

# Wayfinding



    Wide gate

Platforms 4 to 7



# Document Verification



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Platforms 2-9



Underground



Toilets



Customer lounge



Broadgate Circle 1.2 miles

Way out  



This Wayfinding Design Guidance Manual provides recommendations for directional signage on the railway, developed principally for Network Rail managed stations undertaken across the network. It supports the aspirations of the 2021 Williams Shapps Plan and Great British Railways in achieving line wide consistency in station signage quality and installation within the passenger environment. In doing so it promotes the installation of consistent wayfinding and design compliance under PRM NTSN while following the technical assurance process as prescribed under Network Rail standard **NR/L2/CIV/150**.

This update to the 2022 published Manual provides enhanced detail of design graphics and technical specifications of the signage family.

The intended audience for this document are station management teams, rail operators, sponsors, planning teams, project teams, sign designers and suppliers, tier contractors and other third party stakeholders involved in the planning, design, consent and implementation of passenger wayfinding signage systems for Network Rail stations.

## Standards Reference

Station Wayfinding Design and Assurance Procedure  
**NR/L2/CIV/150**

# How to use this document



## Section 1 Introduction

This chapter outlines the purpose and scope of this document, explains the field of design known as Wayfinding, and the stages involved in a Network Rail project.



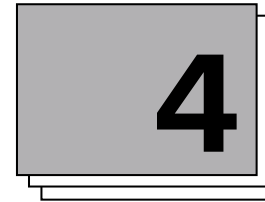
## Section 2 The Principles of Design

This chapter sets out the salient design principles to take into consideration when undertaking a signage and wayfinding design project within a Network Rail Station environment.



## Section 3 Wayfinding Strategy

This chapter explores the process through which a designer can understand the project site and its movement framework, so as to formulate a wayfinding strategy.



## Section 4 Information Structure

This chapter provides guidance on how to present information in such a way that it can be grasped easily and effectively, translating complex data into valuable and meaningful information.

### Hint and tips:

To quickly navigate this document click on any of the titles on this page.

To return to the contents page you can click on the Rail Symbol 2 in the page banner at the top of each page.



## Section 5 Graphic Guidance

This chapter provides guidance on the graphics designed to address passenger requirements. These should be applied consistently across all signage and wayfinding applications in stations.



## Section 6 Sign Family

This chapter details the suite of sign types. Each type is tailored to fulfil a certain function and convey a certain type of information in the passenger's journey.



## Section 7 Integration with Other Systems

This chapter deals with how wayfinding should integrate into other types of information at stations, how to establish a hierarchy and how to balance competing interests for space and attention.



## Section 8 Technical Guidance

This chapter provides technical guidance and clear principles to follow to suit consistent, high quality production and installation of wayfinding signage to all stations.



## Appendix A Document References

Document references including books, PDFs and websites. A further reading list includes Design Guidelines, British Standards and National Standards documents.



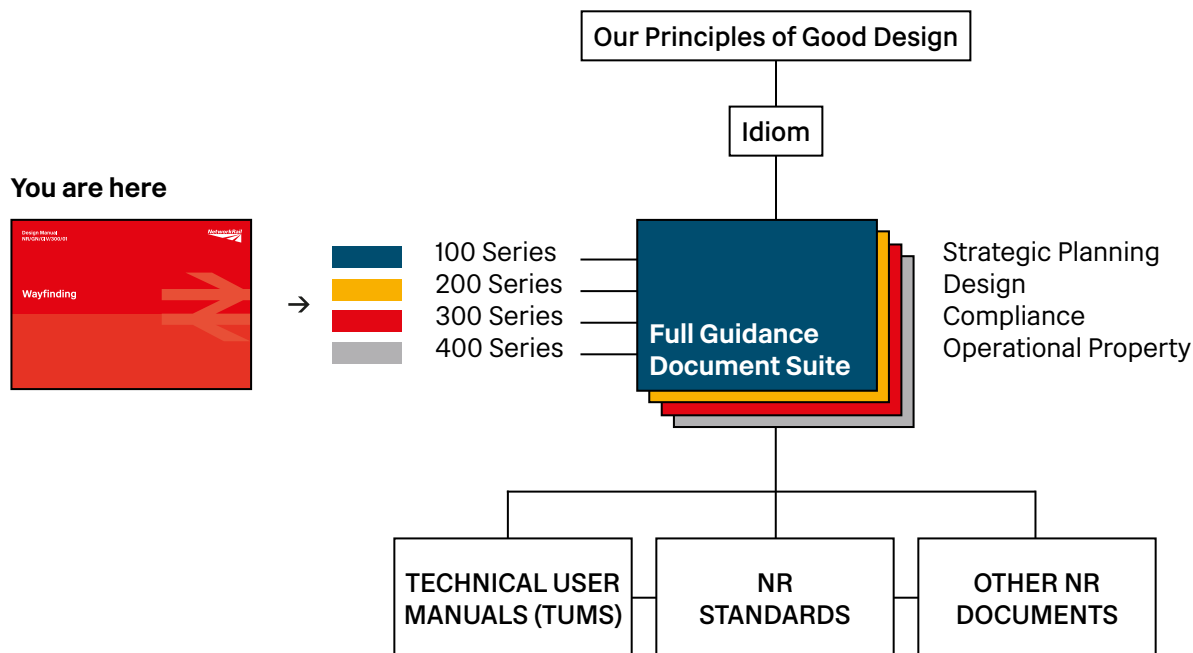
## Appendix B Acknowledgements

Image and content credits and acknowledgements.

# How to use the guidance suite



## The Network Rail Document Suite



## References to other documents

- Code of Practice Guidance
- National Standard
- Network Rail document
- European Standard

## Example:

### Standards Reference

Application of the PRM NTSN

**PRM NTSN: GEGN8615**

Design of Buildings and their Approaches to meet the needs of Disabled People – Code of Practice (2015)

**BS 8300**

### NR Guidance Suite Reference

**Inclusive Design Guidance**

NR/GN/CIV/300/04

This guidance has a Network Rail standards Green status, and the contents do not require derogation




A full list of relevant documents, and other guidance suite documents is contained in the appendix.



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Wide gate

↑ Underground

Way out

ticket office

Tickets

Entrance

Destination board

↑ Lift

Screen

↑

↑ Changing prices  
Way out

Screen

Lift

Wayfinding Design Manual  
**Introduction**



# Introduction

## 1.1 Purpose



At railway stations the design and positioning of rules for directional, orientation and identification information and signposting is commonly known as wayfinding. Wayfinding encompasses all the ways in which people orient themselves in physical space and navigate from place to place.

The provision of an effective wayfinding system is recognised as a means of assisting passengers in undertaking their journey efficiently, comfortably, accessibly, conveniently and safely.

This guidance supports statutory requirements for accessibility by achieving consistency between wayfinding signage installations undertaken in different stations across the Network. It sets out the requirements for the provision of wayfinding in a coherent and consistent manner that enables designs and compliance to be measured.

This document focuses on compliance with primary legislation and regulations made under it. In particular, the Equality Act, DfT/Transport Scotland Code of Practice Design Standards for Accessible Railway Stations, and the PRM NTSN for accessibility which prescribes consistency in visual information in signposting. It is advisable to follow this guidance in order to comply with both National and European requirements of achieving a coherent, comprehensive and consistent system across the railway network.

This document should be read in conjunction with the Network Rail Wayfinding Design and Assurance Procedure Standard, NR/L2/CIV/150, which has been produced to support the implementation of a consistent signposting system across the UK's network of rail stations.

The guidance fits within a framework of other wayfinding guidance manuals and standards that should be consulted during the design and procurement of station passenger signage, such as the Rail Delivery Group Wayfinding Best Practice Guide, which focuses on improving the passenger connections between the rail network and the first and last mile journey

In applying this guidance projects are strongly advised not to adopt a piecemeal approach to implementation. The best way to update any wayfinding system is to approach it strategically. A wholesale update of signage is always the most preferable route.

However if this is not feasible it would be advisable to develop a master plan for consistency, break the project into phases, seek alternative funding, and collaborate with multiple stakeholders. Replace an existing signage system by updating the most crucial aspects of wayfinding, such as basic directional signs, safety signage, and emergency exits. Other elements (e.g., local maps, retail signs) can be added later as funds become available.



**2021**  
GEGN8615  
Rail Industry Guidance Note  
Application of the PRM NTSN



**2020**  
NR/L2/CIV/150  
Network Rail Station Wayfinding  
Design & Assurance Procedure

### Standards References

Application of the PRM NTSN

**PRM NTSN: GEGN8615**

Station Wayfinding Design and Assurance Procedure

**NR/L2/CIV/150**

Station Capacity and Crowd Management

**NR/L2/OPS/292**

### Relevant NR Guidance Suite References

NR/GN/CIV/100/03 - Station Capacity Planning

NR/GN/CIV/200/04 - Public Toilets in Stations

NR/GN/CIV/200/06 - Public Realm Design

NR/GN/CIV/300/04 - Inclusive Design

# Introduction

## 1.2 Scope



This guidance may be applied to fixed directional wayfinding signage intended for use by passengers at current nationally managed stations. This includes wayfinding signage in all passenger-facing areas, including those which may be used infrequently by passengers.

This Guidance applies to the following types of proposed or actual Works when undertaken on buildings and civil infrastructure that is owned, or is to be owned, by Network Rail:

### 1. Enhancements:

Wayfinding signage that is delivered through a project that changes operational capability or function of the building or infrastructure.

### 2. Replacements:

Signage replacement where there is no change to the functionality of the building or infrastructure.

### 3. Renewals:

Signage that is replaced at the end of its design life.

### 4. Temporary works:

Signage supplied on a temporary basis for no longer than six months.

### 5. Permanent works or staged construction:

Signage supplied on permanent works, or as a stage in construction where temporary works may have the same impact on the infrastructure as permanent Works

The guidance is intended for Network Rail and non-Network Rail parties involved in the design, remitting, design approval, installation and bringing into use of signage and wayfinding for station premises. It should be read in conjunction with industry best practice guidance such as the Sign Design Society Design Guide, Rail Delivery Group Best Practice Guide, and Rail Safety & Standards Board (RSSB) signage research reports.

This Guidance supports the free and safe movement of station users and addresses wayfinding related factors that may influence:

- Security and safety
- Visual information for passengers
- Efficiency
- Accessibility
- Ambience
- Branding and corporate design

This Guidance also supports applications for Landlord's Consent from Network Rail.

### Works not covered by this Guidance include:

- Non-public or operational line side signage;
- Safety signage
- Heritage and listed building requirements.
- Emergency Do Not Enter (EDNE) signage
- Electronic Visual Customer Information Systems (CIS) installed in stations.



**2018**  
Rail Delivery Group  
Wayfinding Best Practice Guide



**2024**  
Sign Design Guide +:  
A guide to designing inclusive wayfinding information



**2006**  
Rail Safety & Standards Board  
Research into signage and wayfinding at stations



**2010**  
Rail Safety & Standards Board  
Evaluating wayfinding systems for blind and partially sighted customers at stations



'Wayfinding' refers to the design field devoted to planning and designing coherent systems which incorporate maps, signs, directional markers and the insertion of small clues throughout the built environment that enable orientation. The wayfinding system codes the environment – through naming systems which identify, colour which differentiates, numbering systems that perceptually order the space, and the imposition of hierarchies which cast greater importance on some places rather than others. Good wayfinding systems employ explicit signs and information as well as implicit cues and symbols.

Wayfinding is a specialist field of design that crosses a number of disciplines, including urban design and planning, product design, graphic design, information design and behavioural psychology. At its most essential, wayfinding is directly concerned with fundamental human needs, such as being able to travel effectively, to find one's destination in time, or to let others know where one can be found.

Too often signage is added as an afterthought to the design of environments, which can result in poor and inefficient installations. The best design outcomes are usually achieved when wayfinding is considered at the start of any space planning exercise, and forms part of a holistic programme of works that includes an analysis of station usage, capacity and pedflows. This includes signage renewals when destinations and facilities often change, and decision points may change with them.



# Introduction

## 1.4 Project Stages

Projects should refer to Network Rail's PACE (Project Acceleration in a Controlled Environment) standard NR/L2/P3M/201 in developing significant, complex station wayfinding proposals.

The PACE standard is generally well-suited to the design and delivery of major station signage schemes and masterplanning, especially given its strengths in project management,

risk control, cost management, timeline integration and stakeholder engagement. However, the success of applying PACE to a signage project depends on

assuring that specialised wayfinding expertise is brought in early, passenger-centered design is prioritised, and iterative design and user-testing are well integrated into the process.

### Comparative Timeline of Design Stages

PACE	Project Initiation	Strategic Development & Project Selection			Project Development & Design		Project Delivery	Project Close	
PACE Milestones		ES1 Client Requirements	ES2 Feasibility	ES3 Single Option	ES4 Approval in Principle	ES5 Construction Ready	ES6 Construction	ES7 Demobilise	ES8 Closeout

Note that PACE milestones do not correlate directly with RIBA workplan stages, but are approximately shown here

RIBA	0. Strategic Definition	1. Preparation and Briefing	2. Concept Design	3. Spatial Coordination	4. Technical Design	5. Manufacturing and construction	6. Handover
Masterplan Stages	Strategic Framework	Outline Business Case	Spatial Masterplan	Outline Planning Application	Implementation Plan		

**By the end of the PACE Strategic Development & Project Selection stage:**

An outline Wayfinding Strategy should be considered as part of NR/L2/CIV/003 F004 Architectural and Layout Acceptance submission.

**At the start of the PACE Project Development & Design Stage:**

An outline Wayfinding Proposal should be developed for any station project as part of the NR/L2/CIV/003 F004 Architectural and Layout Acceptance submission. It is advisable that a Wayfinding design consultant is appointed.

### Design and Delivery



Caffè RITAZZA

Tickets and Travel Centre

Piccadilly Mall

Shopping  
Platforms 8 to 14  
Metrolink  
Taxis Local Buses

Information board with text including:  
Arrivals  
Departures  
Lost & Found  
Help

Information board with text including:  
Arrivals  
Departures  
Lost & Found  
Help

FRIDAYS

FRIDAYS



Wayfinding Design Manual  
**The Principles of Design**

2



### 2.1.1 Context and De-Cluttering

The objective of the signage and wayfinding designer is not to add more words, signs or clutter into spaces but instead to work collaboratively with architects, asset protection managers and those responsible for the station layout change to design spaces in which people can intuitively navigate.

Planning intuitive spaces requires:

- A layout which provides clear sight lines toward entrances, exits, and vertical circulation cores;
- An understanding of how the layout of spaces affects pedestrian circulation;
- A clear pattern of routes and hierarchy of routes through spaces;
- An understanding of how finishes, lighting and subtle design cues may guide people's movement more powerfully than a written message.



### Cluttered

#### Information clutter

Platform information competes with train operator and station information, commercial branding, advertisements and retail signage.

#### Lack of visibility

Signage colours do not stand out against a cluttered or poorly lit background. Signs are crowded with multiple arrows pointing in the same direction. Text size is frequently too small to be read from a convenient distance.

#### Product aesthetics

In many cases current signage presentation gives an impression of lack of consideration for aesthetics or quality.

#### Poor maintenance

Station assets do not have consistent ownership and are often not kept up to the same level of consistency. Renewals often looks temporary with the widespread use of visible vinyl patches or poor colour matching.

# The Principles of Design

## 2.1 The Station Environment – Planning



### 2.1.2 Legible Environments

In cases where a space is not legible, wayfinding information should be presented in such a way that it engenders efficient and effective understanding. The success of signage rests on how well information has been organised for travellers to grasp, process and utilise for making quick decisions during their journey.

Signage should provide only the information required by users at that location to allow them to make an informed decision regarding where they head next. Signage can quickly become complicated, unwieldy and confusing to some users if not well managed or designed. Signage should look to convey information simply, concisely, and in a clear order.

### 2.1.3 Heritage Environments

Most Network Rail managed stations have listed building status and many stations often contain areas of considerable historical and architectural value. Project teams and station management should always consult with the **Planning** to establish all planning and listed building consent obligations,



### 2.1.4 Asset Protection and Optimisation

Care should always be exercised when undertaking works which may change or impact the operation, maintenance, or safety of the station environment.

These works include signage, particularly when supported by building structure or fabric. The **NR ASPRO team** should be consulted to assess any potential CDM safety risks of works.

### Clean and consistent

#### Consistent and predictable placement

Consideration given to the consistency of signage placement and mounting heights can significantly improve the predictability of information for travellers.

#### Appropriate spacing between signs

To enable clear visibility, signage should stand out from its environment. A predictable rhythm of signage should be established in order to set expectations for the traveller. Signage which is squeezed together without consistent layout consistency is more difficult to follow.

#### Clear sight lines for signs

Signs should be placed perpendicular to the main flow of passenger movement to allow the passenger to find the relevant wayfinding information intuitively.

#### Clean layout

Information designed according to a set of definitive standards – for layouts, letter heights, line spacing, colour palette – will read as a system and give the passenger confidence in the accuracy of the information.

### Standards References

Asset Protection and Optimisation Management of Third Party Works on Network Rail Infrastructure  
**NR/L2/CIV/095**



Rail Symbol 2 (Fig 2.2a) which is more commonly known as the ‘double arrow’, and the Network Rail corporate logotype (Fig 2.2b) are the public and corporate brands of the the railway .

Much of the British public associates Rail Symbol 2 with rail travel in the UK. The symbol is frequently used to direct to, and identify, stations throughout the country. It is also widely used nationally by other transport operators and private organisations.

Network Rail’s logotype is for corporate use only and should not be used in stations, either on signage or notices, as this could be confusing to passengers. Rail Symbol 2 is owned by the Department for Transport which licenses its use. For additional information regarding use and reproduction, please refer to the: Rail Symbol 2 Design Manual (NR/GN/CIV/300/05)

For colour references please refer to Colour Palette, section 5.4 of this document.

Rail Symbol 2



The original version of the symbol was designed in 1964 by the Design Research Unit and was implemented in the same year. In 2022 the symbol was redrawn under the name ‘Rail Symbol 2.’

It is used within the public realm and on station identification, indicating Network Rail stations as well as franchised stations.

Fig 2.2a Rail Symbol 2 (The Double Arrow)

Network Rail corporate logotype



This brand logo was designed in 2002 and is for corporate use only. It is used within the Network Rail corporation and should not normally be visible on wayfinding elements.

Fig 2.2b Network Rail Corporate Logotype

### NR Guidance Suite Reference

Rail Symbol 2 Design Manual  
NR/GN/CIV/300/05

**NetworkRail**

**Here to help**



# The Principles of Design

## 2.3 Sight Lines and Legibility

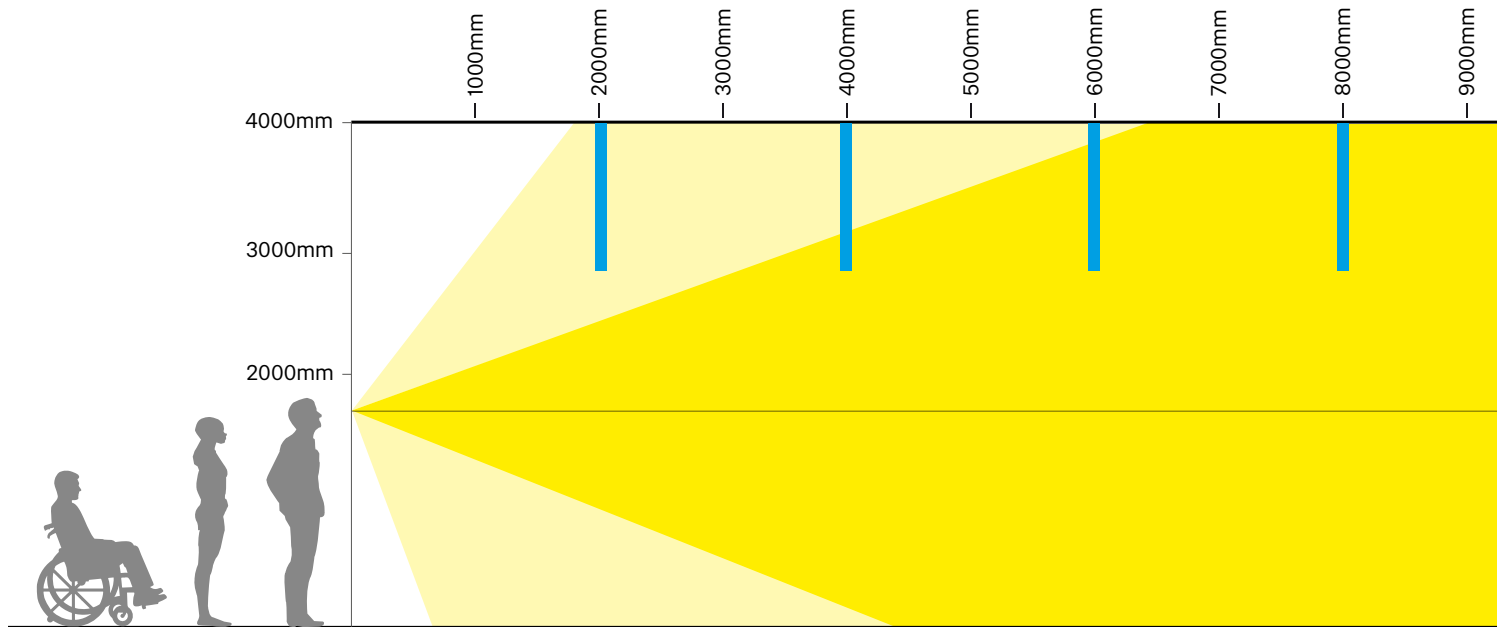


Fig 2.3 Typical viewing angles

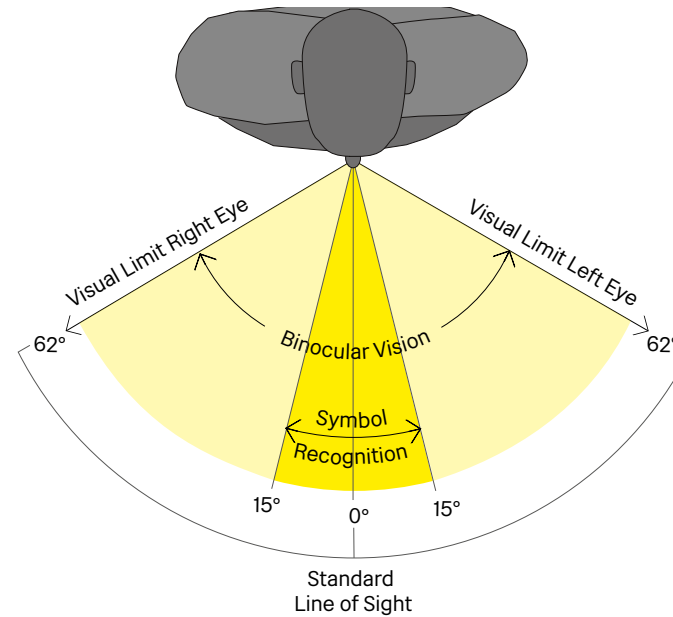
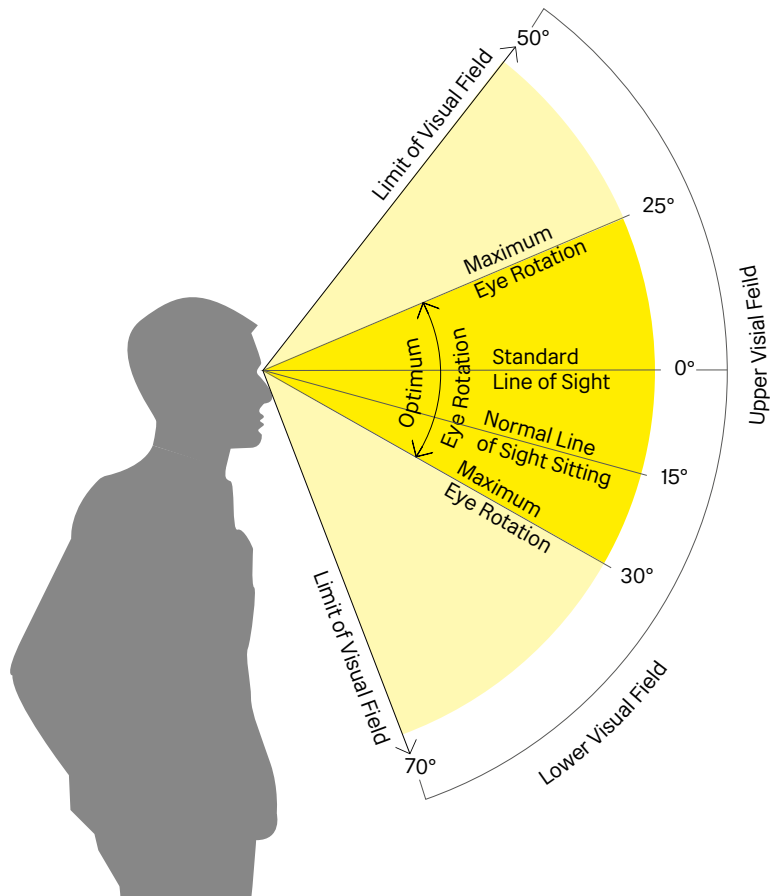
### Typical Viewing Angles

In order to be functional, signage should be legible. The first step to understanding legibility is to understand the human Field of View. The average visual field for a person with full binocular vision is roughly 160 degrees horizontally and 120 degrees vertically, without turning the head. Part of this visual field is peripheral vision, and not suited for recognition of characters and symbols. For signage to be read comfortably, it should be positioned at heights and distances that are comfortable for reading without strain.

Please refer to RIS-7700-INS, the Rail Industry Standard for Station Infrastructure, for additional information on mounting heights for signage.

# The Principles of Design

## 2.3 Sight Lines and Legibility



Visual Fields

**Human visual fields**

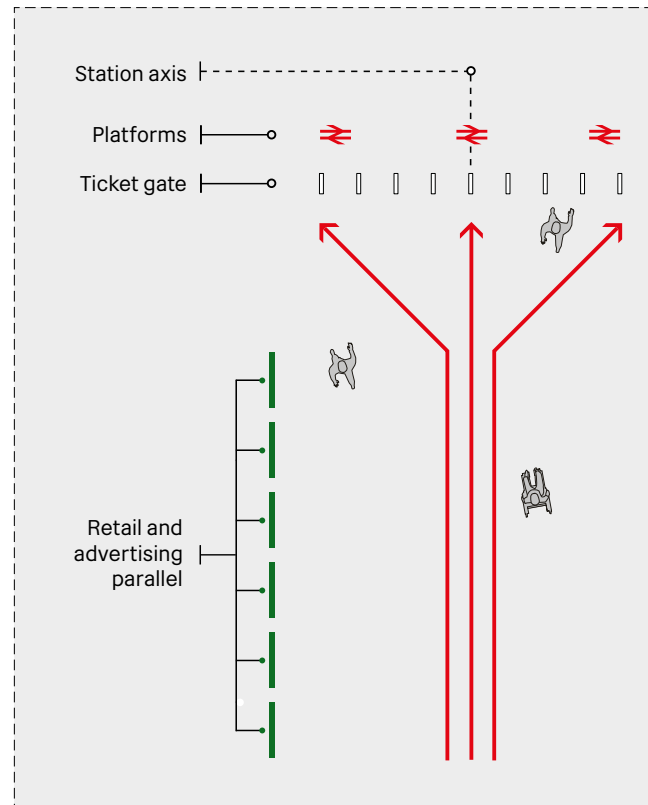
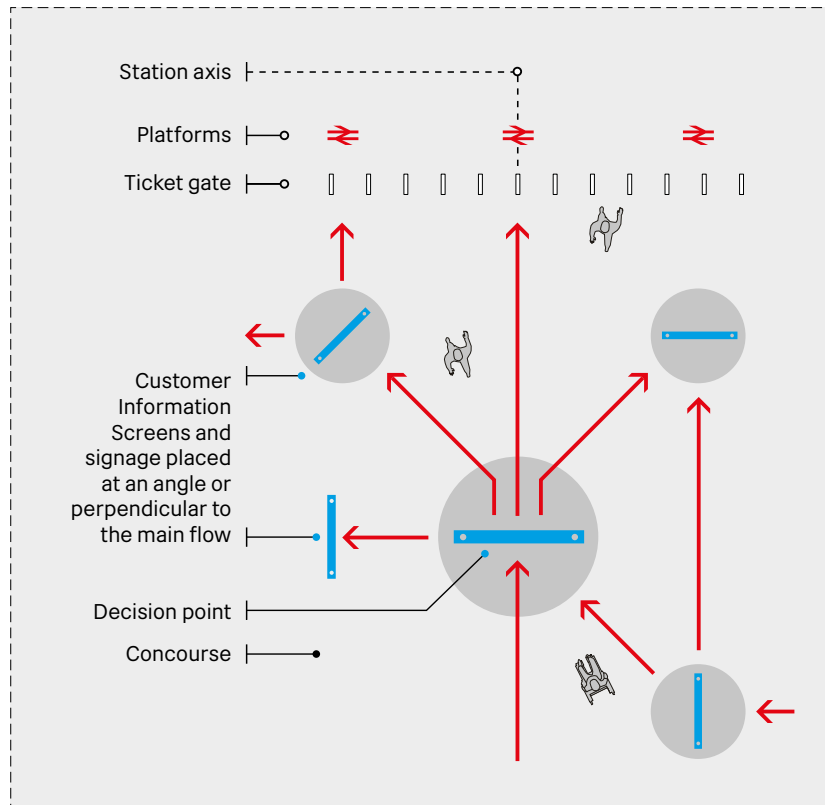
People will tend to read signage from different distances based on whether it is placed overhead or at eye level. From overhead signage, they tend to stand in 4–6m distance in order to read it without straining their neck too much, from eye-level signage they tend to stand 1–2m away.



to Platforms 10 to 15 ➡







In stations, it is critical that there are clear lines of sight between the passenger decision-making points and the signage which is providing information for that decision to be made. Signs should be located with a common rationale, considering how they will be read, by whom, from which direction, at which height, and in relation to other elements that exist or will exist within the space.

The location of signage should always follow from the passenger circulation mapping and decision point analysis, and not the other way around. Signs should be placed **perpendicular** to the main paths of movement, so that they can be seen by flows of passengers while moving.

Advertising and retail should be positioned **parallel** to user flow to avoid it being an unnecessary distraction to route finding. It should avoid restricting views to wayfinding information from walkways and passenger waiting areas. Railway Group Standards state that advertising should not be used in the immediate vicinity of escalators where they might constitute a dangerous distraction.

Signage Location Schematic Diagram

### Standards References

Station Wayfinding Design and Assurance Procedure  
NR/L2/CIV/150



1.

### Passenger Flow Mapping



In developing any wayfinding strategy care should be given to adhering to the following sequence:

1. Passenger flow mapping;
2. Identifying decision points;
3. Locating signs.

This sequence is often not given the requisite care and attention that is required in both existing and new station design, leading to undesirable cross-flows and crowd friction problems. Poor mapping, or the lack of due consideration of future passenger movements, can potentially lead to serious safety issues during periods of perturbation or station evacuation. In all cases of major station renewal works project teams should seek the advice and input of the station capacity team.

2.

### Identifying Decision Points



3.

### Locating Signs

#### NR Guidance Suite Reference

Station Capacity Planning  
NR/GN/CIV/100/03

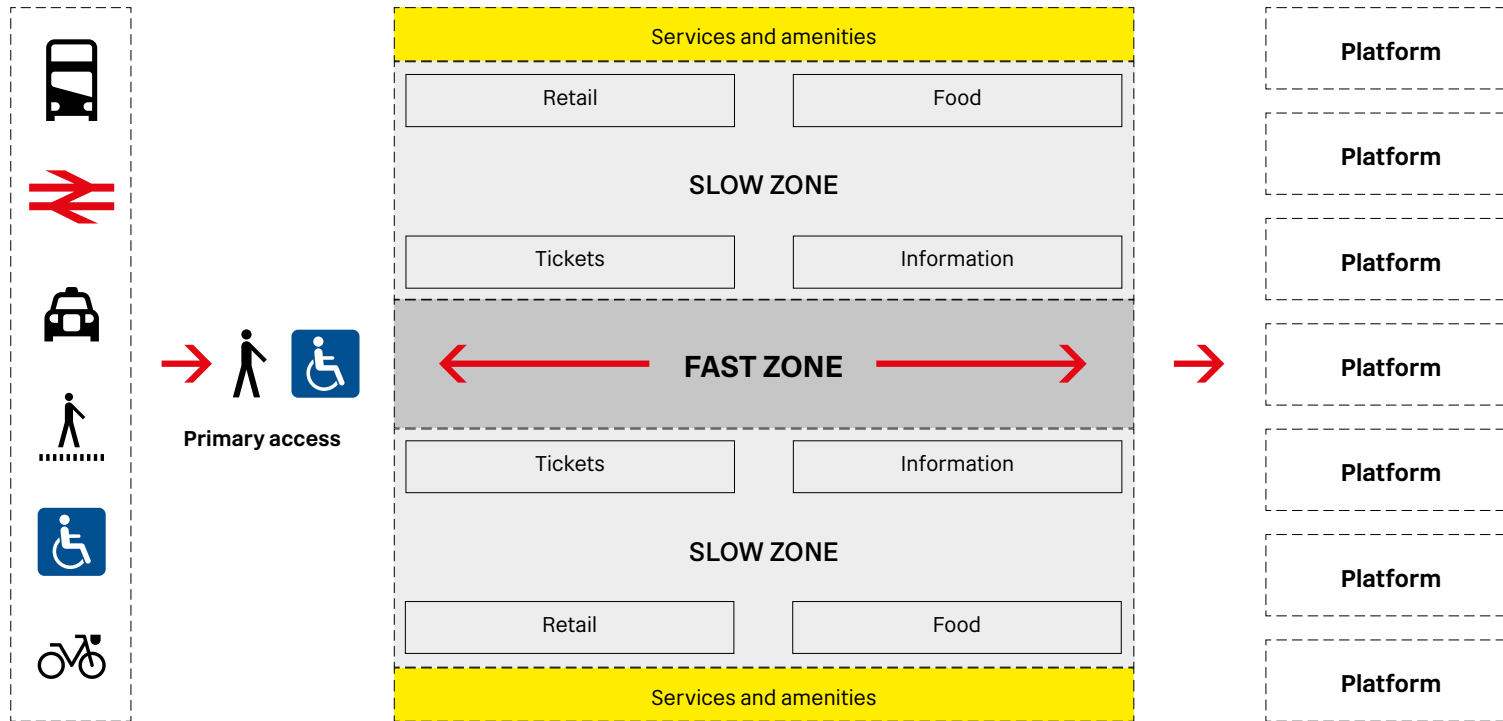
#### Standards References

Station Capacity and Crowd Management  
NR/L2/OPS292

Station Wayfinding Design and Assurance  
NR/L2/CIV/150

# Wayfinding Strategy

## 3.2 Passenger Flows and Destinations



Ideal Passenger Flow

To understand how people find their way through a space or station, a first important step is to map their circulation. It is essential to know their primary origins and destinations. If they are in a rush, they will take the shortest path. Flows should be observed or crowd modelled to test the operational concept for the station.

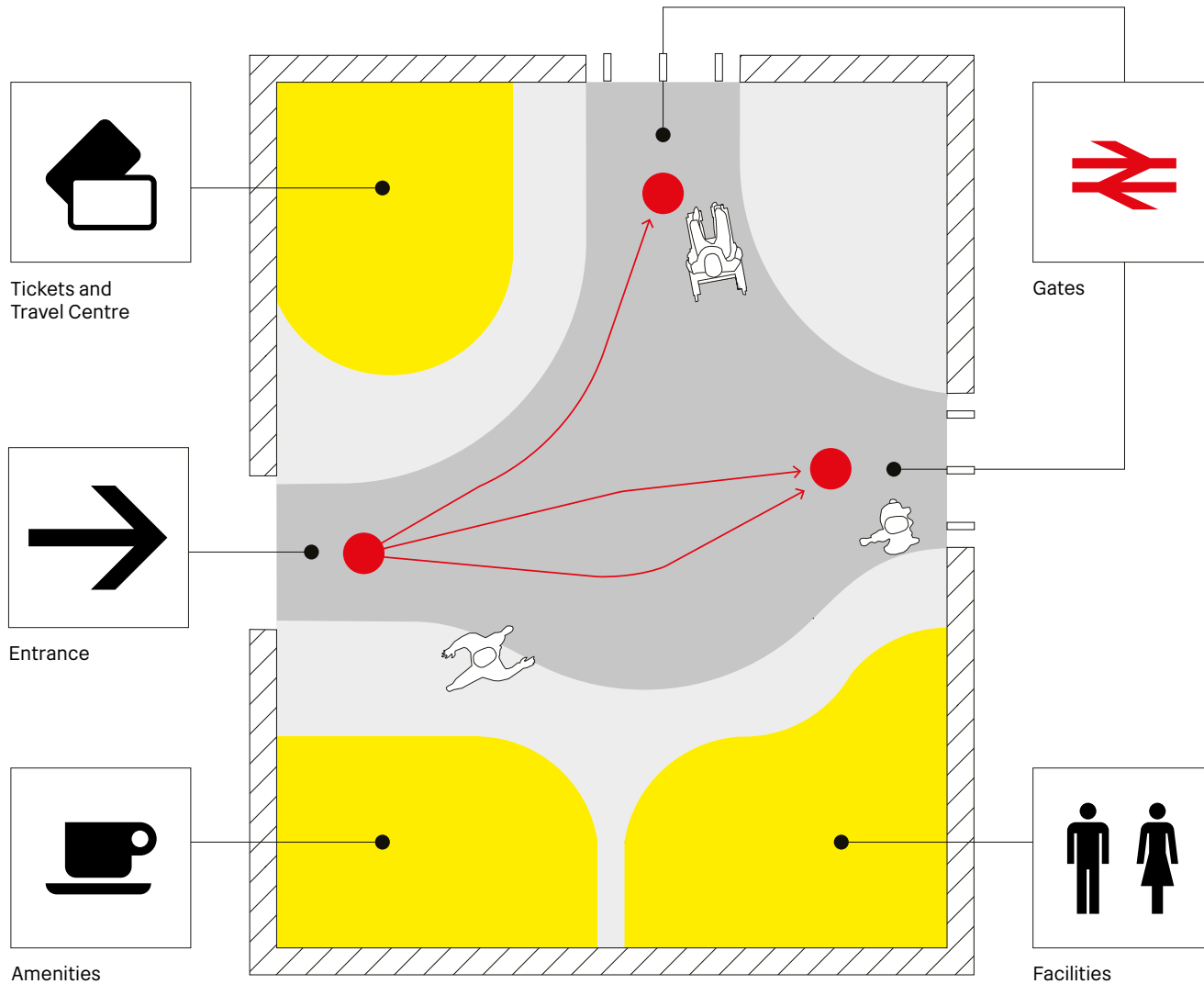
Zones for fast movement should be cleared of obstructions and prioritised on the journey between entrance and platforms. Mapping passenger flows is an initial step in the process of developing an appropriate wayfinding strategy.

**Fast zones versus slow zones of movement**





Some decision points are located in transient spaces characterised by fast-paced movement, where it is important to deter passengers from stopping and creating bottlenecks in circulation spaces. These locations require fast, immediate directional information that can be accessed without stopping, for example over the heads of crowds with text large enough so it can be read and acted on from a distance. At other points, visitors may seek more in-depth map/directory information. This requires more time, and therefore the location should be suitable for visitors to stop without obstructing passenger flows.

# Wayfinding Strategy

## 3.2 Passenger Flows and Destinations



### Primary Flows and Decision Points

-  Movement spaces (fast zone)
-  Decision points
-  Opportunity spaces
-  Dwelling spaces (slow zone)

#### Decision points

Decision points are locations where the passenger should make a wayfinding decision. For example, the passenger may choose whether to continue along the current route or take a turn at an intersection of paths.

#### Passenger flow analysis

By analysing passenger flows within movement spaces, it is possible to determine fast zones (for time-poor passengers) and slow zones (for time-rich passengers). Opportunity spaces are thereby created outside fast zones, where passengers stop in dwelling areas to wait for travel information or make use of retail and other station facilities.



### Liverpool Street

#### 1.

##### Station Approaches

Upon arrival, passengers look to confirm station ID and time. An Exterior Station Name Sign featuring the double arrow logo should be positioned at the Entrance. For stations with a building canopy the Station Name Sign should be incorporated into the station canopy. Where stations have more than one entrance, each station entrance should be numbered.



#### 2.

##### Entering the Ticket Hall

Upon entering the Ticket Hall passengers will require wayfinding to direct them. They may also meet a member of staff at the entrance, mobility assistance point or arranged meeting point. Directional signage is required to guide passengers to information, ticket facilities and the Departures board / passenger information screens.

Once passengers have confirmed their fastest or preferred route of travel with the assistance of staff or with the passenger information boards, they confirm train departure times and rail services. If passengers have time, they may use the amenities and services provided and familiarise themselves further with the station wayfinding to find the lift or escalators.



### Platform 2

#### 3.

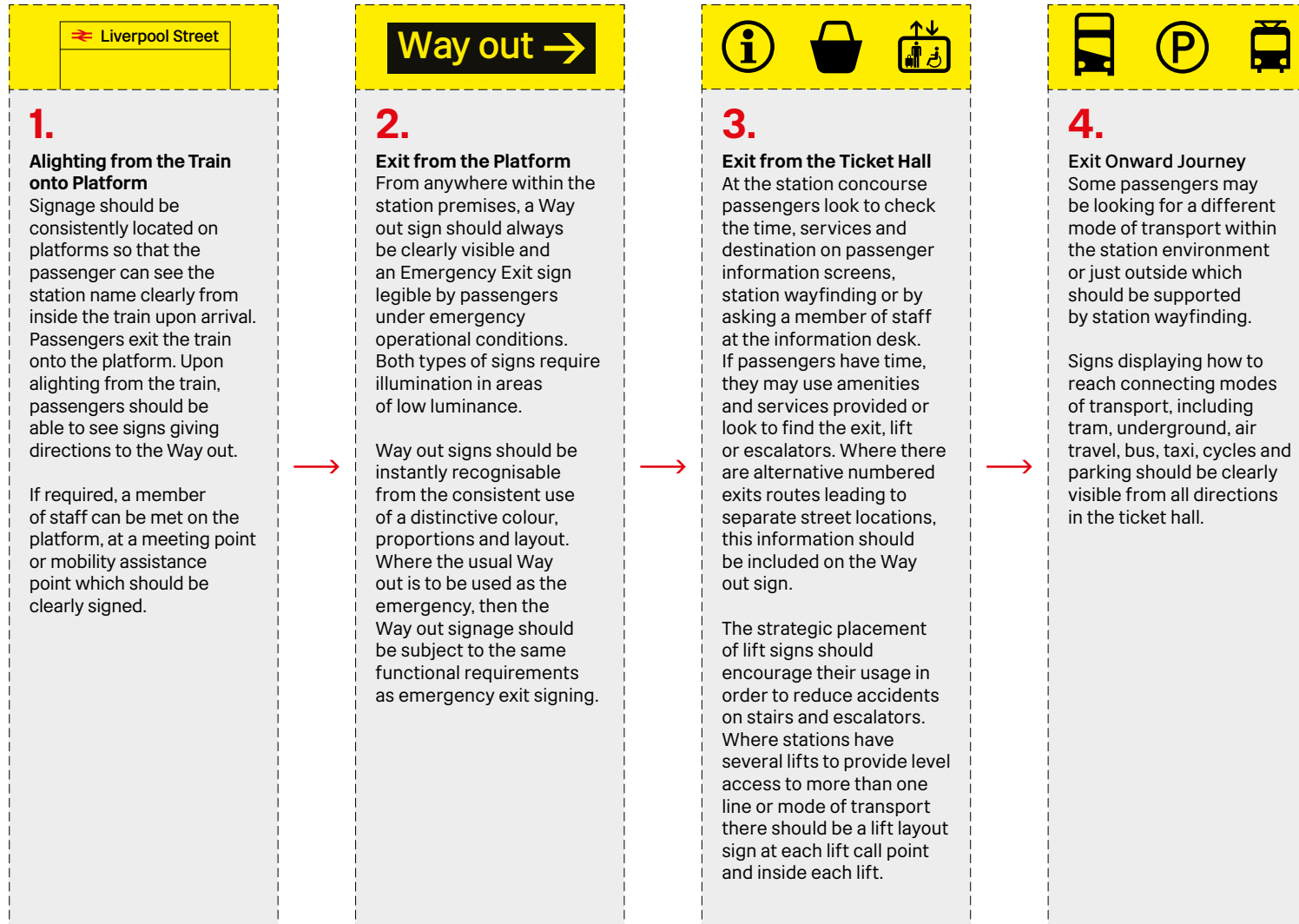
##### Ticket Hall to Platform

From the Departures board / passenger information screens, directional signage should be provided to platforms. Platform numbers should be clearly visible to passengers from the concourse. Typically, a bank of ticket gates will have only one accessible gate. To facilitate smooth flows on step-free routes toward the accessible ticket gate, both high level and low level signage should be provided to increase visibility for those using wheelchairs. Line diagram signs should be provided to passengers en route to platforms that illustrate the platform layout.

Once on the platform, passengers will look for confirmation that they are at the correct platform in order to board the right train. A platform number should be located on the platform. Accessible routes should be clearly marked.

A passenger will pass through a number of distinct stages on the journey to and from the station. At each stage during the journey, the passenger may ask a particular question, relating to the space and the decision to be made there, and these stages together make up the Whole Passenger Journey.

For information to be placed effectively at stations, a common approach is to be taken at all stations wherein specific information should be consistently presented and positioned at each stage of the journey, regardless of constraints imposed by the station design. The journey of a passenger on departure from a station is shown on this page and the journey on arrival to the destination station is shown on the following page.



On arrival into a new city, for example, upon alighting and accessing the main concourse, a passenger may ask ‘where is the taxi stand?’ The answer should appear within the concourse in the form of signage.

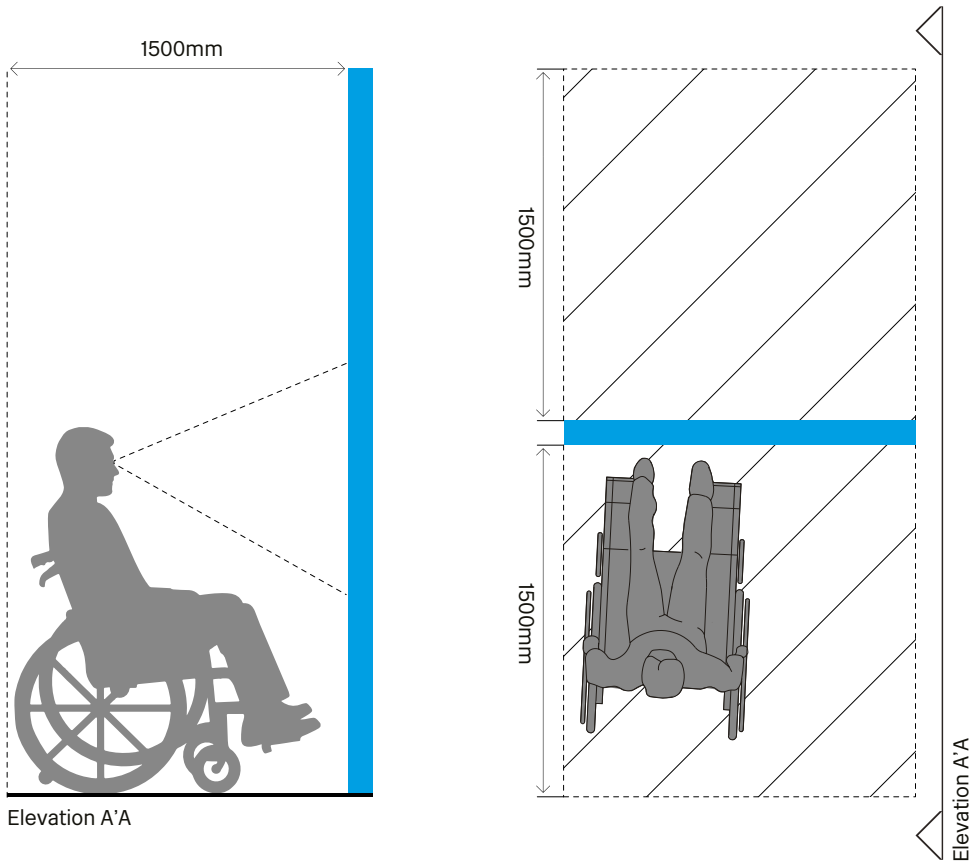
Signage should only respond with as much information as is absolutely necessary. This is termed Progressive Disclosure of Information and is a principle that should guide the signage information design and placement. Otherwise, if asked to think several steps ahead and to remember these details amongst the other distractions around, the passenger may become overloaded and forget essential information along the way.

### Passenger and Mobility Assistance

**NOTE:** It is an ORR recommendation that all Operators provide clearly marked locations and directions for **help points, information points, and contact centres** as part of their submitted Accessible Travel Policy (ATPs).

# Wayfinding Strategy

## 3.5 Inclusive Design



For any public project, there will be a broad audience with a range of different needs and abilities which may affect how they read signs. Inclusive design caters to all groups equally. In order to develop a signage and wayfinding project for the station environment that meets Network Rail's objectives for inclusive design, this guidance should be read in tandem with Network Rail's Inclusive Design Guidance NR/GN/CIV/300/04.

For example, up to 8% of the male population and up to 0.5% of the female population are affected by some form of colour blindness, with red-green colour blindness being the most common. Due to this fact, colour should not be relied upon on its own to convey important distinctions, but should be accompanied by a secondary measure to check the wayfinding message is universally accessible. It is not only the choice, but also the pairings of colours that matter. In order for text on signage to be visible, it needs sufficient contrast with its background. A common rule of thumb is that the contrast between the foreground colour and background colour should be at least 70%. Colour contrast between foreground and background can be calculated through

comparing the Light Reflectance Values (LRV) of the two colours. Signs should also be well illuminated for clear reading.

The signage designer should also take into consideration such factors as capitalisation when designing signage. Words written in all capital letters can be harder to read than those formed of upper and lower case, including for people with dyslexia and vision impairments. Because lower-case letters have more distinctive shapes and greater variations than capital letters, the combination of lower-case letters creates a more distinctive 'word footprint', making them easier to distinguish and to read than an all-cap 'word footprint'. The spacing between letters is important to check that letters do not appear to blur together for people with vision impairments.

**Minimum Viewing Zone**

When locating free-standing signage within a station environment, a suggested wheelchair-safe waiting zone of 1500mm should be space-proofed, to assure a comfortable and safe space without impacting on pedestrian flows.

**Standards Reference**

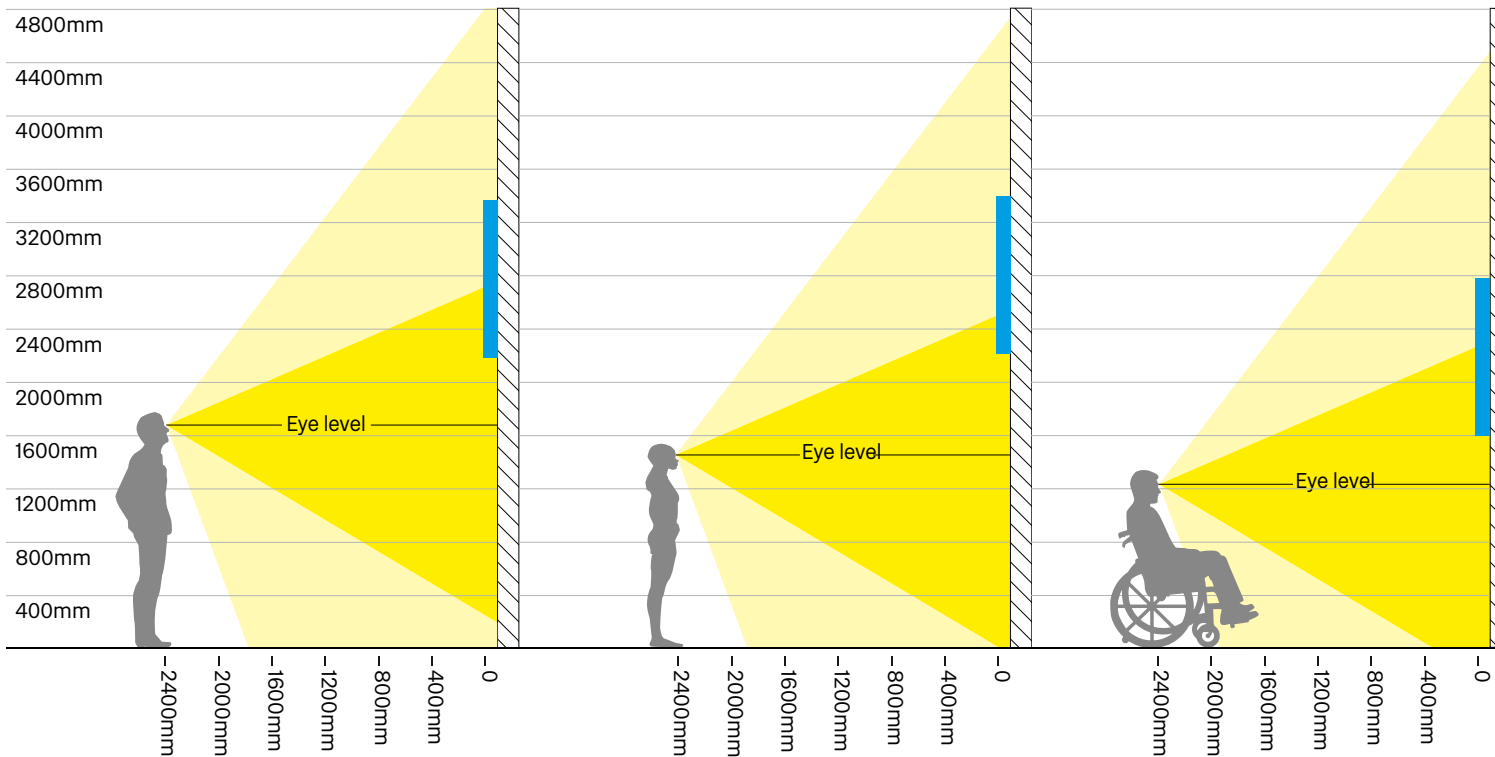
The Sign Design Guide  
**ISBN 978-1858784120**

Design of Buildings and their Approaches to meet the needs of Disabled People – Code of Practice (2018)  
**BS 8300:2018**



# Wayfinding Strategy

## 3.5 Inclusive Design



For persons of reduced mobility, who may be travelling through the station via step-free routes, it is advisable to provide signage on these routes at both a high and low level so as to accommodate their needs. These and other principles of good sign design can be found in the reference documents provided below, including The Sign Design Guide and British Standard BS8300. Additionally, statutory signage regulations should be observed to check that signage should be usable by people with various types of needs, and should often stipulate standards for aspects such as tactile lettering, braille, pictogram sizing and letter heights.

The following diagrams illustrate comfortable viewing angles, distances and minimum viewing zones for different user groups.

### Accessible Wall-Mounting Heights

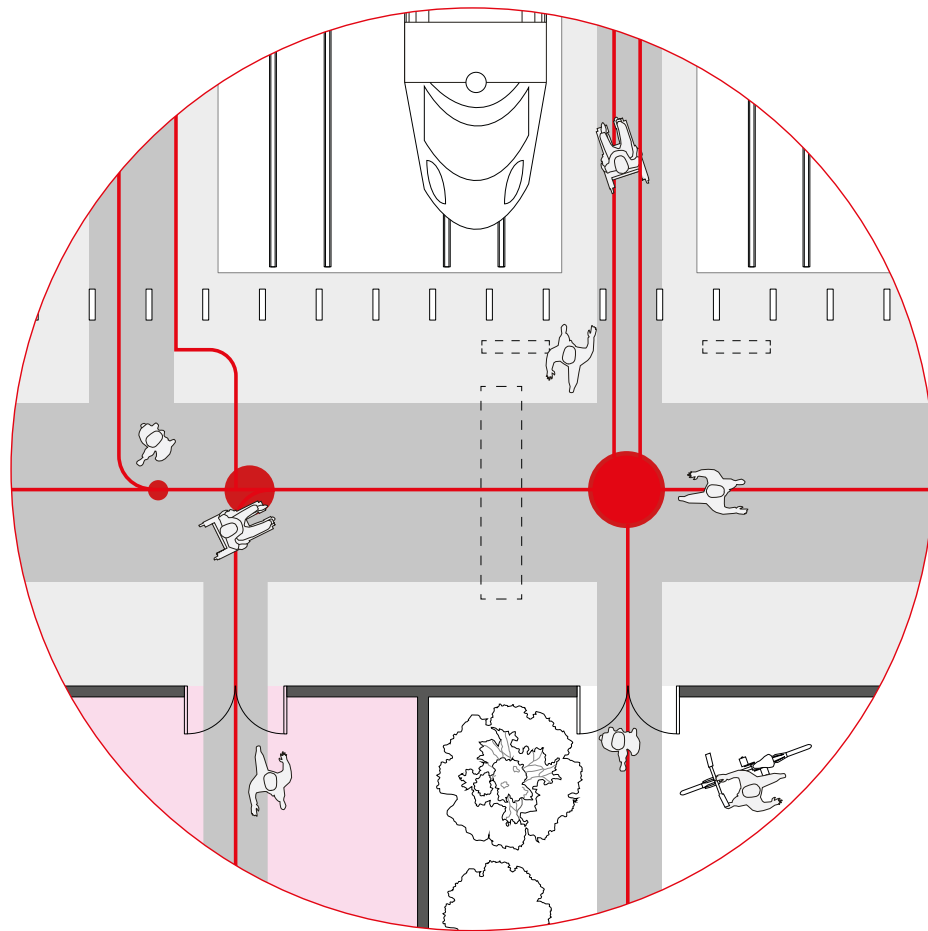
#### Accessible Wall-Mounting Heights

On step-free routes, it is advisable to provide signage at both a high and low level to accommodate to the needs of all users.

#### NR Guidance Suite Reference

**Inclusive Design**  
NR/GN/CIV/300/04

## 3.6 Mapping User Flows and Decision Points

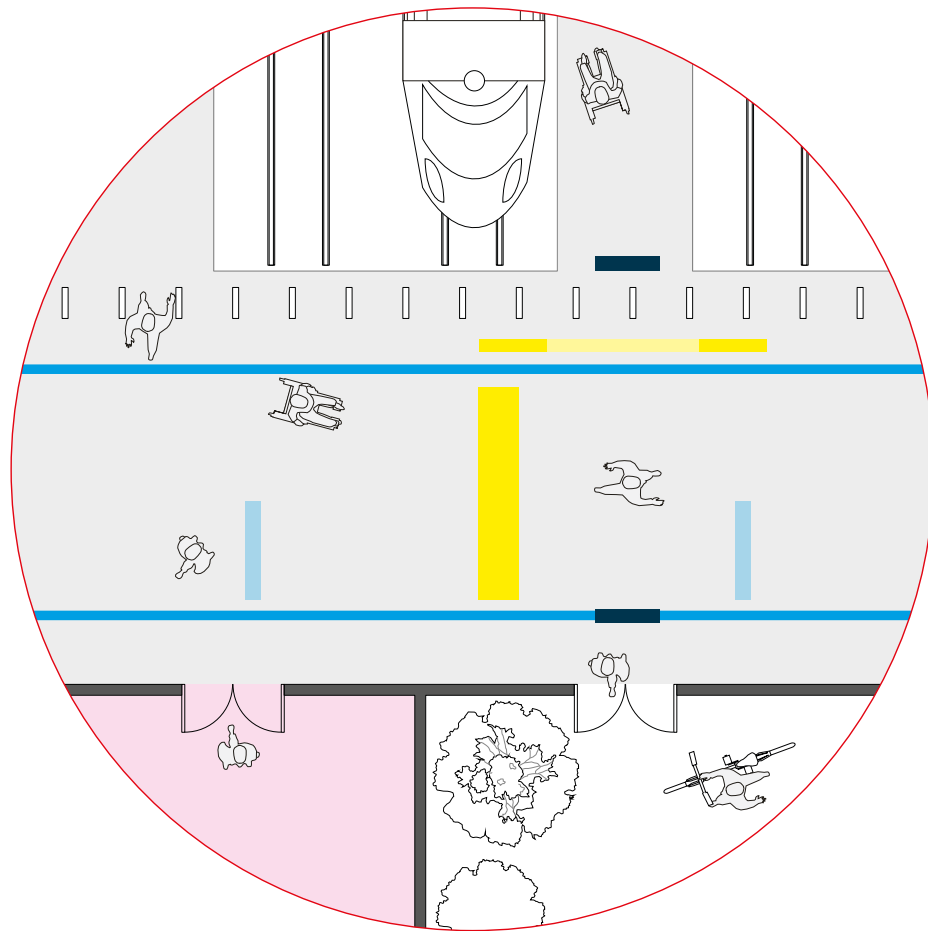


### Schematic Diagram Decision Points

- ● ● Decision points
- Visitor routes
- Circulation zone – main axis
- Circulation zone
- Other transport services
- □ □ Customer Information Screen

Signage should be placed at decision points or as close to the decision point as possible, taking into account the user flows and mounting points available in the space. Placing a sign after the decision point may cause a passenger to backtrack, which can be detrimental in a crowded flow and can cause loss of time en route to a train.

Decision points may be at intersections of paths or at an entrance to a building. They can also be in front of a lift or at the top of a staircase or escalator.



### Schematic Diagram Signage Location Planning

- Way out sign
- Perimeter ribbon
- Totem
- Customer Information Screen
- Platform number sign
- Circulation zone
- Other transport services

Having identified the decision points within a project, the next step is to pinpoint locations for wayfinding and signage in a form of documentation that can be used by the extended design team and contractor. Typically, a CAD (Computer Aided Design) program may be the most suitable software, as locations will need to be recorded with accuracy.

At this stage, the location plans represent a strategy for signage within the site, charting the categories of signs, the specific typologies of signs, their locations and unique address within the sign type series.

← Platforms 1 to 19  
Tickets  
Information ⓘ  
Underground  
Jubilee line  
Waterloo East  
Taxis  
Toilets ⓘ ♿  
**Way out**

↗ Underground  
Bakerloo line  
Northern line  
Waterloo & City line

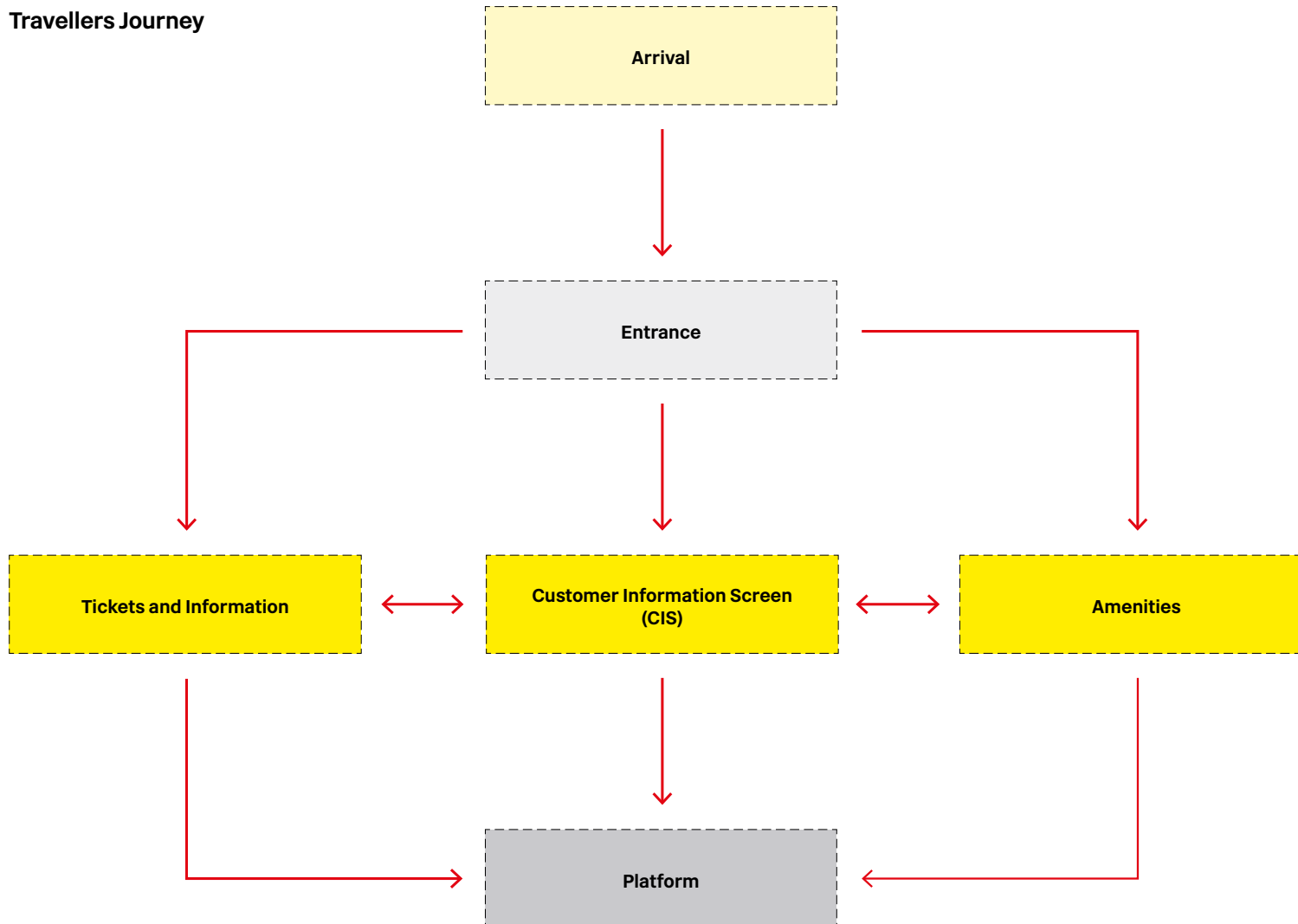


Wayfinding Design Manual  
**Information Structure**





### Travellers Journey



### 4.1.1 Progressive Disclosure

The wayfinding design process at stations starts with analysing flows, mapping decision points and locating signs at these points. In parallel, traveller journeys and the information these travellers require are defined and mapped into the space.

At this point, the messages on signage should be planned. In so doing, the principle of progressive disclosure of information should be applied so that only as much information as necessary is given at each specific decision point. This avoids overloading the visitor with too much complexity.

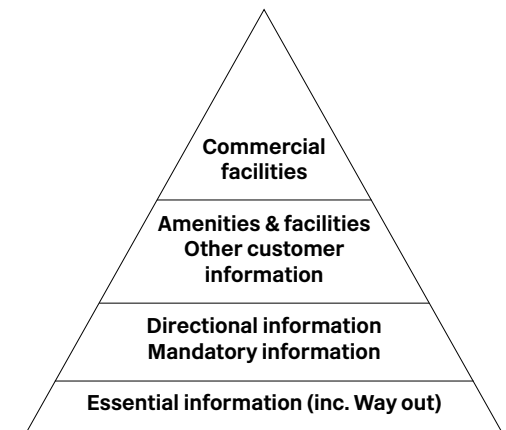
# Information Structure

## 4.2 Hierarchy of User's Needs



Maslow's hierarchy of needs is a psychological theory put forward by Abraham Maslow in 1943, which uses a classification system to describe how human needs correlate with motivational behaviour. Four classes of human needs are represented as a pyramid with the essential needs at the bottom and the more convenience needs and desires at the top. Starting at the base and rising upward, an individual should have the needs of each stage met within themselves before their motivations rise to the next level.

In much the same way, a hierarchy of importance should be followed within station signage design, which correlates with station users' needs.



# Information Structure

## 4.3 Information Hierarchy

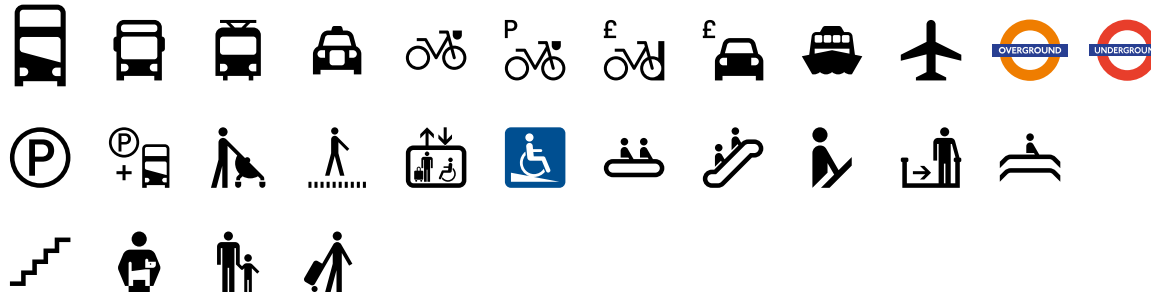
### 1. Essential journey information

- Train travel
- Way out



### 2. Onward journey information

- Transport Interchange
- Journey inside station



### 3. Amenities & facilities

- Toilet and shower facilities
- Main station facilities
- Other amenities



### 4. Commercial establishments

- Restaurants, cafés, shops, hotels



A clear and consistent hierarchy of information is essential to wayfinding. This hierarchy defines how information is presented consistently across all channels of information. Designing an information hierarchy requires thinking from the passenger's point of view about their primary, secondary and tertiary needs, and then using graphic means to emphasise importance.

As passengers read a list of destinations in signage from the top down, the hierarchy of information for passengers should start with the station user's most essential needs at the top, working down to their least critical requirements. The high importance of safety, directional and mandatory signage should be reflected visually in the information design.

Essential rail travel, tickets and Way out information should be listed at the top, followed by onward journey information, internal station circulation, amenities and facilities, working down to less essential commercial services at the bottom.



# Information Structure

## 4.4 Use of Language



### Abbreviations

This list of Network Rail abbreviations and punctuation is indicative. Any queries should be addressed to Network Rail Managed Stations Design team. Abbreviations or contractions should only be used where space is limited. Abbreviations do not include a full stop. For example: Rd - Road, Sq - Square, Saint Austell - St Austell. Where unavoidable, the following permitted abbreviations can be used:

- N North
- E East
- S South
- W West
- Jn Junction
- Ctl Central
- Rd Road
- Sq Square
- St Saint or Street
- Pk Park

### Ampersand

Do not use the ampersand and use 'and' instead. For example: Left luggage and lost property. This also applies to station names.

### Dates

Dates should be displayed in the order of day, month, year. Suffixes such as 1st or 2nd should not be used. The preferred abbreviation for days and months are as follows: Mon, Tues, Wed, Thurs, Fri, Sat, Sun, Jan, Feb, March, Apr, Jun, Aug, Sep, Oct, Nov and Dec.

### Hyphenation

When used in continuous text, a character space should not be inserted either side of the hyphen. For example: self-service. A hyphen should not be used to indicate a time or day period or a range. In these instances, the term 'to' should be used, for example: Monday to Saturday, 18 00 to 21 00 or Platforms 3 to 5.

### Money

The characters '£' and 'p' should not appear together in the same figure. For example values equal to or greater than £1 should be shown with the '£' symbol, i.e. £2.00 and values less than £1 should be shown with the character 'p', i.e. 20p. The decimal point should be represented with a full point.

### Numerals

The terms 'number' and 'No.' should not be used in phrases such as 'platform 5'.

### Station names

Station names should be shown in full, as in the all line timetable, i.e. Glasgow Central. Ampersands should not be used and station names should be written out in full, i.e. Borough Green and Wrotham

### Telephone numbers

All telephone numbers should be stated in full, i.e. 020 7123 4567, without hyphenation and preceded with the word 'telephone'.

### Time

All times should be shown in the 24hour clock. A character space, rather than a punctuation mark, should be inserted between the hours and minutes, for example: 20 00.

### Upper and lower case

Upper case letters (capitals) are only used for the initial letter of a sentence or line of information on a sign panel. All other text is to be displayed in lower case, with the exception of the following:

- Places, e.g. Ryedale House
- Station names, e.g. Euston Station
- Tickets and Travel Centre

Language on signage should be direct and simple, allowing the passenger to:

- Find what they need
- Understand what they find
- Use what they find to meet their needs

Principles that can be employed when drafting sign messages which will help to confirm this include:

- Logical organisation with the passenger in mind
- Non-aggressive tone of voice
- Active voice, short sentences
- Common, everyday words
- Easy-to-read design features



All platforms



Tickets



Information



Customer lounge



Overground



Bus station



# Graphic Guidance

## 5.1 Introduction



This section sets out the basic elements and graphic guidance required to create signage for Network Rail stations. The basic elements consist of Rail Symbol 2, the colour palette, typography (using Rail Alphabet 2), arrows and pictograms.

# Graphic Guidance

## 5.2 Rail Symbol 2



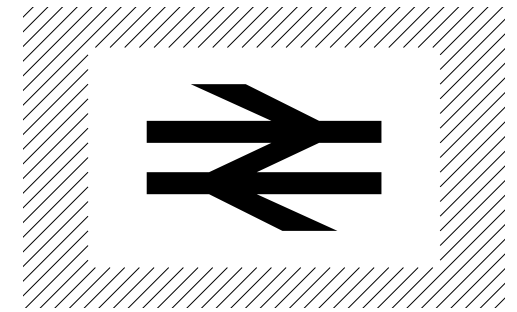
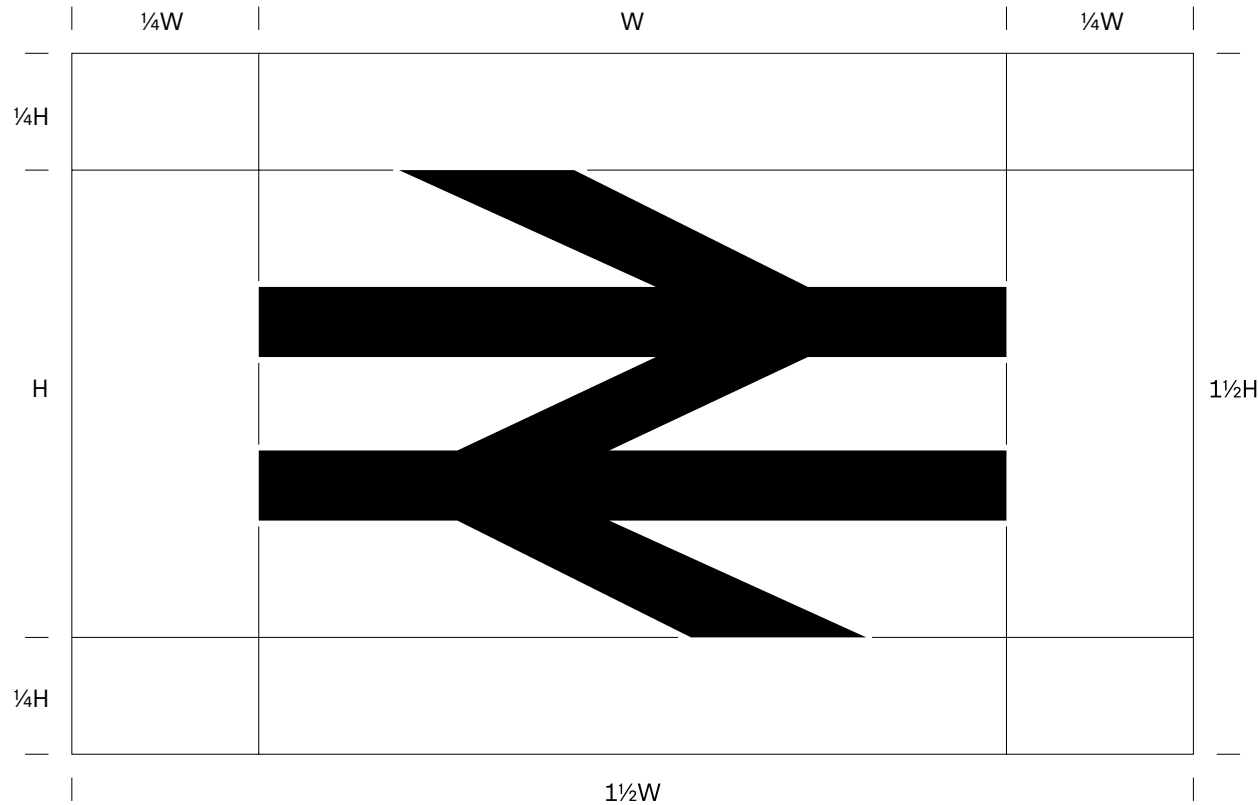
Shown opposite is Rail Symbol 2. Originally designed in 1964, the symbol has recently been redrawn to optimise performance across all media.

