Bus Shelters Guide

Things to consider when purchasing Bus Shelters
From which roof to select to seats, end panels, back panels, flag posts, timetable cases, civil engineering and electrics.
We’re here to help you make the right choices.

When buying a shelter there are many factors to consider which are not always obvious. Especially if you don’t buy shelters very often. Whether it is narrow footpaths, excessive trees, issues of privacy, passenger ‘line-of-site’, health & safety concerns, uneven pavements or just which roof to choose, we can help you resolve these challenges.

This short guide is designed to give you an overview of the kinds of things we help customers with every day. It will give you an insight into these areas. With this additional knowledge, you will be better prepared to get the best bus shelter solution possible.

There’s no question too silly. There’s no challenge (so far) that we haven’t been able to develop a creative solution for.

The Externiture team are here to help you make the right choices and to make sure you get the shelter that best suits your particular situation so please do call us and discuss your requirements.

Call us today on: 01635 862 100
What is the difference between shelters?

Externiture provide the best value bus shelters. There are several ranges to suit different budgets and locations.

Standard shelters are simple, effective structures that provide great weather protection and a 10 year warranty.

Premium models are precision engineered with higher load-bearing capacity, a wider range of optional extras, and come with a 20 year warranty.

We have four bus shelter designs/styles.

**Bus Shelter Ranges**
- **“Brookes”**: Standard traditional design. Usually best option from a price perspective. Still great quality.
- **“City Light”**: More elegant traditional design bus shelters. Usually mid priced. Smart looking.
- **“Sharp”**: Modern ‘angular’ design. Premium priced.

Below are some things to think about when deciding which bus shelters to select.

**Location**
Location is often a key factor. For suburban and lighter-use locations, the Brookes shelters are excellent value. The City Light is competitively priced too.

Main corridor, town centres are ideal for the City Light as well. To add architectural impact, the Sharp and Utopia work fantastically. The Sharp and Utopia bus shelters are popular for bus stations, rapid transit and other high volume passenger stops.

Most popular are the Brookes and the City Light bus shelters with contemporary looks that suit any environment. The City Light’s heavier aluminium frame and build quality are very attractive with it’s generous 20 year warranty.

**Budget**
The ranges available mean that you do not need to compromise to stretch your budget. Brookes give a lot of value, but the additional premium for the City Light, Sharp and Utopia is supported by their fantastic lifespan and engineering excellence.

**Build**
City Light, Sharp and Utopia shelters are a modular structure - precision engineered to higher standards and consistency. They are pre-assembled and tested in our warehouse, and then transported to be installed. Although still great quality, the Brookes bus shelters are built on-site and made of thinner Aluminium.

**Configurations**
All our shelters can be supplied in almost all available configurations of size, panels, end panels, roof types.

**Additional Shelter Types**
We also supply wooden bus shelters and “heritage- style” bus shelters.

---

Call us on 01635 862 100 if you have any questions. We love to help.
Traditionally a bus shelter roof has been made from clear glass or polycarbonate. This is a see-through roof.

However, many customers now specify a solid roof. The main reason for this is that, over a short period of time, bus shelter roofs get a coating from nearby trees and traffic grime. This means that the shelter looks dirty and requires cleaning. However, by having a solid roof it doesn’t matter what dirt is on the roof - as you cannot see it.

Cleaning is quicker and cheaper and it is safer as cleaning can be done without ladders.

A solid, aluminium roof lasts longer too which reduces long-term maintenance/repair costs.

A solid aluminium roof may cost more in the short term. However, it saves significantly on maintenance by reducing the frequency that the bus shelter will need cleaning and the length of time the shelter will take to clean.
FAQ
What roof shapes are available?

Vaulted (Barrelled)
- Low maintenance.
- Contemporary shape.
- Curved roof struts need to be checked every 5 years.

Pitched
- Suits heritage sites.
- Can suit solar.
- Can be more expensive as it has more parts.
- Apex and additional seals/joints need to be included in maintenance regime.

Flat
- Great for solar panels.
- Less cleaning if solid.
- Can use the “seedum” roof
- Seals need to be maintained every 5 years.
Glazing and Panels

Polycarbonate or glass are the most common, but there are other materials that you might consider. Remember, it is possible to combine materials. The choice of the materials comes from the location characteristics. Think about how the shelter will fit into the environment.

