

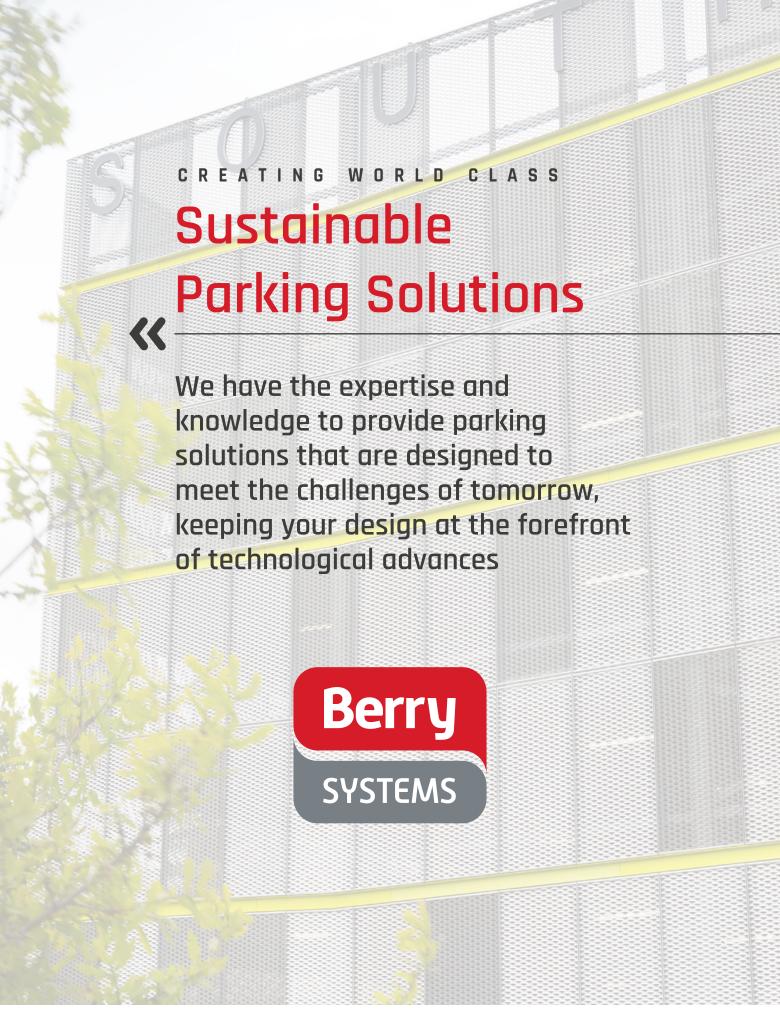


# ~ م ш

www.berrysystems.co.uk

PARKING SOLUTIONS

N - . ٣



















Berry Systems designs, supplies and installs physical security systems to protect people, property & vehicles. We work on projects across sectors and the urban environment.



































T O M O R R O W

With almost half a century of experience to call upon, Berry Systems has the expertise and knowledge to provide parking solutions that are designed with the next 50 years in mind, keeping our customers at the forefront of technological advances that will ensure your facilities are equipped to manage change.

Urban development requirements mean that today's parking facilities are designed to enrich the aesthetics of its surroundings and enhance the end user experience. With one eye fixed firmly on the needs of tomorrow, Berry Systems design, supply and install sustainable parking solutions.

The expert team here at Berry Systems can provide advice and support in designing energy efficient parking facilities, that meet the challenge of increasing electric vehicle use and a fast-changing urban landscape.

Talk to us early in your design process about your new-build or refurbishment project. We can advise on the latest developments in vehicle restraint systems, innovative solar powered EV charging points and a range of parking solutions to suit your requirements.

We are part of Littlewood Fencing Ltd, a group of companies that are market leaders in providing infrastructure products. With a focus on engineering designs for the roads and utilities market, the Littlewood group hold strong positions in niche markets, delivering solutions worldwide.



# >> CONTENTS

#### **ABOUT US**

| PARKING SOLUTIONS OF TOMORROW    | 04 |
|----------------------------------|----|
| EVERYTHING FOR YOUR PROJECT      | 06 |
| CAR PARK DESIGN ADVISORY SERVICE | 07 |
| TESTING AND SURVEYING            | 08 |
| STANDARDS AND REGULATIONS        | 09 |