The symbol should always be accurately reproduced using approved master artwork and not redrawn or modified in any way.

For further information regarding the use of Rail Symbol 2 please refer to:  
NR/GN/CIV/300/05 Rail Symbol 2  
Design Manual

# Graphic Guidance

## 5.2 Rail Symbol 2

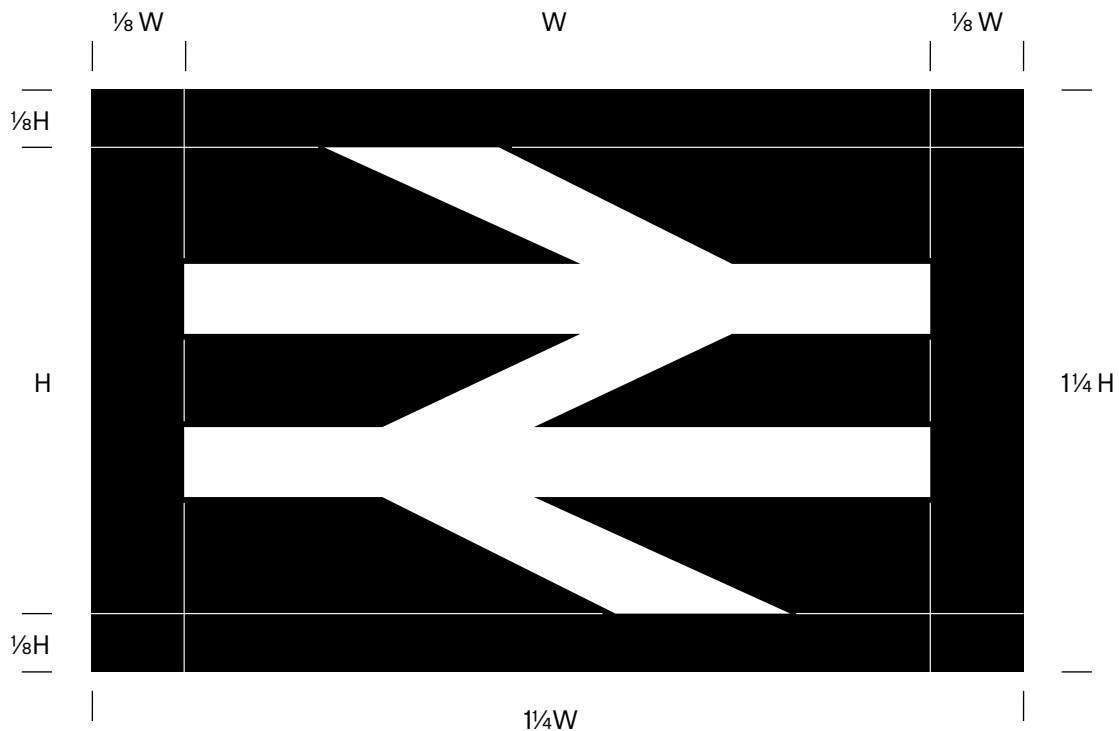


**Exclusion zone**  
The standard version of Rail Symbol 2 appears within an exclusion zone, a protective area around the symbol which should remain free from other visual elements.

The extent of the exclusion zone is represented by the outer border in the construction diagram and is defined in proportion to the width ( $W$ ) and height ( $H$ ) of the rail symbol as shown.

# Graphic Guidance

## 5.2 Rail Symbol 2



### Lozenge version

The lozenge version of Rail Symbol 2 is used for exterior lozenge and pole signs. The lozenge version is also used to determine the position of the symbol on house flags.

The extent of the lozenge is represented by the outer border in the construction diagram and is defined in proportion to the width (W) and height (H) of the rail symbol as shown.

# Graphic Guidance

## 5.3 Colour Palette



The sign colours are defined in accordance to the RAL standard for paint application. Approximate matches for Pantone Matching System (PMS) are provided as reference only. Die cut vinyl application or inkjet printing are not acceptable on permanent signs. CMYK (Cyan, Magenta, Yellow and Black) and RGB (Red, Green and Blue) approximate matches are provided as reference for printed (CMYK) and digital (RGB) temporary signs only.

### White

RAL 9016  
C0 M0 Y0 K0

### Black

RAL 9005  
PANTONE® Process Black C  
C0 M0 Y0 K100

### Red

RAL 3020  
PANTONE® 485 C  
C0 M100 Y100 K0

### Blue

RAL 5005  
PANTONE® 2945 C  
C100 M60 Y0 K20

### Yellow

RAL 1018  
PANTONE® Process Yellow C  
C0 M0 Y100 K0

### Green

RAL 6029  
PANTONE® 356 C  
C95 M0 Y100 K27

The wayfinding colour palette – including all colours in PMS, RGB and CMYK – can be obtained from the Network Rail Brand Hub.





abcdefghijklmnopqrs

tuvwxyz&-.,'()

ABCDEFGHIJKLMNOP

QRSTUVWXYZ

1234567890

Rail Alphabet 2 SIGN Medium

Rail Alphabet 2 was designed by Margaret Calvert in collaboration with Henrik Kubel and has a notably strong resemblance to the original Rail Alphabet lettering, designed in the 1960s by Margaret Calvert and Jock Kinneir. However the construction of the letters is sharper and more compact, aiding legibility and saving space.

The font family for signage consists of a single weight, **Rail Alphabet 2 SIGN Medium** (shown left). This weight has been specifically designed for wayfinding and signage.

Three further weights exist with corresponding italics that have been designed for printed publications: TEXT Regular, Text Medium and TEXT Bold.

**However The TEXT weights of Rail Alphabet 2 should never be used for signage purposes.**

The Rail Alphabet 2 typeface and associated pictograms can be obtained from the Network Rail Brand Hub.



Shown opposite are examples of cap height and x-height for Rail Alphabet 2 characters. Cap height represents the height of the capital letters, measured from the baseline to the top of the character. The x-height is also measured from the baseline and represents the height of the lower case characters with no ascenders or descenders.

**Throughout this document, x-height is used to measure text size.**



## 5.4 Typography – Sizing to Distance

Organisation	Inclusive Mobility (DfT)	London Underground	Previous Network Rail standard	Recommended sizes for Network Rail stations
Distance from text (metres)	Text size (x-height mm)	Text size (x-height mm)	Text size (x-height mm)	Text size (x-height mm)
5m	38.6mm	12mm	8.6mm	25mm
10m	77.2mm	24mm	37.2mm	50mm
15m	115.8mm	36mm	55.8mm	75mm
20m	154.4mm	48mm	74.6mm	100mm
25m	193mm	60mm	93.28mm	125mm
30m	231.6mm	96mm	111.8mm	150mm
50m	386mm	120mm	186.6mm	250mm

In order for signage to be functional, information should be legible, including by those with impairments. Text legibility standards are written into most universal accessibility regulations. However, which size of text is legible from which distance is not universally agreed upon. It is important to be aware that standards vary based on country, on setting, on whether the viewer is walking or driving etc. and to use judgement on each project about which standards are more appropriate in that case.

Shown opposite is a table that compares reading distances of text heights advised by other sign guidelines. The last row in the table shows the ratio of text height to reading distance. The recommended sizes for use in this document are shown in the last column.

To calculate which x-height size (in mm) should be used to provide a target reading distance, the distance (in m) should be multiplied by 5.  
e.g. 5(m) x 5=25(mm).

To calculate the target reading distance (in mm) of a particular x-height, the x-height (in mm) should be divided by 5.  
e.g. 25(mm)/5=5(m)

## 5.4 Typography – Sizing to Distance

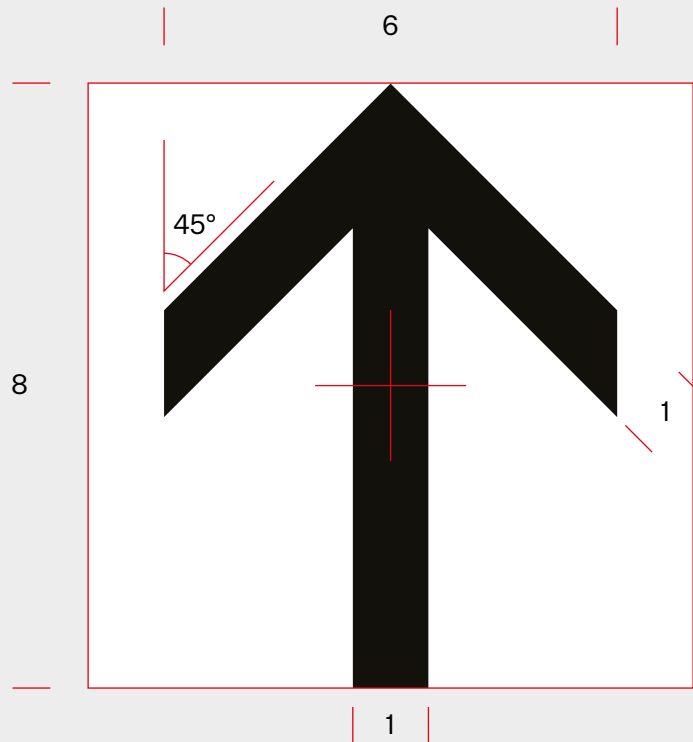


The diagram below demonstrates target reading distances for x-heights using the calculations on the previous page.



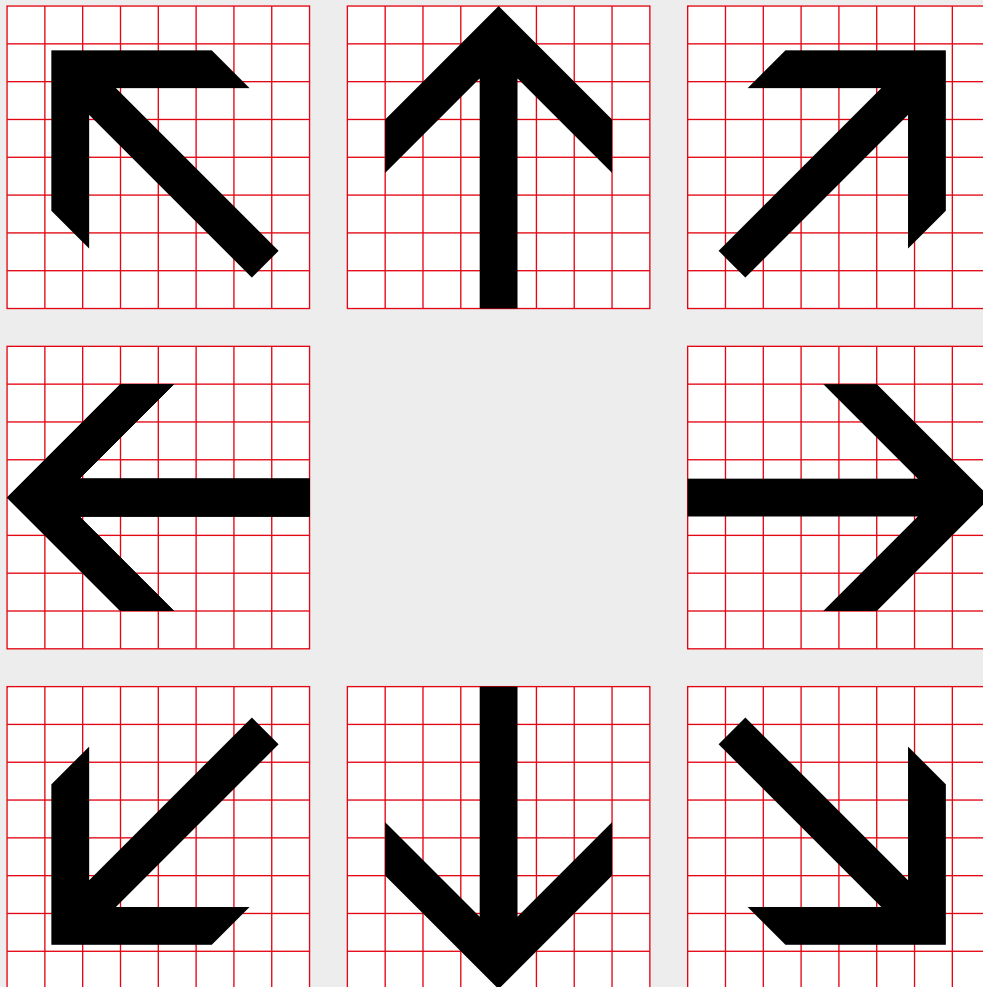
# Graphic Guidance

## 5.5 Arrows



The Network Rail directional arrow is bespoke, designed to compliment the wayfinding design. Arrows accompany the typography.

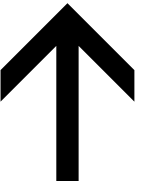



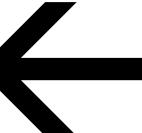
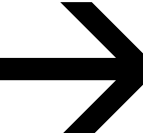
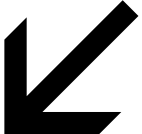



Network Rail arrows should be used only as illustrated in these guidelines and not redrawn or modified in any way.



In order to keep the relative alignment of arrows consistent, regardless of orientation, each arrow is positioned within a square and rotated in increments of 45° about its centre.

# Graphic Guidance

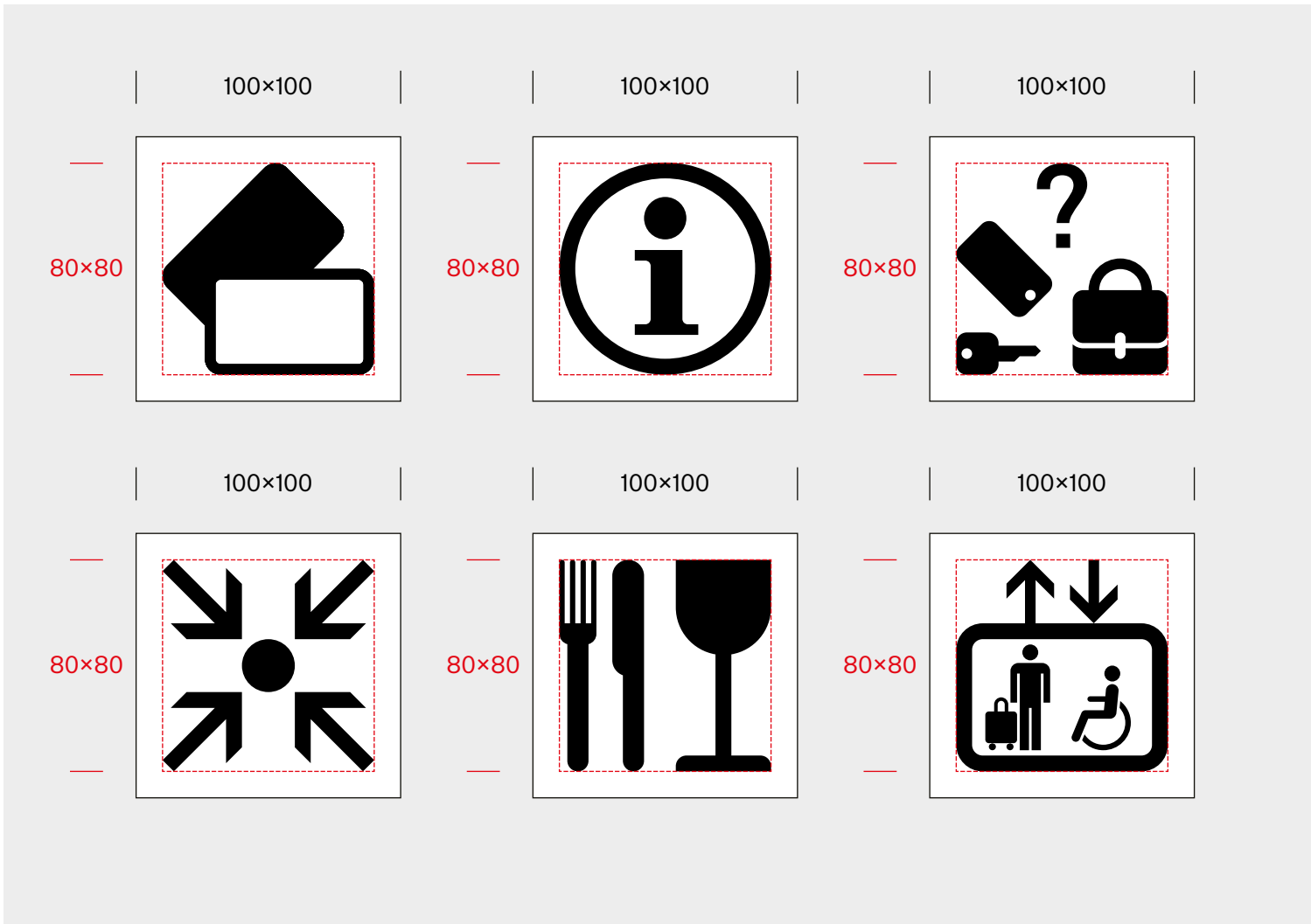
## 5.5 Arrows – Order

	<p><b>Straight ahead / Up</b> To represent straight-ahead direction, or level change</p>	<p>In certain situations, straight ahead/up arrows can be used on the right side of signs but the preference is to align them to the left.</p>	
	<p><b>Diagonal or Up</b> To direct across a diagonal flat area, or to represent level change (up). When representing level change (up), the arrow can be accompanied by the text “via lift”, “via escalator” or “via stairs” to indicate the way of getting to the upper level</p>	<p><b>Diagonal or Up</b> To direct across a diagonal flat area, or to represent level change (up). When representing level change (up), the arrow can be accompanied by the text “via lift”, “via escalator” or “via stairs” to indicate the way of getting to the upper level</p>	
	<p><b>Left</b> For standard left directions</p>	<p><b>Right</b> For standard right directions</p>	
	<p><b>Down</b> Only to represent level change. The arrow can be accompanied by the text “via lift”, “via escalator” or “via stairs” to indicate the way of getting to the lower level</p>	<p><b>Down</b> Only to represent level change. The arrow can be accompanied by the text “via lift”, “via escalator” or “via stairs” to indicate the way of getting to the lower level</p>	
	<p><b>Down via lift</b> Only to represent a level change (down via lift)</p>	<p>In certain situations, down arrows can be used on the right side of signs but the preference is to align them to the left.</p>	

The use of arrows on signs should follow a certain order, to clarify directions and avoid allowing arrows to point at each other.

# Graphic Guidance

## 5.6 Pictograms



Pictograms are pictorial symbols which convey meaning without the use of descriptive text. Pictograms can communicate a message to speakers of many different languages at once.

Most pictograms are contained within a 80×80 bounding box, this is centred within inside a 100×100 module. When adding pictograms to signs it is important that the bounding box is retained to ensure that they are used at the correct proportion.

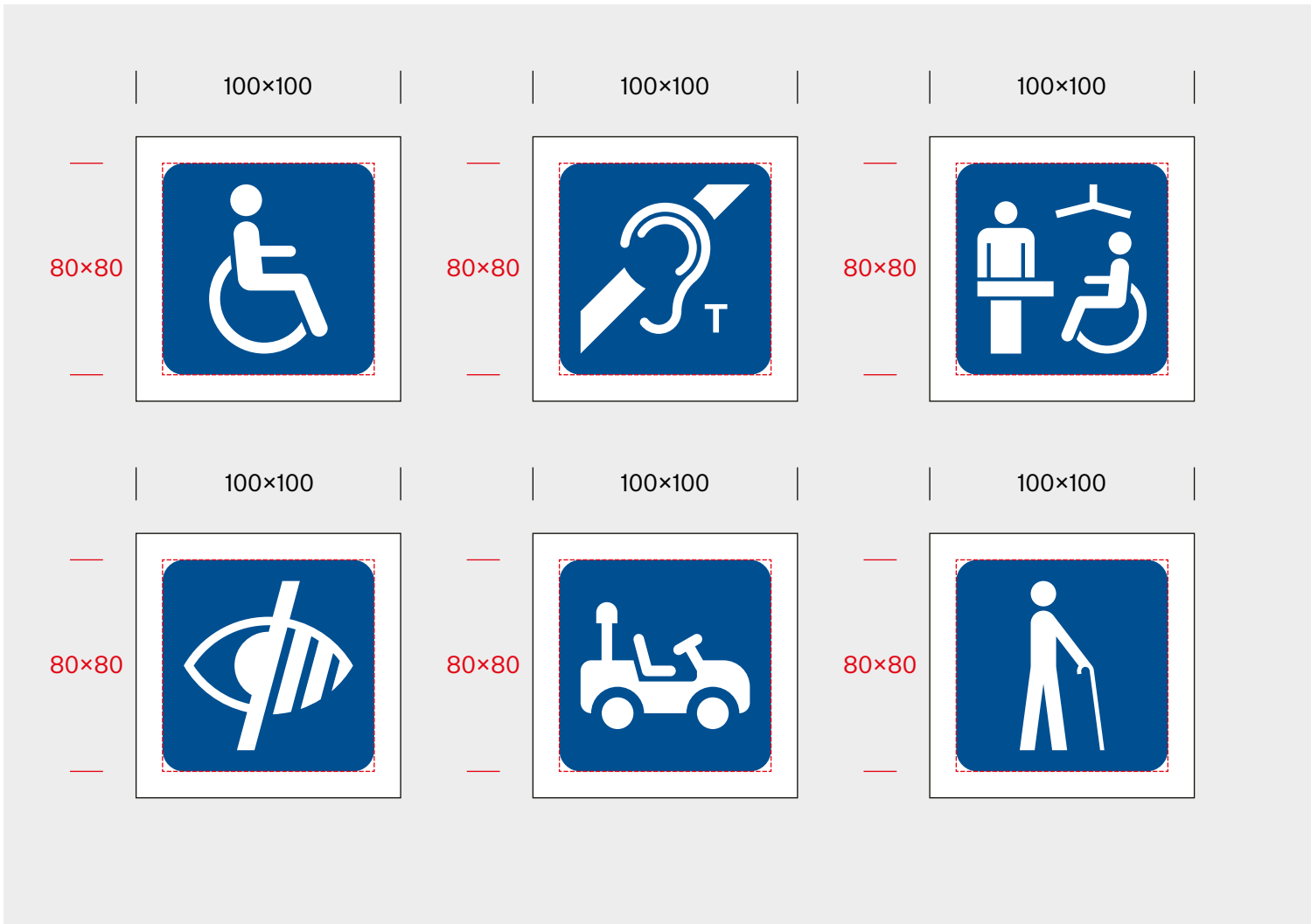
As stated in the *Design Standards for Accessible Railway Stations, Department for Transport, 2015*, some pictograms will require supporting text 'unless it is known that they will be understood by passengers.'

Network Rail pictograms may be obtained for projects from the Network Rail Design Hub on request and subject to authorisation.





There are a number of exceptions to the rule stated on the previous page. The Rail Symbol and TfL modes use the full width of the 100x100 module. For optical reasons, some pictograms, for example dog spend and telephone, have a smaller than usual bounding box but sit on same 100x100 module.



As a direct and universally accessible form of communication, internationally recognised pictograms are often required on statutory signage. Thus, pictograms used for statutory signage are also governed by strict legibility standards to check they are large enough and recognisable enough to be clear and visible for all travellers.

Please note that three different pictograms representing Priority Seating have been provided within the Network Rail pictograms library displayed on the next page. These Priority Seating pictograms – showing a pregnant woman, a mobility impaired passenger and a parent and small child – may be used together or separately.

### PRM pictogram colours

This guidance follows the European Union Technical Standard for Interoperability 2014 on PRM in its interpretation that the subject of colour raised in Appendix N.3 refers specifically to clause (9) of point 4.2.1.10, as referred to in clause (9). PRM pictograms should therefore always be white, with a dark blue background.

# Graphic Guidance

## 5.6 Pictograms – Library



Rail symbol



Tickets



Ticket machine



Information



Station reception



Café



Food and drink



Grab and go



Shopping



Pedestrian



Lift



Travelator



Escalator



Hold the handrail



Stand on the right



Footbridge



Stairs



Hold on to your child



Hold on to your dog



Pushchair



First-class lounge



Customer lounge



Shower



Toilets



Toilet (unisex)



Male toilet



Female toilet



Baby change



Ferry



Airport



Bus



Coach



Tram



Taxi



Cycle



Cycle parking



Cycle hire



Car hire



Car parking



Drop off and pick-up

# Graphic Guidance

## 5.6 Pictograms – Library



Park and ride



Luggage locker



Lost property



Luggage trolley



Charging zone



Bureau de change



Cash machine



Hotel



Post box



Post office



Wi-Fi



CCTV



Tourist information



Meeting point



Waste recycling



Litter



Hand dryer



Soap dispenser



Drinking water



British Transport Police



Vaping zone



Dog relief area



Telephone



Pedestrian with luggage



Pedestrian crossing

# Graphic Guidance

## 5.6 Pictograms – Library



Accessibility



Ramp



Changing places



Priority seating I



Priority seating II



Priority seating III



People with reduced mobility



Auditory impairment



Visual impairment



Mobility assistance



First aid



No vaping



No smoking



No luggage



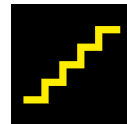
No entry



Escalator  
(Way out patch)



Footbridge  
(Way out patch)



Stairs  
(Way out patch)



Lift  
(Way out patch)



Accessible route  
(Way out patch)



Accessible ramp  
(Way out patch)



Underground



Overground



Elizabeth line



DLR



Merseyrail



Metrolink



Tyne & Wear  
Metro



Glasgow  
Subway



Bee Network



West Midlands  
Rail

↑  
Platforms 2 to 4  
Way out 4 Colton Road

Platforms 5 to 7  
Platforms 11 to 18  
Way out Market Street

Tickets  
Information  
Toilets

↑  
Station reception  
Left luggage  
Lost property  
First class lounge  
Cycle parking  
Car hire  
Way out

Platforms 2 to 4  
Way out

Wayfinding Design Manual  
**Sign Family**



# Sign Family

## 6.1 Introduction



This section provides detailed information on all basic elements, sign types, sign layout, sizes, combinations and mounting heights.

### Basic elements

The following page outlines the basic elements, the modular components that are used to construct signs, and how each of the elements are represented on the pages defining different sign layouts.

Subsequent pages describe the standard layout of these elements, including relative size relationships for primary messaging, secondary messaging, pictograms, secondary pictograms, Way out panels and interchange service identification.

Further detail is then provided for the construction of the following sign types:

- **Directional**
- **Identification – Facility**
- **Threshold – Gateline**
- **Identification – Platform**
- **Identification – Station**
- **Identification – Station External**
- **Regulatory and Prohibition Signs**
- **Fire and Life Safety Signs**

### Sign sizes

When developing a wayfinding strategy for a station, text heights to be used on signs will need to be considered.

The recommended sizes for sign types given are informed by ergonomic as well as informational factors. Depending on the traveller's distance and the direction of travel, sign types may suit differing situations. In order to size type, decision points should be mapped throughout the station environment. These are the points at which the passenger may require information to make a decision about which way to go, and will look toward signage. Distances between decision points and signs should be measured. These distances inform the type sizing.

As a priority, signage should be designed so that text is of a sufficient size to be legible from the decision point from which the sign may be read. At the same time, the suite of sign types should work together to create a consistent and complete system for wayfinding. From freestanding totems to wall mounted directional signs, the visual communication needs consistency in order to meet traveller's needs.

The hierarchy of sizes accounts for the distance from which that type may be viewed, as well as the relative importance of that category of signage. Standardising type sizes by using such sizing categories, maintains typographic consistency. Text sizing on public signage is also governed by accessibility codes to ensure that it will be universally accessible.

### Mounting heights

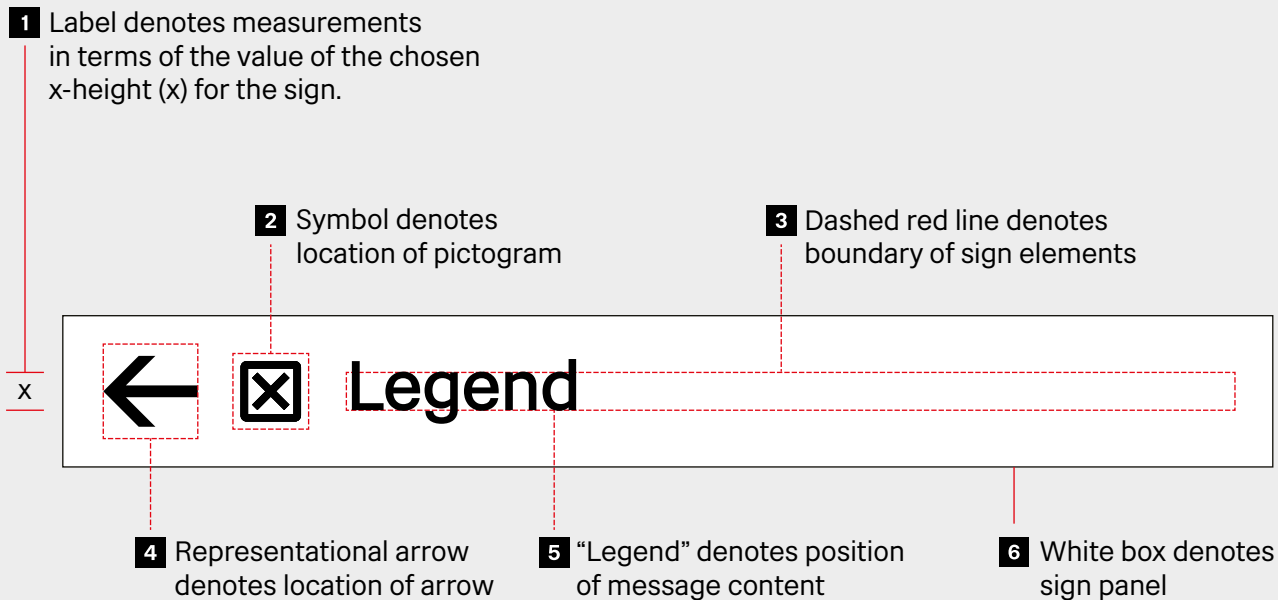
Sign mounting heights and locations should always be carefully considered. Of particular importance is the safety of passengers, staff and railway operatives who may come into contact with signs.

**As a principle signs should never be mounted within the OLE envelope of any platform as this could introduce significant safety hazards (such as electrical arcing), interfere with OLE operation and maintenance, and lead to operational and service disruptions.**



# Sign Family

## 6.2 Basic Elements



Illustrated opposite is a breakdown of the basic elements used to construct the varied sign types outlined within this section and how they are represented.

The elements are as follows:

- 1** 'x' value
- 2** Pictogram
- 3** Boundary of sign elements
- 4** Directional arrow
- 5** Sign message
- 6** Sign panel

### Value of x

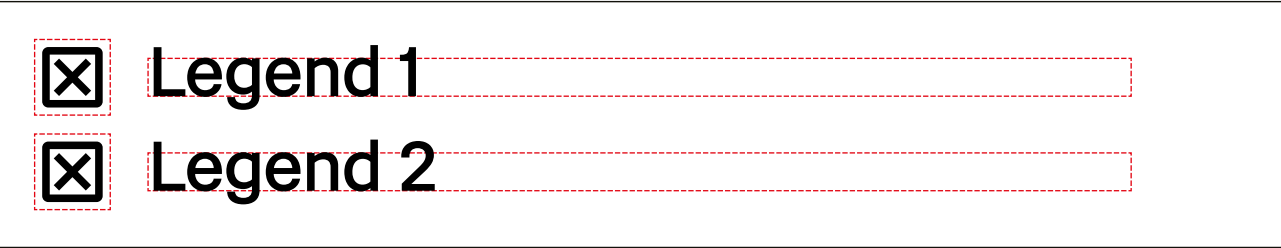
This system uses the value of the chosen **x-height** to specify the measurements used to construct the sign elements and panels. If for example, after consultation and consideration of the guidance detailed in **Section 5**, the chosen **x-height** is **60mm**, **2x** represents **120mm**.

# Sign Family

## 6.2 Basic Elements

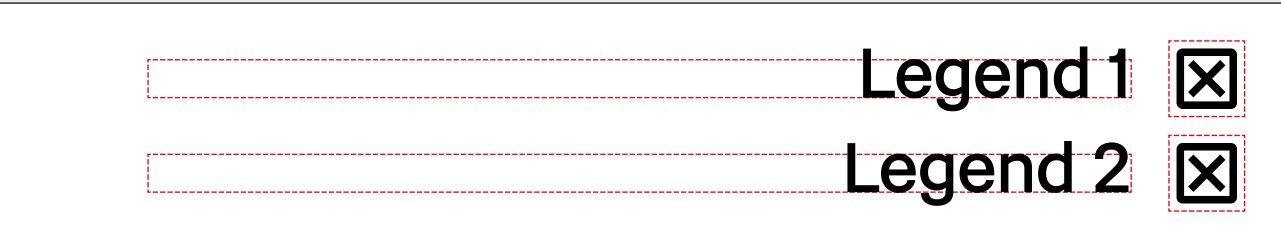
2x | x |

x  
1.5x  
x



Left aligned configuration

| x | 2x |



Right aligned configuration

The diagram illustrates two configurations for legend alignment. The 'Left aligned configuration' shows two legend entries, 'Legend 1' and 'Legend 2', each consisting of a square pictogram icon with an 'X' and the text to its right. The pictograms are aligned to the left. Dimension lines indicate a vertical spacing of 'x' between the top of the first legend and the top of the second, and a horizontal spacing of '2x' between the left edge of the first legend and the left edge of the second. The 'Right aligned configuration' shows the same two legend entries, but the pictograms are aligned to the right. Dimension lines indicate a vertical spacing of 'x' between the bottom of the first legend and the bottom of the second, and a horizontal spacing of '2x' between the right edge of the first legend and the right edge of the second.

### Pictogram and legend

- Layout for pictogram and text and spacing between lines
- The centre of the pictogram is always aligned to the centre of the x-height of the legend

# Sign Family

## 6.2 Basic Elements

Diagram illustrating the left aligned configuration of a sign element. The sign contains the word "Legend" and two secondary pictograms (represented by squares with an 'X'). Dimensions are indicated by dashed boxes and labels: the word "Legend" is 2x wide and x high; the secondary pictograms are 1.6x wide and 1.6x high. The spacing between the pictogram and the text is 0.4x.

Left aligned configuration

Diagram illustrating the right aligned configuration of a sign element. The sign contains the word "Legend" and two secondary pictograms (represented by squares with an 'X'). Dimensions are indicated by dashed boxes and labels: the word "Legend" is 1.6x wide and 1.6x high; the secondary pictograms are 1.6x wide and 1.6x high. The spacing between the pictogram and the text is 0.4x. The word "Legend" is 2x wide and x high.

Right aligned configuration

### Secondary pictogram

- Application of secondary pictograms
- Secondary pictograms are sized at 1.6x

# Sign Family

## 6.2 Basic Elements

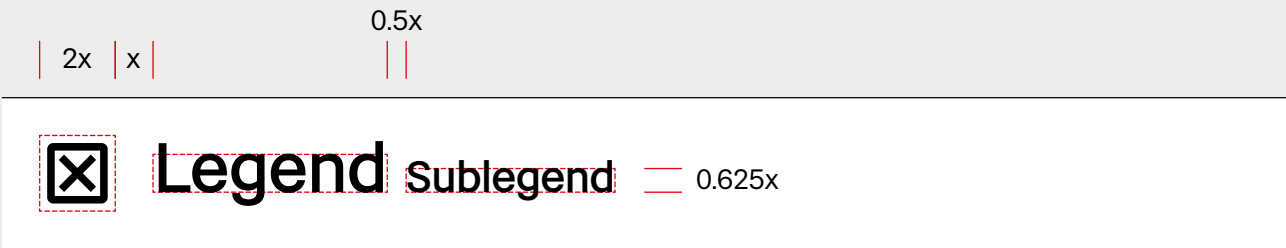


Diagram illustrating the left aligned configuration of a sign element. The sign consists of a square icon with an 'X' inside, followed by the text "Legend" and "Sublegend". The icon is sized at 2x, the "Legend" text at x, and the "Sublegend" text at 0.625x. The vertical spacing between the icon and the text is 0.5x. The overall height of the sign is x.

Left aligned configuration

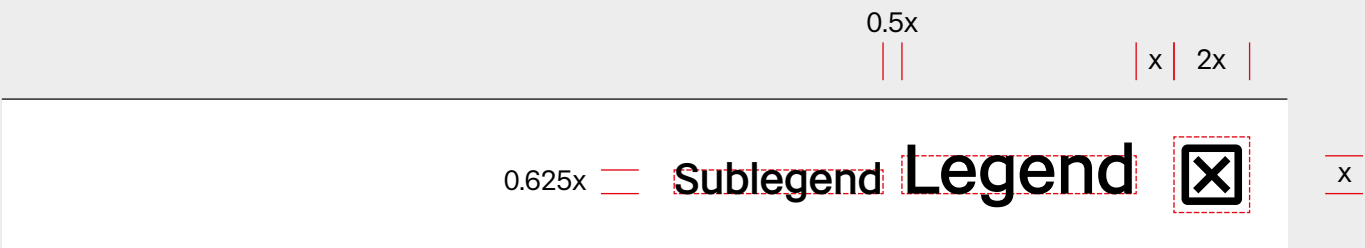


Diagram illustrating the right aligned configuration of a sign element. The sign consists of the text "Sublegend" and "Legend", followed by a square icon with an 'X' inside. The "Sublegend" text is sized at 0.625x, the "Legend" text at x, and the icon at 2x. The vertical spacing between the text and the icon is 0.5x. The overall height of the sign is x.

Right aligned configuration

- Sublegend**
- Sign layout when a sublegend is required
  - Sublegend text is sized at 0.625x

# Sign Family

## 6.2 Basic Elements

| 2x | x |

x  
x



Legend

Sublegend 1

Sublegend 2

— 0.625x  
— 0.625x  
— 0.625x

Left aligned configuration

| x | 2x |

0.625x —  
0.625x —  
0.625x —

Legend

Sublegend 1

Sublegend 2



x  
x

Right aligned configuration

### Multiple line sublegends

- Sublegend layout when more than one line is required for a sublegend
- Sublegend text is sized at 0.625x

# Sign Family

## 6.2 Basic Elements

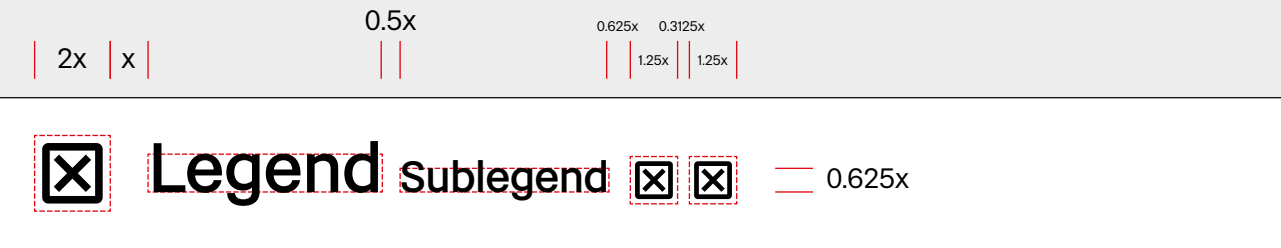


Diagram illustrating the left aligned configuration of a legend sign. The sign consists of a pictogram (a square with an 'X') followed by the text "Legend" and "Sublegend", followed by two more pictograms. Dimension lines indicate the following measurements: 2x (width of the first pictogram), x (width of the second pictogram), 0.5x (height of the text), 0.625x (width of the first sublegend pictogram), 0.3125x (width of the second sublegend pictogram), 1.25x (width of the third sublegend pictogram), and 1.25x (width of the fourth sublegend pictogram). A dimension line of 0.625x is shown below the text "Legend".

Left aligned configuration

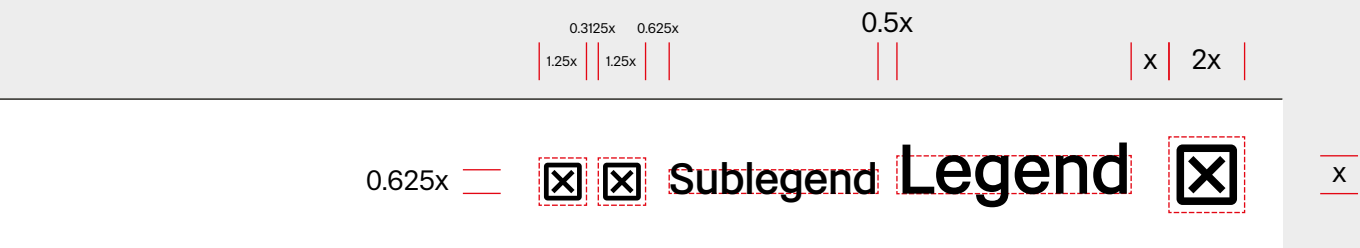


Diagram illustrating the right aligned configuration of a legend sign. The sign consists of two pictograms followed by the text "Sublegend" and "Legend", followed by a final pictogram. Dimension lines indicate the following measurements: 0.3125x (width of the first sublegend pictogram), 0.625x (width of the second sublegend pictogram), 1.25x (width of the third sublegend pictogram), 1.25x (width of the fourth sublegend pictogram), 0.5x (height of the text), x (width of the final pictogram), and 2x (width of the final pictogram). A dimension line of 0.625x is shown to the left of the text "Sublegend".

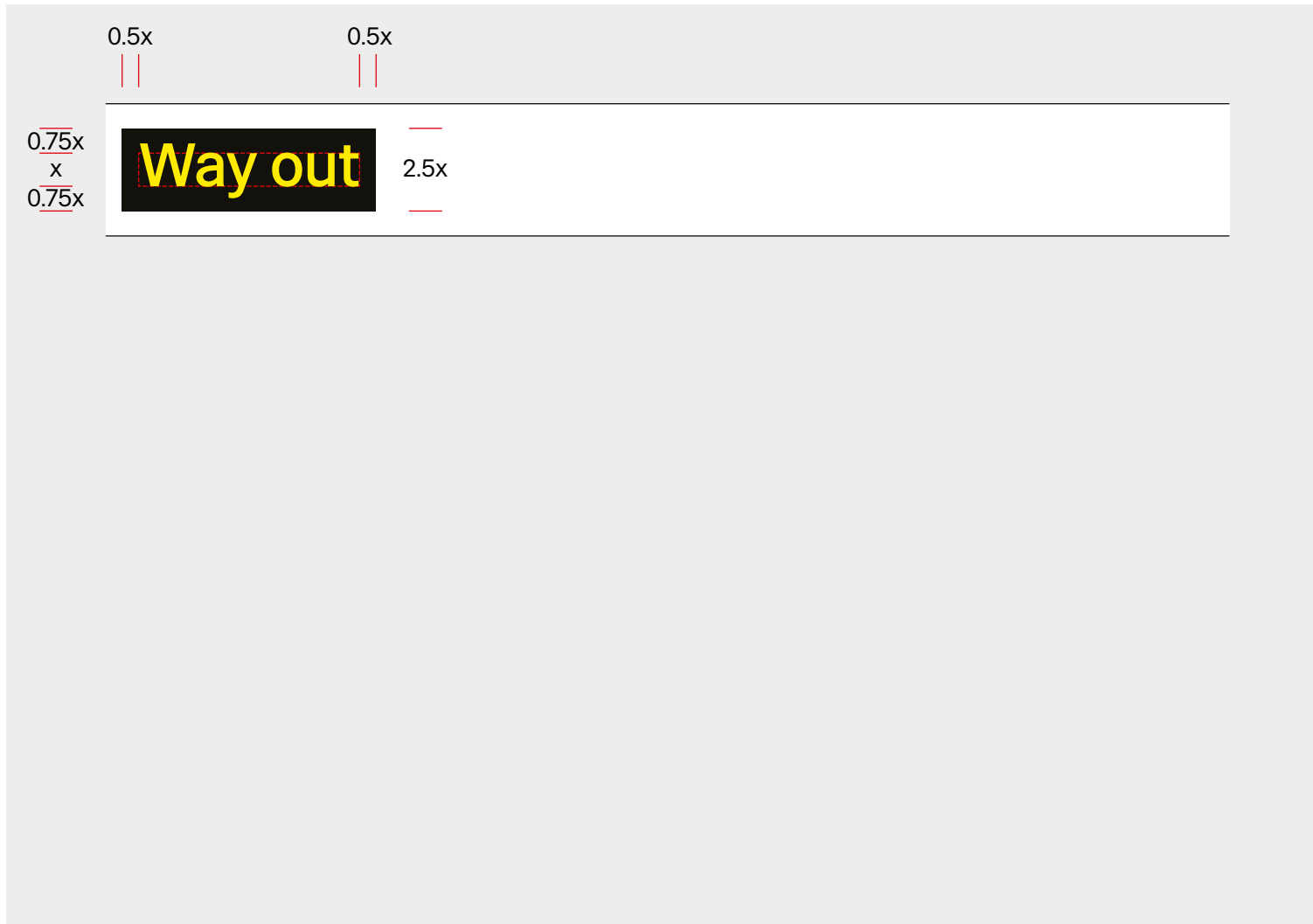
Right aligned configuration

### Sublegend pictograms

- Application of sublegend pictograms
- Sublegend text is sized at 0.625x
- Sublegend pictograms are sized at 1.25x

# Sign Family

## 6.2 Basic Elements

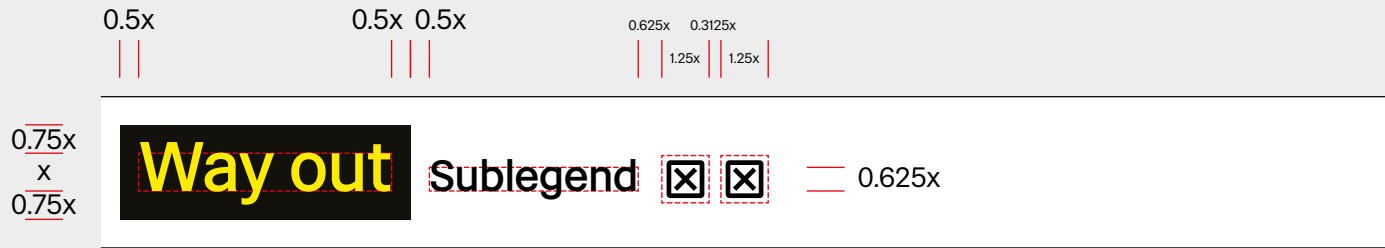


### Way out patch

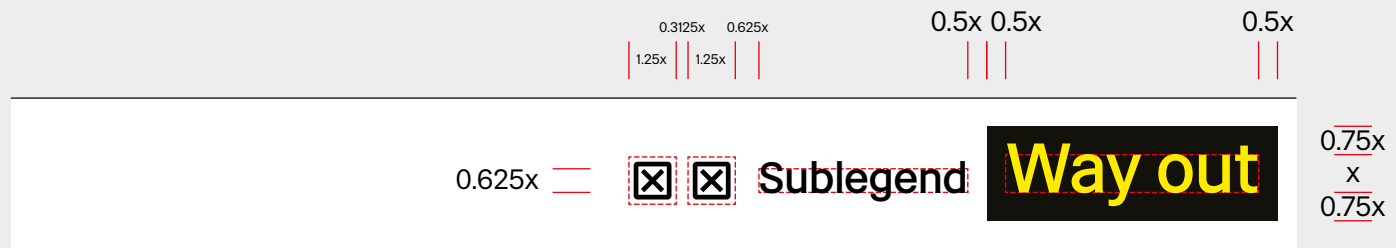
- Application of way out patch
- This system utilises a way out patch for indicating station exits
- Basic way out patches are not accompanied by a pictogram

# Sign Family

## 6.2 Basic Elements



Left aligned configuration



Right aligned configuration

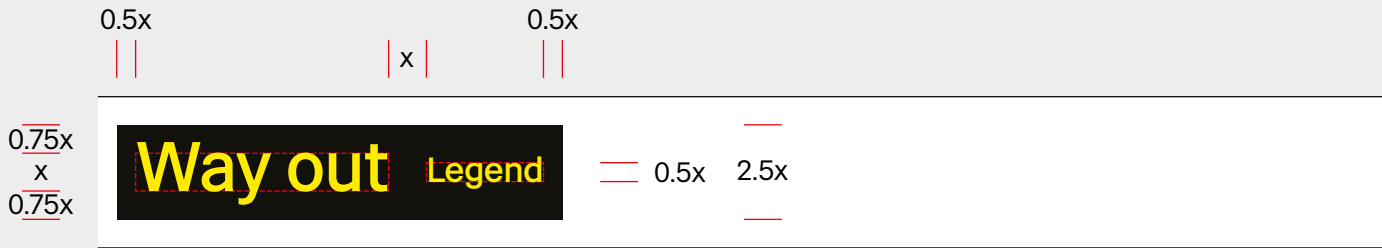
### Way out patch and sublegend

- Way out patch with sublegend and sublegend pictogram configuration

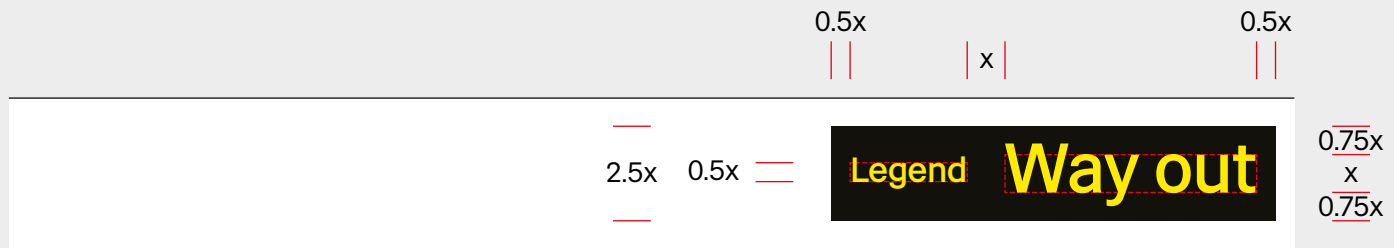


# Sign Family

## 6.2 Basic Elements



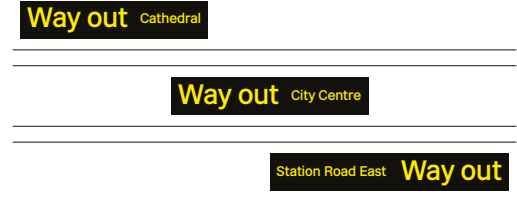
Left aligned configuration



Right aligned configuration

### Way out patch with sublegend

- Way out patch with destination sublegend contained in patch



Layout examples

# Sign Family

## 6.2 Basic Elements

0.5x
| x |
0.5x

$\frac{0.75x}{x}$   
 $\frac{0.75x}{0.75x}$

Way out

Legend
Legend

0.5x
0.5x
0.5x

2.5x

Left aligned configuration

0.5x
| x |
0.5x

2.5x

0.5x
0.5x
0.5x

Legend
Legend

Way out

$\frac{0.75x}{x}$   
 $\frac{0.75x}{0.75x}$

Right aligned configuration

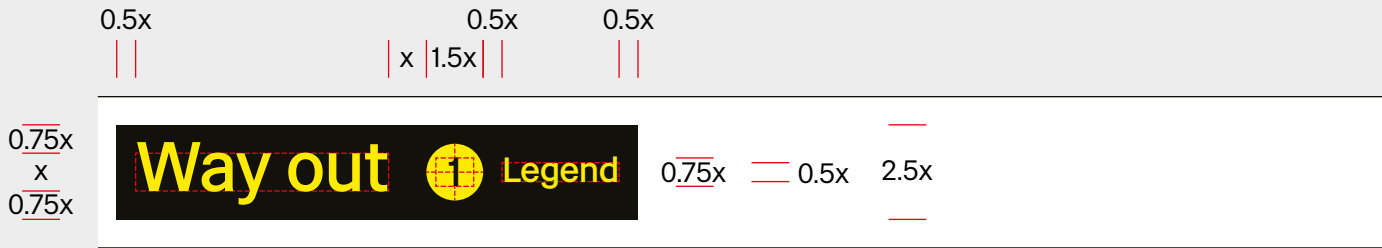
### Way out patch with sublegend

- Way out patch with double line destination sublegends contained in patch

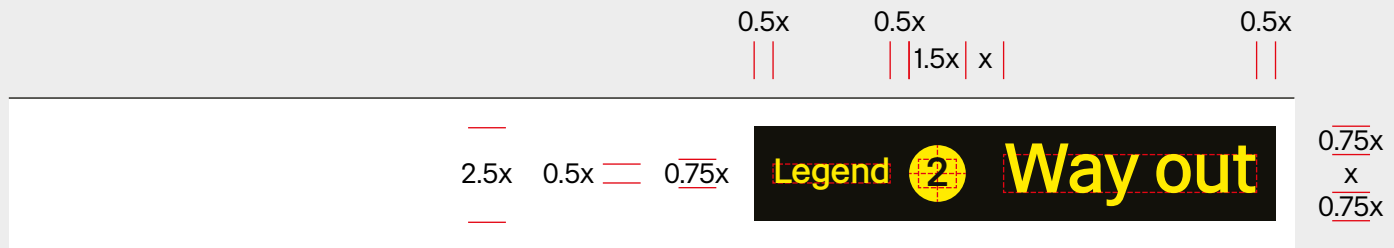
Layout examples

# Sign Family

## 6.2 Basic Elements



Left aligned configuration



Right aligned configuration

### Way out patch with number and sublegend

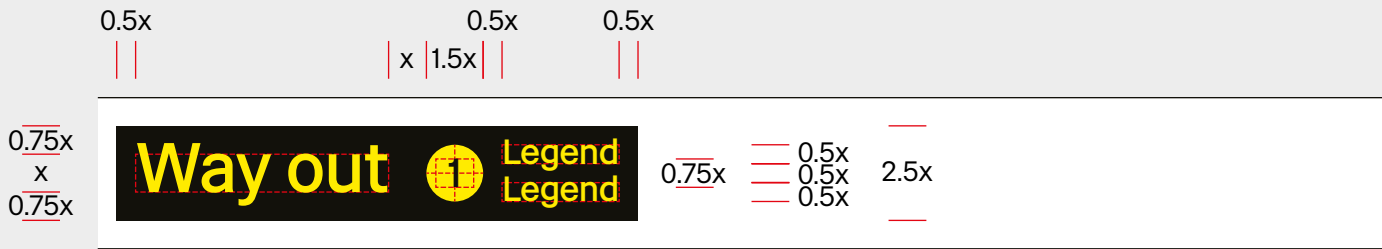
- Way out patch with number and sublegend



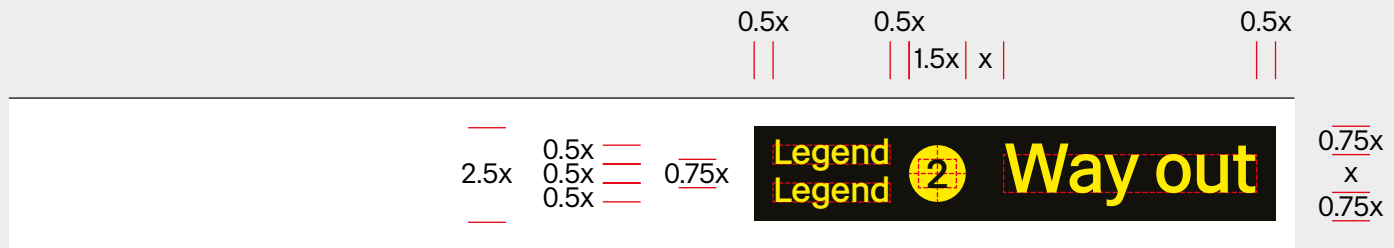
Layout examples

# Sign Family

## 6.2 Basic Elements



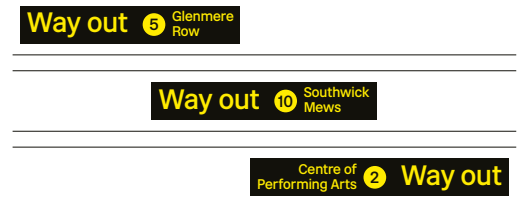
Left aligned configuration



Right aligned configuration

### Way out patch with number and double line sublegend

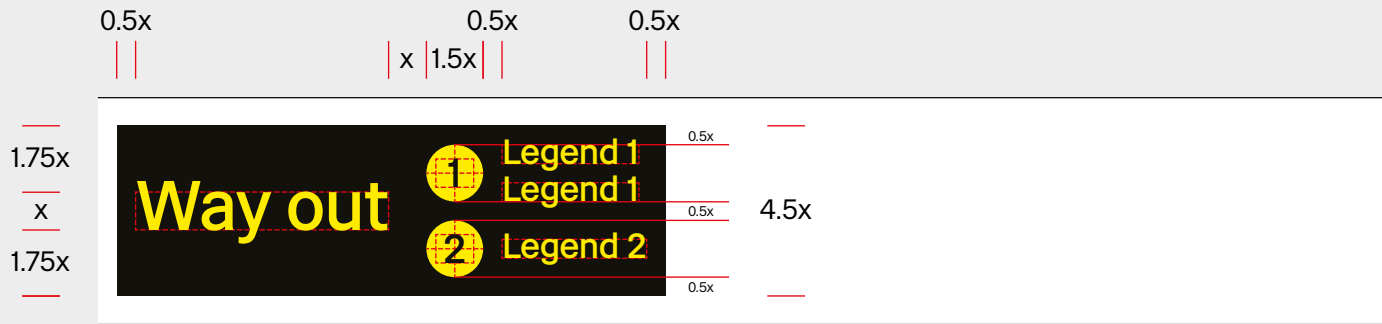
- Way out patch with number and double line destination sublegends contained in patch



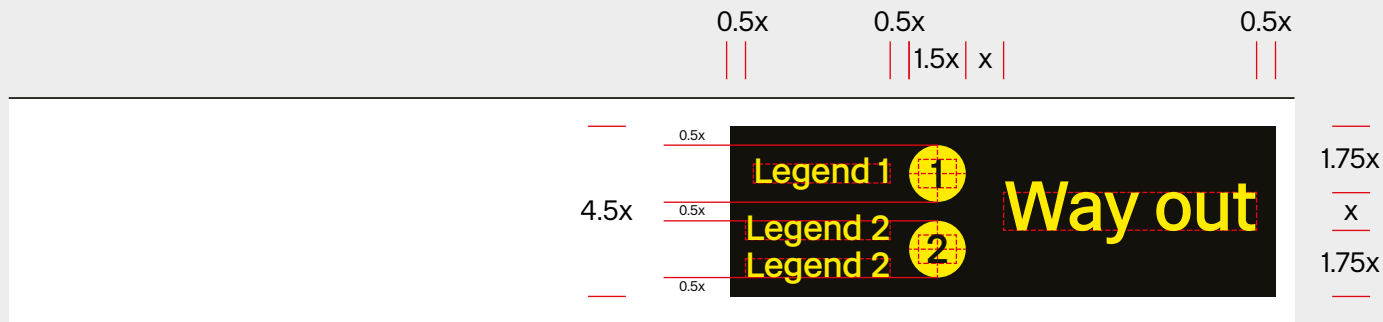
Layout examples

# Sign Family

## 6.2 Basic Elements



Left aligned configuration



Right aligned configuration

### Way out patch with multiple numbers and sublegends

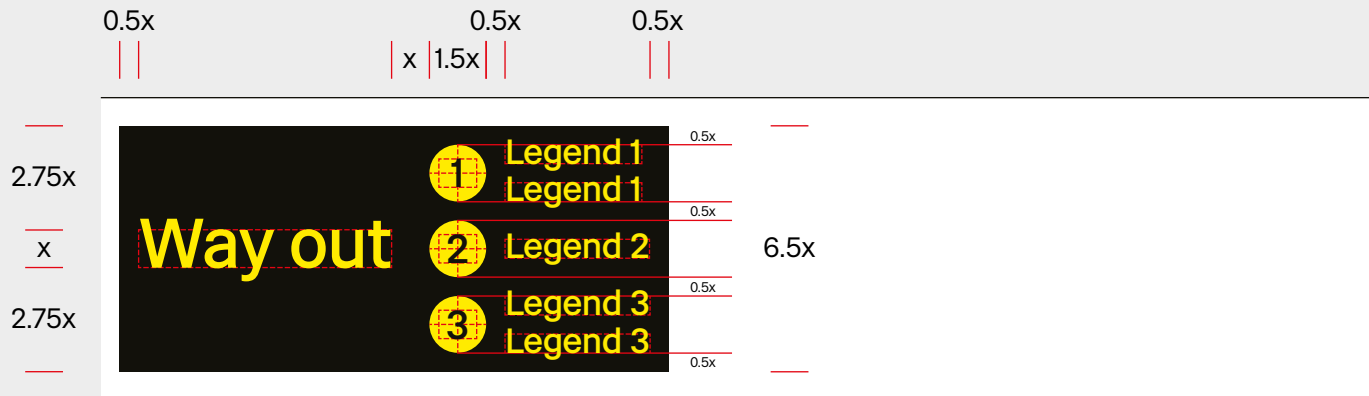
- Way out patch with numbers and double line destination sublegends contained in patch



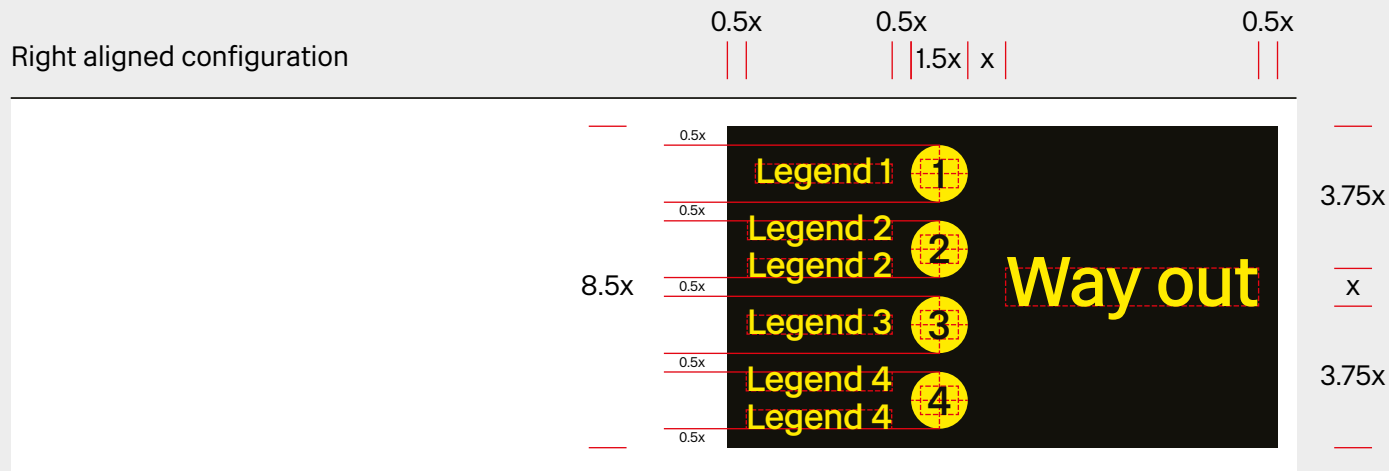
Layout examples

# Sign Family

## 6.2 Basic Elements



Left aligned configuration



Right aligned configuration

### Way out patch with multiple numbers and sublegends

- Way out patch with numbers and double line destination sublegends contained in patch

#### Additional notes

The Way Out patch can be combined to indicate a maximum of four exits in the same direction.

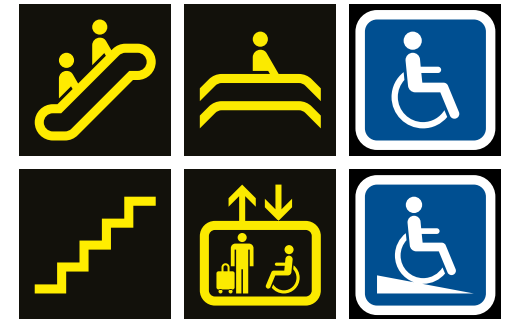
# Sign Family

## 6.2 Basic Elements



### Way out patch pictograms

- Pictograms for use on Way out patches
- These pictograms are included within the pictogram library



Pictograms for use on Way out patches

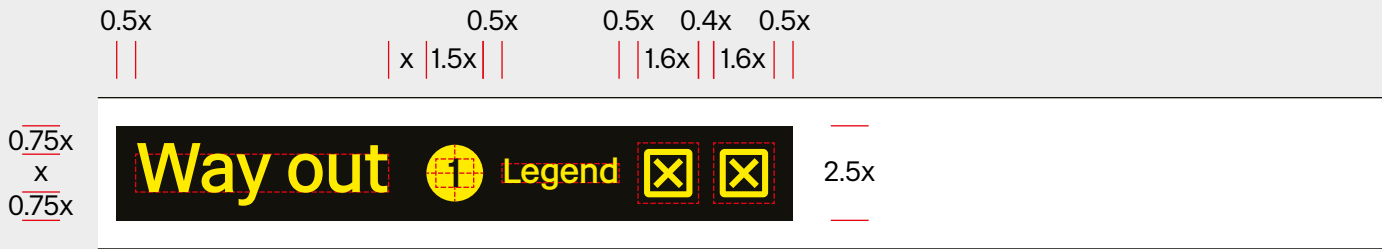
### Notes

Secondary pictograms can be utilised within the Way Out patch to signify the mode of vertical circulation available to access the Way Out route.

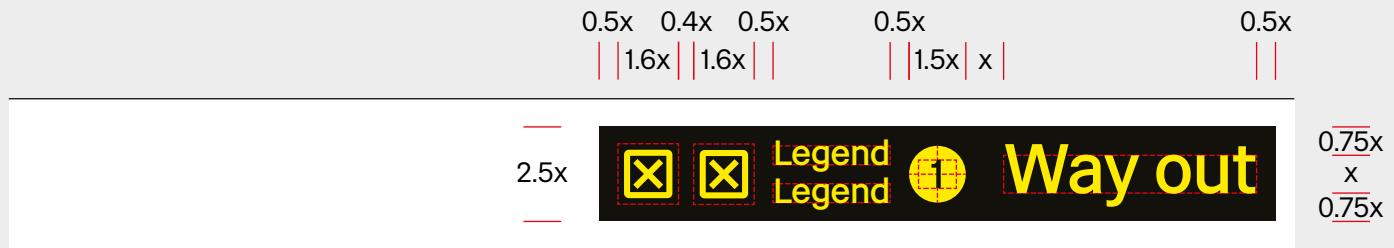
The accessibility pictogram is used to identify a Way Out route which is fully accessible from the point it is identified upon a sign.

# Sign Family

## 6.2 Basic Elements



Left aligned configuration



Right aligned configuration

### Way out patch pictogram

- Application of pictograms on Way out patches

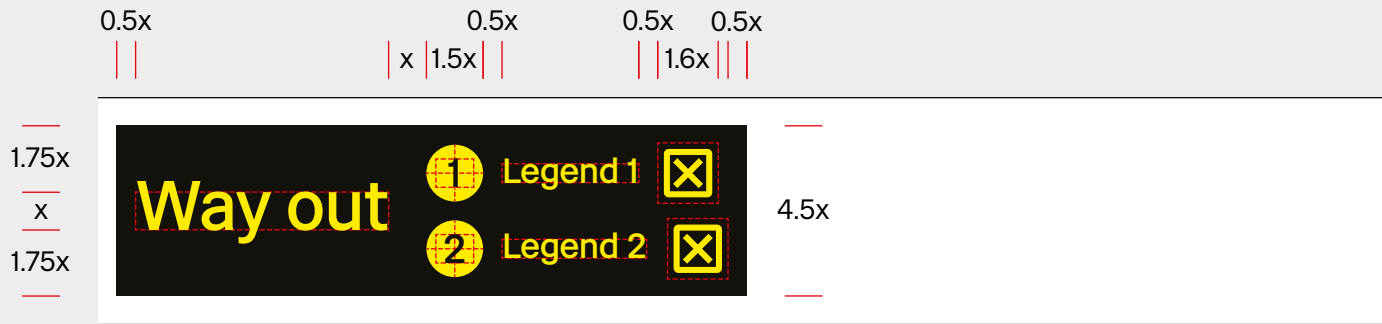


Layout examples

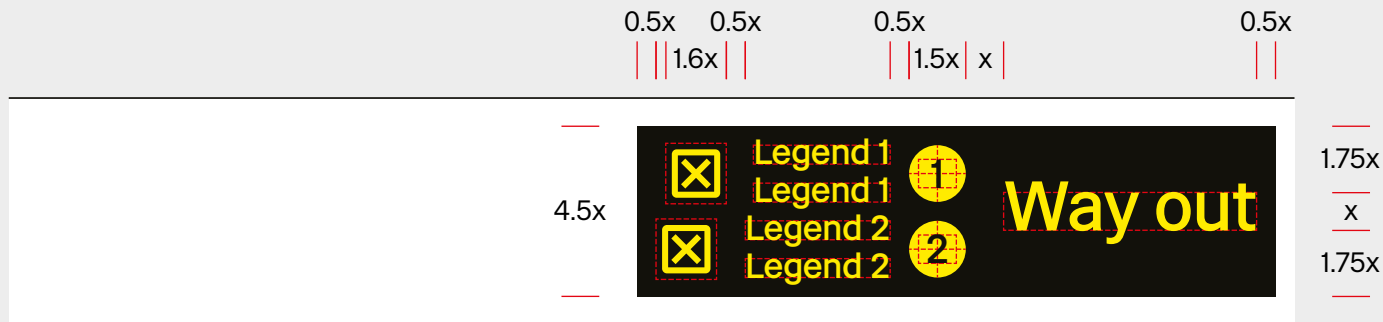


# Sign Family

## 6.2 Basic Elements



Left aligned configuration



Right aligned configuration

### Way out patch pictogram

- Application of pictograms on Way out patches



Layout examples

# Sign Family

## 6.2 Basic Elements

0.5x 0.5x

0.75x  
x  
x  
0.5x  
0.75x

**Way out**  
Legend

4x

0.5x 0.5x

0.75x  
x  
x  
0.5x  
0.5x  
0.5x  
0.75x

**Way out**  
Legend  
Legend

5x

### Way out patch bespoke

- Way out patches for use in bespoke situations
- Way out patches should be centred within panels
- Way out patches may sit within a white sign panel befitting the station architecture or local conditions



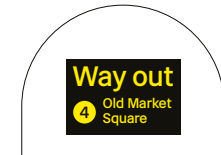
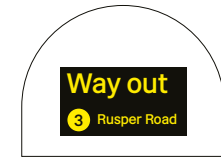
Layout examples

# Sign Family

## 6.2 Basic Elements

### Way out patch bespoke

- Way out patches for use in bespoke situations
- Way out patches should be centred within panels
- Way out patches should sit within a white sign panel befitting the station architecture or local conditions



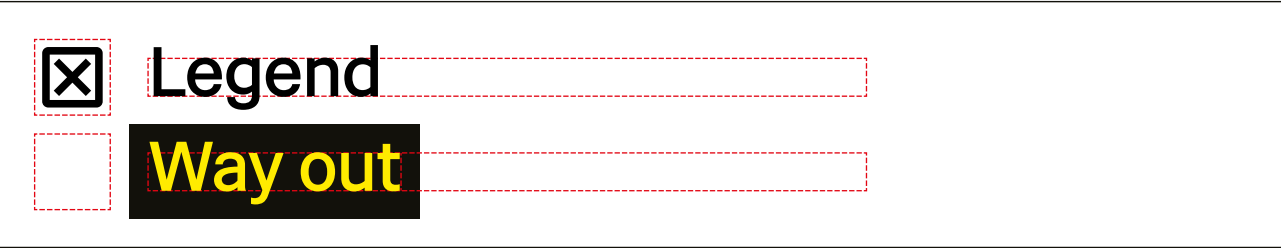
Layout examples

# Sign Family

## 6.2 Basic Elements

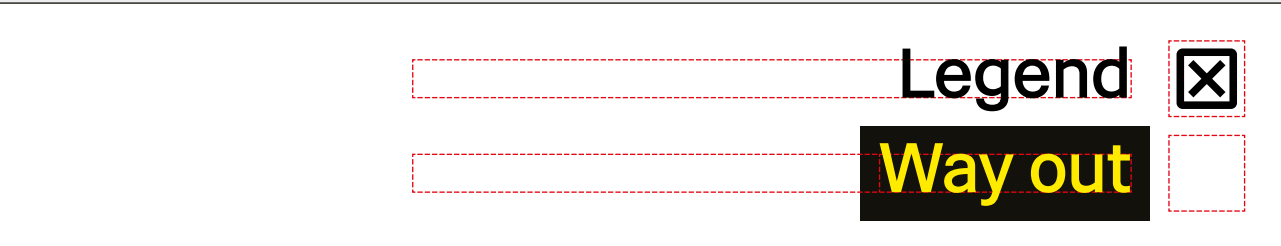
2x | x |

x  
1.5x  
x



Left aligned configuration

| x | 2x |



Right aligned configuration

The diagram illustrates two sign configurations. The 'Left aligned configuration' shows a legend box with an 'X' icon and the word 'Legend' on the top line, and a 'Way out' sign on the bottom line. The 'Right aligned configuration' shows the legend box and 'Way out' sign on the top line, and the 'X' icon and 'Way out' sign on the bottom line. Dimensions are indicated by lines and text: '2x' and 'x' for the legend box, 'x', '1.5x', and 'x' for the sign height, and 'x' and '2x' for the legend box width.

### Way out patch

- For use when Way out patches are added to directional signs


### Additional notes

Way out information are always positioned at the bottom of an information group.

# Sign Family


## 6.2 Basic Elements

| 2x | x |
| x | 2x |
| 2x |
| 2x |
| 2x |

x

Legend
A
B
C
D
x

Left aligned configuration

| 2x |
| 2x |
| 2x |
| 2x |
| x |
| x |
| 2x |

x
A
B
C
D
Legend

x

Right aligned configuration

### Bus Stop identifier

- For use when directing to bus and coach stops
- Layout for fewer than four consecutive stops/stands.

 Buses E F G H

 Coach stop M

A B T Bus station 

K P Coach stand 

Layout examples

#### Additional notes

As default the bus ID signs utilise the **Red** colour: RAL 3020, PANTONE® 485 C, C0 M100 Y100 K0.


Local transport operators may use specific colours to identify services. These colours can be used instead of the default red but contrast between the text and background colour should adhere to the legibility standards established in this document.

All layout examples shown feature the brand colours from the TfL guideline:

# Sign Family


## 6.2 Basic Elements

2x | x |
0.5x 0.5x
| x | 2x | | | 2x |

x

Legend
A
to
E
0.625x
x

Left aligned configuration

0.5x 0.5x
| 2x | | | 2x | x |
| x | 2x |

x
0.625x
A
to
E
Legend

x

Right aligned configuration

### Bus Stop identifier

- For use when directing to bus and coach stops
- Layout for more than four consecutive stops/stands.

---

 Coaches R to X

---

 Bus stand B to I

---

A to E Coach stand 

---

L to Q Bus stop 


---

Layout examples

# Sign Family


## 6.2 Basic Elements

2x | x |
0.5x
0.625x 0.3125x 0.3125x 0.3125x  
| 1.25x | | 1.25x | | 1.25x | | 1.25x |

x

0.625x

Left aligned configuration

0.3125x 0.3125x 0.3125x 0.625x
0.5x
| x | 2x |  
| 1.25x | | 1.25x | | 1.25x | | 1.25x |


0.625x

x

Right aligned configuration


### Sublegend Bus Stop identifier

- For use when directing to bus and coach stops with a sublegend
- Layout for less than four consecutive stops/stands.


---

 **Buses** Old Market Street A B E G


---

 **Coach stop** Victor Avenue U

---

W R Gilbert Road **Bus station** 

---

L M N Park Road **Coaches** 

Layout examples

# Sign Family


## 6.2 Basic Elements

2x | x |

0.5x  
||

0.625x 0.3125x 0.3125x  
| 1.25x | | 1.25x |

x



Legend

Sublegend

A

to

E

0.390625x

0.625x

Left aligned configuration

0.3125x 0.3125x 0.625x  
| 1.25x | | 1.25x |

0.5x  
||

x | 2x |

0.625x

0.390625x


A

to

E

Sublegend

Legend




x

Right aligned configuration

### Sublegend Bus Stop identifier

- For use when directing to bus and coach stops with a sublegend
- Layout for more than four consecutive stops/stands.

