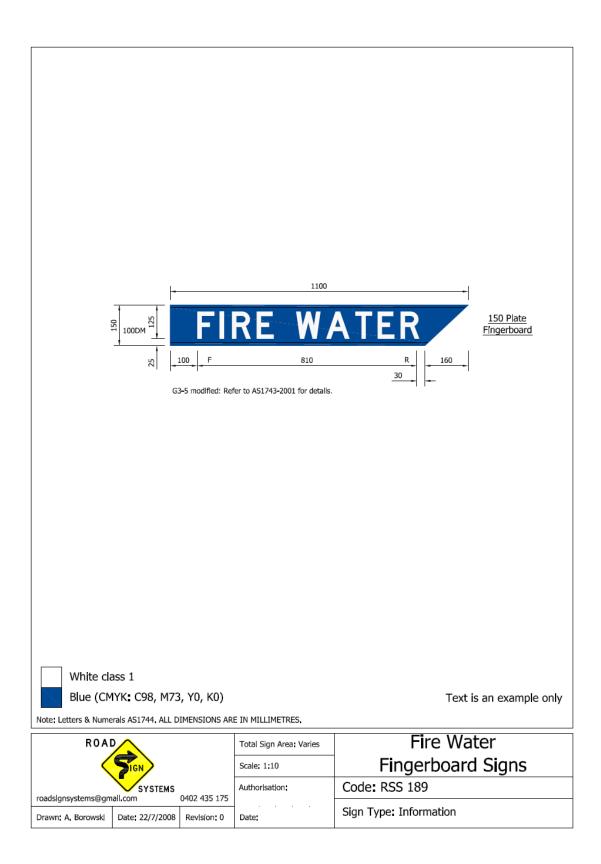
Text - 'FIRE WATER'.

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# 4.6 Fire Track Signage - Posts and Fittings



Post cap for use on a 60mm OD (Outside Diameter/ 50mm nominal bore) post.



Top cap bracket for fitting to the top of a 60mm OD post and attaching a double-end fingerboard blade sign.



Post 2.8m x 60mm OD (Outside Diameter/ 50mm nominal bore) for fingerboard blade signs, assembly point & water point fingerboard blade signs.



Bracket – to attach 150mm fingerboard blade sign to a 60mm OD post.



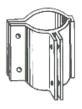
Sleeve & wedge to suit 60mm OD post. 450mm or 600mm. For use with all posts.



Bracket – to attach 200mm fingerboard blade sign to a 60mm OD post.



Post 1.8m x 60mm OD (Outside Diameter/ 50mm nominal bore). For Service Track signs.



2-way Bracket – to attach two fingerboard blade signs to a 60mm OD post (available in 150mm or 200mm).



Bracket – To attach a service track and assembly point signs to a 60mm OD post. The sign is secured with an anti-vandal proof triobular bolt.



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3-way Bracket – to attach three fingerboard blade signs to a 60mm OD post (available in 150mm or 200mm).

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