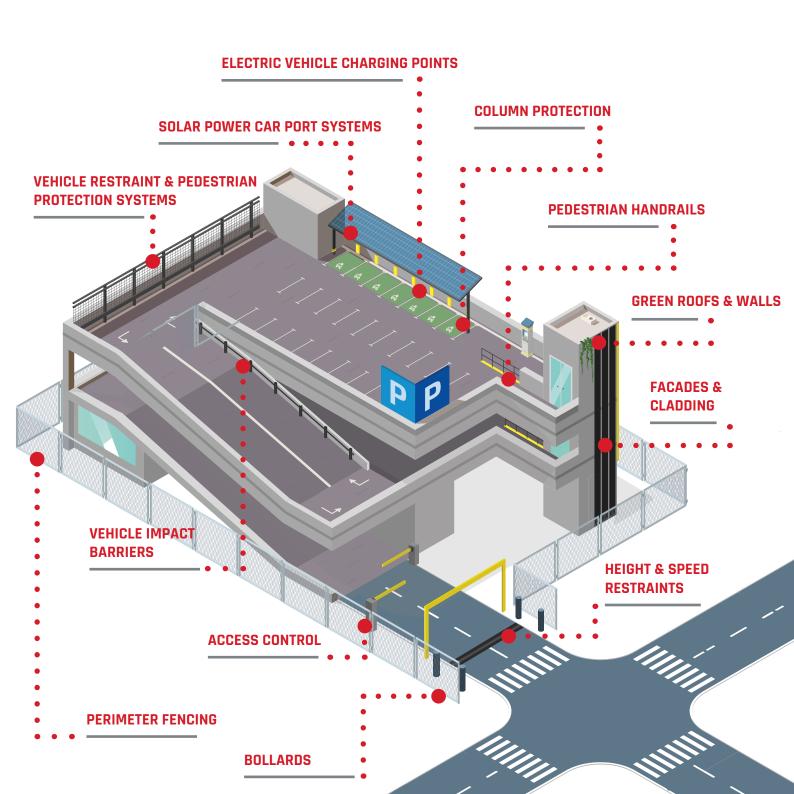
#### **PRODUCT OVERVIEW**

| VEHICLE RESTRAINT SYSTEMS                 | 10 |
|---|----|
| FACADES AND CLADDING                      | 14 |
| PARKING SOLUTIONS                         | 19 |
| EVC SUSTAINABLE ELECTRIC VEHICLE CHARGING | 24 |
| PERIMETER SECURITY FENCING                | 28 |
| ACCESS CONTROL                            | 34 |
| BOLLARDS & PARKING POSTS                  | 36 |
| GLOSSARY                                  | 39 |



# Everything

FOR YOUR PROJECT



#### CAR PARK DESIGN ADVISORY SERVICE

# CP-DAS

Early contractor involvement is crucial to ensure that all the requirements of your project are expertly addressed right from the initial planning stage. By taking advantage of CP-DAS, the Car Park Design Advisory Service from Berry Systems, we ensure that every aspect of your development is carefully co-ordinated, from conception to completion, and that your project is fully future proof.

We provide a comprehensive consultancy service in all areas of car park design, including access control, safety protection, traffic flow and exterior cladding options. All surveying and design work is carried out by our inhouse experts and we have a full CAD service, utilising the latest software. Our testing facilities ensure your project meets the very highest standards of quality and safety.

At Berry Systems, we combine our expertise with a range of top-quality products and unbeatable service. Whatever you require, we will find you a solution.



#### **PRODUCT MANUFACTURE**

Our wealth of knowledge in steel and car parks gives you access to the best products on the market. We also manufacture products bespoke to architect requirements without compromising on safety.



#### **FULL PROJECT SUPPORT**

Our expert team is here to support you in all aspects of your project, from initial concept right through to completion, making certain that everything runs smoothly and to schedule.



#### **MAINTENANCE**

We carry out the maintenance and inspection of multi-storey car parks in accordance with the Institution of Structural Engineers, keeping your facility fully operational.



#### LOGISTICS

We will work with you to plan and schedule deliveries to meet the demands of your project, helping you to keep your schedules on track.



#### **SURVEYING & TESTING**

We offer a full surveying service for both supply only and supply and fit projects. Our testing facilities ensure all products and projects meet the most stringent standards of compliance.



#### **SAMPLES**

We can provide visual 3D renders and physical samples for your project so you can get a clearer vision of how your development will come together.



# Testing

AND SURVEYING



Quality and safety are key to everything we do at Berry Systems. Our expert testing and survey services ensure that our customers and their projects benefit from this passion for perfection.

We undertake structural and general surveying to provide precise, clear-cut and comprehensive reporting with all the information and recommendations required to make the right choice for each project.

Not only are all our products tested to meet the most stringent and exacting standards, but we provide an expert in-depth site testing service for existing multi-storey car parks. We also conduct installation compliance testing, which is recommended for car parks every 16 years to ensure safety standards are still being met.

#### **SPECIALIST EQUIPMENT**

QUICK AND ACCURATE RESULTS

We use specialist testing rigs to efficiently load test edge protection barriers, providing customers with quick and accurate results. All testing and reporting is in strict accordance with appropriate standards and guidance.

#### **VITAL SAFETY CHECKS**

LOAD TESTING OPTIONS

Load testing car park edge protection is vital to ensure that barriers are safe and to highlight any potential faults with design or installation, reducing the risk of injury to users of the car park. We provide pseudo-static load testing, anchor pull out load testing and dynamic load testing.

USING THE LATEST
EQUIPMENT AND MACHINERY,
WE PERFORMANCE TEST
VEHICLE RESTRAINT SYSTEMS,
ANCHORS AND GENERAL
CONDITION BEFORE PROJECTS,
PROVIDING DETAILED RESULTS
AND RECOMMENDATIONS



### **STANDARDS & REGULATIONS**

The latest impact forces are given within BS EN 1991-1-1. Barriers and parapets within car parking areas should be designed to resist the horizontal loads given within the document. These are based on this formula:

#### $F = 0.5 \text{mv}^2 / (\delta_c + \delta_b)$

m is the gross mass of the vehicle in (kg)v is the velocity of the vehicle (in m/s)

- $\delta_c$  is the deformations of the vehicle (in mm)
- $\delta_b$  is the deformations of the barrier (in mm)

B(3) where the car park has been designed on the basis that the gross mass of the vehicles using it will not exceed 2500kg the following values are used to determine force F.

**m** = 1500kg

**v** = 4.5m/s

 $\delta_c$  = 100mm unless better evidence is available

This is also to comply with the Institution of Structural Engineers (IStructE) 'Design recommendations for multi-storey and underground car parks'. The diagram below right shows where single and twice force systems need to be applied:

# INSTITUTE OF STRUCTURAL ENGINEERS

As a business operating within structural engineering criteria, we endeavour to meet the recommendations advised by the Institution of Structural Engineers. In the IStructE 'Design recommendations for multi-storey and underground car parks', there are significant proposals for the use of vehicle barriers and design considerations within multi-storey car parks. The diagram and supporting key helps demonstrate the advice given.

#### **TWICE FORCE**

Opposite the ends of straight ramps intended for downward travel which exceed 20m in length, the barrier has to withstand twice the force.