---



**Coach stops**


Craven Avenue

B

to

G

---



**Bus stands**

Montpelier Street

T

to

X

---


D

to

J

Bacton Lane

**Coach Station**



---


N

to

S

Station Approach

**Buses**

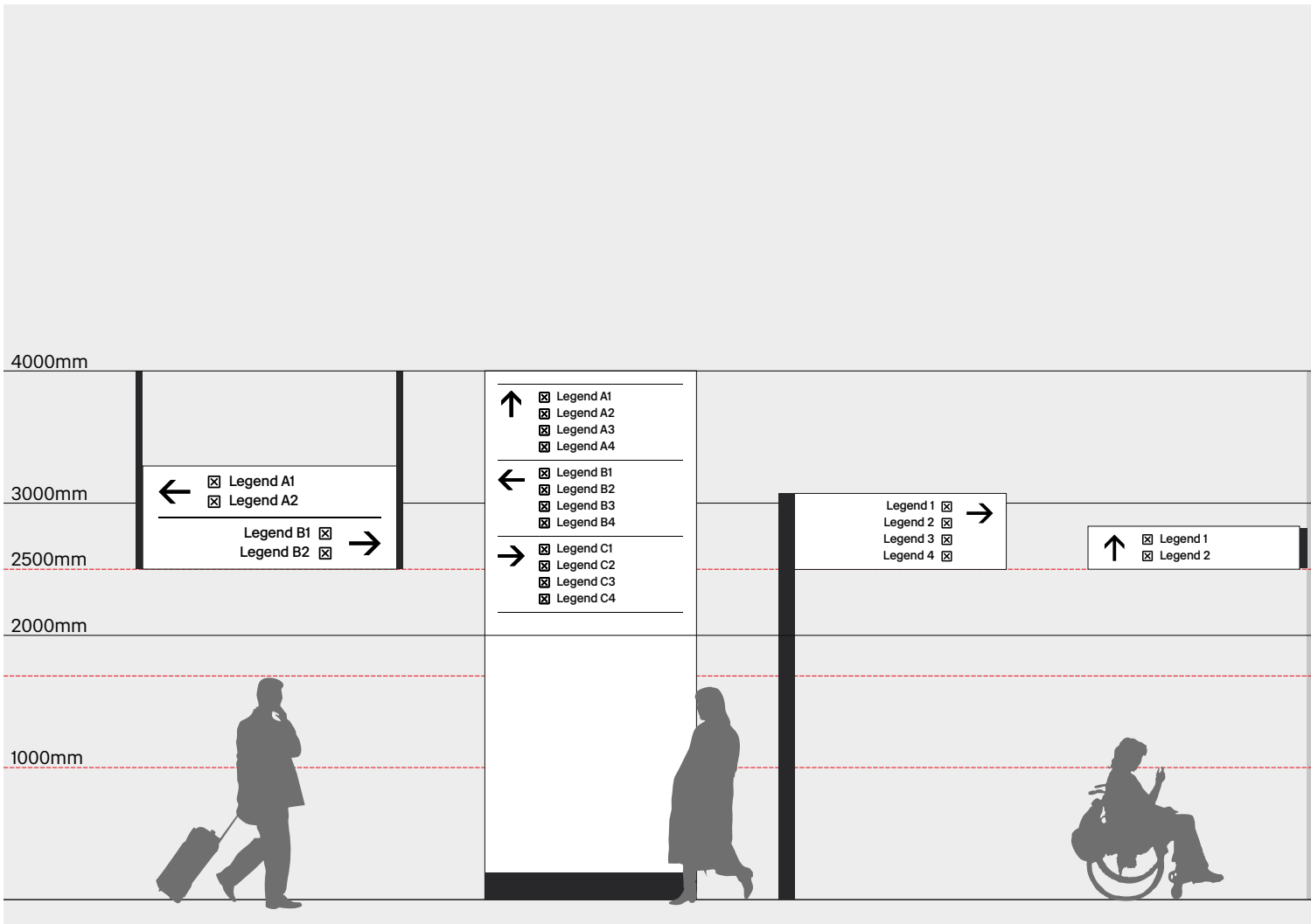


Layout examples



# Sign Family

## 6.3 Directional



### Function

- Provides directions to station destinations (e.g. platforms, facilities, vertical circulation).

### Typical Content

- Destination text with pictograms.
- Directional arrows.

### Typical Placement:

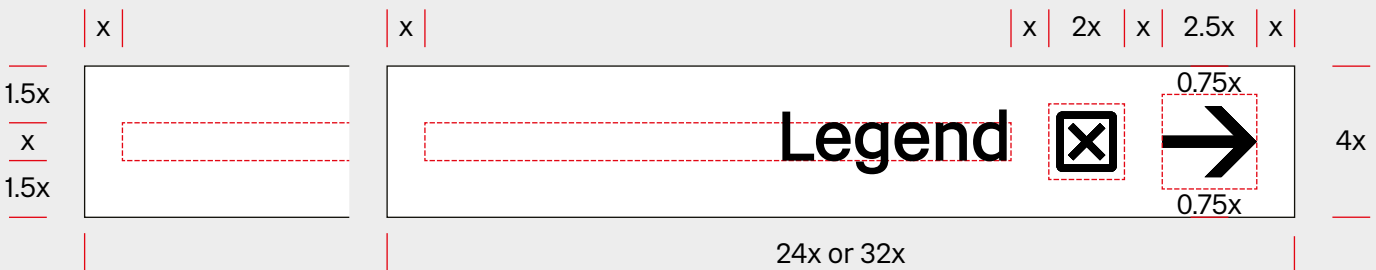
- At key decision points in the station to provide direction.
- High level, visible above crowds and can be read from long distances.
- Around the edges of the concourse (perimeter ribbon).
- Care should be taken so they do not obstruct flows or cause congestion (totem and floor mounted).

### Additional notes

- Projected and suspended signs should be mounted at a minimum of 2,500mm from the finished floor level.
- Wall mounted directional signs need to be fixed sufficiently high as not to be obscured by passengers. They should never be placed lower than 1,000mm.
- Arrows should not point at each other

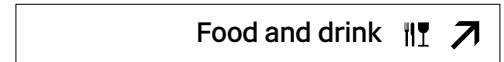
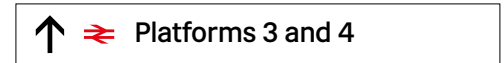
# Sign Family

## 6.3 Directional

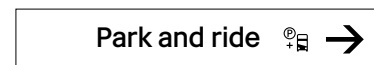
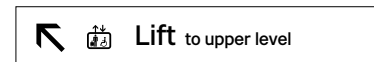


### Directional – One line

- For use when only one direction is required



Large size example



Small size example

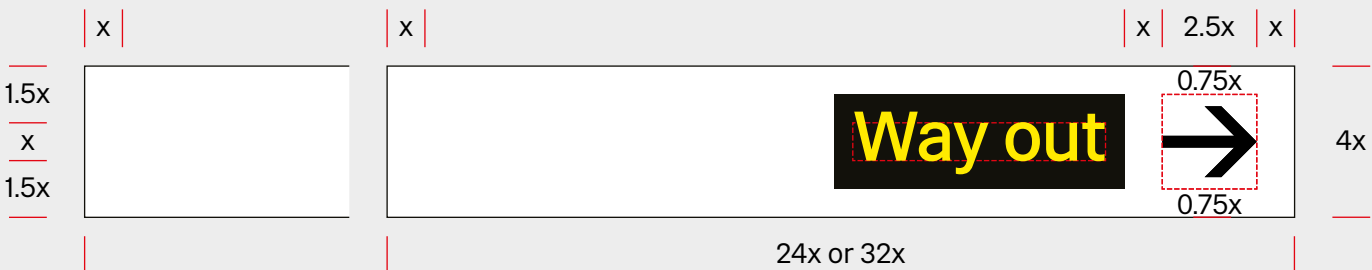
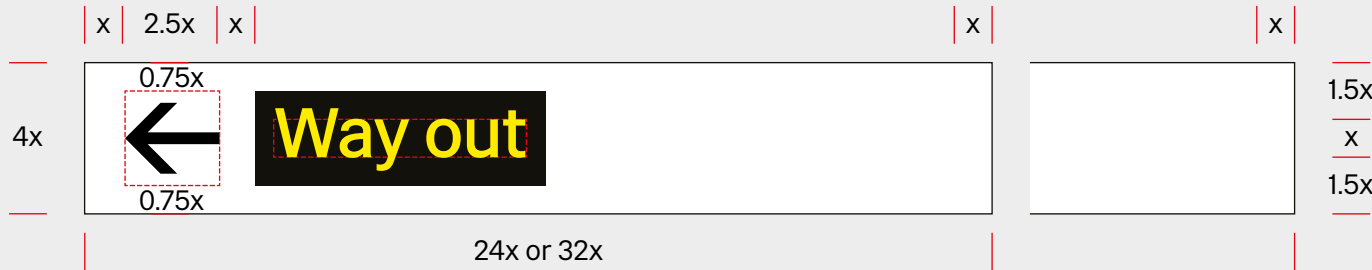
### Size options

x-height	Width		Height
	Large	Small	
40mm	1,280mm	960mm	160mm
50mm	1,600mm	1,200mm	200mm
60mm	1,920mm	1,440mm	240mm
80mm	2,560mm	1,920mm	320mm
100mm	3,200mm	2,400mm	400mm

Refer to Section 5.4 for target reading distances

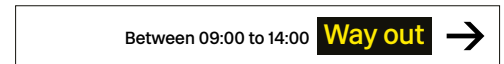
# Sign Family

## 6.3 Directional



### Directional – Way out

- For use when only a Way out patch is required on a single line directional sign



Large size example



Small size example

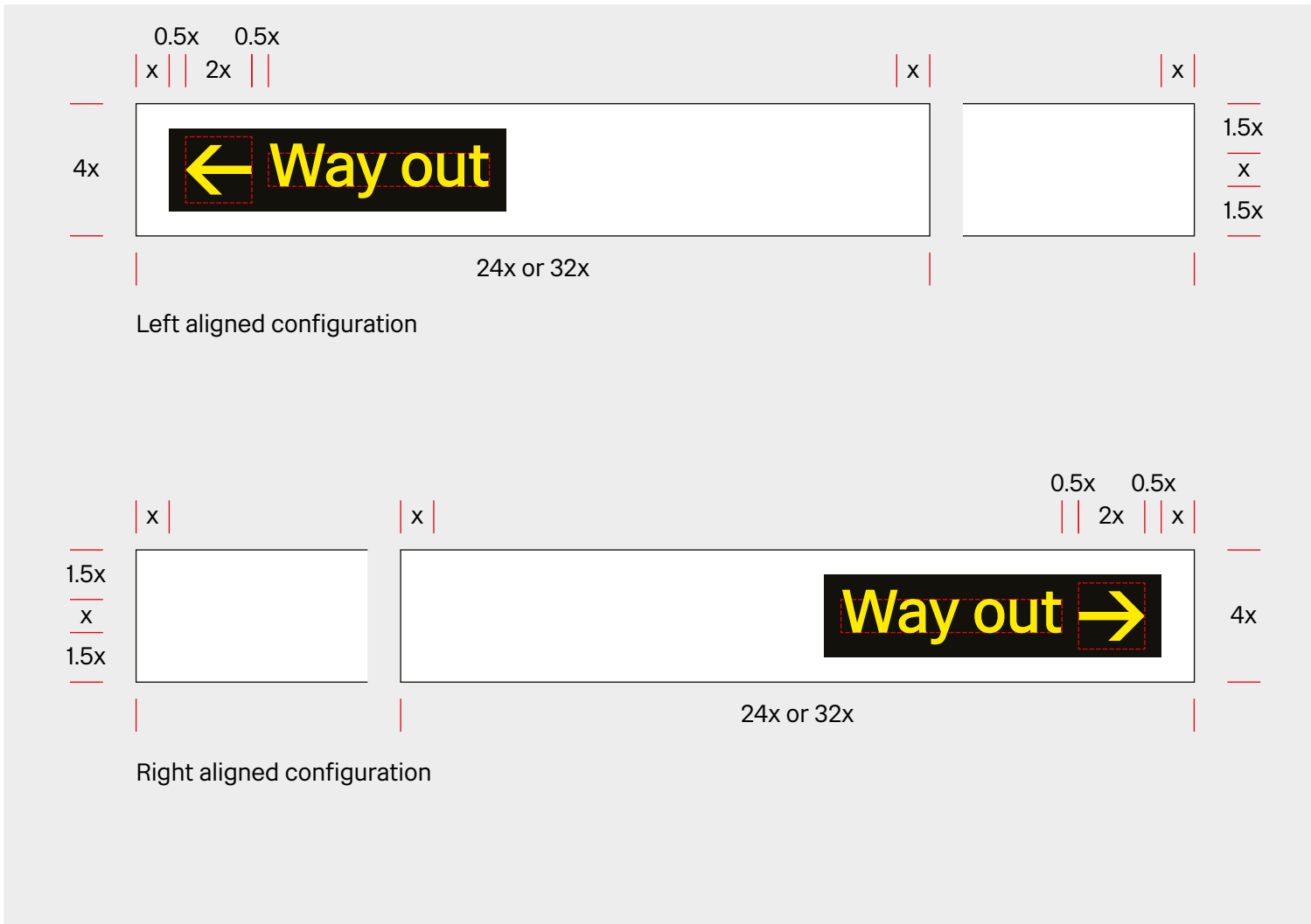
### Size options

x-height	Width		Height
	Large	Small	
40mm	1,280mm	960mm	160mm
50mm	1,600mm	1,200mm	200mm
60mm	1,920mm	1,440mm	240mm
80mm	2,560mm	1,920mm	320mm
100mm	3,200mm	2,400mm	400mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



### Directional – Illuminated Way out

- For use when only an illuminated Way out patch is required on a single line directional sign



Large size example



Small size example

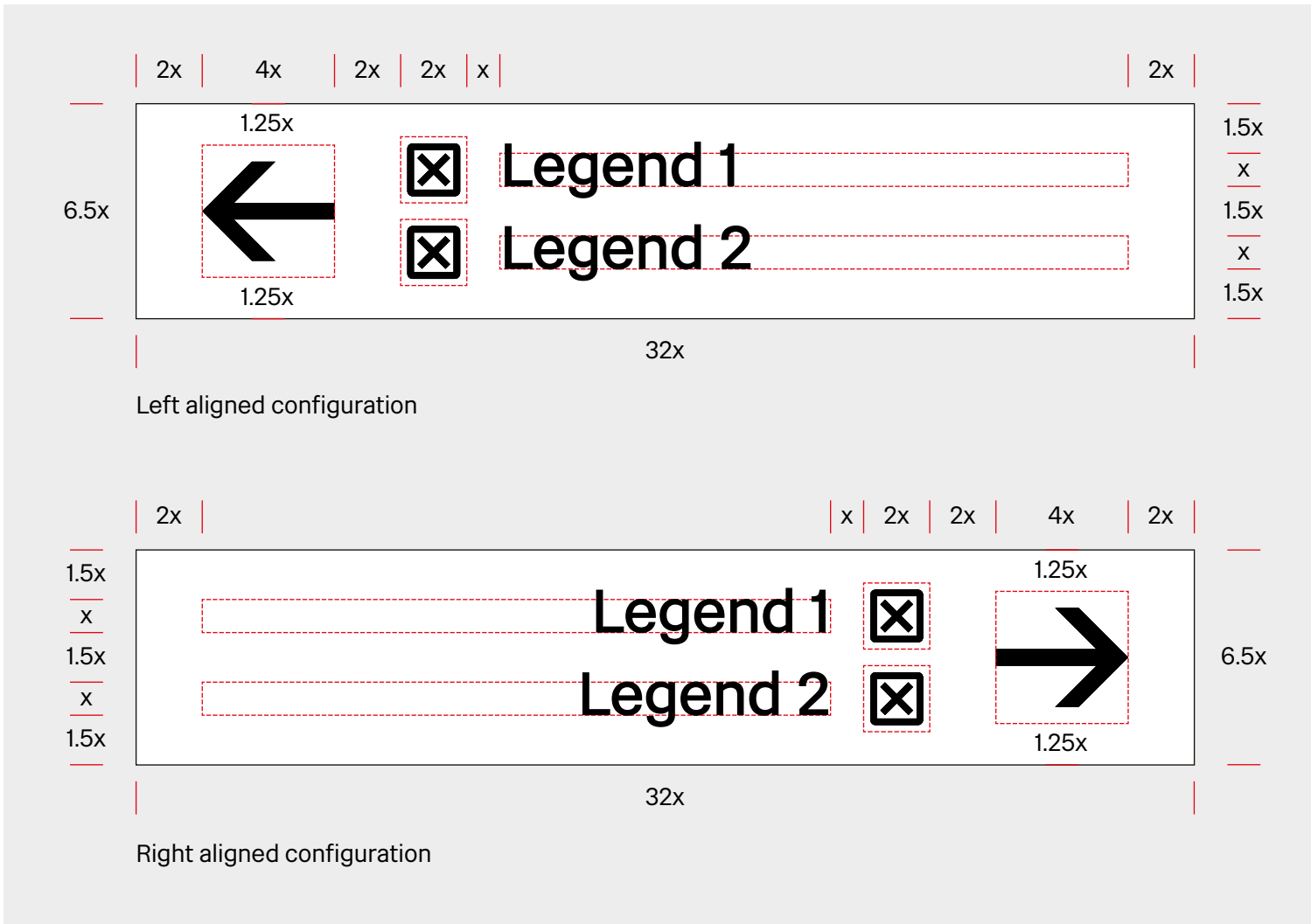
### Size options

x-height	Width		Height
	Large	Small	
40mm	1,280mm	960mm	160mm
50mm	1,600mm	1,200mm	200mm
60mm	1,920mm	1,440mm	240mm
80mm	2,560mm	1,920mm	320mm
100mm	3,200mm	2,400mm	400mm

Refer to Section 5.4 for target reading distances

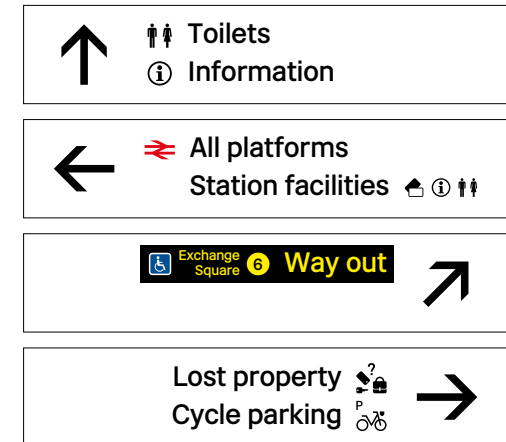
# Sign Family

## 6.3 Directional



**Directional – Two line**

- For use when two directions are required on a sign



Layout examples

**Size options**

x-height	Width	Height
40mm	1,280mm	260mm
50mm	1,600mm	325mm
60mm	1,920mm	390mm
80mm	2,560mm	520mm
100mm	3,200mm	650mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional

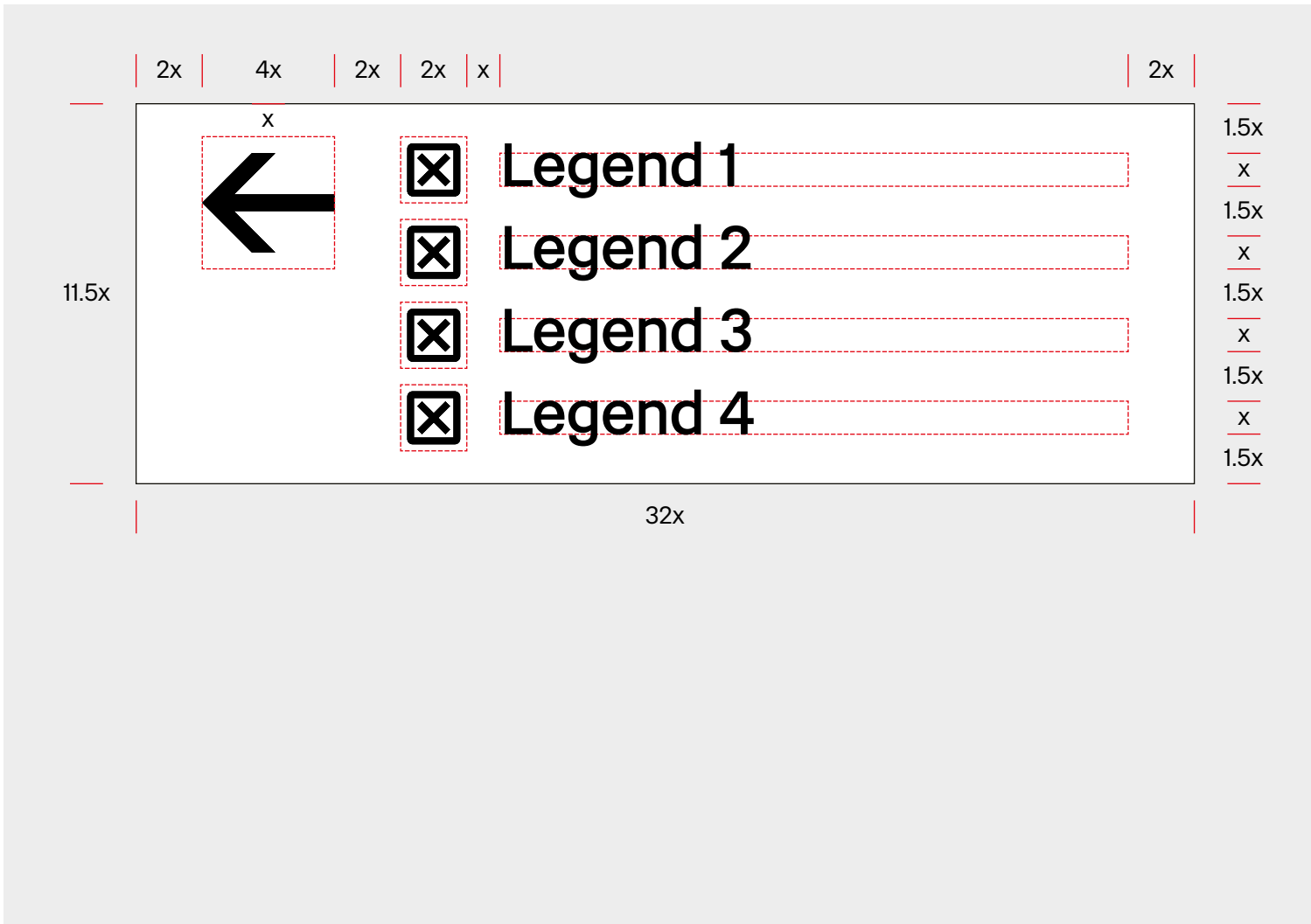
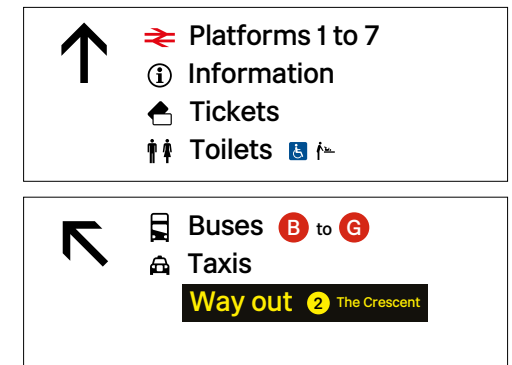


Diagram illustrating the layout of a directional sign with four legends. The sign is 32x wide and 11.5x high. The layout includes a left-pointing arrow (width 4x, height x) and four legend boxes (width 2x each, height x) labeled Legend 1, Legend 2, Legend 3, and Legend 4. The legend boxes are 1.5x high. The overall sign width is 32x and height is 11.5x.

### Directional – Four Line (left aligned)

- For use when four directions are required on a sign



Two examples of directional signs using the four-line layout:

- Example 1: Left arrow pointing up. Legend 1: Platforms 1 to 7 (with red arrow icon). Legend 2: Information (with 'i' icon). Legend 3: Tickets (with ticket icon). Legend 4: Toilets (with male/female icons and accessibility icon).
- Example 2: Left arrow pointing up-left. Legend 1: Buses (with bus icon) B to G (with red circles). Legend 2: Taxis (with taxi icon). Legend 3: Way out (with yellow arrow icon) The Crescent (with yellow circle icon).

Layout examples

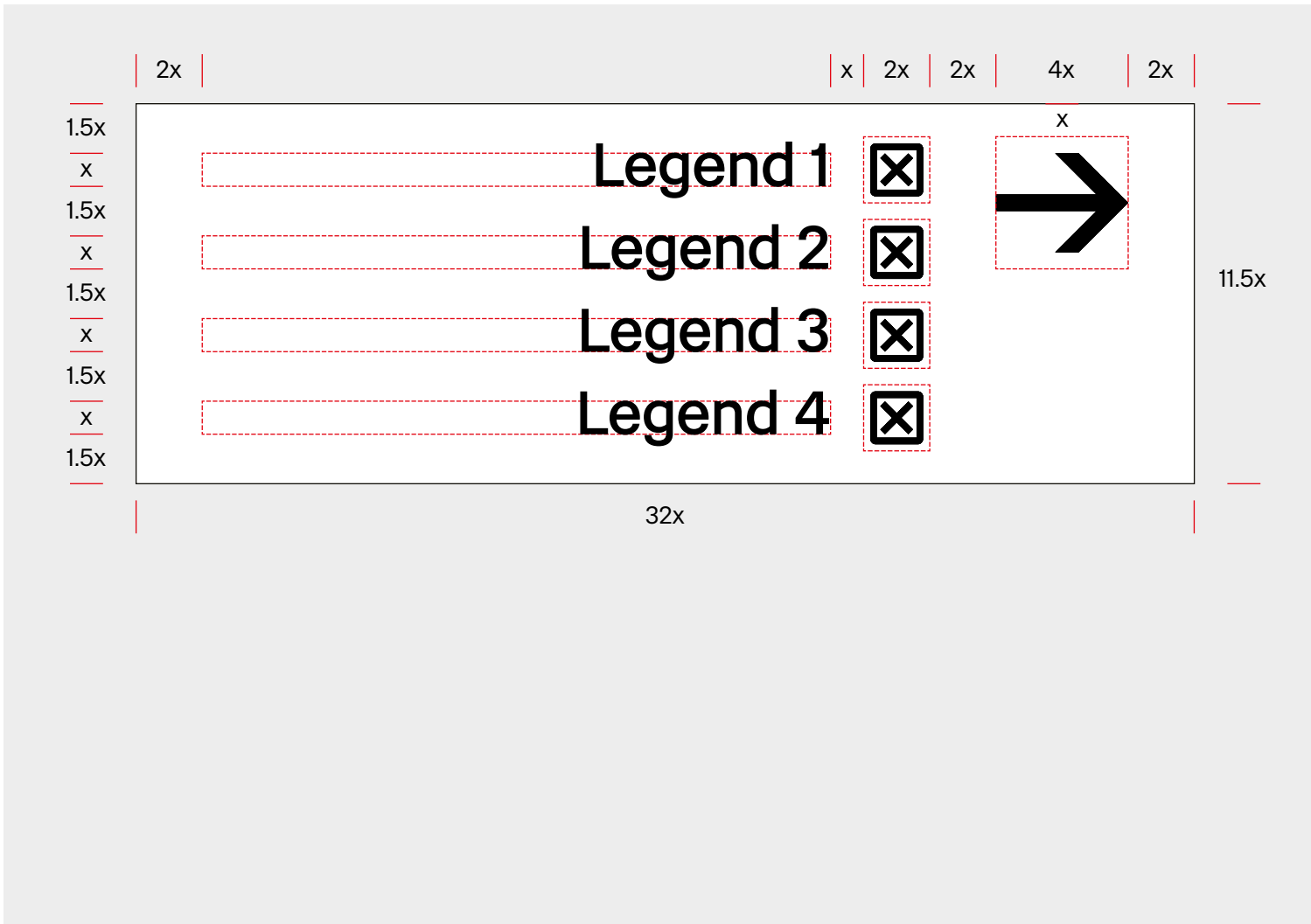
### Size options

x-height	Width	Height
40mm	1,280mm	460mm
50mm	1,600mm	575mm
60mm	1,920mm	690mm
80mm	2,560mm	920mm
100mm	3,200mm	1,150mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



2x | x | 2x | 2x | 4x | 2x

1.5x  
x  
1.5x  
x  
1.5x  
x  
1.5x  
x  
1.5x

Legend 1  
Legend 2  
Legend 3  
Legend 4

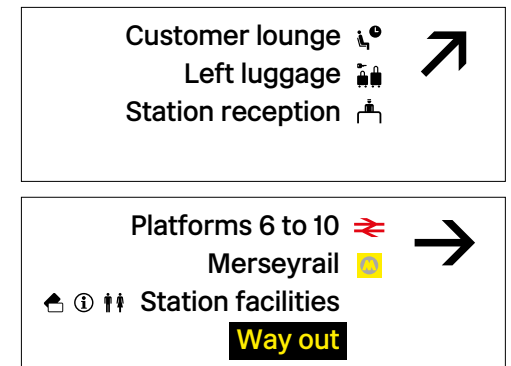
32x

11.5x

x

### Directional – Four line (right aligned)

- For use when four directions are required on a sign



Customer lounge  
Left luggage  
Station reception

Platforms 6 to 10  
Merseyrail  
Station facilities  
**Way out**

Layout examples

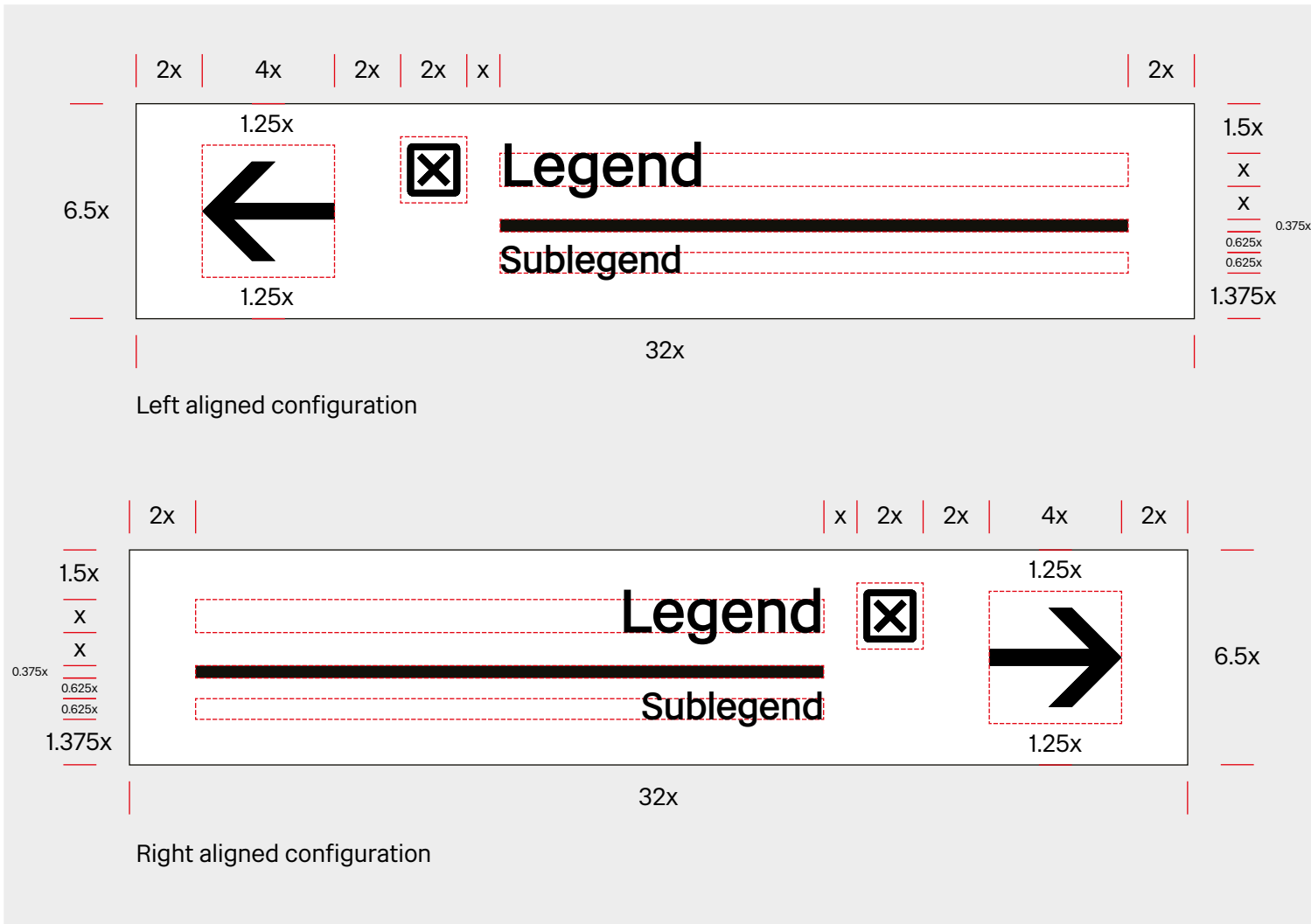
### Size options

x-height	Width	Height
40mm	1,280mm	460mm
50mm	1,600mm	575mm
60mm	1,920mm	690mm
80mm	2,560mm	920mm
100mm	3,200mm	1,150mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



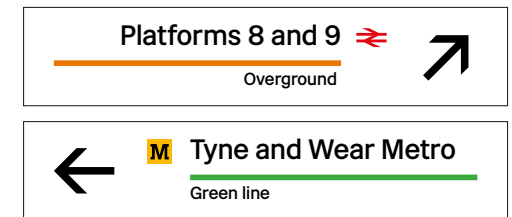
The diagram illustrates two configurations for directional signs: 'Left aligned configuration' and 'Right aligned configuration'. Both configurations are 32x wide. The 'Left aligned configuration' features a left-pointing arrow on the left, a legend box with an 'X' icon, and a sublegend box on the right. The 'Right aligned configuration' features a legend box with an 'X' icon, a sublegend box on the left, and a right-pointing arrow on the right. Dimensions are provided in 'x' units for various elements: arrow width (1.25x), legend box height (1.5x), sublegend box height (1.375x), and text heights (1.5x, x, x, 0.625x, 0.625x). Spacing dimensions are also indicated at the top and bottom of each configuration.

Left aligned configuration

Right aligned configuration

### Directional – Colour band

- For use when a single line colour band sign is required



Layout examples

### Size options

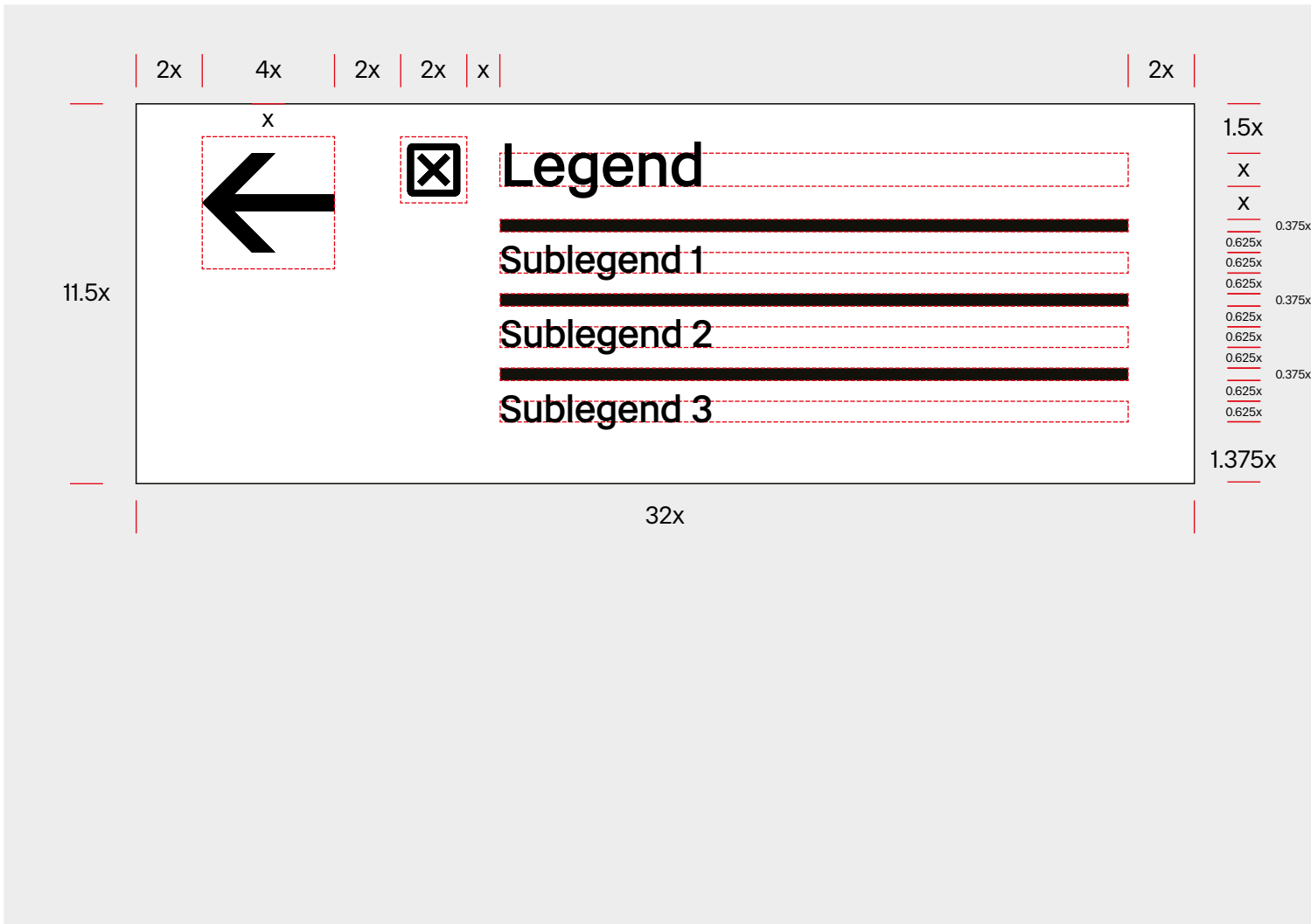
x-height	Width	Height
40mm	1,280mm	260mm
50mm	1,600mm	325mm
60mm	1,920mm	390mm
80mm	2,560mm	520mm
100mm	3,200mm	650mm

Refer to Section 5.4 for target reading distances



# Sign Family

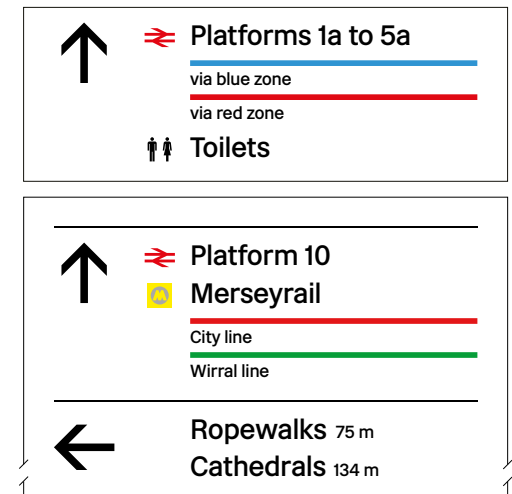
## 6.3 Directional



### Directional – Colour band (left aligned)

- For use when a multiple colour band lines are required

#### Layout examples



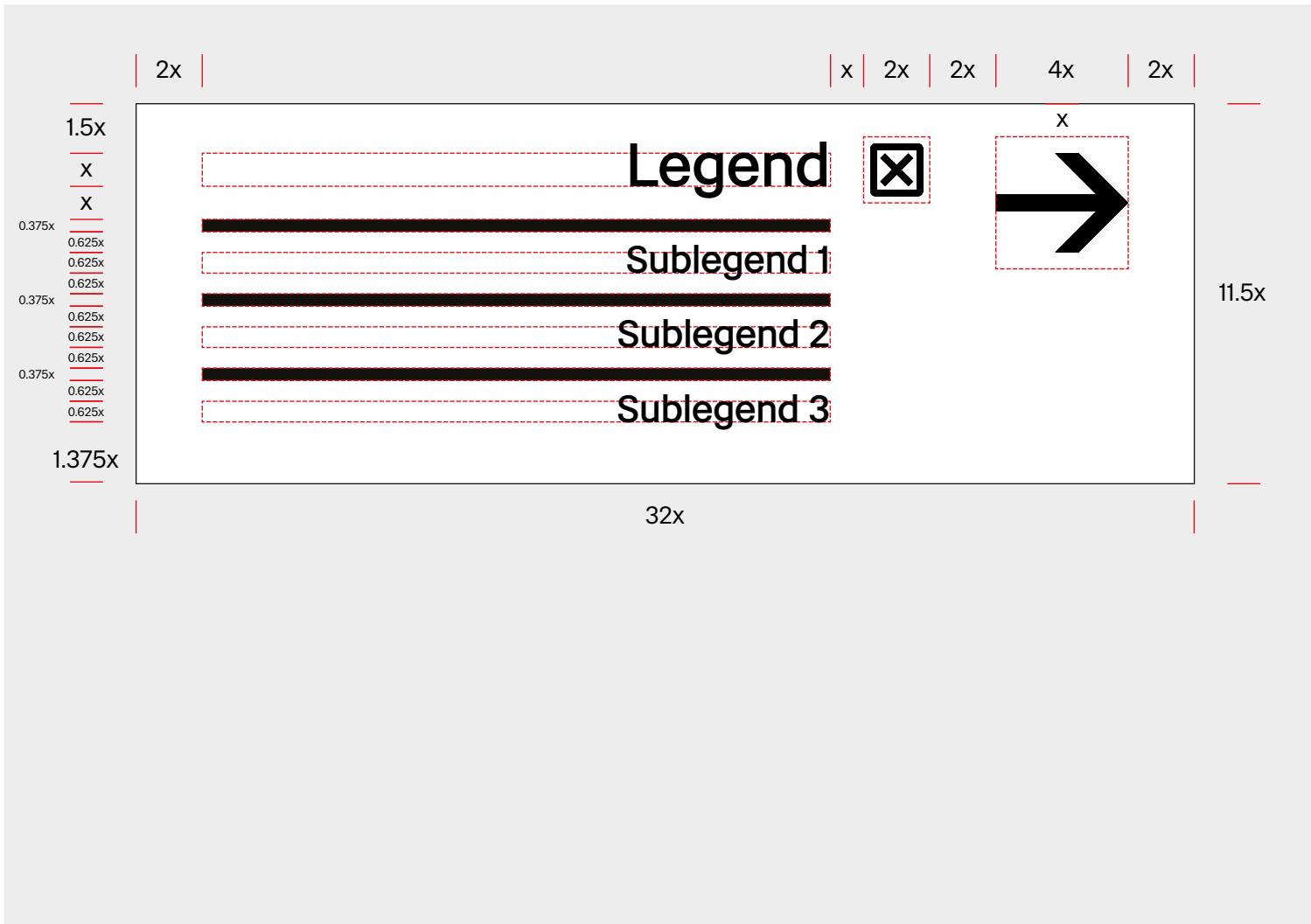
#### Size options

x-height	Width	Height
40mm	1,280mm	460mm
50mm	1,600mm	575mm
60mm	1,920mm	690mm
80mm	2,560mm	920mm
100mm	3,200mm	1,150mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



2x | x | 2x | 2x | 4x | 2x

1.5x  
x  
x  
0.375x  
0.625x  
0.625x  
0.625x  
0.375x  
0.625x  
0.625x  
0.625x  
0.375x  
0.625x  
0.625x  
1.375x

Legend

Sublegend 1

Sublegend 2

Sublegend 3

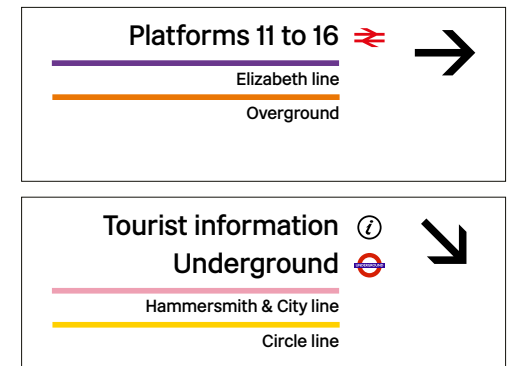
x

11.5x

32x

### Directional – Colour band (right aligned)

- For use when a multiple colour band lines are required



Platforms 11 to 16 → Elizabeth line Overground

Tourist information ⓘ Underground ⓘ Hammersmith & City line Circle line

Layout examples

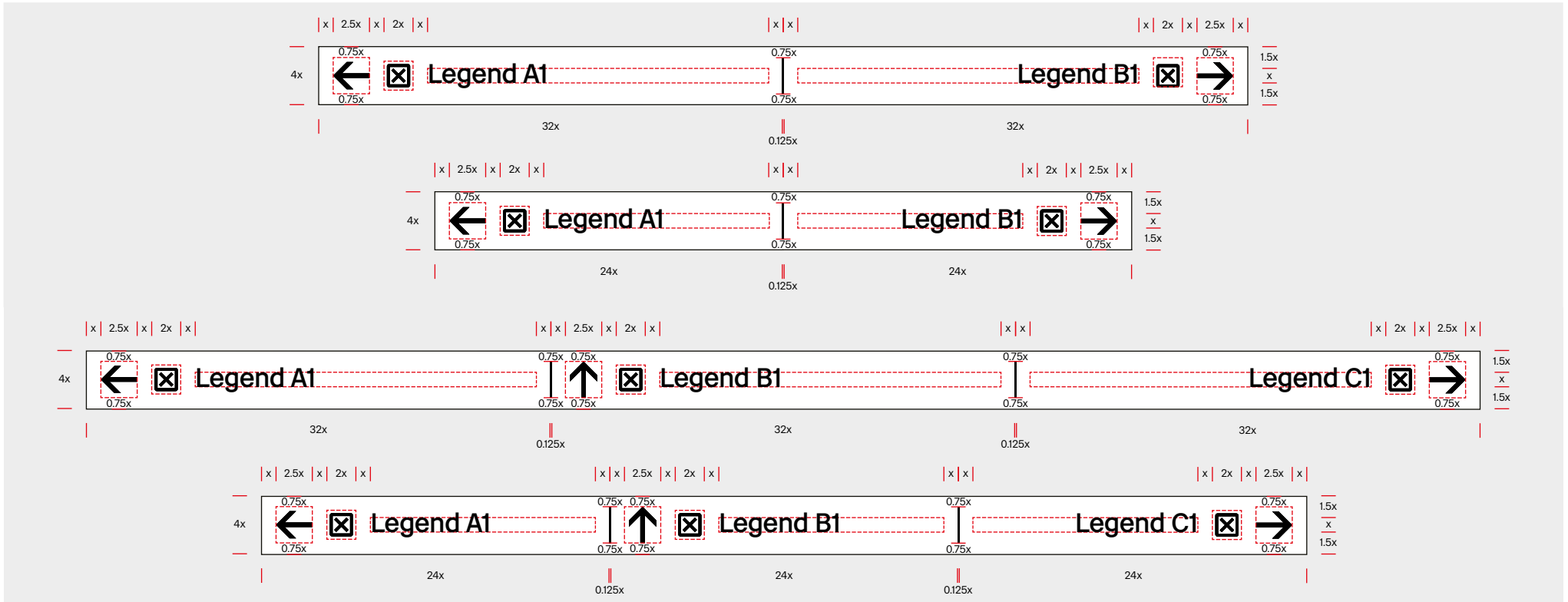
### Size options

x-height	Width	Height
40mm	1,280mm	460mm
50mm	1,600mm	575mm
60mm	1,920mm	690mm
80mm	2,560mm	920mm
100mm	3,200mm	1,150mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



### Directional – One line (combined horizontally)

- For use when multiple single line signs are required with limited clearance

### Size options – Two direction

x-height	Width (Large)	Width (Small)	Height
40mm	2,560mm	1,920mm	160mm
50mm	3,200mm	2,400mm	200mm
60mm	3,840mm	2,880mm	240mm
80mm	5,120mm	3,840mm	320mm
100mm	6,400mm	4,800mm	400mm

Refer to Section 5.4 for target reading distances

### Size options – Three direction

x-height	Width (Large)	Width (Small)	Height
40mm	3,840mm	2,880mm	160mm
50mm	4,800mm	3,600mm	200mm
60mm	5,760mm	4,320mm	240mm
80mm	7,680mm	5,760mm	320mm
100mm	9,600mm	7,200mm	400mm

Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



Two direction configuration examples



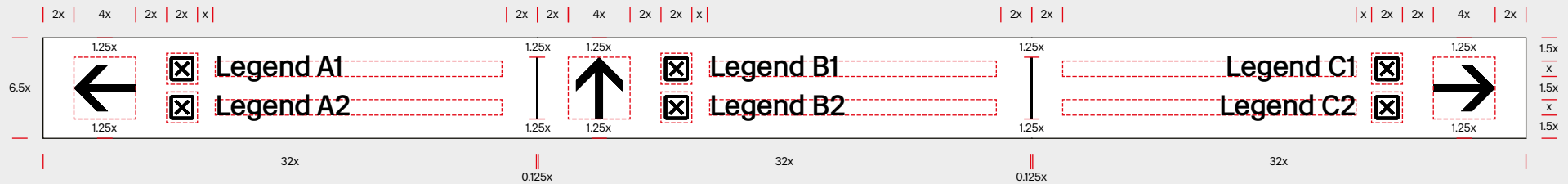
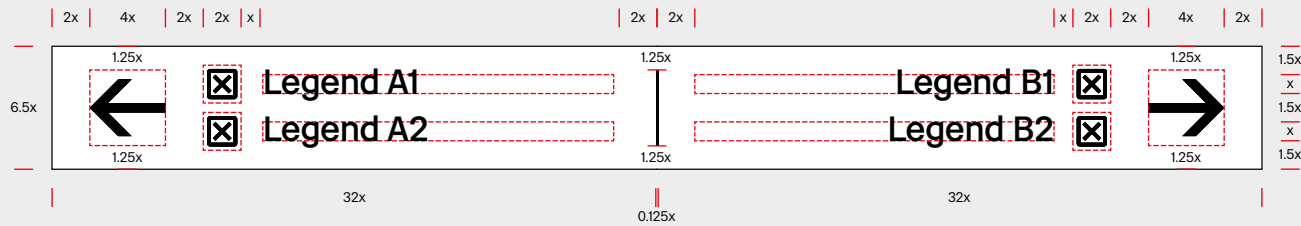
Three direction configuration examples



Directional – One line  
(combined horizontally)

# Sign Family

## 6.3 Directional



### Directional – Two line (combined horizontally)

- For use when multiple two line signs are required

#### Size options – Two direction

x-height	Width (Large)	Height
40mm	2,560mm	260mm
50mm	3,200mm	325mm
60mm	3,840mm	390mm
80mm	5,120mm	520mm
100mm	6,400mm	650mm

Refer to Section 5.4 for target reading distances

#### Size options – Three direction

x-height	Width	Height
40mm	3,840mm	260mm
50mm	4,800mm	325mm
60mm	5,760mm	390mm
80mm	7,680mm	520mm
100mm	9,600mm	650mm

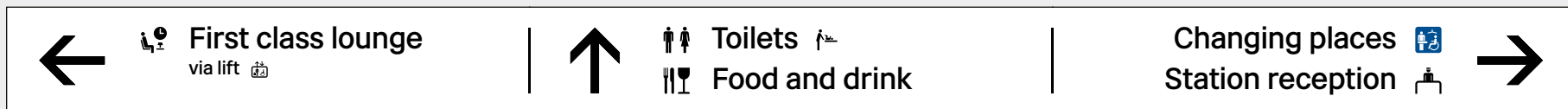
Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional



Two direction configuration examples

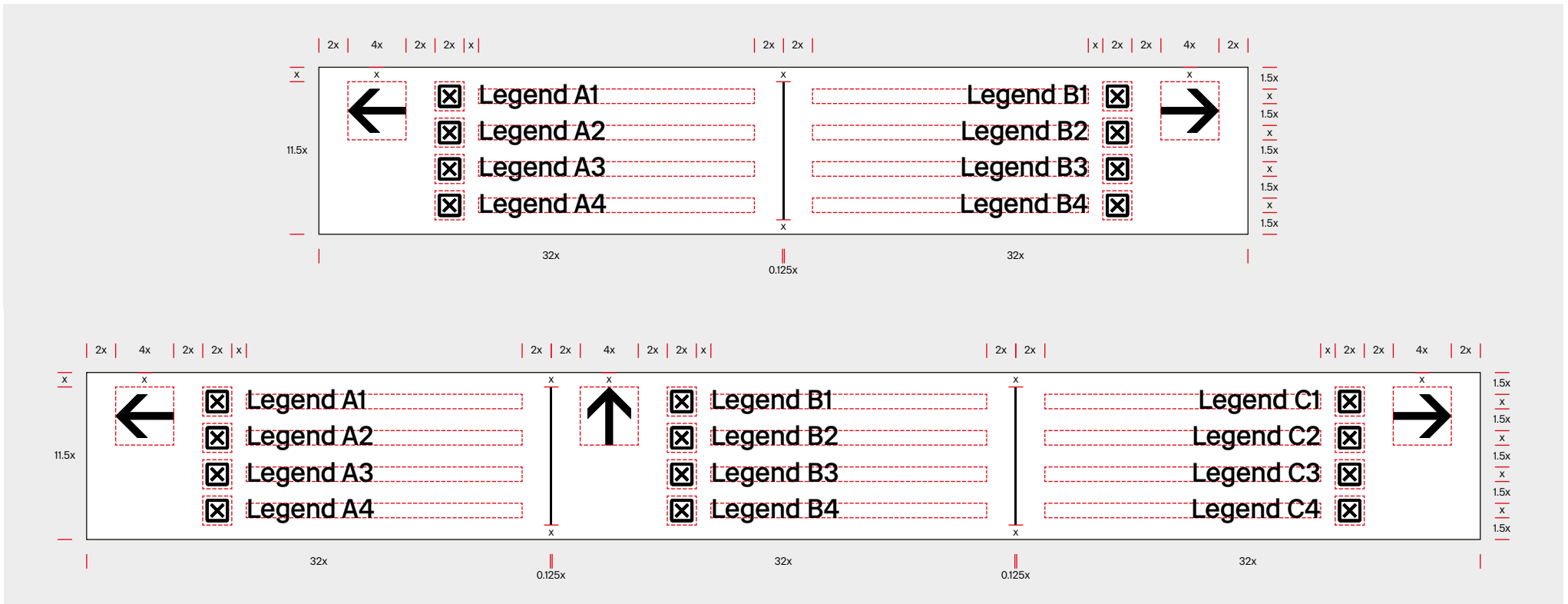


Three direction configuration examples

**Directional – Two line  
(combined horizontally)**

# Sign Family

## 6.3 Directional



### Directional – Four line (combined horizontally)

- For use when multiple four line signs are required

#### Size options – Two direction

x-height	Width (Large)	Height
40mm	2,560mm	460mm
50mm	3,200mm	575mm
60mm	3,840mm	690mm
80mm	5,120mm	920mm
100mm	6,400mm	1,150mm

Refer to Section 5.4 for target reading distances











#### Size options – Three direction

x-height	Width	Height
40mm	3,840mm	460mm
50mm	4,800mm	575mm
60mm	5,760mm	690mm
80mm	7,680mm	920mm
100mm	9,600mm	1,150mm















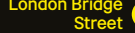


Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional

	 Platforms 1 to 5	Car park 	
	 Merseyrail via lift 	300 m St George's Hall	
	 Toilets  	165 m Albert Docks	
	 Lost property		

Two direction configuration examples

	 Underground		 Information	Tickets 	
	<b>Way out</b>  Joiner Street		 Buses Tooley Street   	 Shard Piazza Buses 	
			 Taxis	 London Bridge City Pier	
			 London Bridge City Pier	 <b>Way out</b>	

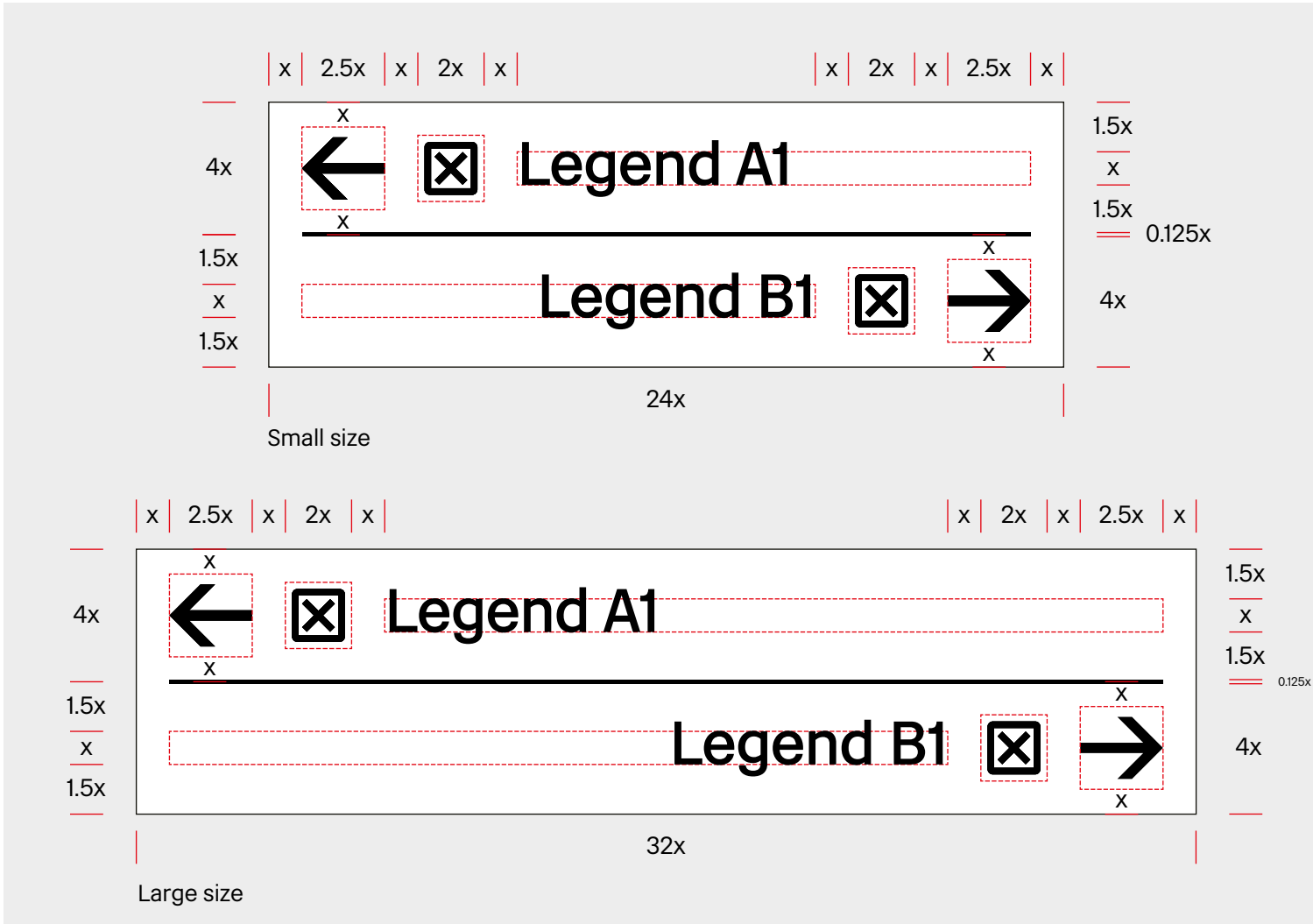
Three direction configuration examples

Directional - Four line  
(combined horizontally)



# Sign Family

## 6.3 Directional



### Directional – One line (vertically stacked)

- For use if two directions are required



Large size example



Small size example

#### Size options

x-height	Width		Height
	Large	Small	
40mm	1,280mm	960mm	320mm
50mm	1,600mm	1,200mm	400mm
60mm	1,920mm	1,440mm	480mm
80mm	2,560mm	1,920mm	640mm
100mm	3,200mm	2,400mm	800mm

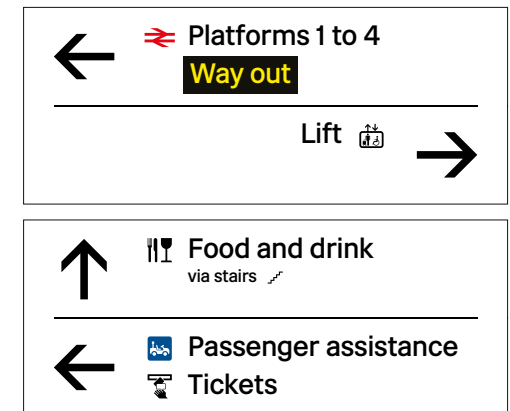
Refer to Section 5.4 for target reading distances

# Sign Family

## 6.3 Directional

### Directional – Two line (vertically stacked)

- For use if two directions are required



Layout examples

#### Size options

x-height	Width	Height
40mm	1,280mm	520mm
50mm	1,600mm	650mm
60mm	1,920mm	780mm
80mm	2,560mm	1,040mm
100mm	3,200mm	1,300mm

Refer to Section 5.4 for target reading distance

2x | 4x | 2x | 2x | x | x | 2x | 2x | 4x | 2x

1.25x

6.5x

1.25x

1.5x

x

1.5x

x

1.5x

0.125x

1.25x

6.5x

1.25x

32x

# Sign Family

## 6.3 Directional

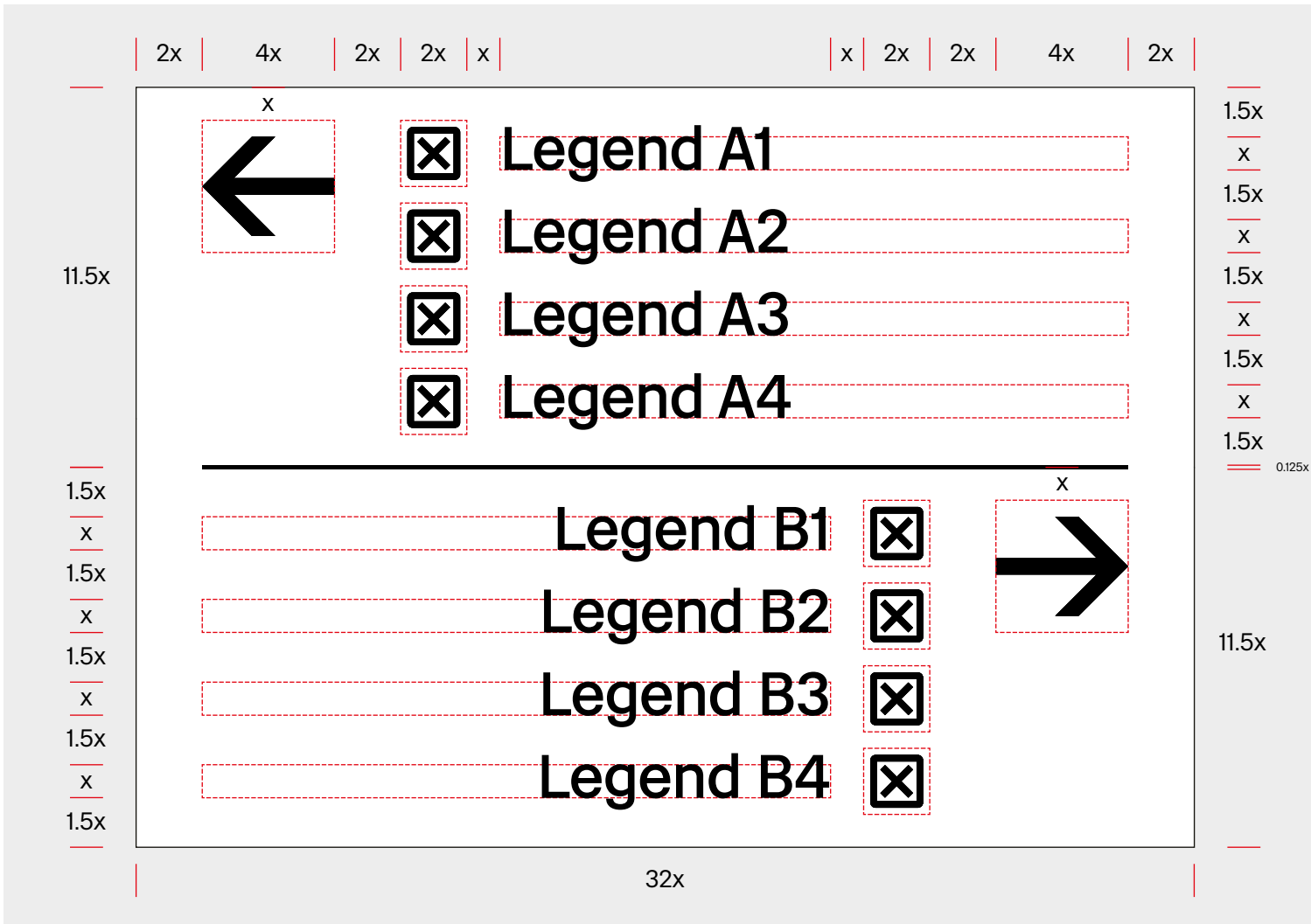
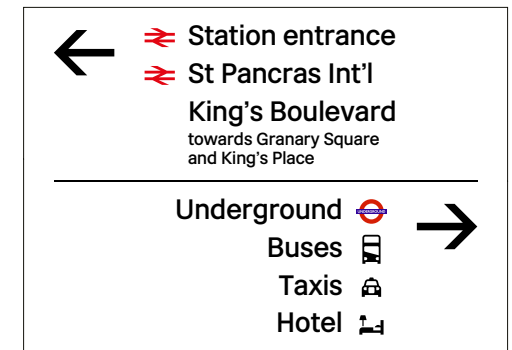


Diagram illustrating the layout and dimensions of the Directional - Four line (vertically stacked) sign. The sign is 32x wide and 11.5x high. It features a left-pointing arrow on the left and a right-pointing arrow on the right. The sign is divided into two sections by a horizontal line. The top section contains four legend boxes (Legend A1, Legend A2, Legend A3, Legend A4) and the bottom section contains four legend boxes (Legend B1, Legend B2, Legend B3, Legend B4). Dimensions are provided for various elements: 2x, 4x, 2x, 2x, x, x, 2x, 2x, 4x, 2x, 1.5x, x, 1.5x, x, 1.5x, x, 1.5x, x, 1.5x, x, 1.5x, 0.125x, 11.5x, 1.5x, x, 1.5x, x, 1.5x, x, 1.5x, 32x.

### Directional - Four line (vertically stacked)

- For use if four directions are required



Layout example showing the sign with a left-pointing arrow and a right-pointing arrow. The sign is divided into two sections by a horizontal line. The top section contains a left-pointing arrow and the text: "Station entrance", "St Pancras Int'l", "King's Boulevard", "towards Granary Square and King's Place". The bottom section contains a right-pointing arrow and the text: "Underground", "Buses", "Taxis", "Hotel".

