



At 123v Plc our philosophy is to combine four important elements to create the ideal solution: Design, Manufacture, Installation & Value



THE CANTILEVER CANOPY

Maximum projection from wall 3629mm

Material Specification

Most cantilevered canopies look similar, however they are significantly different.

Beams:

Our beams are hand laminated in Glass Reinforced Polyester (a modern-day version of fibreglass) to a specification suiting each individual project, including where necessary, special projections, moulded-in cutouts, and individual beam load requirements. These are further reinforced with a unique structural grade alloy 6082T6 (BS 1474) section, designed by our **R&D** Department for use in our GRP beams. This makes for a stronger beam with far superior roof sheet fixings. We consider using only standard beams inadequate.

Sheeting:

The GRP roofing sheets (85% translucent) are machine formed to our exclusive profile with co-extruded ultraviolet filter (class-3 fire rating). This sheeting is designed by our own **R&D** department to provide maximum strength with an expected service life of 30yrs. Our sheeting conforms to British Standards.

Wall fixings:

Wall fixings are manufactured by Hilti Great Britain. These would normally be mechanical (20mm diameter) or chemical anchors depending on the base material to which the beams are being attached.

Fascia:

Fascias as standard are in structural grade alloy 6082T6 (BS1474), powdercoated (BS6496). Although a plastic fascia would be cheaper, it would spoil an otherwise highly specified product.

Brackets:

On occasion circumstances dictate that load-spreading brackets are required. These brackets are fabricated in grade-43 steel, galvanised (BS EN ISO 1461) and powdercoated (BS6496). This finishing of the brackets is to a marine specification and will not require any maintenance. Brackets are added so as to comply with BS6399 part3 to ensure structural stability.



THE TRADITIONAL CANOPY

Single Pitch maximum projection from wall 10200mm (33ft)

Dual Pitch maximum projection from wall 7625mm (25ft)

Material Specification

Beams & posts:

Our beams (97mm & 240mm) and posts are extruded in structural grade aluminium 6082T6 (BS1474) and powdercoated (BS6496). On occasion special posts are fabricated in grade-43 steel, galvanised (BS EN ISO 1461) and powdercoated (BS6496).

Ground work:

New concrete foundations are specified per individual job requirement.

Sheeting:

As with our Cantilever range, the Traditional Glass Reinforced Polyester roofing sheets (85% translucent) are machine formed to our exclusive profile with co-extruded ultraviolet filter (class-3 fire rating) with an expected service life of 30yrs, conforming to British Standards.

Wall Fixings:

Wall fixings are manufactured by Hilti Great Britain. These would normally be mechanical (20mm diameter) or chemical anchors depending on the base material to which the beams are being attached.

Fascia:

Fascias as standard are in structural grade aluminium 6082T6 (BS1474), powdercoated (BS6496).

Brackets:

On occasion circumstances dictate that load-spreading brackets are required. These brackets are fabricated in grade-43 steel, galvanised (BS EN ISO 1461) and powdercoated (BS6496). This finishing of the brackets is to a marine specification and will not require any maintenance. Brackets are added so as to comply with BS6399 part3 to ensure structural stability.



The Traditional Range:

Create a
Classroom
Outdoors



The philosophy at 123v Plc is to base the strength of our products on engineering principles. This enables outstanding structural performance over a long period of time. Many people however agree there is nothing like a real test of nature. To confirm our calculations correct, please find a testament below where one of our structures experienced wind speeds excess of 120mph.



15.01.05

Dear Robin,

You may remember that your team recently created a cantilever car port 18'x 10" at the gable end of my croft house on the Isle of Skye. As I live only a few yards from the shore I needed your assurance that the structure would withstand very high winds which regularly batter the island in the winter.

On the night of the 11th January the area was in the eye of a severe storm with gusts reaching hurricane force and locally recorded at 124mph. Although a great deal of damage was sustained to my sheds, fences and trees, the car ports remained firmly affixed to thecroft and sustained no damage. The storm was one of the worst in living memory on Skye.

Your calculations were correct, a testament to yourself and your product.

Many thanks

Regards

Kevin Penman

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TURN KEY SOLUTION: Oakwood Infant School, Clacton on Sea

The Problem:

Four canopies previously installed by another company totalling an area of 260m sq. failed during the first winter

The Answer:

123v Plc. We were appointed to replace the structures due to our design and engineering abilities

The Process:

Product designed in 3D AutoCAD
Structural calculations submitted and approved
Planning Permission approved
Building Regulations approved
Materials ordered and product manufactured
Installation completed during 8 days of School holidays
Site cleaned, ready for School use





Strength with
appearance

Quality
everytime





Create a
Sheltered
Waiting or
Activity Area

At 123v Plc we are unique in the marketplace by being able to offer a complete professional in-house service by specializing in the design, manufacture and installation of canopies, carports, covered walkways and other forms of shelter in cantilevered and traditional designs.

Each project is planned using 3D computer-aided design, taking into account structural calculations and the aesthetic requirements. Materials are manufactured in our factory premises to the needs of each individual client, and the installations carried out by our own fully-trained staff. Everything is made-to-measure, not made to fit. Whatever your need, we can do it.

We have fitted hundreds of canopies all over Britain. Only with this vast experience are we able to guarantee our canopies in extreme weather conditions, with each maintenance-free product carrying a 10yr guarantee for all parts and labour.

Each complete project is approved under **British Standard EN ISO 9001:2000** for the Quality Administration Systems, **British Standard EN ISO 14001:2004** for the Environmental Management Systems, and **British Standard BSI OHSAS 18001:1999** for the approved Occupational Health & Safety Management Systems applying to the Design, Manufacture and Installation of Glass Reinforced and Other Laminated Structures.



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