

Product: POLYsade®

**POLYsade®**

Class 1a GRP Composite  
security and boundary  
fencing system



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# **POLY**mer /poli'mer/

noun CHEMISTRY

a substance which has a molecular structure built up chiefly or completely from a large number of similar units bonded together, e.g. many synthetic organic materials used as plastics or resins

# **palisade** /palɪ'seid/

noun

a fence of stakes or railings fixed in the ground, forming an enclosure or defence.  
Synonyms: fence, paling, enclosure, defence, barricade, stockade, fortification, bulwark

# POLYsade®

Class 1a GRP Composite security and boundary fencing system

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# POLYsade®

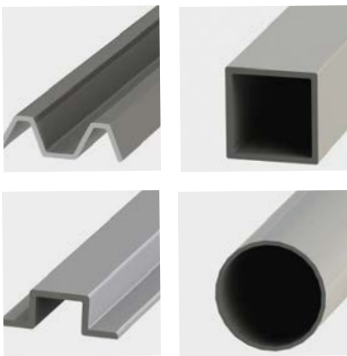
POLYsade® has been developed to offer an exceptionally long life, good looks and safety from electrical touch potential: All in a minimum of a Class 1A security fence.

As it's equally at home providing protection to assets, a long life replacement to short lived traditional fencing or in areas where a source of electricity is present; there's no surprise it is widely adopted for use in rail and power networks.

Employing Patented design; POLYsade® delivers a level of security far superior to any other GRP fence and even higher than many steel palisade type fences.

## Lightweight Panels & Components

## Pale Styles



## High Strength Box Section Rails



## QUICKfoot™ Surface Mounted

Wide Colour Range



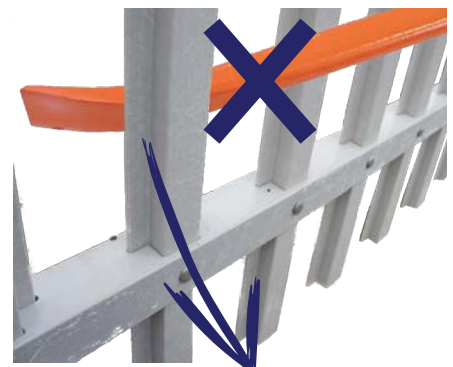
Various Pale Tops



Large Size Range of widths



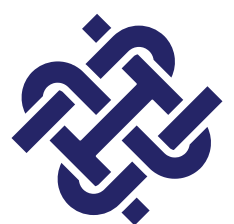
Large Size Range of heights



Patented Pass Through Pales  
- Cannot be levered from rail

BOXposts™ Buried

High Impact & Lateral loading Resistance



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# Key Features



## Assured

Complies with BS1722:12 2016 testing and sizing requirements.  
All profiles, CNC machining and assembly made in the UK.



## Durable

With a design life in excess of 60 years, POLYsade® is highly impact resistant, will not rot like wood or rust like steel and will keep its' good looks long after traditional alternatives have needed to be replaced.



## Secure

Patented Pass through pale to rail design means pales cannot be levered from the rail; a common way of breaching steel palisade fence; especially the case with other GRP alternatives.



## Non-Conductive

POLYsade® cannot conduct electricity: Eliminating the need for bonding; for which; it is increasingly difficult to get designs approved. It also eliminates the need to annually risk assess and maintain bonding. Removing secondary Health & Safety risk for Rail companies trackside.



## Lightweight

Factory Pre-made panels can easily be handled by two persons. As such; they can be lifted into place and fixed within seconds: Leading to drastically reduced installation times.



## Sloping Sites

Due to its' unique design: Panels provide site adjustment for a 6 percent rake in either fall or raise. As all products are produced in house; more challenging slopes such as rail embankments and steel walls can also be catered for through bespoke produced panels.



## Simple Maintenance

POLYsade® provides the ability to quickly and easily replace pales on site should accidental damage occur. Otherwise the fence greatly reduces whole of life maintenance: Fit it and Forget it.



### Product Approvals

Already approved by Network Rail Off Track RAMs, CrossRail and various Train Operating Companies (TOCs), various Energy Companies including UKPN & by Royal Mail.



### Posts

BOXposts™ come pre-slotted for in-line pass through, corner or end post purposes. The BOXpost™ not only provides a stronger post than traditional I-Beams but the finished product is much more attractive. Available in standard buried; with keying post-mix holes or with the QUICKfoot™ for secure, surface mount fixing to hard standings.



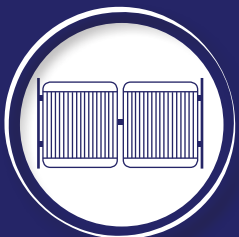
### Rails

Box section rails are very strong and delivers a fence that is has no creep/sag issues like the standard angle rails supplied with other budget GRP fences. This also means fixings are concealed and the finished fence is much more aesthetic.