#### STANDARD FORCE

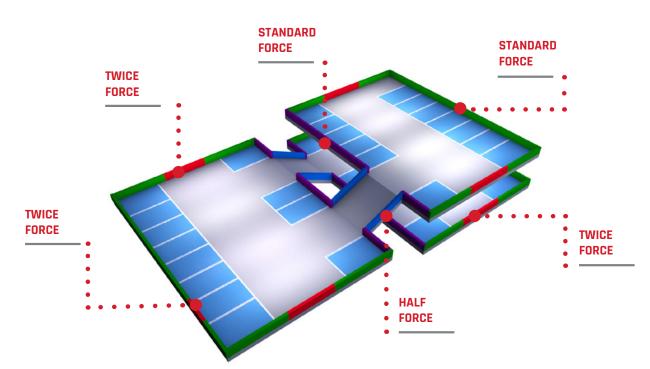
Split level

#### AND

When the direct vehicle approach to the barrier is less than 20m

#### **HALF FORCE**

Typically used on ramps due to the angle of impact changing to 45°. The barrier systems have to withstand half the force given within BS EN 1991-1-1.





# VRS

V E H I C L E R E S T R A I N T S Y S T E M S

We have been specialists in the design, manufacture and supply of industry-leading vehicle restraint systems for more than 45 years.

With a broad range of up to date products for modern methods of construction and cost-effective solutions for refurbishment projects, our vehicle restraint systems provide the highest protection for any development.

We ensure compliance to varying standards by only installing and supplying tested and approved systems to maintain the safety of all those using the car park facility.



# BRI-SAFE

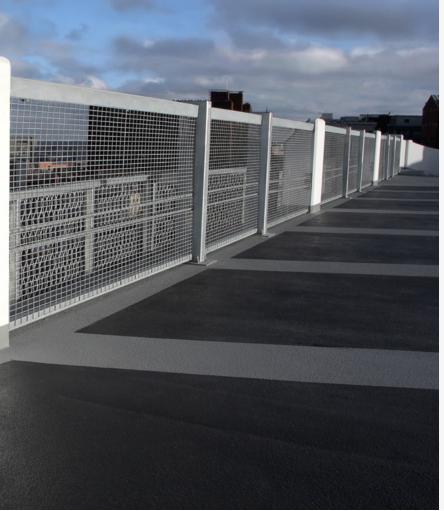
This tensioned system provides a truly flexible design. Manufactured from three lengths of wire rope that are anchored under tension to the car park columns, Bri-Safe forms a barrier to prevent both vehicle and driver from falling from the edge of the structure itself.

Upon impact, the wire ropes deflect and absorb the impact energy forces to then return to their normal 'resting' position.

#### **MORE AVAILABLE PARKING AREA**

With a zero footprint in the parking bay, Bri-Safe allows architects to maximise the parking space available. It also provides flexibility to enhance the appearance of the whole structure combined with independently tested safety performance.





### SYSTEM 3

Comprising of untensioned steel bars anchored to the structural steel columns of the car park itself, the System 3 solution provides protection against impact. The reduced impact deflection and footprint figures make System 3 an attractive option for both new build and refurbishment projects. The system is 'locked off' at each column on installation, so can easily be replaced should an impact occur.

#### **DESIGN FLEXIBILITY**

System 3 can span between typical 7.5m columns. If deflection zones need to be reduced, we can install Berry Flexi-Bollards to achieve this.

Like the Bri-Safe system, there is a wide range of infill panel options to choose from, including wire mesh and screen printed.

# <u>FLOOR</u> MOUNTED



Traditional floor mounted safety barriers for single level or multi-storey car parks can be mounted on flexible, semi-flexible or rigid posts.

They are also often used inside industrial sites or externally to help protect the structural integrity when there is a risk of accidental collisions.

#### **SPRING STEEL**

The Spring Steel option is economical in footprint and has the advantage of absorbing some of the impact, meaning reduced loadings into the slab. Ideal for uneven surfaces, an additional base plate assists in levelling the buffer and spreads the impact load over a wider surface area to avoid damage to the substrate.

#### **RIGID POST**

Rigid Barriers have a limited deflection and deformation of the barrier and damage to the vehicle is likely with a significant impact. Rigid post systems are ideal for areas where barriers need to be placed as close to a wall or cladding line as possible.

#### **FLEXI-POST**

The flexi-post system combines both a flexible rubber absorption and rigid post design. This means that we can achieve limited deflection zones whilst reducing loadings transferred into the substrate.

#### **SPLIT LEVEL SAFETY**

A barrier protection must be installed if a drop is greater than 380mm between levels.
Berry's pedestrian mesh infill system can be utilised to further increase safety to pedestrians and prevent them from falling through the open spaces between levels.

#### **RAMP SYSTEMS**

A protection system must be in place on ramps to absorb potential impact forces and to prevent vehicles from falling. To further increase these safety measures, our pedestrian barrier and combined mesh infill system ensures pedestrians are unable to climb on the ramp or fall through the gap between levels whilst still withstanding a vehicle impact.

#### PEDESTRIAN PROTECTION

Pedestrian handrail systems in parking structures should be able to withstand a 1.5kN load. All of our vehicle barrier systems can incorporate a handrail and mesh design. These are designed and tested to the latest standards (BS 6180).

# COLUMN PROTECTION UNITS



Our range of column protection units allows us to protect critical structures within a car park as well as protecting vehicles from bumps and scrapes.

We have a range of Column mounted, floor mounted and wall mounted units available to suit any scenario within your parking area.



#### **COLUMN BUFFER PLUS**

The column buffer units utilise our RB1 posts with a radius warehouse rail semi circle, available in 500/750 and 1000mm diameter units as standard.



#### **COLUMN SENTRY**

Made from semi-flexible and stress crack resistant plastic, our Column Sentry CPUs restrict access to vehicles and protect pedestrians using an air cushion method designed to absorb energy generated by impact.



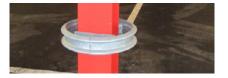
#### **COLUMN MOUNTED**

The rubber block CPU acts as a visual deterrent unit attached directly onto the columns. Hi Viz PPC corners with black EPDM rubber provide a perfect solution against scrapes and light impacts.



#### **HEAVY DUTY CPU**

The Heavy Duty CPU is built to withstand impacts from larger vehicles, making it ideal for industrial yards where HGVs are present. The additional protection this CPU provides reduces the risk of collisions into supporting columns, structural items, stock and machinery.



