A risk matrix allows you to best understand the level of risk you may be exposing yourself or others to. This method of rating risks is recommended for assessing the risk to safety associated with any activity.
Having said this, if you are unfamiliar with a risk matrix, they can be overwhelming and difficult to understand. That's why we have written this small article, talking all about how to read a risk matrix.

Firstly, let's discuss exactly what a risk matrix is.

What is a risk matrix

A risk matrix is a grid that visually represents risks that may occur in a particular situation. Each risk rating in the grid is allocated a number between 1 and 25 and is listed as low, medium, high or critical. Each risk rating is also colour-coded to signify the level of risk a hazard poses. Our risk matrix uses the colours green, yellow, orange and red. signifying low, medium, high and catastrophic risks respectively.

This matrix format is designed to determine the risk associated with an identified hazard and to convey the consequence and likelihood of risks identified in a risk assessment. Now that we know what a risk assessment matrix is, we can discuss how to read one.

How to read a risk assessment matrix

You will notice on a risk matrix there are ratings along the top of the grid and ratings along the left-hand side of the grid. These are otherwise known as the x and y axes respectively. The x axis details the consequence a person could face if they encountered the hazard. They are ranked from left to right as such:

1. Insignificant
2. Minor
3. Moderate
4. Major
5. Catastrophic

The y axis outlines the likelihood of the risk occurring. They are ranked from top to bottom as such:

1. Almost certain to occur
2. Likely to occur frequently
3. Possibly and likely to occur
4. Unlikely to occur but could happen
5. May occur but rare

So, to read the risk matrix and determine the risk you may be facing, you need to determine the consequence of the risk and the likelihood of the risk occurring. Once you have these details, you can determine where the columns and rows from the X and Y axes meet and you'll have your risk rating for the hazard you have identified.

		Consequence				
		Negligible 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Likelihood	5 Almost certain	Moderate 5	High 10	Extreme 15	Extreme 20	Extreme 25
	4 Likely	Moderate 4	High 8	High 12	Extreme 16	Extreme 20
	3 Possible	Low 3	Moderate 6	High 9	High 12	Extreme 15
	2 Unlikely	Low 2	Moderate 4	Moderate 6	High 8	High 10
	1 Rare	Low 1	Low 2	Low 3	Moderate 4	Moderate 5