### Options

As with all traditional security and boundary fences; POLYsade® can be supplied with bespoke options, including In-fill panels, Fans, Colours, Heights, Panel widths and intrusion detection.



### Gates

Purpose designed pedestrian and vehicular gates with various hinge and locking options are available.



### Pales

Four profiles; Top Hat or traditional 'W' and Circular or box are available with many topping designs including standard security 'sharp point', 'rounded' or 'soft flat' being the most popular.



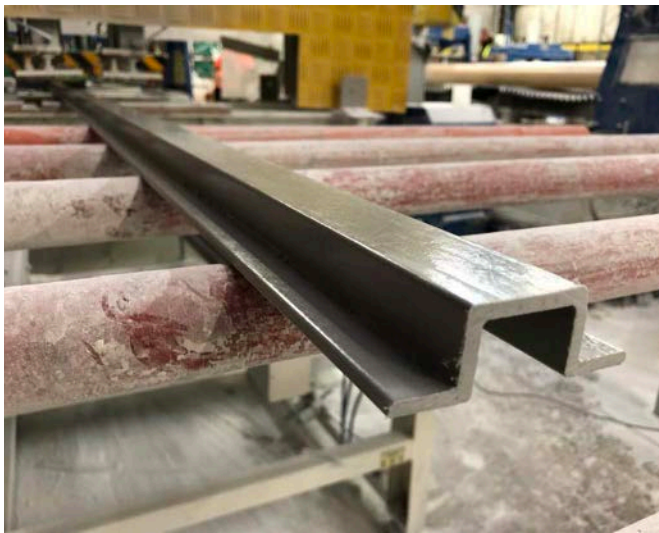
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# POLYsade®

POLYsade® is a cross between a Class 1A security fence and an aesthetic boundary fence. A viable 'whole of life cost' alternative to traditional steel palisade security fencing as well as traditional painted wooden boundary fences: it offers asset owners the ability to replace these short lived traditional materials with a durable and long lasting product that also brings many other advantages.

Fence panels are factory CNC machined and then assembled into finished panels from high quality Glass Fibre reinforced Polymer profiles which are also produced by Plura.

As all profiles used in the fence system are produced completely in house they can be coloured & cut to length according to customer requirements. This greatly reduces environmentally unfriendly scrap, generated when imported 6 metre profiles are cut down to size to supply alternative GRP systems.



Pultruding the Profiles



Precision CNC Machining Components



Hand Assembling The Panels



## Feature Focus - Designed for efficient shipping



### Bespoke reusable Stillage's

Produced by Plura; specially to make storing, shipping and moving of fence packs easy.



### Lightweight Sections

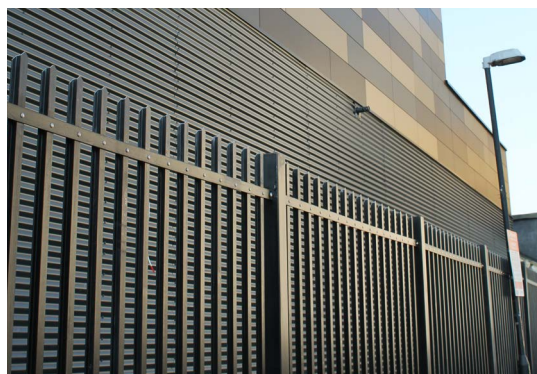
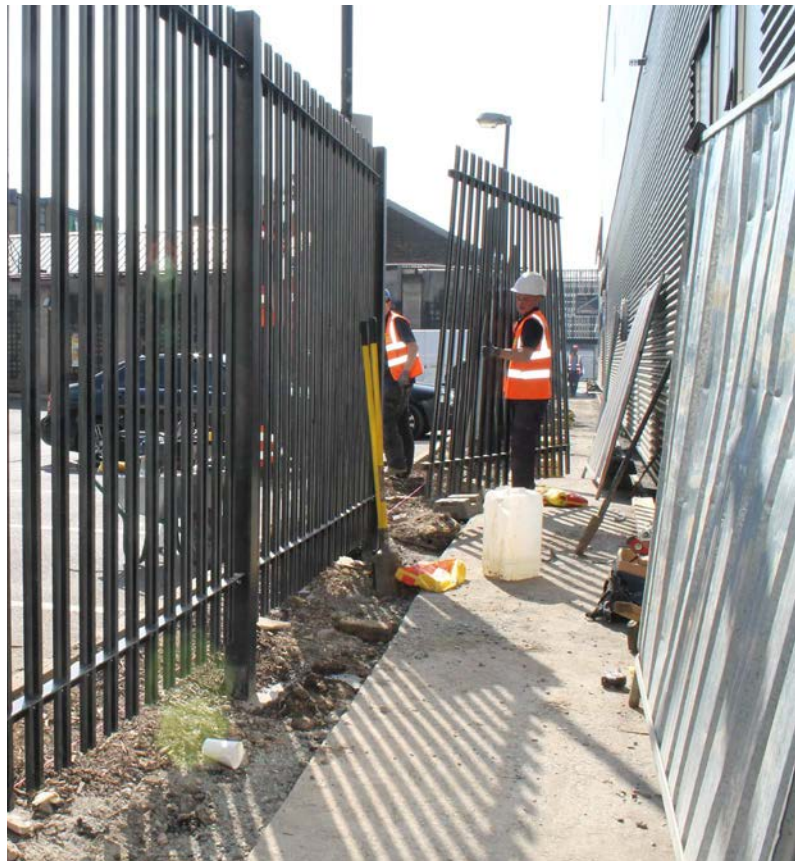
As panels are lightweight, even for the tallest fences; they can easily be lifted by one or two persons onto the fish-tail fixings projecting from the posts.

