

Rail Symbol 2





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About this document



Purpose

The purpose of this guidance is to provide a definitive version of the Rail Symbol for use on the UK national railway network, including graphic reproduction in various formats and mediums.

Scope

The intended audience for the Rail Symbol 2 Manual are project teams, consultants, design managers, sponsors, contractors who have been tasked with creating or overseeing the application of Rail Symbol 2 across a variety of mediums.

The key guidance for reproducing Rail Symbol 2 is contained in a single section within this document.



Section 1
Rail Symbol 2

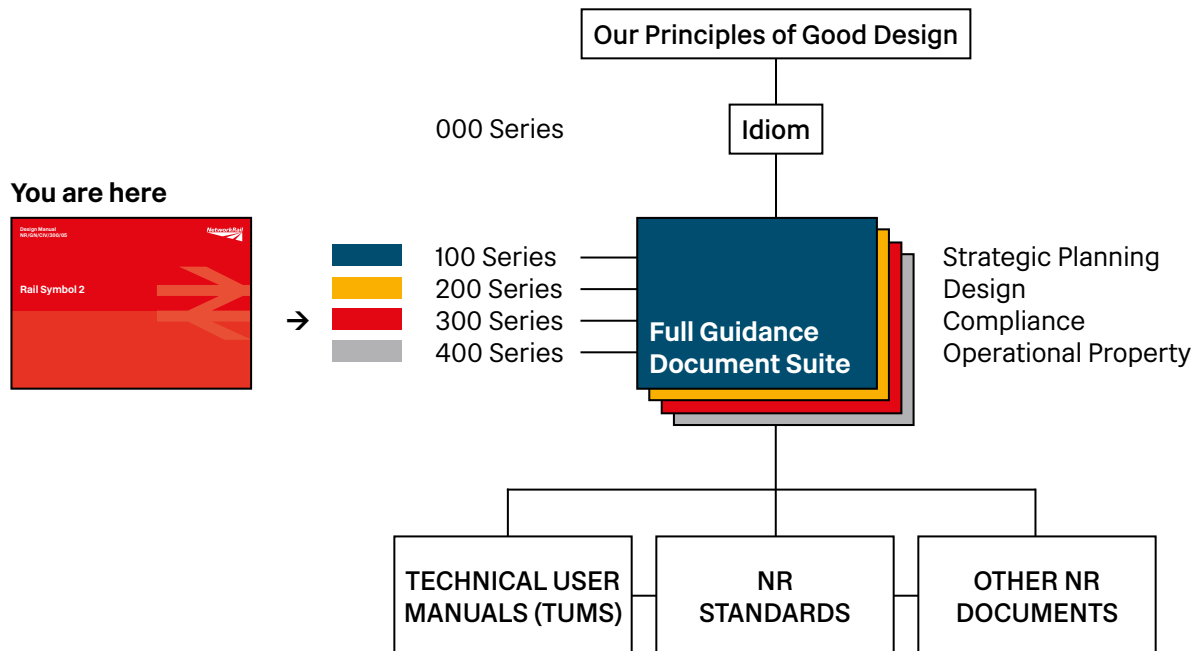


Appendix A
Assets & References





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:

Rail Industry Guidance Note

PRM NTSN: GEGN8615 (2021)
National Technical Specification
Notice: Application for Persons with
Reduced Mobility (PRM)

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



Rail Symbol 2 is the unique visual device used to identify and express the national rail network across Great Britain.

Originally specified in the British Rail Corporate Identity Manual in 1965, the Rail Symbol 'consists of two-way traffic arrows on parallel lines representing tracks.' Today the symbol remains an enduring part of the fabric of the nation.

The Rail Symbol has now been carefully redrawn in order to optimise performance across all media, responding to the digital environment considerations now expected in successful brand design and implementation.

The continued effectiveness of Rail Symbol 2 depends upon faithful reproduction and consistent application at all times. This document provides comprehensive, practical guidance for correctly using Rail Symbol 2 and should be observed in every situation.

By following this manual you will be helping to ensure a high standard of quality is always maintained whenever the symbol is used. You will also be enhancing the visual image of our railway in the best possible way, with an internationally known symbol.

Sir Peter Hendy CBE



Sir Peter Hendy CBE
Chair, Network Rail

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To return to the contents page you can click on the Double Arrow symbol.

The rail symbol

A brief history



The renowned 'double arrow' symbol was designed in 1964 by Gerry Barney, a young lettering artist at Design Research Unit (DRU). It was formally introduced in January 1965 as part of the groundbreaking British Rail Corporate Identity Manual, a comprehensive and integrated design system which received wide acclaim for its ambitious and universal scope.

The symbol itself was disarmingly simple. Its dynamic and distinctive, modernist lines—a far cry from the complex heraldic devices that had preceded it—had instant popular appeal. Although the symbol had its share of vocal critics, it rapidly gained widespread recognition as it was rolled out across Britain and has now been synonymous with the railways in Great Britain for well over half a century. To this day the timeless double arrow remains one of the best known British 'logos' and continues to provide confidence and reassurance to rail travellers nationwide.

However, the symbol was not without idiosyncrasies, not least its 38:23 proportions. Furthermore, the original symbol was designed in two optical weights in order to appear the same thickness in positive and negative. This has commonly led to incorrect variants being used in reproduction.



Photo 1 - Picture of historical Rail Symbol station identification 'lozenge'

Rail Symbol 2





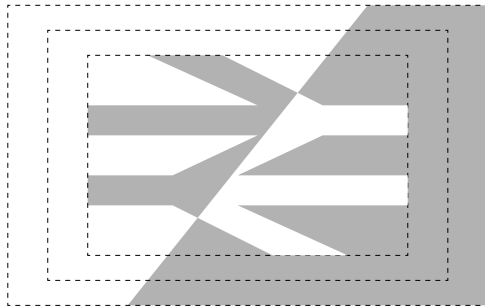
1.1.0 Rail Symbol 2 is a powerful visual statement of the intention for the British railway network to function effectively and efficiently as a cohesive and unified whole.

In May 2021 the Department for Transport announced, via the Williams-Shapps Plan for Rail, the intention to bring Britain's railway network under the single national leadership of a new public body, Great British Railways. Following written confirmation from the GBR Transition Team graphic designer Nick Job, with the assistance of the Design Council, was engaged to refine the proportions of the original 'double arrow' symbol to meet modern digital standards.

