

Health, Safety & Environment Department

Severe Weather Standards



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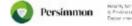


1. Introduction

The purpose of these severe weather standards is to give site management guidance on what preparations should be making in the event of severe and extreme weather being forecast.

Within the United Kingdom, we are experiencing ever-increasing cases of unseasonable weather that can cause a risk of disruption, damage and harm through events such as storms and flash flooding. The majority of extreme weather that we experience is predicted by the Met Office, having this knowledge at hand we can put in place measures to mitigate against the effects of these events on a localised risk basis.





2. Met office weather warnings

The Met Office will provide warnings up to seven days ahead for rain, thunderstorms, wind, snow, lightning, ice, extreme heat and fog.

The Met Office issues weather warnings, when severe weather has the potential to bring impacts to the UK. These warnings are given a colour code (yellow, amber or red) depending on a combination of both the impact the weather may have and the likelihood of those impacts.

Warnings represent a range of impact levels and likelihoods, this means it is important to read each warning to know what level of impact can be expected for given warning areas and how likely those impacts are to occur.

These impacts can include damage to property, travel delays and cancellations, loss of water supplies, power cuts and, in the most severe cases, bring a danger to life.

Yellow warning

Can be issued for a range of weather situations. Many are issued when it is likely that the weather will cause some low level impacts.

Amber warning

There is an increased likelihood of impacts from severe weather, which could potentially disrupt plans. This means there is the possibility of travel delays, road and rail closures, power cuts and the potential risk to life and property.

Red warning

Dangerous weather is expected and, if steps haven't already been taken, a person should take action immediately to keep themselves and others safe from the impact of the severe weather. It is very likely there will be a risk to life, with substantial disruption to travel, energy supplies and possibly widespread damage to property and infrastructure. Where possible travel should be avoided and the advice of the emergency services and local authorities followed.



3. Preparing sites for severe weather

Site management must monitor daily weather forecasts; all weather conditions can have an impact on health and safety, build quality and the working environment of site operatives. If amber or red warning are forecast then further steps must be considered to mitigate any risks to operatives and members of the public.

3.1 High winds

Ensuring sites are always kept tidy and in order is a good place to start. When high winds are predicted, inevitably high winds will empty rubbish skips of material that could cause damage on site. The main risk from high winds is from persons or property being struck by flying objects that have become airborne from the force of the wind.

Site management must consider the following if severe high winds is forecast:

Assess whether working at height needs to stop.

Ensure that loose materials are secured, especially material such as plasterboard, flooring or sheets of plywood, remove any of this type of loose material from scaffolds and flat roofs. Ensure that skips are securely covered over.

Remove materials that are stored on top of containers.

Do not store any materials close to the perimeter fence.

Do not use monoflex material on Herras fencing unless you have a wind loading design.

Load out/weigh down exposed floors with materials such as packs of blocks (do not overload)

Ensure that scaffold boards are suitably fixed.

Ensure light weight material such as Kingspan insulation or claymaster polystyrene type material are secured and weighed down.

Ensure that the scaffold is re-inspected once the high winds have died down and before anyone works on the scaffold.

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Site management must monitor daily weather forecasts; all weather conditions can have an impact on health and safety, build quality and the working environment of site operatives. If amber or red warning are forecast then further steps must be considered to mitigate any risks to operatives and members of the public. Where the site is in an area susceptible to flooding, site management must register with the relevant flood warning service.

3.2 Heavy snow and ice

In recent years, the UK has come to a standstill due to the effects of severe snow and ice. Heavy snow has forced sites to close due to operatives not being able to travel to site and the extreme cold has prevented bricks from being laid. Water pipes to welfare units have frozen solid resulting in sites having to close due to no flushing toilets or no drinking water. Slips and trips are the main risk factors when snow and ice is present on site; however, we must also consider the risk of flooding and silting up streams if there is a sudden thaw.

Site management must consider the following if severe snow and ice is forecast:

All working at height must stop, no work to be carried out on scaffolds. Lag or bury water pipes that supply welfare units, to prevent freezing. Leave heating on in the welfare units.

Where safe to do so, clear site roads and pedestrian walkways of snow and ice and spread them with rock salt (ensuring there is a plentiful supply of rock salt on site before winter months). If there's no running water in the toilets or canteen the site should be closed. Check any silt mitigating measures that are already in place prior to the snow thawing and instigate further silt protection if necessary.

3.3 Heavy rain

Certain parts of the country are used to experiencing heavy rain, such as Wales, the North West of England and the Scottish regions. Nevertheless, any part of the UK can struck with bouts of heavy rain that can cause flash flooding. The main threat from heavy rain on our sites is from mud and silt contaminating water courses or from localised floods.

Site management must implement the following if heavy rain is forecast:

Ensure that all surface water run-off containing sediment will be controlled and contained, e.g. diverted to temporary attenuation basin(s) with adequate capacity to hold water. Check that all areas vulnerable to surface water run-off are protected (e.g. silt fencing, soil bunds etc.)

Where installed, check that silt protection measures are well maintained and adequate. Check that open surface water ditches are clear of debris etc. to maintain capacity of flow. Drain guards are checked and emptied, or replaced where necessary.

Crush material or rubber type matting is put down on walkways to prevent operatives from walking through mud and puddles.

Ensure that there is suitably heated drying rooms to adequately dry out clothing.

Remember, vegetation acts as natural barrier to mitigate water run-off from our sites, therefore it is important that vegetation is not stripped until absolutely necessary.

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3.4 Thunder and lightning

Thunder and lightning can occur at any time during the year and its exact location is very difficult to predict, manifesting very quickly. It is therefore important that when thunder and lightning is forecast in the area, site management must undertake visual checks throughout the day.

Site management must consider the following if thunder and lightning is forecast:

Operatives must not work on scaffold. Any crane operations must stop. Be prepared for sudden heavy rainfall Persimmon



4. Unpredicted severe weather

There has been a number of cases where severe weather has stuck the UK which has not been forecasted. In the UK we experience around 30 small tornadoes each year, these are short lived, but can cause an imminent risk of injury, property damage and localised flooding.

Site management must always be prepared for the unexpected; good forward planning and housekeeping arrangements will lower the risk of a site having problems if hit by an unpredicted severe weather event.

5. Further reading

metoffice.gov.uk/weather/guides/warnings

England - Sign up for flood warnings - GOV.UK (www.gov.uk) Scotland - Flood Warnings - Floodline Scotland - Be prepared for flooding Wales - Natural Resources Wales / Sign up to receive flood warnings