### Fast Installation

This in turn greatly reduces installation times when compared with traditional steel fences, which due to their heavy weight, must be installed a single pale at a time.

Secondary benefits of this; reduction of possession times and securing the site in less time.

The resultant installation has not only been installed quicker & provides better security but will far outlast traditional fences and it looks great!



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# POLYsade®

POLYsade® is the perfect combination of all the features and the installation & maintenance benefits that asset owners require when compared with other fence systems and materials.

The table below highlights this by breaking out and scoring the features asset owners and installers typically look for. POLYsade® is the **only** system that scores full points.

|  | Y = 1 Point | N = 0 Points             | ? = Unknown (Given 1 Point) |                     |                            |
|--|-------------|--------------------------|-----------------------------|---------------------|----------------------------|
| Material / Make Up                                     | POLYsade®   | STEEL<br>(e.g. Palisade) | WOOD<br>(e.g. Picket)       | GRP<br>(Face Fixed) | GRP<br>(Pass Thru & Glued) |
| <b>Feature</b>   |             |                          |                             |                     |                            |
| Non - Corrosive / Non - Rot                            | Y           | N                        | N                           | Y                   | Y                          |
| Non - Conductive so requires Zero bonding              | Y           | N                        | Y                           | Y                   | Y                          |
| Full colour range: Gy, Gn, Wt, BK, Bu within 4 weeks   | Y           | Y                        | Y                           | N                   | N                          |
| Through coloured & cannot peel / chip                  | Y           | N                        | N                           | Y                   | Y                          |
| Completely manufactured in the UK                      | Y           | ?                        | ?                           | ?                   | ?                          |
| Security Level 1a (Pales cannot be levered from rails) | Y           | N                        | N                           | N                   | Y                          |
| Compliant with loadings in BS1722:12 2016              | Y           | Y                        | N                           | ?                   | ?                          |
| Gates, pedestrian and vehicular                        | Y           | Y                        | Y                           | Y                   | Y                          |
| Equally at home as decorative or security fence        | Y           | N                        | N                           | N                   | ?                          |
| Feature Points Total                                   | 9           | 3-4                      | 3-4                         | 4-6                 | 5-8                        |
| <b>Installation</b>                                    |             |                          |                             |                     |                            |
| Average time to install each panel in minutes          | 5           | 15                       | 15-20                       | 15-20               | 5                          |
| Available as 'Made up Panels'                          | Y           | N                        | N                           | ?                   | Y                          |
| Available 'Flat Packed'                                | Y           | Y                        | Y                           | ?                   | N                          |
| Can be Raked for slopes                                | Y           | Y                        | Y                           | Y                   | N                          |
| Lightweight and therefore easy to transport to site    | Y           | N                        | ?                           | Y                   | Y                          |
| Full range of accessories: Fans, Post Feet etc         | Y           | Y                        | ?                           | ?                   | ?                          |
| Installation Points Total                              | 6           | 3                        | 2-4                         | 3-5                 | 3-4                        |
| <b>Maintenance</b>                                     |             |                          |                             |                     |                            |
| Virtually zero maintenance (not from damage)           | Y           | N                        | N                           | Y                   | Y                          |
| Pales easily remove & replaced if damaged              | Y           | Y                        | Y                           | Y                   | N                          |
| Spare parts readily available                          | Y           | Y                        | ?                           | Y                   | ?                          |
| Life expectancy in years                               | 60+         | 15                       | 6-8                         | 60+                 | 60+                        |
| Maintenance Points Total                               | 4           | 2                        | 1-2                         | 4                   | 2-3                        |
| <b>Points Total</b>                                    | 19          | 8-9                      | 6-10                        | 11-15               | 10-15                      |



### **Corrosion: The killer of assets**

Millions of Pounds are spent every year by Rail asset owners in particular, in maintaining fencing. Mainly replacing single components, where the build up cost over time can be eye watering high!