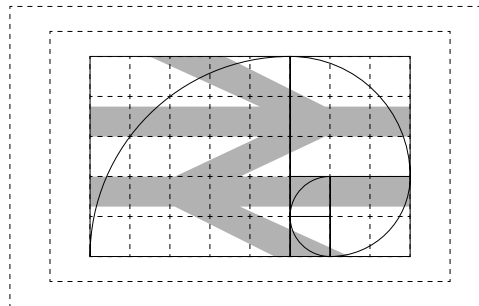




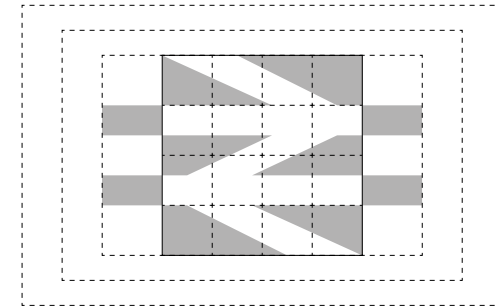
1.1.1 Rail Symbol 2 has been redrawn to both remove the requirement for two optical variants, and to rationalise proportions in order to maximise effectiveness for modern technologies.



1.1.2 Reducing the two original optical variants to a single definitive version, optimally situated between the original positive and negative weights, removes the potential for the use of incorrect artwork. This yields a greater degree of control over the application of the symbol.



1.1.3 The relationship between width and height has been simplified to 8:5—nearer to the ‘golden ratio’ and away from the original 38:23 proportions of the symbol—ensuring a more practical relationship between horizontal and vertical metrics.



1.1.4 A slight adjustment to the arms enhances the performance of the device at small sizes and low resolution. This adjustment also makes the ‘point-to-point’ dimensions precisely square. This results in a revised symbol that is now twice the height of the tracks, adding a further layer of assistance for designers.