Layout example

#### Size options

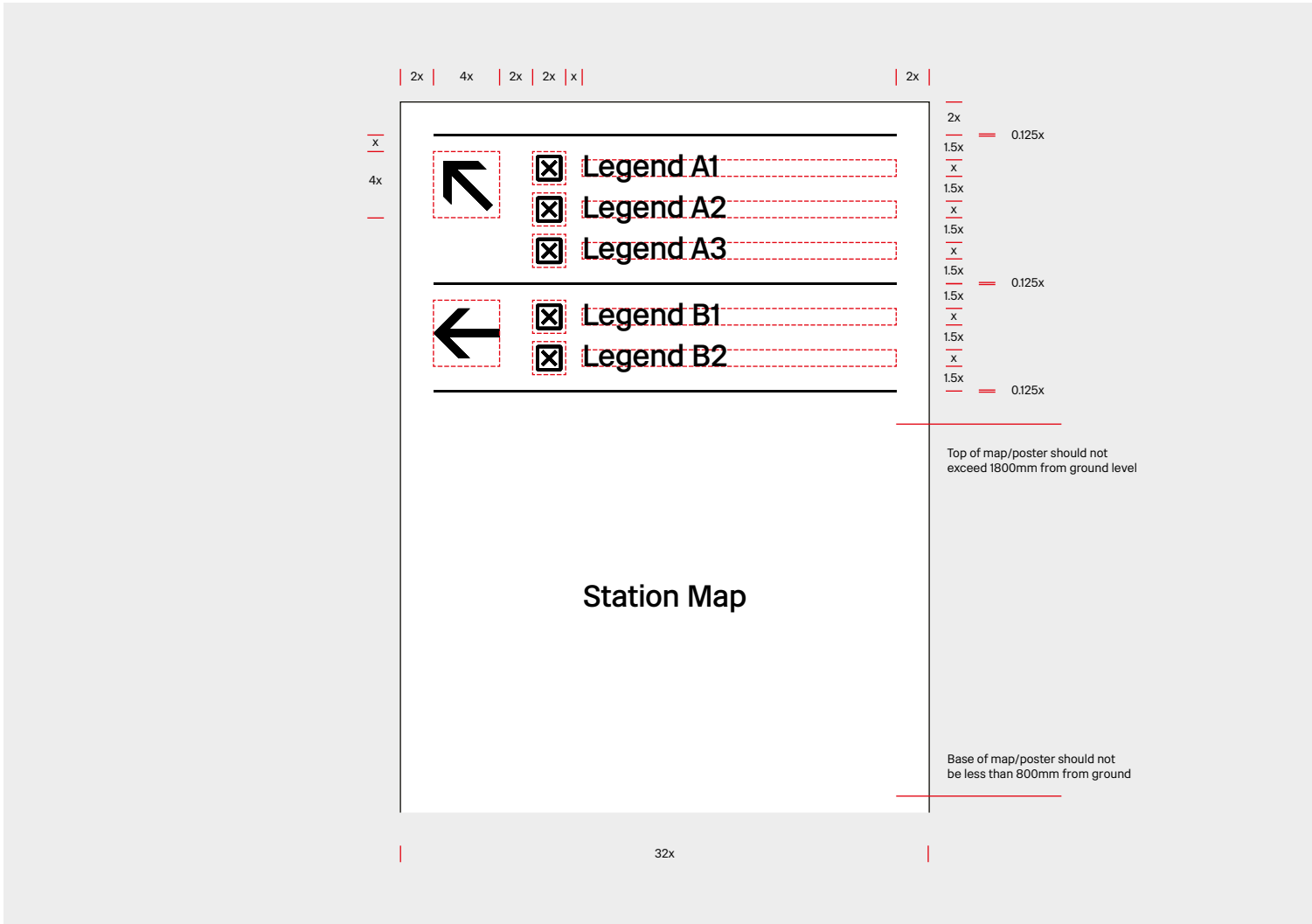
x-height	Width	Height
40mm	1,280mm	920mm
50mm	1,600mm	1,150mm
60mm	1,920mm	1,380mm
80mm	2,560mm	1,840mm
100mm	3,200mm	2,300mm

Refer to Section 5.4 for target reading distance



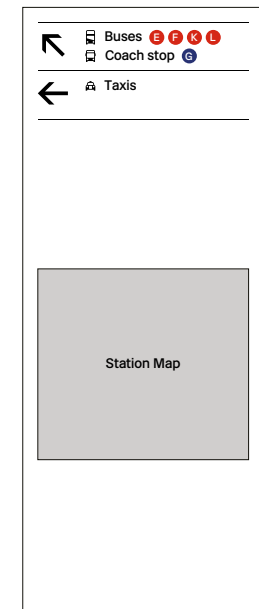
# Sign Family

## 6.3 Directional



### Directional – Totem and station map

- Totems are the only sign type where all arrows should horizontally align



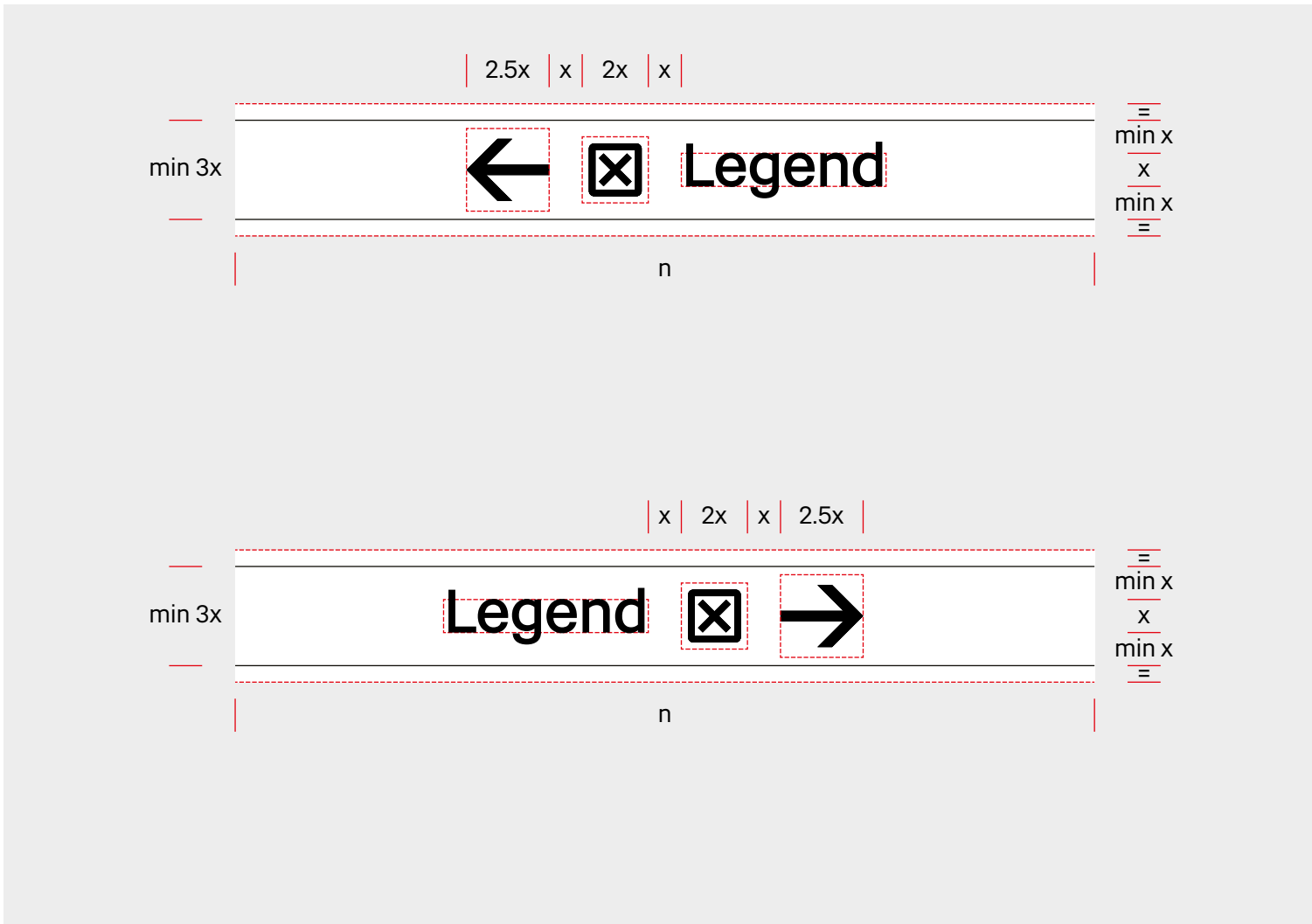
#### Size options

x-height	Width	Height
40mm	1,280mm	3,200mm
50mm	1,600mm	4,000mm

Refer to Section 5.4 for target reading distance

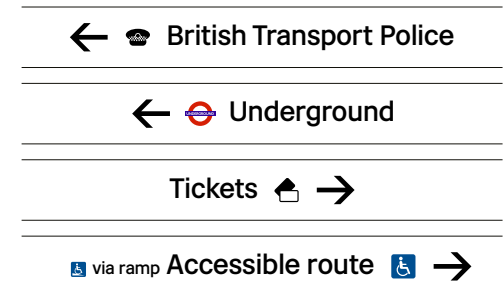
# Sign Family

## 6.3 Directional



### Directional – Ribbon

- For use when directional signs are used in a ribbon



Layout example

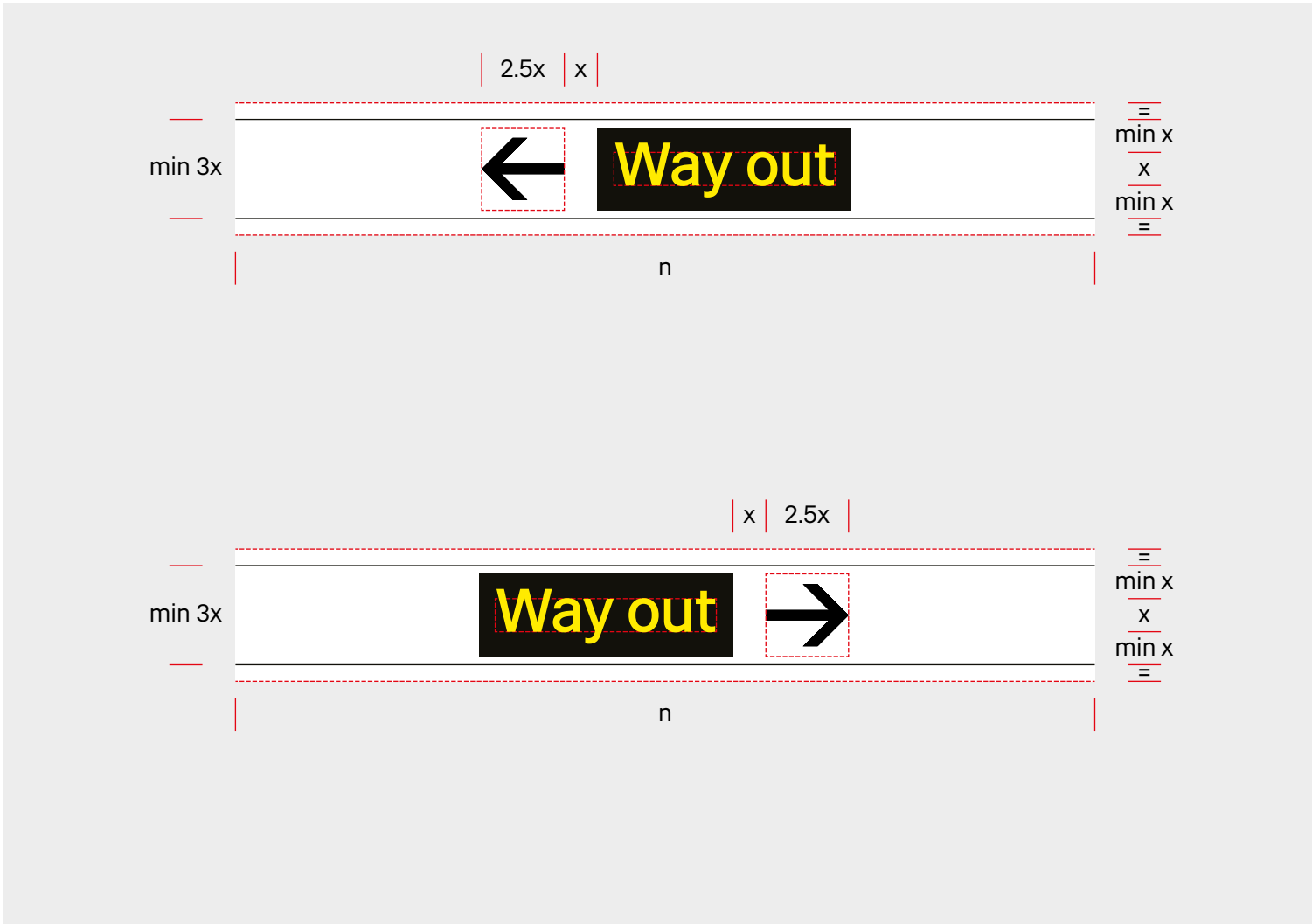
### Size options

x-height	Width	Height
40mm	n (variable)	180mm
50mm	n (variable)	240mm
60mm	n (variable)	300mm
80mm	n (variable)	360mm
100mm	n (variable)	480mm

Refer to Section 5.4 for target reading distance

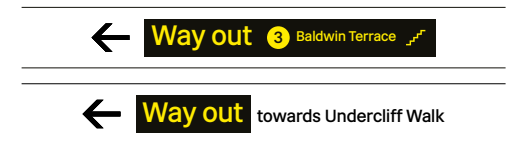
# Sign Family

## 6.3 Directional

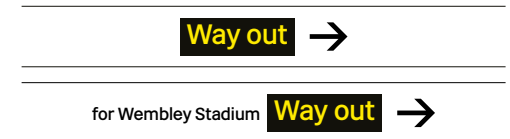


### Directional – Way out ribbon

- For use when Way out patches are used in a ribbon



Layout example



Layout example

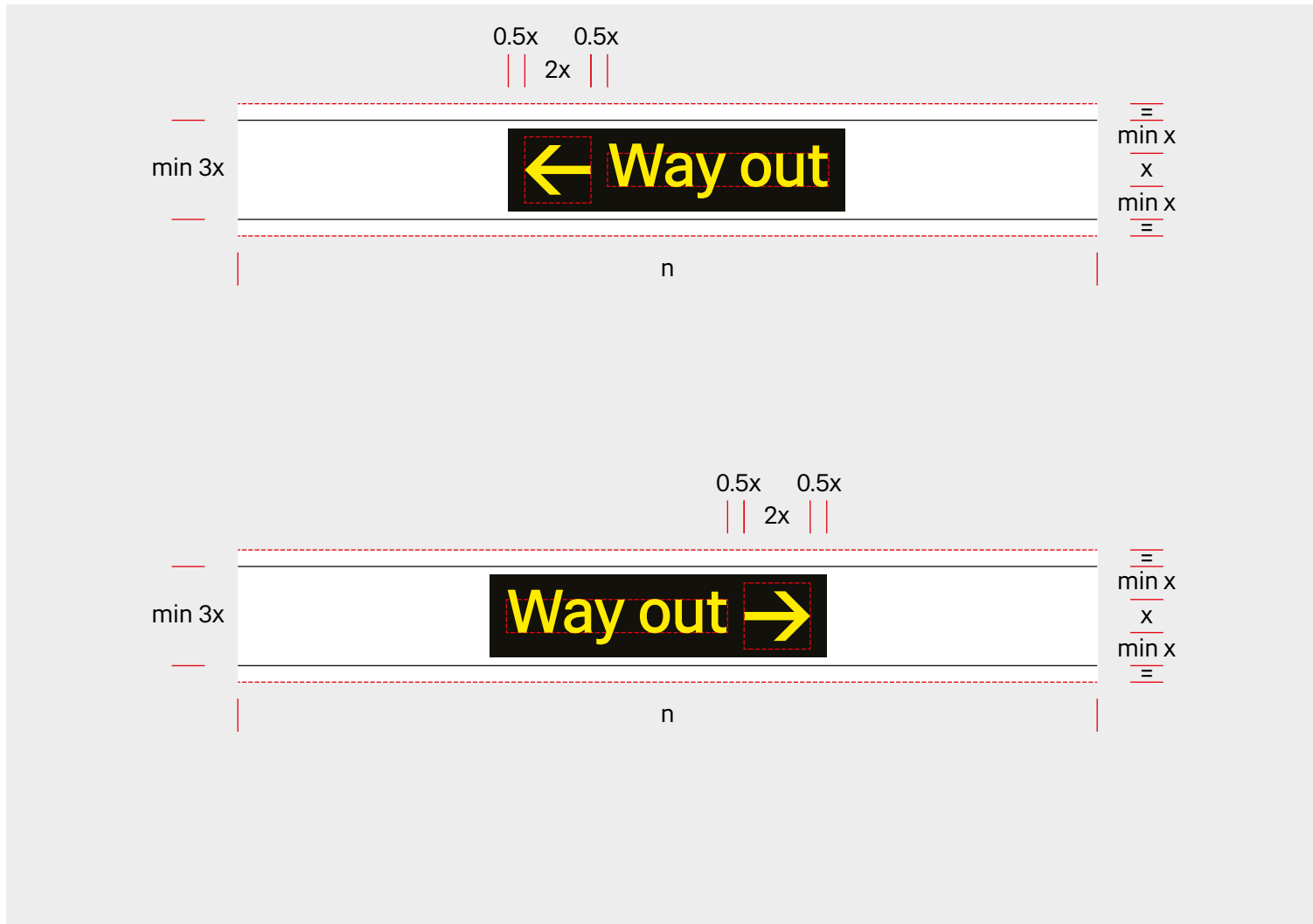
### Size options

x-height	Width	Height
40mm	n (variable)	180mm
50mm	n (variable)	240mm
60mm	n (variable)	300mm
80mm	n (variable)	360mm
100mm	n (variable)	480mm

Refer to Section 5.4 for target reading distance

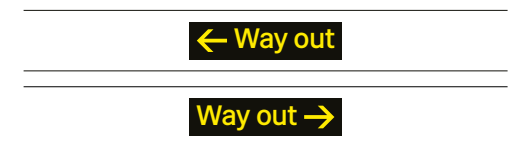
# Sign Family

## 6.3 Directional



### Directional – Way out ribbon (illuminated)

- For use when illuminated Way out patches are used in a ribbon



Layout example

#### Size options

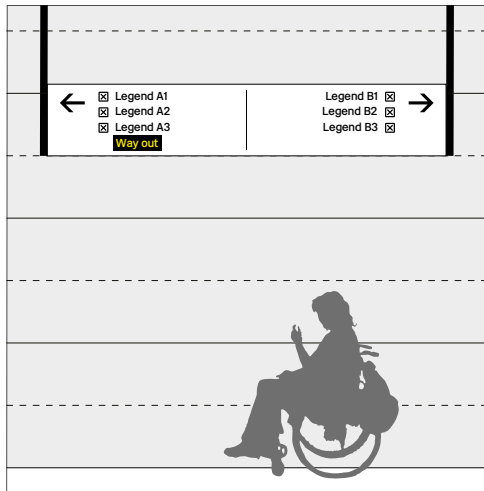
x-height	Width	Height
40mm	n (variable)	180mm
50mm	n (variable)	240mm
60mm	n (variable)	300mm
80mm	n (variable)	360mm
100mm	n (variable)	480mm

Refer to Section 5.4 for target reading distance

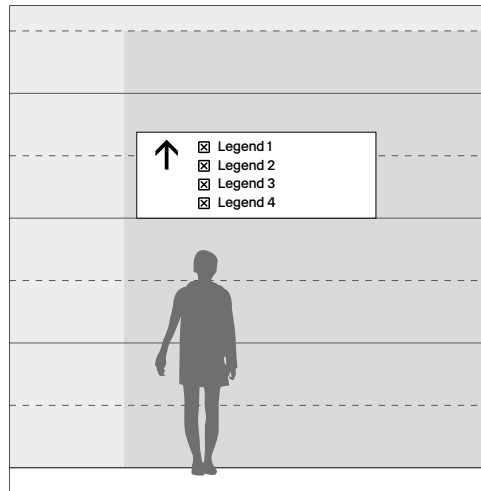


# Sign Family

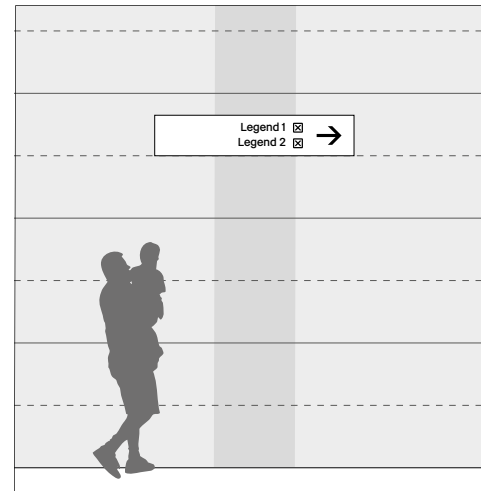
## 6.3 Directional – Product Types



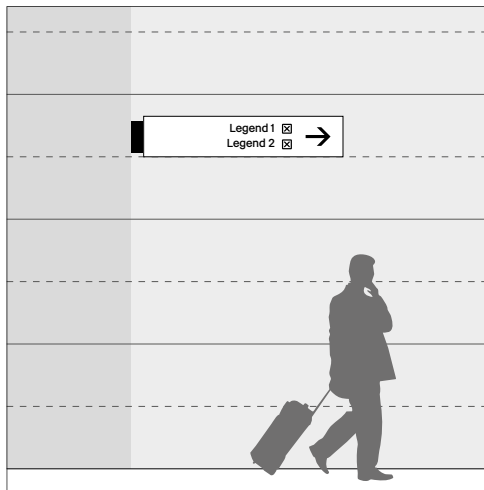
Suspended



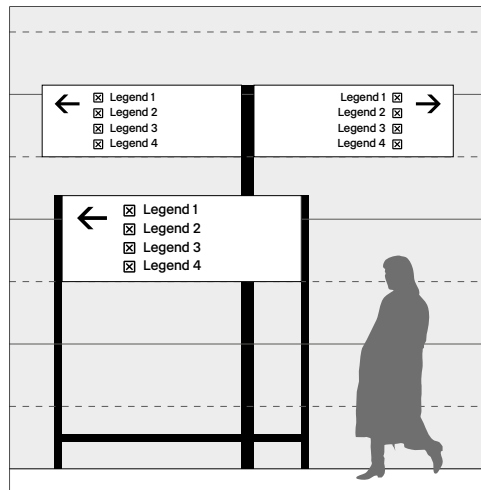
Fascia mounted



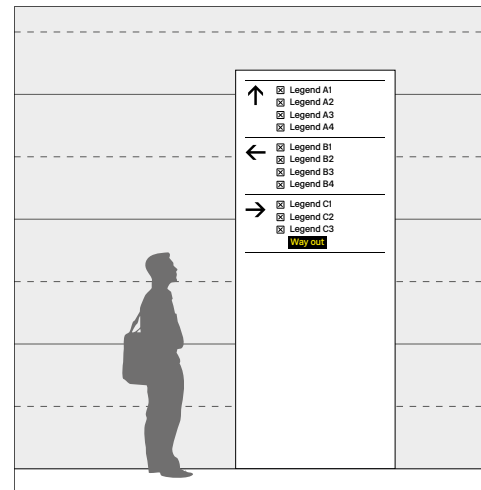
Column mounted



Projected



Post mounted



Totem

Directional signs can be used with a range of products and fixed in a number of ways. Shown on this page are their types and fixing variations:

### Suspended

Suspended on rods from ceilings or overhead structures.

### Fascia mounted

Attached to walls or surfaces.

### Column mounted

Attached to columns or upright structures.

### Projected

Fixed at 90° from walls or structures.

### Post mounted

Attached to posts that are fixed in the ground.

### Totem

Displayed on floor mounted totems.

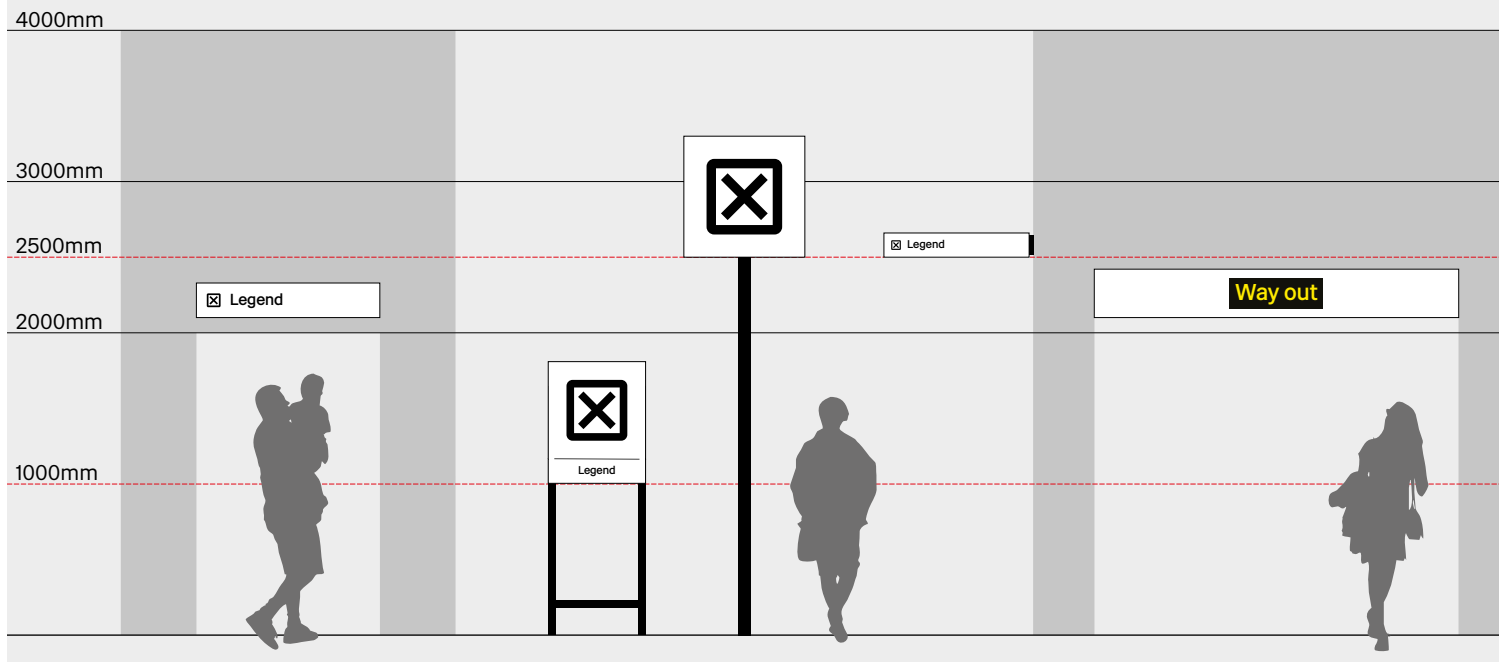
# Sign Family

## 6.4 Identification



### Additional notes

- Projected and suspended signs should be mounted at a minimum of 2,500mm from the finished floor level.
- Wall mounted directional signs need to be fixed sufficiently high as not to be obscured by passengers. They should never be placed lower than 1,000mm.
- When projected, sign content should always be aligned to the outer edge of the sign panel, away from the wall it is projecting from.



### Function:

- Indicates the location of facilities (including lifts and other vertical circulation).
- Indicates and highlights the location of station exits (and the street name the exit leads to where applicable).

### Typical Content:

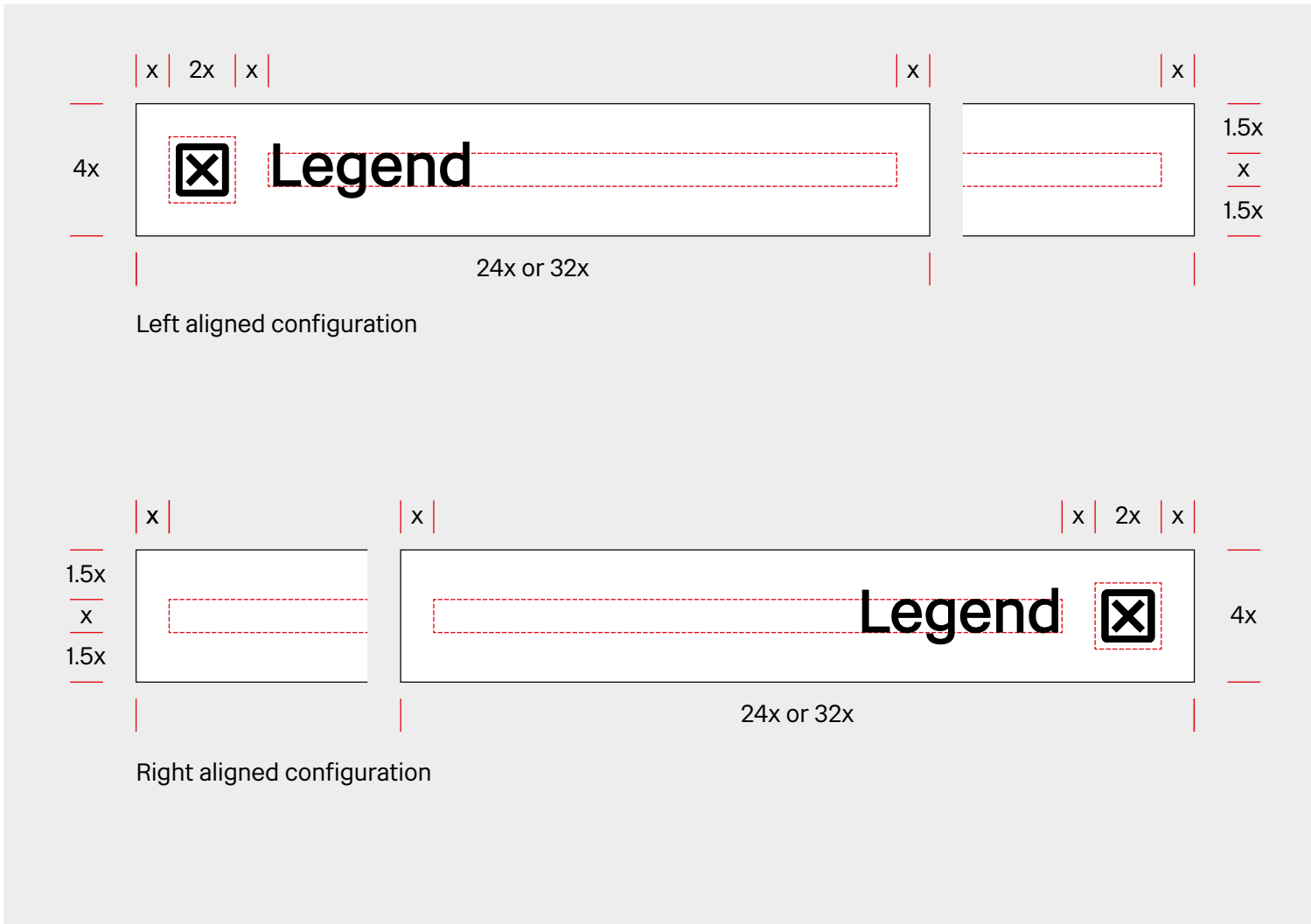
- Pictogram
- Facility name (where applicable)
- Way out text
- Way out number (where applicable)
- Way out name (where applicable)

### Typical Placement:

- Next to or above station facilities so they are visible from a distance.
- High level, visible above crowds and can be read from long distances.
- Panel to fit within exit openings/arches dependant on station architecture.
- High level, visible above the crowds and can be read from long distances.
- 'Bespoke' used for specific architecture or local conditions (e.g. curved archways).

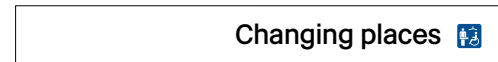
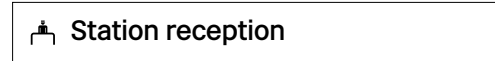
# Sign Family

## 6.4 Identification

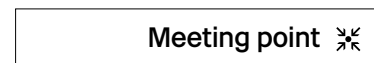
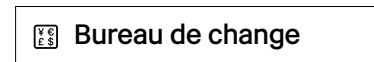


### Identification – Facility

- Content is aligned left on the sign panel unless projected from a wall, where established guidance applies, or above wide openings, where centre alignment should be utilised.



Layout examples



Layout examples

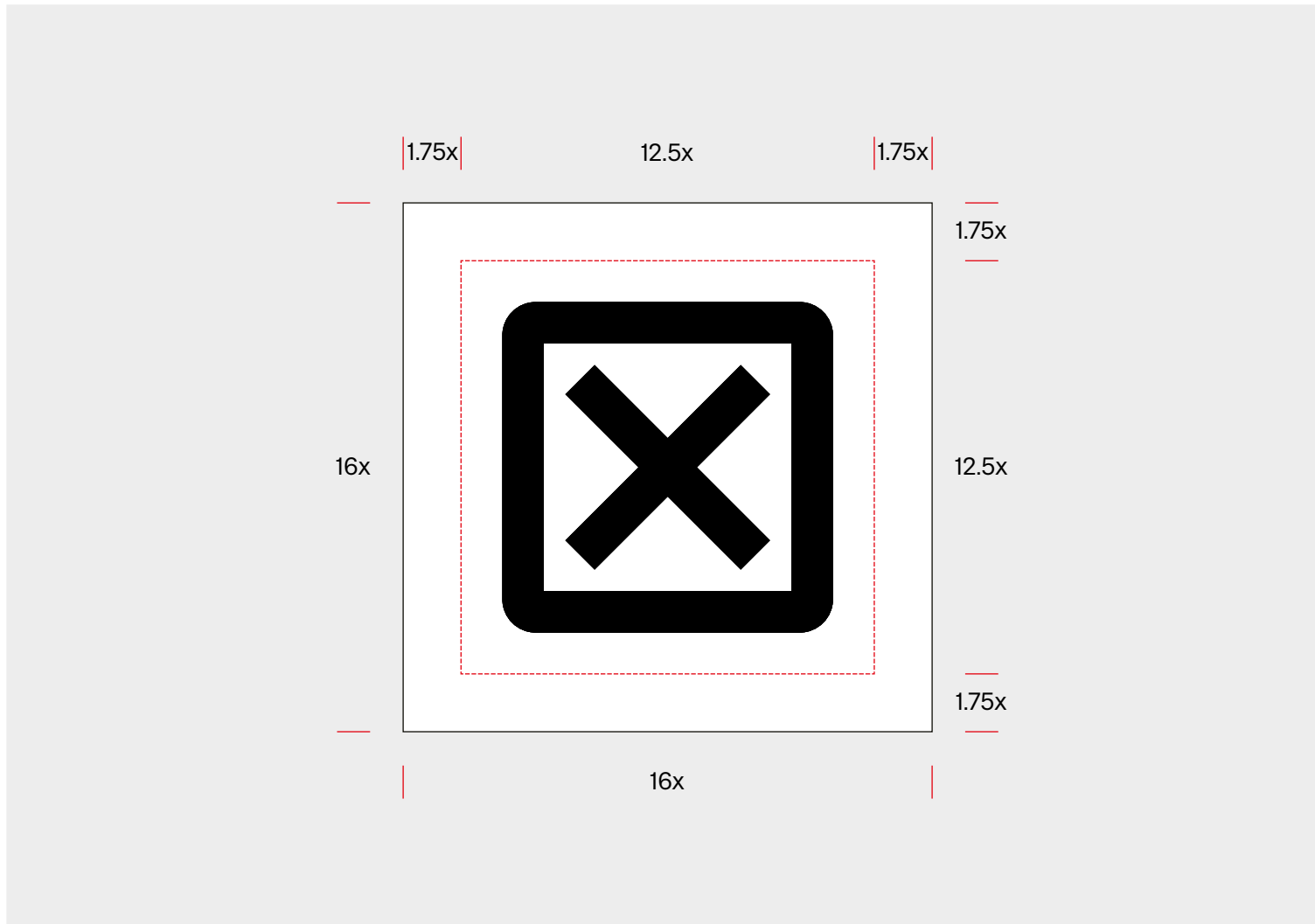
### Size options

x-height	Width		Height
	Large	Small	
25mm	800mm	600mm	100mm
40mm	1,280mm	960mm	160mm
50mm	1,600mm	1,200mm	200mm
60mm	1,920mm	1,440mm	240mm
80mm	2,560mm	1,920mm	320mm
100mm	3,200mm	2,400mm	400mm

Refer to Section 5.4 for target reading distance

# Sign Family

## 6.4 Identification



### Identification – Facility

- Layout for pictogram only signs



Layout examples

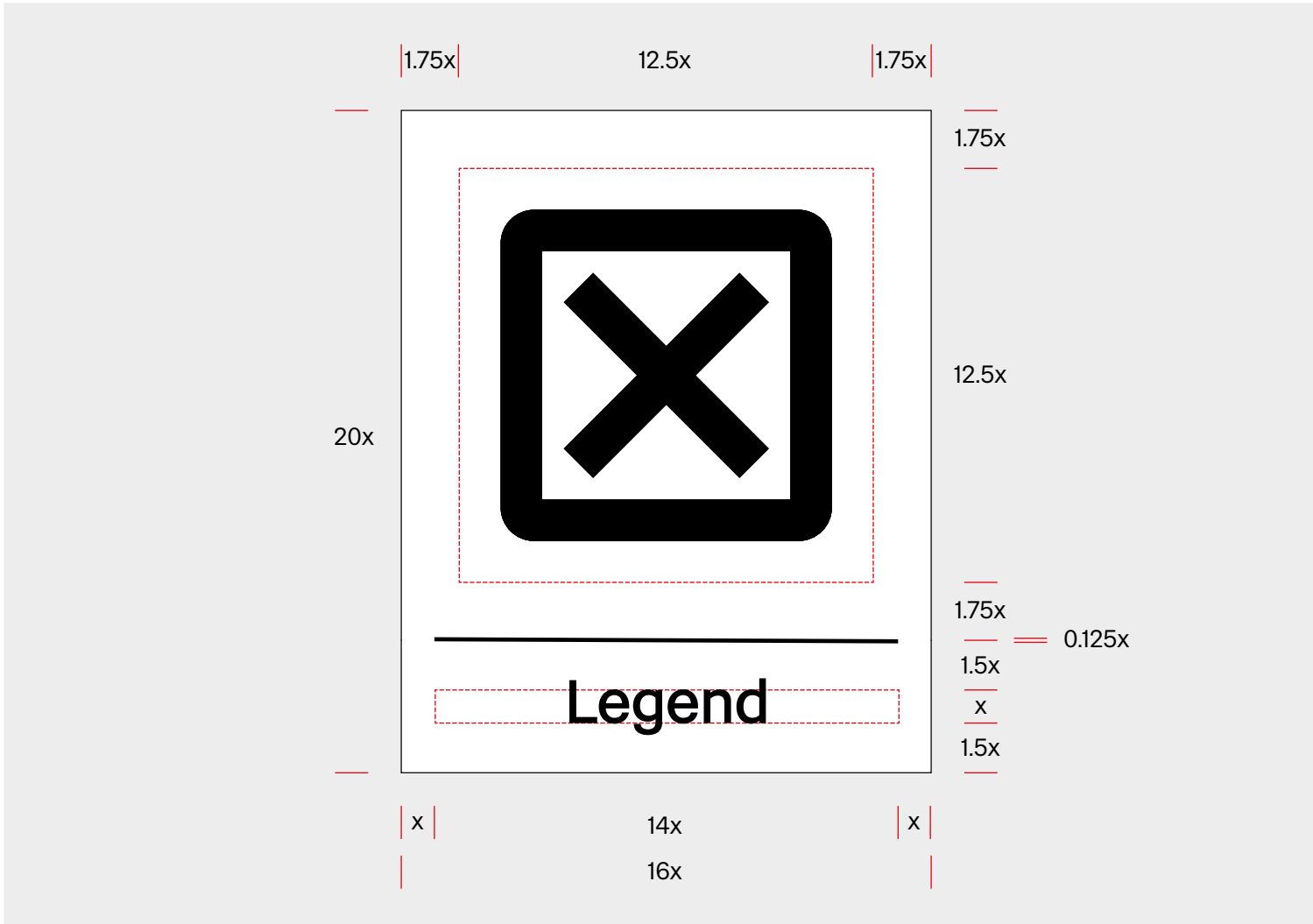
### Size options

x-height	Width	Height
25mm	400mm	400mm
30mm	480mm	480mm
40mm	640mm	640mm
50mm	800mm	800mm
60mm	960mm	960mm
80mm	1,280mm	1,280mm
100mm	1,600mm	1,600mm

Refer to Section 5.4 for target reading distance

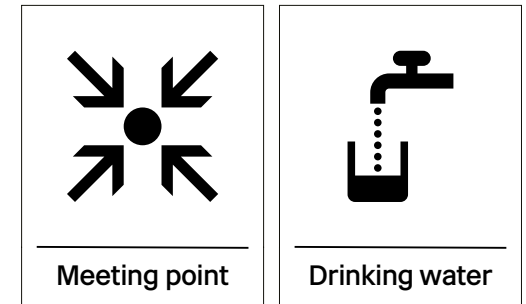
# Sign Family

## 6.4 Identification



### Identification – Facility

- Layout for pictograms with supporting text



Layout examples

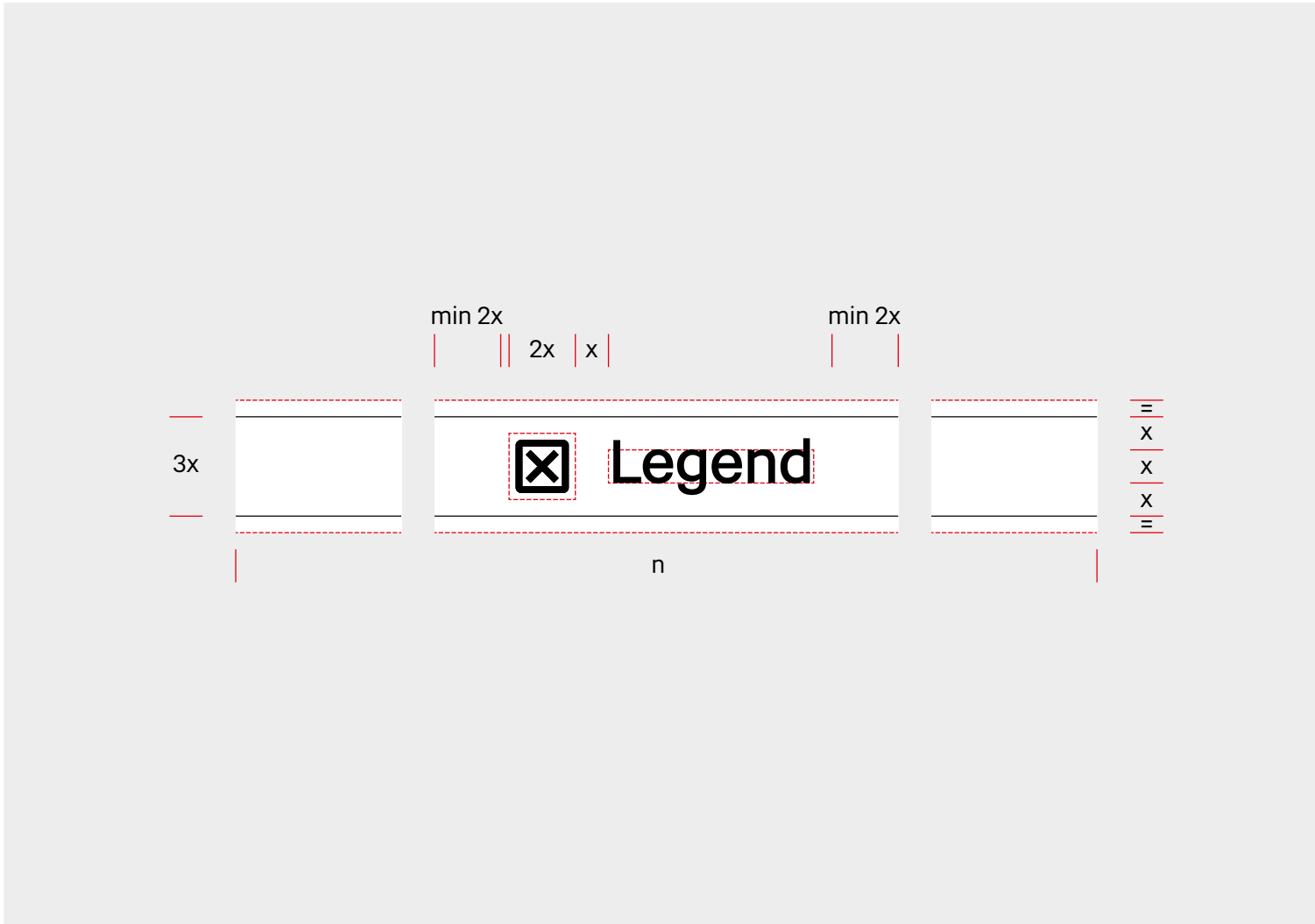
### Size options

x-height	Width	Height
25mm	400mm	500mm
30mm	480mm	600mm
40mm	640mm	800mm
50mm	800mm	1,000mm
60mm	960mm	1,200mm
80mm	1,280mm	1,600mm
100mm	1,600mm	2,000mm

Refer to Section 5.4 for target reading distance

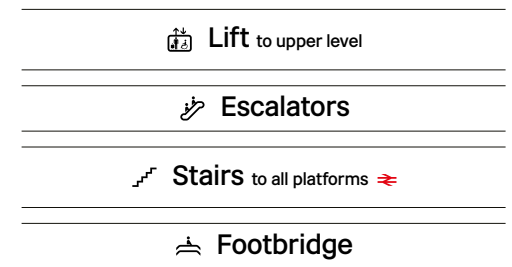
# Sign Family

## 6.4 Identification



### Identification – Vertical circulation

- To identify vertical circulation



Layout examples

#### Size options

x-height	Width	Height
60mm	n (variable)	180mm
80mm	n (variable)	240mm
100mm	n (variable)	300mm
120mm	n (variable)	360mm
160mm	n (variable)	480mm

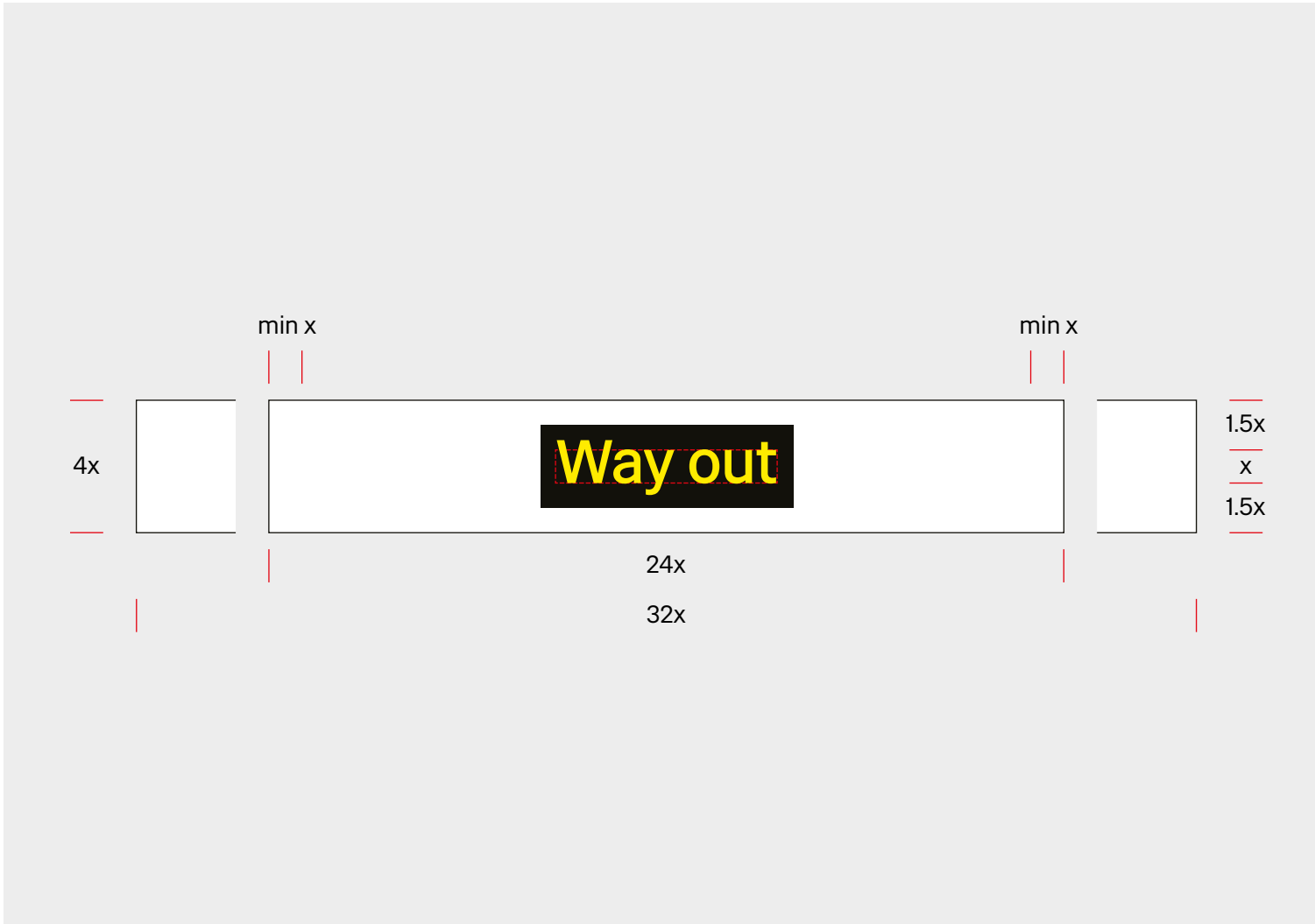
Refer to Section 5.4 for target reading distance

#### NR Guidance Suite Reference

**NR/GN/CIV/200/05**  
Vertical Circulation Manual

# Sign Family

## 6.4 Identification



### Identification – Way out

- For use when Way out patches are used to identify exits
- Way out patches should be centrally aligned on the sign panel



Layout examples



Layout examples

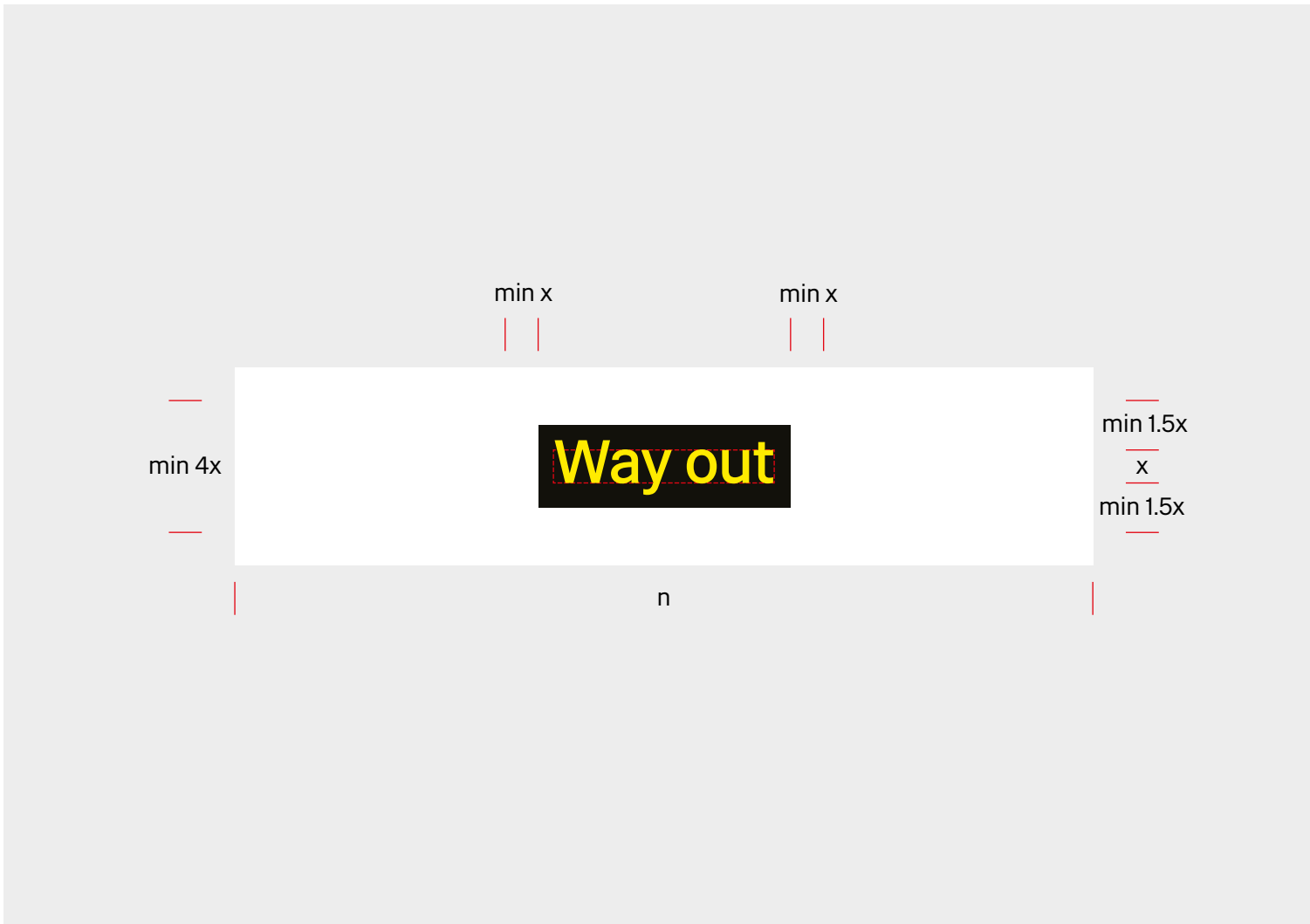
### Size options

x-height	Width		Height
	Large	Small	
40mm	1,280mm	960mm	160mm
50mm	1,600mm	1,200mm	200mm
60mm	1,920mm	1,440mm	240mm
80mm	2,560mm	1,920mm	320mm
100mm	3,200mm	2,400mm	400mm

Refer to Section 5.4 for target reading distance

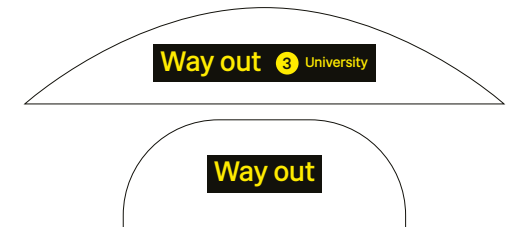
# Sign Family

## 6.4 Identification



### Identification – Way out (bespoke)

- For use when Way out patches are used to identify exits in bespoke situations
- Way out patches should be centrally aligned on the sign panel
- Way out patches should sit within a white sign panel befitting the station architecture or local conditions



Layout examples

### Size options

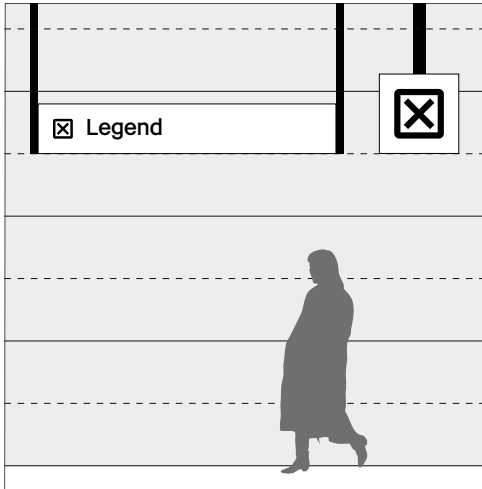
x-height	Width		Height
	Large	Small	
40mm	1,280mm	960mm	160mm
50mm	1,600mm	1,200mm	200mm
60mm	1,920mm	1,440mm	240mm
80mm	2,560mm	1,920mm	320mm
100mm	3,200mm	2,400mm	400mm

Refer to Section 5.4 for target reading distance

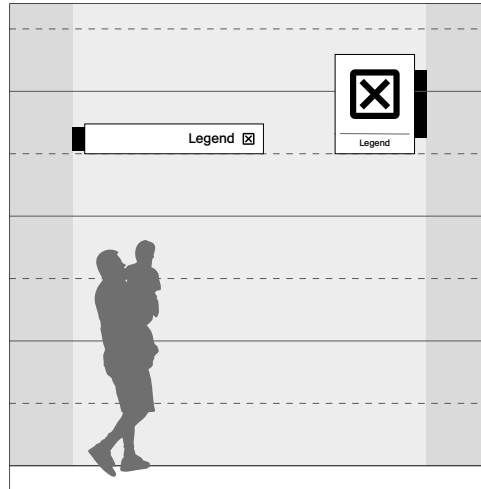


# Sign Family

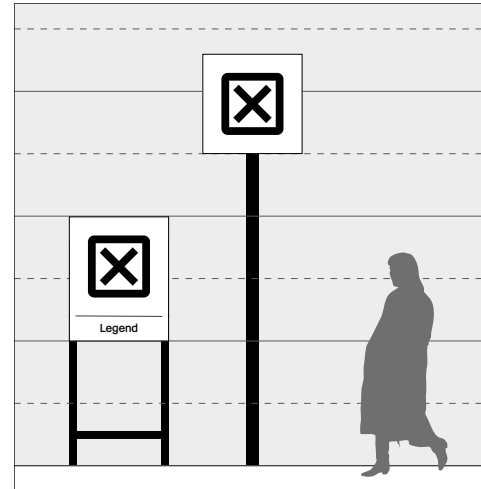
## 6.4 Identification – Product types



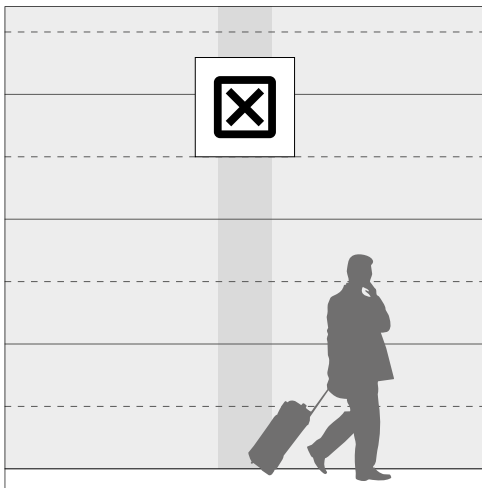
Suspended



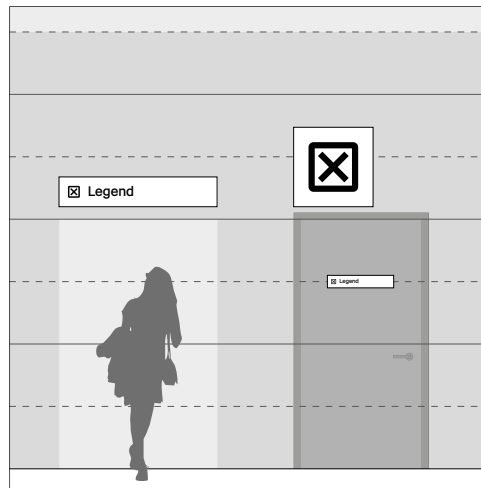
Projected



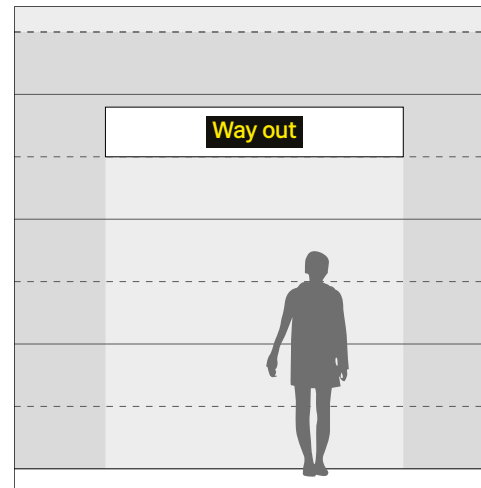
Post mounted



Column mounted



Fascia mounted



Fascia mounted (Way out)

Identification signs can be used with a range of products and fixed in a number of ways. Shown on this page are their types and fixing variations:

### Suspended

Suspended on rods from ceilings or overhead structures.

### Projected

Fixed at 90° from walls or structures.

### Post mounted

Attached to posts that are fixed in the ground.

### Column mounted

Attached to columns or upright structures.

### Fascia mounted

Attached to walls or surfaces.



### Function:

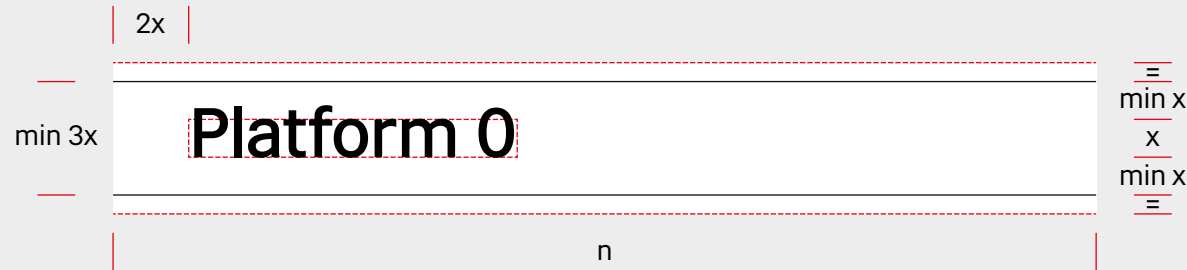
- Indicates which platform passengers are heading towards.
- Provides directions on the reverse.
- Reinforces which gates are in/out (where digital is used).
- Identifies the location of wide aisle gates (where applicable).

### Typical Content:

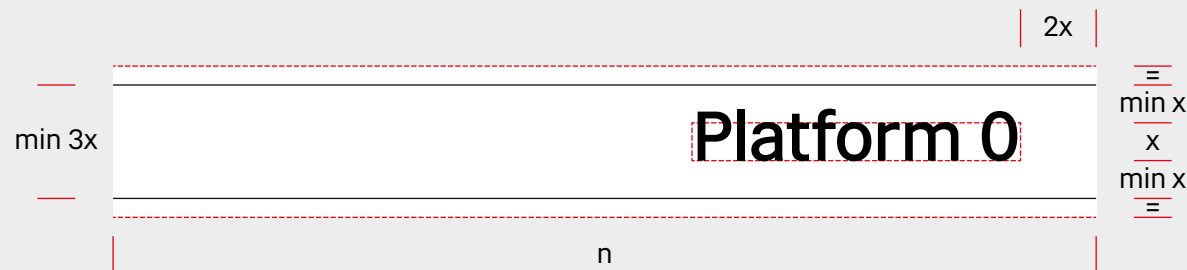
- Platform number/s.
- Wide aisle gate pictogram (where applicable).
- Reverse shows Way out and onward journey directions (where applicable).
- Digital cross/arrow symbols (where applicable).

### Typical Placement:

- Placed above ticket barriers / gatelane or at the platform threshold.
- High level, visible above crowds and can be read from long distances.



Left aligned configuration



Right aligned configuration

### Threshold – Gateline

- For use above platform gateline thresholds
- Information should be left aligned when the platform is on the left and right aligned when the platform is on the right.

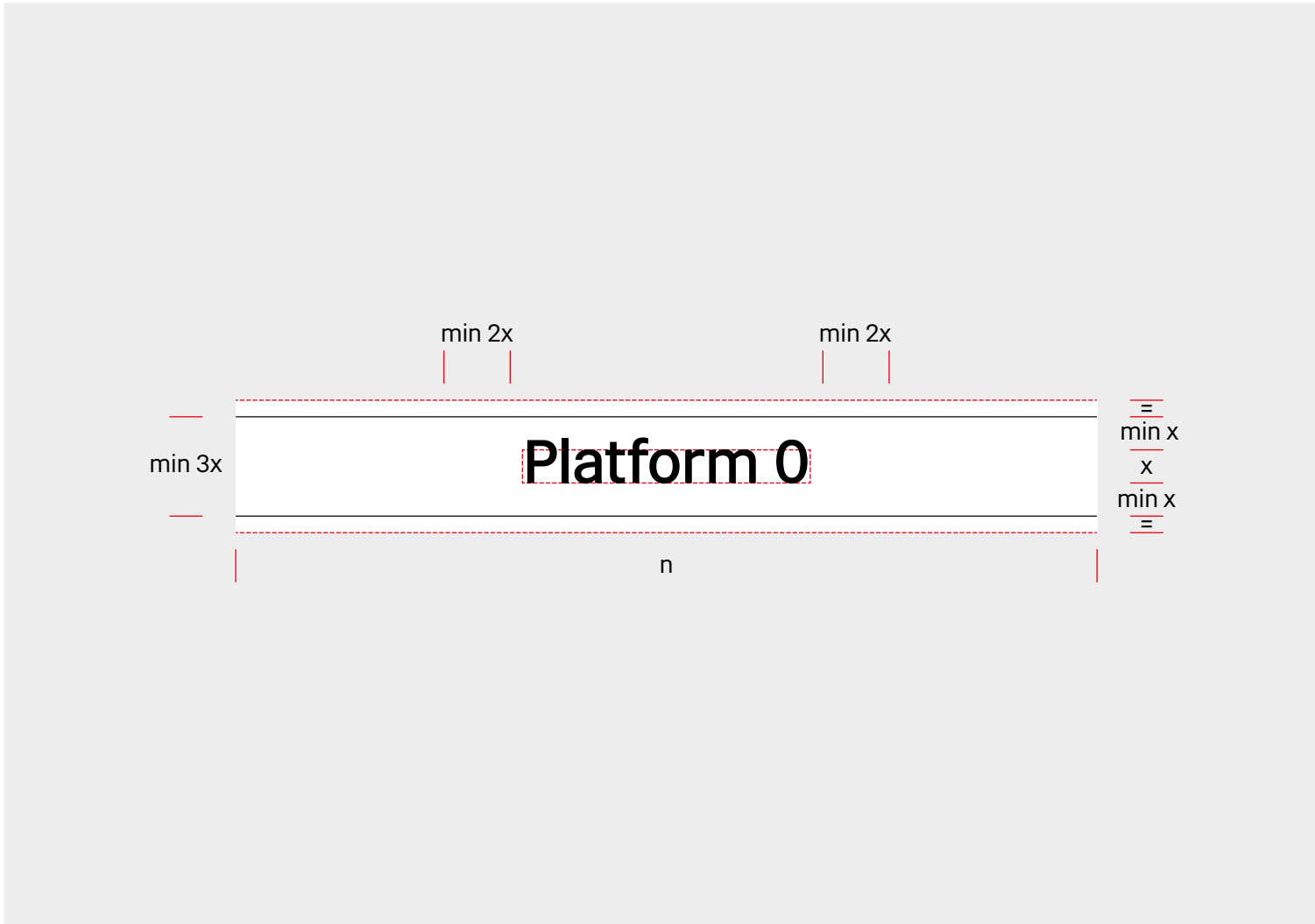
Platform 2	Platform 3
Platform 7	
	Platform 11

Layout examples

### Size options

x-height	Width	Height
60mm	n (variable)	180mm (min)
80mm	n (variable)	240mm (min)
100mm	n (variable)	300mm (min)
120mm	n (variable)	360mm (min)
160mm	n (variable)	480mm (min)

Refer to Section 5.4 for target reading distance



**Threshold – Gateline**

- For use above platform gateline thresholds when multiple platforms are beyond the threshold
- Message is centred on the sign panel

Platforms 8 and 9

Platform 14

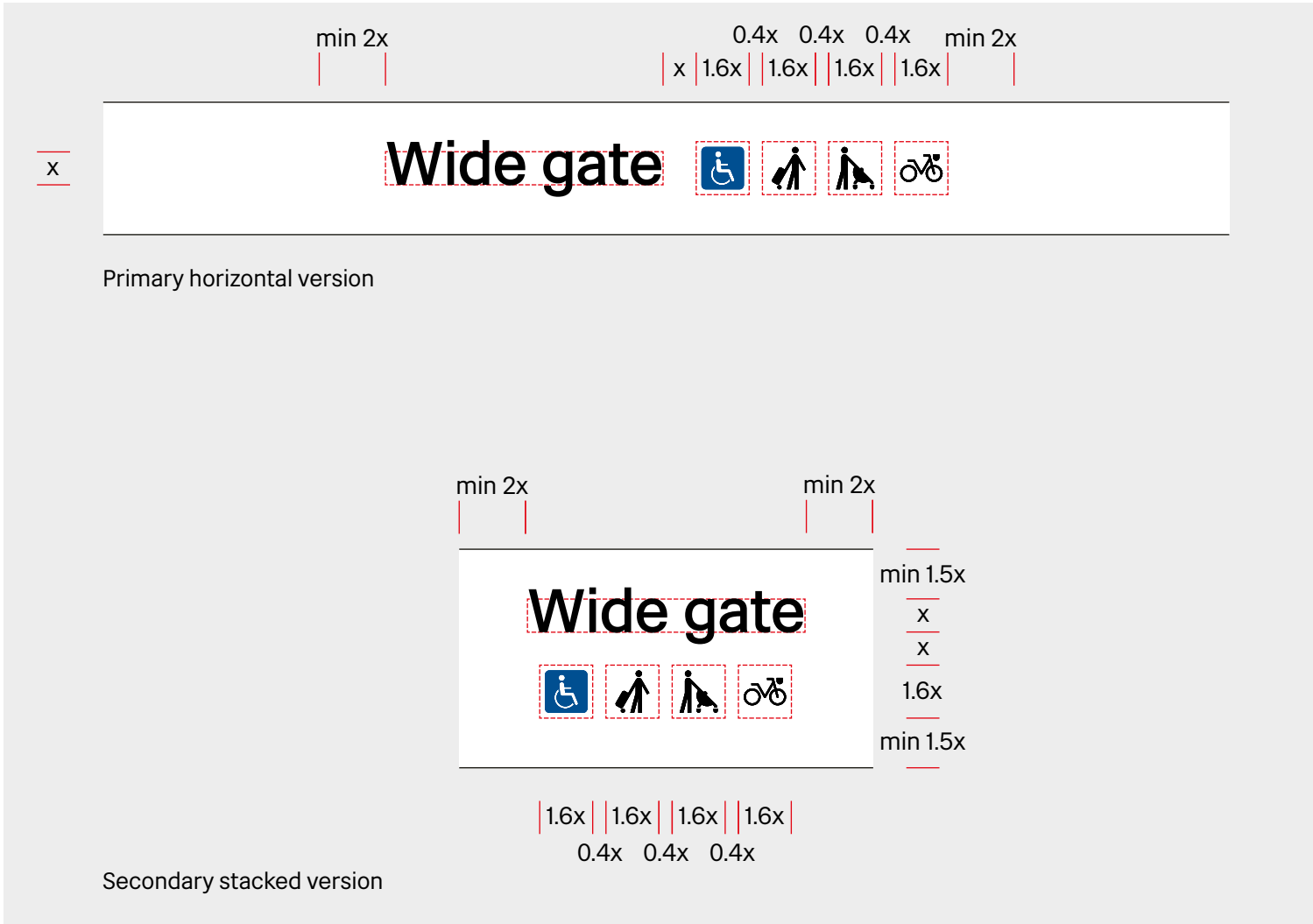
Platforms 1 to 5

Layout examples

**Size options**

x-height	Width	Height
60mm	n (variable)	180mm (min)
80mm	n (variable)	240mm (min)
100mm	n (variable)	300mm (min)
120mm	n (variable)	360mm (min)
160mm	n (variable)	480mm (min)

Refer to Section 5.4 for target reading distance



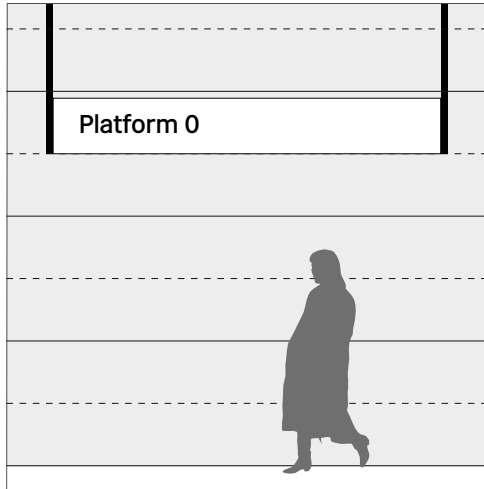
### Threshold – Gateline Wide gate identification

- For use above platform gateline thresholds to identify wide gates.
- Secondary stacked version should only be used if there is not adequate space available for the primary horizontal version.

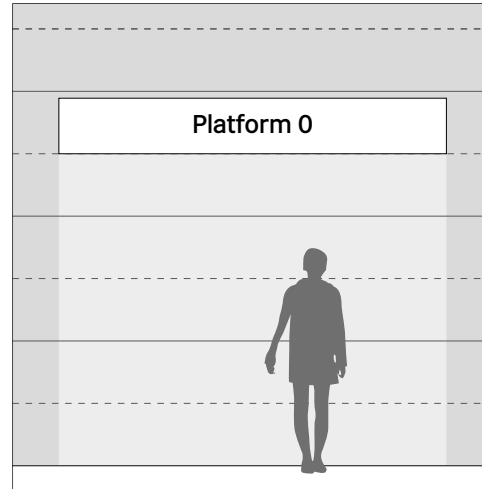
Platform 9 Wide gate    

orm 16 Wide gate     Platform

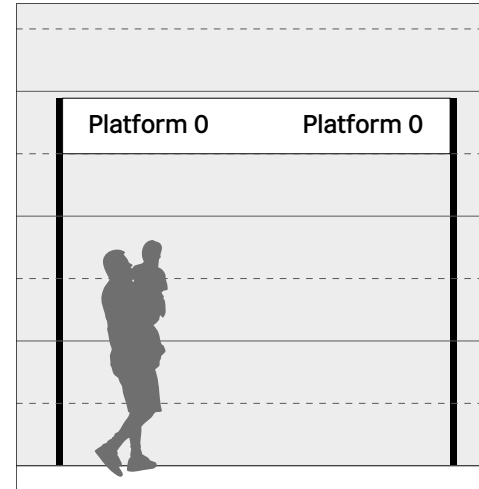
Sign examples



Suspended



Fascia mounted



Post mounted

Threshold – Gateline signs can be used on three products, fixed in three different ways. Shown on this page are their types and fixing variations:

**Suspended**

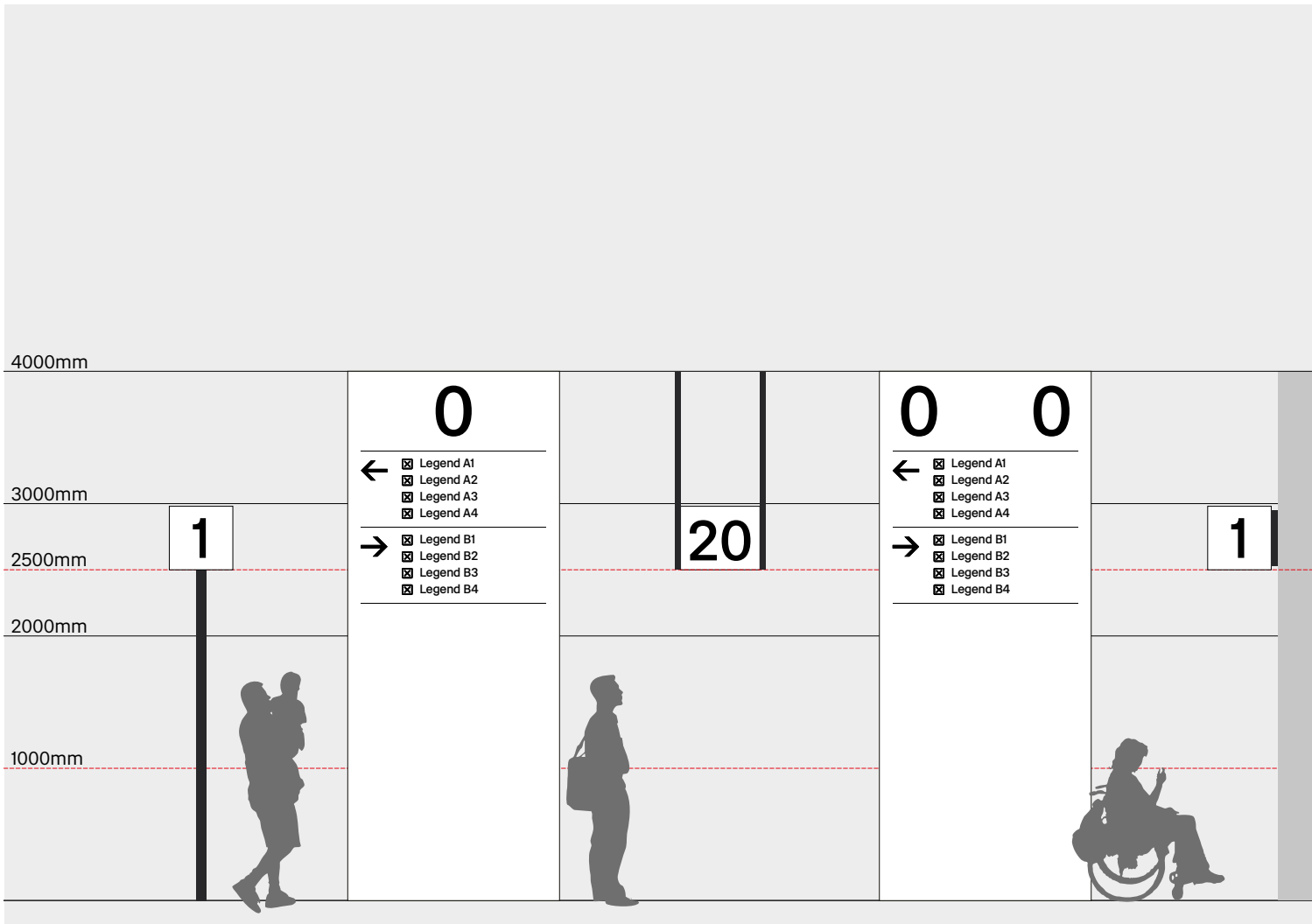
Suspended on rods from ceilings or overhead structures.

**Fascia mounted**

Attached to walls or surfaces

**Post mounted**

Attached to posts that are fixed in the ground.



### Function:

- Indicates which platform passengers are entering (or are currently on).
- Provide directions (on totems where applicable)

### Typical Content:

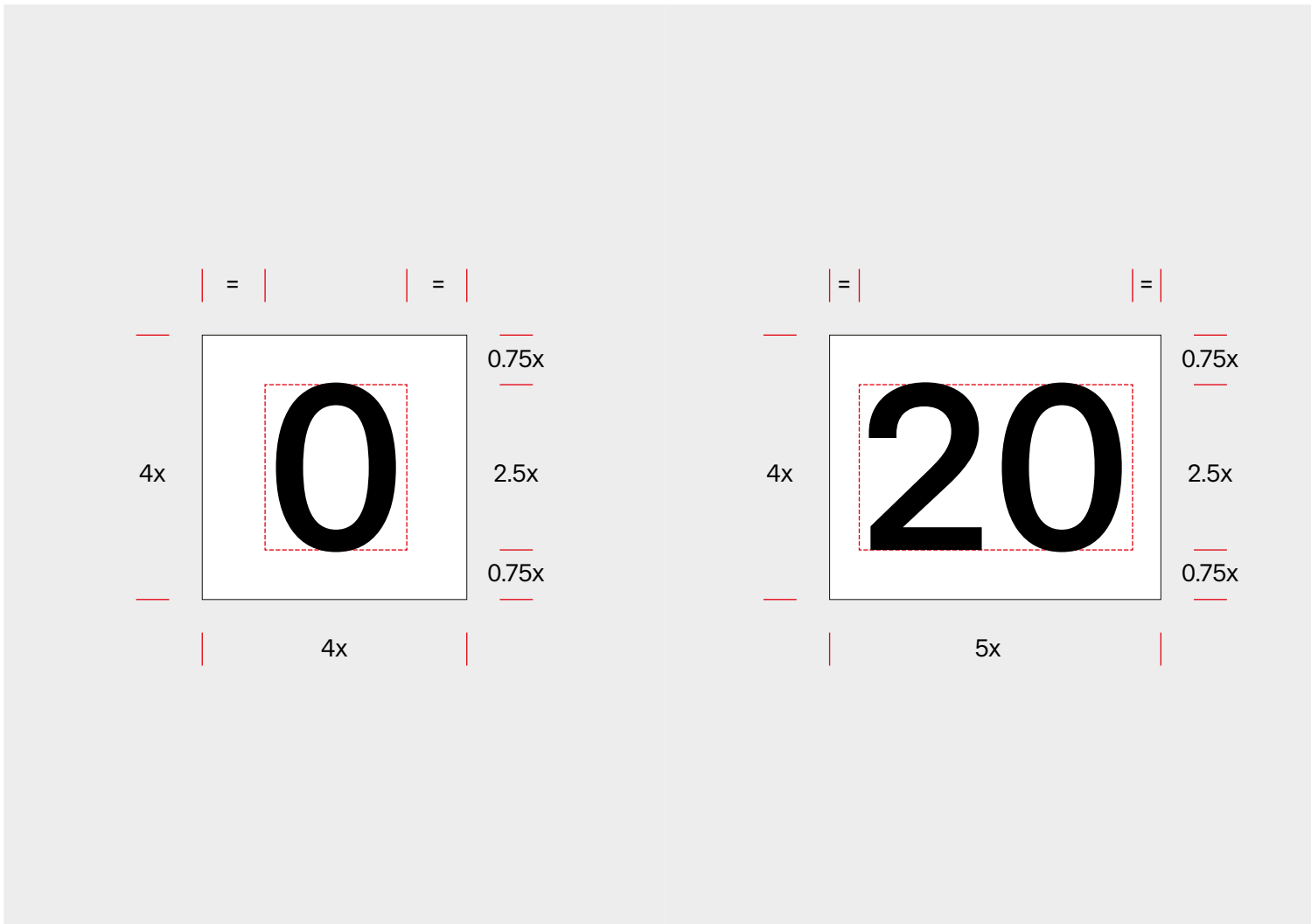
- Platform number
- Platform zone/letter (where applicable)
- Directions / map (on totems where applicable)

### Typical Placement:

- At the entrance to each platform (and repeated along its length).
- Paired with platform CIS along the platform (where applicable).
- High level, visible above crowds and can be read from long distances.
- Mounting dependant on local conditions.
- Care taken so signs do not obstruct flows or cause congestion (totem and floor mounted).

### Additional notes

- Signs on platforms should be mounted at 2,500mm from the finished floor level.



