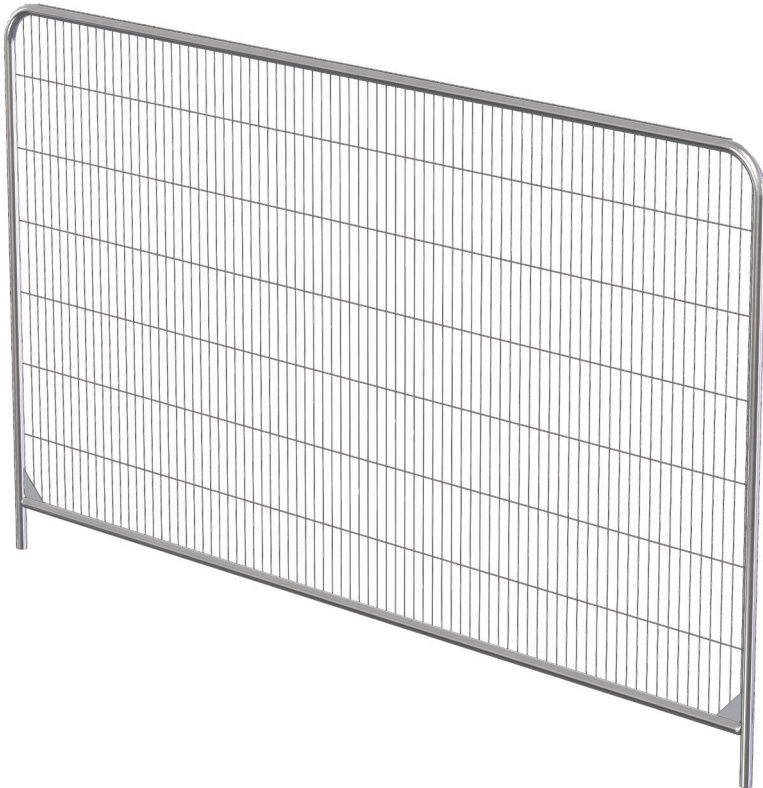




FENCING & HOARDING

FENCING & STABILITY

Stability Guide



GENERATION
HIRE & SALE

ALTRAD

LW/09.22

Introduction

Service Overview

Generation Hire and Sale are leading suppliers of Access and Building Equipment. Operating through a nationwide network of 18 branches. Our expertise and knowledge leaves us confident that we can deliver the best product for your requirements or application and provide an efficient delivery service meaning you receive your items at the right place at the right time.

The Generation wind-load calculation service is a technical support resource specifically designed to help sites meet the requirements of BS5975 'Temporary Works Design' relative to temporary fencing and hoarding installations. The service provides Generation customers with general guidance on the expected wind resistance capabilities of a range of freestanding fence panel products with various stabilisation systems.

This Guide

This guide is provided for general guidance only and features just a few of the more common configurations typically used by the construction industry. The aim of this guide is to provide an indication of what wind speeds different panels and stabilisation systems can resist before they reach their 'Limit of Stability' and become unstable.

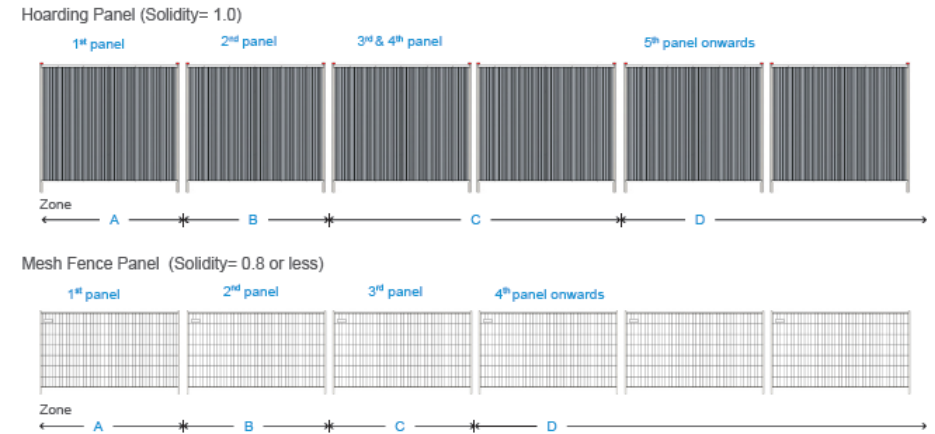
Before referring to this guide it is advisable to obtain your own site specific information such as prevailing wind speeds and directions. Once the site specific wind speed has been obtained you can then configure a panel and stabilisation system to match those conditions.

Resistance Values / Product Specification

The resistance values referred to in this guide are approximations and are for general guidance only. Please contact your Account Manager for more detailed information.