1.2 Faithful reproduction

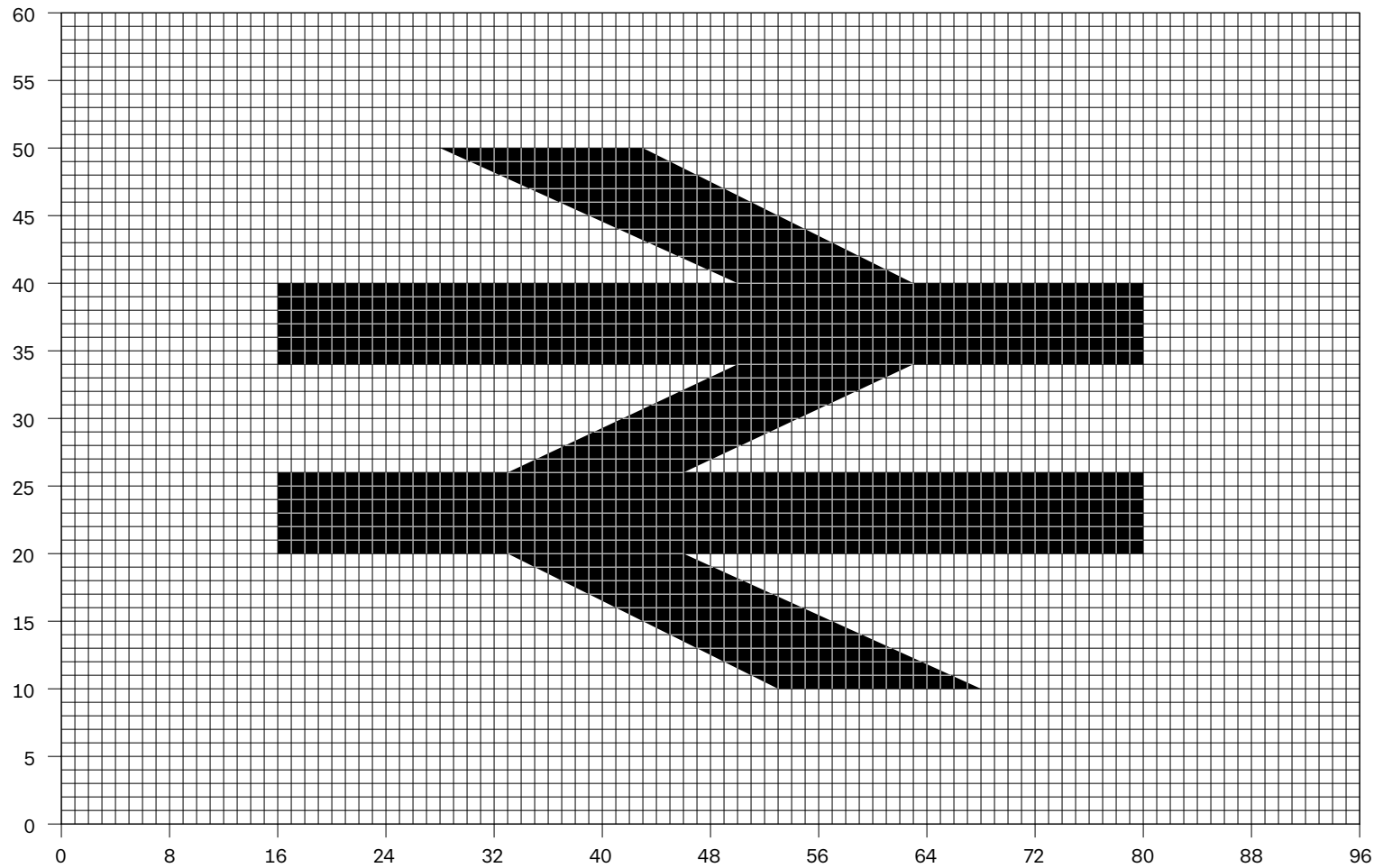


Fig 1.2.1 Grid drawing to be used for detail enlargement of the symbol

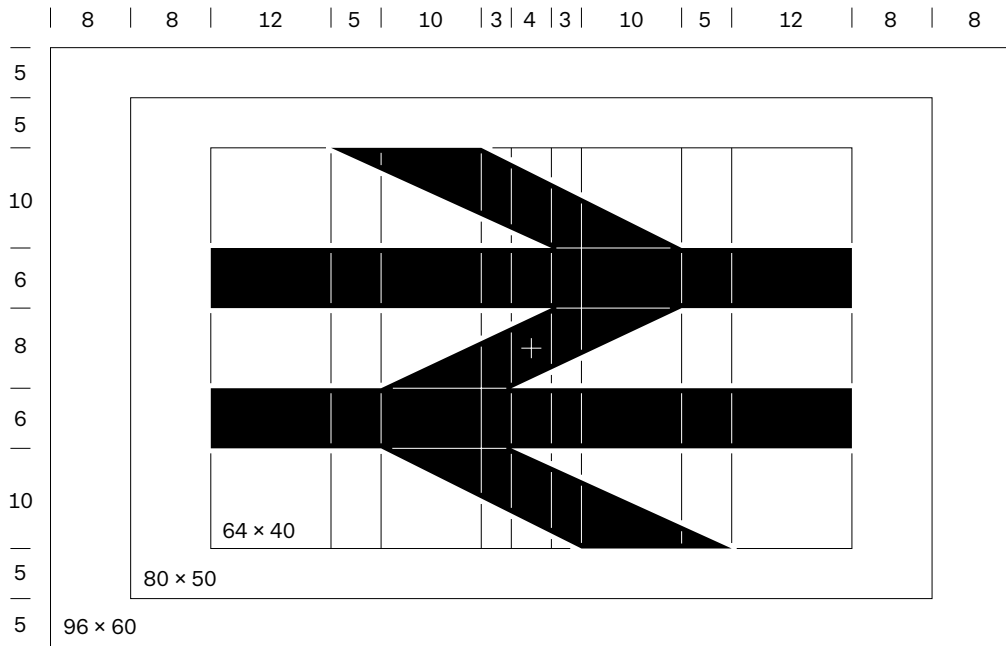


Fig 1.2.2 Rail Symbol 2 should always be accurately reproduced using approved master artwork in accordance with the proportions given in the construction diagram above.

Unauthorised or improper use of the symbol is strictly prohibited.

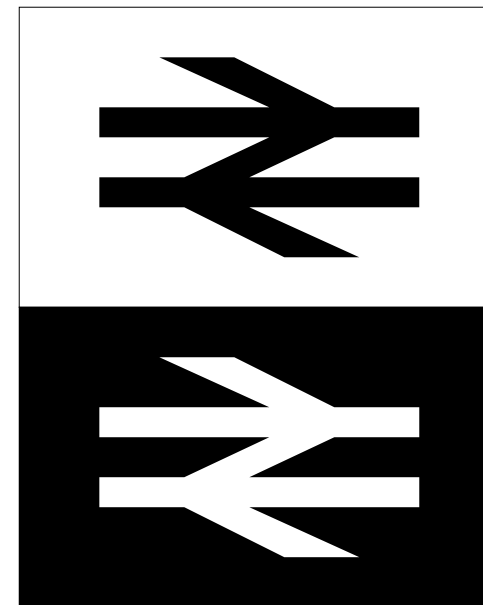


Fig 1.2.3 The proportions of Rail Symbol 2 are identical for positive and negative reproduction.



1.2.1 Rail Symbol 2 notably has a number of defining visual attributes—specific orientation, optical adjustment and balanced proportions—which characterise its appearance when correctly reproduced.

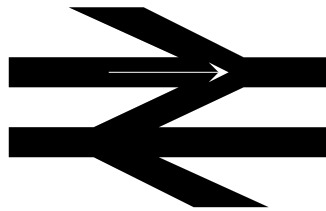


Fig 1.2.4 The top arrow always points to the right to reflect the two track UK system with left side running. The only exception to this rule is in the case of flags where the top arrow always points towards the hoist.

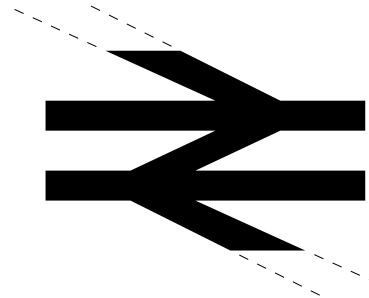


Fig 1.2.5 The arms are flared in order to give the appearance of even thickness throughout. If the arms are incorrectly drawn with parallel lines they appear to taper.

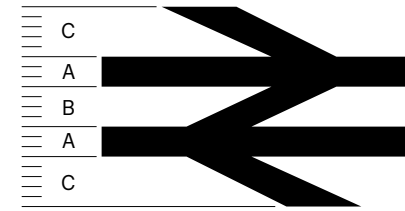


Fig 1.2.6 The depth of the parallel tracks (A) is less than the depth of the space between the tracks (B) which in turn is less than the depth of the space above and below the tracks (C). The ratio of A:B:C is 3:4:5.

Rail Symbol 2

1.3 Exclusion zone

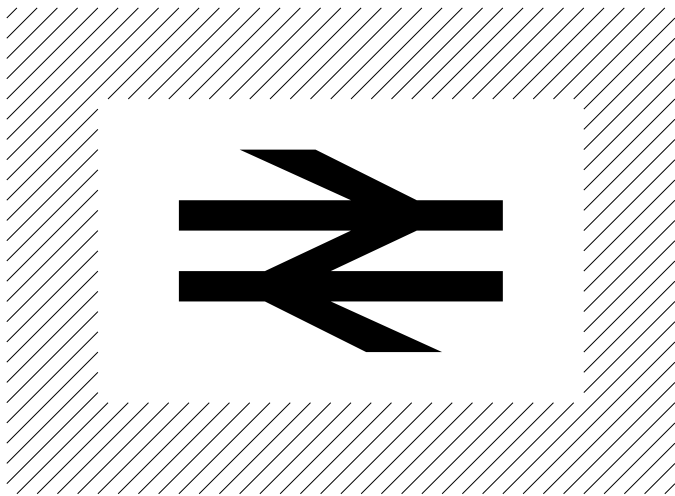


Fig 1.3.1 The standard version of Rail Symbol 2 appears within an exclusion zone. This is a protective area around the symbol which should remain free from other visual elements.

