

Rooftop (and wind-exposed site) guidance

This guidance may also be interpreted by clients with sites in / on

- **Coastal locations** including clifftop sites
- Mountainous regions including valley sites with intensified wind
- Riverside locations where wind can 'run up the river'
- Renowned 'micro-climate' locations e.g. Silverstone Race Circuit / Canary Wharf
- Super-yachts, barges and other ships

Introduction

Each site will have its own special characteristics which will determine the most appropriate size umbrella for any site.

Key considerations relate to

- Umbrella size
- Selection of base type surface base, bolt down base or in-ground base
- Bracing whether the umbrella mast can be 'tied' by a brace to a rigid structure (wall)
- Amending the umbrella specifically for roof-terraces
- Site specifics
 - size of roof-top area
 - o elevation
 - o exceptional locations e.g. exposed coastal locations / microclimates
 - extent of vertical enclosure / balustrade
 - o positioning of umbrella
 - o access to site lift / stair well
 - type of use private / residential vs commercial / restaurant
 - o sites used by visiting friends and relatives including holiday lets

Risk assessment

1 UMBRELLA SIZE

Typically, for almost all roof terraces, we will advocate a 3m square unit or $3.5m \times 2.5m$. The arm on the $3.5m \times 2.5m$ can be from the centre of the 2.5m or 3.5m side.

The maximum size that we will consider is a 4m x 3m or 3.5m square unit. The arm on the 4m x 3m will almost always only be offered from the centre of 4m side.

2 BASE SPECIFICATION

Typically, a surface base is the 'go-to' first choice for a roof-top or balcony umbrella

Our standard surface base is 900mm square and is specified even for 3m square and 3.5m x 2.5m umbrellas. This powder-coated 'milled steel' base is supported by 8 x 22.5kg concrete blocks (height 150mm). Gross weight of the base itself and one layer of blocks is 227kg (or with base cover added circa 307kg)

If the case is made for 3.5m square or 4m x 3m umbrella – we will almost certainly specify an additional layer of blocks and / or a base cover. Gross weight of base with double layer of blocks is 407kg or with double layer of blocks and base-cover is circa 487kg

Alternatively, a bolt down base may be possible. However, frequently this is ruled out by architects in relation to potential loss of integrity of waterproofing membranes.

We are also ready to listen to hybrid base proposals on a site-specific basis. Such occasions include the availability of a steel framework on which to bolt / weld one of our bases.

The use of an in-ground base is ruled out unless there is a 350mm cavity below decking (or similar).

If such a cavity exists, an adapted in-ground base may be considered.

Below – examples of roof-top 'double-blocked' surface bases with and without ('Millboard') base cover



3 BRACING

Some sites offer the opportunity to consider 'bracing' to an adjacent wall. These will need to be bespoke dimensions.



4 BOLTING OF UMBRELLA TO BASE (Roof terraces only)

As added security, since up-dating this guidance (8/22) it is mandatory procedure for Poggesi UK to put a bolt through the foot of the mast so that it passes through the base spigot – therefore tying the umbrella to the base.



5 SITE SPECIFIC CONSIDERATIONS

5.1 Size of roof-top area in proportion to canopy and proximity to edge of building

We have come across 3^{rd} floor roof terraces the size of 'football pitches', which offer far more options when compared to much smaller terraces where even a 3m x 3m canopy would be within a metre of the balustrade.

5.2 Site elevation / floor level

Obviously, the higher the elevation (floor level) - the less likely we would be to supply.

1st floor - usually little concern, these positions can often be no more than a 'raised terrace'. However, core rooftop guidance re aspects such as the size of canopy apply.

2nd - 3rd floor - this whole guidance document is primarily aimed at helping you, and us, making your decision.

4th - 6th floor - we will only supply in exceptional circumstances.

Case histories

6th floor Victoria - where the base is entirely welded to form part of the terrace structure and the roof garden has 1500mm high walls providing significant protection.

 6^{th} floor Kensington – where the client had owned a 3m square on site since 2006 and sought to upsize to 3.5m square while also accepting advice to increase the number of blocks for the base.

7th floor and above – simply 'no'!