**Polycarbonate**
Transparent, more vandal resistant than glass from striking/impact. Lighter than glass.

**Toughened Glass**
Clearer appearance. Doesn’t deteriorate as quickly as polycarbonate. It can’t be burned. It is stiffer than polycarbonate.

**Perforated Aluminium**
Vandal resistant. Allows for some visibility. Partially protects from vegetation. Reduces cleaning requirement compared with polycarbonate and glass.

**Solid Aluminium**
Vandal resistant. Blocks view completely. Protects from vegetation. Reduces cleaning requirement compared with polycarbonate and glass.
Although visibility is obscured, perforated panels ensure that customers still have a visual awareness of their surroundings.

This shelter has all perforated panels as it is near a school and vandalism was a consideration whilst maintaining some visibility.

Situated close to flats, the back solid panels help prevent waiting passengers from peering into nearby home owner’s windows.

Solid back panels allow the shelter to be closer to the back of the pavement (as they don’t need cleaning) and also protect from vegetation.
Side/End Panels

You should always try and offer passengers the most protection that you can from the weather. So, the best option would always be a full-end panel on both ends of your bus shelter.

If the footway width doesn’t allow this, then the side panels can be reduced to either: half-end panels, quarter-end panel or a ‘cantilever’ shelter (i.e. no ends).

Points to remember

• The shelter roof needs to be 500mm back from the kerb edge, possibly more if the bus comes in at an angle

• You need to leave a minimum of 1.1m for pedestrian access passed the shelter. If it is a busy footway then more space would be needed

• A shelter can have different end panel sizes.

• You don’t have to have the same sized panels at both ends.

• You don’t have to have the same materials both ends (e.g. you could have clear glass so passengers can see the bus coming and perforated aluminium the other end).
FAQ
What are the different end panels I can have?

You have 4 options when it comes to the side panels of your bus shelter. You can have them “See-through” (with polycarbonate or glass), “Perforated” (aluminium with small holes punched through) or “Solid” (zero visibility - made from solid panel of aluminium).

The side panels can be supplied as a ‘full drop’ panel or as two smaller panels with a mid-rail as per graphics below.

A  Full-End
B  Half-End
C  Quarter-End
D  Cantilever
An example of half-end panels. Why? Because, although the shelter could have had full-ends, aesthetically, it looks better due to the shelter’s size.

Half-end panel on nearest end. Full-end panel on farthest end. Giving customers appropriate access and protection.

This is on quite a narrow footway, but there was enough space to fit quarter-end panels to the shelter and provide some protection for passengers.

When access to the bus shelter is narrow or on a very busy footway, it might be best to have no ends at all. This is also ‘cantilever’ shelter.

An example of half-end panels. Why? Because, although the shelter could have had full-ends, aesthetically, it looks better due to the shelter’s size.
FAQ
What is a "Cantilever Shelter"?

When a shelter has no side panels and no front panels, it becomes “top heavy” and would be unstable if it was just being held up by its standard supports positioned at the back of the shelter. Therefore, the roof needs to be supported by a self-supporting cantilever beam at the top of the shelter. And, we also need additional support under the ground to add strength and stability to the shelter.
Seats

The choices are bench seats, pad or perch seats. Many passengers (for example, the elderly) do not prefer the perch seats as they are not as comfortable. However, they take up less room and cannot be slept on.

Bench seats come with or without arms. Arms are good for those who are maybe a bit unsteady to use to push themselves up. Arms also mean the shelter cannot be used by “sleepers”.

Benches, perches or pads can be mounted on brackets attached to the shelter or fixed into the ground - which is strong, but will be more expensive.
Real Time Information (RTI)

You might want a shelter that is RTI-ready. That means an electrical cable is run from the bracket that will hold the RTI display to an electrical box within the shelter.

For safety, this connects to a feeder pillar which is separate from the shelter on the footway.

The feeder pillar will be fed by your local electricity Distribution Network Operator (DNO), but it might be your responsibility to connect from the feeder pillar to the shelter.