Note that wind-load calculation data is based on Generation product specifications and as such are only applicable to these products sourced from Generation either for hire or sale. Market alternatives may not give the same result as these readings so this document must not be used as reference to competitors products.

Wind Resistance Zones



Zones A, B & C are not covered in these calculations but we can provide them upon request.

The readings in this document refer to zone D which relates to 4th fence panel or 5th hoarding panel in a continuous run.

Consult BS EN 199-1-4 in conjunction with the Product Wind Resistance Calculator to determine the product wind resistance in Zones A, B & C or alternatively contact your Generation Account Manager for assistance.

Note the following detail relating to the stability methods below:

Methods 1-4 utilise 2 x fencing couplers & an anti-lift device.

Methods 5-7 utilise 2 x heavy duty gripper couplers per panel & the windbreaker foot has an integral anti-lift.

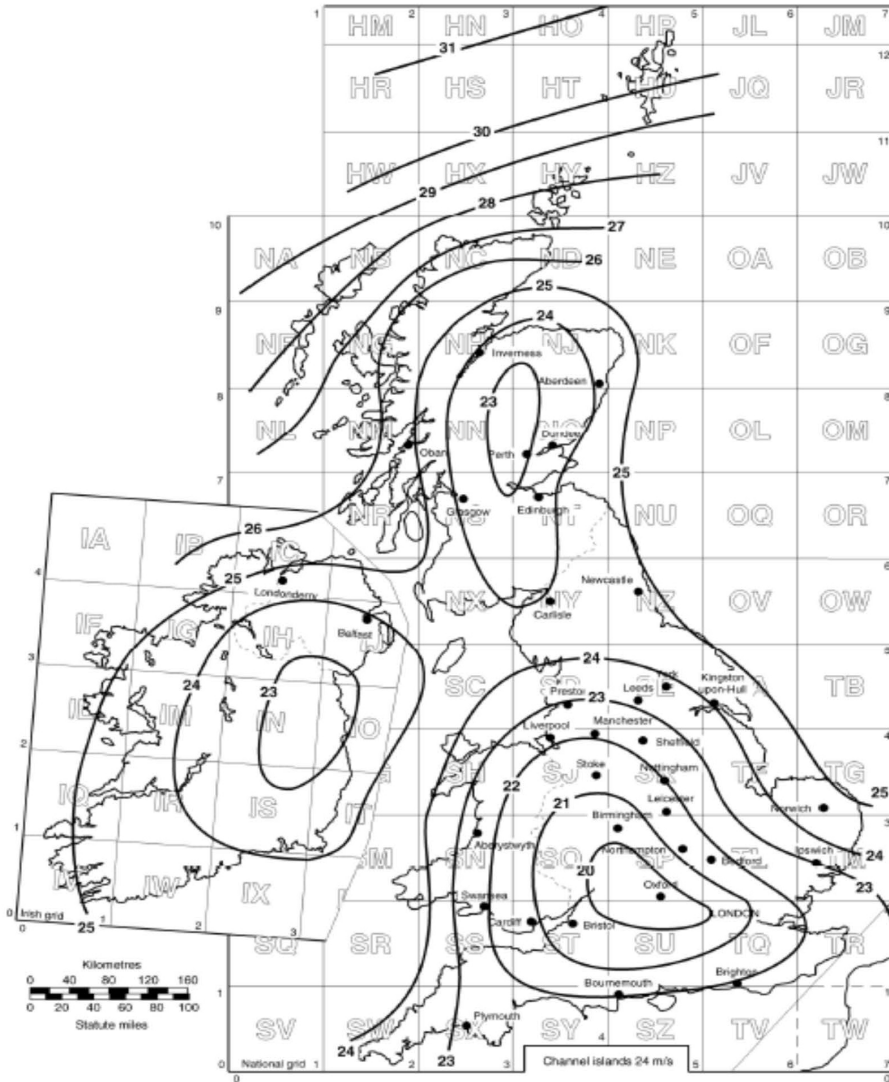
The results are based on the chosen stability method to be installed on every panel.

Important Information:

The values in this guide are based on 1.2 factor of safety
We have a range of calculations from 0- 2.0 factor of safety.

UK Wind Speed Map

Wind speed is measured in metres per second.