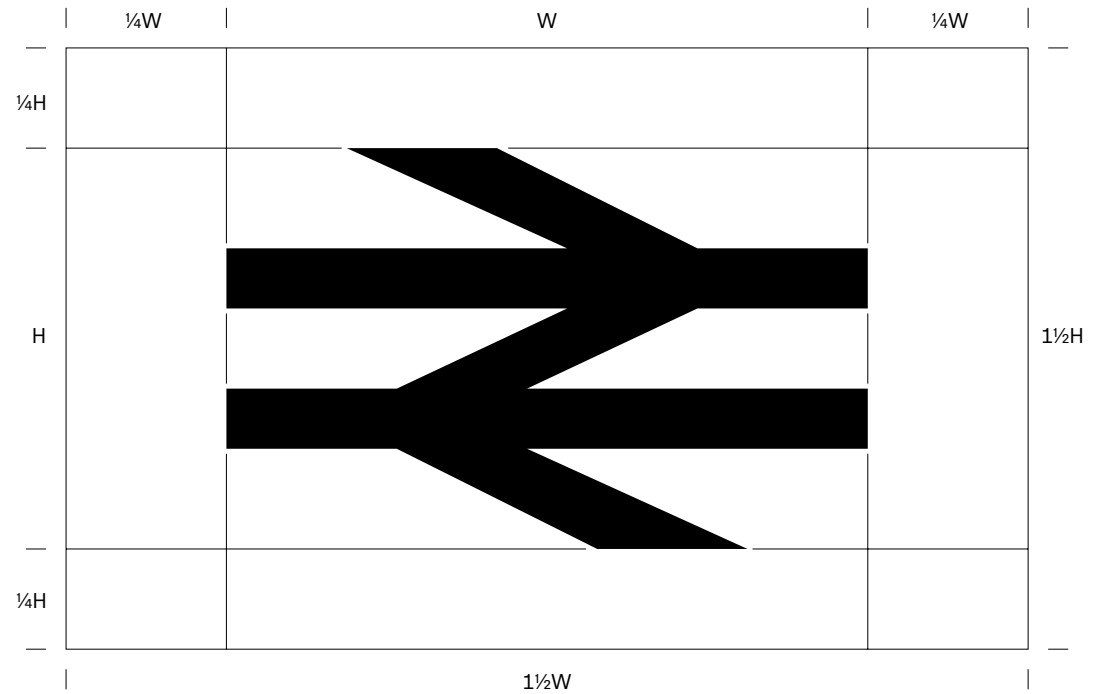


Fig 1.3.2 The extent of the exclusion zone is represented by the outer border in the construction diagram and is defined in proportion to the width (W) and height (H) of the rail symbol as shown.



Fig 1.4.1 The lozenge (or ruled rectangle) version is only authorised in certain situations - for example station fascia signage, station identifiers, projecting box signs, pole signs and printed graphics.

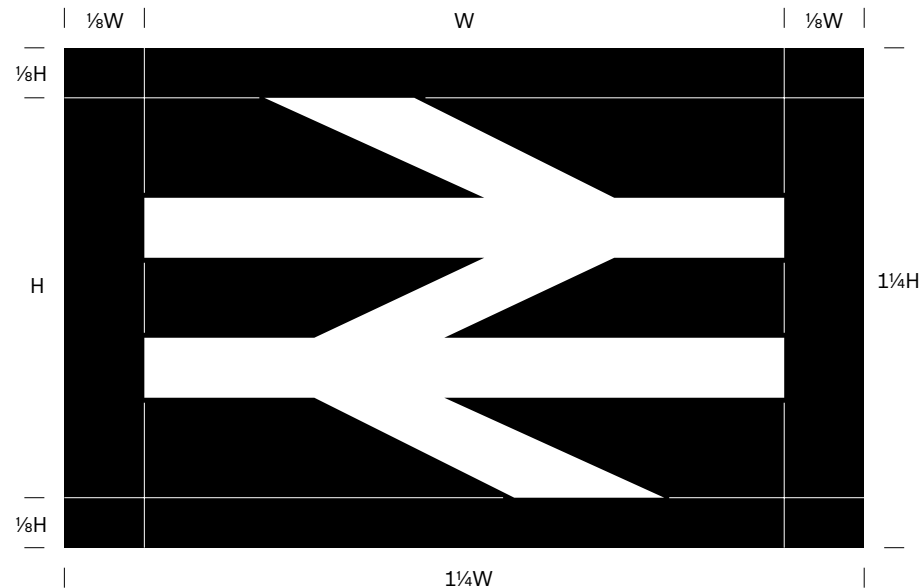


Fig 1.4.2 The lozenge is represented by the outer border in the construction diagram and is defined in proportion to the width (W) and height (H) of the rail symbol as shown.



1.4.3 Any variant of free-standing signage within the physical environment (e.g. station identifiers such as totems and projecting wall signs) should use the lozenge version to assure the symbol is seen correctly from each direction.

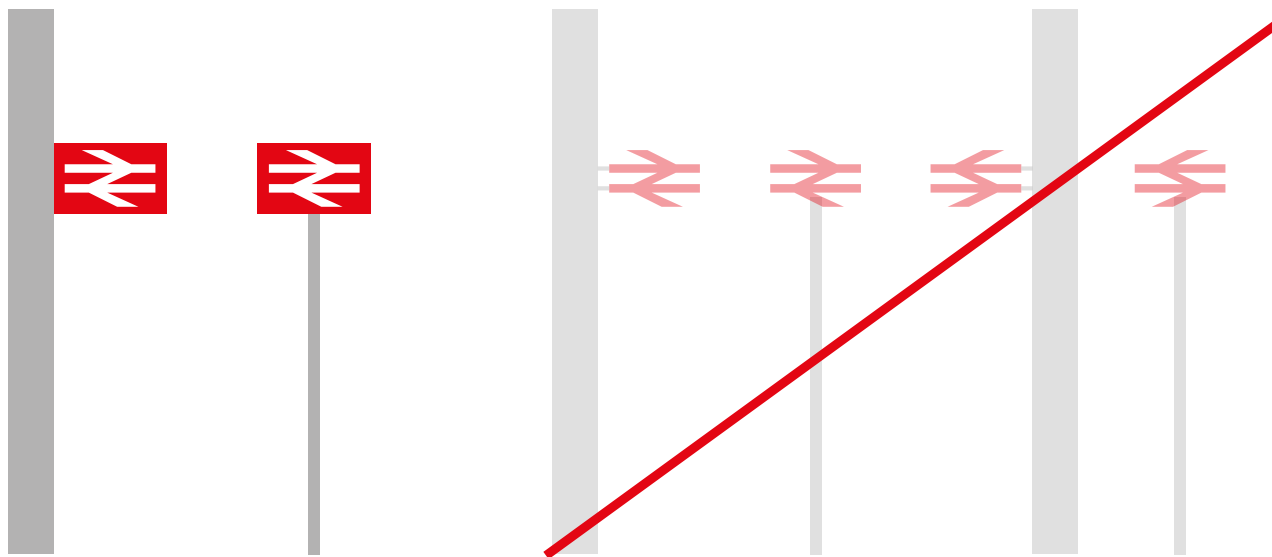


Fig 1.4.3 The signage shown in the diagram above is indicative only and not drawn to scale.