The main reason for replacement? : Rotted/Corroded elements.



Particularly with wood where environmentally negative preservative treatments are not only being legislated against, but morally; who wants to use a product that has a bad environmental impact these days?

GRP provides the perfect 'fit it and forget it' solution to this.



**Be aware of cheap Imported products**



**Site drilled and fitted pales are much more susceptible to incorrect pale spacings**



### **Sloping Sites**

The pale fixings, when combined with a little oversize tolerance in the pass-through slot; means that POLYsade® has the ability to be raked on a sloping site: A feature any fencing contractor will say is "essential" in a fencing product. Having a fixed panel that can only be used where the site is totally flat is in-practical, or requires the expensive addition of more posts; which is one of the reasons why; when POLYsade™ was designed; PLURA chose to use stainless steel fixings rather than gluing pales to rails.



### **Future pale removal for Maintenance.**

Given the 60 plus year design life for POLYsade®; it is possible that at some point during its' life span a pale; intentionally or otherwise; may become damaged. A fixing means replacement is a relatively simple task; using a tungsten drill bit; the two security fixings for the pale can be drilled out within 10 minutes; the damaged pale slid out and a new pale slid into place; with new fixings applied within a couple more minutes.

# POLYsade®

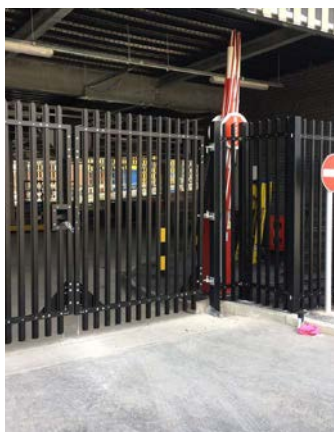
POLYsade® truly comes to its' own when the full system is taken into account and it is this breadth and depth of options and accessories that marks it out from other GRP fence products, which are simply offered as component parts or fixed rigid panels.

## Gates

Gates are made using the same pass-through design, so security is not compromised at all. In both single Pedestrian and double Vehicular types; from 900mm up to 5 metre standard widths.

Hinges and Catches are provided accordingly; with all pedestrains gates having Truclose, self-closing hinges as standard and vehicular gates having galvanised steel pin and eye hinges with GRP re-enforcement gussets in gate corners.

Locking is as per customer requirements; usually via padlocks.



## Non-Standard Panels

In situations where the standard 2.6 metre wide panel is not a suitable width, or where a greater angle of rake is required than the rake available in our standard POLYsade® panel; for example; 45 degrees.

## QUICKfoot™

Ideal in hard standing areas or in places where post burial is not an option.

Now in its' 5th design iteration; this fitting keeps post firmly and strongly in place; a clever internal design feature means posts cannot shear if adverse or surcharge loading is applied to the top half of the post.



## Steps and Ramps

Ideal for use in the rail sector; stairs and ramps can be incorporated into the fence system using the same GRP materials. These colour match perfectly with the POLYsade® fence colours.



## Fish Plates & Post Caps

Spare Fishplates & Posts Caps are available

## Built in Signposts

Save on the cost of separate sign posts; with an added benefit in rail of 'de-cluttering' station platforms



## Built in Lighting Posts

As with the Signposts; de-cluttering of platforms is further possible by combining our BOXposts™ with station lighting. As the post are hollow; they can also be provided with a panel to the rear for cable placement and access.



## Specialist Posts

If the fence is to be fitted to an existing structure; such as a platform; POLYsade® posts can be provided over length & with specialist fixings.



## Anti Burrowing

As detailed in BS1722:12 2016; Pales can be extended and buried (standard 350mm). These buried pales will not rot or rust as with traditional materials.



## Electric Fence Topping

PLURA work with the market leading suppliers of electrical security topping systems. POLYsade® is ideal for this use; as it is totally non-conductive and all fixings are factory cnc machined to take the wires.

## Steel Post Insulating Cap

Where POLYsade® is used to break electrical continuity in an existing steel fence run and the existing steel posts will remain in situ: The POSTcap™ can be fixed over any standard steel I beam post to eliminate the danger of touch potential.



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# Specification

As GRP fencing is relatively new; there is no EN or British Standard that governs its' use.

Mainly used to replace existing steel security fencing; it is however; also used as a means of demarkation & partition in areas of public use as well as within utility compounds.

As such: **IT IS VERY IMPORTANT DESIGNERS MAKE SURE THE CORRECT PRODUCT FOR USE IS SPECIFIED. RATHER THAN A SIMPLE CATCH ALL SPECIFICATION CLAUSE OF 'GRP FENCING' : NOT ALL GRP FENCES ARE THE SAME!**

Comparing 'like for like' when evaluating which GRP product to specify, and making sure a products' characteristic's match those required within the design application (such as; Level of Security & Loading required) are critical, as, unlike steel fences which have been standardised under a British Stansard; GRP is open to the vagaries of each suppliers offering.