#### I BEAM PROTECTOR

The I Beam protection is a clamped on protection unit that requires no drilling of the columns. With our in house designed bespoke brackets we can manufacture to suit any size UC.



#### **MONOSTRUT CPU**

A light and economic spring steel system, the Monostrut Rail CPU offers protection against small passenger vehicles travelling at low speeds. This system is suitable for both interior and exterior use and comes in a standard 400mm diameter triple height unit.



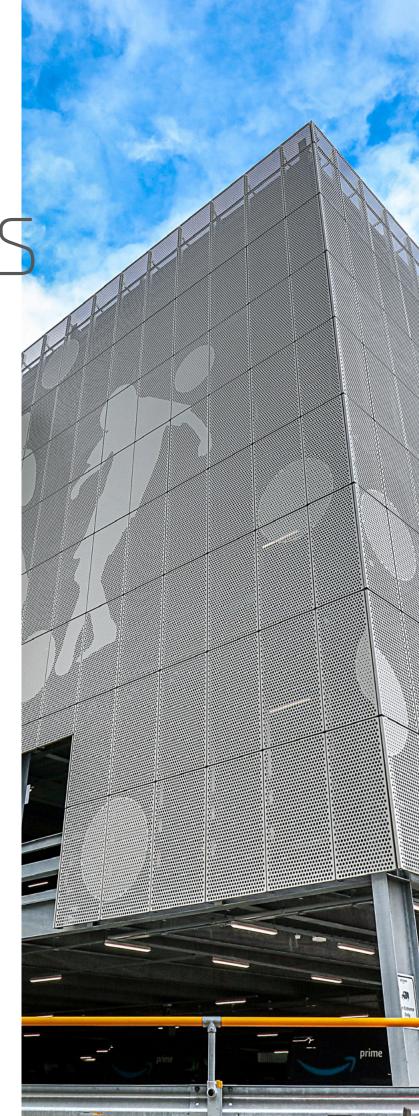
# Facades

AND CLADDING

Berry Systems provide complete packages for building exteriors, including cladding, curtain walling, perimeter barriers and pedestrian protection.

By involving Berry Systems in projects at an early stage means we can work with the architect to bring designs into reality. Using our knowledge and industry leading experience, we can deliver the design brief whilst working within site restraints, achieving the latest regulations and meeting client expectations.

Our portfolio includes a wide range of popular rainscreen cladding and facade choices and are available in various finishes and effects, including Galvanised, Polyester Powder Coated (PPC), Polished, Glass and Anodised.



# RAINSCREEN **CLADDING**

Rainscreen cladding protects the structure from wind, rain and fire.

Panel designs easily interface with other components to give a complete finish to the facade.

We work to the latest standards including Approved Document B (ADB v.2) and work closely with the schemes fire engineers to ensure the panelling meets the latest fire rating requirements.

We are able to provide Fire Tested composite and built up systems to meet A1 'non-combustible' requirements.





Perforated cladding provides practical functionality, helping to manage the amount of natural light required in the car park.

Perforated patterns have near infinite flexibility in the design. Patterns can be used to create imagery, 3D effects and shading on a scheme.

# TRAPEZOIDAL **PROFILES**

Made up of a series of corrugations, Trapezoidal profiles are mounted either vertically or horizontally for a variety of aesthetic effects in a wide range of colours and finishes.

# COMPOSITE CLADDING

Designed for partial or full weather board cladding, our smart composite panels give instant impact when applied to any property. These can also be used where boundaries of the site require fire resistance. We are able to install fire rated systems with outer shell cladding to keep the aesthetics of the building consistent.





# <u>EXPANDED</u> METAL MESH

Expanded metal mesh is one of the most popular forms of cladding in multi-storey car parks, providing a wide choice of styles and strands.

Various apertures betweens strands can provide different shading effects, this also allows different open areas to be achieved allows for natural ventilation.

# WOVEN MESH

Available in high tensile, stainless and galvanised steel, woven mesh can be practically limitless in its range of designs, opening up new dimensions in architectural cladding. Due to its woven nature often high open and visual areas are achievable.



Timber is a great choice for softening the aesthetic of a building into the natural environment. It can be extremely durable and long lasting, giving a great solution for the façade. We also only source our timber only from FSC accredited suppliers.

# GREEN WALL

Green walls are an increasingly popular option for architects and specifiers.

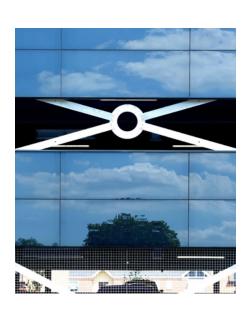
Façades can be utilised in various configurations to support climbing or scrambling plants. Not only is this a practical method of giving a building a more natural appearance, it also helps to purify the air and lower ambient temperature inside the building, reducing the need for air conditioning.

There are three main options for green areas on carparks, Green Roofs, Green Walls and Climbing Trellis Systems.



# GLASS RAINSCREEN CLADDING

Rainscreen glass panels can be screen-printed and custom made to any size or shapes. The system is extremely lightweight and is quick and cost effective to install, inside or outside.



# www.berrysystems.co.uk

# FINS & LOUVRES

Available in a range of materials, Fins & Louvres can be installed vertically, horizontally, inclined or twisted to create unique aesthetics.

The positioning of the fins and louvres can provide suitable solar shading to the car park decking whilst also maintaining high open areas for air flow.





# BESPOKE DESIGNS

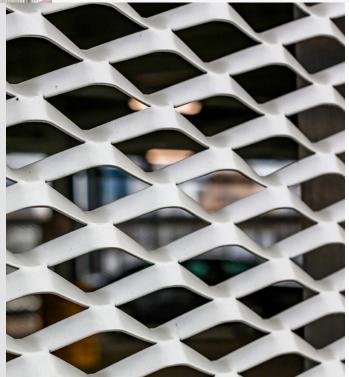
All of our cladding projects are designed to suit the arhcitectural reuqirements, whether a special finish or unique pattern, our designers will be able to assist.