Rail Symbol 2

1.5 House flag



Fig 1.5.1 The House flag follows a 2:1 proportion ratio in keeping with the Union Flag, and should be flown in accordance with British flag etiquette.

Acceptable sizes		
Flag dimensions	Symbol	Height (ground to finial)
2,000 × 1,000mm	1,280 × 800mm	4m to 8m
3,000 × 1,500mm	1,920 × 1,200mm	8m to 12m
4,000 × 2,000mm	2,560 × 1,600mm	12m to 16m
5,000 × 2,500mm	3,200 × 2,000mm	16m to 20m
6,000 × 3,000mm	3,800 × 2,400mm	20m and above

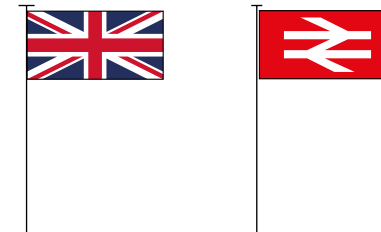


Fig 1.5.2 The flag should be produced from a single sheet of synthetic fabric. The top arrow of the symbol should point towards the right on the front (obverse) face of the flag.

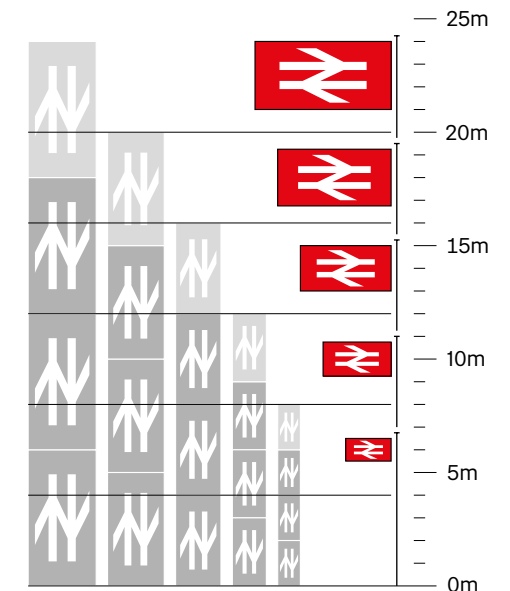


Fig 1.5.3 Flag size ratio in relation to height

Rail Symbol 2

1.6 Minimum size



1.6.1 Reproducing the symbol at smaller sizes impacts directly upon the integrity and subsequent recognition of the symbol.

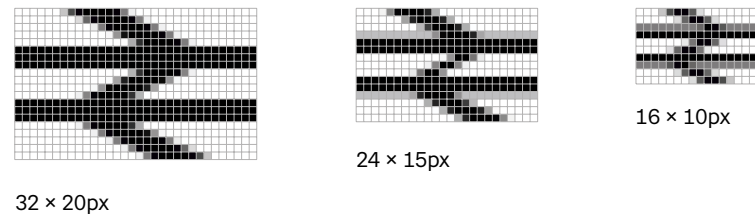
Print

6.4 × 4mm	4.8 × 3mm	4 × 2.5mm
3.2 × 2mm	2.4 × 1.5mm	2 × 1.25mm

1.6.2 In print (both digital and offset) and many other material reproduction processes (for example laser etching), a reduction in size inevitably leads to a loss of quality related to associated limitations, ink-fill, paper quality, registration etc.

1.6.3 Sizes below 2 × 1.25mm should not be used
Sizes below 4 × 2.5mm may only be used where the integrity of the symbol is maintained, specifically at a resolution of 300dpi or above.

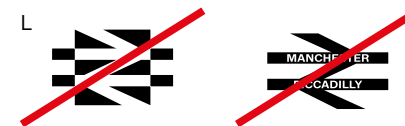
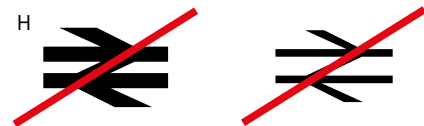
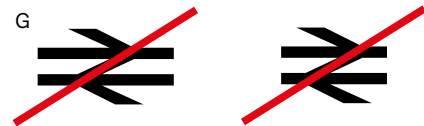
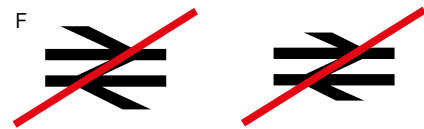
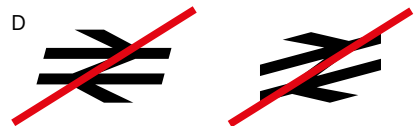
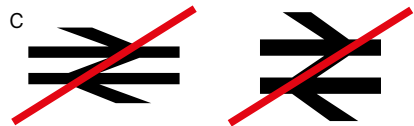
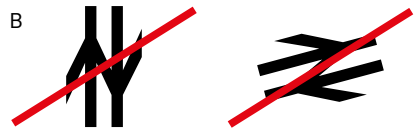
Digital



1.6.4 Reproduction of the symbol in a digital context is directly affected by the constraints of the on-screen 'grid' and how colour is mathematically processed within this space, using the 'pixel' as the base unit of measurement. Accurate representation is increasingly compromised as the symbol decreases in size.

1.6.5 Dimensions in the ratio 8:5 should be used, observing that 32 × 20px is the smallest size that the parallel lines of the symbol remain fully intact (cf. 24 × 15px and 16 × 10px variants which experience significant anti-aliasing).

Sizes below 16 × 10px should not be used.



