



**BIG FOOT  
SYSTEMS**



# Big Foot Walkway

## Typical Application

For establishing clear, safe pathways around installations on a flat roof. Provides a secure route for service engineers to gain access to plant and for managing the flow of other personnel.

## Dimensional Data & Product Weights

Section Name	Length outside of metalwork (mm)	Width of walkable section (mm)	Width to outside of Big Foot (mm)	Height to walkway surface (mm)	Height to top of handrail (mm)	Approx. Weight (Kg)
<b>AA (1.5m)</b>	1496	1018	1388	168	1065	69
<b>90°</b>	1536	1018	1388	168	1065	82
<b>45°</b>	1934	1018	1388	168	1065	102
<b>T-Junction</b>	1530	1018	1388	168	1065	80
<b>PQ (1.5m)</b>	1496	1018	1388	168	1065	64
<b>PQ (1.0m)</b>	1058	1018	1388	168	1065	51
<b>OO (1.0m)</b>	1058	1018	n/a	168	1065	45
<b>OO (0.5m)</b>	445	1018	n/a	168	1065	33

Supplied flat packed  
Easy assembly  
Removable sections  
Weight / Load spreading

## Walkway Metalwork

Smooth Surface Finish  
Excellent Weldability  
High Strength  
Supplied to EN10219 S235 J0H, EN10219 S275 J2H & EN10219 S355 J2H  
Lock Nuts are M24, type C form Din 936 Washers to BS 4320-B  
Large M24 Nut & Studding manufactured from Mild Steel Grade EN1A (Leaded)  
Main framework 40mm x 40mm x 2.5mm thick steel tube



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## Big Foot Plastic Foot

Material – Nylon 6 B601L 30% Glass Fibre Filled



Property	Test Method ASTM	Test Method ISO Equiv	Units	Value 30%
<b>Physical</b>				
Specific gravity	D792	ISO 1183	Kg/m <sup>3</sup>	1.36
Water Absorbtion	D570	ISO 62	%	1.1
Mould Shrinkage (flow)		ISO 2577	%	0.35
<b>Mechanical</b>				
Tensile Strength	D638	ISO 527	MPa	130
Elongation at break	D638	ISO 527	%	4
Flexural Strength	D790	ISO 178	MPa	190
Flexural modulus	D790	ISO 178	Gpa	5900
Notched Charpy Impact		ISO 179/1eA	kJ/m <sup>2</sup>	45
Unnotched Charpy Impact		ISO 179/1eU	kJ/m <sup>2</sup>	
<b>Thermal</b>				
Melting Point		ISO 3146	°C	220
Vicat Softening Point	D789	ISO 12188	°C	
Deflection Temperature	D648	ISO 75	°C	
			A 1.85 Mpa	210
			A 0.46 Mpa	220
<b>Flammability</b>				
UL94 m/m		ISO 75		V2

All data generated from specimens moulded in natural material, stored in a dry atmosphere (no more than 0.2% moisture). The inclusion of colour pigments or other additives may change some of the test results. All technical information supplied is accurate and reliable to the best of our knowledge. The information is given without warranty or guarantee and is intended for initial guidance or comparative purposes.



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# Big Foot Walkway

## Walkway Grid

- Grating supplied gritted available coloured yellow or grey
- Slip resistant
- Impact resistant
- Fire resistant – meets British Standard BS 476 Part 7
- Corrosion resistant

Grid Pattern	Plan View
25 x 38 SM	
<b>Load Bar Thickness</b>	
6.4mm	
<b>Load bar Centres</b>	
38mm	
<b>No. Bars per foot</b>	
8	
<b>Open Area</b>	<b>Elevation</b>
68%	
<b>Approx. Weight</b>	
12.3 kgs/sq.m	





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## Walkway Fixings

- M8 x 80mm bolts (grating supports)
- M8 12mm ø bars (grating supports)
- M10 nuts (frames)
- M10 washers (frames)
- M10 x 100mm bolts (frames)
- Black end plugs (40 x 40mm)
- M8 x 30mm bolts (for use with M clips)
- M8 nuts (for use with M clips)
- M8 washers (for use with M clips)

Type M Hold Down Clips - Designed to fix grating & prevent it turning in all four directions.



## Walkway Loading Values

305mm<sup>2</sup> Plastic Foot

Load (KG)	Load per Foot (kN/m <sup>2</sup> )
10	1.0
20	2.1
30	3.2
40	4.2
50	5.3
60	6.4
70	7.5
80	8.6
90	9.6
100	10.8
110	11.8
120	12.9

Big Foot Walkway Grid - Deflection in mm

Span (mm)	Concentrated Full Panel Load (Kg)						
	149	372	745	1117	1490	2234	2979
<b>457</b>	0.203	0.406	0.711	0.889	1.143	1.676	2.210
<b>610</b>	0.356	0.889	1.499	1.905	2.413	3.531	4.267
<b>914</b>	0.610	1.500	2.900	4.140	5.410	7.950	10.566
<b>1219</b>	0.914	2.388	4.699	6.960	9.195	13.665	-



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# Big Foot Walkway

## Life Expectancy

The Big Foot Walkway, when subjected to normal conditions of exposure and use, will retain its integrity for a period in excess of 25 years.

