

Heathrow's Runway Guide



Welcome

Heathrow is the busiest airport in Europe and is one of the busiest two runway airports in the world,

Here we showcase the measures we take to protect our most critical assets, our runways, aircraft, and passengers.



What happens if we don't protect our runways?

Runway incursions, unauthorised presence of aircraft, vehicles, or people on the runway can lead to dangerous situations, including collisions.

Operational delays

Any obstruction or runway incursion can cause significant delays affecting schedules and passenger travel plans.

Safety hazards

A lack of protection of the runway surface area can increase the risk of accidents during take-off and landing, which are critical phases of flights.

Stop if you are unsure of your location and if you use the manoeuvring area frequently, always refrain from using the outer taxiways.



Double white lines

Double white lines differentiate the apron area from the manoeuvring area, marking a critical safety boundary. Beyond this line, licenced drivers must pay extra attention to aircraft movements as it represents the first barrier to runway safety.

Never cross the double white line manoeuvring area unless licenced and trained. Airside Operations offers follow me services, allowing any A licence holder to be escorted onto the manoeuvring area under the direct supervision of airfield operations. This service helps minimise the risk of runway incursions. If your job requires overnight work on a taxiway or runway, it's important to ensure a demarcated works area is established, minimising the risk of runway incursions and conflict with aircraft.

Holding Position Markings

There are two different types of Runway Holding Point Markings. At some runway entry points at Heathrow, you will see just one of these types as you approach the runway. In other locations, you will see both. The reason for this, and what the runway holding points are called (i.e. Cat I, Cat II/III bar) is explained at the end of this section.

TO AVOID A RUNWAY INCURSION NO PART OF YOUR VEHICLE OR PERSON SHOULD CROSS THEE MARKINGS WITHOUT ATC PERMISSION



Pattern 'A'



Also known as the Cat I or "Cat one bar"

107.5m from centreline

Pattern 'A' runway holding position is always the final holding position before entering a runway. If you see this marking, stop, you are near a runway.



Pattern 'B'



Also known as the Cat II/III or "Cat two/three bar"

Pattern B: 137m from centreline

This runway holding position marking identifies a holding point further down the runway than a Cat I bar. These markings are used in low visibility conditions to enable us to further protect our runway.



Why are there two types of runway holding point and why are they known as 'Cat I or Cat II/III'?

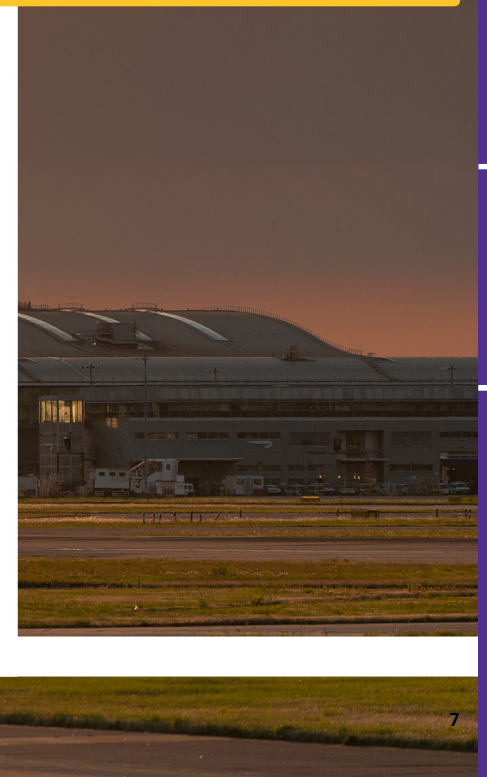
CAT I

These bars are used during normal operations when visibility is good $> 550\text{m}$.

CAT II/III

These bars are used when visibility is reduced, and we need to further protect the runway surface and associated ILS equipment.

During CAT I conditions, objects can be closer to the runway and ILS equipment without the risk of causing interference to landing aircraft. During CAT II/III conditions, objects need to be further away.