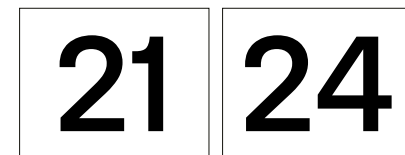
### Identification – Platform number

- To identify platforms



#### Numbers 1 to 19

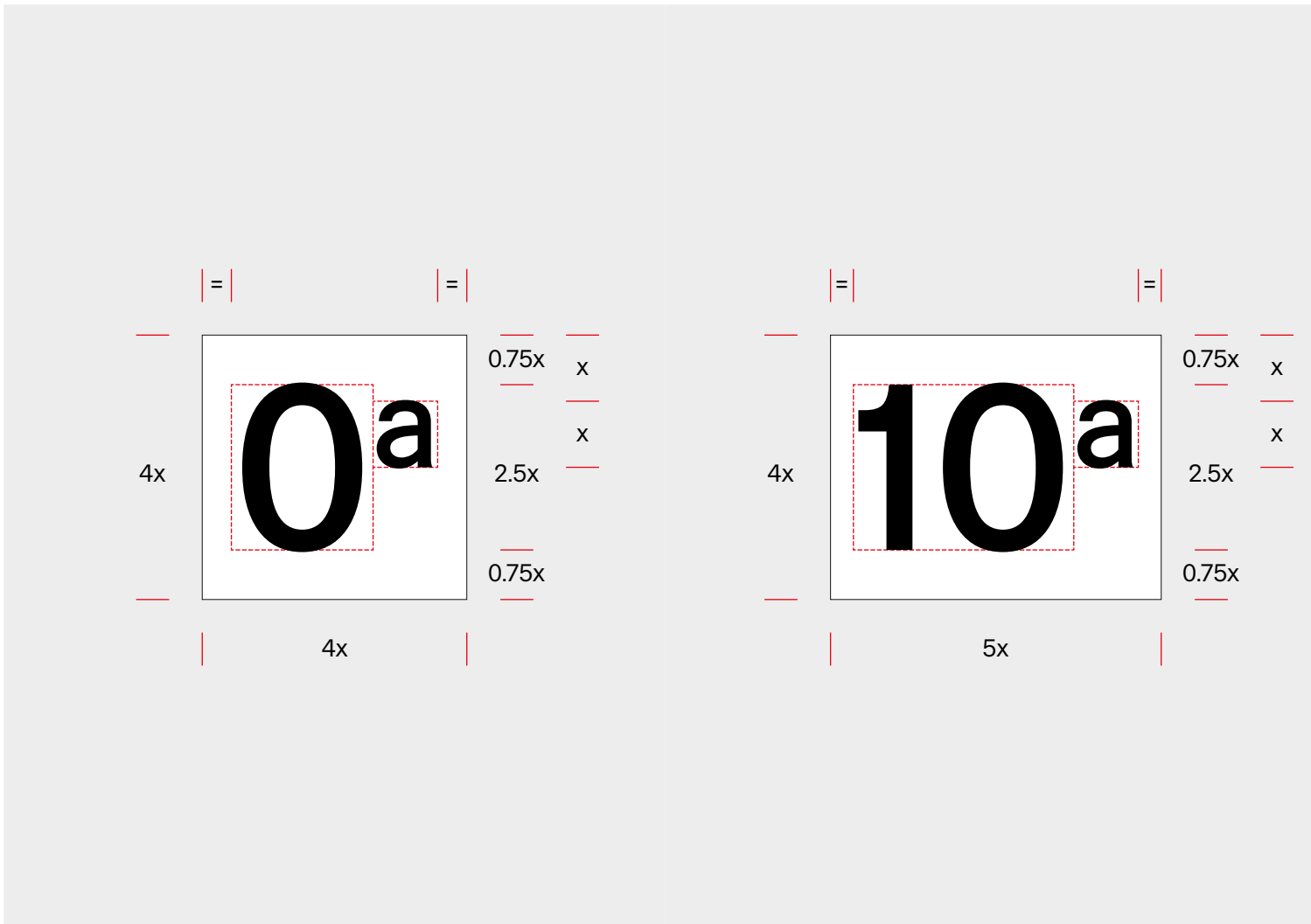
x-height	Number height	Width	Height
100mm	250mm	400mm	400mm
120mm	300mm	480mm	480mm
160mm	400mm	640mm	640mm



#### Numbers 20 onwards

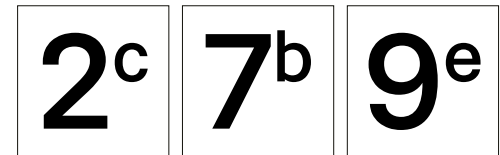
x-height	Number height	Width	Height
100mm	250mm	500mm	400mm
120mm	300mm	600mm	480mm
160mm	400mm	800mm	640mm





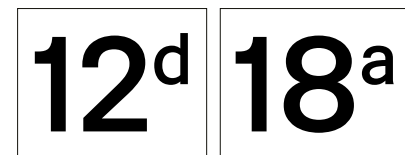
**Identification – Platform number and suffix**

- To identify platforms
- Includes suffix
- Always show suffix in lower case



**Numbers 1 to 9**

x-height	Number height	Width	Height
100mm	250mm	400mm	400mm
120mm	300mm	480mm	480mm
160mm	400mm	640mm	640mm



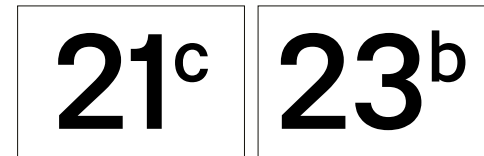
**Numbers 10 onwards**

x-height	Number height	Width	Height
100mm	250mm	500mm	400mm
120mm	300mm	600mm	480mm
160mm	400mm	800mm	640mm



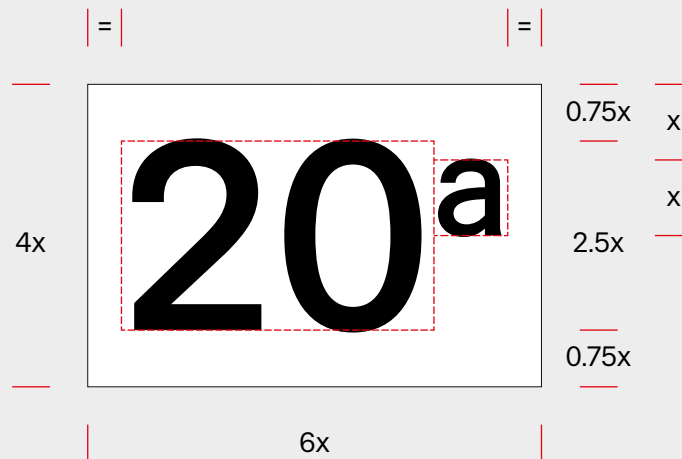
**Identification – Platform number and suffix**

- To identify platforms
- Includes suffix



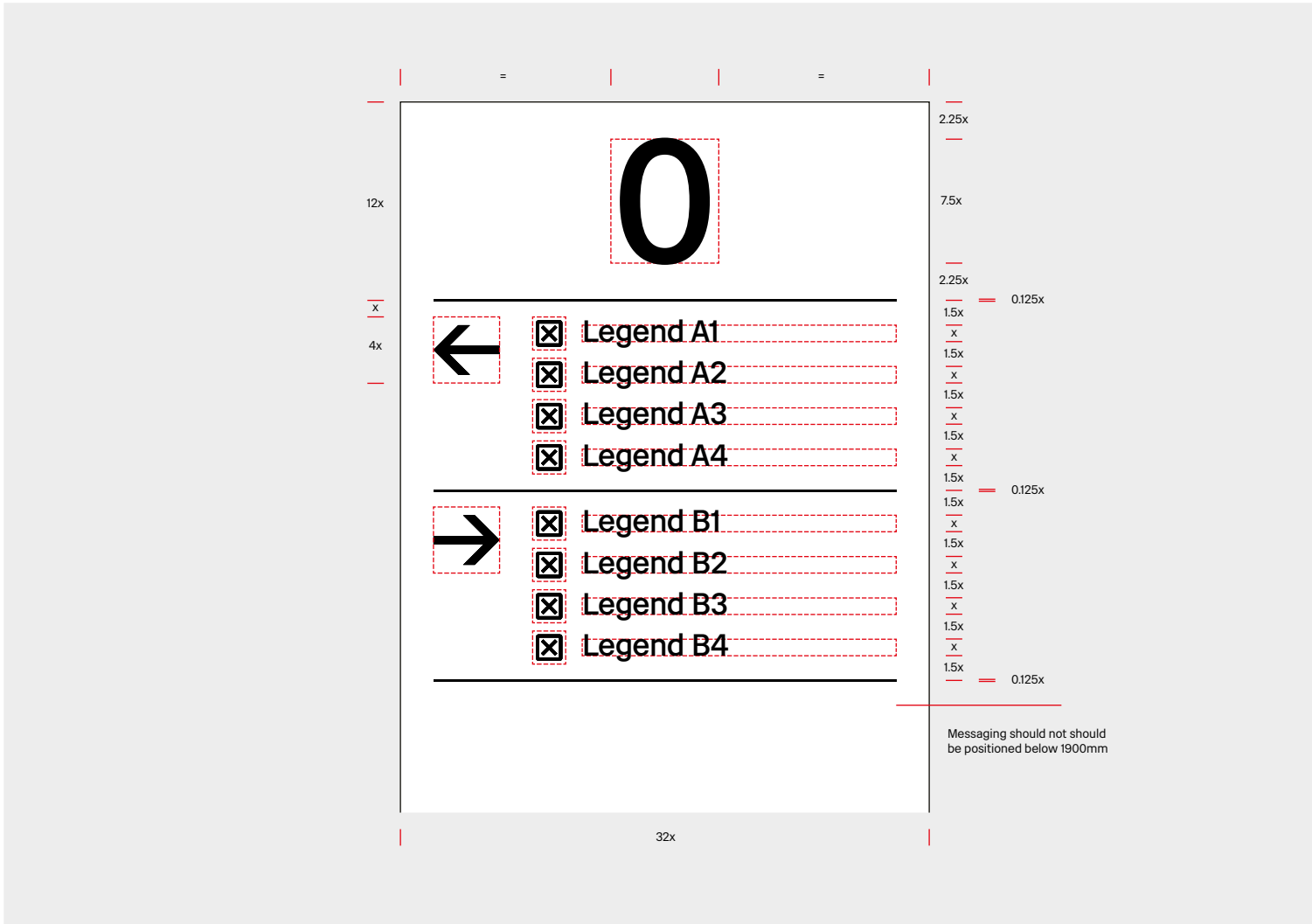
**Number 20 onwards**

x-height	Number height	Width	Height
100mm	250mm	600mm	400mm
120mm	300mm	720mm	480mm
160mm	400mm	960mm	640mm

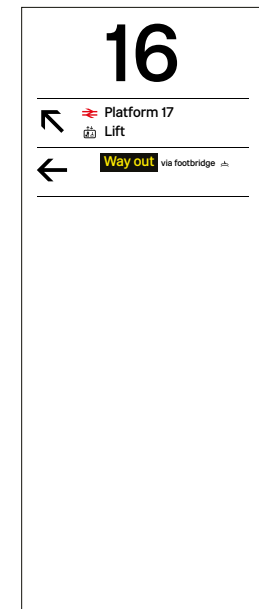


# Sign Family

## 6.6 Identification – Platform



Identification – Platform totem (one platform)



Layout example

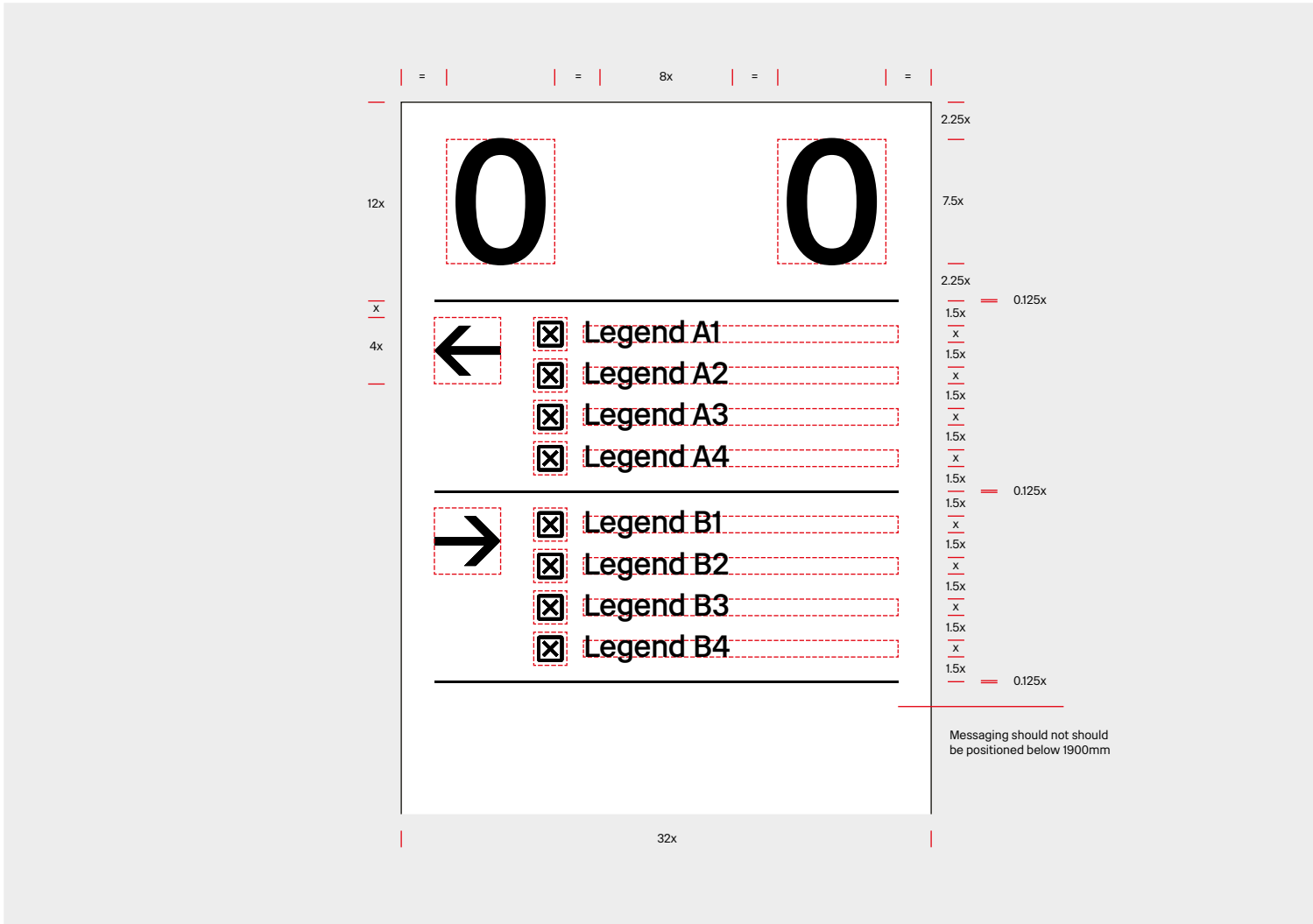
**Size options**

x-height	Width	Height
40mm	1,280mm	3,200mm
50mm	1,600mm	4,000mm

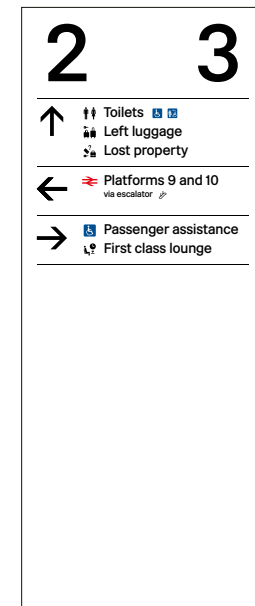
Refer to Section 5.4 for target reading distance

# Sign Family

## 6.6 Identification – Platform



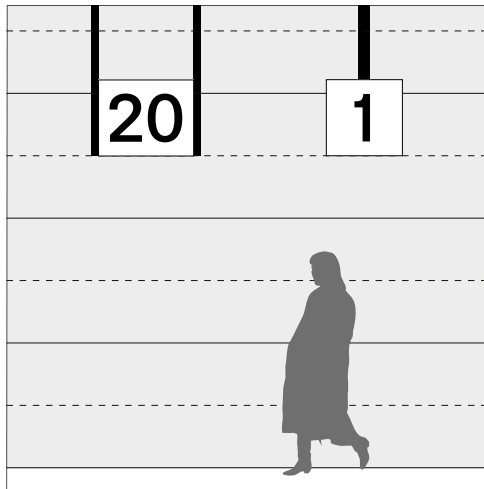
### Identification – Platform totem (two platform)



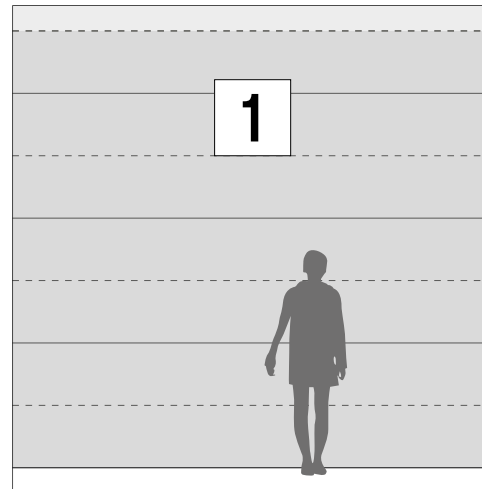
#### Size options

x-height	Width	Height
40mm	1,280mm	3,200mm
50mm	1,600mm	4,000mm

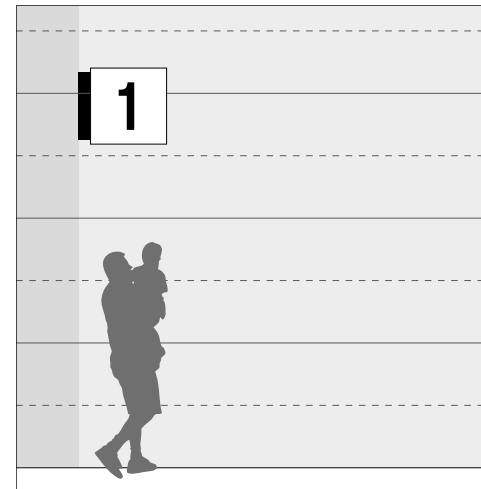
Refer to Section 5.4 for target reading distance



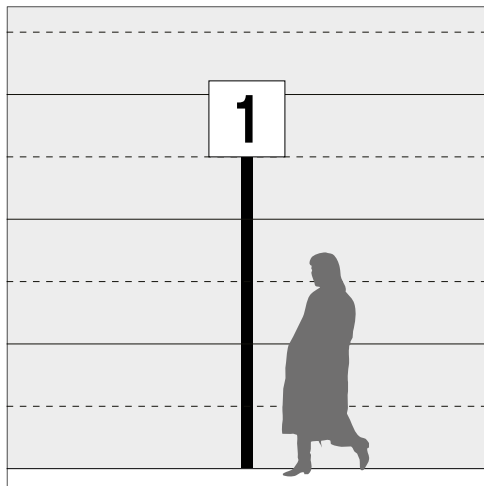
Suspended



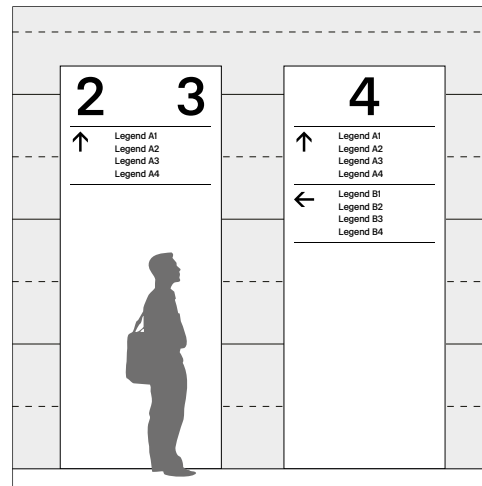
Fascia mounted



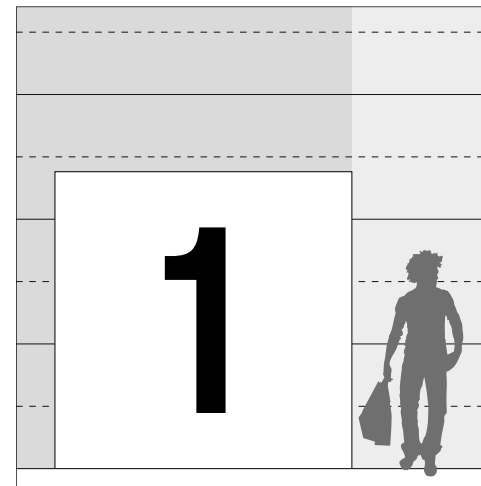
Projected



Post mounted



Totem



Fascia mounted (Supergraphic)

Identification – Platform signs can be used with a range of products and fixed in a number of ways. Shown on this page are their types and fixing variations:

**Suspended**

Suspended on rods from ceilings or overhead structures.

**Fascia mounted**

Attached to walls or surfaces.

**Projected**

Fixed at 90° from walls or structures.

**Post mounted**

Attached to posts that are fixed in the ground.

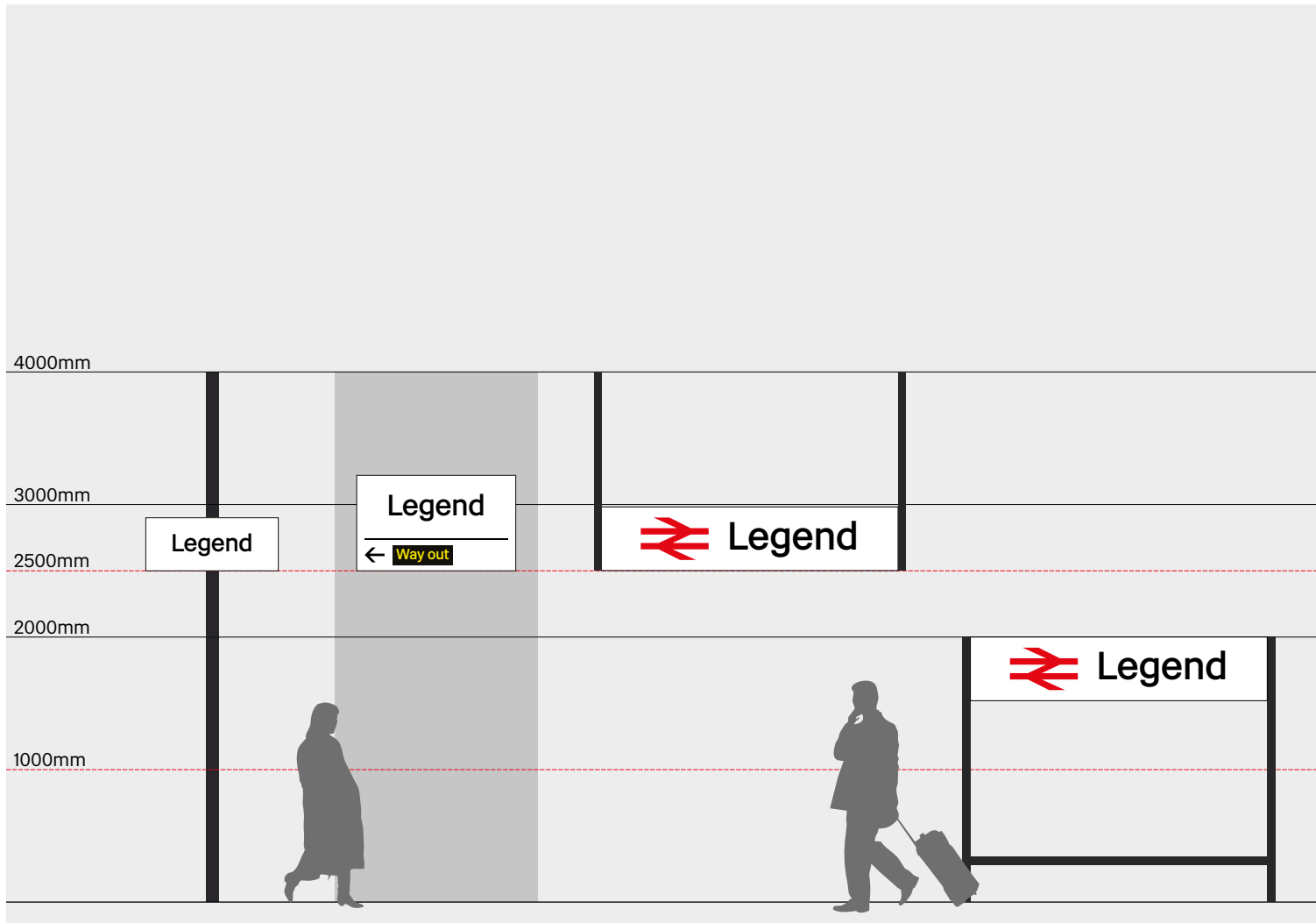
**Totem**

Displayed on platform totems

**NOTE:** Platform signs should never be mounted within the OLE envelope of any platform as this could introduce significant safety hazards (such as electrical arcing), interfere with OLE operation and maintenance, and lead to operational and service disruptions.

# Sign Family

## 6.7 Identification – Station



### Function:

- Identify the station as the train pulls in.
- Provides direction to the way out and other facilities (where applicable).

### Typical Content:

- Name of the station.
- Arrow and directions (where applicable)
- Network Rail 'Double Arrow' (only on running in board).

### Typical Placement:

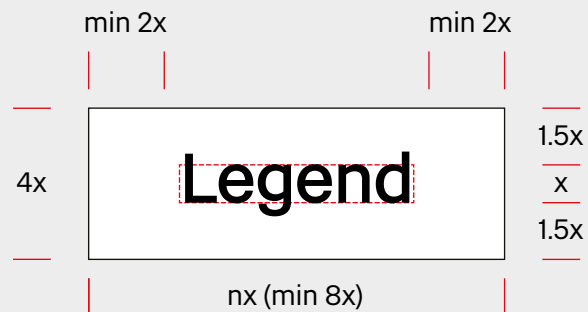
- At regular intervals along the platform.
- Visible from the train.
- Mounting dependent on local conditions.
- One running in board should be used per platform.



### Identification – Station

#### Single line repeater

- For use when a single line sign is required



Guildford

Nottingham

Milton Keynes Central

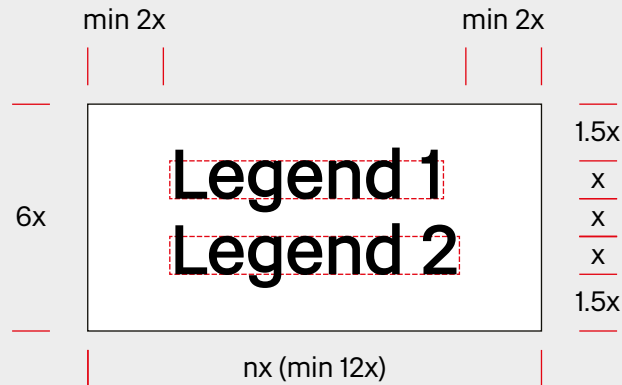
Birmingham International

Layout examples

#### Size options

x-height	Width	Height
60mm	480mm (min)	240mm
80mm	640mm (min)	320mm
100mm	800mm (min)	400mm
120mm	960mm (min)	480mm
160mm	1,280mm (min)	640mm

Refer to Section 5.4 for target reading distance



**Identification – Station**

**Double line repeater**

- For use when a double line sign is required

Didcot  
Parkway

Liverpool  
Lime Street

Haddenham and  
Thame Parkway

West Hampstead  
Thameslink

Layout examples

**Size options**

x-height	Width	Height
60mm	720mm (min)	360mm
80mm	960mm (min)	480mm
100mm	1,200mm (min)	600mm
120mm	1,440mm (min)	720mm
160mm	1,920mm (min)	960mm

Refer to Section 5.4 for target reading distance

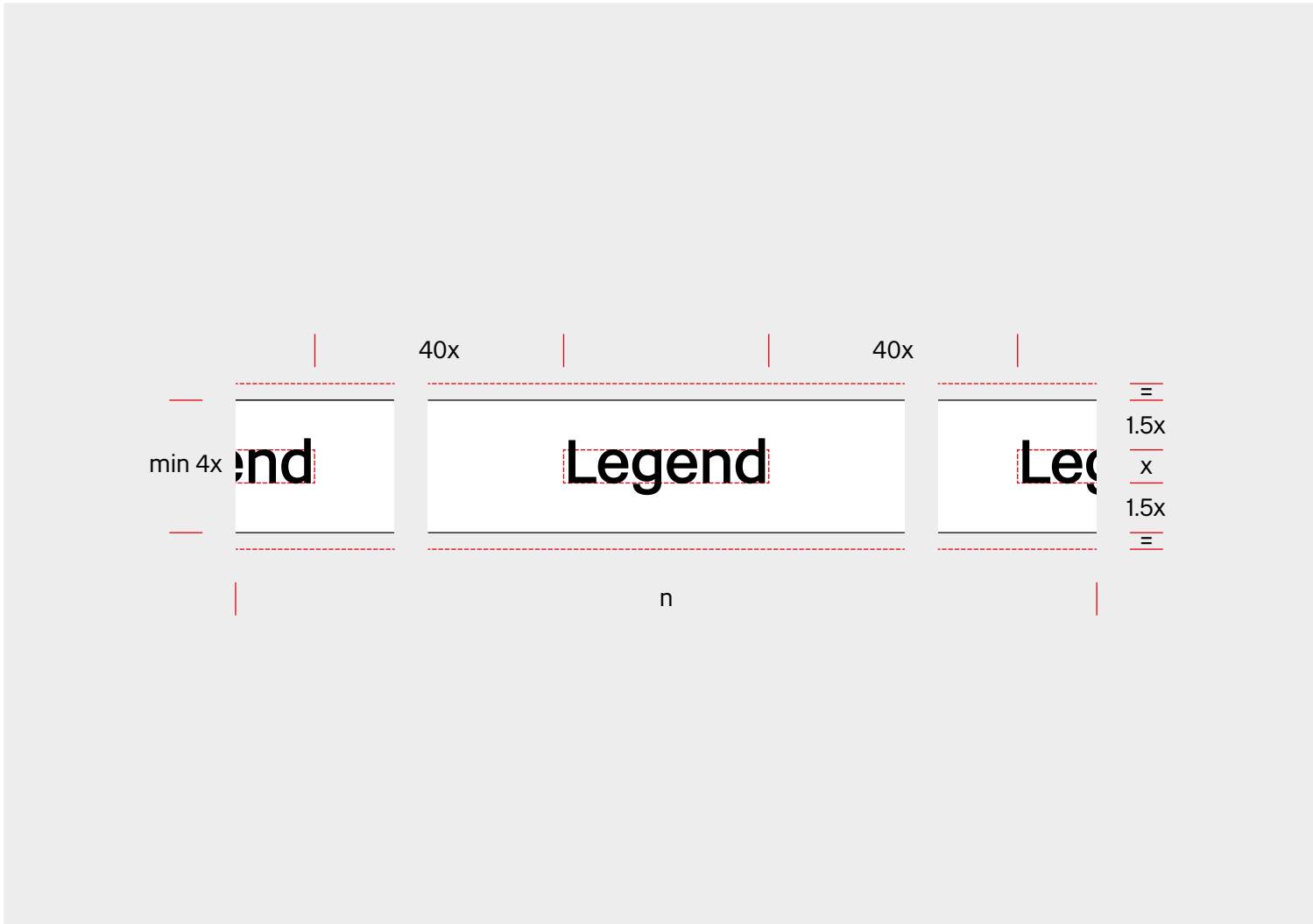




**Identification – Station**

**Ribbon repeater**

- To be used to display station names in ribbons



Middlesbrough

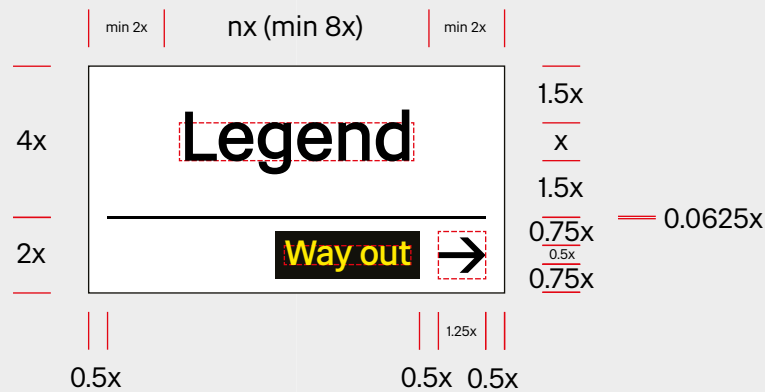
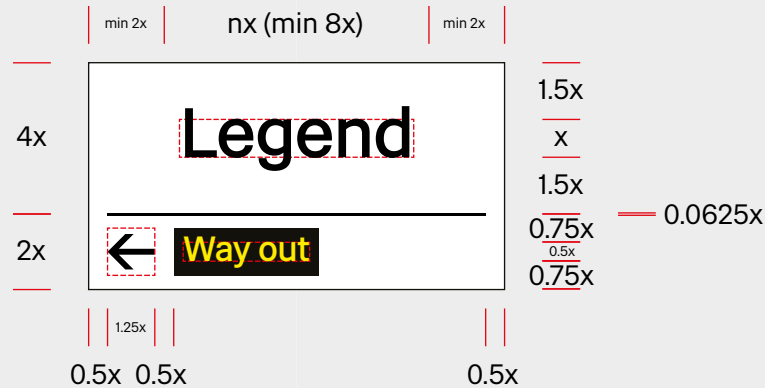
London Charing Cross

Layout examples

**Size options**

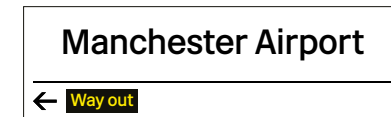
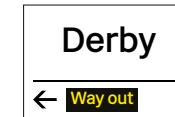
x-height	Width	Height
60mm	n (variable)	240mm
80mm	n (variable)	320mm
100mm	n (variable)	400mm
120mm	n (variable)	480mm

Refer to Section 5.4 for target reading distance



### Identification – Station Single line repeater with Way out patch

- For use when a single line sign and a Way out patch is required

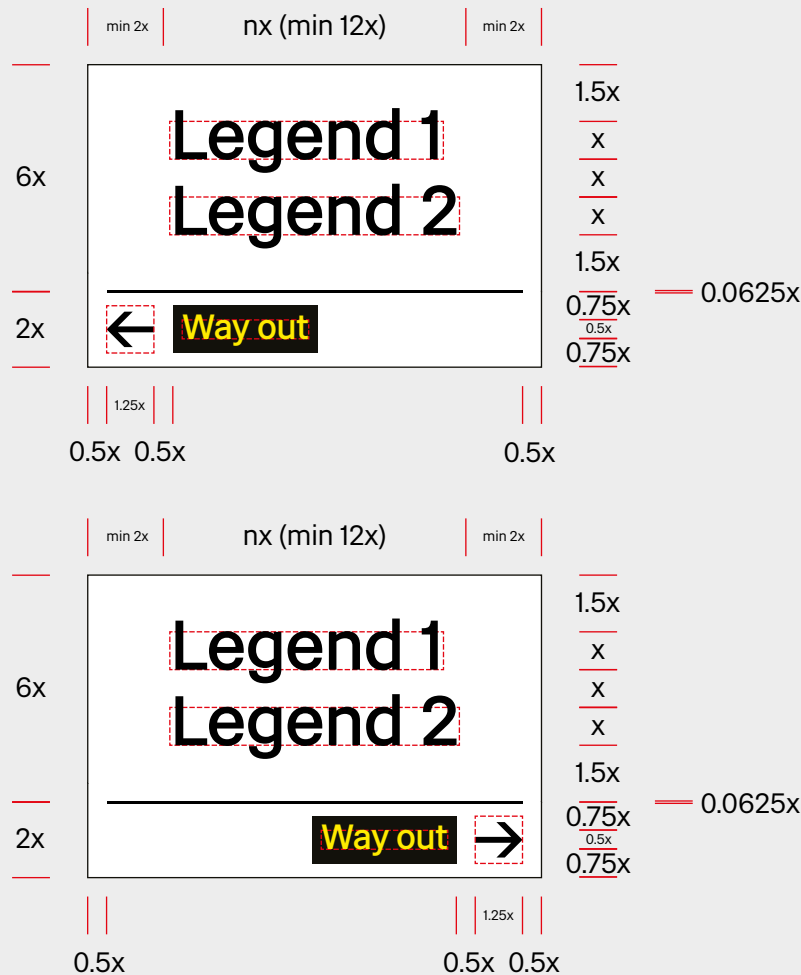


Layout examples

#### Size options

x-height	Width	Height
60mm	480mm (min)	360mm
80mm	640mm (min)	480mm
100mm	600mm (min)	600mm
120mm	960mm (min)	720mm
160mm	1,280mm (min)	960mm

Refer to Section 5.4 for target reading distance



### Identification – Station Double line repeater with Way out patch

- For use when a double line sign and a Way out patch is required



Layout examples

### Size options

x-height	Width	Height
60mm	720mm (min)	480mm
80mm	960mm (min)	640mm
100mm	1,200mm (min)	800mm
120mm	1,440mm (min)	960mm
160mm	1,920mm (min)	1,280mm

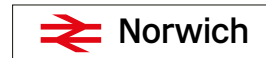
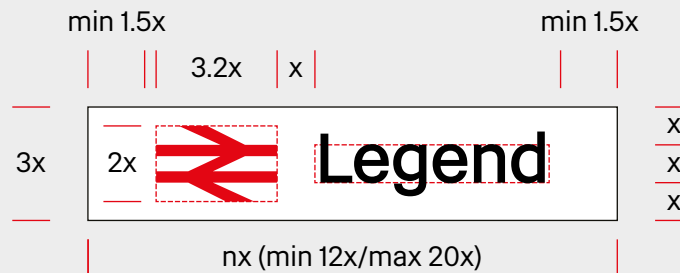
Refer to Section 5.4 for target reading distance



### Identification – Station

#### Single line running in board

- Rail Symbol 2 should only be included on running in boards.



Layout examples

#### Size options

x-height	Width	Height
160mm	1,920mm (min)	480mm
200mm	2,400mm (min)	600mm

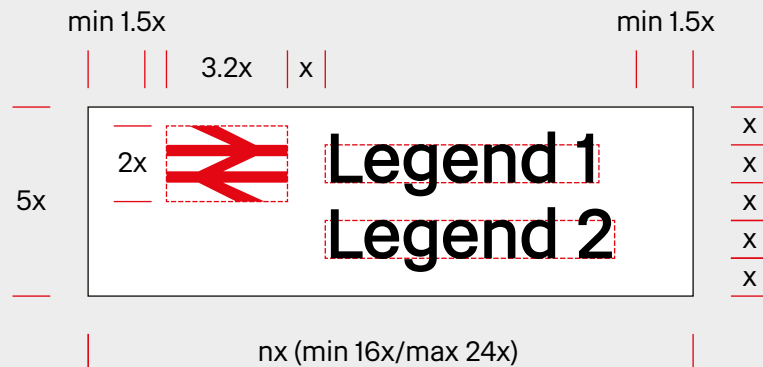
Refer to Section 5.4 for target reading distance



### Identification – Station

#### Double line running in board

- Rail Symbol 2 should only be included on Running In Boards.



 Glasgow Central

 Manchester Piccadilly

 Southampton Central

 Cobham and Stoke d'Abernon

Layout examples

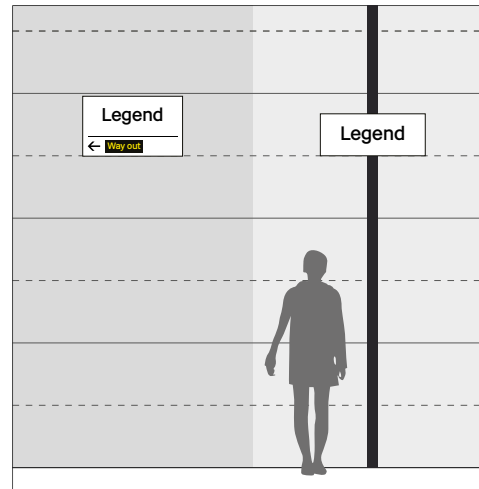
#### Size options

x-height	Width	Height
160mm	2,560mm (min)	800mm
200mm	3,200mm (min)	1,000mm

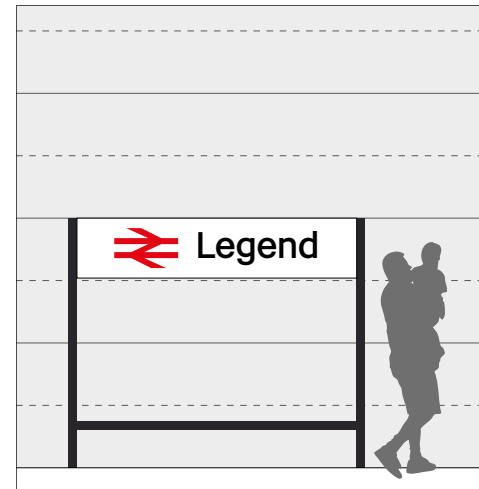
Refer to Section 5.4 for target reading distance



Suspended



Fascia and post mounted



Post mounted running in board

Identification – Station signs can be used with a range of products and fixed in a number of ways. Shown on this page are their types and fixing variations:

**Suspended**

Suspended on rods from ceilings or overhead structures.

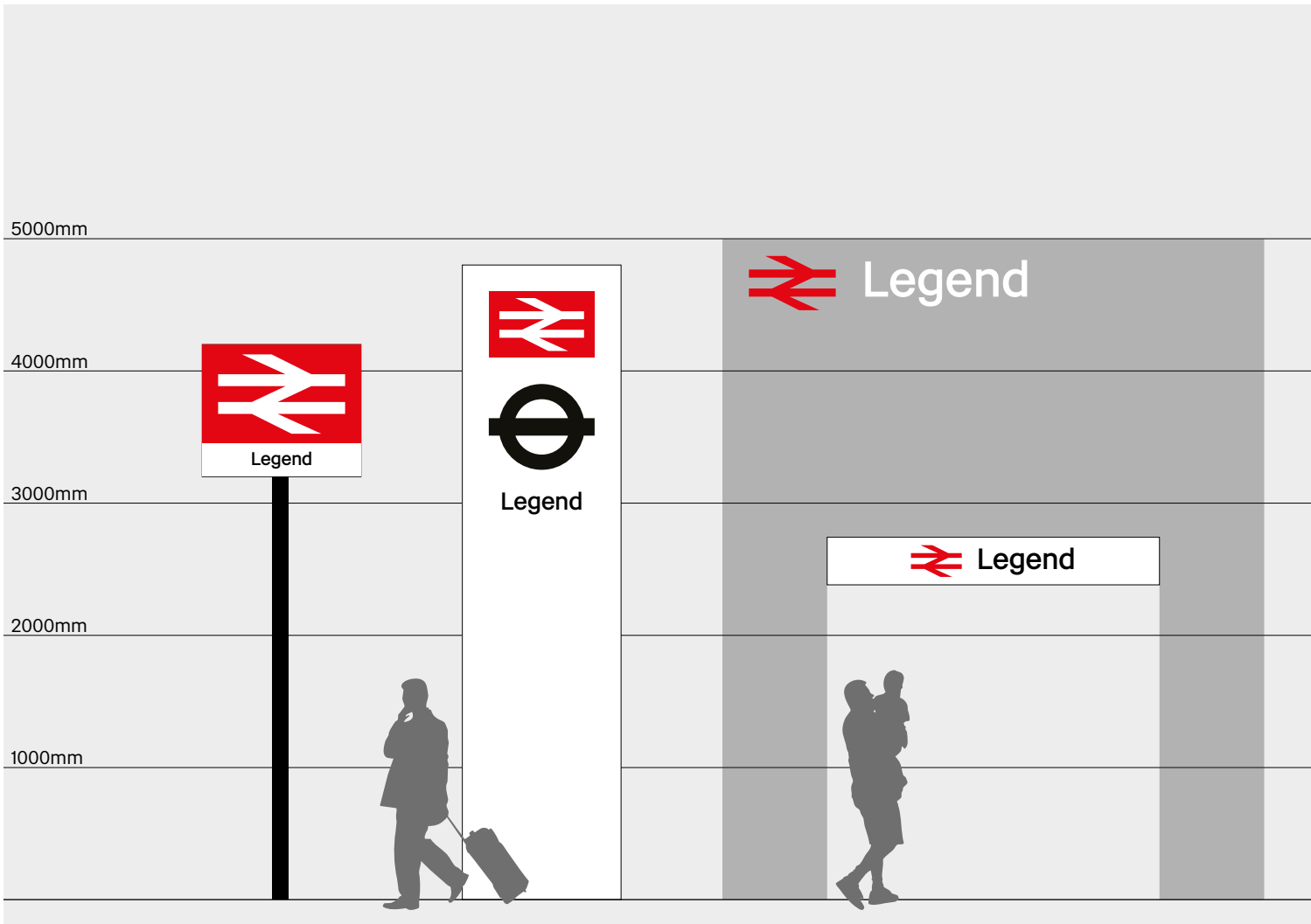
**Fascia mounted**

Attached to walls or surfaces.

**Post mounted**

Attached to posts that are fixed in the ground.

## 6.8 Identification – Station External



### Function:

- Identifies the station on approach and signifies its presence.
- Identifies modes served by the station.

### Typical Content:

- Name of the station.
- Rail Symbol.
- Other transport identifiers where applicable (e.g. TfL roundels).

### Typical Placement:

- Placed in prominent positions to provide visibility from key access routes to the station.
- High level, visible above crowds and can be read from long distances.
- Mounting dependant on local conditions and architecture.



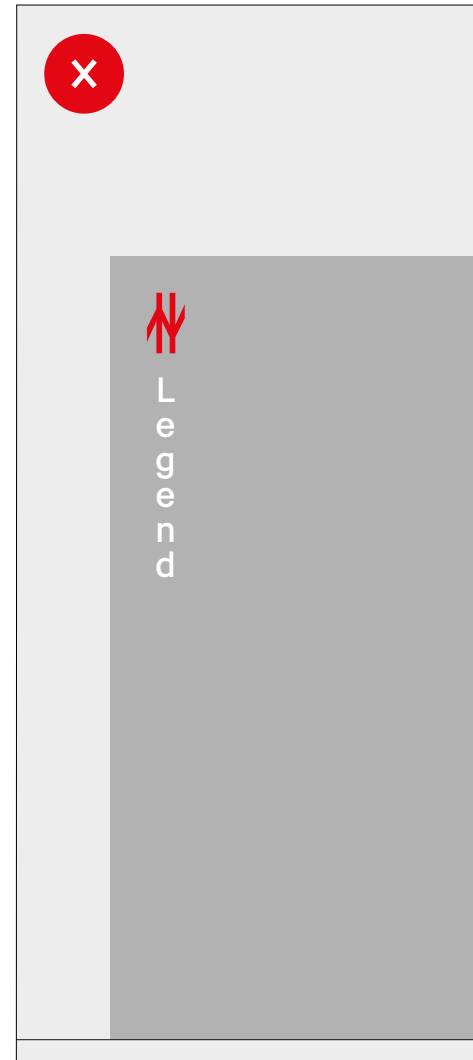
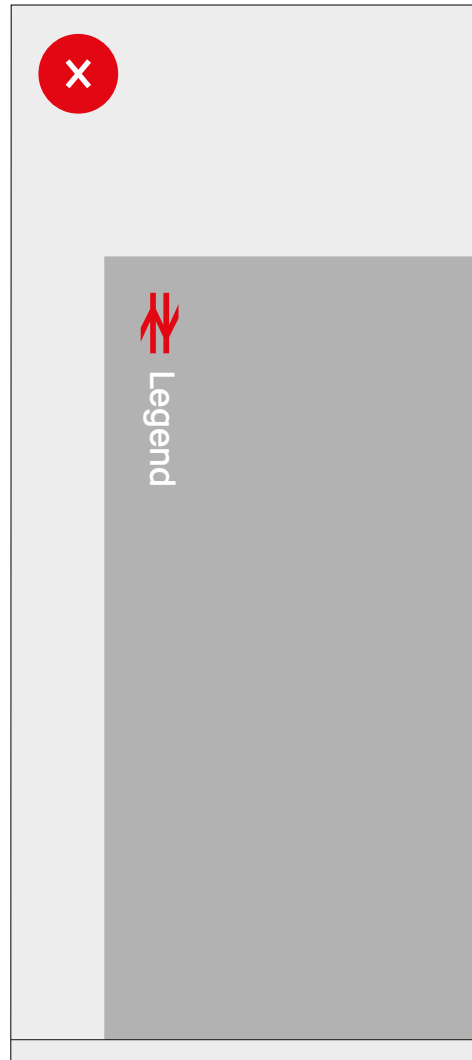
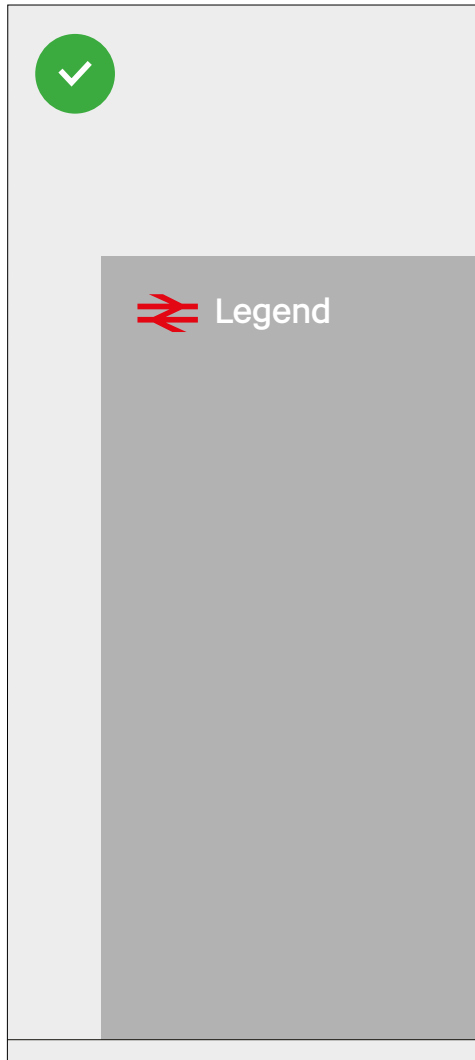
### Identification – Station External

#### Monumental lettering

Monumental lettering will be permanently attached to the station building, it is as much an architectural feature as a wayfinding element.

As every application of monumental lettering is unique, the Network Rail Architecture department will need to be consulted when monumental lettering is being proposed for a station building.



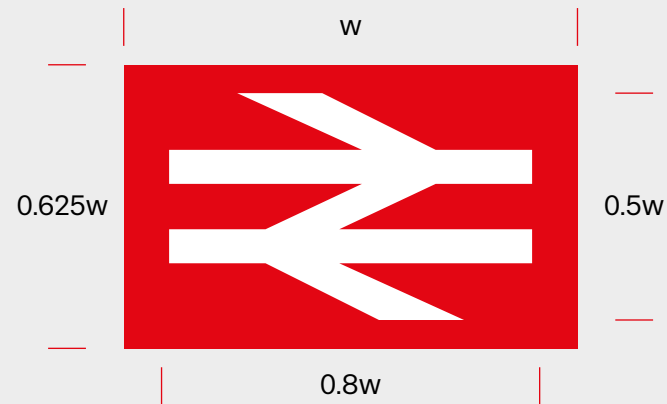


### Identification – Station External Monumental lettering

- Text should never be vertically aligned and letters should also never be stacked vertically.



## Identification – Station External Lozenge



### Size options

x-height	Width	Height
80mm	800mm	500mm
100mm	960mm	600mm
120mm	1,200mm	750mm

Refer to Section 5.4 for target reading distance



## Identification – Station External Lozenge with station name

- For use with short station names

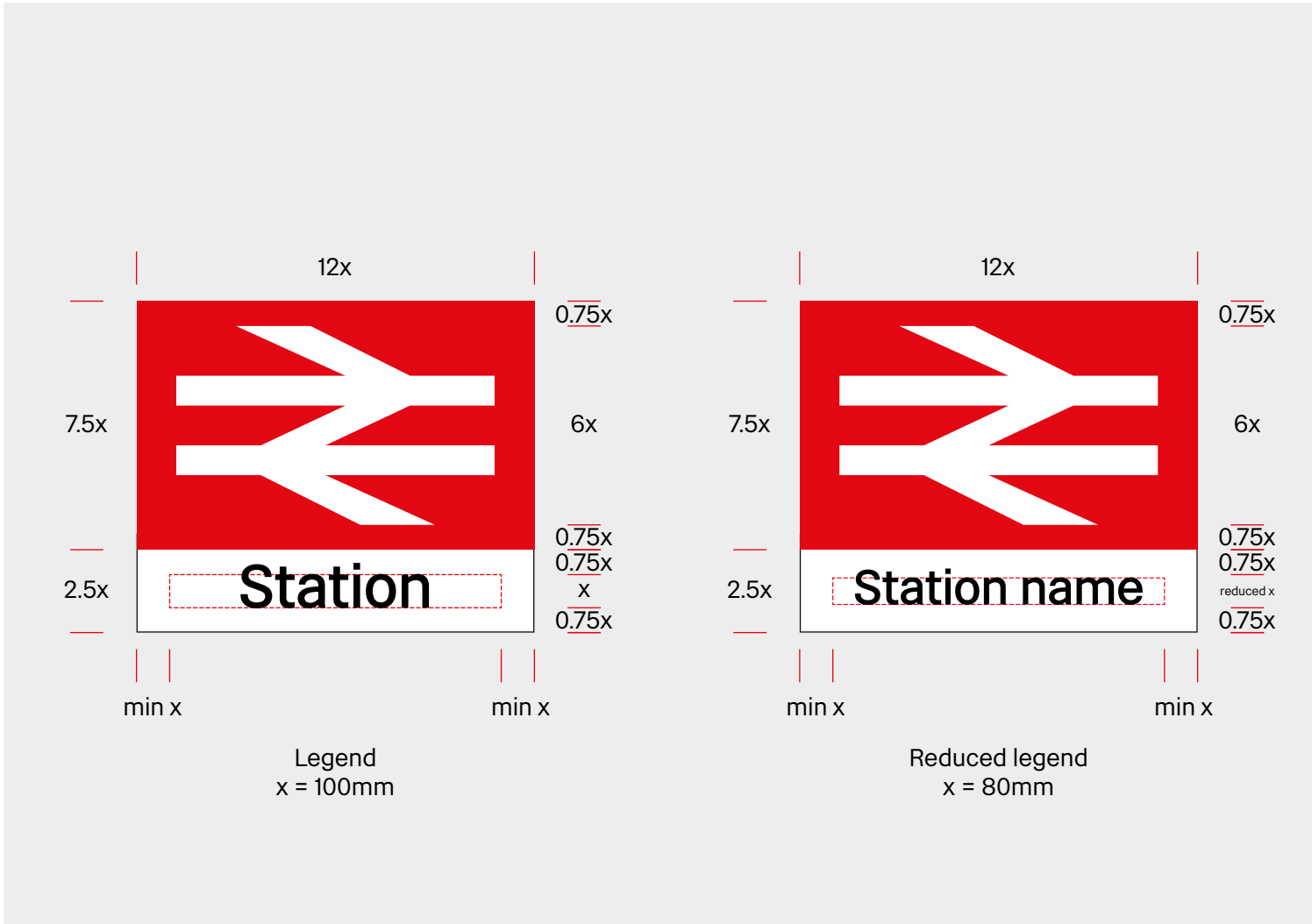


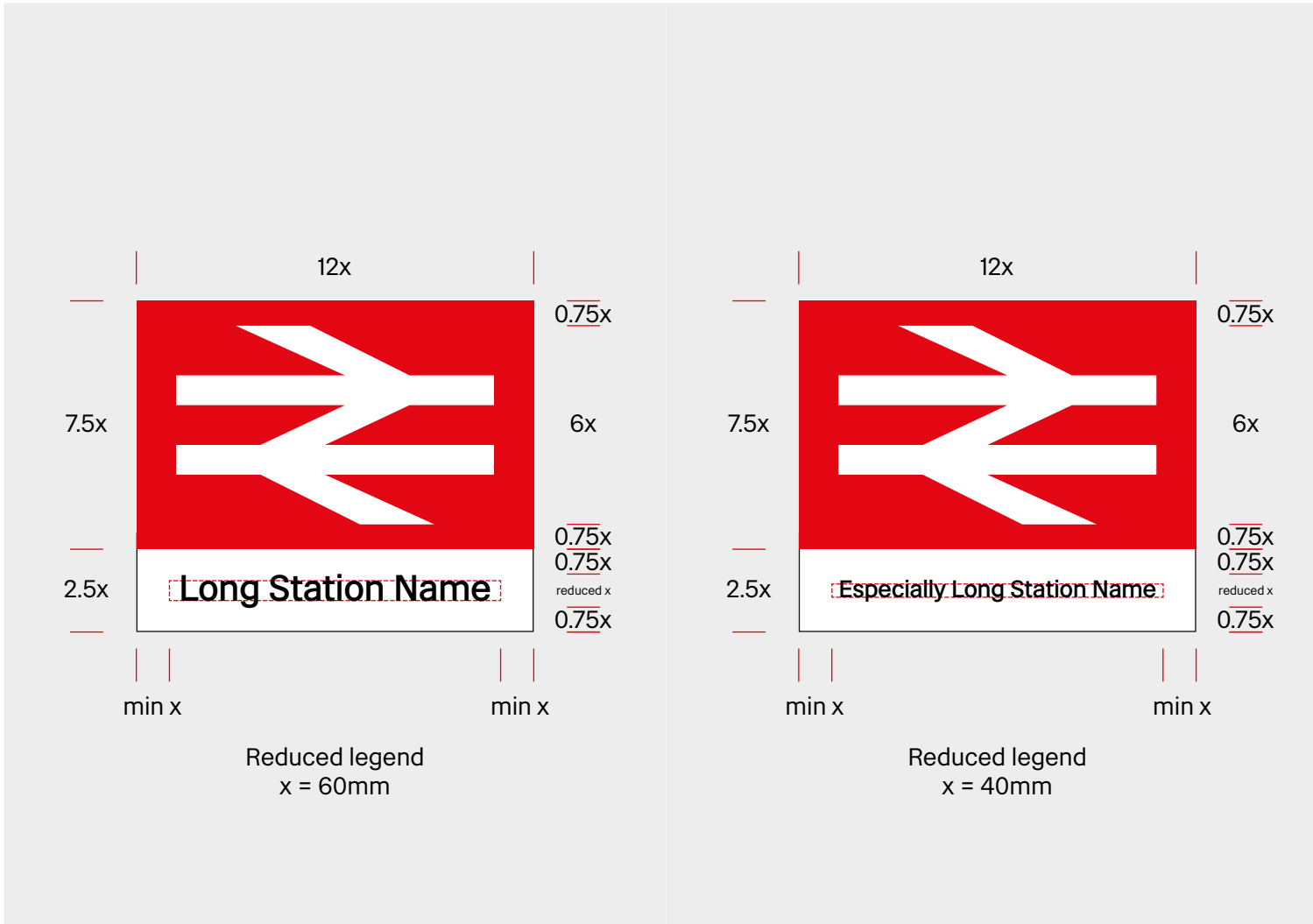
Layout examples

### Size options

x-height	Width	Height
80mm	960mm	800mm
100mm	1,200mm	1,000mm

Refer to Section 5.4 for target reading distance





### Identification – Station External Lozenge with station name

- For use with longer station names



Layout examples

#### Size options

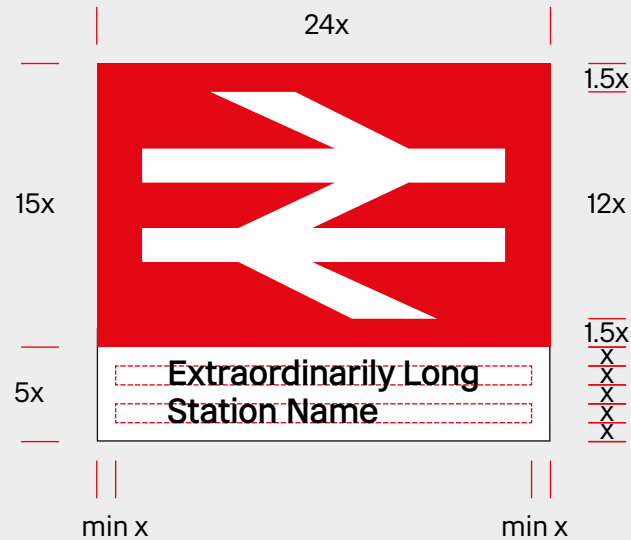
x-height	Width	Height
80mm	960mm	800mm
100mm	1,200mm	1,000mm

Refer to Section 5.4 for target reading distance



## Identification – Station External Lozenge with station name

- For use with even longer station names

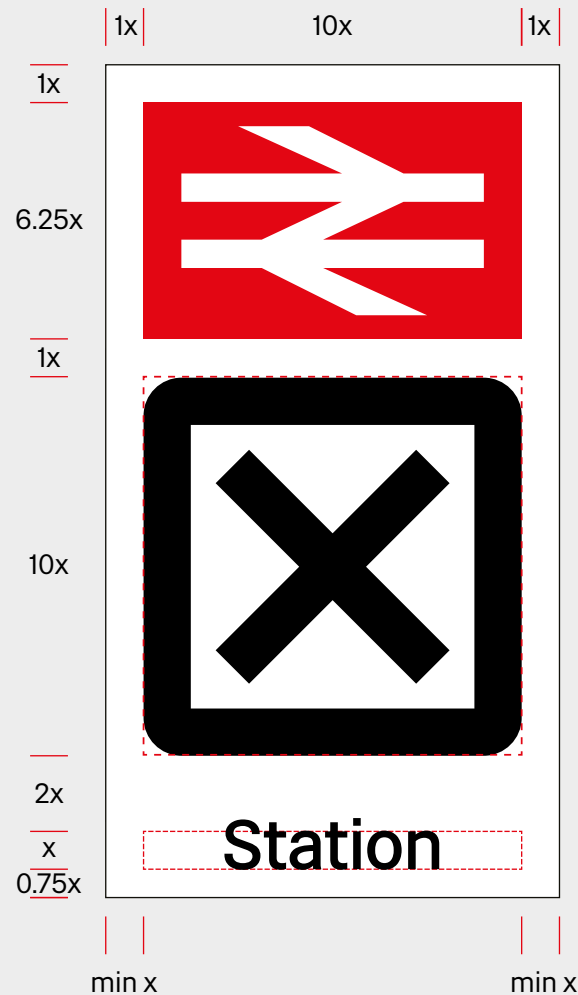


Layout examples

### Size options

x-height	Width	Height
40mm	960mm	800mm
50mm	1,200mm	1,000mm

Refer to Section 5.4 for target reading distance

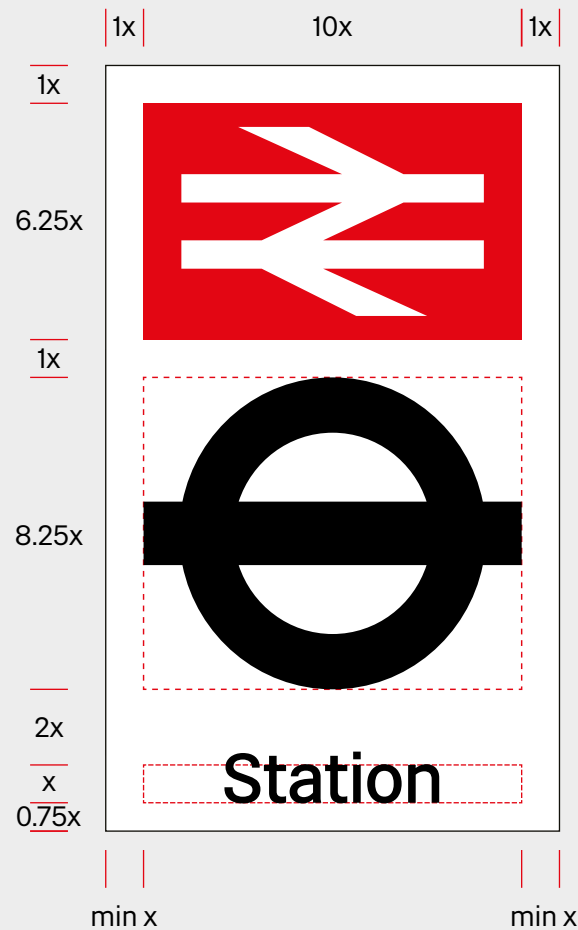


### Identification – Station External Lozenge with transport interchange

- To be used when additional services are available from station only
- Not to be used to identify train operating companies
- For longer station names utilise previously established guidance



Layout examples

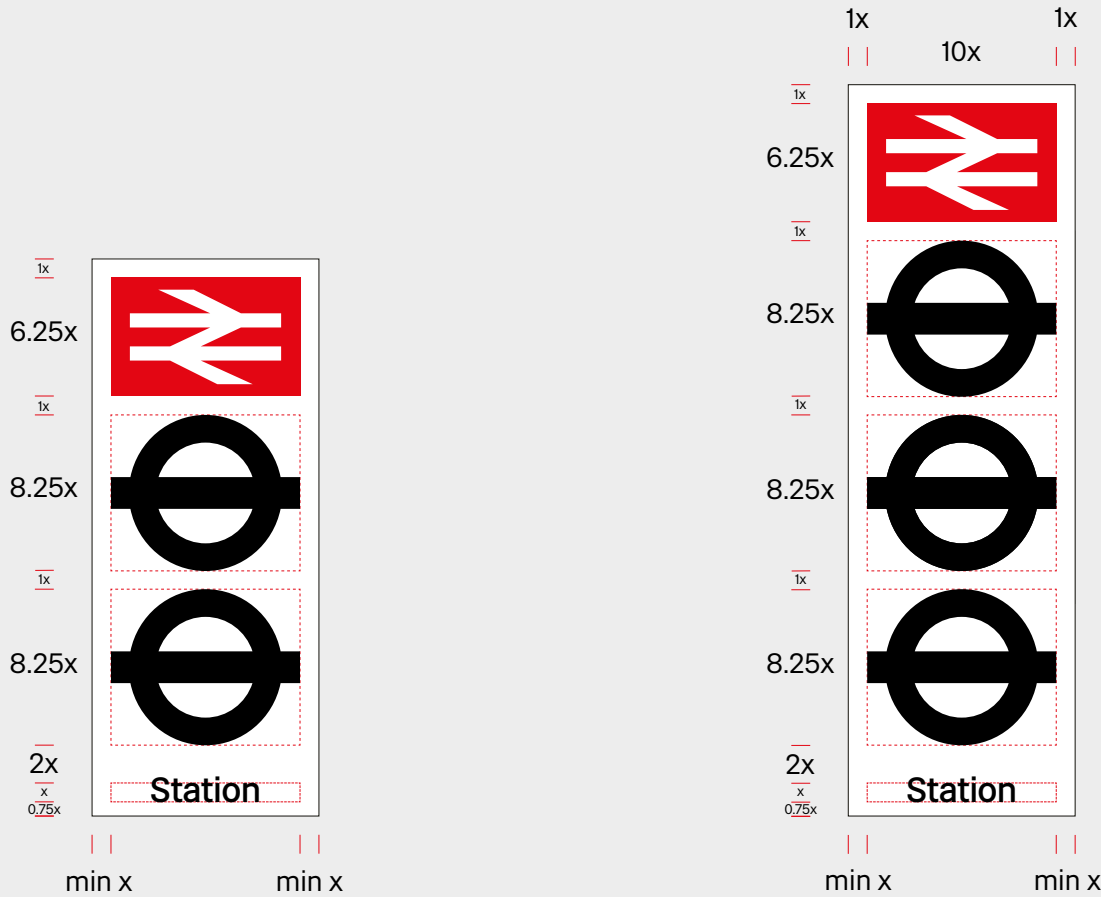


### Identification – Station External Lozenge with TfL interchange

- To be used when additional services are available from station only
- Not to be used to identify train operating companies
- For longer station names utilise previously established guidance



Layout examples



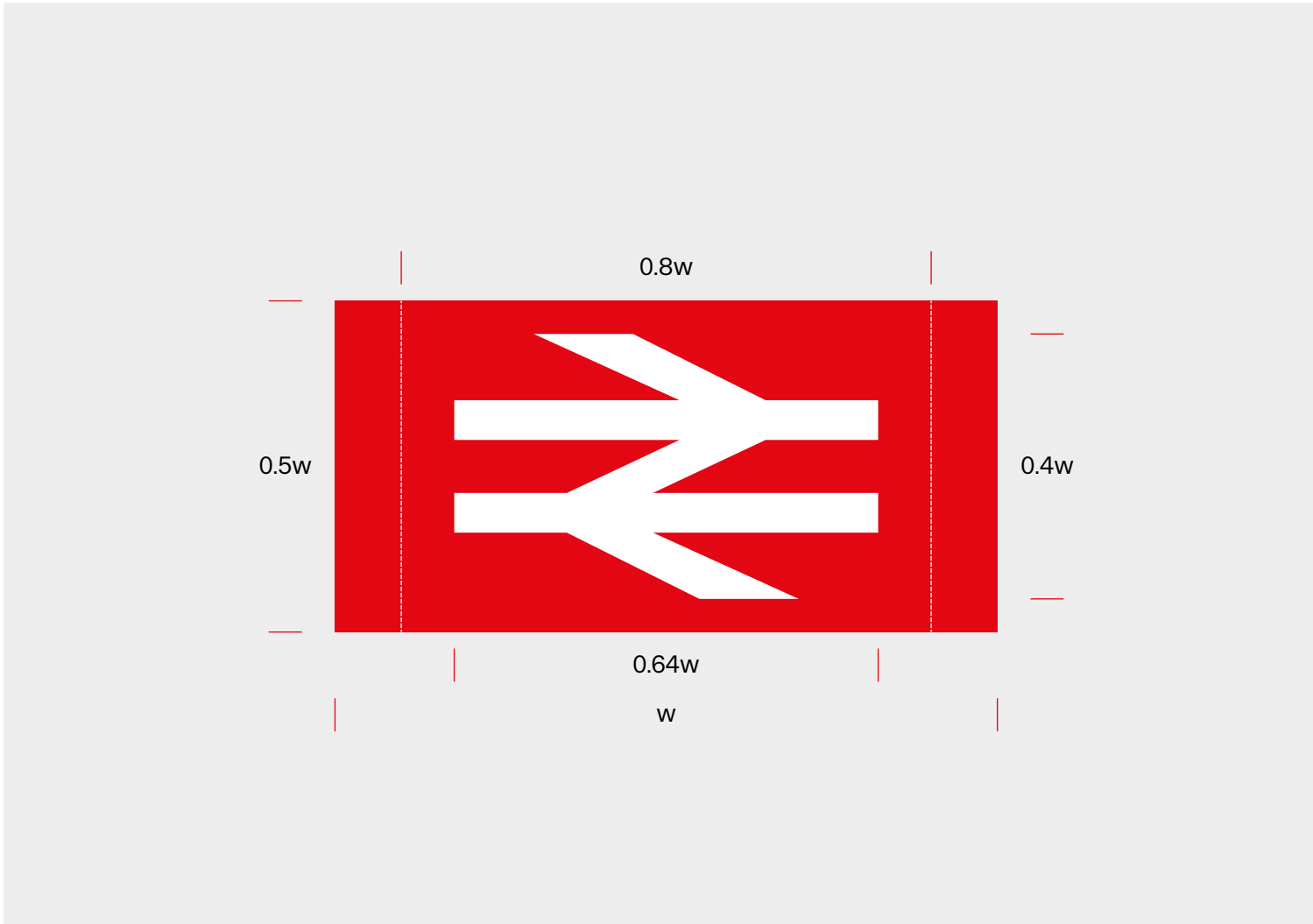
### Identification – Station External Lozenge with TfL interchange

- To be used when additional services are available from station only
- Not to be used to identify train operating companies
- For longer station names utilise previously established guidance

#### Layout examples

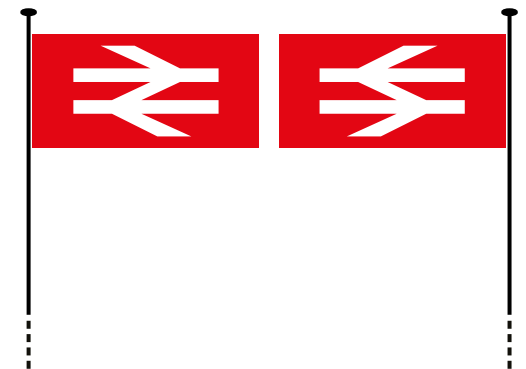






### Identification – Station External House flag

- The lozenge version of the symbol is centred to fill a 2:1 flag in keeping with the Union Flag with which it may be flown in accordance with flag etiquette.
- The flag should be produced from a single sheet of synthetic fabric. The top arrow of the symbol points away from the hoist.