Case history - Heron Tower. City of London. A prospective restaurant client on the 37th floor was quite persuasive that the risk was low 'because we have your umbrellas on raised terraces in New York and Miami'. Those restaurants though were no more than 5 floors high and much greater surface area than proposed for their London site.

5.3 Exceptional locations e.g. exposed coastal locations / micro-climates

We are not experts in microclimates nor meteorology, but our experience can help identify sites which that should be treated similarly to roof-top sites. However, you should not expect us to be able to always identify these sites and warn you to take special care. You live there, know the site best, and are far better placed to decide against our largest side-arm models – in favour of smaller sizes. Likewise, you should be able to identify which guidance, aimed primarily at roof-terrace sites, should be adopted for your site. (e.g. placing in winter storage / not being left open while no-one is at the property)

Case studies:

'Windyridge' – there's a clue in the name!

There is no surprise that one of our long-standing clients at a house named 'Windyridge', calls us out from time to time for one of the eight ribs to be replaced. This site has a 4.5m x 3.5m Piazza model, and the home is often used by different family members – it's hard to ensure that all visitors are equally trained in 'correct use'.

Silverstone - high speed cars, high speed winds!

It is established knowledge, at least in the motor sport world and racing fraternity, that this former airfield, with substantial concrete runways, creates a microclimate of its own. Whilst in Towcester (5 miles away) clients may only feel a gentle breeze, Silverstone may be gusting far harder.

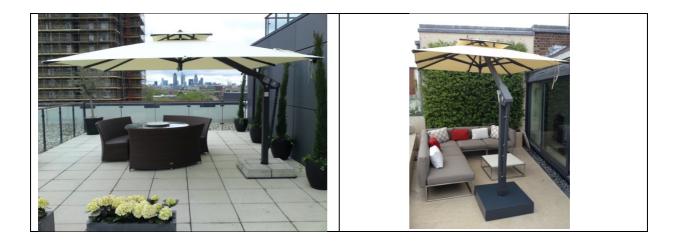
Super-yachts, boats and barges – we have made stunning installs on barges and even floating 'hotels', but of course these sites do not stay in the same location. A hotel barge on the sheltered Canal du Midi on a glorious summer day – is a whole lot different than sailing 'The Rhone' with the 'Mistral' blowing.

5.4 Extent of enclosure / balustrade / protection

This consideration differentiates between 'sunken gardens' which can have up to 2m high walled surrounds from simple 1000mm > 1200mm glass balustrades. Clearly the greater the protection, the more positive we are towards such sites.

5.5 Positioning of umbrella

The greatest wind threat to a side arm umbrella arises from the wind placing pressure on the main arm. The umbrella on the left in the photographs below is more at risk than the umbrella on the right which is far more protected. However, note that the umbrella on left is a larger terrace and beyond the balustrade further floor surface mitigates against 'up-draft'.



5.6 Access to site – lift / stair well issues

We are able to strip down the umbrella in order to transport and carry the ribs / mast / arm separately. The umbrella will then be re-built in situ.

5.7 Type of use – private / residential or commercial / restaurant

The relevance of this paragraph is that we often find that private clients become tuned in to life on a penthouse terrace. Generally, we have found that they have learnt the risks that lightweight items pose on an elevated terrace. Although this guidance, accompanied by the wind guidance provided by Poggesi UK, formalises the 'responsibility contract' between us and client – we have found that those with roof terraces are very alert to their risk and take greatest care. A broad overview of all our clients' repair needs is that rooftop clients have fewer issues, simply because they are more vigilant in windy conditions, and are alert to their responsibility and because their umbrellas tend to be smaller sizes and bases over-engineered as an extra security.

Conversely, we seldom agree to supply our umbrella to commercial (HoReCa) clients with roof top restaurants – although an occasional exception may be to supply a first floor terrace – because

- There is a history of lack of continuity of business ownership and risk that responsibility for training in correct use is not passed on.
- Commercial clients have become conditioned to centre pole commercial umbrellas, at ground level, with in-ground bases, that can often be left open for months on end. These personnel tend not appreciate thes differences and the importance of responsible use.
- It can be difficult to persuade a business to write job descriptions for a 'team leader' to have 'ownership\ of correct use.
- Late night shift finishes especially after a long shift human error' can occur more-so in a dash to get home.
- 5.8 Type of use visiting friends and relatives

On roof-tops and other exposed sites we strongly urge you not to leave the operating handle accessible for friends and relatives to use your umbrella.