Runway Ahead Markings

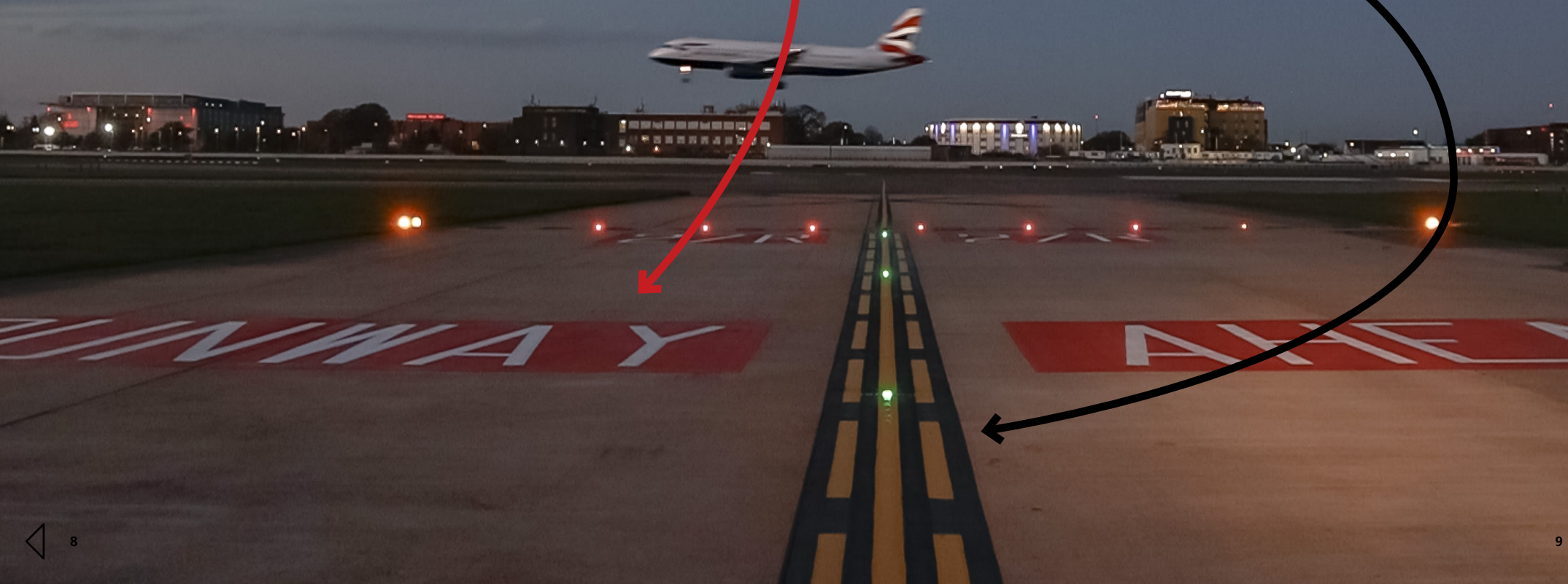
Enhanced Runway Holding Point Markings.

Red paint with white text indicating runway designators and runway ahead is applied on the taxiway surface before the runway holding position.

Enhanced Taxiway

Centreline.

As you approach the runway, you will find the Enhance Taxiway Centreline Markings. These are unique to the runway bar and not found anywhere else on the airfield.



Runway Mandatory Signage

Signage used for Runway entry points are

WHITE TEXT ON A RED BACKGROUND

These signs are co-located with the painted runway holding position markings. They are used to alert pilots and drivers they are approaching a runway.

The

YELLOW TEXT ON A BLACK BACKGROUND

accompanying the mandatory signage indicates your position.

Remember

RED and WHITE = RUNWAY in SIGHT!

Location Signage



The example above indicates that your location is **N6**, holding short of Runway 27L/09R. The Runway 27L threshold is to your left, and the 09R threshold to your right.



The example above indicates that you are at location **S4W**, holding short of Runway 09R/27L. The Runway 09R threshold is to your left; the Runway 27L threshold is to your right.



Lighting

Runway Guard Lights

Runway Guard Lights consist of two sets of lights which flash alternately. They are positioned each side of the Taxiway at Runway Holding Points and warn pilots and drivers they are approaching an active runway. These lights are ON 24hrs a day. Only the relevant Runway Guard Light unit (i.e. Cat I or Cat II/III runway holding points) will be illuminated.



Runway Guard Bars (Red Stop Bars)

Runway Guard Bars (red stop bars) consist of inset red lights, 3m apart across the full width of the taxiway in line with the runway holding position paint marking.

They are installed at all runway holdings points (except on vehicle access roads on the northern side of Runway 09L/27R) and operate 24 hours a day. They are an additional visual cue for pilots and drivers that they are approaching a runway. Only the relevant operational runway guard bar (i.e. Cat I or Cat II/ III runway holding point) is illuminated.



DRIVERS MUST NOT CROSS A LIT RED RUNWAY GUARD BAR

Runway Safety Awareness

Runway incursions present a significant hazard. Before starting work (that's close to a runway), think about how a work site or maintenance activity may affect the runway, and how you can play your part in keeping everyone safe.

Typical layout of a runway entry point – look out for these features:



A RUNWAY INCURSION IS THE INCORRECT PRESENCE OF AN AIRCRAFT, VEHICLE OR PERSON ON THE PROTECTED AREA OF A SURFACE DESIGNATED FOR THE LANDING AND TAKE-OFF OF AIRCRAFT

Dos and Don'ts

Do

- ✓ Look out for the features to know when you're close to a runway
- ✓ Know in advance where you're going to be setting up a works area, or working
- ✓ STOP if you're unsure

Don't

- ✗ Cross an illuminated red Runway Guard Bar / Runway Holding Point Marking
- ✗ Go outside the worksite boundary
- ✗ Ignore safety briefing and instructions





Heathrow