### **SAMPLES**

#### **REQUEST A SAMPLE**

If you need cladding for your next project, we can provide you samples to help you make the best choice.

Contact us on **01902 491100** or email **sales@berrysystems.co.uk** to find out more about our expanded mesh, timber fins or perforated panels.





# Parking Solutions

Berry Systems are able to offer a turnkey solution for your parking needs, with the ability to supply, design and install your parking structure right through to handover to the operator.

By bringing together all of our individual product ranges, we can provide an efficient service all the way through the build process.

We design and erect concrete and steel superstructures, utilising modern methods of construction that encompass modular components and traditional built methods.

Working with clients to meet the specific requirements of your project, our expert team create innovative designs that will provide value engineered solutions.



#### PLANNING, DESIGN

# AND BUILD



Our CP-DAS service enables us to project manage your TopDeck project from concept to completion through a devised strategy to enable efficient installation, while utilising resources that are kind to your budget.

The planning and design of parking structure installation is typically in three steps.

#### STEP 1

#### CONCEPT

The initial concept is developed, we can produce this simply from satellite photography if you don't have current CAD plans.

#### STEP 2

#### **CAD DRAWINGS**

We will then produce a fully detailed CAD plan with elevations. This is normally deemed to be sufficient for planning applications.

#### STEP 3

#### **FINALISED DESIGN**

A full set of investigations can be completed in order to finalise the design. Full 3D models can then be produced ready for fabrication and construction.

#### **BUILD**

#### **MODERN METHODS OF CONSTRUCTION**

TopDeck Car Parks have been designed incorporating many modern methods of construction, enabling installation to be completed in days rather than months.

- AUTOMATIC LANE MARKINGS RUBBER SEALS BETWEEN MODULES VISUALLY DELINEATE PARKING BAYS.
- MODULAR RAMPS AND STAIRS FOR RAPID ATTACHMENT TO PARKING MODULES.



#### **PLANNING**

We meticulously plan the initial concept of the project to cater for all requirements. Making sure the stakeholders needs are taken into account, so that when the scheme is then sent to planning the design requires as fewer changes as possible.



#### **DESIGN**

We create a detailed design using CAD and 3D site modelling. Using the latest software we can provide a detailed model to ensure each aspect of the scheme can be reviewed and understood.



#### **BUILD**

Our expert installation teams utilise speed build technology to erect your project. Through each phase of the project we ensure programmes are provided to give you clarity on the status of the job and how we can keep your site moving during construction.

# TOPDECK MODULAR

TopDeck utilises modular design philosophy in a carefully optimised layout to provide the maximum potential for your site. In theory, there is no minimum or maximum number of parking spaces in a TopDeck car park but typical capacity is between 70 and 700. Standard modules are 16 metres long comprising two opposing parking bays at 2.4m x 4.8m separated by a 6m access way. Our catalogue of products from barriers to facades, can all be integrated with TopDeck.



Berry Systems can provide a turnkey offering for your parking requirements. Providing future proof solutions to accommodate changing business and urban requirements.



#### PRE-ASSEMBLED

Off-site preparation and assembly means reduced construction time. Optional Speed-Build Cladding where required.



#### **ADAPTABLE**

Our expert team will work closely with you on all aspects of your project to ensure success. Access lanes identified by colour of deck coating.



#### **RAINWATER MANAGEMENT**

Installed to provide a 1:50 gradient for rainwater run-off, the Top Deck surface is a resin based slip resistant waterproofing system. Fast and easy clip-on drainage systems can be added once the decks are in place.

## **INNOVATIVE DESIGN**

#### **FUTURE PROOF INVESTMENT**

TopDeck meets all relevant building regulations and standards and is suited for square or rectangular sites where modularisation can be vastly duplicated.

The flexibility of TopDeck allows it to be installed along with ramps for optimised traffic flow and stairs for pedestrian safety, without compromising existing facilities.

#### **BENEFITS OF TOPDECK SOLUTIONS**

- MODULAR DESIGN FOR FAST EFFICIENT ERECTION
- PRE-FINISHED ANTI-SKID DECKS
- MINIMAL DISRUPTION DUE TO OFF-SITE CONSTRUCTION
- NO FOUNDATIONS NECESSARY IF SITE CONDITIONS ARE SUITABLE.
- SCREW PILE FOUNDATIONS FOR RAPID INSTALLATION IF FOUNDATIONS ARE REQUIRED.



#### **OFF-SITE CONSTRUCTION**

'FLAT PACK' FOR RAPID ASSEMBLY

Many elements of TopDeck are built at our manufacturing facilities. The water resistant, anti-skid, grit-coat surface is also factory applied and safety barriers are pre-installed. Hinged columns are incorporated where required for structural integrity with maximum accessibility. Quality control is ensured by manufacturing systems to BS EN ISO 9002 and galvanising to BS EN ISO 1461:1994.

Units are delivered to site in a 'flat pack' state for rapid assembly as each unit is securely attached to the previous one. Hinged columns are swung into place and locked down.

#### **OFF-SITE CONSTRUCTION**

- PRE-FITTED PLUG AND PLAY ELECTRICS
- PRE-FINISHED ANTI-SKID DECKS
- PRE-FITTED INTEGRAL SAFETY BARRIERS TESTED TO BS EN 1991-1-1
- NO WET TRADES NEEDED ON SITE
- MODULAR DESIGN FOR FAST CONSISTENT ERECTION





Berry Systems also offer a permanent concrete decked solution to your parking problems. This structure incorporates profiled steel floor decks. These are ideal for decked car parks as efficient solutions with a highly durable material.







#### **PROFILE DECKING**

The trapezoidal shaping on the steel decks provides maximum strength to the deck, with spans up to 6m unsupported and a range of different gauges, this steel decking provides an economic solution. The design profile guarantees central shear-stud positioning, reducing time on site for installation and checking.