5.9 Selling on your property along with the umbrella

If you are leaving your umbrella behind for use by an incoming buyer, please give them a demonstration of correct use – or better still, Poggesi UK will, for most parts of the UK, either go to site to demonstrate or when that's not viable, we will use a WhatsApp or other video call.

6 Summary of responsibilities

We will

- Share this guidance with you as soon as you inform us that your site involves a roof-terrace / exposed site.
- Give appropriate prominence to this guidance on poggesi.co.uk
- Make a gratis site survey to assess suitability of site before purchase is confirmed.
- · Provide you with guidance on size of canopy / position of base / the correct base for your site

- Be positive about assisting commercial (restaurant / hotel) in developing RAMS / Risk Assessment / TQM procedures.
- Amend your umbrella to place a bolt through the foot of mast and also through the base spigot (to further reduce any opportunity for the umbrella to be separated from its base)
- Make a full demonstration of correct use upon installation
- Provide 'Wind Guidance'
- Welcome your comments on any suggested improvements to our guidance

You can / must

- Be aware of this guidance
- Be alert to windy conditions.
- Select an App to alert you to changing and abnormal weather / wind conditions (Met Office / Windy / Clime)
- Always pleat the eight segments of the canopy before using the tie-strap (current umbrellas now supplied with a broader 'corset') to ensure that the fabric of your umbrella is as secure as possible. (applies only to roof terraces above 1st floor)
- Use the winter storage bag provided especially when not using the umbrella for long periods.
- Regularly checking that the locking nut that holds the shaft to the base is tight
- Do not use the Piazza (variable height model) at higher canopy levels
- Not leave the winding handle accessible for house guests to use in your absence.

7 Responsibility and risk management

Ultimately – we are confident of the overall performance of a tried and tested product – but it is as much a responsibility of the client to use it sensibly and safely as it is for the manufacturer and supplier to provide clear guidance and defences aimed at minimising risk.

This written guidance is on our website – but realistically there is a risk that it appears as 'small print' and unnecessary to many clients. This guidance is essential for roof-top clients. It is also essential to Poggesi UK's owners / employees / sub-contractors / sales partners. By having this guidance so clearly documented, we are doing all we can to ensure that each of us is consistent with our voice communication of these issues.

7.1 Poggesi UK risk management includes

- Providing this guidance to clients in order that together we can assess whether one of our umbrellas is appropriate for your site.
- We do not accept an order for a rooftop terrace without making a prior site survey.
- We will only install the umbrella on a roof-top when the occupying client is present to ensure that they have a demonstration of correct use.
- In our wind guidance to all clients, we include specific guidance relevant to roof-terrace clients
- We will seldom supply our umbrellas to commercial clients with roof terraces unless, together, we agree site specific procedures and that the management take responsibility for ensuring that a specific person on site is responsible for the umbrellas, along with a deputy, If neither employee is on site simultaneously, our guidance is that umbrellas remain closed
- We have £5,000,000 public liability insurance.
- We will regularly review this document and seek to continually manage risk

7.2 Consultation

While preparing this draft document our attention has been turned to adding new procedures to help us make the correct decisions with regard to roof terraces. In particular we propose to prioritise external evaluation of these procedures by

• Consulting other main distributors of umbrellas to enquire as to whether they have their own 'roof top assessment procedure' or 'guidance for clients / owners

7.3 Wind and warranty

Poggesi UK are not / cannot be responsible for wind damage on roof-terraces or any other location. Imagine if we did take responsibility and provide warranty for wind damage... there would be little

incentive or responsibility on clients to close their umbrella, even in the strongest winds - in the knowledge that any damage would be met by us.

A closing thought;

Our umbrella has often been labelled by clients as 'The Ferrari of umbrellas'. It is a flattering and kind analogy. However, we do not think it is incorrect to use the same analogy to prompt our clients that Ferrari will not take responsibility for 'bumps and grazes', accidents or damage caused by weather related events (e.g. floods or falling trees). We are absolutely committed to continual improvement of the Poggesi product and supporting our clients, and if you have read this far we sincerely welcome any suggestions / comments.