#### Flag dimensions

2,000 × 1,000mm  
3,000 × 1,500mm  
4,000 × 2,000mm  
5,000 × 2,500mm  
6,000 × 3,000mm

#### Height (ground to finial)

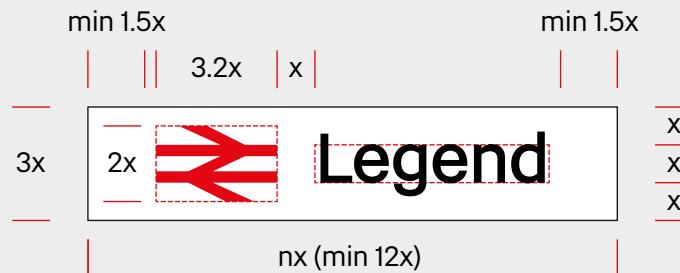
4m to 8m  
8m to 12m  
12m to 16m  
16m to 20m  
20m and above



### Identification – Station External

#### Single line name sign

- For use with short station names



Layout examples

#### Size options

x-height	Width	Height
80mm	960mm (min)	240mm
100mm	1,200mm (min)	300mm
120mm	1,440mm (min)	360mm
160mm	1,920mm (min)	480mm
200mm	2,400mm (min)	600mm

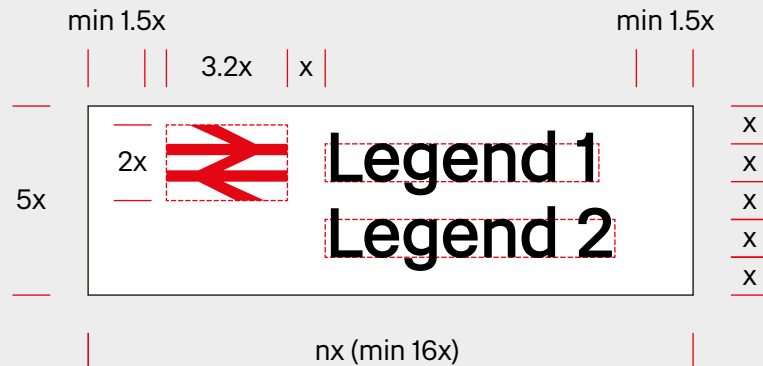
Refer to Section 5.4 for target reading distance



### Identification – Station External

#### Double line name sign

- For use with longer station names



Layout examples

#### Size options

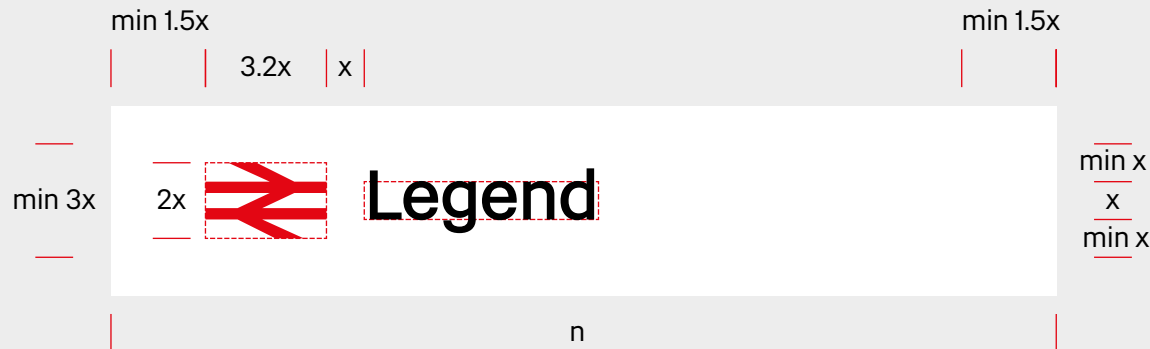
x-height	Width	Height
80mm	1,280mm (min)	400mm
100mm	1,600mm (min)	500mm
120mm	1,920mm (min)	600mm
160mm	2,560mm (min)	800mm
200mm	3,200mm (min)	1,000mm

Refer to Section 5.4 for target reading distance



**Identification – Station External**  
**Single line bespoke**

- To be used to fit available space



 **Mansfield**

 **Three Bridges**

Layout examples

**Size options**

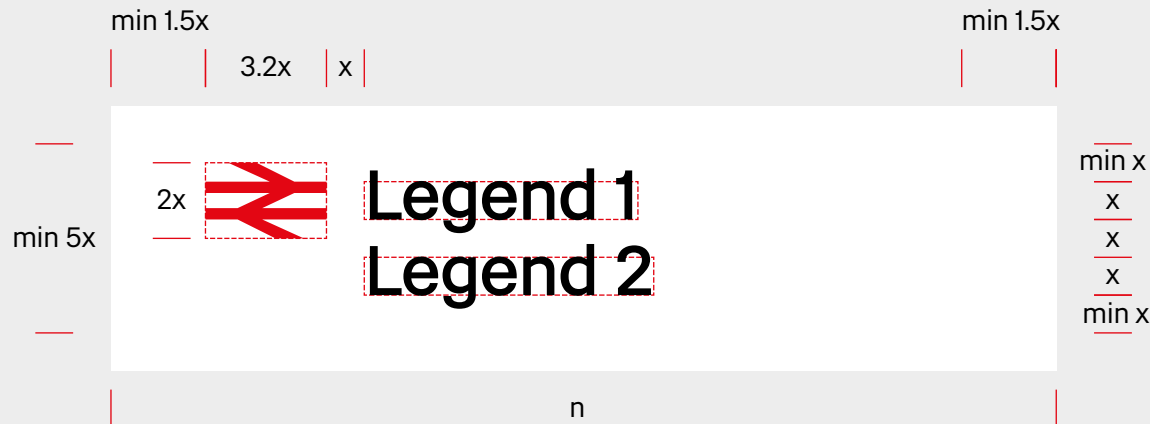
x-height	Width	Height
80mm	n (variable)	240mm (min)
100mm	n (variable)	300mm (min)
120mm	n (variable)	360mm (min)
160mm	n (variable)	480mm (min)
200mm	n (variable)	600mm (min)
240mm	n (variable)	720mm (min)

Refer to Section 5.4 for target reading distance



### Identification – Station External Double line bespoke

- To be used to fit available space



Layout examples

#### Size options

x-height	Width	Height
80mm	n (variable)	400mm (min)
100mm	n (variable)	500mm (min)
120mm	n (variable)	600mm (min)
160mm	n (variable)	800mm (min)
200mm	n (variable)	1,000mm (min)
240mm	n (variable)	1,200mm (min)

Refer to Section 5.4 for target reading distance

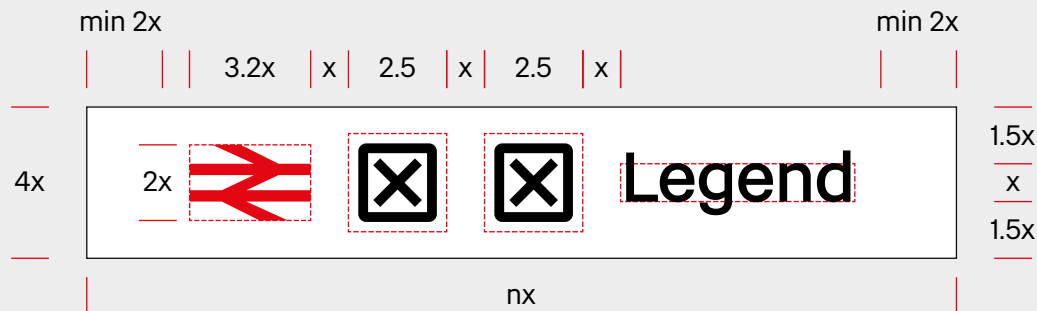


### Identification – Station External Interchange

- To be used when additional services are available from station



Layout examples



### Size options

x-height	Width	Height
80mm	n (variable)	320mm
100mm	n (variable)	400mm
120mm	n (variable)	480mm
160mm	n (variable)	640mm
200mm	n (variable)	800mm
240mm	n (variable)	960mm

Refer to Section 5.4 for target reading distance

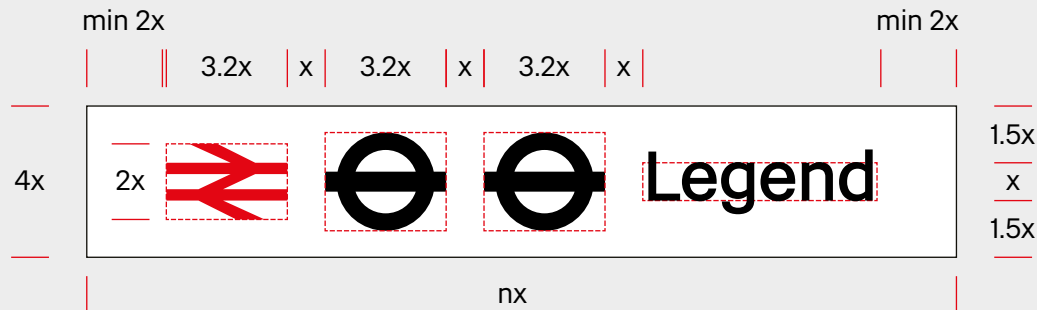


### Identification – Station External TfL Interchange

- To be used when TfL services are available from station



Layout examples



#### Size options

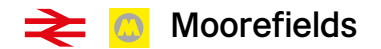
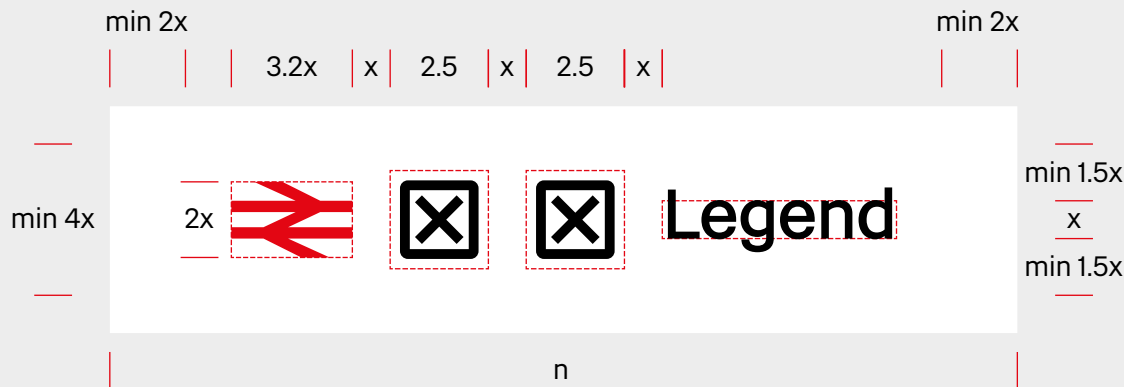
x-height	Width	Height
80mm	n (variable)	320mm
100mm	n (variable)	400mm
120mm	n (variable)	480mm
160mm	n (variable)	640mm
200mm	n (variable)	800mm
240mm	n (variable)	960mm

Refer to Section 5.4 for target reading distance



### Identification – Station External Interchange

- To be used when additional services are available from station
- To be used to fit available space



Layout examples

#### Size options

x-height	Width	Height
80mm	n (variable)	320mm
100mm	n (variable)	400mm
120mm	n (variable)	480mm
160mm	n (variable)	640mm
200mm	n (variable)	800mm
240mm	n (variable)	960mm

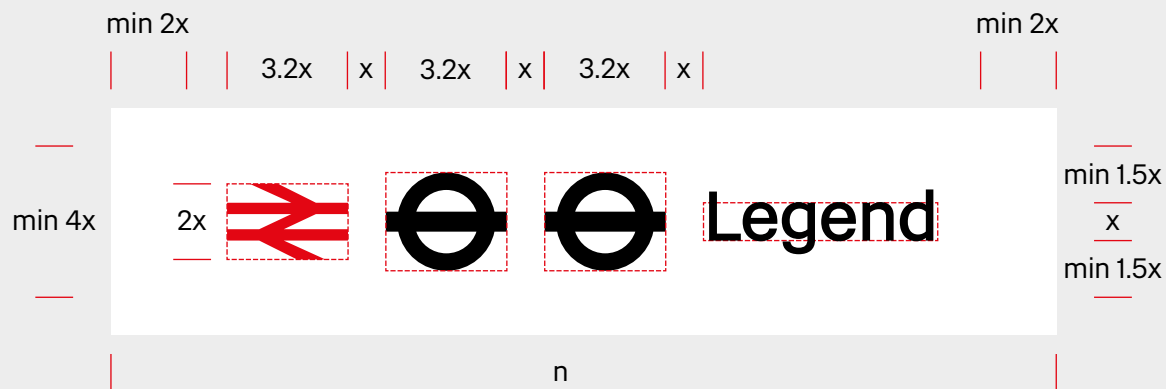
Refer to Section 5.4 for target reading distance





### Identification – Station External TfL Interchange

- To be used when TfL services are available from station
- To be used to fit available space



Layout examples

### Size options

x-height	Width	Height
80mm	n (variable)	320mm
100mm	n (variable)	400mm
120mm	n (variable)	480mm
160mm	n (variable)	640mm
200mm	n (variable)	800mm
240mm	n (variable)	960mm


Refer to Section 5.4 for target reading distance



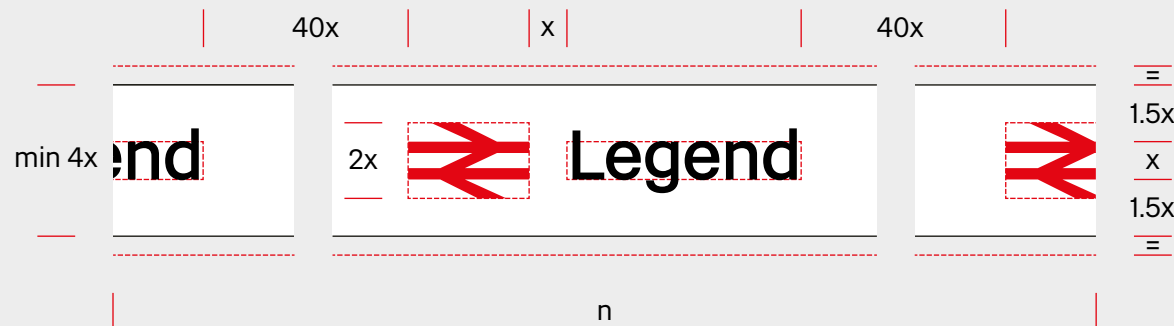
**Identification – Station External  
Ribbon**

- To be used to display station names in ribbons

 Shoreham-by-Sea

 Windsor and Eton Riverside

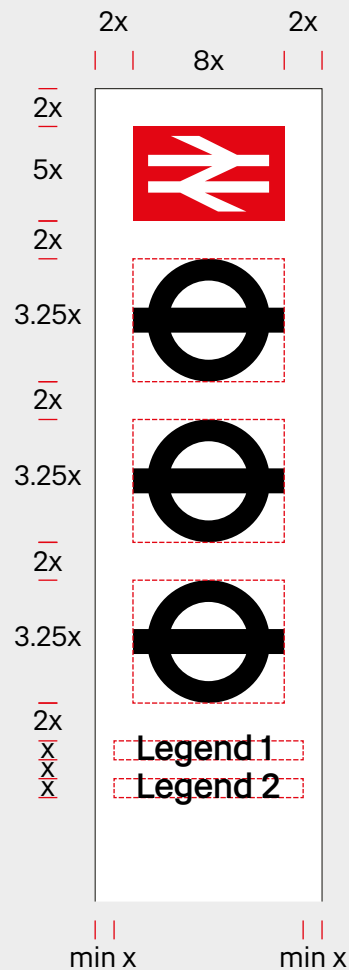
Layout examples



**Size options**

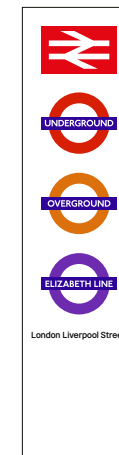
x-height	Width	Height
60mm	n (variable)	240mm
80mm	n (variable)	320mm
100mm	n (variable)	400mm
120mm	n (variable)	480mm

Refer to Section 5.4 for target reading distance



### Identification – Station External TfL interchange totem

- To be used when TfL services are available from station

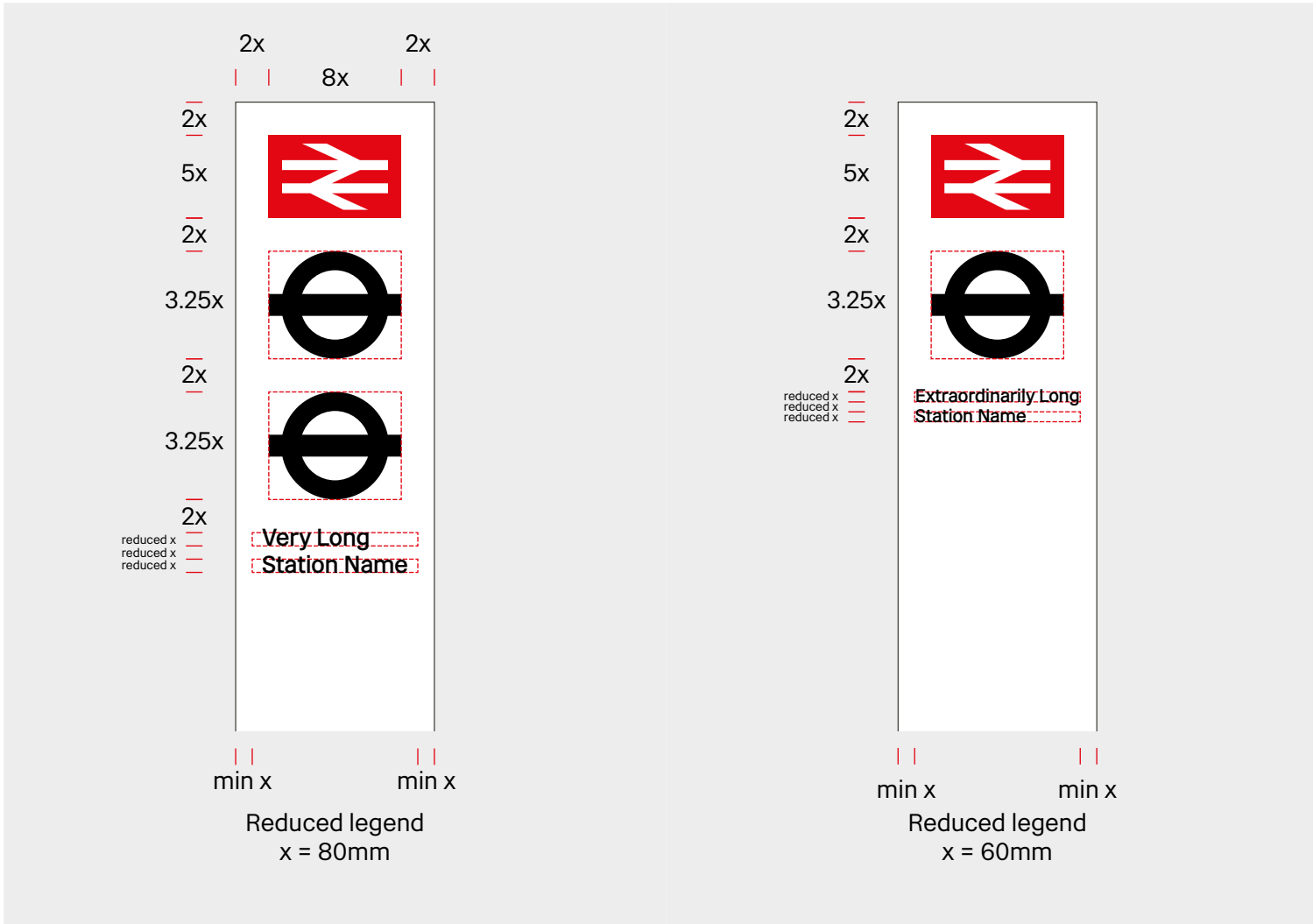


Layout example

#### Size options

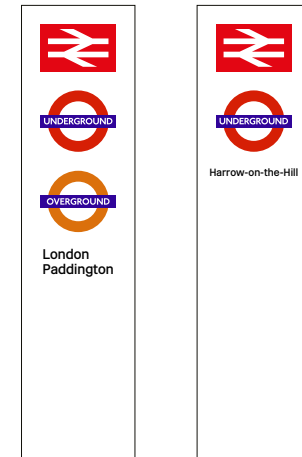
x-height	Width	Height
100mm	1,200mm	4,800mm

Refer to Section 5.4 for target reading distance



### Identification – Station External TfL interchange totem

- To be used when TfL services are available from station
- For use with longer station names

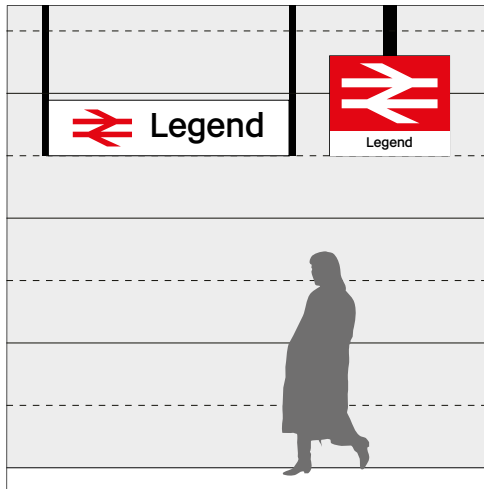


Layout example

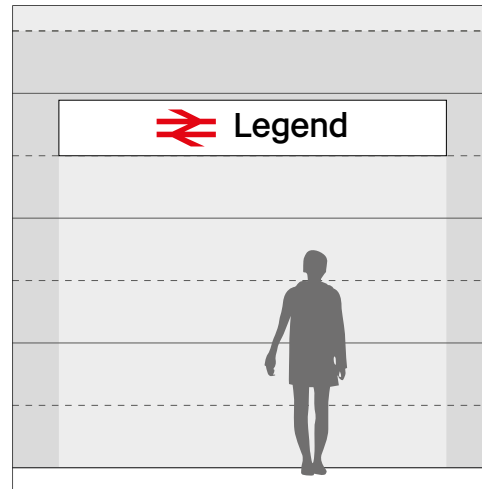
### Size options

x-height	Width	Height
100mm	1,200mm	4,800mm

Refer to Section 5.4 for target reading distance



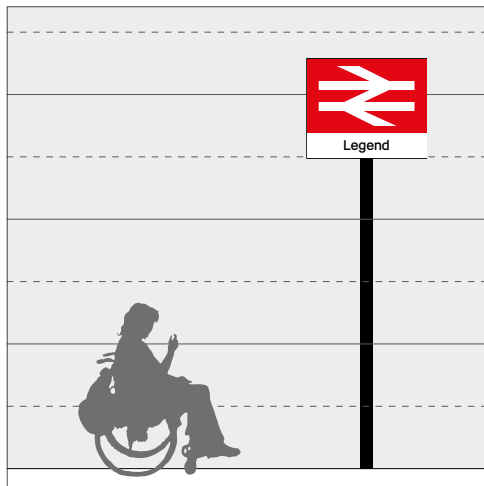
Suspended



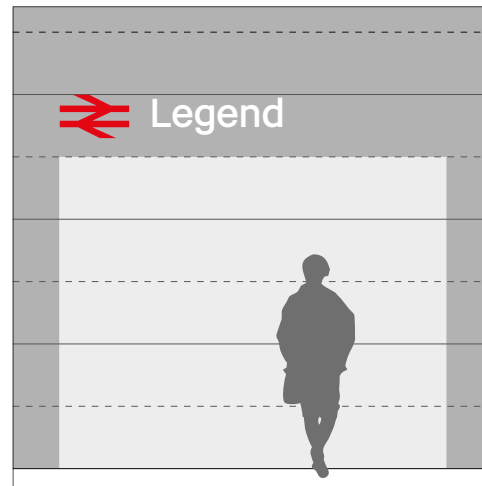
Fascia mounted



Projected



Post mounted



Fascia mounted (Supergraphic)



Totem

Identification – Station External signs can be used with a range of products and fixed in a number of ways. Shown on this page are their types and fixing variations:

**Suspended**

Suspended on rods from ceilings or overhead structures.

**Fascia mounted**

Attached to walls or surfaces.

**Projected**

Fixed at 90° from walls or structures.

**Post mounted**

Attached to posts that are fixed in the ground.

**Totem**

Displayed on large totems outside of stations.



No Smoking Sign



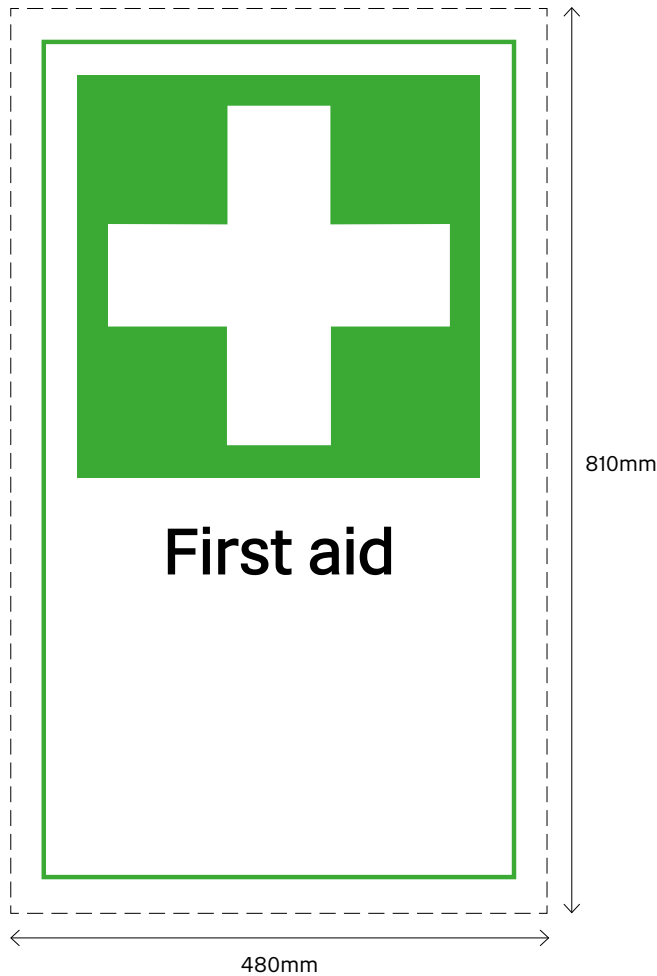
No Trolleys Sign

In addition to wayfinding signage, regulatory signage warns passengers of restricted access, hazards, rules and regulations. This type of signage is designed to align with the same visual system as the wayfinding signage, but should stand out as having an authoritative tone. Regulatory signs are for example: emergency exit; keep clear; caution; do not enter; no smoking; staff only and mobility access signs.



### Recommended sizing

The typeface used for these signs is Rail Alphabet 2 SIGN Medium. The Cap-Height (CH) is 41mm in this example. Depending on the sign and the information needed, the Cap-Height can slightly vary. However, it is important that all text is positioned within the allocated space of 360x300mm and is centred vertically.



First Aid Sign

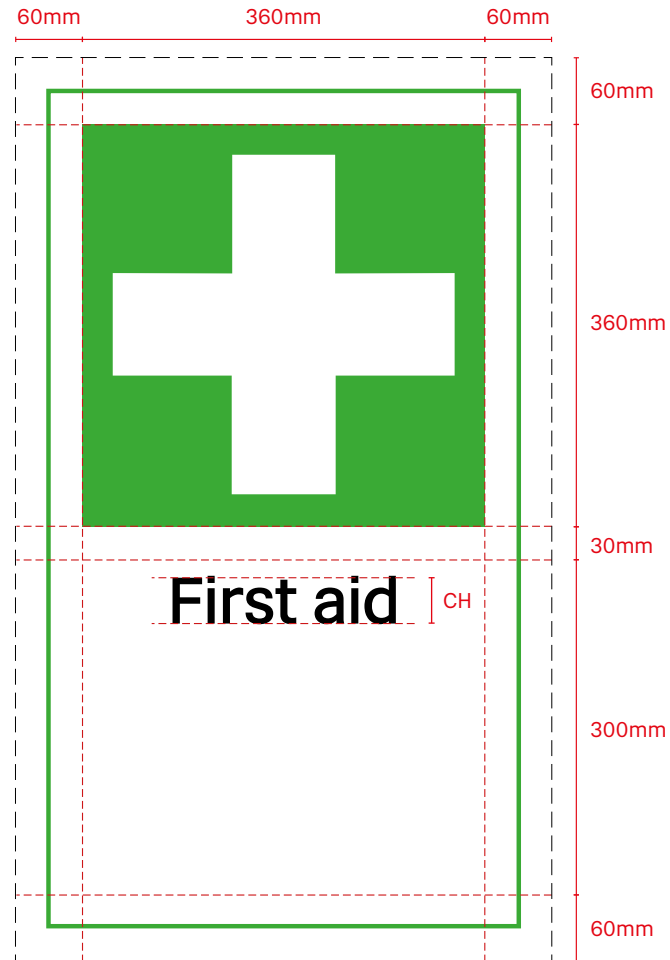


Fire Extinguisher Sign

Fire and life safety signs provide information or instructions about health and safety. International symbols for fire and life safety are usually shown in red and green. The colours of these signs are not to be used elsewhere in the wayfinding signage colour palette. They convey safety and emergency information on signage. All signs should carry the correct pictogram with the appropriate text. Other wayfinding should never obstruct safety and emergency information.

The colour of the First Aid sign is Pantone 3405C. For more information on statutory signage, please refer to document BS 5499.





### Recommended sizing

The typeface used for these signs is Rail Alphabet 2 SIGN Medium. The Cap-Height (CH) is 41mm in this example. Depending on the sign and the information needed, the Cap-Height can slightly vary. However, it is important that all text is positioned within the allocated space of 360x300mm and is centred vertically.



Disney  
Think you know Disney+?

You're missing half the story.

Platform	Destination	Time	Status
1	London	09:45	On Time
2	Manchester	09:50	Delayed
3	Birmingham	09:55	On Time
4	Cardiff	10:00	On Time

09:40:35

Get your ride in 200 people

now on Uber

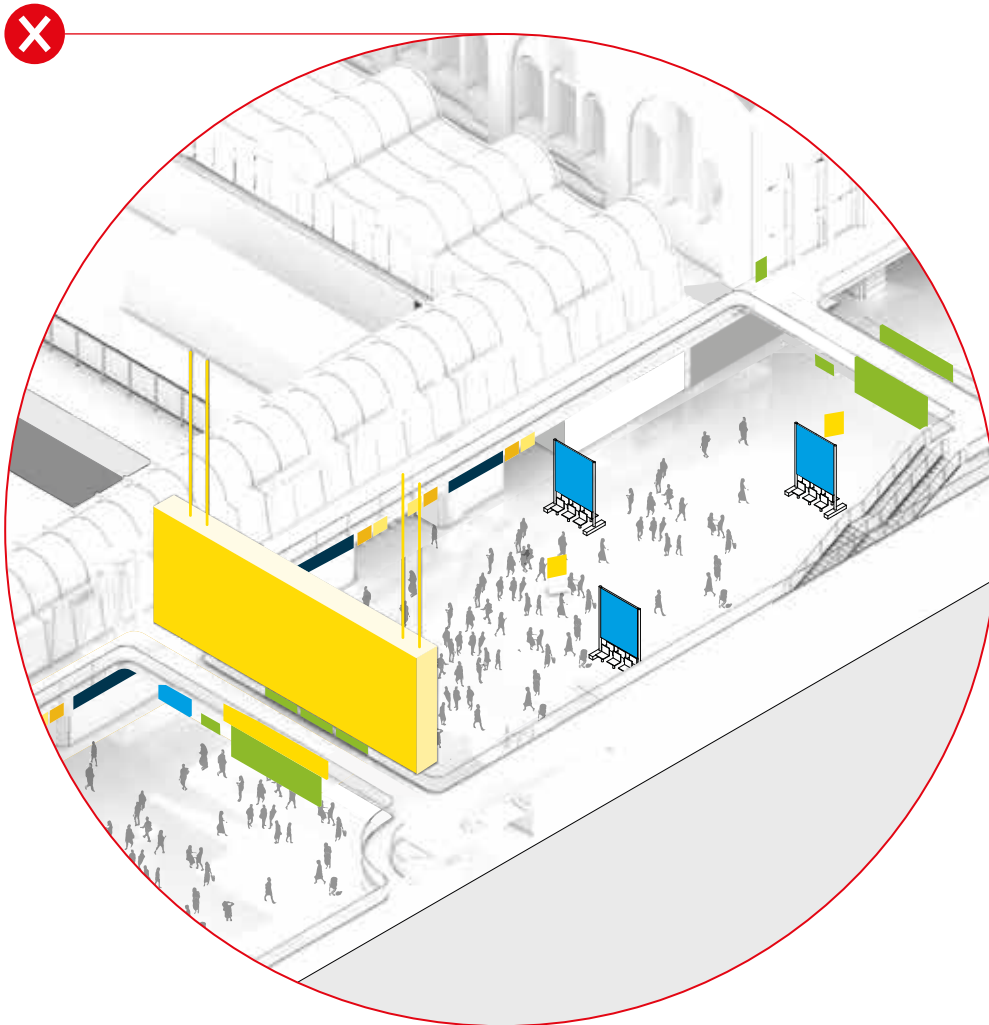
- Information Station
- Embarkment Station
- Embarkment Pier
- Help Desk & Information

1 2 3 Connect to Free Station WiFi



Wayfinding Design Manual  
**Integration with Other Systems**





- Customer Information Screen
- Advertising
- Wayfinding
- Retail signage

### Wayfinding and Advertising

Advertising materials, including posters, banners, mobile units and exhibition stands, present a potential conflict with wayfinding. Digital advertising material particularly with moving images can be distracting to many people with impairments and can be problematic for people who are neurodiverse. To confirm wayfinding is not compromised, a balance should be struck between maintaining the legibility of concourses and providing opportunities for retailers. Wayfinding signage should always take visual priority over other signs, and its view should always remain unobstructed from key decision points.

### Visual clutter

A key issue impairing the usability of stations from a passenger's perspective is visual clutter. Standing on the concourse, passengers are bombarded with signs and messages from all angles with no easily discernible hierarchy or consistency.

### NR Guidance Suite Reference

Retail Design Manual for Stations  
NR/GN/CIV/200/06

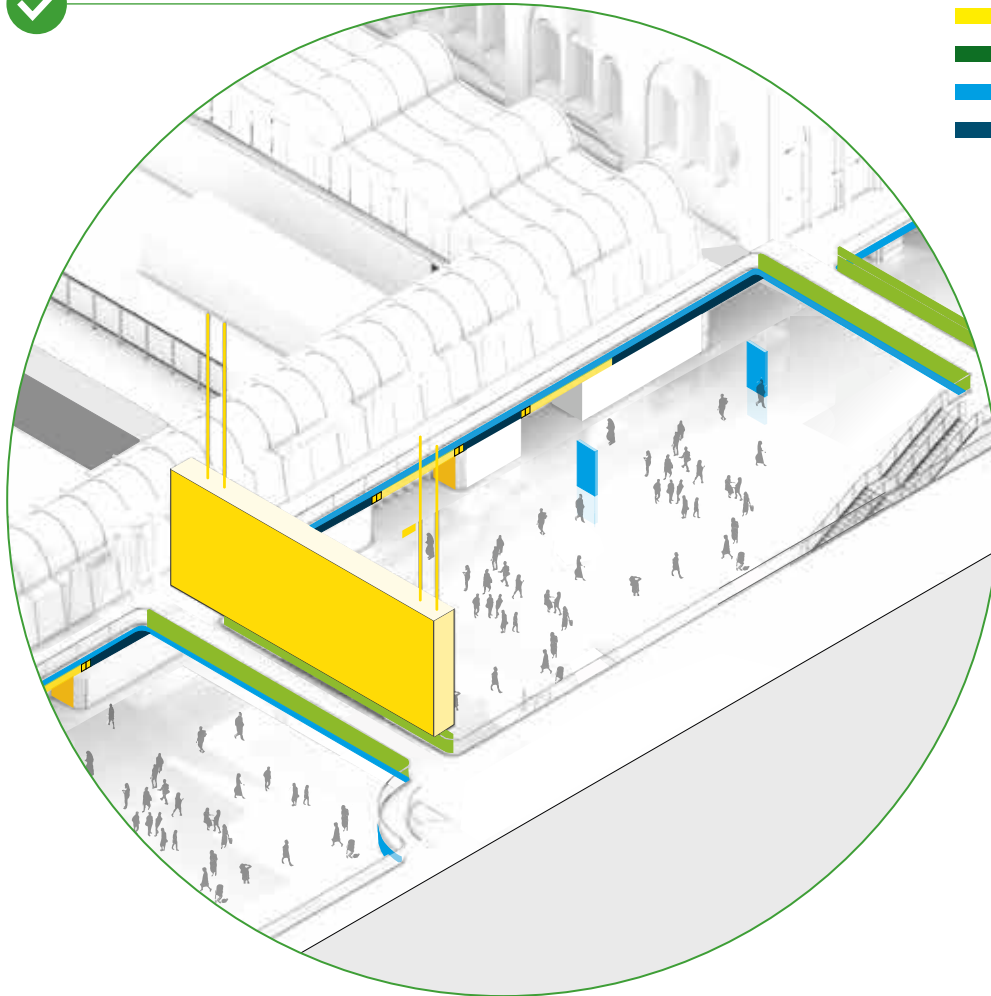
Advertising should not be combined with wayfinding on the same sign, without clear separation or suitable clearance from any route-finding information. Advertisements should not be placed in positions where they will visually obstruct, obscure, or distract from, station wayfinding or signage. Any adjacent advertising should not have an unreasonable level of illuminance in relation to station wayfinding. For additional information please refer to the Retail Design Manual for Stations guidance document.

# Integration with Other Systems

## 7.1 Advertising, Retail and Customer Information



- Customer Information Screen
- Advertising
- Wayfinding
- Retail signage



### Zonal Aligned Information

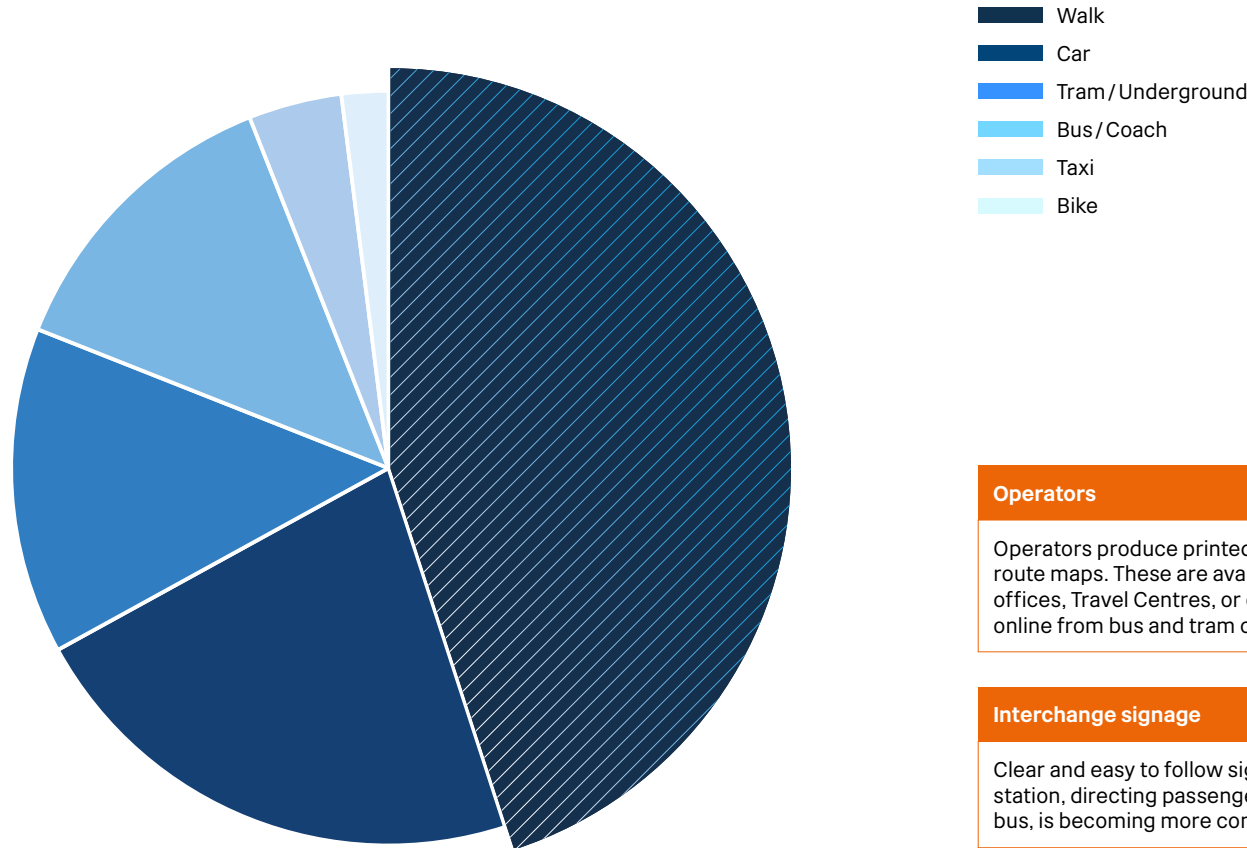
Station signage is more effective when placed at defined levels or vertical zones in a concourse space, as this helps improve visibility, legibility, and overall wayfinding efficiency. Signage in predictable vertical zones reduces cognitive overload, as passengers know where to look for specific types of information. This enhances their ability to make quick decisions, especially in crowded or fast-paced environments like train stations. An additional benefit is a reduction in visual clutter and greater visual impact.

- 1 Customer Information Screen
- 2 Advertising
- 3 Wayfinding
- 4 Retail signage





The mode of transport that is most dominant at each station will vary depending upon its location. In many cases, the default choice of transport for travel to and from rail stations is by car. 58% of CO2 emissions in Britain come from cars, and each year this figure continues to rise. Therefore, it is beneficial to encourage staff and passengers to use sustainable forms of transportation and become less dependent on cars.



**Fig 7.2.** Diagram showing typical ratio split of onward travel mode from rail stations.

**Operators**

Operators produce printed timetables and route maps. These are available from company offices, Travel Centres, or can be ordered online from bus and tram company websites.

For further reading on sustainable transport interchanges, please refer to Network Rail Inclusive Design Guidance NR/GN/CIV/300/04.

**Interchange signage**

Clear and easy to follow signage through the station, directing passengers from train to bus, is becoming more commonplace.

**Local Councils / Public Transport Executives**

Most Councils and Public Transport Executives (PTEs) normally have detailed public transport information available on their websites.

**Timetable displays**

Local authorities and local bus operators provide timetable information about bus services at most local bus stops.

**Posters**

Many local authorities and/or bus operators supply National Rail stations with timetable literature and/or posters about local bus services.

# Integration with Other Systems

## 7.2 Onward Transportation Information

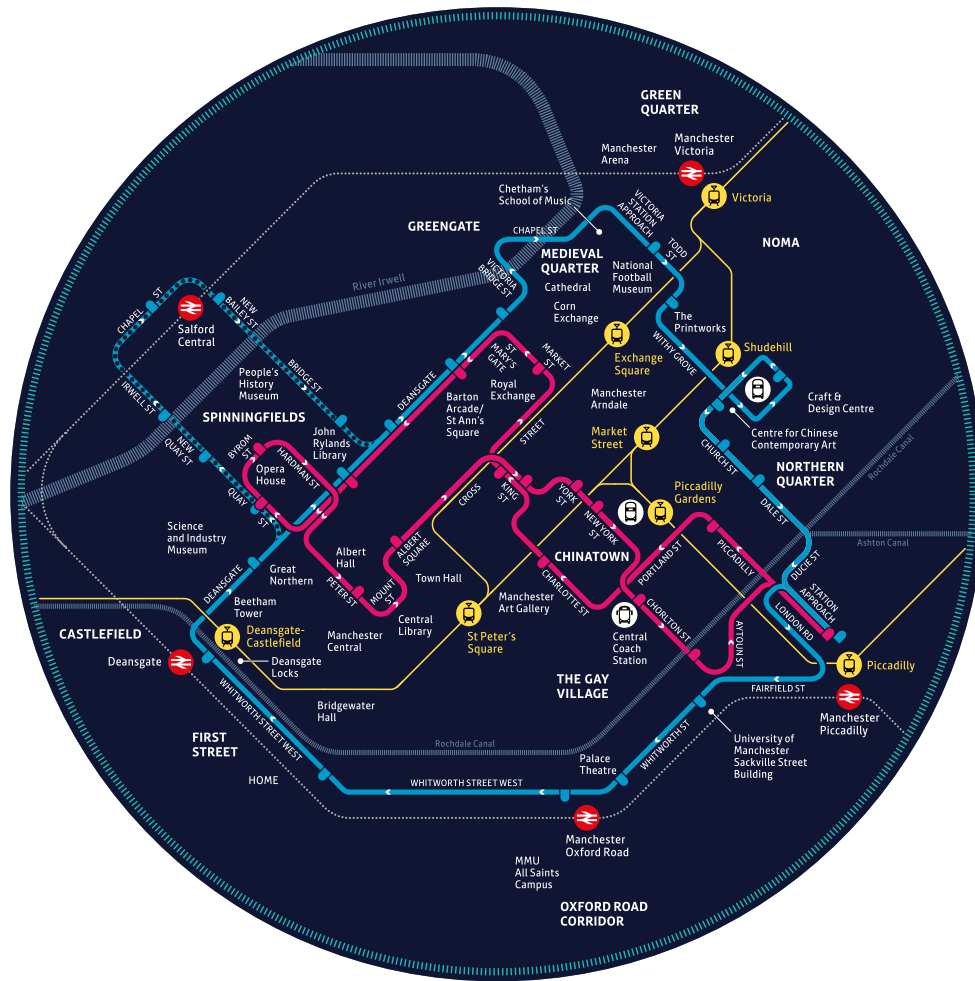


Fig 7.2.1 Great Manchester Connected Wayfinding 2018. Public Transport Map, by Spaceagency.

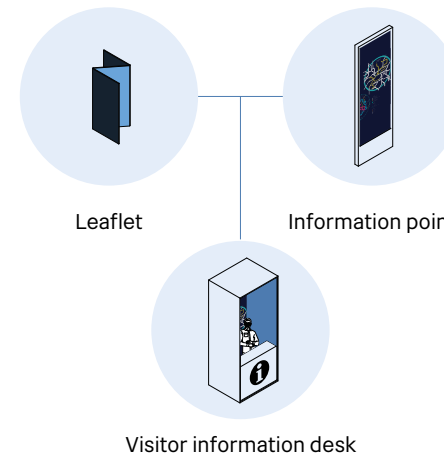
### Public Transport Connections

#### Free bus services

- Route 1 & stop
- Route 2 & stop
- Direction of travel
- Route 2 peak time only

#### Fare payable

- National Rail
- Metrolink tram
- Bus station
- Coach station



Very few rail passenger journeys actually start or finish at rail stations. Passengers live and work elsewhere and need to travel to and from rail stations by other forms of transport. Railway stations are therefore interchanges, where passengers change between various modes of transport, not just start or finish train journeys.

Passenger research has shown that across Britain 45% of National Rail passengers walk to the station. Therefore, over half of them use another form of transport (bus, bike, car or taxi) to get to the station.

#### Onward transportation information

The onward transportation map above is an example of an in-station guide which visitors can use when looking for further information on public transport options. Visitor information desks should provide information on onward transportation and further (repeated) information such as bus times should be placed by the exits and bus stops. Additionally, onward transport information should include train times, car rentals and taxi points.

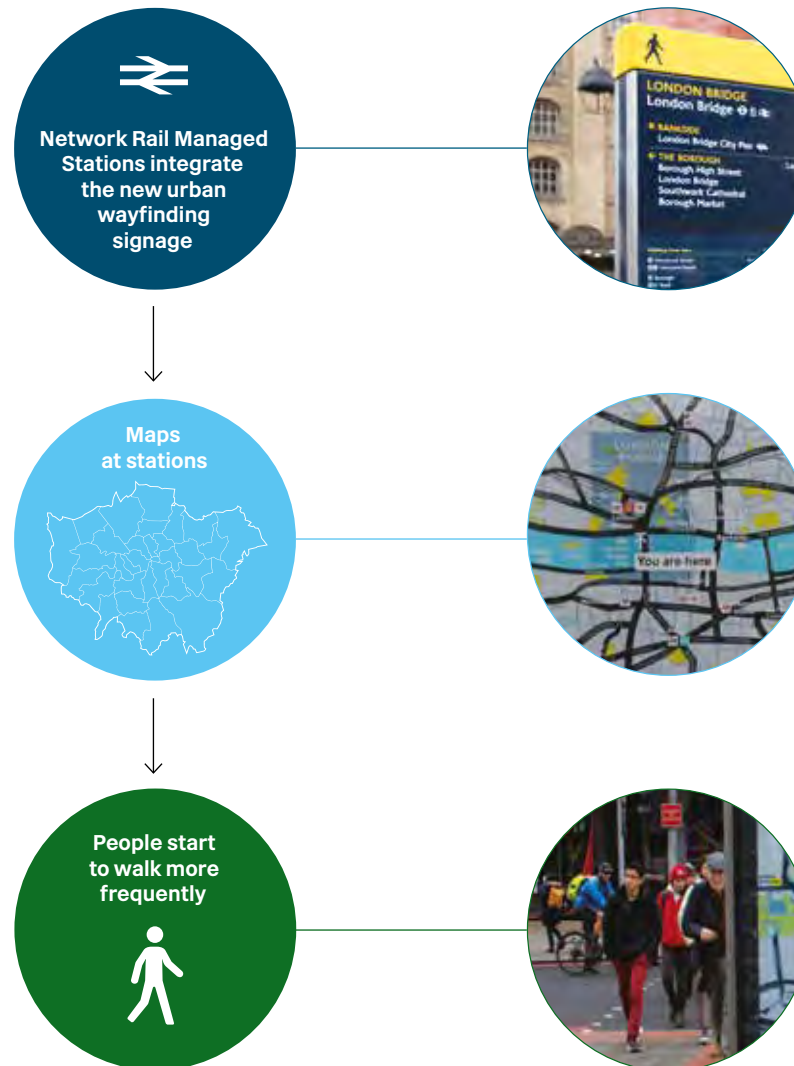
# Integration with Other Systems

## 7.3 Urban Wayfinding Systems



Signage is not the only means people use to find their way from A to B. Landmarks, public art, lighting, urban landscaping and urban planning all play their part in encouraging legibility and defining London's key characteristics, such as the River Thames, underpasses, tunnels and alleyways. On-line information, from TfL's journey planner and the AA website to visitlondon.com, are becoming increasingly popular means of planning routes before setting out. Printed maps and some on-street wayfinding kiosks are also part of the present mix. Most of these information sources were not designed specifically for pedestrians, but all have important lessons for developing a customer-led approach to pedestrian wayfinding in London.

*Legible London*



When passengers alight from the train and are new to a city, they may be in need of wayfinding information. By integrating urban walking maps directly into the station environment, visitors can plan their journey, find the most appropriate form of onward transportation and potentially be encouraged to walk, which is a sustainable mode of transport.



# Integration with Other Systems

## 7.4 Station Security and Operations

Exterior or interior signage should not block or obstruct any CCTV inside the station environment.



Emergency Do Not Enter (EDNE) signage are located at the entrances of stations. These signs are lit and emit a sound when turned on. They should not be blocked by any other signage.

It is important that wayfinding signage does not obstruct other types of signage and devices used for station security and operations. Security in the Design of Stations (SIDOS) should be consulted in relation to security requirements and their interaction with the signage scheme. Signage and other wayfinding installations should comply with SIDOS in the same manner as any other Station or key asset locations, paying particular attention to compliance with:

Design Measures section 7.24 – 7.26; Fixtures and Fittings setting 7.27 – 7.31; and SIDOS Annex D – Blast Protection Requirements.

Careful consideration should be given to assuring that signage does not add to fragmentation, for example through tethering.

Security cameras and Emergency Do Not Enter (EDNE) signs are installed for passenger safety and protection. Security cameras are placed inside and outside stations and run twenty-four hours a day. EDNE signs are installed at the entrances of stations in order to alert visitors when not to enter the station during an emergency situation.

For guidance on compliance contact Network Rail Group Security via email: [groupsecurity@networkrail.co.uk](mailto:groupsecurity@networkrail.co.uk)

The fixing of Station Wayfinding should be in accordance with the DfT Security in the Design of Stations requirements.

### NR Guidance Suite Reference

Security at Stations  
NR/GN/CIV/300/02

### Standards Reference

Security In the Design Of Stations (2018)  
SIDOS

# Integration with Other Systems

## 7.5 Tactile Wayfinding

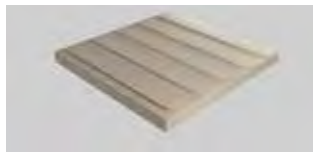
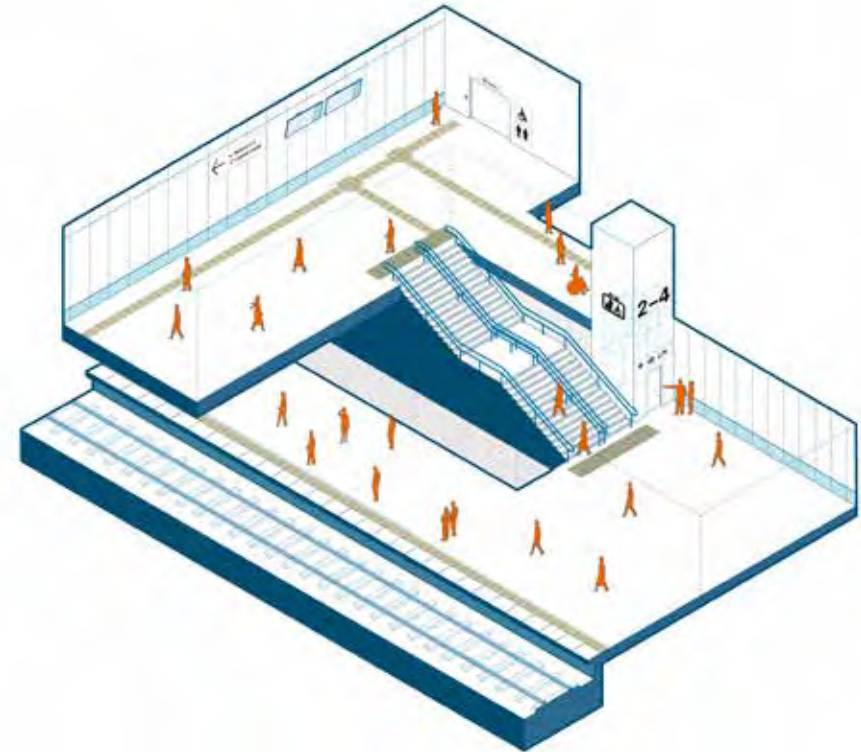


Tactile paving and wayfinding are textured surfaces used across various environments to assist those who are blind and partially sighted. Differing tactile patterns, such as blisters and lozenges on paving, and braille or prismatic-letters on handrails and walls, are used to convey distinct meanings and purposes to users in a station environment.

Tactile wayfinding is a requirement under the DfT PRM NTSN and RSSB GEGN8615 which states that Information on an obstacle-free route shall be given to visually impaired people by tactile and contrasting walking surface indicators as a minimum.

Tactile wayfinding plays a crucial role in enhancing the safety and independence of individuals who are blind and partially sighted, allowing them to navigate environments with confidence and reducing the risk of accidents or injury. Tactile walking surface indicators are designed to be easily detectable underfoot or by long cane, and serves two primary purposes: to provide warnings for safety, and to provide wayfinding guidance.

More information on the different types of tactile paving, and detailed guidance on specification and implementation can be found in NR/GN/CIV/300/06 Tactile Paving & Wayfinding Manual.



### NR Guidance Suite Reference

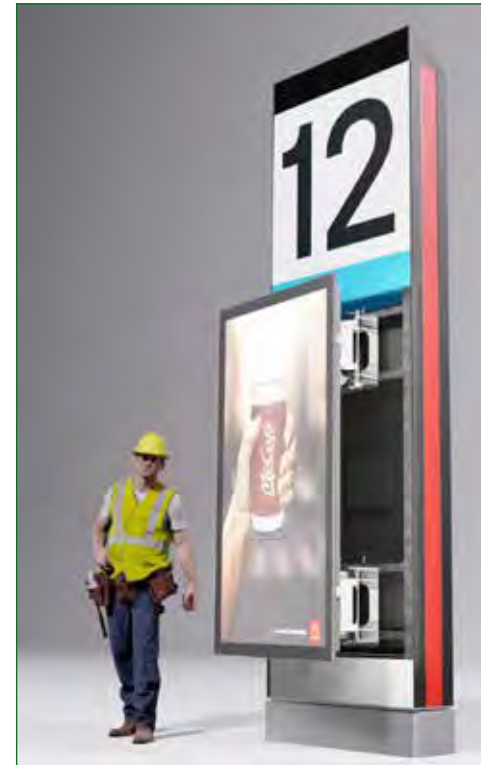
Tactile Paving & Wayfinding  
NR/GN/CIV/300/06

### Standards Reference

Application of PRM NTSN  
GEGN8615

# Integration with Other Systems

## 7.6 Digital Signage



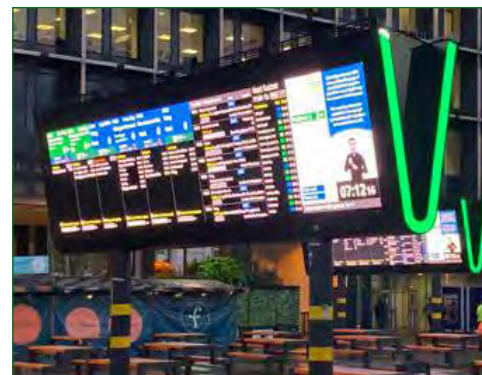
Digital signage is increasingly used for station wayfinding and should be gradually integrated with other wayfinding elements. The benefits of using digital wayfinding include the flexibility to reconfigure wayfinding messaging, the seamless combination of customer information with wayfinding and the ease of connecting wayfinding information with the Network Rail customer information database. As the provision of digital information in spaces becomes more prevalent, screen usability factors should be considered.

Digital screens, particularly touch screens, can be inaccessible to people with vision impairments and may be inaccessible to wheelchair users and people of short stature if the touch area is out of reach. New technologies allow the usable portion of a touch screen to be interactively lowered to suit the height of the user. This allows people of different heights and in wheelchairs to customise the working area to their height, if configured properly. These digital touch points can also include audio output and the ability to increase font size and screen contrast. It is important that digital advertising is not combined with the wayfinding information, and is always visually separated.

### Standards Reference

#### NR/L2/TEL/30130

Specification for the Maintenance of CIS control equipment, for additional information on CIS screens.



Network Rail's digital signage is currently not fully integrated with other wayfinding elements in the station environment. Moving forward, it is important that digital signage is integrated with the NR Wayfinding Design system, using the correct typography, alignment, scale and colour palette.

# Integration with Other Systems

## 7.7 Technology



### Innovative Technical navigation solutions

New digital technology and innovative solutions that allow wayfinding to be more accessible for a wider range of people have been utilised and are being constantly developed around the world. Some examples of the latest initiatives are shown in this section. However while digital technology has an important role to play, it cannot be relied upon as the only method for finding one's way. To future-proof stations, new technologies should be considered with static signage at an early stage when developing a holistic wayfinding strategy.

The needs of various station users with different accessibility needs should also be carefully considered, as not everyone will have the same neurological profile enabling them to navigate a space successfully. **PAS 6463 Design for the mind - Neurodiversity and the Built Environment** places greater emphasis on the development of new wayfinding solutions that may benefit station users who may require different ways of accessing journey and facility information, but may be negatively affected by unwanted or extreme sensory feedback through smell, touch, taste or temperature..



### Smartphone navigation

Location based Smartphone applications using augmented reality enable people to pre-plan their journeys. People with cognitive, sensory and mobility disabilities can research an unfamiliar station to understand what facilities are available to help them plan their routes in advance of their journey.

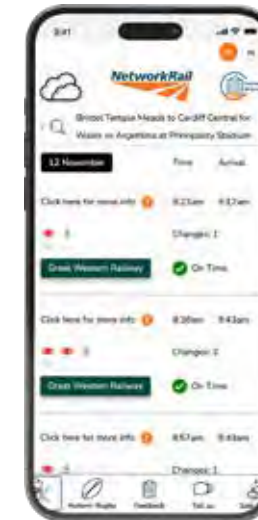
Augmented reality apps can also be very useful for people with disabilities superimposing digital information onto a real-world setting. Using a Smartphone mobile device, they can navigate their way around complex railway stations and receive information in real-time.

Information provided on display screens should, where practicable, be complemented by audible information for people who are blind or partially sighted. There are a number of Smartphone based technologies available to support this.

iBeacons and QR codes can be used to provide information for people with hearing impairments (as well as other travellers). iBeacons are a small, inexpensive products that can be integrated into wayfinding elements such as totems. These transmit a signal to a person's smartphone or other wearable technology that can provide a description of the information on an adjacent sign or even of the surrounding environment.

### Whoosh

Network Rail and transport technology innovator, Whoosh, are providing QR Codes containing bespoke journey information for users going to and from key sporting events. The Journey Assist platform guides users from home-to-venue with bespoke QR Codes displaying real-time information, including live travel updates, train/station facilities, and onward travel options



# Integration with Other Systems

## 7.7 Technology



### Next generation

Next generation wayfinding research and development focuses on user experience. Augmented reality is technology that allows for a digitally enhanced view of the world, connecting the user with an informational content overlay on the environment. With the camera and sensors in a smartphone, or with a holographic glass running on Intel Core processors, AR adds layers of digital information – videos, photos, sounds – directly onto the world around us.

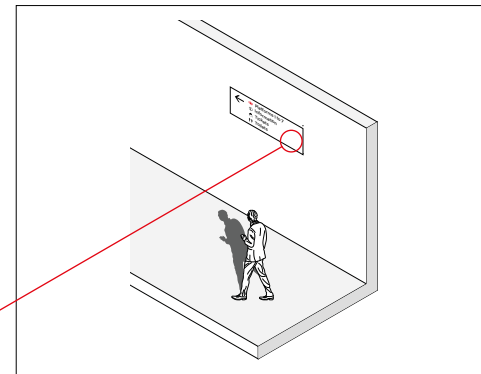


### Future technology

Different devices, such as smart phones, tablets and sat-navs have become commonplace – and in some instances have largely replaced previous devices, such as paper maps, or pushed them into a niche existence. Further technological development is inevitable. The trend towards more integrated devices – heading towards wearables, such as the Apple watch, or mixed and augmented reality (AR) concepts including Google Glass, Microsoft's HoloLens or Apple's Vision Pro technology is likely to continue over the foreseeable future. Additionally for wayfinding, personal digital devices offer added benefits, such as visitor data collection, advertisement and customer identification, which make them attractive for operators of key destinations.

# Integration with Other Systems

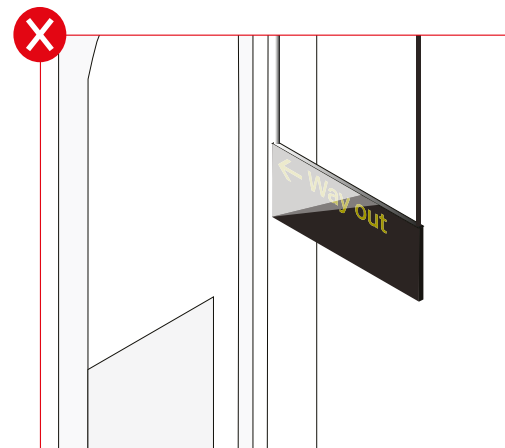
## 7.8 Illumination



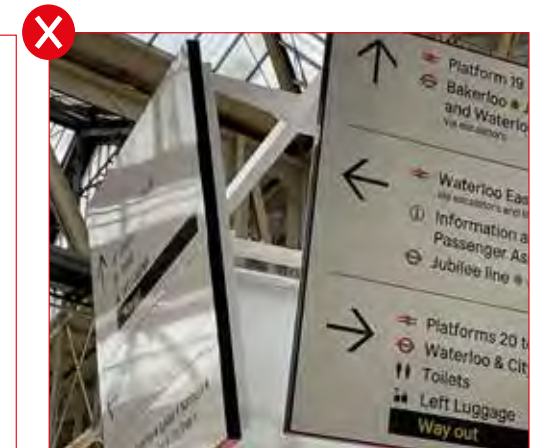
All electrical feeds to illuminated signs should be as discreet as possible, and any conduit should be buried beneath the wall finish entering the sign through the back.

Great care should be taken when positioning signage in relation to lighting in station areas. This is particularly important where energy-saving down lighters are adopted as the primary lighting source, as this can leave areas of the ceiling in relative darkness. All illuminated signs should have a luminance of 100 lux with a maximum variation in luminance of 10% across the face of the sign. Additional lighting should be provided if this can't be achieved. Where possible, signs should not be attached close to lighting fittings so as to cast shadows on wall areas.

Detail of an Illuminated Sign



Glare should always be monitored and designed out, either via sign placement or signage finish



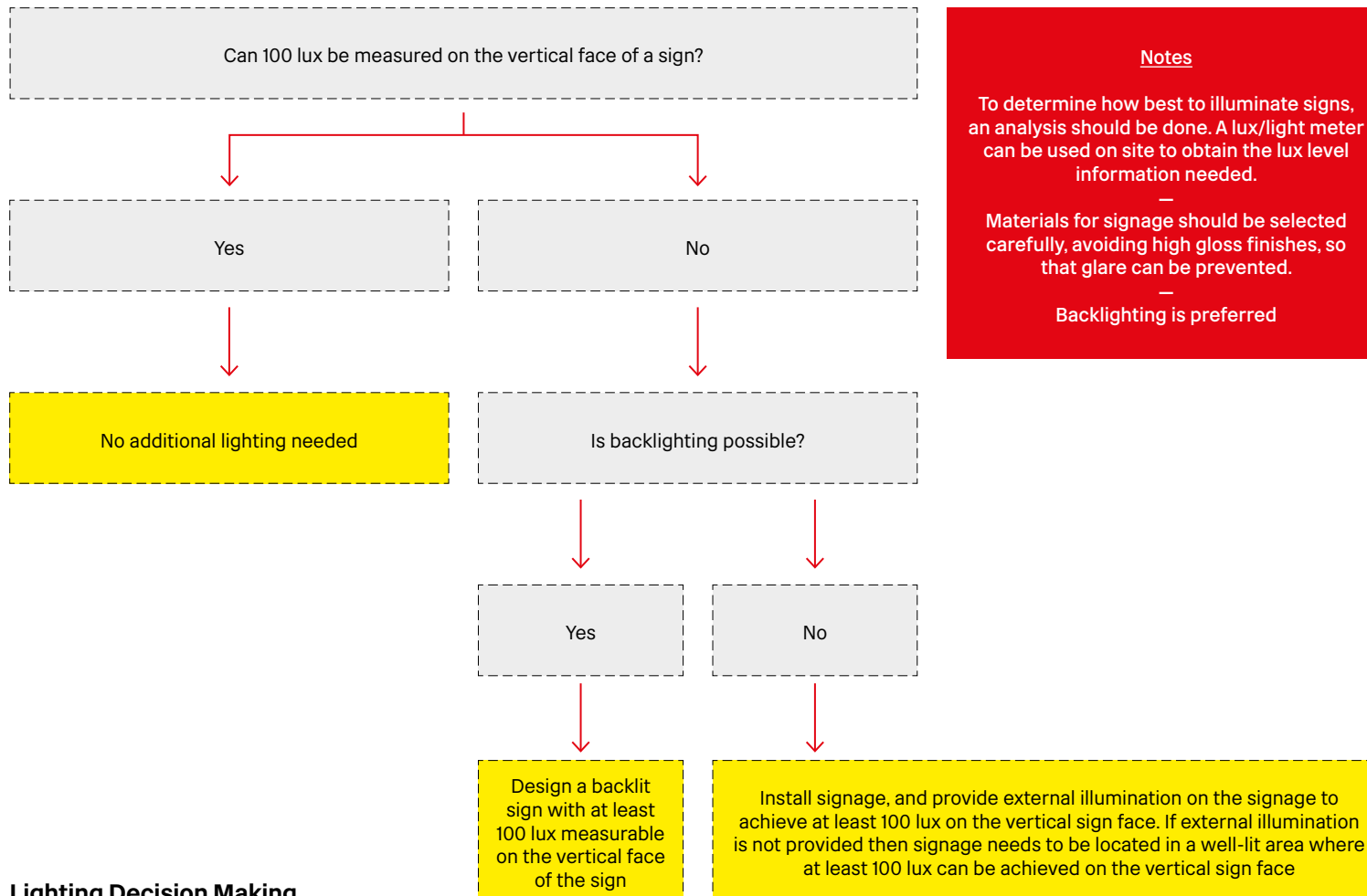
Glossy surfaces under glazed rooflights should be avoided by careful surface finish specification

# Integration with Other Systems

## 7.8 Illumination



### PROCESS TO DETERMINE APPROPRIATE METHOD TO PROVIDE SUFFICIENT ILLUMINATION FOR SIGNAGE



**Notes**

To determine how best to illuminate signs, an analysis should be done. A lux/light meter can be used on site to obtain the lux level information needed.

—

Materials for signage should be selected carefully, avoiding high gloss finishes, so that glare can be prevented.

—

Backlighting is preferred

For additional information regarding lighting and illumination in stations please refer to the: Lighting Design in Stations Design Manual.

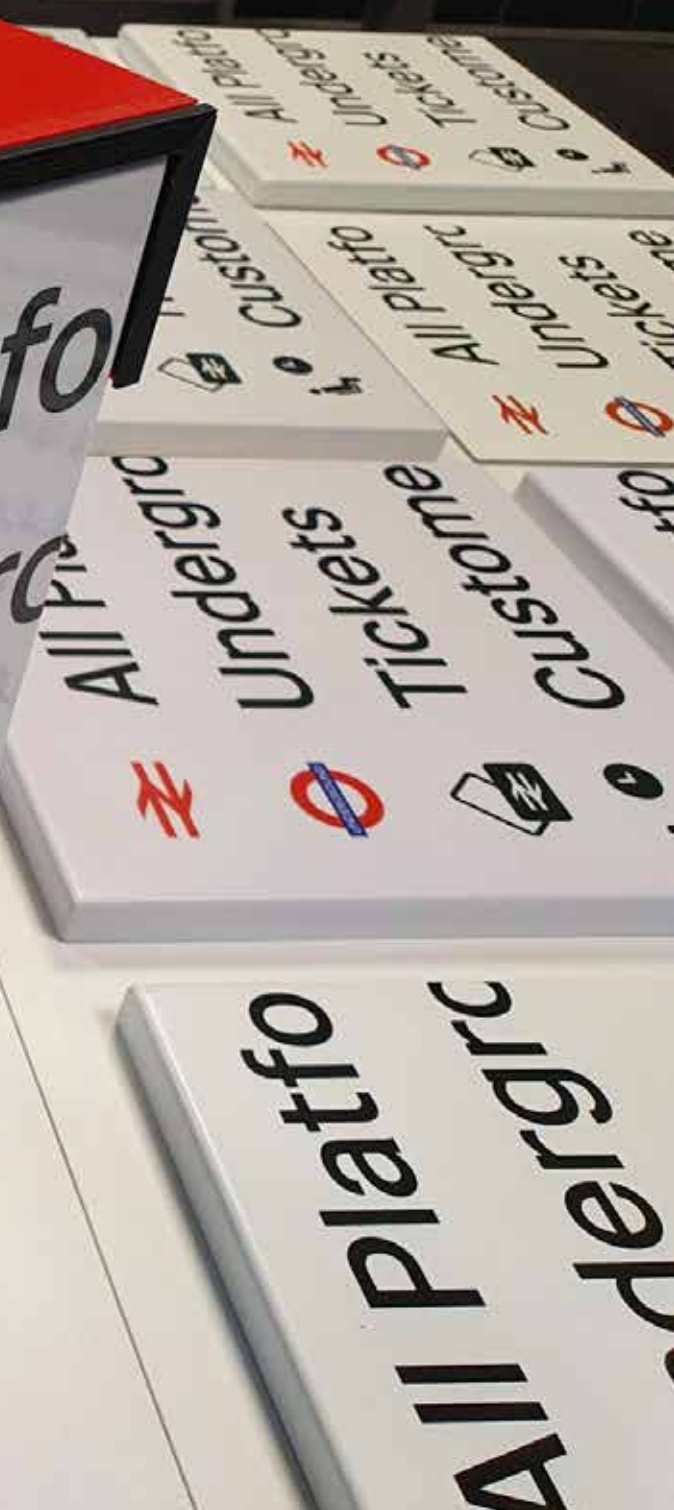
### NR Guidance Suite Reference

Lighting Design in Stations  
NR/GN/CIV/200/08

For full details of electrical requirements for signs please refer to RSSB standard for Lighting at Stations (RIS-7702-INS).



All Platform  
Underground  
Tickets  
Customer







<p>↑ Platforms 16 and 17 via lift</p> <p>Multi-faith room</p> <p>NCP Car park via platform 15</p> <p>Cycle parking via platform 15</p>	<p>Scottish destinations</p> <p>Tickets</p> <p>Taxis</p> <p>Glasgow station link</p> <p>Airport bus</p> <p><b>Way out</b></p>	<p>Platforms 1 to 8</p> <p>non Scottish destinations</p> <p>Tickets</p> <p>Toilets</p> <p>Accessible toilet</p> <p>Left luggage</p>
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# Technical Guidance

## 8.1 Introduction



### Signage Construction Consistency

Network Rail's Technical Authority have developed a three dimensional product design for wayfinding signage that compliments the graphic standards and sign family.

This technical guidance section is intentionally detailed to assure project, design and implementation teams have clear principles to follow for the production of signage. The following core aspects of the design are fixed for consistency and network wide implementation:

- **3D Look and Feel**
- **Materiality and Finish**
- **Product Construction (Sign Box)**
- **Product Update Ability**
- **Performance and Environmental Criteria**

### Environmental Criteria

Materials used in the core components of the design are specified to meet our aims on the use and re-use of recycled content materials. See "Performance Overview".

### Signage Adaptability

This guidance illustrates new instances of signage, however the product design has been developed to accommodate suitable existing structures that can be renewed using core components from the design.

### Fixings and Interfacing

The communication of a standard "Sign Box" product and construction that can be adapted to fit our various station environments allows our project teams to focus design time on the fixing and interfacing requirements.

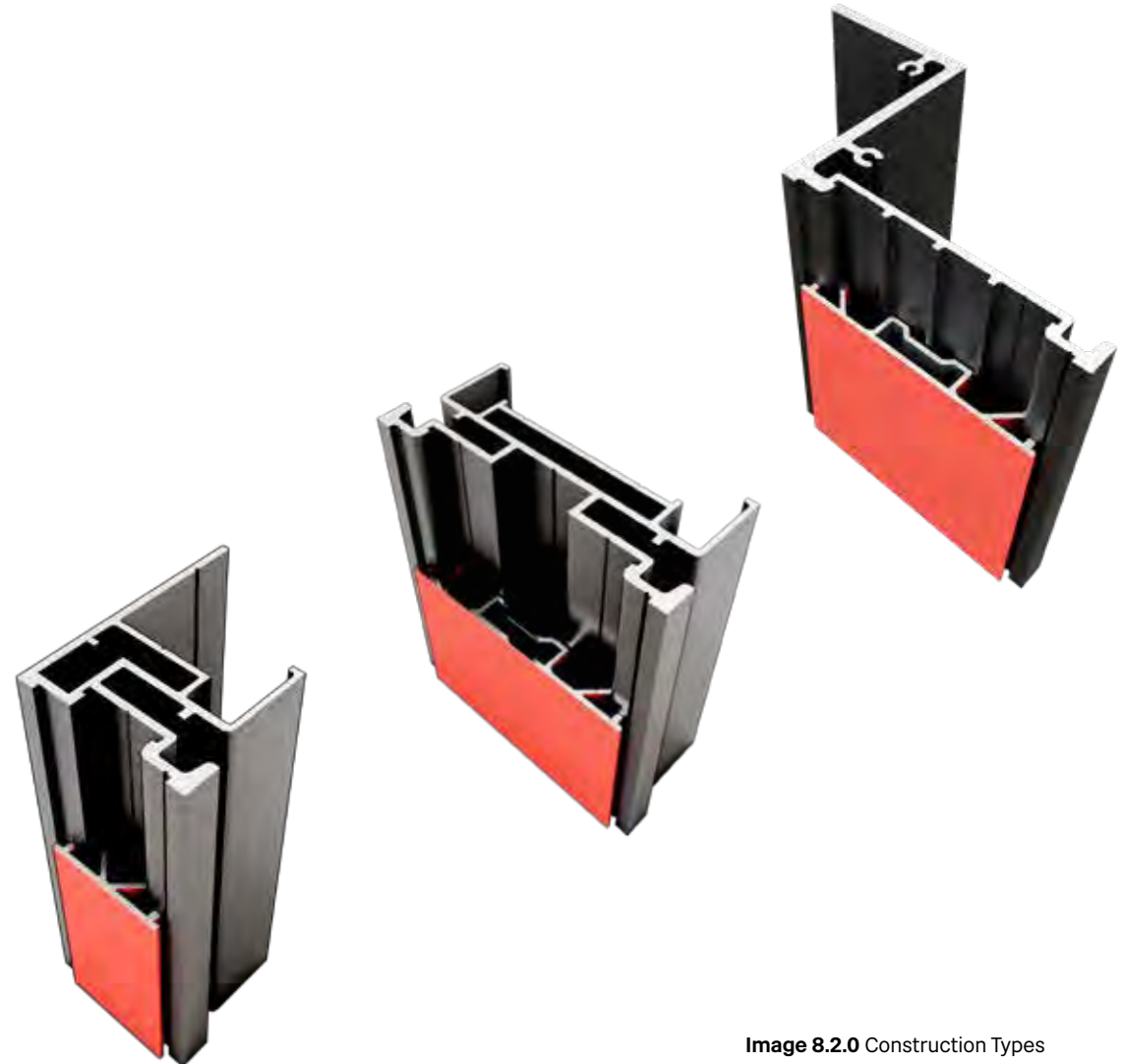
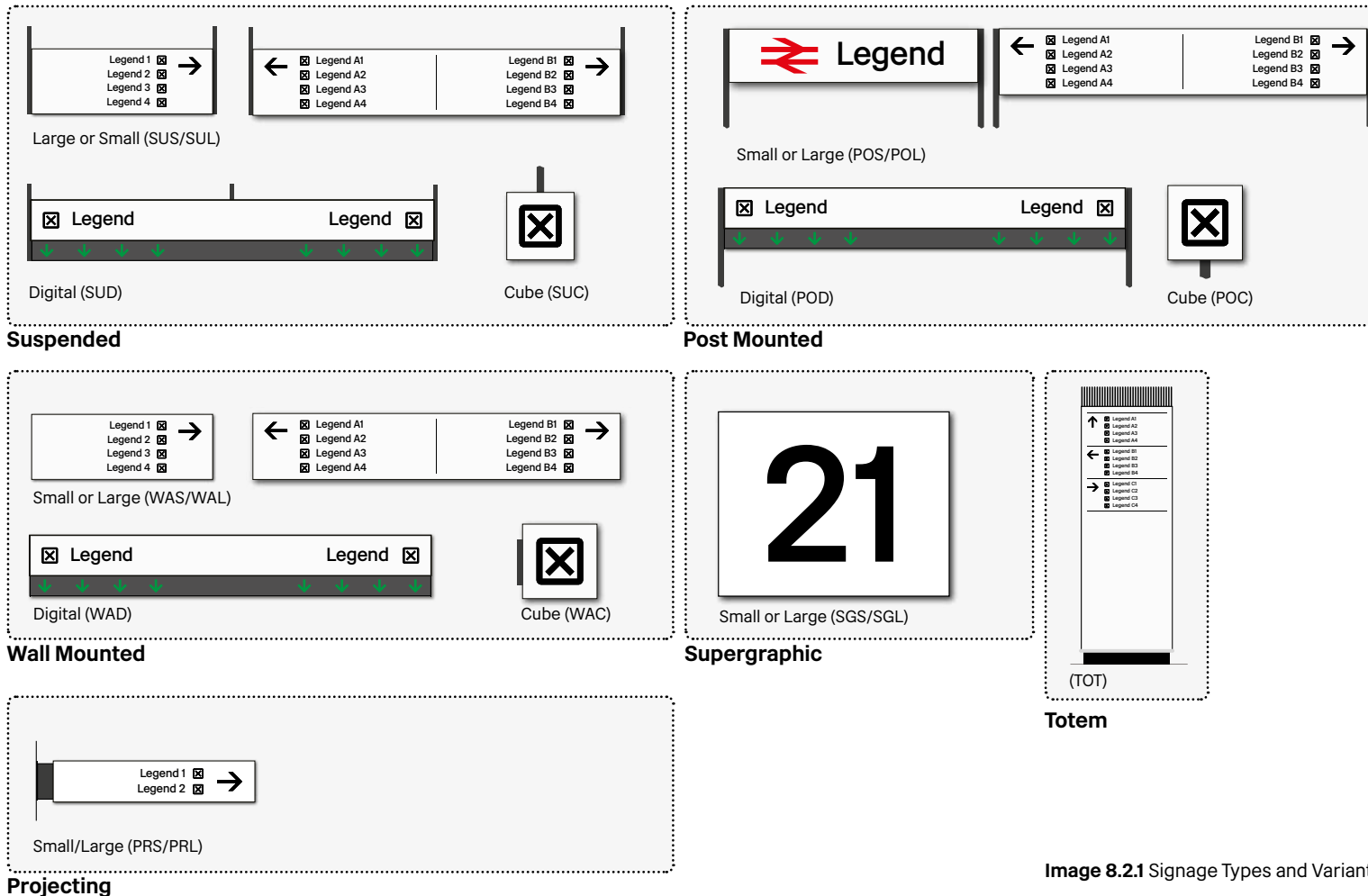


Image 8.2.0 Construction Types

## 8.2 Signage Types and Variants



### Signage Types and Variants

A visual summary of standard Signage Type and Signage Variant is shown here. These are able to service the wayfinding functions indicated in Section 5 and 6.