## Installation Guidelines

Please consult Big Foot Walkway Installation Sheets. Can be obtained by contacting Big Foot Systems.

## Slip Resistance

The Big Foot Walkway grating has been tested for slip resistance using the Pendulum Test procedure. The Pendulum Test is designed to test the slip resistance of floor surfaces and is universally accepted as the best test available.

The Skid Resistance Tester operates thanks to a pendulum with a rubber slider, which bounces from a fixed height and sharpens with an edge over a fixed length of the road surface. The energy converted by the sliding procedure is determined on the basis of the climbing height of the pendulum and results in a measure for the pavement grip of the examined surface.

The Big Foot Walkway grating achieved the following results when tested:

<b>Dry Reading</b>	70
<b>Wet Reading</b>	65

The UK Slip Resistance Group guide to slip resistance of a floor for able bodied pedestrians:

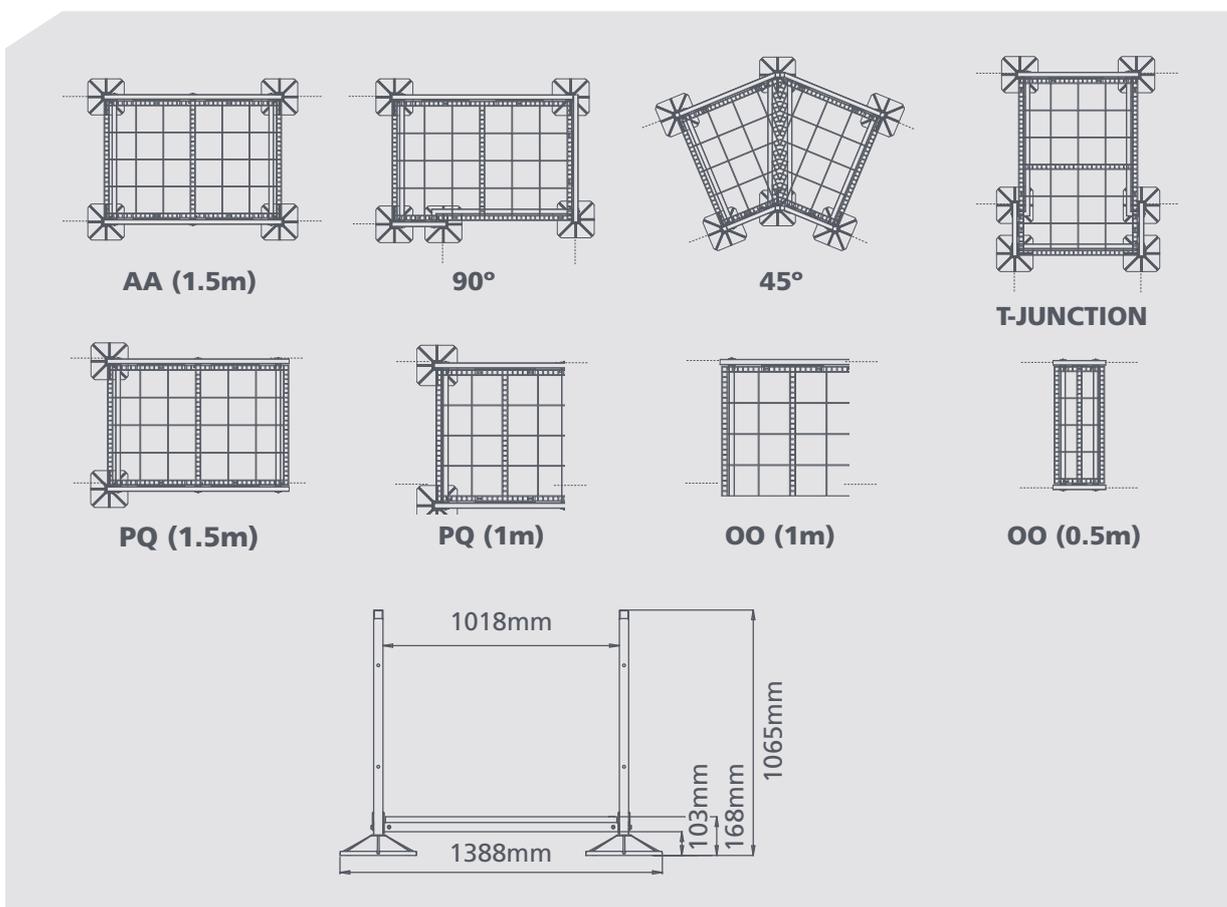
<b>Four S Pendulum Value</b>	<b>Potential for Slip</b>
Above 65	Extremely Low
35 to 65	Low
25 to 65	Moderate
25 and Below	High



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## Section Diagrams



Full technical drawings of each section are available on request and can be obtained by contacting Big Foot Systems.

*BBJ Engineering takes no responsibility for the condition of the roof on which our equipment is to be used. You must ensure that the substrate on which the Big Foot is intended for use is structurally sound enough to take the weight and point loadings we have indicated. The Big Foot products must be installed in line with the guarantees and recommendations of the manufacturer of the roofing system. The manufacturer of PVC membranes should advise on the susceptibility migration of plasticizers and specific recommendations should be adhered to so that the roof guarantee is not affected.*