**All too often therefore; a GRP fence arrives on site that is not what the client, installer or designer had wanted nor expected.**

## Specification Guide

To counter this problem; Plura have created the following three step Specification Guide that helps Designers and Asset owners put the correct Specification Clauses in place resulting in a product that complies with relevent standards and the clients needs. Where appropriate; more information is provided at each stage behind the reason for the Clause.



1. Add the basic fence make-up: "Installation & Use" and "Maintenance" Clauses to your specification



2. Choose & Add the Height Dimension required from the Tables (all other dimensions will then be assured)



3. Choose an application that best fits your needs & Add the Clause

## STEP 1. Add ALL the "Basic Fence Makeup", "Installation & Use" and "Maintenance" clauses

| Key Design Requirement               | Consideration                            | Specification Clause   |
|--------------------------------------|--|--|
| <b>1. Basic Fence Makeup</b>         |  |  |
| 1a. Minimum Strength                 | Resistance to entry and impact           | 1.1 "GRP Fence; Pales, Rails, Posts and Fishplates shall be tested in accordance with BS1722-12:2016 and evidenced".   |
| 1b. Assured Quality of Build         |  |  |
| Material Properties Steel Components | Specification of Fixtures and Fittings   | 1.2 "Steel components used within the GRP fence structure shall comply with BS1722-12:2016"  |
| Material Properties GRP Components   | Elimination of poor quality GRP products | 1.3 "GRP Fence components shall conform with BS EN 13706 Grade E17"<br>1.4 "GRP Posts, Pails & Pales shall all match in colour and be to the following RAL numbers: Grey RAL 7040, Green RAL 6005, Black RAL 9005, White RAL 9010"   |
| Fence Construction                   | Pale Spacing and Panel Quality           | 1.5 "GRP Fence shall be supplied in panels factory constructed under ISO 9001:2015 factory production control FPC"<br>1.6 "In situations where an unassembled GRP fence is required for reasons of site access; all components shall have all fixing holes pre-made at a factory under ISO 9001:2015 FPC for a consistent site assembly" |
| Confirmation of Quality              | Assurity to the client                   | 1.7 "As per the requirements in BS1722-12:2016; GRP fence shall be supplied with a Certificate of Conformity to this specification"  |
| <b>2. Installation &amp; Use</b>     |  |  |
| 2a. Ability to Rake                  | Installation on Sloping sites            | 1.8 "GRP Fence shall have a minimum raking value of 100mm raise or fall for every 2700mm of fenceline run"   |
| 2b. Post mounting                    | Installation on Hard Standing            | 1.9 "GRP Fence posts shall have the ability to be surface fitted on hard standing in addition to the standard buried method, without loss of performance under 1.1, 1.2, 1.8 or 1.9 in this specification"   |
| 2c. Accessories and variations       | A fully rounded off system               | 1.10 "GRP Fences shall consist of Standard and Non-Standard Panels & Posts, Pedestrian & Vehicular Gates, 45 Degree or similar acute Sloping Panels and End of Fence Fans."  |
| <b>3. Maintenance</b>                |  |  |
| 3a. Pale removal                     | Replacement of damaged pales             | 1.11 "GRP Fence shall have the ability to remove and replace any damaged components; specifically the Pales"   |

# Specification

## STEP 2. Choose the Fence Height required & Add to the Specification



### Dimensions for General Purpose GP POLYsade® Fencing

| British Standard<br>Type Reference      | Fence Height<br>Above Ground | Dimensions                       |                      |                                    |  |                |  |
|---|------------------------------|----------------------------------|----------------------|------------------------------------|--|----------------|--|
|   |                              | Posts                            | Rails (Horizontal)   |                                    | Pales<br>(Maximum gap between pales,<br>face- to-view, 89mm) |                |  |
|   |                              | Embedded<br>Length <sup>A)</sup> | Length <sup>B)</sup> | Typical Connector<br>Bolt Diameter | Oversail   |                | Typical Bolt<br>Diameter Pale<br>to Rail <sup>D)</sup> |
|   | (m)                          | (mm)                             | (m)                  | (mm)                               | Top<br>(mm)  | Bottom<br>(mm) | (mm)   |
| GP 11 Not Covered<br>in BS 1722-12:2016 | 1.10                         | 525                              | 2.60                 | 10                                 | 225  | 150            | 6  |
| GP 12 Not covered<br>in BS 1722-12:2016 | 1.20                         | 525                              | 2.60                 | 10                                 | 225  | 150            | 6  |
| GP 15                                   | 1.50                         | 525                              | 2.60                 | 10                                 | 225  | 150            | 6  |
| GP 18                                   | 1.80                         | 525                              | 2.60                 | 10                                 | 225  | 150            | 6  |
| GP 21                                   | 2.10                         | 625                              | 2.60                 | 10                                 | 275  | 200            | 6  |
| GP 24                                   | 2.40                         | 725                              | 2.60                 | 10 <sup>C)</sup>                   | 300  | 210            | 6  |
| GP27 Not covered<br>in BS 1722-12:2016  | 2.70                         | 825                              | 2.40 <sup>E)</sup>   | 10 <sup>C)</sup>                   | 300  | 210            | 6  |