An important thing to note is that the bottom of the RTI display has to be 2100mm above the footway.

“The cabling and fixing brackets are ready for the RTI supplier to fit their sign.”
Timetable & Poster Cases

All our bus shelters can have poster cases and timetable cases fitted.

We have our own range of timetable cases or we can work with Trueform and/or Bissell cases.

There are a wide range of poster case sizes available. Most timetable cases will be “Double Royal” size (as per image below). These are a standard paper size used across the country. Sometimes the A1 size will be used.

Cases can be retro-fitted but it is harder on glass than on polycarbonate or metal.

Did you know that, with our timetable generation software, we can create and print your timetables for you?

Or, you can easily do it yourself.
Flag Posts

If required, the flag post can be part of the shelter roof. This means you can reduce the amount of infrastructure by not having to have a separate flag post.

You also need to consider other street furniture such as bus stop clearway plate and litter bins might be needed at your new shelter location.

NFC/QR or QR plates

Quick Response (QR) codes or Near Field Communication (NFC) devices enable passengers to use their smart phones to get the bus times of the next 3 buses for that specific stop.

This is used quite widely in some areas for additional passenger information where there is no Real Time Information (RTI) available.

We can generate, create and print the QR codes (which users scan) as well as programming and providing the NFC devices (which users ‘tap’ with their phone) for your bus shelters.
Questions to Consider

**Standard or Premium**
Where is the shelter located? High priority location, main corridor, rural, high passenger volume, near a school etc. Do you need the shelter to look stunning or is it more of a ‘utility’ requirement.

**Position/Environment**
Any sloping of pavement? Pedestrian access. Foliage. Proximity to houses. Likelihood of vandalism. Is it on a cycle path? Is it on a bend (visibility)? Rural or Town?

**Height**
A shelter needs 2.1m clearance from the ground. If it is near a cycle lane, we recommend 2.3m. If you need Real Time Information (RTI), we use 2.1m clearance from the bottom of the RTI display.

**Width**
How much space do we need? How busy is the stop? How many people may it need to shelter. How much space do we actually have? Pavement width? How many back panels will this need? How exposed to the weather is the shelter?

**Colour**
Want to stand out or blend in? We can supply shelters and seating in a wide range of colours.

**Roof Shape**

**End Panel Sizes**

**Our Access to site**
Speed of the road the bus shelter is on? Curve of the road? Parking for our vans/crane? Density of traffic?

**Technical/Electrical**
If you need RTI, you may need power or solar panels? Lighting? Clean Air Shelters?

**Access**

**Special Passenger Groups**

**Project Considerations**
When do you need it done by? Funding? Bulk/combined purchases with other councils?

**Future Requirements**
Maintenance? Cleaning? Refurbishment?
Glossary

DDA
The Disability Discrimination Act works to protect people with disabilities from discrimination. Additional thought and features will need to be implemented to meet these requirements when it comes to bus shelters. For example, dropped kerbs for wheelchair users and tactile paving for partially sighted passengers.

DNO
Distribution Network Operator. The company that is responsible for the distribution of electricity from the national transmission grid.

Cantilever
A shelter which is not supported by any front posts and requires additional support structures. A shelter without sides is, by default, a cantilever shelter. However, a shelter with sides may still be a cantilever shelter if the side panels are not providing any structural support.

Clearway Plate
As small yellow sign that says “No stopping except for buses” and may also include times when this doesn’t apply.

Full End
End panel on the shelter is approximately 100% of the width of the overall shelter width. Providing maximum shelter from the weather.

Half End
End panel on the shelter is approximately half the width of the overall shelter width.

NFC
Near Field Communication. Bluetooth radio transmission technology passengers can use their smart phone/devices to pick up relevant information (URLs, text etc)

Poly carbonate/Perspex
Clear material (sometimes tinted) for shelter panels and roofs as an alternative to glass.

QR Code
Quick Response Code. A square, dotted graphic that can be read by smart phones/devices and provide users with information (URLs, text etc)

RTI / RTPI
Real Time Passenger Information. Display units within the bus shelters.

RTI Ready
The cabling and bracket are ready for the RTI supplier to fit their sign.