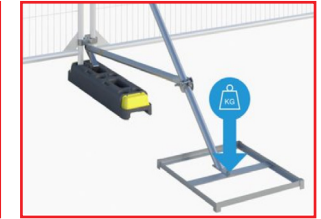
Stability Options



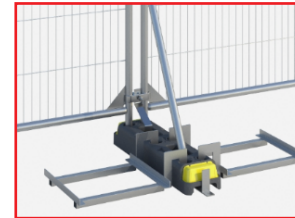
Method 1
 Round Top in End Hole
 Weight Applied Zero
 Wind speed 7.45 m/s,
 16.66 mph



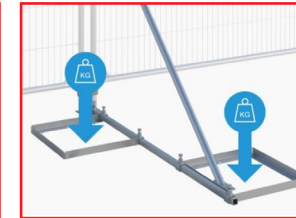
Method 2
 Roundtop in end hole &
 stabiliser
 Weight Applied 15kg
 Wind speed Achieved
 13.6 m/s, 30.42 mph



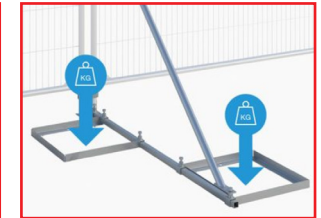
Method 3
 Roundtop in end hole,
 stabiliser, tray & cross brace
 Weight Applied 57kg
 Wind speed 23 m/s,
 51.45 mph



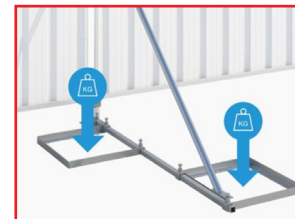
Method 4
 Roundtop, 151 strut &
 1 x block cradle
 Weight Applied to one block
 cradle 216kg
 Wind speed 32 m/s,
 71.68 mph



Method 5
 Roundtop & windbreaker
 System
 Weight Applied per tray 76kg,
 so 152kg in total
 Wind speed 32 m/s,
 71.68 mph



Method 6
 Roundtop, debris netting &
 windbreaker system
 Weight Applied per tray 205kg,
 so 410kg in total
 Wind speed 20.51 m/s,
 45.88 mph



Method 7 - Hoarding
 2m High Hoarding &
 windbreaker system
 Weight Applied per tray 199kg,
 so 398kg in total
 Wind speed 27.98 m/s,
 62.58 mph

The Anchor Block

Name	Dimensions	Weight
Anchor Block	L:600 x W:300 x H:235	23kg Approx



The Anchor Block improves the wind resistance properties of a Temporary Fence installation without the necessity for ground fixings or anchors. It has the added advantage of achieving stability of fencing whilst taking up only a small footprint making it an ideal option for inner city sites where space is at a premium.

The new product is made from 100% recycled plastic that makes it extremely strong, and is ideally suited to resist the rigors of the most demanding construction site uses...not just once, but again and again.

The Anchor Block can also be used as a fence footing and it has a self-weight of 23kg making it very stable, it is Anti-Trip as it doesn't protrude in front of the fence line, unlike standard fence feet when used in the preferred centre hole location.

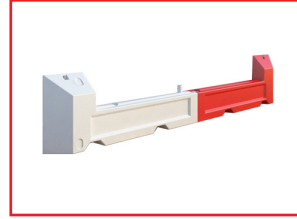


The Anchor block has been designed to stack and carry safely. The block has locating ribs molded into to the top of the block and corresponding channels in the underside so that the blocks stack neatly and safely together to minimize movement in transit and stack safely in your yard. It also has convenient lifting handle at each end of the block



NOTE: These wind speed resistance figures shown here are for guidance only at this stage.

Other Fencing Stability Options



Slot Block (Water Filled)
Wind speed 57 mph
Wind speed with debris netting 39 mph



Rota Block Mini (Water Filled)
Wind speed 54 - 73 mph
Dependent on how many are utilised



Fence Stabiliser



Fence Stabiliser (HSG151) Small



Fence Stabiliser and Brace with Block Tray



Fence Ballast Block with Fence Stabiliser (HSG151) Small



Windbreaker Stabiliser - Reduced Footprint



Zero-Trip Base and Cranked Stabiliser

Other Hoarding Stability Options



Windbreaker Stabiliser -
Reduced Footprint



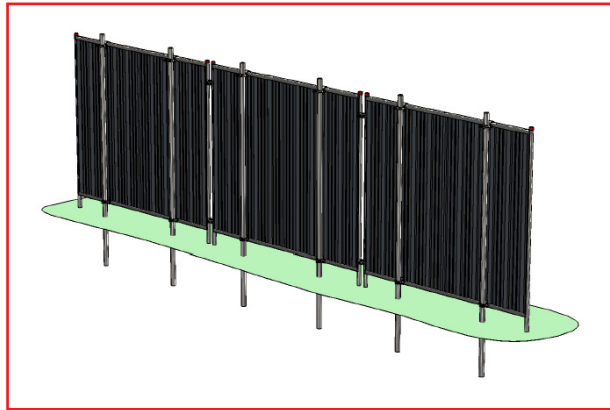
Hoarding Stabiliser and Cross
Brace with Block Tray



Big Foot Stabiliser (780kg)



Big Foot Stabiliser - Reduced
Footprint (780kg)



In Ground System Scaffold
Tube & Scaff to Hoard
Couplers

Notes



**SCAN ME
TO FIND**



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