### Dimensions for Security Purpose SP POLYsade® Fencing

| British Standard<br>Type Reference | Fence Height<br>Above Ground | Dimensions                       |                      |                                    |  |                |  |
|------------------------------------|------------------------------|----------------------------------|----------------------|------------------------------------|--|----------------|--|
|                                    |                              | Posts                            | Rails (Horizontal)   |                                    | Pales<br>(Maximum gap between pales,<br>face- to-view, 89mm) |                |  |
|                                    |                              | Embedded<br>Length <sup>A)</sup> | Length <sup>B)</sup> | Typical Connector<br>Bolt Diameter | Oversail   |                | Typical Bolt<br>Diameter Pale<br>to Rail <sup>D)</sup> |
|                                    | (m)                          | (mm)                             | (m)                  | (mm)                               | Top<br>(mm)  | Bottom<br>(mm) | (mm)   |
| SP 30                              | 3.0                          | 925                              | 2.00                 | 10                                 | 475  | 380            | 6  |
| SP 36                              | 3.6                          | 1125                             | 1.5                  | 10 <sup>C)</sup>                   | 650  | 550            | 6  |

### STEP 3. Choose Your Application from the three choices & Add the relevant clause(s)

| Key Design Requirement   | Consideration   | Specification Clause  |
|--|---|---|
| <b>4. Partition in an Public area where people will gather</b> | Crowd Loadings & Overcrowding Surcharge   |   |
| 4a. Station Platforms, Footways or pavements less than 3m wide |  | "GRP fence shall comply with BS EN 1991-1-1:2002 Horizontal load requirement Class C2 & 3"<br><br>"GRP fence of 1.5 metres or shorter in height shall have a rounded top"   |
| 4b. Assembly areas & Station Platforms greater than 3m wide    |  | "GRP fence shall comply with BS EN 1991-1-1:2002 Horizontal load requirement Class C5"<br><br>"GRP fence of 1.5 metres or shorter in height shall have a rounded top"   |
| <b>5. Security Fence</b>                                       | Security Level & Resistance to attack   | "GRP fence shall comply with LPBC 1175 Level SR1 or higher and shall have a pass through vertical pale to horizontal rail arrangement in order that the vertical pale cannot be levered away from the horizontal rail"<br><br>"GRP Fence shall use shear nuts in its' construction to guarantee security"<br><br>"GRP fence of 1.8 metres or taller in height shall have a spiked or pointed top" |

### Example Specification Clause : Fence for Back of Rail Platform (Greater than 3 metres wide) Applications

#### 1.0 Basic Fence Makeup

- 1.1 GRP Fence; Pales, Rails, Posts and Fishplates shall be tested in accordance with BS1722-12:2016 and evidenced
- 1.2 Steel components used within the GRP fence structure shall comply with BS11722-12:2016
- 1.3 GRP Fence components shall conform with BS EN 13706 Grade E17
- 1.4 GRP Posts, Rails & Pales shall all match in colour and be to the following RAL numbers: Grey RAL 7040, Green RAL 6005, Black RAL 9005, White RAL 9010
- 1.5 GRP Fence shall be supplied in panels factory constructed under ISO 9001:2015 factory production control FPC
- 1.6 In situations where an unassembled GRP fence is required for reasons of site access; all components shall have all fixing holes pre-made at a factory under ISO 9001:2015 FPC for a consistent site assembly
- 1.7 As per the requirements in BS1722-12:2016: GRP fence shall be supplied with a Certificate of Conformity to this specification
- 1.8 GRP Fence shall have a minimum raking value of 100mm raise or fall for every 2700mm of fenceline run
- 1.9 GRP Fence posts shall have the ability to be surface fitted on hard standing in addition to the standard buried method, without loss of performance under 1.1, 1.2, 1.8 or 1.9 in this specification
- 1.10 GRP Fences shall consist of Standard and Non-Standard Panels & Posts, Pedestrian & Vehicular Gates, 45 Degree or similar acute Sloping Panels and End of Fence Fans
- 1.11 GRP Fence shall have the ability to remove and replace any damaged components; specifically the Pales

#### 2.0 Fence Height: GRP Fence shall be 1.80 metre height

#### 3.0 Application

- 3.1 GRP fence shall comply with BS EN 1991-1-1:2002 Horizontal load requirement Class C5
- 3.2 GRP fence of 1.5 metres or shorter in height shall have a rounded top



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# POLYsade®

POLYsade® having many uses and configurations, has a lot of potential applications. Across the next 4 pages are a collection of case studies showing POLYsade® Security Fencing in different situations. For many more please visit our website.