#### **LONGER SPANS**

Depending on the profile type and thickness the steel decking can span up to 6m unsupported and in scenarios not require temporary props during its installation. This means that coverage can be completed efficiently to the layout ready for concrete topping.

#### **FIRE PERFORMANCE**

With a concrete topping to maximise performance the slabs can achieve up to an overall 2 hour fire performance. This can often reduce time, cost and the ongoing maintenance required for additional fire protection.



# EVC

S U S T A I N A B L E E L E C T R I C V E H I C L E C H A R G I N G

We have developed a range of EVC systems that will enable your car park development to profit from a wide variety of benefits. Our 'plug & play' EVCs are designed to efficiently charge electric vehicles directly from the mains supply of your building and these are available in a choice of designs.

Incorporating parking ports with solar panels opens up a variety of additional benefits with a range of ways to utilise any excess power generated.

Incorporating electric vehicle chargers into your project will future proof the development and allow you to expand capacity the when required.



# EVC SYSTEMS



The need to tackle climate change and to provide a cleaner, more sustainable environment is driving a shift to electrical vehicles, and this needs to be given very careful consideration in the design and planning of any new car parking facility.



#### **BATTERY STORAGE**

Batteries can be utilised to store excess electricity for future use.



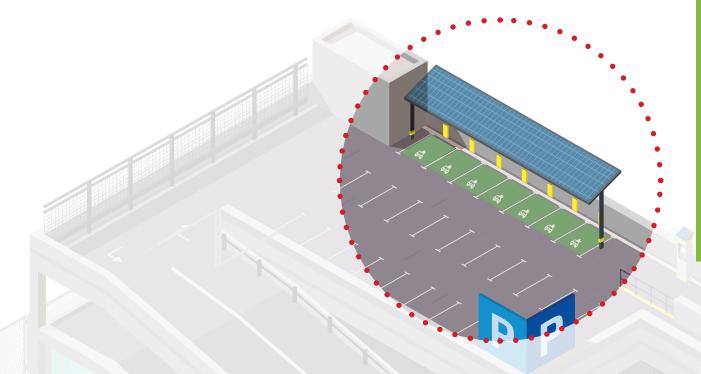
#### **FEED THE GRID**

Instead of storing excess power it can be sent back to the grid for financial benefit.



#### **POWER YOUR FACILITY**

Alternatively, electricity unused by parked vehicles can be used towards powering the facility.



# EV CHARGING BOLLARDS



With access to a range of EVC bollard systems, we can provide fixed or flexible post options that are much less susceptible to damage and are easier to replace.

Our EVC bollards offer a host of benefits for your car parking facility and improve end user experience.



**IMPACT PROTECTION** 

Flexible energy absorbing EVC bollard options to protect against low speed impacts, reducing damage to post and vehicles.



#### **LOW COST SOLUTIONS**

EVC bollards can be positioned in any location with access to power and are a cost-effective method to create parking bays.



#### SUSTAINABLE CHARGING

Can be utilised with EVC systems such as a solar-powered car ports, to provide a clean, sustainable charging solution.

## WHY EVC BOLLARDS

#### THE BENEFITS

- · Easy to install and replace if damaged
- · Bespoke designs include choice of colours and branding
- · Slow, medium and fast charging capacities
- Flexible options available for reduced impact damage



# SOLAR CAR PORTS



Incorporating solar shading to the top levels of car parks is becoming increasingly popular. With this in mind, we have designed a car port system to improve the efficiency and sustainability of your project.

These car ports utilise solar power to charge electric vehicles and to generate enough energy to be either stored or used for vehicle charging or other uses.



#### BESPOKE SOLUTIONS

We offer a wide range of architectural car port system solutions to suit your project.



#### **COST SAVINGS**

By utilising solar power, you will minimize energy expenses and make significant savings.



#### **ENVIRONMENTALLY FRIENDLY**

Incorporating a solar panel car port will reduce the carbon footprint of your facility.

# WHY SOLAR CAR PORTS

#### THE BENEFITS

- Efficient solar panel arrays
- · Lightweight modular design
- · Secure anchorage with minimal ground penetration
- · Quick to install and relocatable in the future
- Battery storage utilization for other facilities
- Soffit lighting and managed water drainage





Perimete

SECURITY FENCING

As part of the Littlewood Fencing group of companies, Berry Systems are in the enviable position of being able to supply and install a range of highquality products from a selection of sister companies to complement our services.

#### **PERIMETER FENCING**

We supply and install a wide range of top-quality galvanized and powder-coated perimeter security products. Not only are these ideal for car parking facilities, but they are also perfect for a wider scope of purposes, such as high security locations, sporting amenities and schools.



# PERIMETER **FENCING**



Security fencing is an important requirement for the perimeter of most car parking facilities.

At Berry Systems, we supply and install a huge choice of options from the UK's leading range of perimeter security. We have years of experience and expertise in the installation of security fencing in a variety of locations and for various sectors along with providing a highly professional service to cater for all your requirements.



#### SAFE AND COMPLIANT

To prevent and deter attack or breach internally and externally, we can provide solutions ideally suited to any application that demands the toughest protective measures.



#### **ADDITIONAL PROTECTION**

Security options include spiked tops, minimal foot holes and cutting resistant solid steel vertical pales to protect against unauthorised access, vandalism and attack.



#### **CUSTOMISED APPEARANCE**

A range of colour choices and patterns are available to cater for locations where attractive perimeters are required, without compromising on security.

## **TESTED** AND CERTIFIED

#### **HIGHEST QUALITY PRODUCTS**

Our specialist fencing products are manufactured to the very highest standards of security, resilience and quality and are certified by several national and international bodies including government regulators and testing standards.

- LPS 1175 A1 (SR1
- ASTM F2781-15
- LPS 1175 B3 (SR2)
- LPS 1175 B3 (SR2) + C1



# FENCING OPTIONS



With a reputation for skill and quality, Barkers Fencing are the UK leaders in perimeter security and has been designing, manufacturing and delivering strong and reliable fencing and metal finishing services for more than 40 years.