1.7.1 Mathematical transformations should not be applied to the symbol.

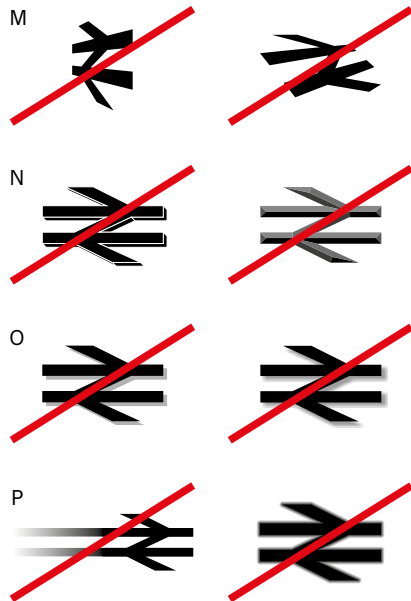
The symbol should not be reflected (A), rotated (B), stretched (C) or sheared (D).

1.7.2 The dimensions of the symbol should not be changed.

The symbol arms should not be drawn using parallel lines (E). The tracks and arms should not be lengthened or shortened (F) (G). You should not change the weight or add outlines that may result in the same effect (H).

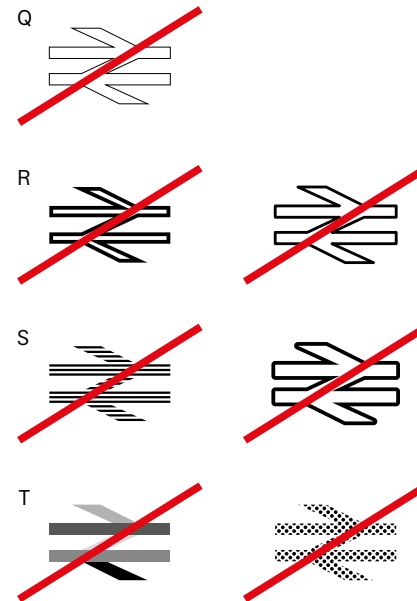
1.7.3 The symbol should not be combined with other graphic elements.

The symbol should not be enclosed (I). It should not be placed on a continuous strip (J). It should not be placed next to 'tracks' (K). It should not be integrated with other objects or lettering (L).



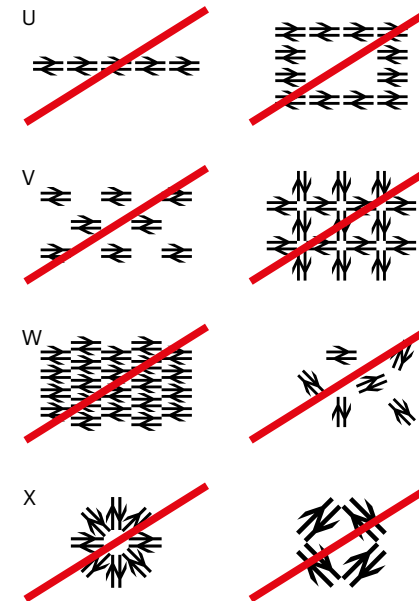
1.7.4 Visual effects should not be applied to the symbol.

The symbol should not add perspective (M). It should not use three-dimensional interpretations (N), shadows (O), or motion or blur effects (P).



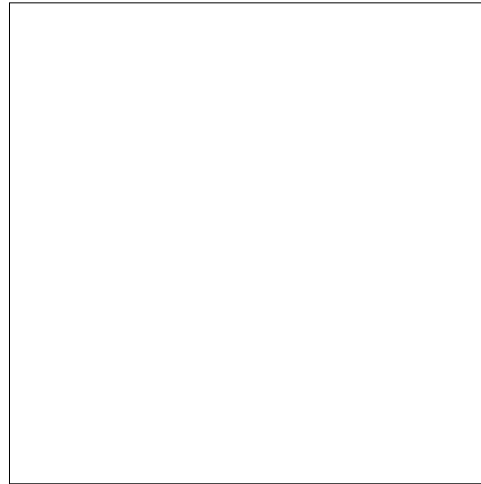
1.7.5 Further complexity should not be added to the symbol.

The symbol should not use outlines (Q), or inner or outer contours (R). It should not use lined, tonal or patterned fills (S). It should not use more than one solid colour (T).



1.7.6 The symbol should not be 'overworked'.

The symbol should not be repeated or manipulated to create lines or borders (U), patterns (V), tones or textures (W), or derivative graphic devices (X).



Red

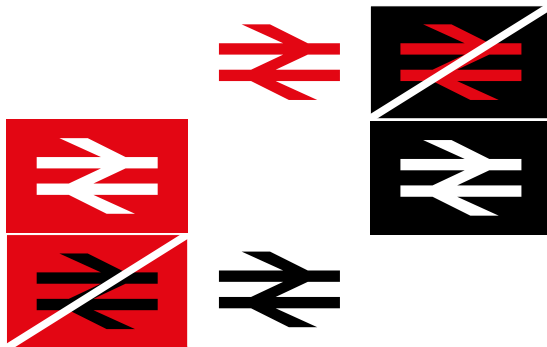
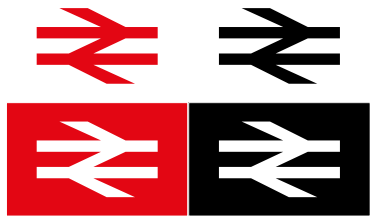
RAL 3020 Traffic Red
NCS S 1085-Y80R
C0 M100 Y100 K0
PANTONE® 485 C
R230 G0 B0 (#E60000)
H0° S100% L45.1%
3M Scotchcal™ 100-13
Avery® 925 Signal Red

White

RAL 9016 Traffic White
NCS S 0500-N
C0 M0 Y0 K0
PANTONE® –
R255 G255 B255 (#FFFFFF)
H0° S100% L100%
3M Scotchcal™ 100-10
Avery® 900 White

Black

RAL 9005 Jet Black
NCS S 9000-N
C0 M0 Y0 K100
PANTONE® Black C
R0 G0 B0 (#000000)
H0° S0% L0%
3M Scotchcal™ 100-12
Avery® 901 Black



1.9.1 Rail Symbol 2 may be reproduced in red or black on a white background (according to the colour specifications).
The symbol may also be 'reversed' in white out of a red or black background.
On any other coloured backgrounds the symbol should be reproduced in white.