## Royal Mail Sorting Office

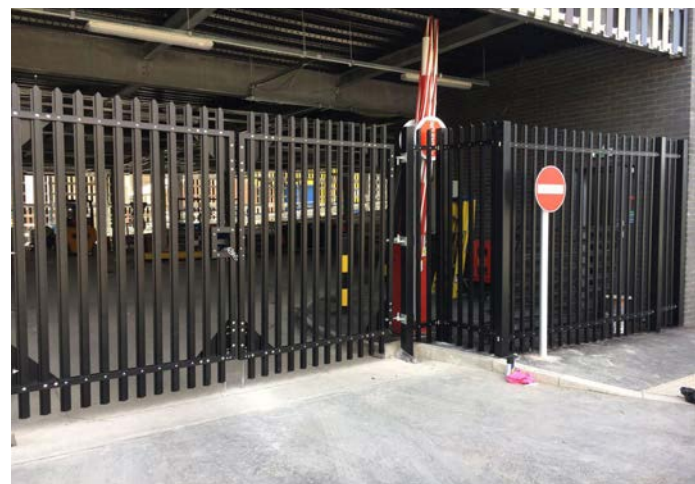
**Product:** POLYsade® Composite Touchsafe Security Fencing System 2.4m finished height. Iron Black

**Project Owner:** Royal Mail

**Contractor:** Volker Fitzpatrick

**Project Details:** New build Sorting Office in Nine Elms London

**Reasons for Use:** Long life of asset - Plus 60 years  
Secure - no possibility to 'lever' bottoms of pails from the crossrail  
Fast installation time - installed in step with the removal of hoardings



## Oulton Station

**Product:** POLYsade® Composite Touchsafe Deliniating Fencing System 1.5metres finished height. Polar White.

**Project Owner:** Abelio Trains Greater Anglia

**Contractor:** Kier Rail

**Project Details:** Replacement of wooden picket station fencing as part of station improvements.

**Reasons for Use:** Elimination of rotting wooden fencing.



## UK Power Networks

**Product:** POLYsade® Composite Touchsafe Security Fencing System 2.4m finished height. Holly Green

**Project Owner:** UK Power Networks

**Contractor:** Four Seasons Fencing Ltd

**Project Details:** New build of Low Carbon Battery storage facility

**Reason For Use:** Zero conductivity - No risk of shock to staff and public

Long life of asset - Plus 60 years

Very Secure - No possibility to 'lever' bottom of pales from the cross rail: the only GRP security fence approved by UKPN



## Crossrail Hayes

**Product:** POLYsade® Composite Touchsafe Security Fencing System 2.4m finished height. Steel Grey.

**Project Owner:** Network Rail: Crossrail Hayes

**Contractor:** Carillion

**Project Details:** Surround to Substation providing power to overhead lines. Overhead lines, Electrical equipment and live rail line all within very close proximity.

**Reason For Use:** Long life of asset - plus 60 years

Fast installation time

No bonding required



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## Edmonton Green

**Product:** POLYsade® Composite Touchsafe Security Fencing System 1.80metres finished height. Steel Grey.

**Project Owner:** Network Rail & Transport for London

**Contractor:** Cleshar & Hammond Rail

**Project Details:** Platform & rear fence upgrade Edmonton Green and Silver Street stations

**Reasons for Use:** Built in lighting & fixings to wooden trestle



## Shepreth Station

**Product:** POLYsade® Composite Touchsafe Security Fencing System 2.4m finished height with built in sign posts. Trash Screens and End of Platform gates and steps finished in Steel Grey.

**Project Owner:** Network Rail: Anglia Route

**Contractor:** Volker Fitzpatrick & Walker Construction Ltd

**Project Details:** Platform Upgrade

**Reasons for Use:** Non Conductivity - no risk of shock to staff and public

Long life of asset - plus 60 years

Complete System - providing the total solution for fencing, signage and access

Fast installation time



# Swindon Solar Farm

**Product:** POLYsade® Composite Touchsafe Security Fencing System 2.4m finished height. Steel Grey.

**Project Owner:** British Solar Renewables

**Contractor:** Renewable Energy Connections connecting to SSE

**Project Details:** Solar farm near Swindon Wiltshire - Surround to connection point to the grid for substation overhead lines.