### The Signage Types are as follows

- **Suspended**
- **Wall Mounted**
- **Projecting**
- **Post Mounted**
- **Supergraphic**
- **Totem**

There are 3 Construction Types (A,B,C) that each of the standard types and variants is based upon.

The following pages provide detail of these and a Construction Summary for individual variants.

These constructions and associated material specifications should be used on signs across the network.

It is highly recommended that wayfinding design, planning and graphic layouts are undertaken by signage designers and suppliers registered under the Directory of The Sign Design Society.

Image 8.2.1 Signage Types and Variants



Signage Type	Suspended				Wall Mounted				Projecting		Post Mounted				Supergraphic		Totem
Signage Variant	SUS	SUL	SUC	SUD	WAS	WAL	WAC	WAD	PRS	PRL	POS	POL	POC	POD	SGS	SGL	TOT
Signage Construction	Small	Large	Cube	Digital	Small	Large	Cube	Digital	Small	Large	Small	Large	Cube	Digital	Small	Large	Varies
	Type A	Type C	Type B	Type B	Type C	Type A	Type C	Type B	Type A	Type C	Type A	Type C	Type C	Type B	Type C	Type A	Type B
<p>The bullets below indicate where a SIGNAGE TYPE and SIGNAGE CONSTRUCTION can be used to suit a wayfinding SIGNAGE FUNCTION as outlined in Section 5 and 6 of this guidance.</p>																	
Wayfinding Function																	
Directional	●	●			●	●			●	●	●	●		●			●
Identification	●	●	●		●	●	●		●	●	●	●	●				
Threshold - Gateline	●	●		●	●	●		●			●	●		●			
Identification - Platform	●	●	●		●	●	●		●	●	●	●	●		●	●	●
Identification - Station	●	●			●	●					●	●					
Identification - External	●	●			●	●			●	●	●	●					●
<p>The bullets below indicate where a SIGNAGE TYPE is likely to be able or need to utilise existing structures, for example "New signage box" attached to existing suspension drops or ground mounted posts. Bullets also indicate where SIGNAGE CONSTRUCTION can utilise frameworks inside existing signage to create a "re-clad signage box".</p>																	
Re-use existing Drops or Posts	●	●	●	●							●	●	●	●			
Re-clad existing Frameworks		●		●					●		●		●				●

Table 8.2.1 Application Matrix

### Application Matrix

Section 5 and 6 details all key planning, functional and graphic aspects of the design. This application matrix shows how the wayfinding functions can be serviced by the standard **Signage Types** and **Signage Variants**.

This is a starting point for application. Sensible selection of a suitable variant for each installation is required and can vary depending on station architecture.

### Existing Drops, Posts and Structures

The standard variants highlighted in the application matrix can make use of existing drops, posts and structures. It is also possible to achieve "non standard" solutions using the core components of the design and still achieve consistency.

Engineering assessments should be considered for all installations. Attention should be given to additional loadings imparted to existing structures and interfaces.

# Technical Guidance

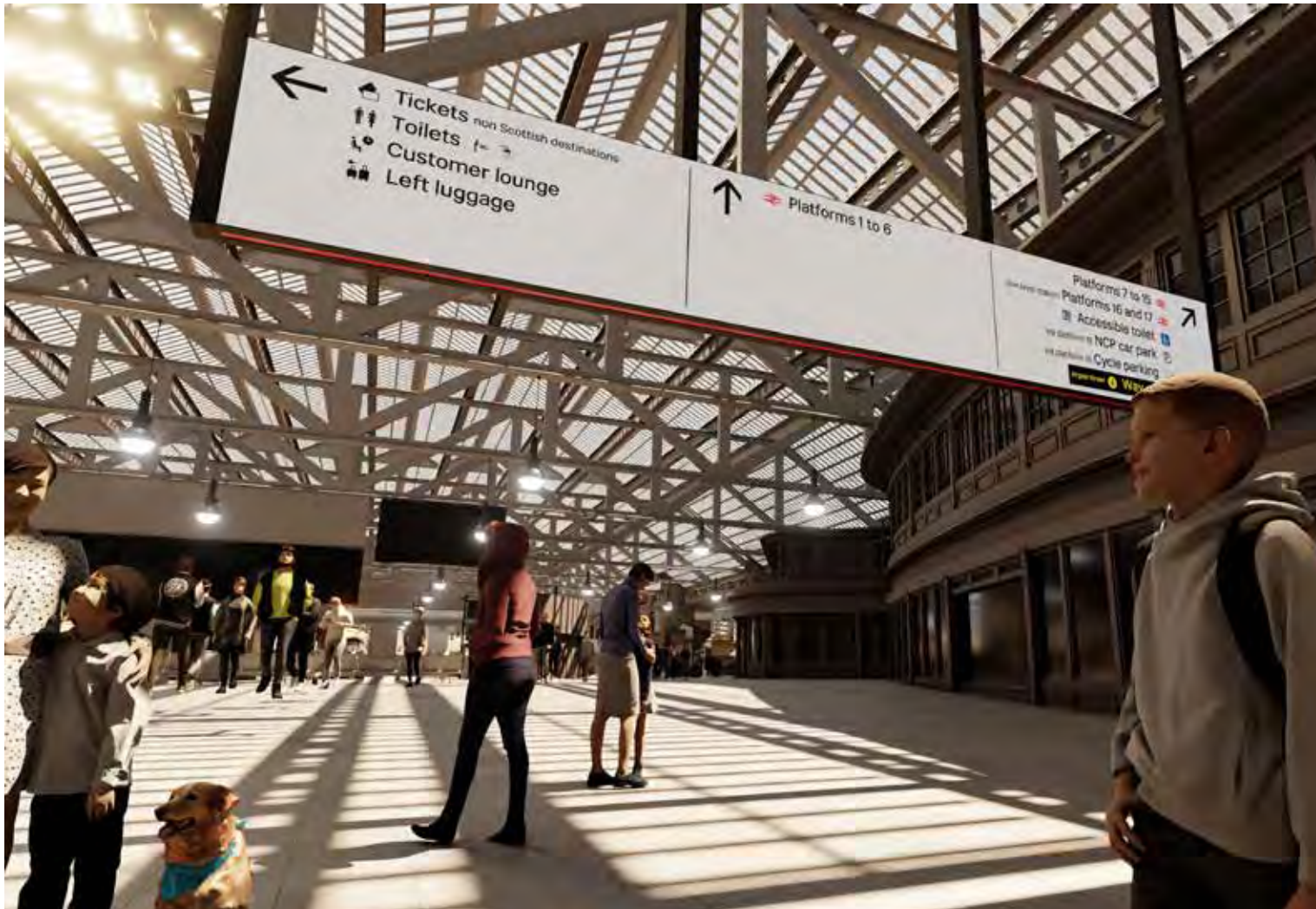
## 8.3 Design Overview



Image 8.3.1 Usage Examples

# Technical Guidance

## 8.3 Design Overview



Visualisation 8.3.2 Glasgow Central

### Design in Context

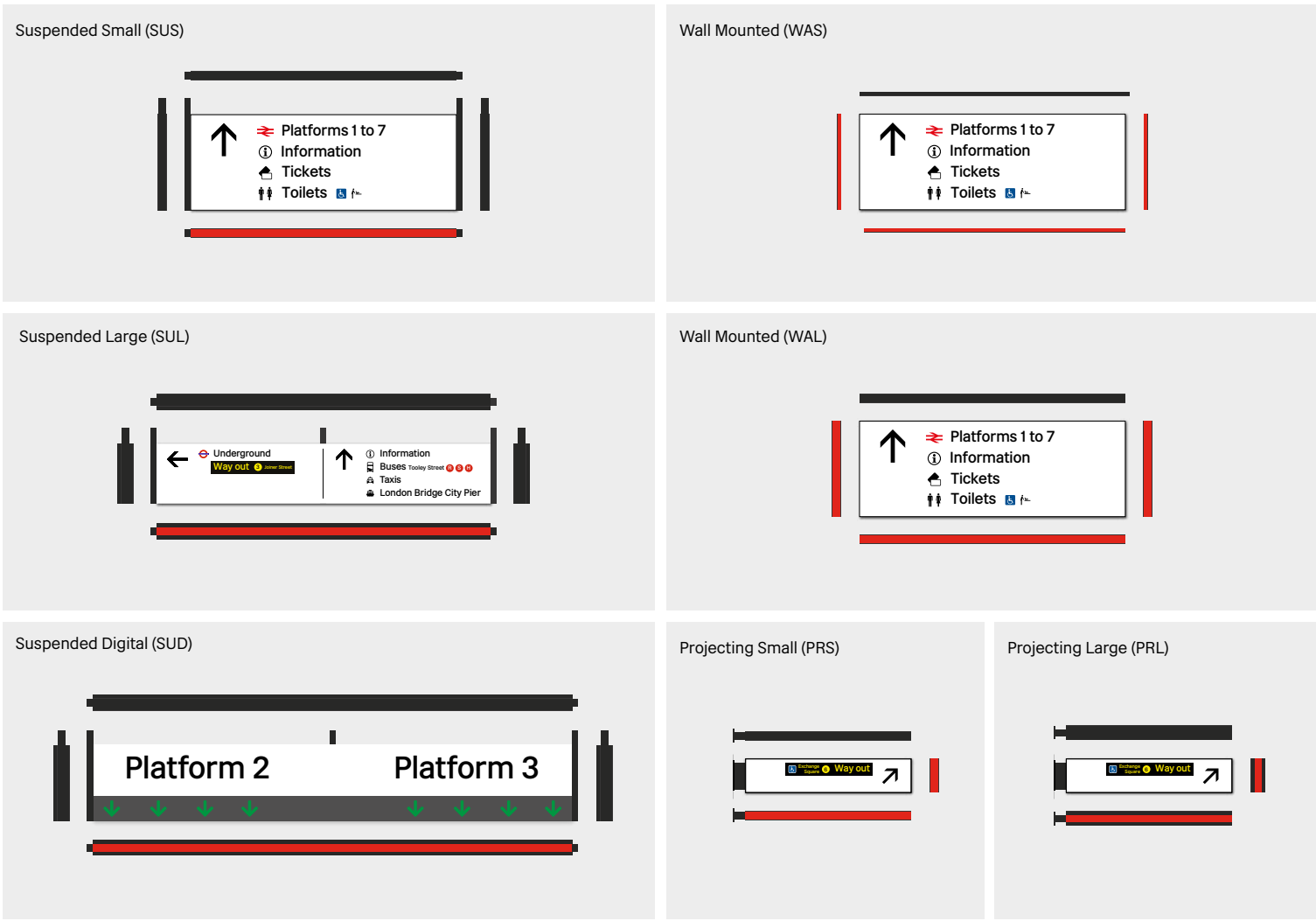
The design is shown here in context, demonstrating how the three dimensional design, look and feel compliments the wayfinding graphic design.

Care should be exercised in the location and orientation of signage to minimise any localised reflective glare from panels.

NOTE: These images are presented as visualisations until real physical examples and photography can be shared.

# Technical Guidance

## 8.3 Design Overview



**Use of Colour**

The main sign body or framing is always black and can be capped with either a contrasting red or matching black.

Red may be used as an accent colour that increases the visibility of the sign in certain station environments.

However particular attention should be paid to the use of red, and to which surface it is consistently applied.

The recommended use of the red or black cap is shown on the illustrations.

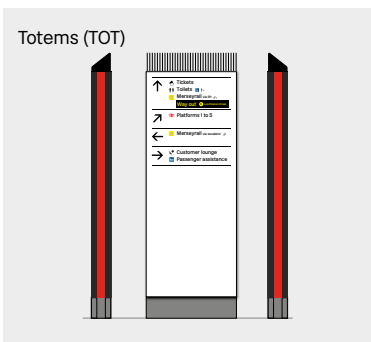
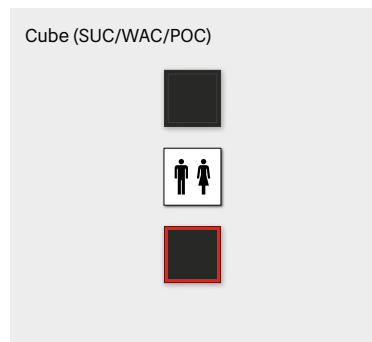
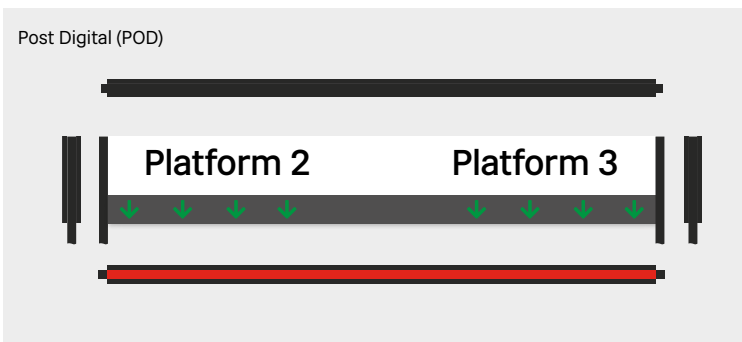
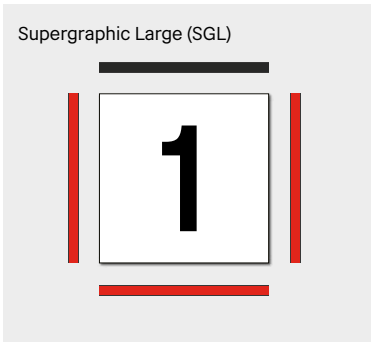
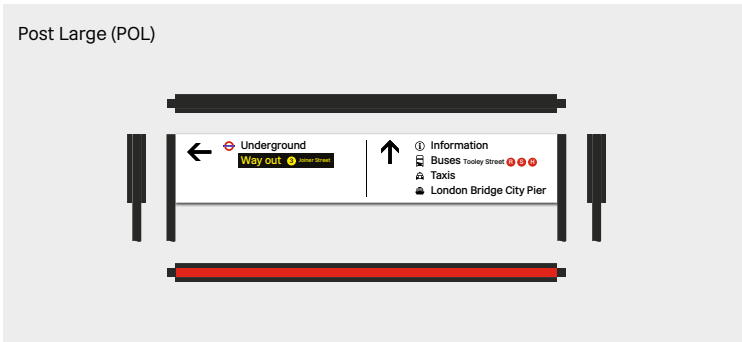
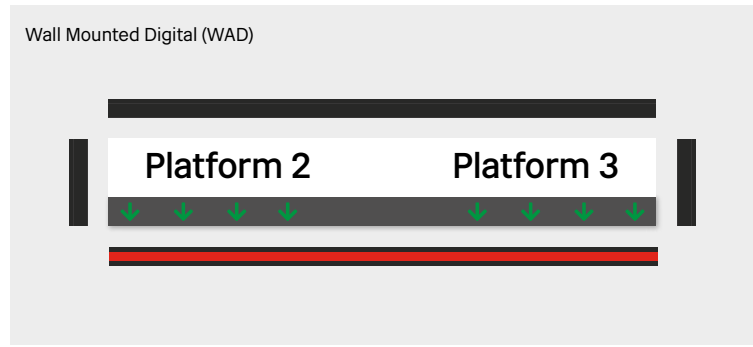
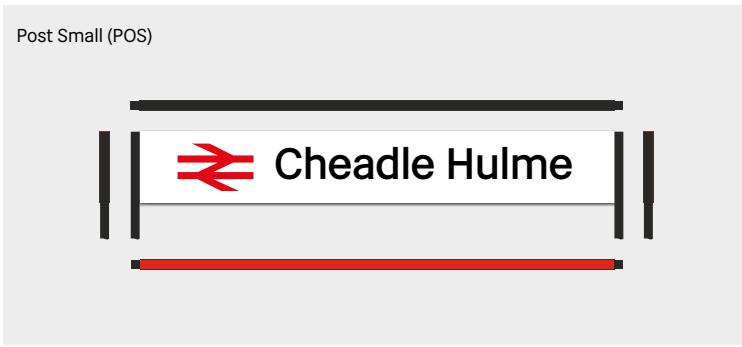
- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

Image 8.3.4 Use of Colour



# Technical Guidance

## 8.3 Design Overview



### Use of Colour

Durability and colour clash should be carefully considered when using colours.

If in doubt, use as few colours as possible and avoid colours which may conflict with safety signs.

Maintenance should also be considered when specifying colours. Using several may increase renewal costs, and may prove difficult to match or repeat.

Some colours (such as red and green) may fade in bright sunlight, and therefore sign location should be carefully considered.




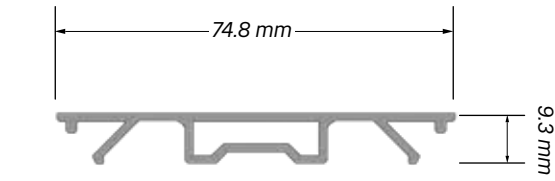
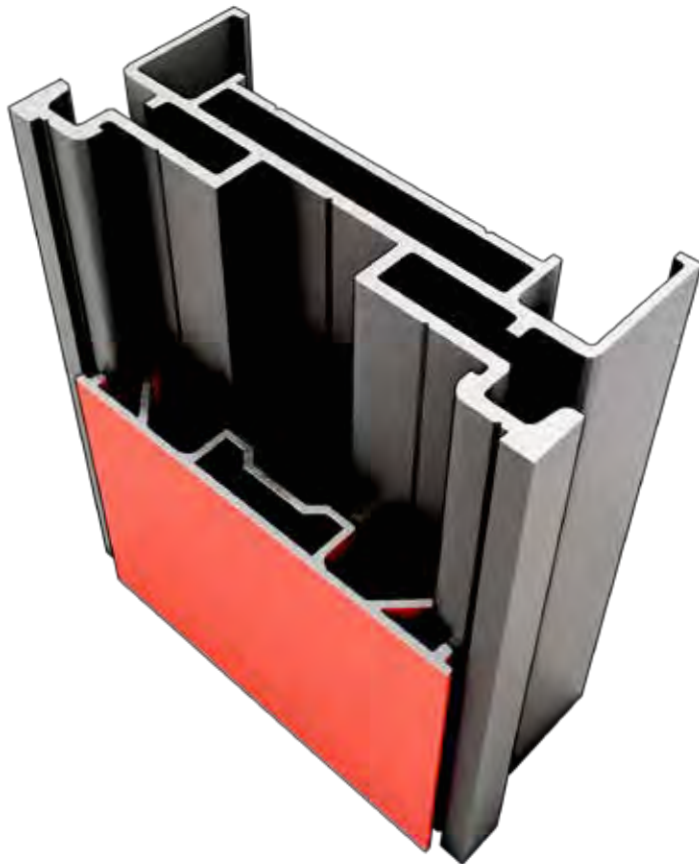
-  RAL 9016 (WF Panel)
-  RAL 9005 (30% Gloss)
-  RAL 3020 (30% Gloss)

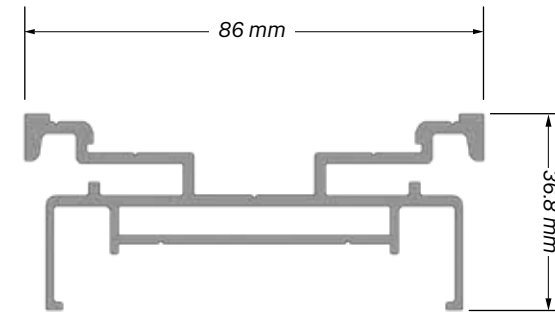
Image 8.3.5 Use of Colour

# Technical Guidance

## 8.3 Design Overview



EXT03



EXT01

### Construction Type A

Utilising aluminium extrusion EXT01 products can be single or double sided, and accommodate various sizes of wayfinding panels that are secure yet easy to update.

EXT03 is a removable cap that conceals all fixings and ultimately gives access to the internal parts.

EXT03 is also used to vary the colour of surfaces as required.

EXT03 should be removed using suitable “Trim Removal or Pry Bar” tools that are of a material that does not damage the powder coated finish or the sign itself.

### Environmental Criteria (Aluminium)

Materials used in the core components of the design are specified to meet our aims on the use and re-use of recycled content materials. See “Performance Overview”.

Specific criteria for the use of aluminium components should be followed.

Image 8.3.6 Construction Type A

# Technical Guidance

## 8.3 Design Overview



Image 8.3.7 Construction Type A Examples

### Construction Type A

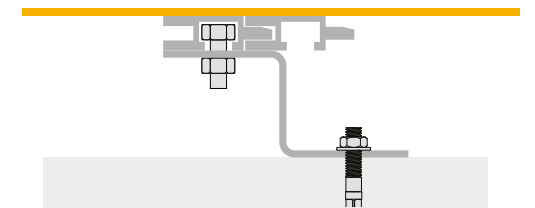
Suitable for a variety of installation scenarios : wall mounted, suspended, projected and post mounted. Combining with additional fabricated frames and structures increases the flexibility of application.

Joins between wayfinding panels are preferred as simple butt joins, however other solutions are acceptable if panel spans or depths require.

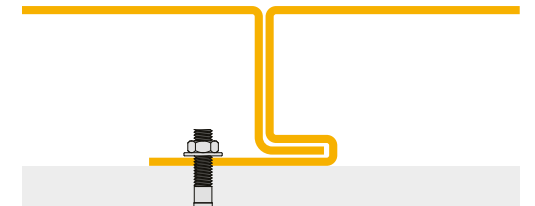
#### Small Panel Spans



#### Large Panel Spans

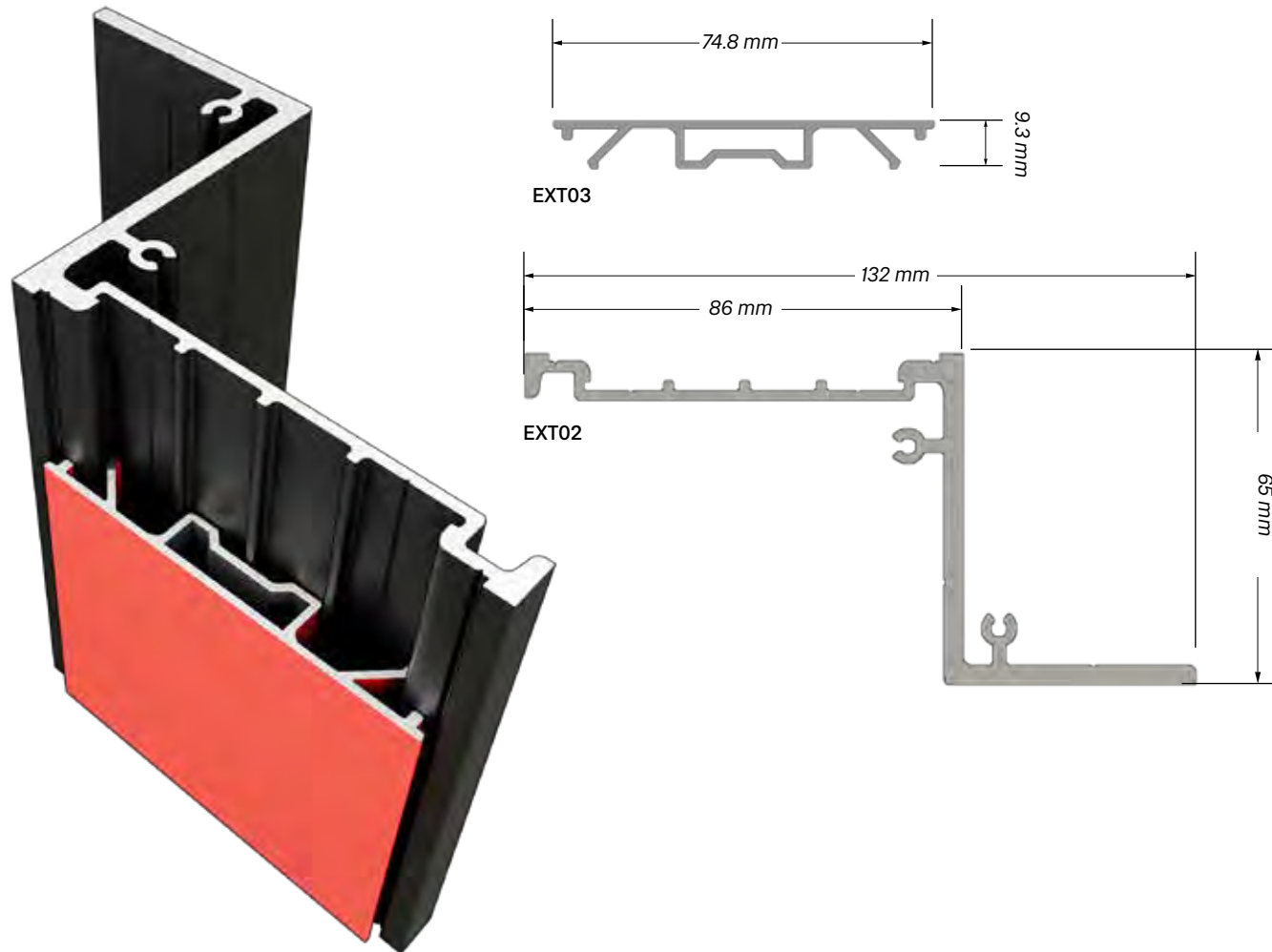


#### Extreme Panel Spans



# Technical Guidance

## 8.3 Design Overview



### Construction Type B

Utilising aluminium extrusion EXT02 can support primary wayfinding but also accommodate integration with other systems such as internal illumination, digital displays, cameras, signal boosters, speakers etc.

Wayfinding panels are secure yet easy to update. EXT03 is a removable cap that conceals all fixings and ultimately gives access to the internal parts.

EXT03 is also used to vary the colour of surfaces as required.

EXT03 should be removed using suitable “Trim Removal or Pry Bar” tools that are of a material that does not damage the powder coated finish or the sign itself.

### Environmental Criteria (Aluminium)

Materials used in the core components of the design are specified to meet our aims on the use and re-use of recycled content materials. See “Performance Overview”.

Specific criteria for the use of aluminium components should be followed.

Image 8.3.8 Construction Type B

# Technical Guidance

## 8.3 Design Overview



Image 8.3.9 Construction Type B Example



Image 8.3.10 Construction Type B Example

### Construction Type B

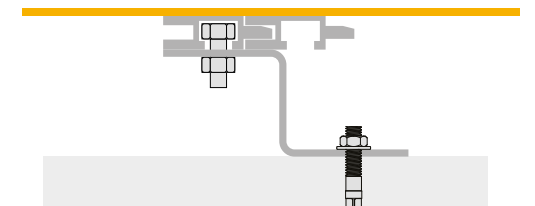
This construction is able to combine with more significant internal framing and structures to create Totem product types.

Where required, and when Construction Type 3 is not suitable this type can also be useful for re-cladding scenarios.

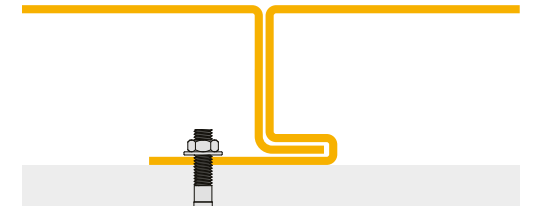
#### Small Panel Spans



#### Large Panel Spans

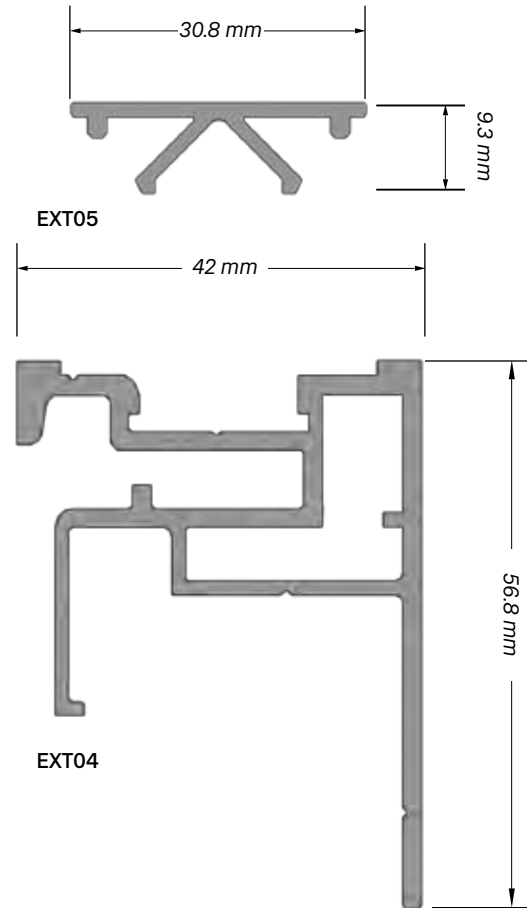
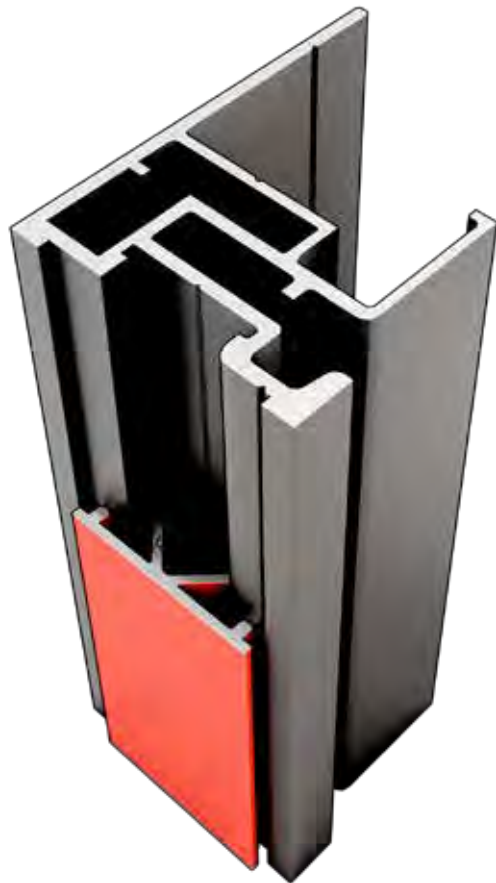


#### Extreme Panel Spans



# Technical Guidance

## 8.3 Design Overview



### Construction Type C

Utilising aluminium extrusion EXT04 products can be single or double sided when back to back, and accommodate various sizes of wayfinding panels that are secure yet easy to update.

EXT05 is a removable cap that conceals all fixings and ultimately gives access to the internal parts.

EXT05 is also used to vary the colour of surfaces as required.

EXT05 should be removed using suitable “Trim Removal or Pry Bar” tools that are of a material that does not damage the powder coated finish or the sign itself.

### Environmental Criteria (Aluminium)

Materials used in the core components of the design are specified to meet our aims on the use and re-use of recycled content materials. See “Performance Overview”.

Specific criteria for the use of aluminium components should be followed.

Image 8.3.11 Construction Type C

# Technical Guidance

## 8.3 Design Overview



Image 8.3.12 Construction Type C



Image 8.3.13 Construction Type C

### Construction Type C

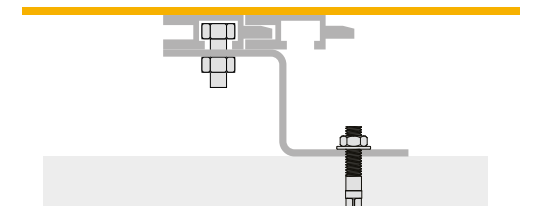
Suitable for a variety of installation scenarios : wall mounted, suspended, projected and post mounted. Combining with additional fabricated frames and structures increases the flexibility of application.

Joins between wayfinding panels are preferred as simple butt joins, however other solutions are acceptable if panel spans or depths require.

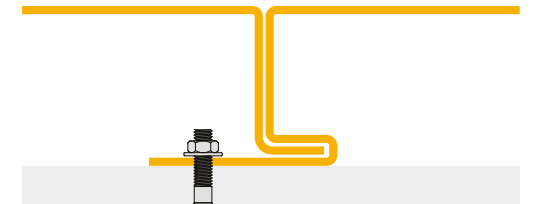
#### Small Panel Spans



#### Large Panel Spans

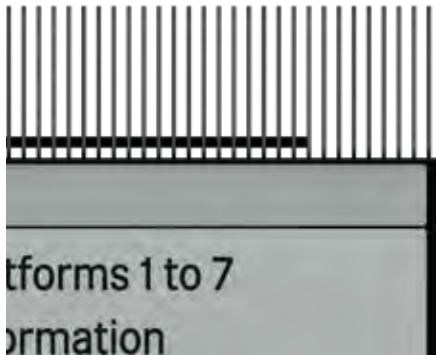


#### Extreme Panel Spans



# Technical Guidance

## 8.3 Design Overview



Detail H



Detail G



### Totem Bird Deterrent

Totems feature an integrated bird deterrent at the top which is of a sloped fin design and is finished consistent with the sign framing.

This is removable for cleaning and future replacement if required.

The spacing of the fins and the angle are to be consistent with the illustration here.

The angle of the slope has been designed in accordance with existing examples and the spacing of the fins are equivalent to off the shelf bird spikes as noted in the Bird Deterrent solution.



Image 8.3.14 Totem Bird Deterrent



# Technical Guidance

## 8.3 Design Overview



### Bird Deterrent

An off the shelf solution can be applied to any of the sign types shown. We would recommend a similar product to that shown here with a mounted wire system.

The visual impact and visibility of the bird deterrent should be kept to a minimum and where possible either clear or matching components should be used.

The extrusion profiles allow for mechanical fixings of bird deterrents into the removable cap component which can be removed for the purpose of cleaning or replacement.

Image 8.3.15 Bird Deterrent Wires and Spikes Options

# Technical Guidance

## 8.4 Variant - Suspended Small (SUS)

### Construction Summary

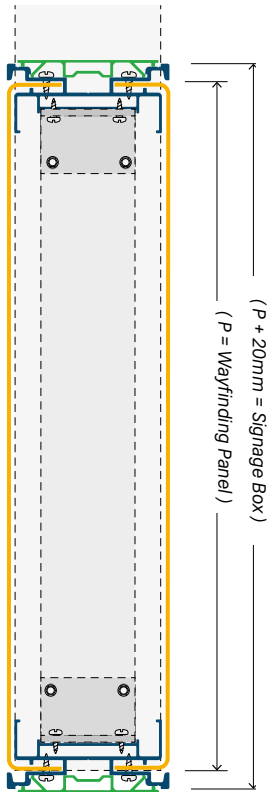


Image 8.4.1 SUS Cutaway

### Usage Examples



Image 8.4.2 SUS London Clapham Junction




Image 8.4.3 SUS London Clapham Junction



Image 8.4.4 SUS London Cannon Street

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

 Wayfinding Panel	 RAL 9016 (WF Panel)
 EXT01	 RAL 9005 (30% Gloss)
 EXT03	 RAL 3020 (30% Gloss)

#### Using Existing Suspension Drops

A new signage box in this construction can be considered for use with suitable existing suspension drops. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

## 8.4 Variant - Suspended Small (SUS)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT01 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	DROPS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
7	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

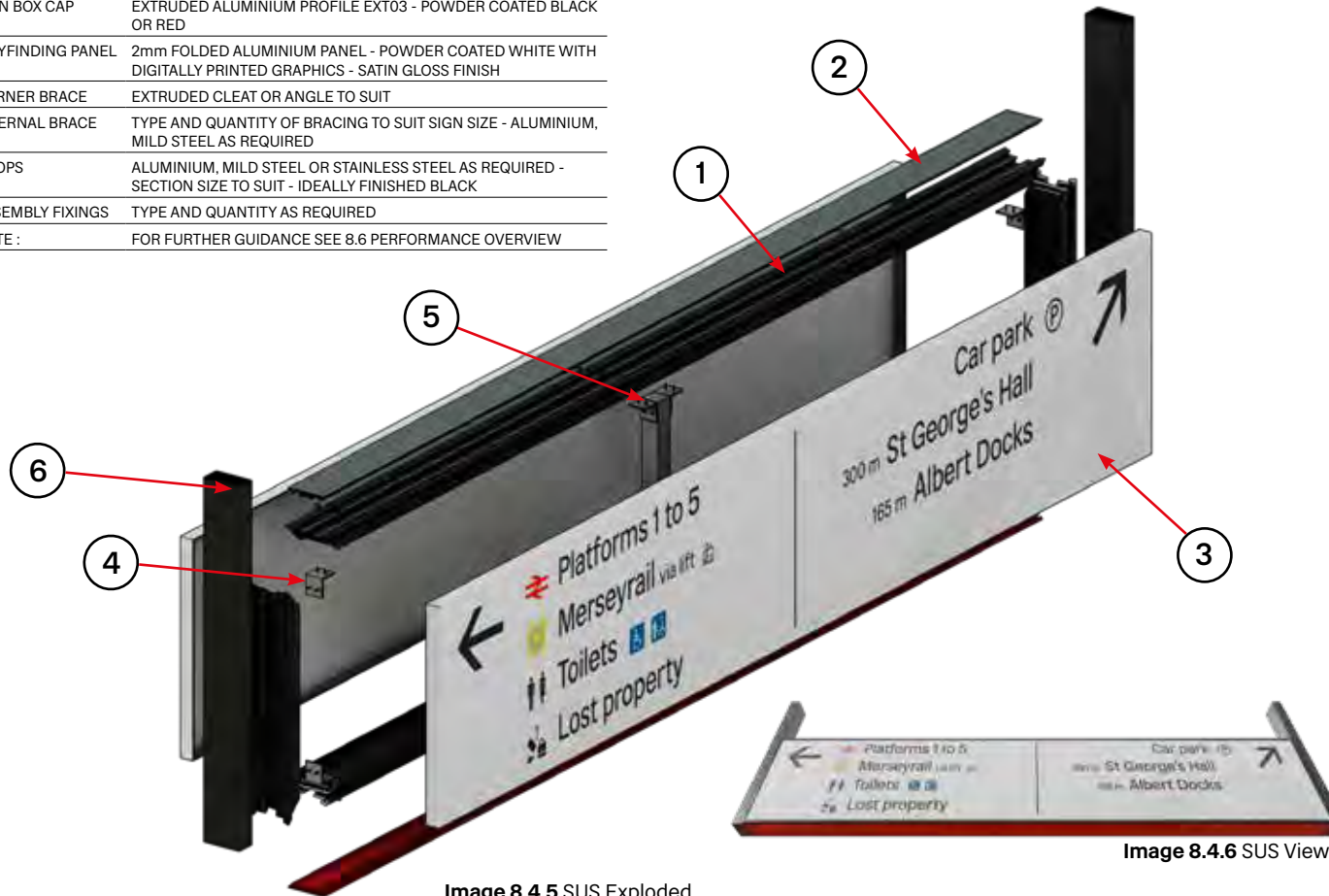


Image 8.4.5 SUS Exploded

Image 8.4.6 SUS View

### Signage Variant Summary

This variant can be used frequently for new installations or a new signage box can interface with existing suspension drops.

Using Construction Type A, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

When assembled there should be no visible fixings around the sign box itself. See 8.3 Design Overview for panel join guidance.

This variant can re-use existing drops into the top or sides of a new signage box.

Where section size for the installation allow, suspension drops should not protrude further than the extrusion profile.

The quantity, section size and materiality of suspension drops should be selected to suit the installation.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

# Technical Guidance

## 8.4 Variant - Suspended Large (SUL)

### Construction Summary

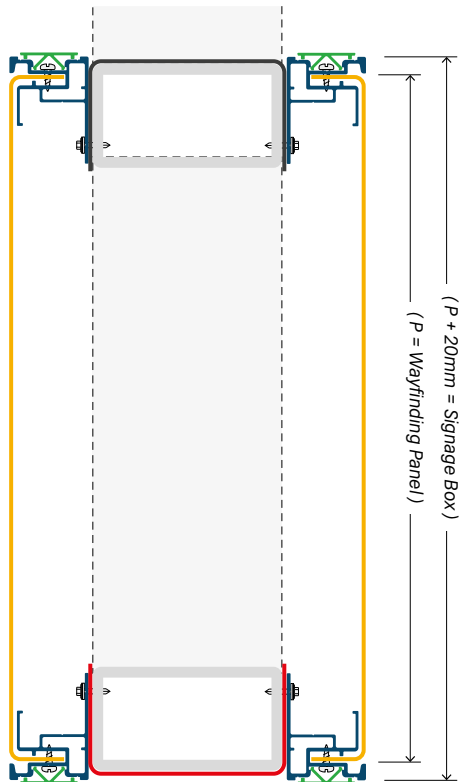


Image 8.4.7 SUL Cutaway

### Usage Examples



Image 8.4.8 SUL London Victoria



Image 8.4.9 SUL London Bridge



Image 8.4.10 SUL London Victoria

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

 Wayfinding Panel	 RAL 9016 (WF Panel)
 EXT04	 RAL 9005 (30% Gloss)
 EXT05	 RAL 3020 (30% Gloss)

### Using Existing Suspension Drops and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing suspension drops or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

## 8.4 Variant - Suspended Large (SUL)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
6	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
7	DROPS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

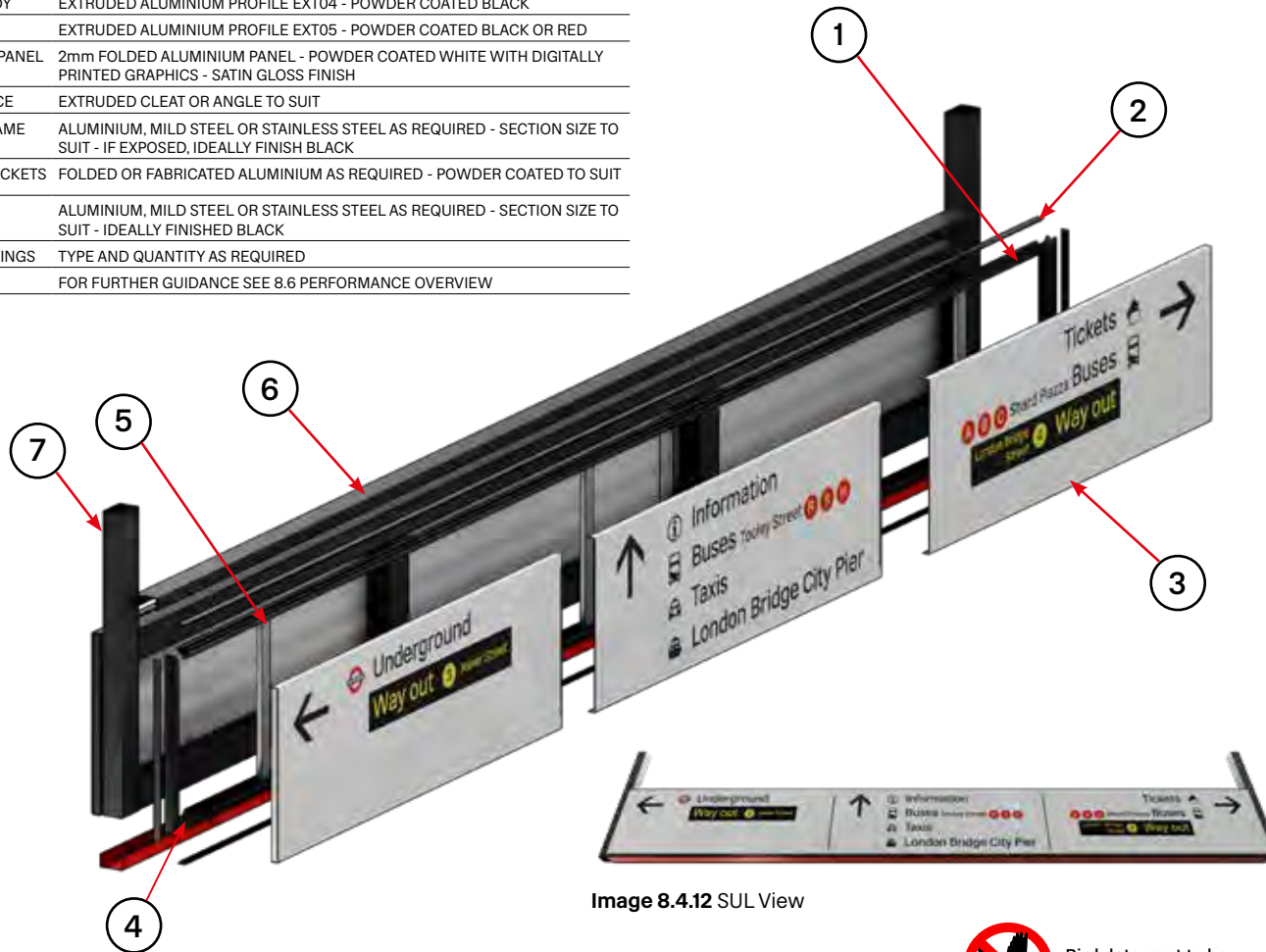


Image 8.4.12 SUL View

Image 8.4.11 SUL Exploded



Bird deterrent to be applied as necessary

### Signage Variant Summary

If the Suspended Small variant is not suitable for use then the Suspended Large can be considered.

This variant works with a new internal frame or structure and can also be used to adapt suitable existing structures and suspension drops.

Using Construction Type C, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Where section size for the installation allow, suspension drops should not protrude further than the extrusion profile.

The quantity, section size and materiality of suspension drops and internal framing should be selected to suit the installation.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



### Construction Summary

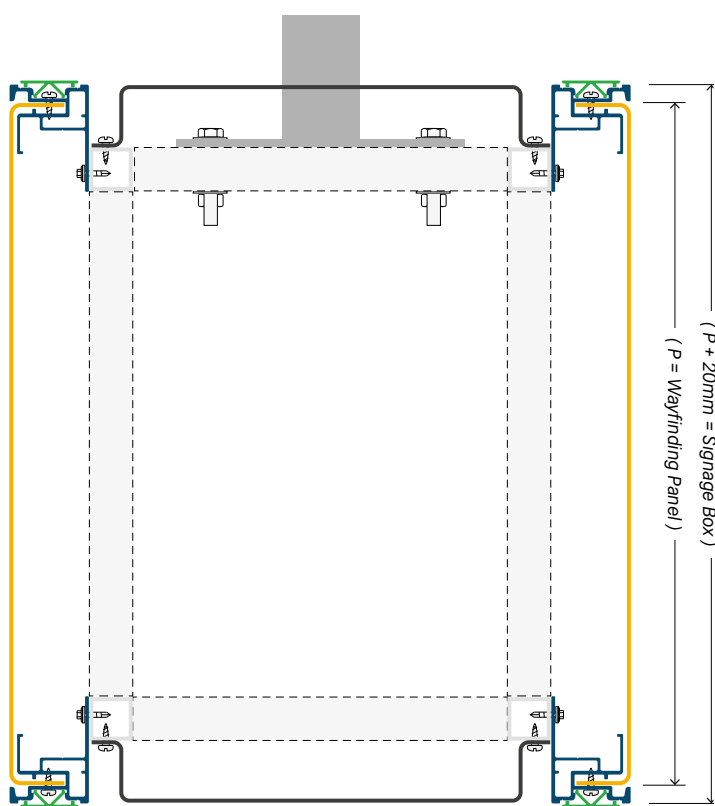


Image 8.4.13 SUC Cutaway

### Usage Examples



Image 8.4.14 SUC London Cannon Street



Image 8.4.15 SUC Clapham Junction



Image 8.4.16 SUC London Liverpool Street

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT04
- EXT05

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

#### Using Existing Suspension Drops and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing suspension drops or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

## 8.4 Variant - Suspended Cube (SUC)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
6	TOP & BOTTOM CAP	2mm FOLDED ALUMINIUM PANEL - POWDER COATED BLACK
7	DROPS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW



Image 8.4.18 SUC View

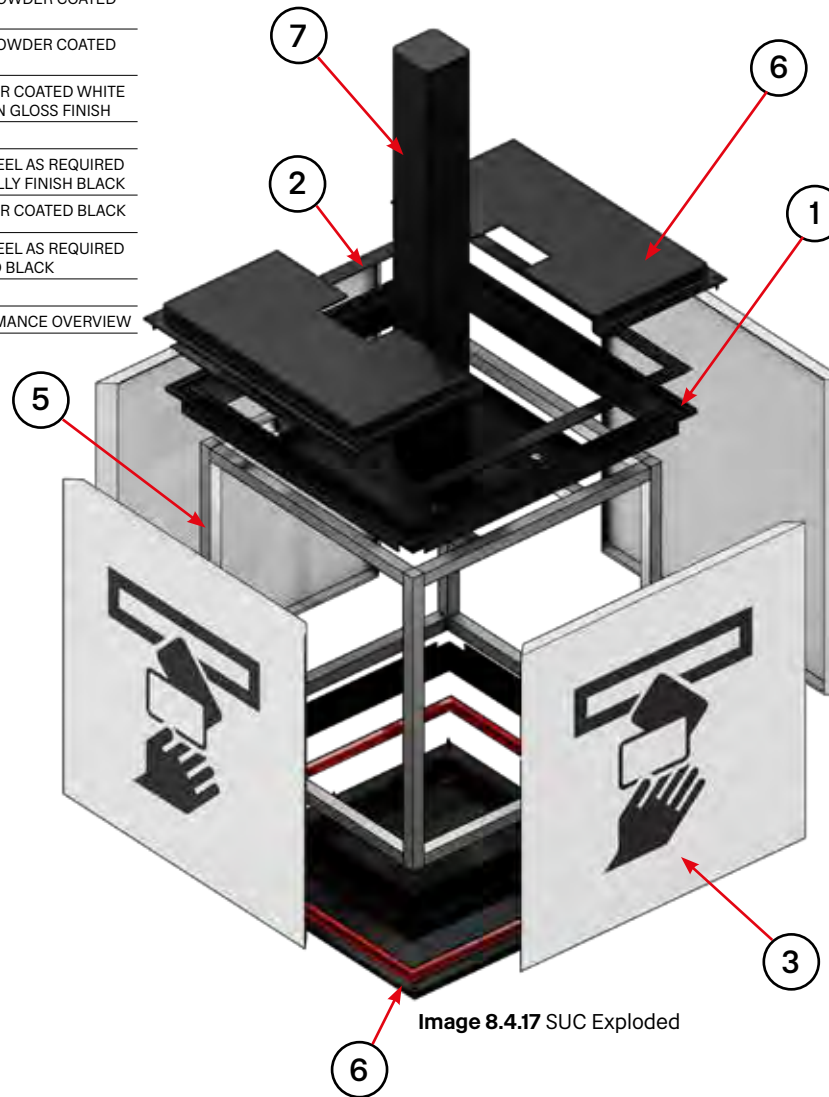


Image 8.4.17 SUC Exploded

### Signage Variant Summary

This variant can be used frequently for new installations or a new signage box can interface with existing suspension drops.

Using Construction Type C, combined with metal fabrications and pressings, there are multiple interface opportunities that will minimise the visibility of plates and bolted connections inside the signage box.

Wayfinding panel fabrication should be executed as shown in these illustrations.

This variant can re-use existing drops into the top or sides of a new signage box.

The quantity, section size and materiality of suspension drops should be selected to suit the installation.

The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary



### Construction Summary

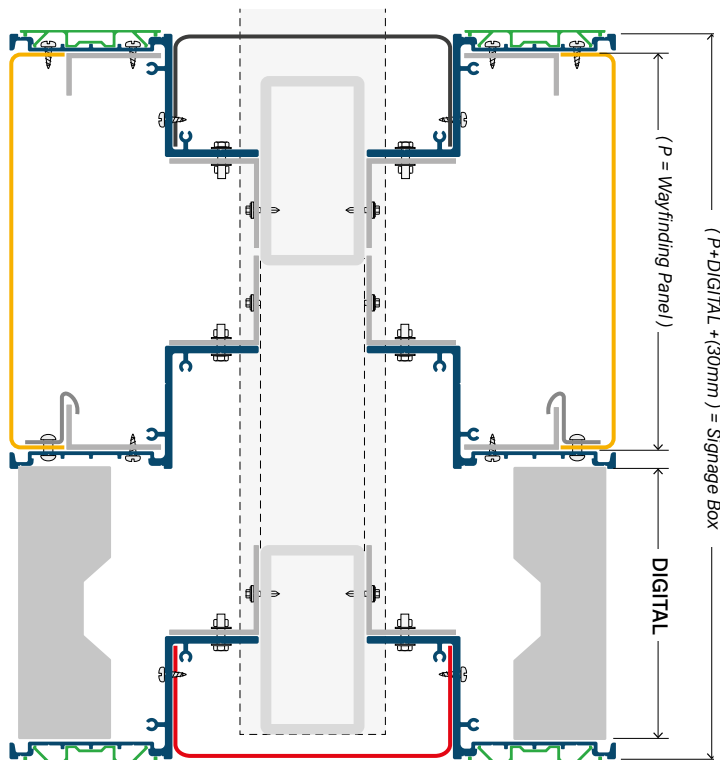


Image 8.4.19 SUD Cutaway

### Usage Examples



Image 8.4.20 SUD London Cannon Street



Image 8.4.21 London Liverpool Street

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT02
- EXT03

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

#### Using Existing Suspension Drops and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing suspension drops or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.



## 8.4 Variant - Suspended Digital (SUD)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT02 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	END CAP	8mm ALUMINIUM - POWDER COATED BLACK
5	DIGITAL DISPLAY	LED DIGITAL DISPLAY
6	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
7	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
8	DROPS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
9	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

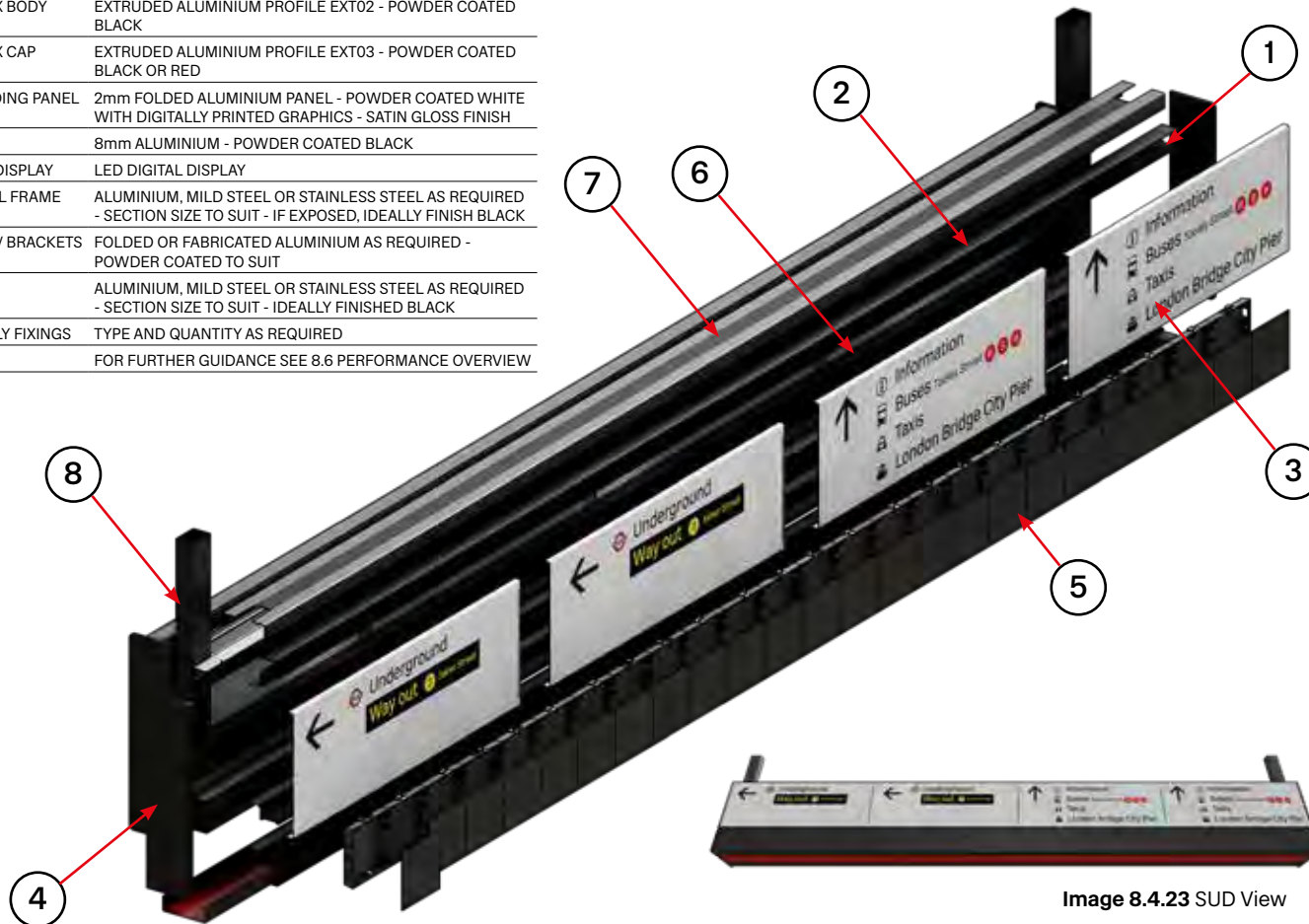


Image 8.4.22 SUD Exploded

Image 8.4.23 SUD View



Bird deterrent to be applied as necessary

### Signage Variant Summary

When a suspended sign is required to have other integrated systems such as digital display, this variant can be considered.

This variant works with a new internal frame or structure and can also be used to adapt suitable existing structures and suspension drops.

Using Construction Type B, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Where section size for the installation allow, suspension drops should not protrude further than the extrusion profile.

The quantity, section size and materiality of suspension drops and internal framing should be selected to suit the installation.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



### Construction Summary

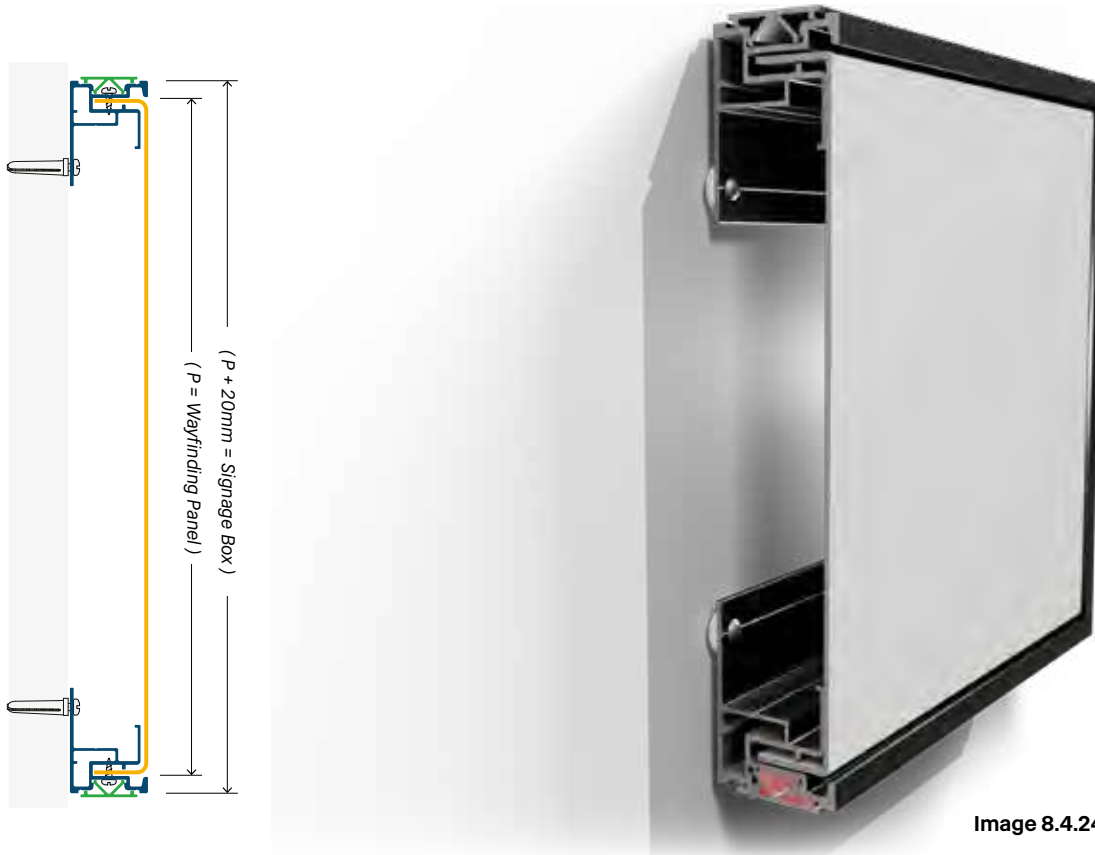


Image 8.4.24 WAS Cutaway

### Usage Examples



Image 8.4.25 Manchester Piccadilly




Image 8.4.26 Guildford



Image 8.4.27 London Cannon Street

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

 Wayfinding Panel	 RAL 9016 (WF Panel)
 EXT04	 RAL 9005 (30% Gloss)
 EXT05	 RAL 3020 (30% Gloss)

## 8.4 Variant - Wall Mounted Small (WAS)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW



Image 8.4.28 WAS Exploded

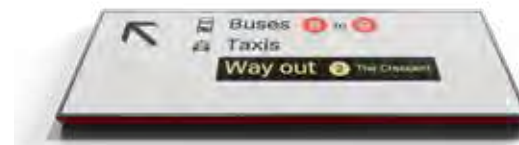


Image 8.4.29 WAS View

### Signage Variant Summary

This variant suits most wall mounted or surface installations and can be used frequently.

Using Construction Type C, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

When assembled there should be no visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.

As a general principle, wall mounted signs with a height of 600mm and under should use this variant.

Signs over 600mm in height can also use this variant and may suit better than the WAL variant in some installations due to the difference in projection from the wall or surface.



Bird deterrent to be applied as necessary

## 8.4 Variant - Wall Mounted Large (WAL)



### Construction Summary

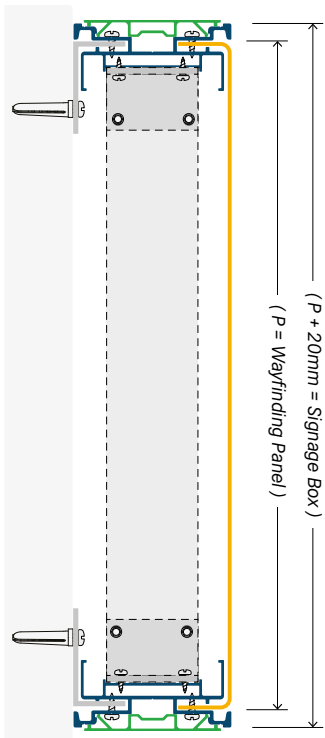


Image 8.4.30 WAL Cutaway

### Usage Examples



Image 8.4.31 London Victoria



Image 8.4.32 London Waterloo



Image 8.4.33 Liverpool Lime Street

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

 Wayfinding Panel	 RAL 9016 (WF Panel)
 EXT01	 RAL 9005 (30% Gloss)
 EXT03	 RAL 3020 (30% Gloss)

## 8.4 Variant - Wall Mounted Large (WAL)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT01 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	WALL BRACKET	EXTRUDED ANGLE, SECTION OR PANEL TO SUIT FIXING SOLUTION
7	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

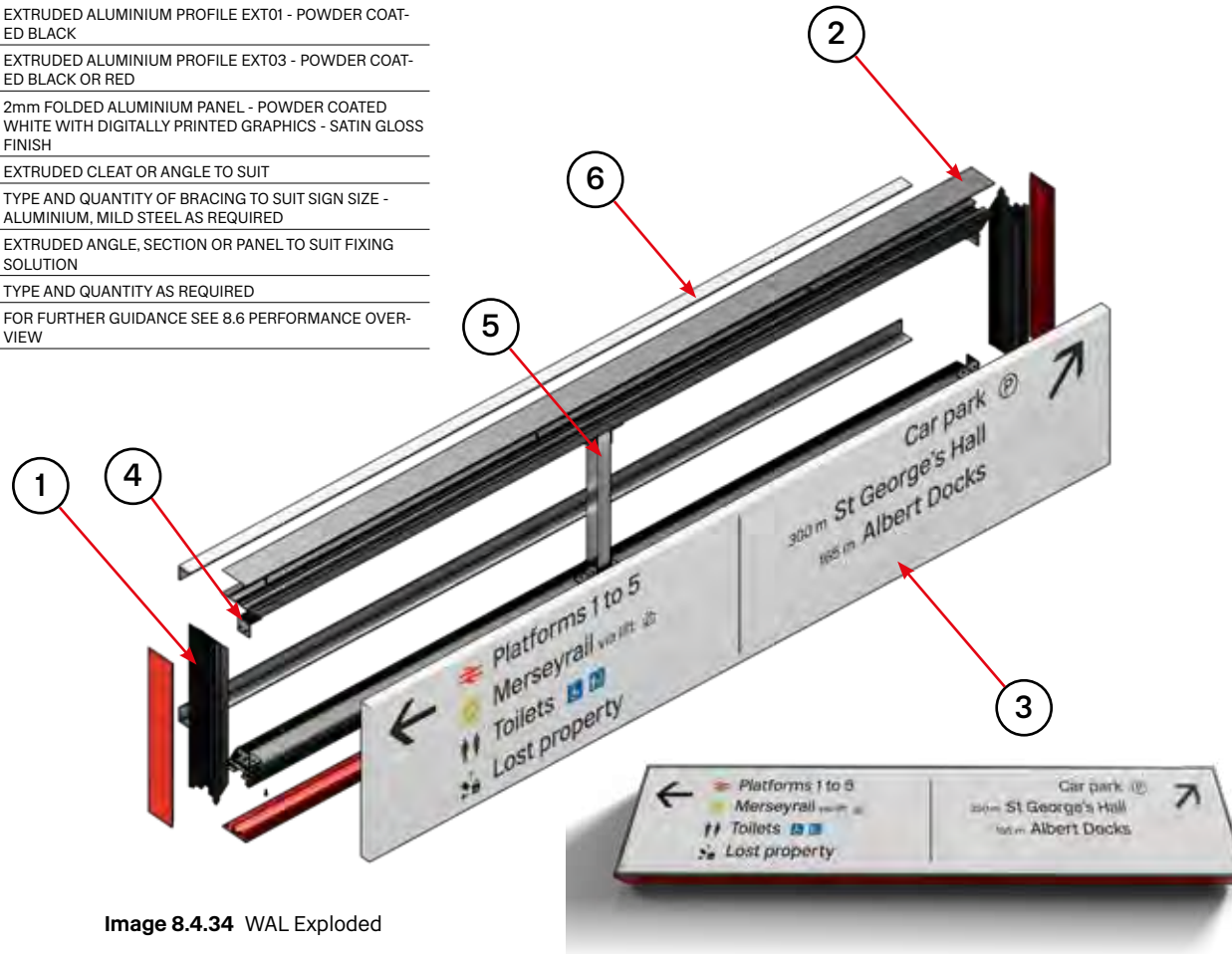


Image 8.4.34 WAL Exploded

Image 8.4.35 WAL View

### Signage Variant Summary

This variant suits most wall mounted or surface installations and can be used frequently.

Using Construction Type A, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

When assembled there should be no visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.

As a general principle, wall mounted signs with a height over 600mm should use this variant.

Signs 600mm and under in height can also use this variant but may be better as the WAS variant in some installations due to the difference in projection from the wall or surface.



Bird deterrent to be applied as necessary

## 8.4 Variant - Wall Mounted Cube (WAC)



### Construction Summary

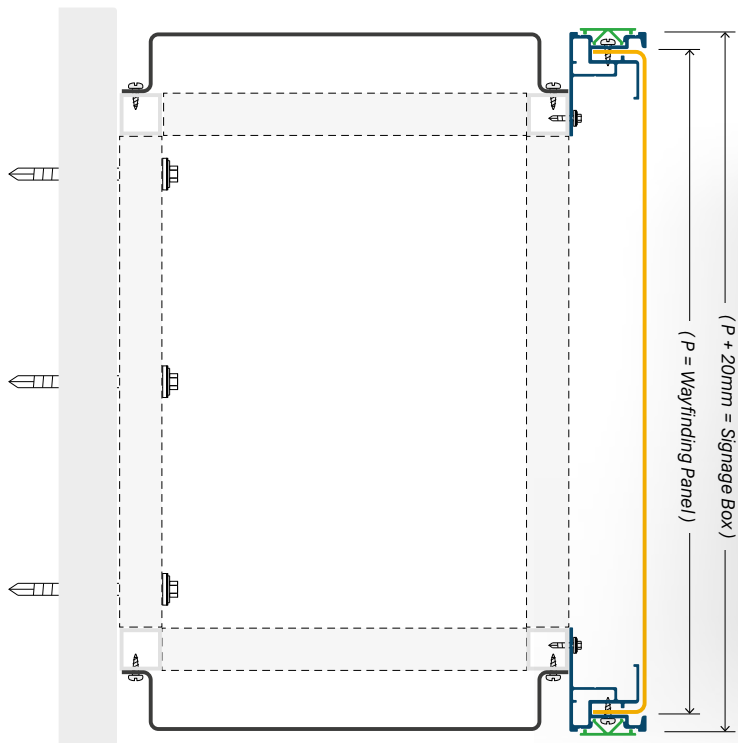


Image 8.4.39 WAC Cutaway

### Usage Examples



Image 8.4.36 London Victoria



Image 8.4.37 London King's Cross



Image 8.4.38 London Bridge

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT04
- EXT05

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

## 8.4 Variant - Wall Mounted Cube (WAC)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
6	TOP & BOTTOM CAP	2mm FOLDED ALUMINIUM PANEL - POWDER COATED BLACK
7	WALL BRACKET	MULTIPLE INTERFACE OPTIONS ARE POSSIBLE UTILISING THE INTERNAL FRAME AND FOLDED OR FABRICATED PARTS AS REQUIRED
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW



Image 8.4.41 WAC View

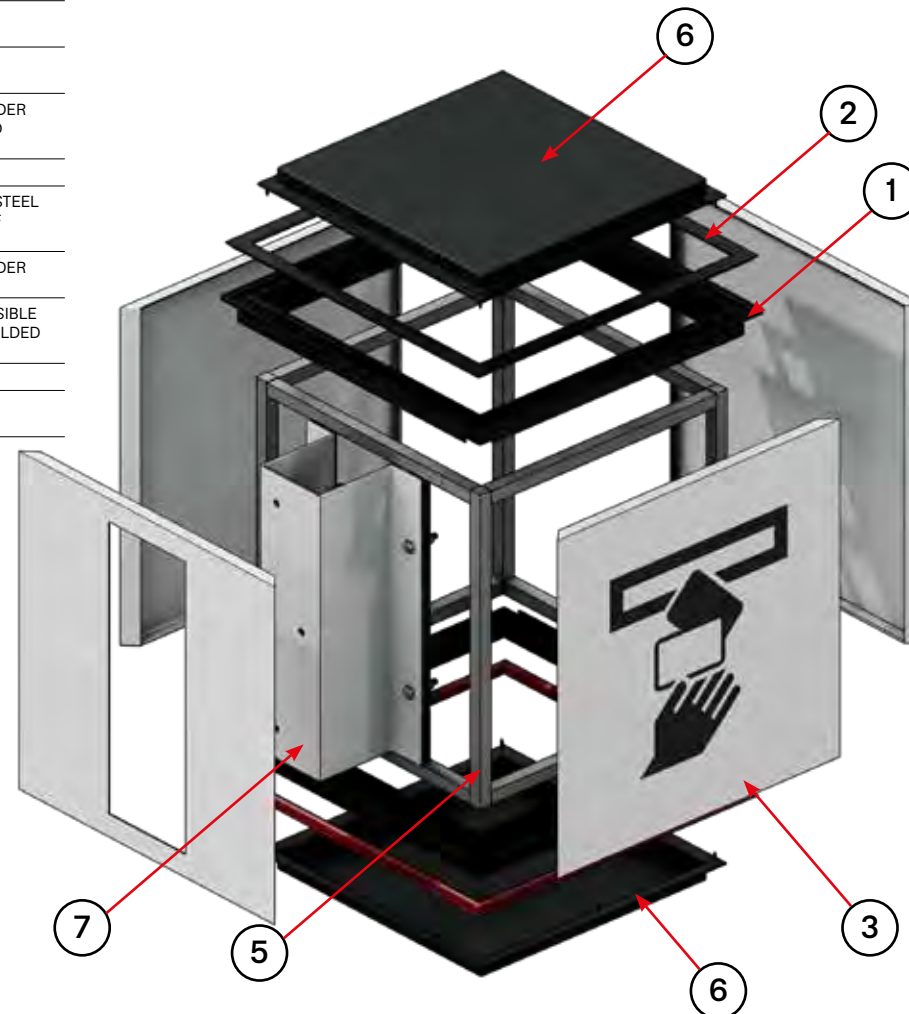


Image 8.4.40 WAC Exploded

### Signage Variant Summary

This variant can be used frequently for new installations.

Using Construction Type C, combined with metal fabrications and pressings, there are multiple interface opportunities that will minimise the visibility of plates and bolted connections inside the signage box.

Signs can be installed flush to the surface or with a stand off as required to suit installations.

Wayfinding panel fabrication should be executed as shown in these illustrations.

The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

## 8.4 Variant - Digital Wall Mounted (WAD)



### Construction Summary

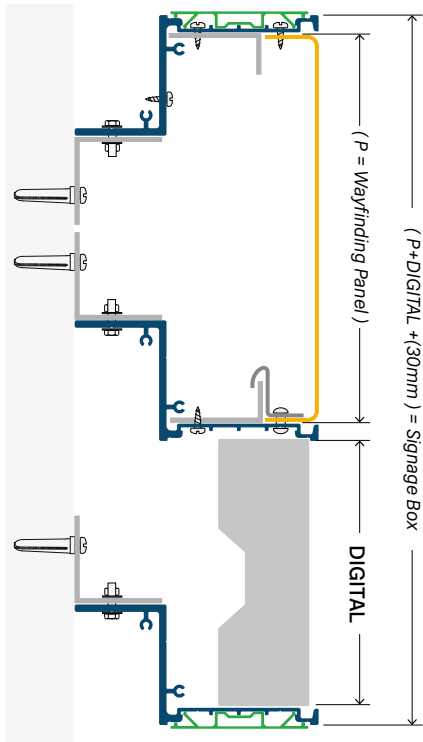


Image 8.4.42 WAD Cutaway

### Usage Examples



Image 8.4.43 Manchester Piccadilly



Image 8.4.44 London Waterloo

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

 Wayfinding Panel	 RAL 9016 (WF Panel)
 EXT02	 RAL 9005 (30% Gloss)
 EXT03	 RAL 3020 (30% Gloss)



## 8.4 Variant - Digital Wall Mounted (WAD)

Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT02 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	END CAP	8mm ALUMINIUM - POWDER COATED BLACK
5	DIGITAL DISPLAY	LED DIGITAL DISPLAY
6	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
7	WALL BRACKET	EXTRUDED ANGLE, SECTION OR PANEL TO SUIT FIXING SOLUTION
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

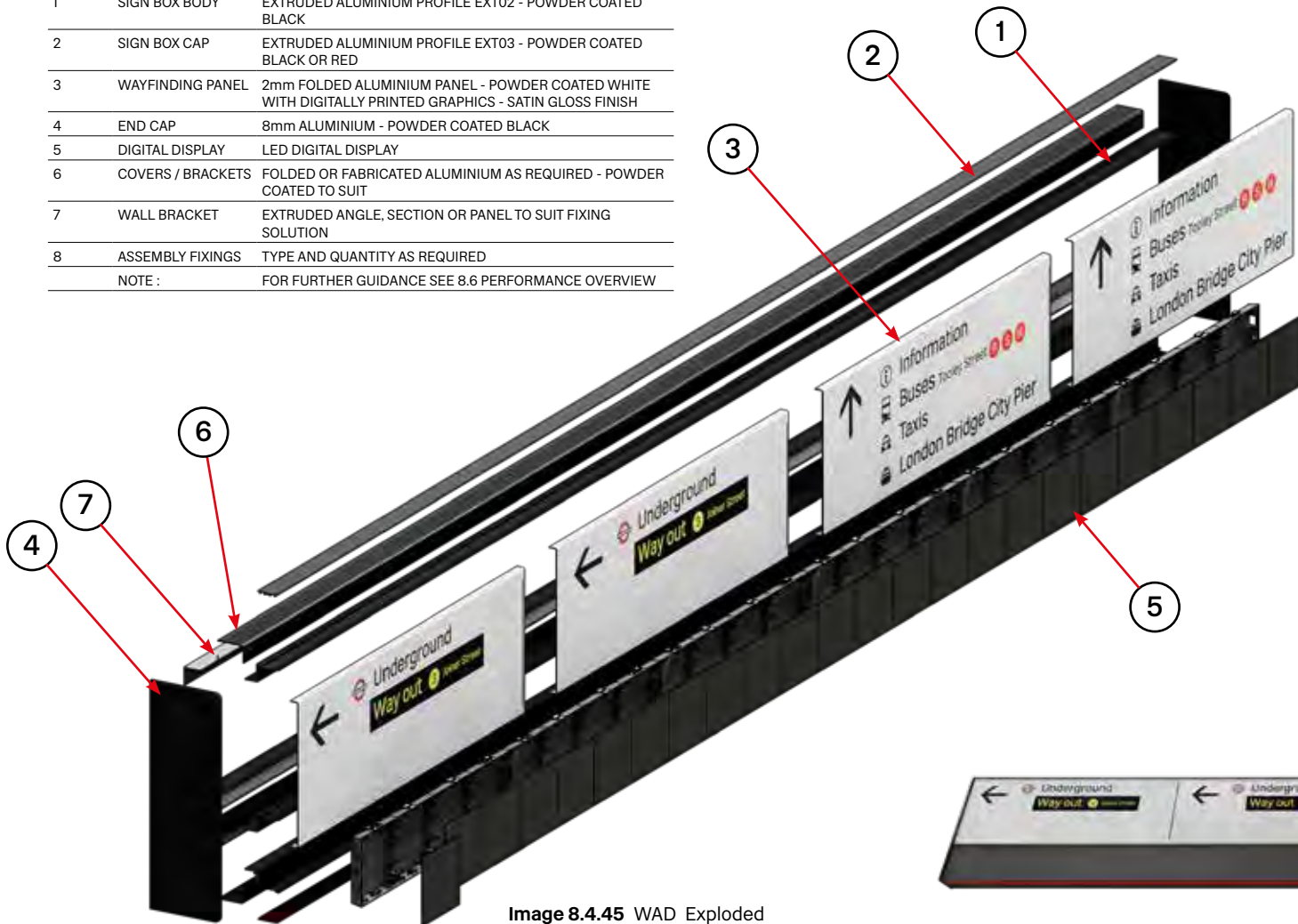


Image 8.4.45 WAD Exploded

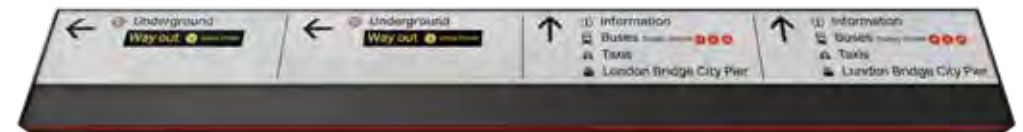


Image 8.4.46 WAD View

### Signage Variant Summary

When a wall mounted sign is required to have other integrated systems such as digital display, this variant can be considered.