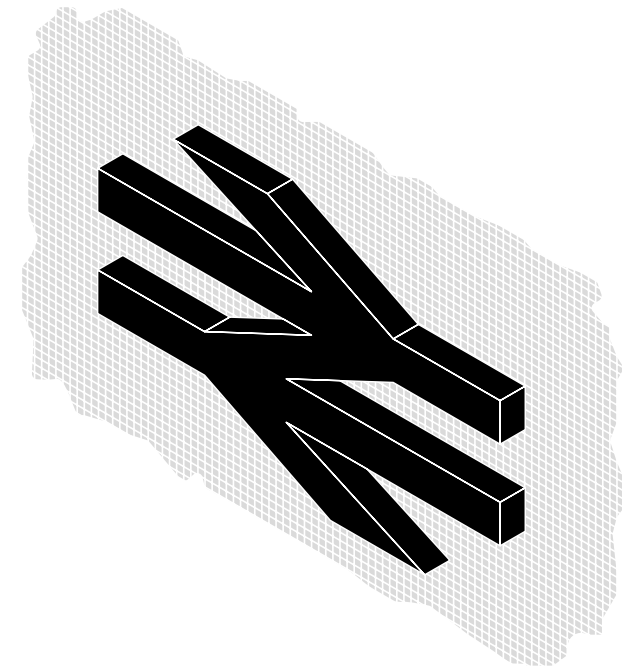
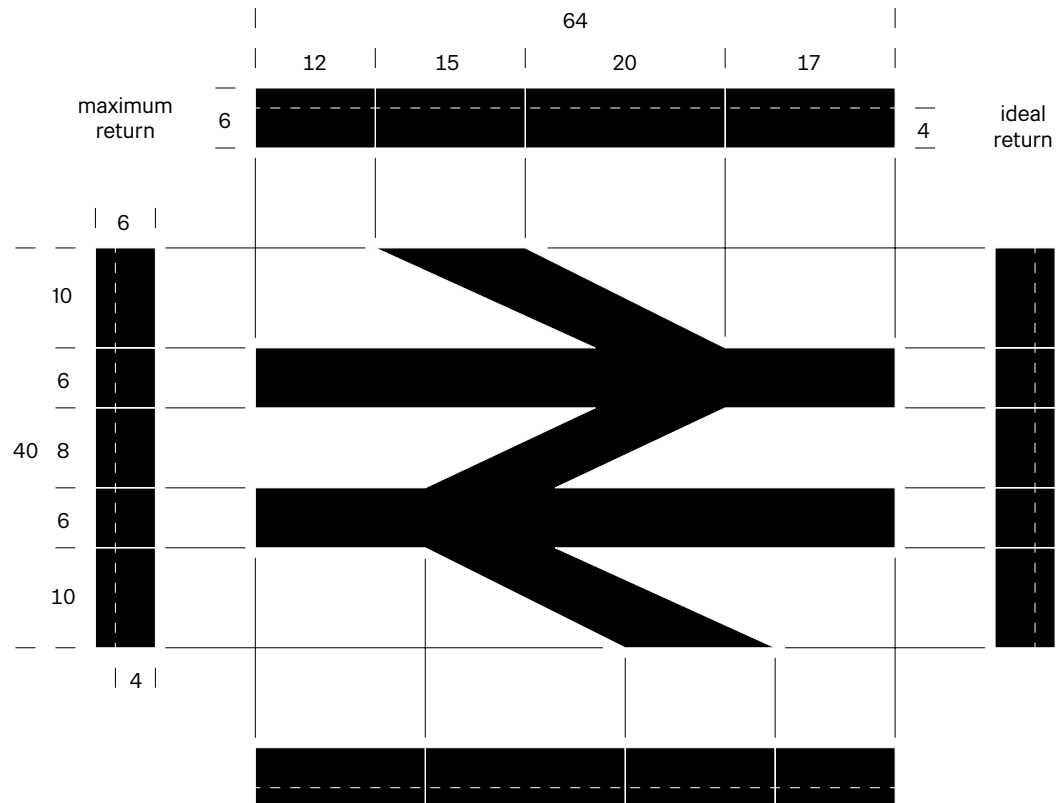


1.9.2 When used on complex photographic backgrounds, Rail Symbol 2 should be reproduced in white.
The background should also provide sufficient contrast to the symbol as illustrated in the examples above.

1.10 Three dimensional applications



1.10.1 Three-dimensional fabrication of Rail Symbol 2 is permitted in architectural situations where the symbol is positioned against another surface.



1.10 Three dimensional applications



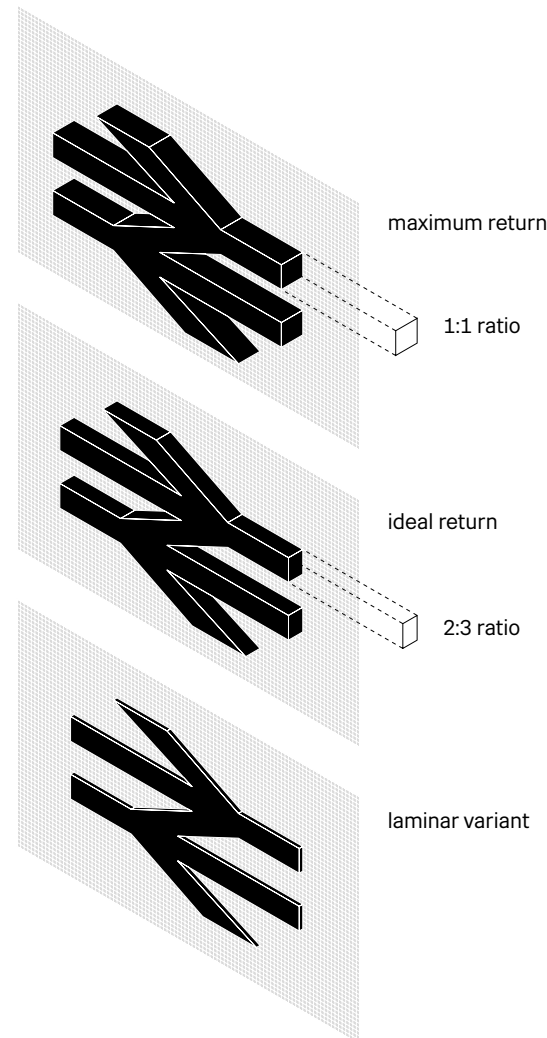
1.10.2 Three-dimensional fabrication of Rail Symbol 2 is permitted in architectural situations where the symbol is positioned against another surface.