Specialist fencing products are produced to the very highest standards of security, resilience and quality and are certified by several national and international bodies including government regulators and testing standards.

### **FASTGUARD**

FastGuard mesh is an expanded metal boundary fencing system. With flexibility, compliance and stringent safety measures in mind, FastGuard is available in a variety of options, making it ideal for applications requiring a strong boundary.

### **PROGUARD**

ProGuard mesh is our premier general purpose boundary fencing system. Featuring an attractive striped-style pattern from varying mesh apertures, it is suitable for applications where general site demarcation is required with a low risk of attack or breach.



### **VGUARD**

VGuard mesh is our economical, general purpose boundary fencing system. Suitable for applications where general site demarcation is required, the unique profix hanging system makes the VGuard our quickest and easiest fence to install, making it a favoured choice for rapid requirements.



# PALISADE

Palisade is a hugely popular, versatile and reliable fencing system. An imposing appearance provides an effective visual deterrent, while spiked tops, minimal foot holes and cutting resistant solid steel vertical pales, ensure protection again unauthorised access and attack.

# **TWINGUARD**

TwinGuard mesh is our medium-security fencing system and is suitable for applications where a hard-wearing boundary is required. Excellent rigid panel systems deliver increased protection with thick, double horizontal wires and a clamp bar fixing.

# TWINGUARD SL1

TwinGuard SL1 is a cost-effective yet highly secure fencing system, using the durable TwinGuard 868 Mesh Panels with a tested security certificate. It is a hard-wearing and appealing fence system, used for moderate risk security sites in conjunction with CCTV monitoring. Ideal for police facilities, airports, schools and industrial and commercial premises.

# TWINSPORTS AND TWINSPORTS REBOUND

TwinSports mesh is a specialist boundary fencing system designed for sports and leisure areas with medium usage, while TwinSports Rebound is ideal for heavy-usage multi-use games areas and football pitches.



# www.berrysystems.co.uk

# SECUREGUARD SR1

SecureGuard SR1 is a heavy-duty, cost-effective and high security fencing system using the renowned SecureGuard 358 mesh. Its durability and strength paired with affordable pricing make it an ideal demarcation solution for a variety of applications.



### **SECUREGUARD**

# SL2

SecureGuard SL2 has successfully surpassed the stringent testing requirements of the LPCB's B3 (SR2) testing regime to the latest LPS1175 Issue 8 standard, preventing intrusion for more than three minutes by an experienced attacker with tools of a higher mechanical advantage, such as bolt cutters, claw hammers and drills – and all this was achieved with a single panel and no on-site assembly required.

# SECUREGUARD 358

SecureGuard 358 mesh is our premium high security boundary fencing system. It meets the very highest demarcation requirements to prevent and deter attack or breach internally and externally and is ideally suited to any application that demands tough protection.



# STRONGUARD™

Stronguard™ was born from a need for high-security fencing to secure the various aspects of the UK's Critical National Infrastructure. It was originally tested by CAST, the government department responsible for testing products to be deployed on Britain's Critical National Infrastructure network and was found to be a resounding success.

### STRONGUARD™ RCS

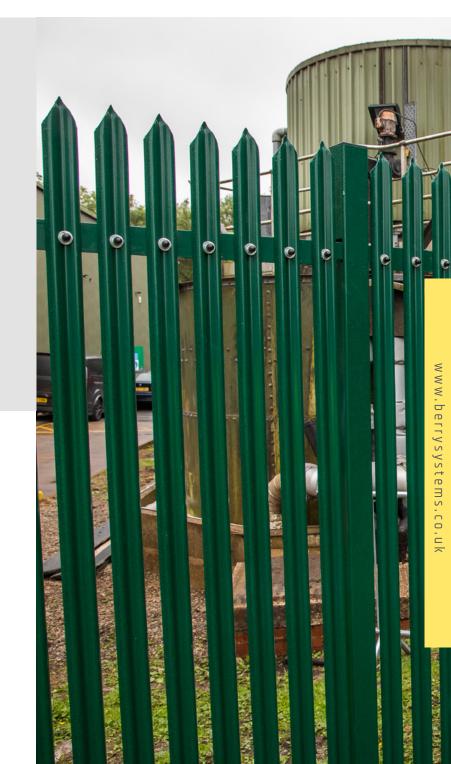
StronGuard™ RCS is the only standalone PAS68 impact tested fence. It is also part of our superdurable, aesthetically pleasing range of renowned StronGuard™ palisade fence. Its variants, including RCS25 and RCS75, have been designed to protect Critical National Infrastructure from increasingly frequent and severe hostile vehicle attacks.

### STRONGUARD™ SR2

StronGuard™ SR2 is a heavily tested, robust palisade fencing system that has been created to meet the high-security requirements. It delivers the classic visual deterrent of standard palisade but with a level of security that's seldom available in the commercial market.

# STRONGUARD™ SR3

The Stronguard™ SR3 is one of our most resilient, robust and effective Stronguard™ products. It secures the most sensitive of assets by delivering incredible resistance against determined attacks, and is ideal for the high security, heavily-regulated environments of airports, ports, data centres, critical national infrastructure and utilities – where is it routinely found protecting the UK's water treatment works.





# ACCESS CONTROL

It is vital that careful consideration is given to which vehicles will be allowed access to a car park facility and what speeds they will be allowed to travel at.

Berry Systems use only the highest quality range of products to achieve these factors, including height restriction barriers, arm barriers, flow plates and speed bumps.

We can provide expert advice on all the necessary measures required for each individual project.



Ideal solution for the prevention of access for high vehicles in unauthorised areas such as low-level car parks.



# <u>ARM</u> BARRIERS

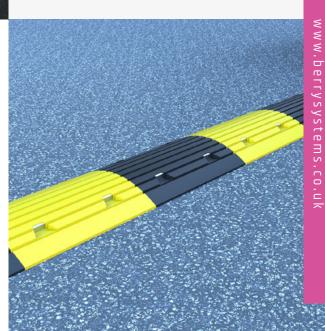
A low maintenance cost effective way of manually controlling access to unauthorised or controlled areas.