**Reasons for Use:** Gave the ability to place the fencing much closer to the earth mats

Lightweight panels - easy to manoeuvre on a remote site

Fast installation time - was erected in a day



# Watford Junction Station

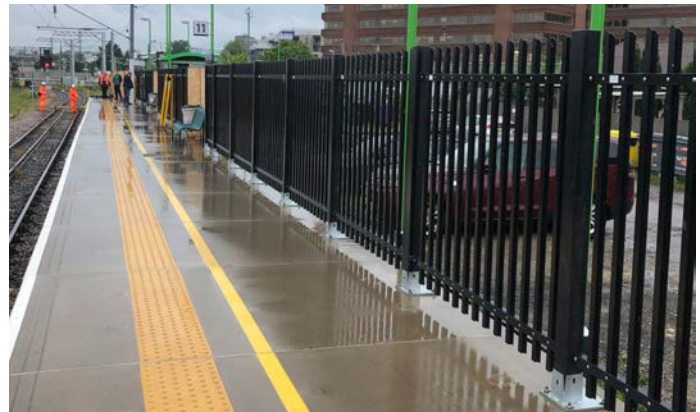
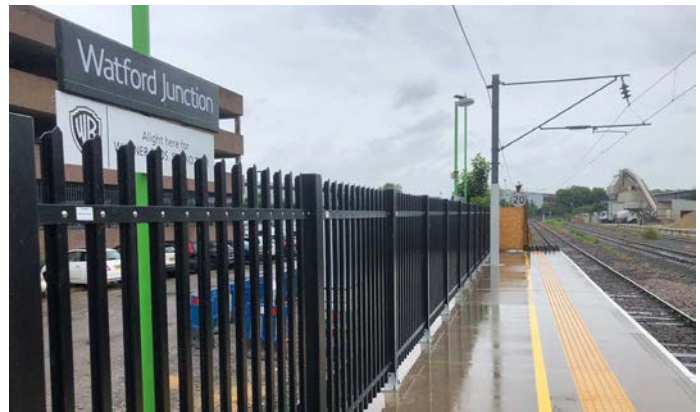
**Product:** POLYsade® Composite Touchsafe Security Fencing System 1.8m finished height. Iron Black.

**Project Owner:** Network Rail

**Contractor:** Murphys

**Project Details:** Security fencing running in close proximity to track and overhead electrical cables

**Reasons for Use:** Zero Conductivity - No risk of touch potential and UK produced



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# Ordering: Please Contact Us

## FENCE ORDERING CHECKLIST

| 1. Survey the site; taking particular note of:   | Check   |
|--|---------|
| 1a. The type of site; Rail Platform, Surround to Electrical equipment, Level Crossing, Sub-Station etc., etc?        |         |
| 1b. Fenceline run distances in metres?   |         |
| 1c. Changes in direction of the fence line?  |         |
| 1d. Changes in height?   |         |
| 1e. Ground Surface finish; Soft ground where posts could be buried or Hard standing requiring feet?                  |         |
| 1f. Access Points required (gates) and for what; Pedestrians or Vehicles?  |         |
| 1g. Special Requirements (for example; anti-burrowing measures or access steps)? Please call PLURA to discuss        |         |
| 2. Specify the basic requirements:   | Details |
| 2a. Fence Height?  |         |
| 2b. Fence Colour?  |         |
| 2c. Linear metres &/or Number of Standard Panels at 2.6 metres wide?   |         |
| 2d. Any non-standard panels? (sizes and quantity of)   |         |
| 2e. Post types? (Pass through, Corner or Terminating and the quantity of each)                                       |         |
| 2f. Any extra posts? (Type as in 2e. and quantity) *Each panel comes with one buried type post as standard           |         |
| 2g. Any Post Feet? (quantity of) * Each post comes as a buried type; unless otherwise requested                      |         |
| 2h. Any Gates? (Opening sizes and quantity)  |         |
| 2i. Any Specials? (Anti-burrow pales? Special Posts? Built in Signage? Built in Lighting? Fans? Electrical Top Off?) |         |
| <b>3. Produce a site drawing which shows the fence line to scale and PLURA can produce a take off to quote.</b>      |         |

**When ordering POLYsade®:**

**Please follow the 3 simple steps in the table to the left.**

**When you have this information contact PLURA and we will be pleased to provide you with a Written Quotation, Drawings and Availability from production or stock.**

**Don't worry; if you are unsure on any elements of this; our experts are on hand to help you at every stage if needed; Please don't hesitate to contact us for assistance or advice.**

## **PRICE PROMISE**

**PLURA Guarantee to beat any price for product on a like for like basis**

**Benefit from all advantages POLYsade® offers without it costing you more!**

### **Further information:**

**POLYsade® Performance Specification FPVTST001**

**POLYsade® Installation Detail Drawings FPVFIG001 to 009**

**POLYsade® Case Studies FPVCAS001**



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## Contact us:

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<https://www.plurainnovations.com/products/polysade-security-fencing>



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