Rail Symbol 2 may be constructed in three dimensions by the addition of a return up to and including the depth of each of parallel horizontal track of the symbol.

The ideal return for a three-dimensional extrusion is two-thirds of the depth of each of parallel horizontal track of the symbol but it is recognised that this may not be deep enough to accommodate fixtures for internal illumination.

Trim required to achieve the necessary three-dimensional effect should be kept to a minimum and avoided if possible.

Laminar versions of the symbol may be cut from base materials such as stainless steel, effectively functioning as two-dimensional objects. These may be raised from the surface to provide further contrast.

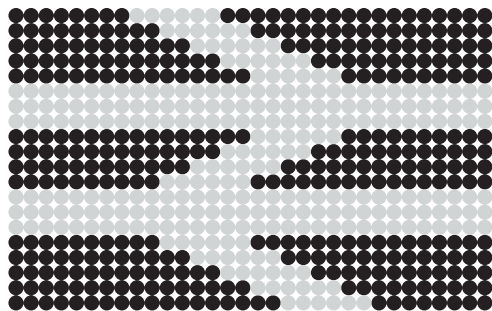


1.11 Low fidelity variants

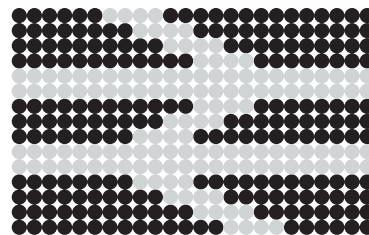


1.11.1 The rail symbol may be produced in low resolution format for digital 'dot matrix' indicators.

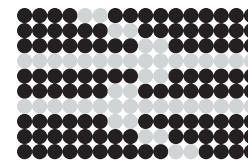
Due to the practical limitations of some electronic dot matrix displays, none of the versions specified may be viable. In which case the symbol depicted should always have rotational symmetry and should be clearly and unambiguously identifiable as the rail symbol.



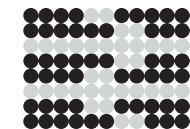
32 × 20



24 × 15



16 × 10



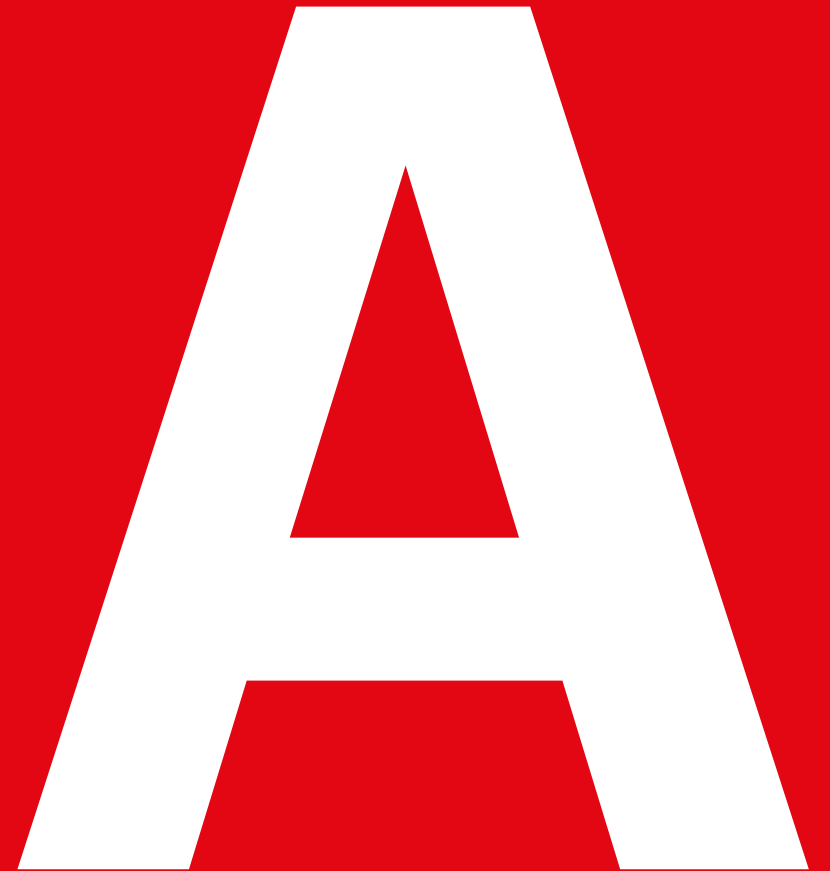
12 × 8



8 × 8

Square version only to be used
when 12 × 8 version is unavailable

Appendix
Assets & Acknowledgements



Appendix A

Assets



Listed below is the approved range of Rail Symbol 2 vector files. These can be accessed and saved while viewing this document in Adobe Acrobat.

	File Name	File Format	
		.eps	.svg
1.	Red Rail Symbol 2	●	●
2.	Black Rail Symbol 2	●	●
3.	White on Red Rail Symbol 2	●	●
4.	White on Black Rail Symbol 2	●	●
5.	Lozenge Rail Symbol 2	●	●
		CMYK	RGB

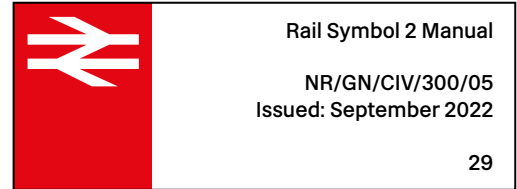


For detailed information on signage please view the **Wayfinding Design Guidance** manual (NR/GN/CIV/300/01) at: <https://www.networkrail.co.uk>

For direct download of all Rail Symbol 2 artwork, please visit Network Rail's Design Hub: <https://brand.networkrail.co.uk>

Appendix A

Acknowledgements



This document was developed with the assistance of:

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London, EC1V 1AW

The Rail Symbol, originally designed by Gerry Barney of the Design Research Unit for British Rail, was revised by Nick Job in collaboration with Calum Spence and the Design Council.

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