Using Construction Type B, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

# Technical Guidance

## 8.4 Variant - Projecting Small (PRS)

### Construction Summary



Image 8.4.47 PRS Cutaway

### Usage Examples



Image 8.4.48 London Cannon Street




Image 8.4.49 London King's Cross



Image 8.4.50 Reading

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

	Wayfinding Panel		RAL 9016 (WF Panel)
	EXT01		RAL 9005 (30% Gloss)
	EXT03		RAL 3020 (30% Gloss)

## 8.4 Variant - Projecting Small (PRS)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT01 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	WALL BRACKET	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
7	SHROUD	FOLDED ALUMINIUM POWDER COATED BLACK
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

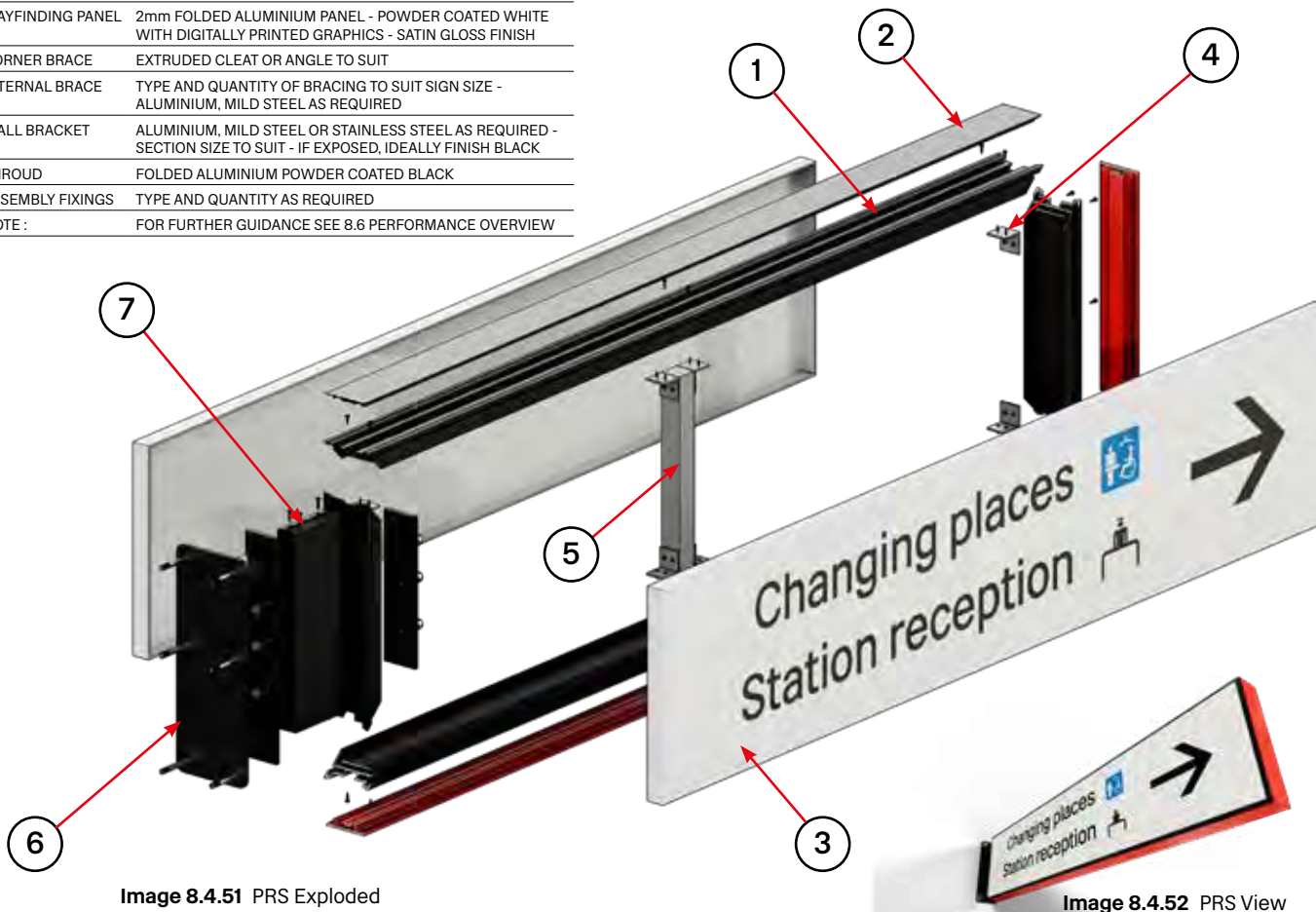


Image 8.4.51 PRS Exploded

Image 8.4.52 PRS View

### Signage Variant Summary

This variant can be used frequently for new installations.

Using Construction Type A, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

When assembled there should be no visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

It is possible to affix the sign flush to the surface through the main signage box, but in most cases a stand off or interface bracket with a wider wall plate is required to achieve suitable fixing points. This bracket should be covered by a shroud as shown.

Multiple proportions of projecting signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary



### Construction Summary

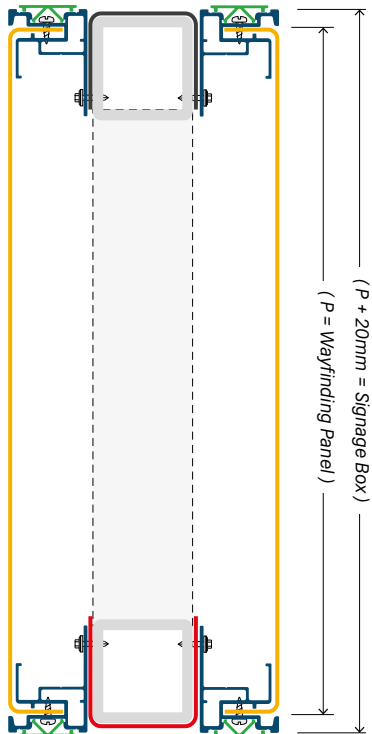


Image 8.4.53 PRL Cutaway

### Usage Examples



Image 8.4.54 London Bridge



Image 8.4.55 London Liverpool Street

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT04
- EXT05

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

#### Using Existing Suspension Drops and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing suspension drops or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

## 8.4 Variant - Projecting Large (PRL)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
6	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
7	WALL BRACKET	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
8	SHROUD	FOLDED ALUMINIUM POWDER COATED BLACK
9	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
	NOTE :	FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

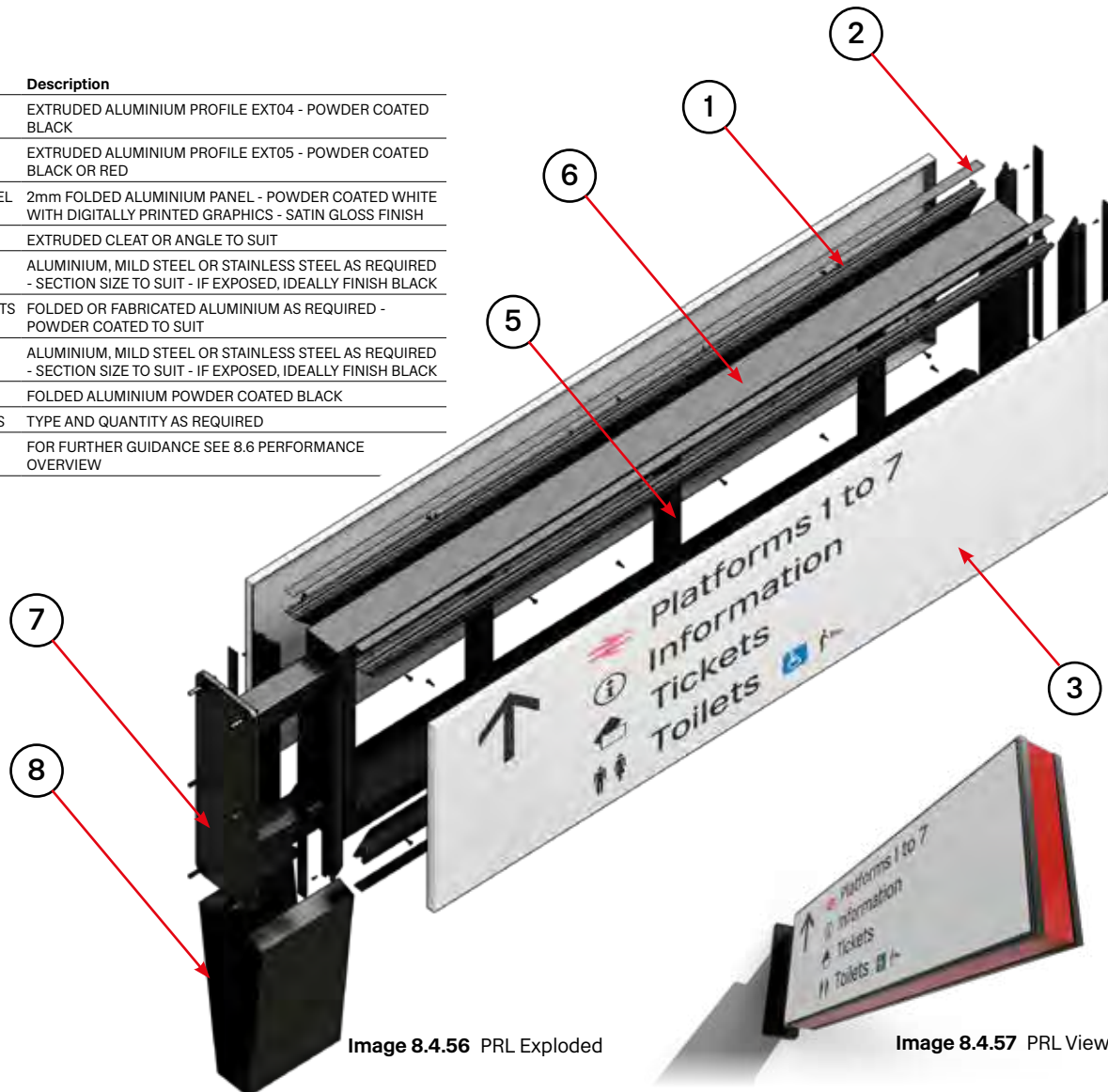


Image 8.4.56 PRL Exploded

Image 8.4.57 PRL View

### Signage Variant Summary

If the Projecting Small variant is not suitable for use then the Projecting Large can be considered.

Using Construction Type C, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

This variant works with a new internal frame or structure and can also be used to adapt suitable existing structures and projecting brackets.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

In most cases a stand off or interface bracket with a wider wall plate is required to achieve suitable fixing points. This bracket should be covered by a shroud as shown.

Multiple proportions of projecting signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary



### Construction Summary

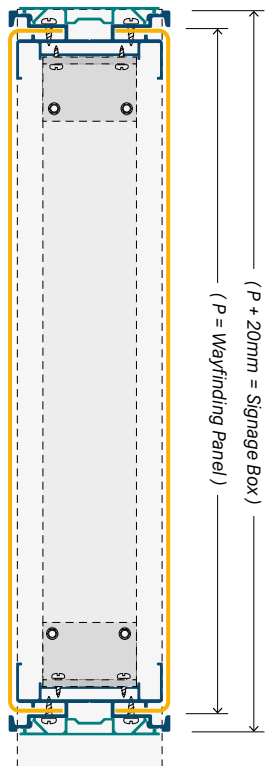


Image 8.4.58 POS Cutaway

### Usage Examples



Image 8.4.59 London Bridge



Image 8.4.60 Leeds Central



Image 8.4.61 London Victoria

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT01
- EXT03

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

### Using Existing Posts

A new signage box in this construction can be considered for use with suitable existing upright posts. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

## 8.4 Variant - Post Mounted Small (POS)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT01 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	POSTS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
7	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

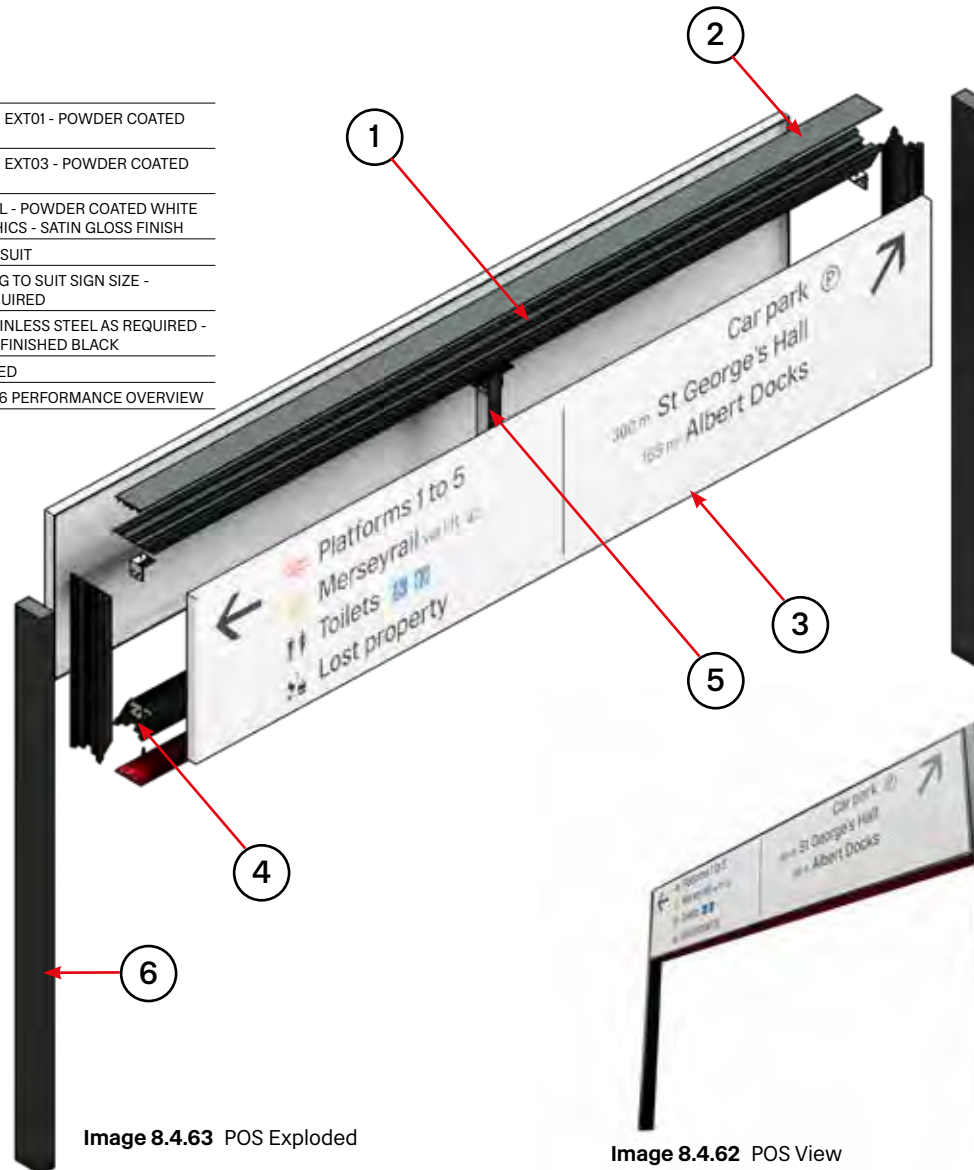


Image 8.4.63 POS Exploded

Image 8.4.62 POS View

### Signage Variant Summary

This variant can be used frequently for new installations or a new signage box can interface with existing upright posts.

Using Construction Type A, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

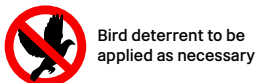
When assembled there should be no visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

This variant can re-use existing posts into the bottom or sides of a new signage box.

Where section size for the installation allows upright posts should not protrude further than the extrusion profile.

The quantity, section size and materiality of upright posts should be selected to suit the installation.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

## 8.4 Variant - Post Mounted Large (POL)



### Construction Summary

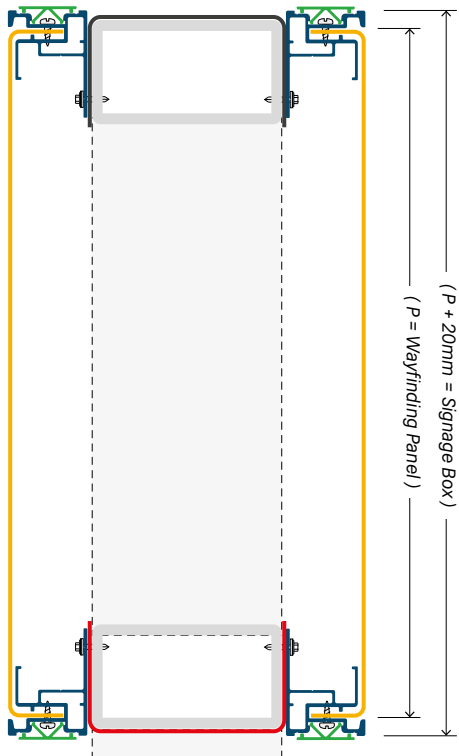


Image 8.4.64 POL Cutaway

### Usage Examples



Image 8.4.65 London King's Cross



Image 8.4.66 Leeds Central



Image 8.4.67 London Liverpool Street

#### (X) Determining Signage Box Size

The illustration above indicates the wayfinding panel size as (X). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT04
- EXT05

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

#### Using Existing Posts and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing upright posts or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.



## 8.4 Variant - Post Mounted Large (POL)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
6	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
7	POSTS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

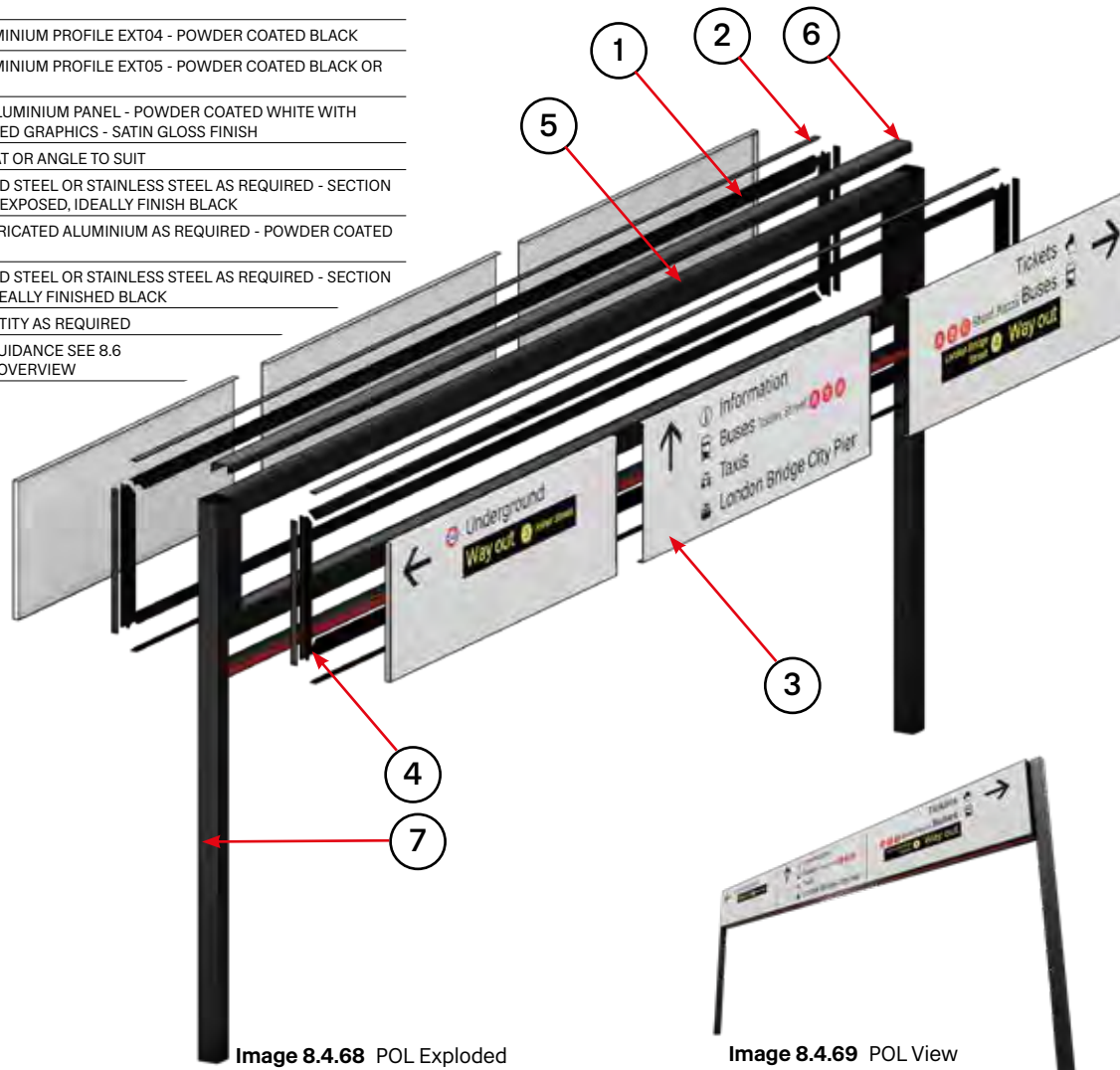


Image 8.4.68 POL Exploded

Image 8.4.69 POL View

### Signage Variant Summary

If the Post Mounted Small variant is not suitable for use then the Post Mounted Large can be considered.

This variant works with a new internal frame or structure and can also be used to adapt suitable existing structures and upright posts.

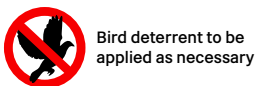
Using Construction Type C, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Where section size for the installation allows upright posts should not protrude further than the extrusion profile.

The quantity, section size and materiality of upright posts and internal framing should be selected to suit the installation.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

## 8.4 Variant - Post Mounted Cube (POC)



### Construction Summary

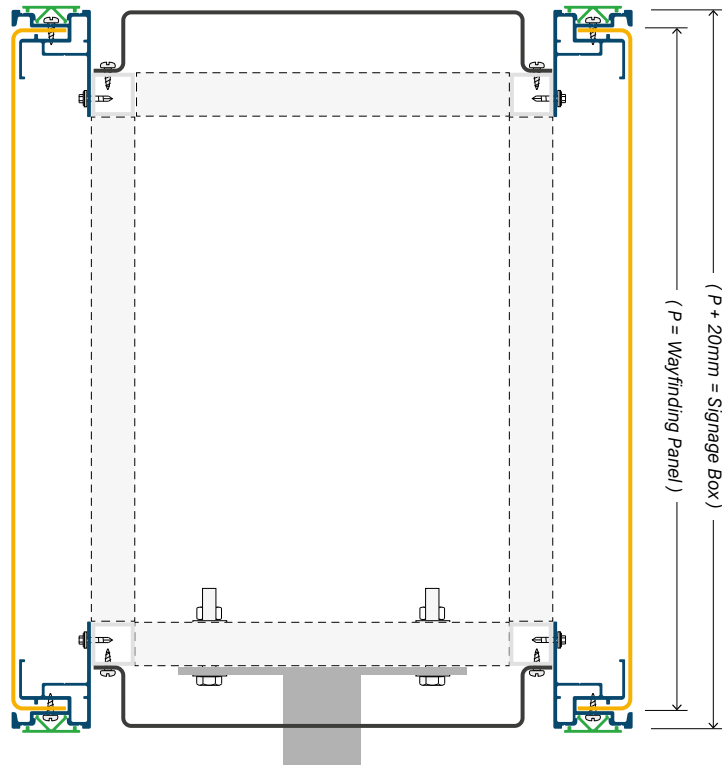


Image 8.4.70 POC Cutaway

### Usage Examples



Image 8.4.71 London Liverpool Street



Image 8.4.72 London King's Cross

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT04
- EXT05

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

#### Using Existing Posts and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing upright posts or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

## 8.4 Variant - Post Mounted Cube (POC)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
6	TOP & BOTTOM CAP	2mm FOLDED ALUMINIUM PANEL - POWDER COATED BLACK
7	POSTS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
8	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

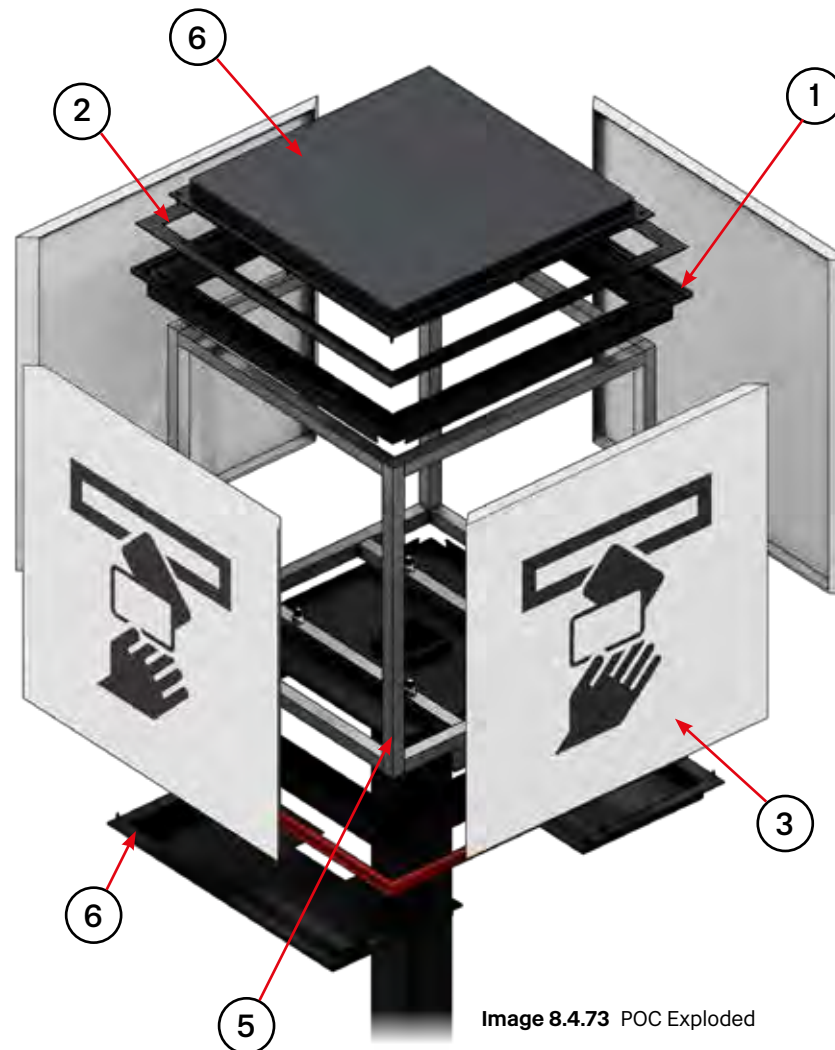


Image 8.4.74 POC View

### Signage Variant Summary

This variant can be used frequently for new installations or a new signage box can interface with existing upright posts.

Using Construction Type C, combined with metal fabrications and pressings, there are multiple interface opportunities that will minimise the visibility of plates and bolted connections inside the signage box.

Wayfinding panel fabrication should be executed as shown in these illustrations.

This variant can re-use existing upright posts into the bottom or sides of a new signage box.

The quantity, section size and materiality of suspension drops should be selected to suit the installation.

The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

Image 8.4.73 POC Exploded

# Technical Guidance

## 8.4 Variant - Post Digital (POD)

### Construction Summary

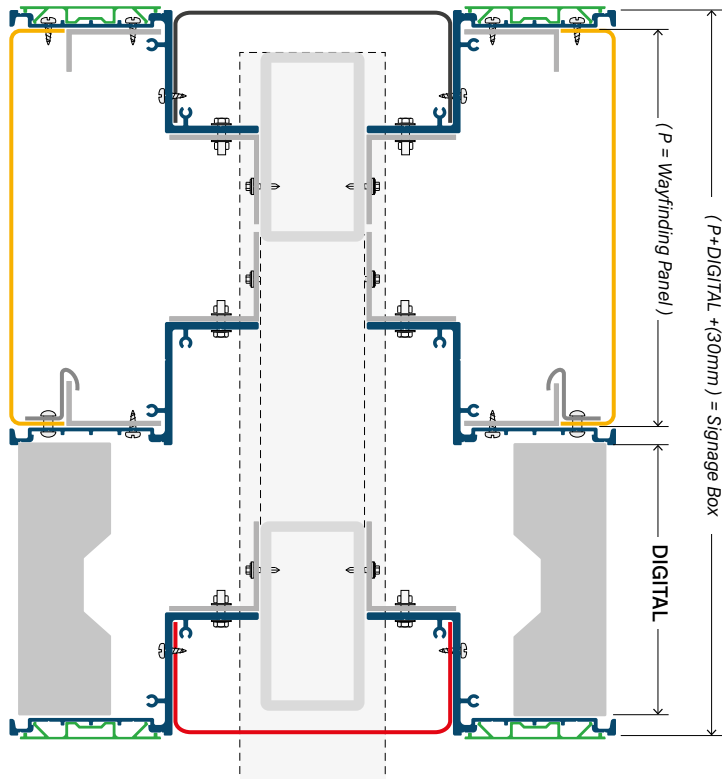


Image 8.4.75 POD Cutaway

### Usage Examples



Image 8.4.76 London Bridge



Image 8.4.77 Edinburgh Waverley

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

	Wayfinding Panel		RAL 9016 (WF Panel)
	EXT02		RAL 9005 (30% Gloss)
	EXT03		RAL 3020 (30% Gloss)

#### Using Existing Posts and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing upright posts or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

# Technical Guidance

## 8.4 Variant - Post Digital (POD)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT02 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	END CAP	8mm ALUMINIUM - POWDER COATED BLACK
5	DIGITAL DISPLAY	LED DIGITAL DISPLAY
6	INTERNAL FRAME	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IF EXPOSED, IDEALLY FINISH BLACK
7	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
8	POSTS	ALUMINIUM, MILD STEEL OR STAINLESS STEEL AS REQUIRED - SECTION SIZE TO SUIT - IDEALLY FINISHED BLACK
9	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW

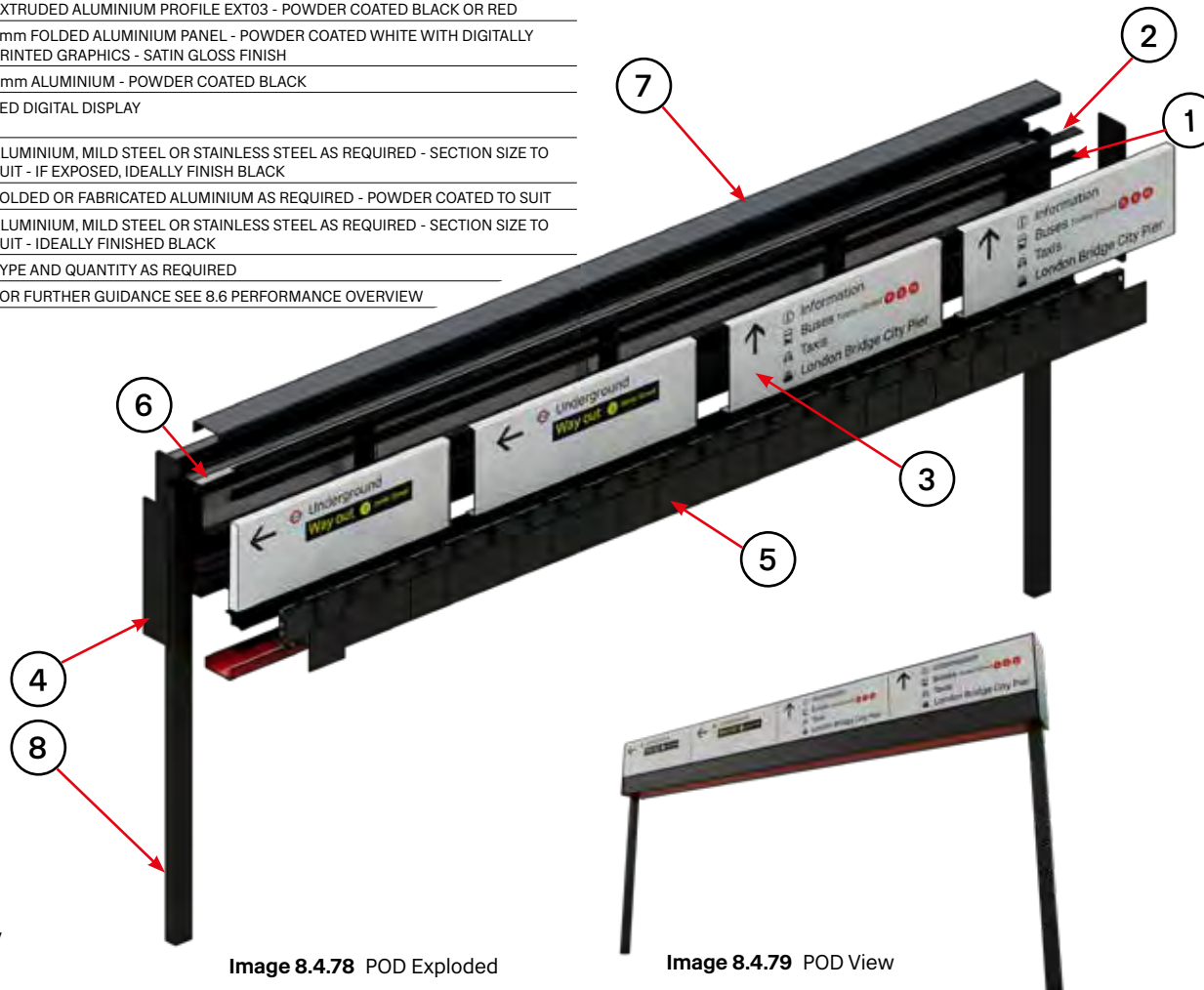
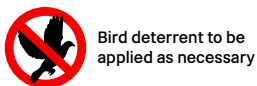


Image 8.4.78 POD Exploded

Image 8.4.79 POD View



Bird deterrent to be applied as necessary

### Signage Variant Summary

When a post mounted sign is required to have other integrated systems such as digital display, this variant can be considered.

This variant works with a new internal frame or structure and can also be used to adapt suitable existing structures and upright posts

Using Construction Type B, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

Where section size for the installation allows upright posts should not protrude further than the extrusion profile.

The quantity, section size and materiality of upright posts and internal framing should be selected to suit the installation.

Short single panel and long multiple panel signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.



### Construction Summary

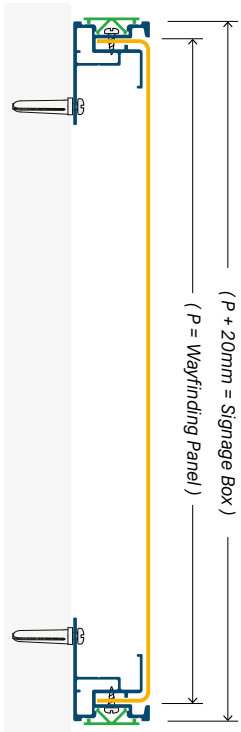


Image 8.4.80 SGS Cutaway

### Usage Examples



Image 8.4.81 Manchester Piccadilly



Image 8.4.82 London Liverpool Street

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT04
- EXT05

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

## 8.4 Variant - Supergraphic Small (SGS)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT04 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT05 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW



Image 8.4.84 SGS View

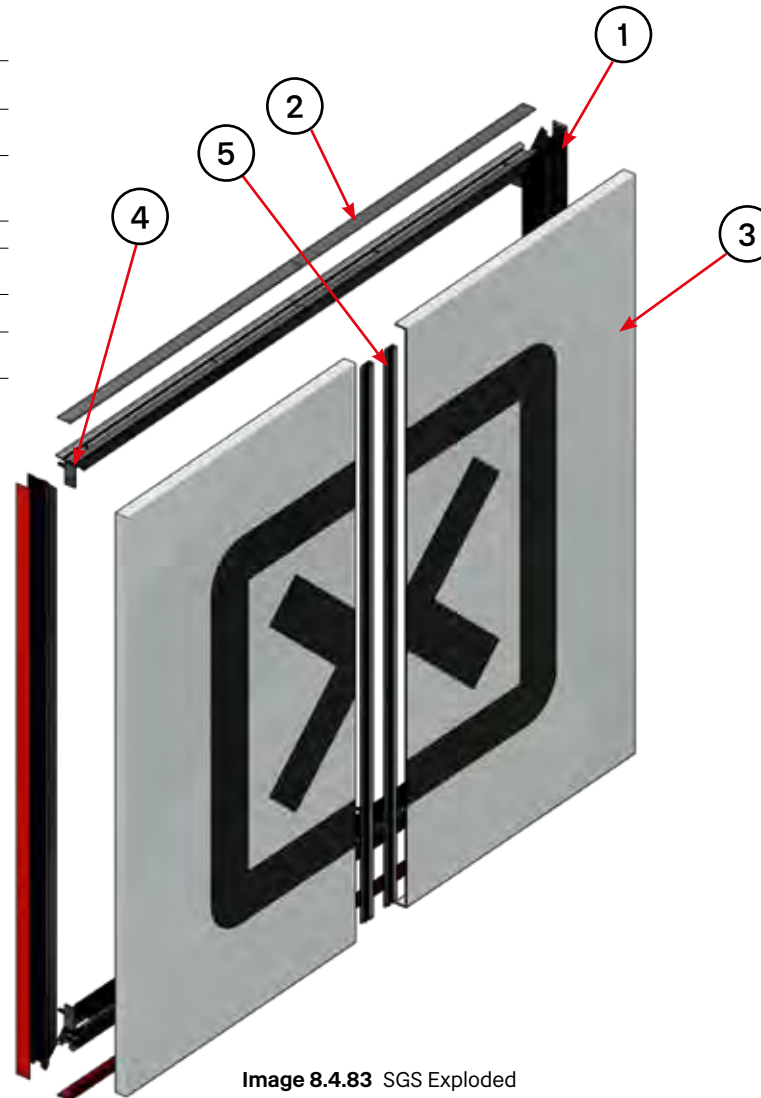


Image 8.4.83 SGS Exploded

### Signage Variant Summary

This variant suits most wall mounted or surface installations and can be used frequently.

Using Construction Type C, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

When assembled there should be no visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance. Panel joins can be either horizontal or vertical to suit.

This variant is identical in construction to the WAS variant but shown here is Supergraphic format.

Multiple proportions of Supergraphic signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.

This variant may suit better than the SGL variant in some installations due to the difference in projection from the wall or surface.



Bird deterrent to be applied as necessary



### Construction Summary

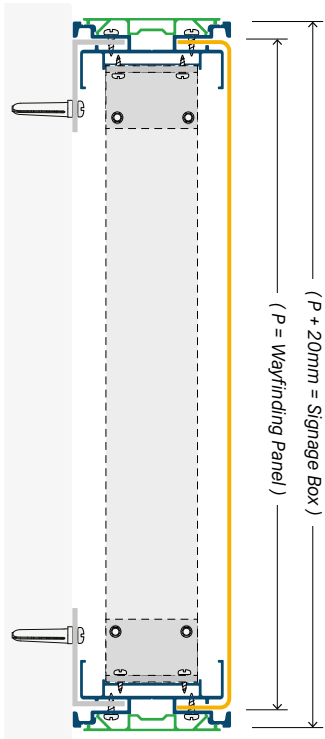


Image 8.4.85 SGL Cutaway

### Usage Examples



Image 8.4.86 Manchester Piccadilly



Image 8.4.87 London Liverpool Street

### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

 Wayfinding Panel	 RAL 9016 (WF Panel)
 EXT01	 RAL 9005 (30% Gloss)
 EXT03	 RAL 3020 (30% Gloss)



## 8.4 Variant - Supergraphic Large (SGL)



Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT01 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	CORNER BRACE	EXTRUDED CLEAT OR ANGLE TO SUIT
5	INTERNAL BRACE	TYPE AND QUANTITY OF BRACING TO SUIT SIGN SIZE - ALUMINIUM, MILD STEEL AS REQUIRED
6	WALL BRACKET	EXTRUDED ANGLE, SECTION OR PANEL TO SUIT FIXING SOLUTION
7	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
	NOTE :	FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW



Image 8.4.89 SGL View

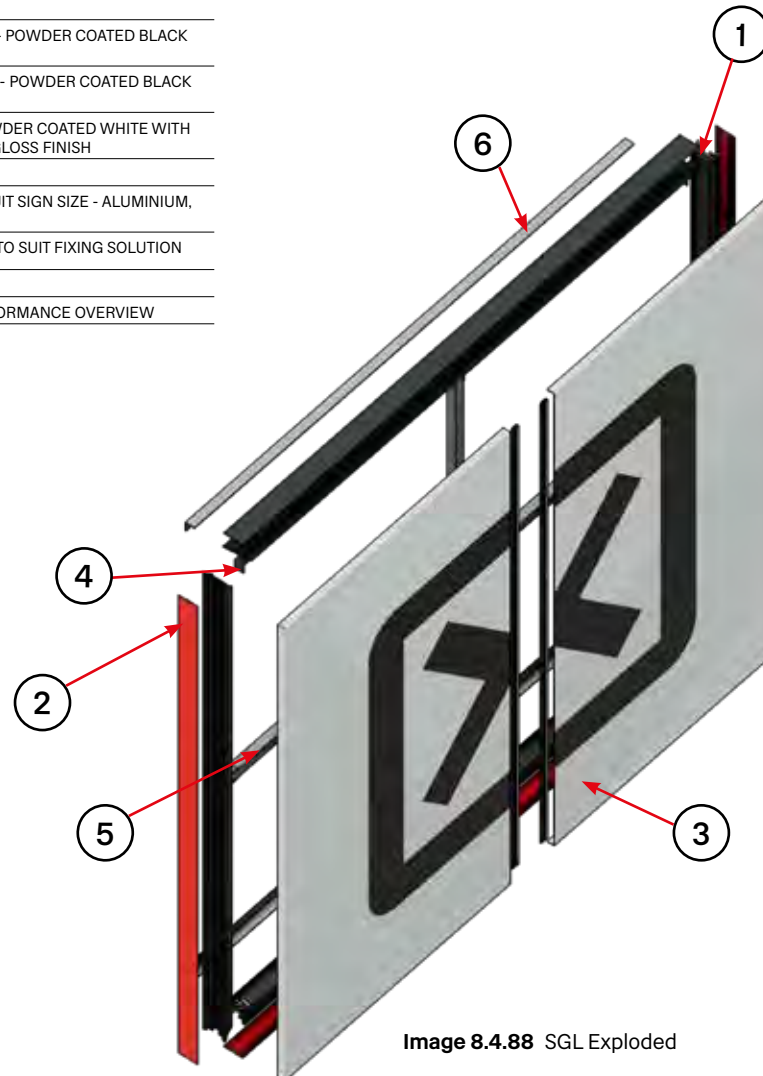


Image 8.4.88 SGL Exploded

### Signage Variant Summary

This variant suits most wall mounted or surface installations and can be used frequently.

Using Construction Type A, multiple internal bracing points are possible and where extra strength is required an additional frame can be integrated.

When assembled there should be no visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance. Panel joins can be either horizontal or vertical to suit.

This variant is identical in construction to the WAL variant but shown here is Supergraphic format.

Multiple proportions of Supergraphic signs are possible. The size extents for the use of this variant requires sensible assessment of each installation.

This variant may suit better than the SGS variant in some installations due to the difference in projection from the wall or surface.



Bird deterrent to be applied as necessary

# Technical Guidance

## 8.4 Variant - Totem (TOT)

### Construction Summary

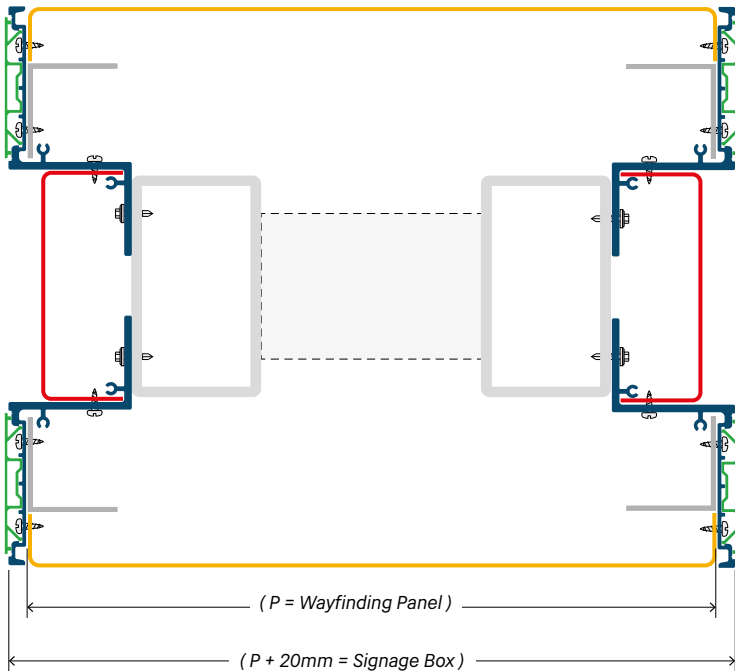


Image 8.4.90 TOT Cutaway

### Usage Examples



Image 8.4.91 London Waterloo



Image 8.4.92 London Waterloo

#### Determining Signage Box Size

The illustration above indicates the wayfinding panel size as ( P ). This size is dependent on the wayfinding function and graphic variant, guidance is set out in Section 6 "Sign Family". The relationship of wayfinding panel size to signage box size is also indicated.

- Wayfinding Panel
- EXT02
- EXT03

- RAL 9016 (WF Panel)
- RAL 9005 (30% Gloss)
- RAL 3020 (30% Gloss)

#### Using Existing Posts and Internal Frameworks

A new signage box in this construction can be considered for use with suitable existing upright posts or internal frameworks. Care should be taken regarding suitability, mechanical interfacing, engineering and aesthetic outcome. Engineering assessments should be considered for all installations.

# Technical Guidance

## 8.4 Variant - Totem (TOT)

Part No.	Part Name	Description
1	SIGN BOX BODY	EXTRUDED ALUMINIUM PROFILE EXT02 - POWDER COATED BLACK
2	SIGN BOX CAP	EXTRUDED ALUMINIUM PROFILE EXT03 - POWDER COATED BLACK OR RED
3	WAYFINDING PANEL	2mm FOLDED ALUMINIUM PANEL - POWDER COATED WHITE WITH DIGITALLY PRINTED GRAPHICS - SATIN GLOSS FINISH
4	MAIN FRAMEWORK	S355 MILD STEEL - DESIGN AND SECTION SIZE TO SUIT- HOT DIP GALVANIZED - IF EXPOSED, IDEALLY FINISH BLACK
5	LOWER BASE INTERFACE	S355 MILD STEEL - DESIGN AND SECTION SIZE TO SUIT- HOT DIP GALVANIZED - IF EXPOSED, IDEALLY FINISH BLACK
6	COVERS / BRACKETS	FOLDED OR FABRICATED ALUMINIUM AS REQUIRED - POWDER COATED TO SUIT
7	SHROUD	2mm 316 GRADE STAINLESS STEEL - 240 GRIT BRUSHED (VERTICAL GRAIN)
8	BUMP RAIL	10mm - 316 STAINLESS STEEL - 240 GRIT BRUSHED
9	BIRD DETERRENT	FABRICATED FROM 8mm ALUMINIUM - POWDER COATED BLACK
10	ASSEMBLY FIXINGS	TYPE AND QUANTITY AS REQUIRED
NOTE :		FOR FURTHER GUIDANCE SEE 8.6 PERFORMANCE OVERVIEW



Image 8.4.94 TOT View

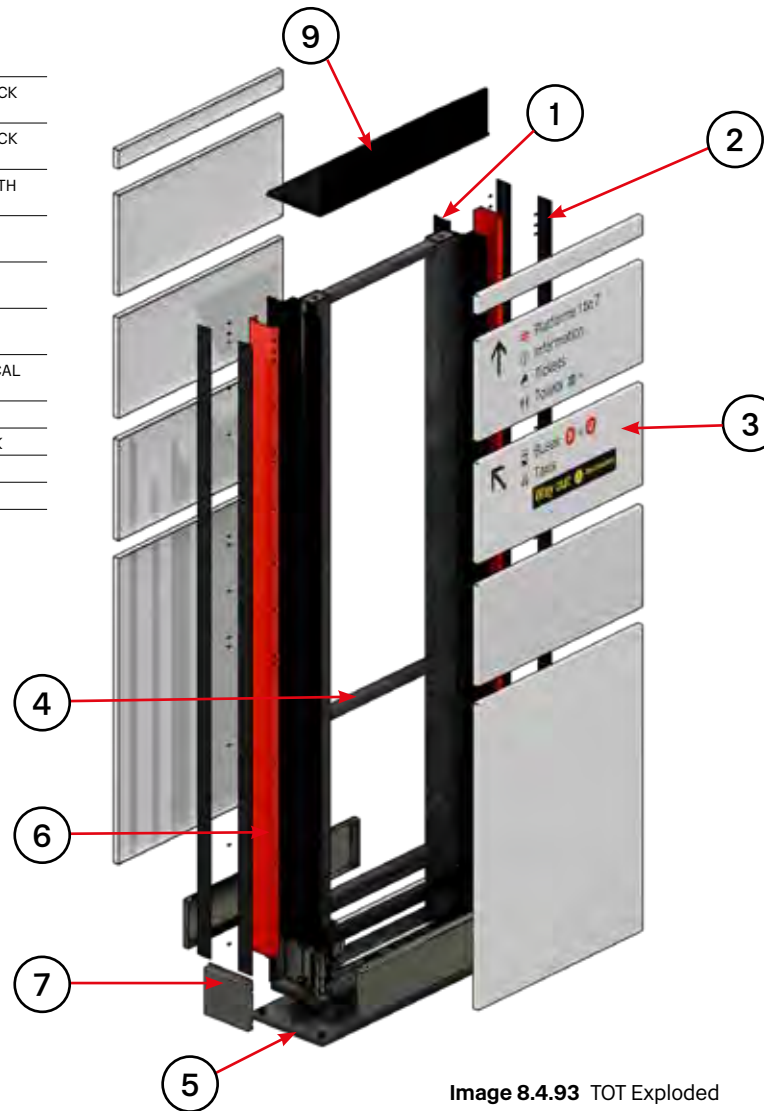


Image 8.4.93 TOT Exploded

### Signage Variant Summary

This variant works as a new installation of a totem with a new internal frame or structure and can also be used to adapt suitable existing structures.

Using Construction Type B, combined with metal fabrications and pressings, this variant can accommodate multiple internal frame dimensions and materials.

When assembled there should be minimal visible fixings around the sign box itself. See 8.2 Design Overview for panel join guidance.

The quantity, section size and materiality of internal framing should be selected to suit the installation. In the most installations a new internal frame should be fabricated from mild steel and be galvanised.

Trolley protection is provided by the integrated stainless steel shroud and bump rail at the base of the totem which is of a robust design.

The size extents for the use of this variant requires sensible assessment of each installation.



Bird deterrent to be applied as necessary

# Technical Guidance

## 8.5 Installation Reference



### General Installation Notes

Site inspections should be carried out prior to installation to verify correct locations, all architectural details, mounting conditions and dimensions.

All installations should be plumb and level, at the correct heights specified, and securely mounted with theft resistant fixings.

Signs should be located in the correct position and orientation as indicated on installation drawings. Copies of the drawings should be submitted as part of Engineering and Architectural Design assurance under standard NR/L2/ CIV/003.

### Indicative Suspension Examples

The indicative Installation examples shown here are not specific to any station, environment or fixing condition and are intended for reference only.

Each installation will need to carefully consider the ability of the substrate/ foundations to withstand all forces applied by the signage system, and any constrictions that may subsequently affect the signage design itself.

Image 8.5.1 Indicative Suspensions



### General Notes

This document and following text provides general guidance only in the form of a baseline product design.

On a project specific basis, the contractor has responsibility to complete the design using materials, components, construction and installation methods such that the product is suitable and safe for its purpose and location throughout its service life including ; design, (pre) manufacture, storage, transport, installation, maintenance and removal.

To complete the design the contractor where appropriate should have visited site and familiarised themselves with all relevant site conditions and location related matters.

Installation examples shown are not specific to any station, environment or fixing condition and are intended for reference only.

Products should comply with all relevant British Standards EN/ISO codes of practice as appropriate.

Products should be accurately and neatly fabricated, assembled and erected.

To minimise site work, as much assembly as possible should be carried out off site.

Early coordination with other interfaces is encouraged.

### Contractor Drawings and Information

Contractor Drawing Information should support Engineering and Architectural Design assurance under standard NR/L2/CIV/003

Drawings for approval should be comprehensive to allow review and approval to take place. This includes detail in relation to materials, construction, proposed methods of support and installation.

Prior to manufacture, physical samples of products or core components, such as the wayfinding panel may be requested by NR to establish material quality and finish are acceptable.

### Fixings and Connections

Primary connections to backgrounds, floor, ceilings, ground etc, are the contractor's responsibility. Contractors should check that the selection of fixings and methods are suitable and safe for their intended purpose and location.

Fixings used in assembly of products are contractor's responsibility. Contractors should check the selection of fixings, methods and quantity are suitable and safe for their intended purpose and location.

All fixings should be suitable for in use performance in respect of strength and type. They should be fitted to an appropriate torque and remain secure and be suitable for all loads imposed.

Fixings subject to loosening due to loadings/ movement/ vibration should be provided with extra security as required using locking nuts, washers etc. Adhesives and bonding tapes to be treated with care.

### Structural Performance

This document provides the headline criteria and loading zones for each product. All final installations should, as a minimum comply, with these. On a project specific basis this may be superseded by a different set of structural performance criteria.

It is both the designer and installation contractors' responsibility to assure the correct fixing of all signs, fixings and supporting structures, in all instances. The appropriate specification of fixings is to be proposed in all construction drawings in accordance with the instance requirement of that specific sign.

It is the installation contractor's responsibility to assure the correct specification of fixing is used, or identical equivalents. Where the design and installation roles are performed by a single contractor, it is the responsibility of that single contractor to assure that both of these criteria are met.

For the purpose of useful circulation of indicative construction design of each sign type, indicative fixings should be specified but labelled as such and not presumed to qualify as appropriate for any specific instance of installation.

# Technical Guidance

## 8.6 Performance Overview

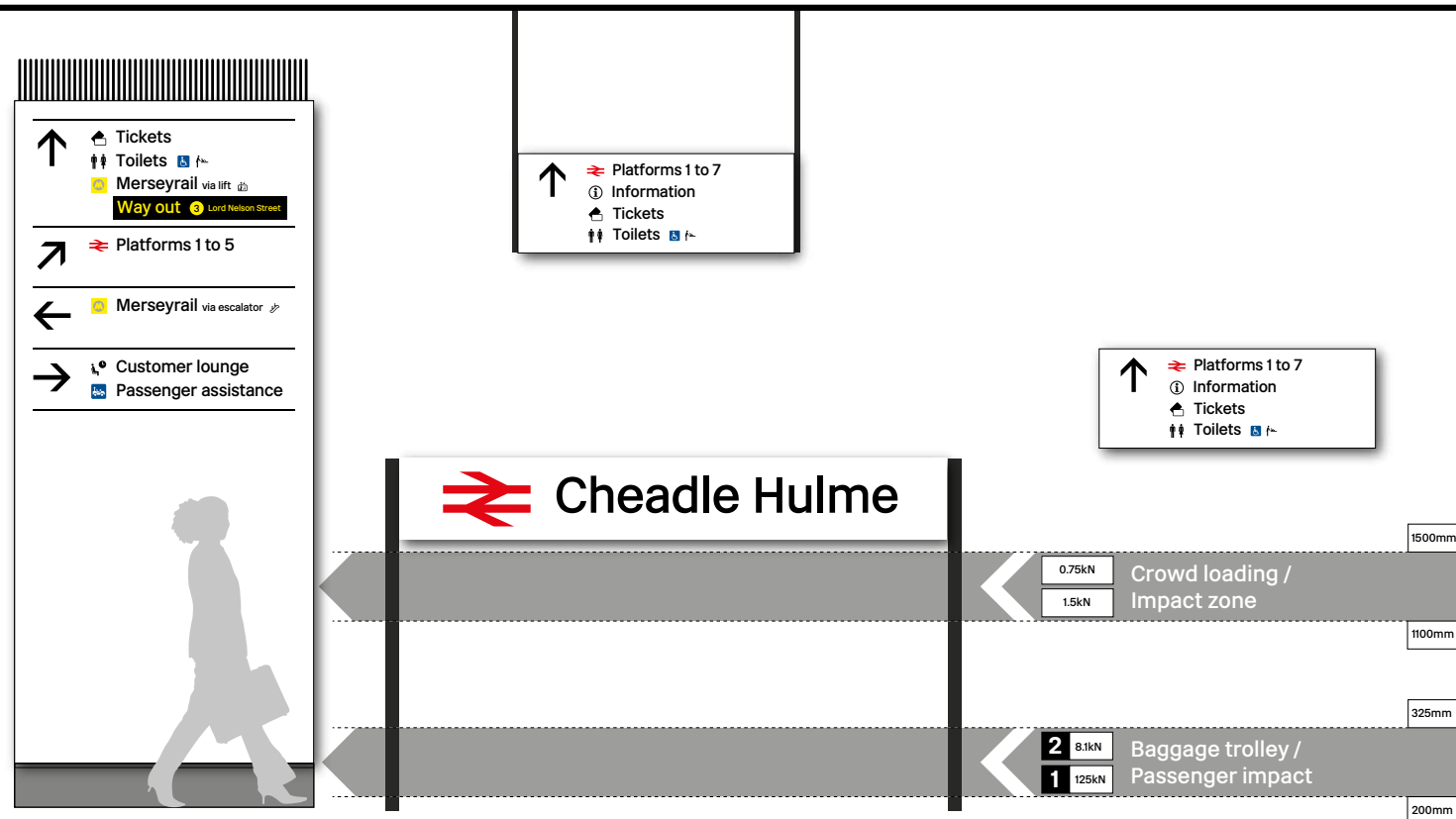


Image 8.6.1 Structural Impact Zones

NR/L2/CIV/003 Form D (Architectural and Layout Acceptance) should be used for the design assurance of Wayfinding, and as a combined approval in principle and design check, in order to demonstrate placement conditions are satisfactory. The Form D should document the rationale for both sign positioning and content. The structural performance and calculations for all products and their fixings should take account of loadings as applicable to the project and location. All loadings are to be checked and reviewed on a project specific basis. Loadings are to be provided by the NR project team following suitable assessment by a contractor.

**Additional loading conditions :**

**External wind pressure** -Check against specific station and project criteria.

**Internal wind pressure** -Check against specific station and project criteria.

**Bomb Blast Main Station** -Check against specific station and project criteria.

**Bomb Blast Regional Station** -Check against specific station and project criteria.



For all signage that sits below 350mm, allowance should be made for the inclusion of a barrier that adheres to one or both of the below conditions. Within larger stations, where small electric vehicles may be in use, the barrier should fit the requirements of condition 1 and 2. For smaller stations where electric vehicles are not in use, the barrier should fit the requirements of condition 2 only.

### 1. Passenger Vehicle Impact Barrier

Should resist impact and damage due to an electric vehicle with an all up mass including passengers of 1250kg at an over-speed velocity prior to impact of 4.47m per sec (10 mph).

Allow for a total displacement of 100mm plus the displacement of the barrier system, where this is designed to absorb impact energy by lateral displacement.

Withstand an impact load applied at the centre line of the barrier level set 200mm above finished floor level.

A 90 degree angle of incidence should be used at abrupt changes in direction normal to the flow. The horizontal force normal to a continuous line of barrier or wall should be taken to be uniformly distributed over a 1000 mm length. For freestanding elements including bollards, the impact load should be treated as a concentrated load.

A 45 degree angle of incidence should be used in all other locations.

For a rigid barrier, 90 degree angle of incidence the force should be taken as 125 kN, a 45 degree angle of incidence the force should be taken as 7.7 kN. Derivations for angle of incident load for less than 90 degrees.

### 2. Trolley Barrier

Should resist impact by a 50kg mass at a velocity prior to impact of 1.8 m per sec (4 mph) with an angle of incidence of 90 degrees between trolley and barrier.

Allow for a total displacement of 10mm, plus the displacement of the barrier system, where this is designed to absorb impact energy by lateral displacement.

Withstand the impact load applied at an engagement height of either, (a) 200 mm above finished floor level when adopting the standard height (200 mm) barrier rail product with the rail set away from the surface being protected, or, (b) 325 mm above finished floor level for all other situations.

For a rigid barrier, the force should be taken as 8.1 kN.



### Materials Overview

This baseline product design indicated in this document has been developed to make best use of repeating components across the product family.

This has resulted in a minimal materials and process list which enable fabrication of the core product.

Interfaces with stations buildings and other structures will extend the core material list.

It is the contractor's responsibility to check all materials are designed, constructed and installed to meet the design and service life of the product, including the requirements of treating dissimilar materials appropriately.

### Aluminium

Aluminium sections and sheet should be of a suitable grade for fabrication, forming and structural performance. See RICS SKA External Signage MD29. Recycled content should be from post-consumer sources and produced using low energy or renewable power to minimise Embodied Carbon (Co2) per Kg.

### Stainless Steel

Stainless steel should be low carbon chromium nickel austenitic steel type 304 or 316 grade. Exposed surfaces should be 316 grade 240 grit brushed, with grain direction indicated by drawings.

### Mild Steel

Mild steel sections and materials utilised in the design should be of a thickness and grade appropriate to meet the loading requirements of the structure and the project. All section protections and finishes should be suitable for exterior architectural applications.

### Powder Coating

Powder coating should be or equivalent to Interpon D1036 grade and should be suitable for exterior architectural applications.

### Wayfinding Panel

Substrate should be aluminium with all graphics achieved by digital printing. Inks used should be rapid cure and emit no or minimal volatile organic compounds (VOC) during printing and curing. Processing should require no special ventilation or environmental equipment.

All wayfinding panels should have the following general properties : 10 year exterior life, high resolution legible printing, weather resistant and colour fast satin-gloss finish, high durability - offering ease of cleaning, but resistance to vandalism, acids, alkalis and salt spray.

**Printed PVC / Non PVC films and over-laminates should not be used, either as a permanent or temporary solution. Panels should be replaced.**

### Fixings

All fixings should be suitable for in use performance in respect of strength and type. Fixings should be A2 grade stainless steel as standard and A4 for marine environments, with tamper resistant heads

### RICS SKA Environmental Assessment

The following extract from SKA External Signage MD29 outlines expected sustainability performance from materials likely to feature in the core product and its connections . Products are required to meet at least one of the following criteria:

1. Are reused.
2. If new, all components are manufactured with a recycled content of at least:
  - aluminium extrusion – 44% (See Aluminium)
  - aluminium sheet – 73% (See Aluminium)
  - steel section – 60%
  - steel sheet – 60%
  - stainless Steel – 75%
  - glass – 10%
3. If new, should have a BRE Standard BES 6001 'Good' rating or better; or
4. If new, should have a Cradle-to-Cradle Institute Gold or Platinum certification.





### Design and Service Life

The design life for products is 10 years. No physical, appearance or structural deterioration should occur within this period.

The service life for products is 20 years. Subject to agreed maintenance, no physical or structural deterioration should occur within this period.

Any servicing, maintenance or conditions required to meet this requirement should be detailed by the contractor and approved by the NR project team.

**Design Life** ; the period of use required for a component, device, or system to perform within its specified parameters.

**Service Life** ; the period of time which a component, device, or system is expected to perform within its specified parameters without excessive expenditure required in terms of operation, maintenance or repair of a component of the construction.

**Primary components** ; have a predicted service life not less than the design life of the element being specified without the need for maintenance, other than regular cleaning.

**Secondary components** ; may require replacement during the design life of the product, these should be capable of easy and cost effective replacement.

### Standards and Testing

Materials and finished products should comply with all relevant British Standards EN/ISO codes of practice as appropriate.

As well as all standards in relation to materials and finished products, the following specific standards should be applied :

BS 559:2009 - Specification for the design and construction of signs.

LU 1-085 - Fire Safety Performance of materials (Sub Surface station applications only).

### Specific Guidance for Aluminium Wayfinding Panel Coatings and Graphic Decoration

Contractors should be able to provide independently certified test data to demonstrate compliance with the desired design life.

Alternatively, contractors should allow for relevant testing and approval prior to installation.

Examples of previous projects where similar design and process have been used to meet the design life can also be submitted for review.

The criteria listed in Table 8.6.1 may be considered in assessing the suitability of the aluminium wayfinding panel coating and graphic decoration method.

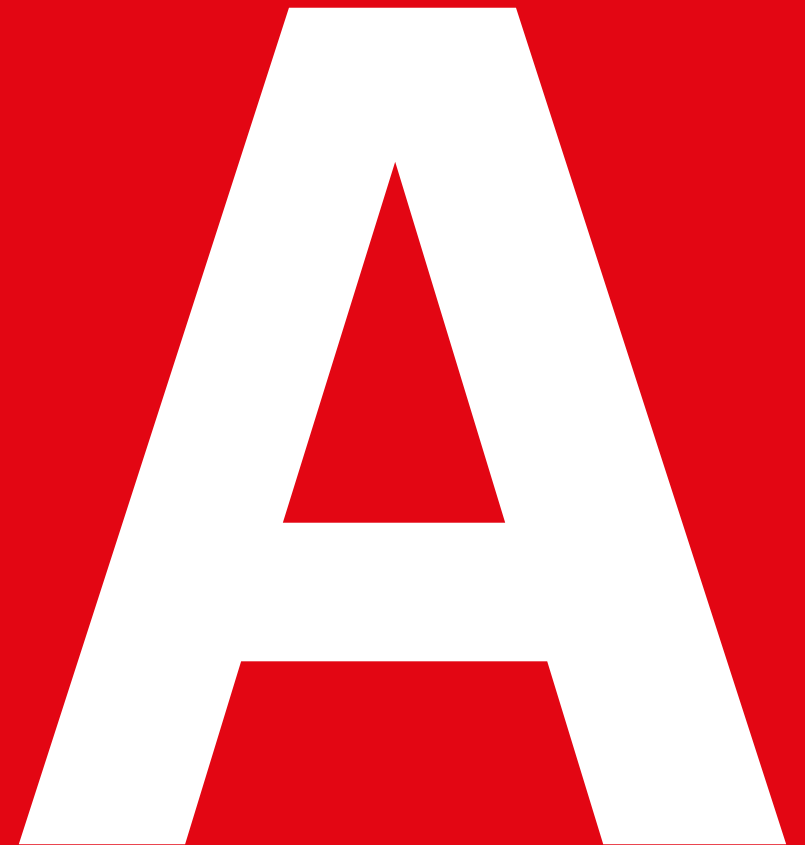
Parameter	Min Standard / Testing	Pass Criteria
<b>Mechanical Properties</b>		
Adhesion	ISO 2409 - 2mm crosshatch	Gt:0
Cupping	ISO 1520	4mm
Hardness	ISO2815	Minimum 80
Flexibility	ISO1519: 2011	5mm
Scratch	BS EN ISO 1518-1:2011	4Kg
Impact Resistance	BS 3900-E7:1974	5Kg cm (N)
<b>Environmental and Durability</b>		
Salt Spray	ISO 7273	Max 2mm creep from scribe 500 hours
Humidity	BS 3900-F2:1973	no blistering 1000hrs
Sulphur Dioxide	ISO 3231	no blistering, creep < 1mm from scribe 24 cycles
Permeability	EN12206-5.10	no defects 2 hours
Chemical Resistance	ASTM 5402-19	4 or 5 on scale, generally good resistance
Mortar Resistance	EN 12206-1:2004	No effect 24 hours
Accelerated Weathering	ISO 16474-2 Method A	After 1000 Hours 50% Gloss retention Colour retention as Qual-Class 1
Natural Weathering	ISO2810	After 1 year 50% Gloss retention Colour retention as Qual-Class 1

Table 8.6.1 Material properties



# Document References

Wayfinding Design Manual  
**Appendix A – Document References**



# Appendix A

## Document References



### Books

Spaceagency. (2018). The Spaceagency Guide To Wayfinding. [Hong Kong, China]: Artpower International Publishing Co., Ltd.

### PDFs

Crossrail, RIBA Stage E – C100 Wayfinding, signage, advertising and public art design guideline. (2010). 1st ed. London: Crossrail Limited.

Design Standards for Accessible Railway Stations. (2015). 4th ed. [PDF] Available at: <https://www.gov.uk/government/publications/accessible-railway-stations-design-standards> [Accessed 7 Jan. 2019].

Legible London Evaluation 2013/14 Report. (2014). [PDF] steer davis gleave. Available at: <http://content.tfl.gov.uk/legible-london-evaluation-summary.pdf> [Accessed 5 Jan. 2019].

Legible London Product Range. (2019). [PDF] Transport for London. Available at: <http://content.tfl.gov.uk/legible-london-product-range.pdf> [Accessed 20 Dec. 2018].

Legible London Yellow Book A prototype wayfinding system for London. (2007). 1st ed. [PDF] Transport for London. Available at: <http://content.tfl.gov.uk/ll-yellow-book.pdf> [Accessed 20 Dec. 2018].

London Gatwick Airport (2019). [PDF] London Gatwick Airport New Supplementary Sign Standard. London: Gatwick Airport Ltd.

Oliver, R. (2009). Airport Wayfinding and Signs, Section C - Sign Planning, Layout Specifications: Specific Signs 9. 1st ed. BAA Airports Limited.

RICS SKA External Signage MD29

RIBA Plan of Work [PDF] RIBA. Available at: <https://www.ribaplanofwork.com>.

Transport for London (2004). Docklands Light Railway Signs Standard. 2nd ed. London: Transport for London.

Cradle to Cradle Products Innovation Institute Product Standard <https://c2ccertified.org/>

### Websites

Maps & signs. TfL. Available at: <https://tfl.gov.uk/info-for/boroughs-and-communities/maps-and-signs>  
Legible London. TfL. Available at: <https://tfl.gov.uk/info-for/boroughs-and-communities/legible-london>

### Further Reading

Sign Design Guide+ – A guide to designing inclusive wayfinding information  
London Underground Signs Manual – Issue 4  
Wayfinding at Stations: A Good Practice Guide: RSSB T321 (2006)

### British Standards

BS 8300-1-2018 Design of an Accessible and Inclusive Built Environment – External  
BS 8300-2-2018 Design of an Accessible and Inclusive Built Environment – Internal

### National Standards

Design Standards for Accessible Railway Stations – Joint Code of Practice (Department for Transport and Transport Scotland)

Inclusive Mobility – A guide to best practice on access to pedestrian and transport infrastructure (DfT)

Guidance on the Use of Tactile Paving Surfaces (DfT)

SIDOS – Security In the Design Of Stations (DfT)

### Network Rail Standards & Guidelines

NR/L2/CIV/150 - Station Wayfinding Design & Assurance Procedure

NR/L2/CIV/003 - Engineering and Architectural Assurance of Building and Civil Engineering Works

NR/L2/OPS/292 - Station Capacity and Crowd Management

NR/L2/TEL/30130 - Specification for the Maintenance of CIS

NR/GN/CIV/100/ 02 - Station Design Guidance

NR/GN/CIV/100/ 03 - Station Capacity Planning

NR/GN/CIV/200/04 - Public Toilets in Stations

NR/GN/CIV/200/05 - Vertical Circulation

NR/GN/CIV/200/06 - Retail Design Manual for Stations

NR/GN/CIV/200/08 - Lighting Design in Stations

NR/GN/CIV/200/10 - Public Realm Design at Stations

NR/GN/CIV/200/12 - Third Party Funded Car Parks

NR/GN/CIV/300/02 - Security at Stations

NR/GN/CIV/300/03 - Fire Safety at Stations

NR/GN/CIV/300/04 - Inclusive Design Guidance

NR/GN/CIV/300/05 - Rail Symbol 2

NR/GN/CIV/200/06 - Tactile Paving & Wayfinding

Available at: <https://www.networkrail.co.uk/industry-and-commercial/supply-chain/existing-suppliers/buildings-and-architecture-design-guidance/>

# Acknowledgements

# B

Wayfinding Design Manual  
**Appendix B – Acknowledgements**

# Appendix B

## Acknowledgements



### Image Credits

#### Network Rail

8 (Manchester Piccadilly), 17 (London Bridge),  
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16 (Waterloo), 37 (Liverpool Street), 116 (London Bridge), 117  
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34 (Birmingham New Street)  
124 (King's Cross)

#### Ralph Hodgson

110 (Liverpool Street)

#### Others

120 Google Glass ([www.siliconbeat.com](http://www.siliconbeat.com))  
120 Apple Watch ([www.techradar.com.uk](http://www.techradar.com.uk))  
121 Dispositivo Beacon ([es.wikipedia.org](http://es.wikipedia.org))  
121 Next Generation Technology: Aihong, L.

### Illustration Credits

Wayfinding illustrations and diagrams  
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Technical Guidance illustrations by Merson Group.

This document was written and produced  
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Platform 8  
 Passenger assistance  
 Left luggage



Platforms 9 to 14  
 Gatwick Express

Platform 15 to 19   
 Coach station



Buckingham Palace Road Way out



Platform 01		Platform 02		Platform 03		Platform 04		Platform 05		Platform 06		Platform 07		Platform 08		Platform 09		Platform 10		Platform 11		Platform 12		Platform 13		Platform 14		Platform 15		Platform 16		Platform 17		Platform 18		Platform 19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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