# FLOW PLATES

Available as sunken or surface mounted, flow plates are designed to encourage a mono-directional flow of traffic.

# SPEED BUMPS

Highly effective method of restricting speed. Available in two heights – 50mm to reduce speeds to 15-20mph and 75mm for 5-10mph.





# Bollards

AND PARKING POSTS

We offer a wide range of bollards and parking posts for a variety of different applications, restricting vehicular access and increasing the safety of pedestrians.

Our bespoke range includes flexible bollards, parking bollards and posts, removable and retractable parking posts. We are also an Official UK distributor for heavy-duty SlowStop® Bollards, which are bolted down to make them ideal for long-term protection within industrial sites and distribution yards.

Our range of bollards and parking posts are available in multiple finishes and fixings including Galvanised, Stainless Steel, Powder Coated, Bolt down and Cast-In.



Impact tested bollards and barriers are becoming a global necessity across urban and industrial CNI sectors. With the widest portfolio of tested products available in today's perimeter security market, all risk profiles are covered within our range.

Designed and certified to withstand vehicular impact, products are tested to internationally recognised standards such as IWA 14, BSI PAS 68, BSI PAS 170 & ASTM.

Security systems can be permanent or temporary depending on client security objectives. All systems are supplied and innovated to meet security, aesthetic, and operational requirements. Whether you want to mitigate a vehicle as a weapon, vehicle ram-raid, accidental impact or a VBEID, we have a wide range of solutions to suit requirements. Products include bollards, manual swing gates, road blockers, wire rope barriers and bespoke street furniture and streetscape art structures.

Designed to avoid the costly disruption of services to accommodate deeper foundation structures, we utilise ground-breaking, impact tested shallow founding technology. This makes it more feasible for areas with limited excavation depth so you don't have to compromise on security levels.

The latest, market leading, innovative solution is a supershallow mount bollard system able to be installed within a suspended slab structure and requires just 40 mm of ground cover to secure the system in place. The product has been developed and successfully impact tested to protect urban spaces, public realm, and sites with limited excavation depth.



#### **TELESCOPIC SECURITY POSTS**

Offering a high level of security and easy to operate, the top of the unit is concreted into the ground level with the surface and can then be pulled up and locked in position.

#### **FLEXI-BOLLARDS**

Flexi-Bollards provide single point impact protection from vehicles, with rubber shock absorbers taking most of the force of the collision.

#### **PARKING POST**

Ideal for restricting access to specific areas or parking bays, these can be unlocked and the hinged mounting allows them to be laid flat.

#### **PARKING POST - STEALTH**

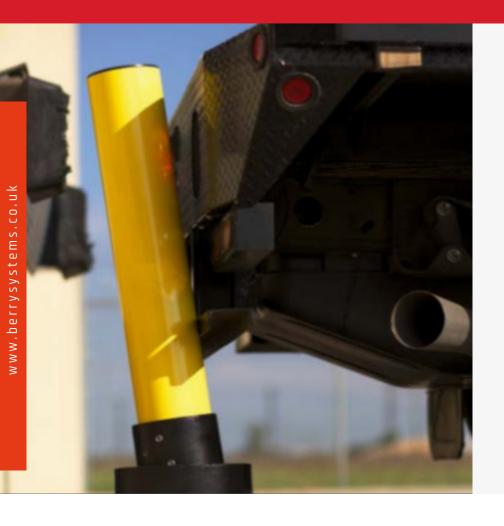
The stealth post has all the benefits of the Parking Post but with the further advantage of a fully flush to ground level socket.

#### **REMOVABLE PARKING POST**

Typically locked in place over night and removed during the day. Additional ground sockets are available for storing when not in use.

#### RETRACTAPOST

Operated by padlock to lock the post in the raised position to the lid. Available in 500mm above ground or 745mm above ground sizes.



### **SLOW-STOP**

The patented SlowStop® Bollard system is a revolutionary rebounding steel pipe bollard.

The kinetic energy of any impact is progressively absorbed by an elastomer hidden in the base, enabling the post to tilt approximately 20° as it progressively absorbs it and softens the impact. After a collision, the post returns upright, leaving your guard intact and ready to perform again.



# Glossary

#### **VEHICLE RESTRAINT SYSTEMS** PAGE 10

Bri-Safe System 3 Spring Steel Rigid Post Flexi-Post

#### **FACADES & CLADDING PAGE 14**

Rainscreen Cladding
Perforated Cladding
Timber Cladding
Trapezodial Cladding
Composite Cladding
Expanded Metal Mesh
Woven Mesh
Green Wall
Glass Rain Screen
Fins and Louvres
Bespoke Designs

# TOP DECK CAR PARK SUPERSTRUCTURES PAGE 19

Planning Design Build

# EVC SUSTAINABLE ELECTRIC VEHICLE CHARGING PAGE 24

EVC Bollards EVC Car Ports Solar Car Ports

#### **PERIMETER SECURITY FENCING PAGE 28**

FastGuard
Palisade
VGuard
Proguard
Twinguard and Twinguard SL1
Twinsports and Twinsports Rebound
Secureguard SR1, SL2 and 358
Stronguard, Stronguard RCS, Stronguard
SR2 and SR3

#### **ACCESS CONTROL PAGE 34**

Height Restriction Barriers Arm Barriers Flow Plates Speed Bumps

#### **BOLLARDS & PARKING POSTS PAGE 36**

Telescopic Security Posts Parking Post Removable Parking Post Flexi-Bollard Parking Post – Stealth Retractapost SlowStop®





# **BERRY SYSTEMS -** A TRADING DIVISION OF LITTLEWOOD FENCING LTD.

Walnut House, Kingswood Business Park Albrighton. WV7 3AU United Kingdom

P: 01902 491100

M : sales@berrysystems.co.uk W : www.berrysystems.co.uk

© 2022 BERRY SYSTEMS

