The ‘SMART’ Multimodal Travel Point™ - Mobility Hub

Design, Manufacture, Installation & Maintenance

A Pioneering Manufacturing & Technologies Company

trueform
Public Transport Infrastructure

The Smart Multimodal Travel Point™

MADE IN BRITAIN®

The Smart Multimodal Travel Point™ provides a focal point in the transport network that seamlessly integrates different modes of transport, multi-modal supportive infrastructure, and wayfinding strategies to create an activity centre that maximises connectivity.

Over the years Trueform have provided award winning transport infrastructure for a wide range of applications.

The Smart Multimodal Travel Point™ is fully engineered to the highest standards and can be supplied in a range of elegant, robust materials and finishes to suit individual architectural requirements and to exacting customer conditions.

With so many designs and options, the Smart Multimodal Travel Point™ is suitable for city centres, transport hubs and the full range of suburban and rural locations.

The Smart Multimodal Travel Point™ comes with options for toughened glass, polycarbonate or solid panels, with integrated water management and electrical cabling. Other options include integral advertising, LED lighting and solar power.

Trueform's comprehensive in-house design, engineering and manufacturing facilities enables the timely, cost effective supply and installation of fabricated architectural structures to suit any client need.

- BUS LOADING/ UNLOADING ZONE
- WAYFINDING SIGNAGE AND INFORMATION
- BIKE AND SCOOTER PARKING
- CAR SHARE PICK UP-DROP OFF POINT
- ELECTRIC VEHICLE CHARGING
- WIFI SMARTPHONE CONNECTIVITY
- AMENITIES AND SERVICES


Green Living Roofs

Enhanced Branding


Solar Energy Solutions


Real Time Information Displays

Smart Multimodal Travel Point™ Features

C Core

Core features that provide the essential level of functionality and inclusivity

S Smart

Smart technology features that delivers a higher level of customer experience

E Enhanced

Features that promote shared active travel and benefit the environment

M Sustainable

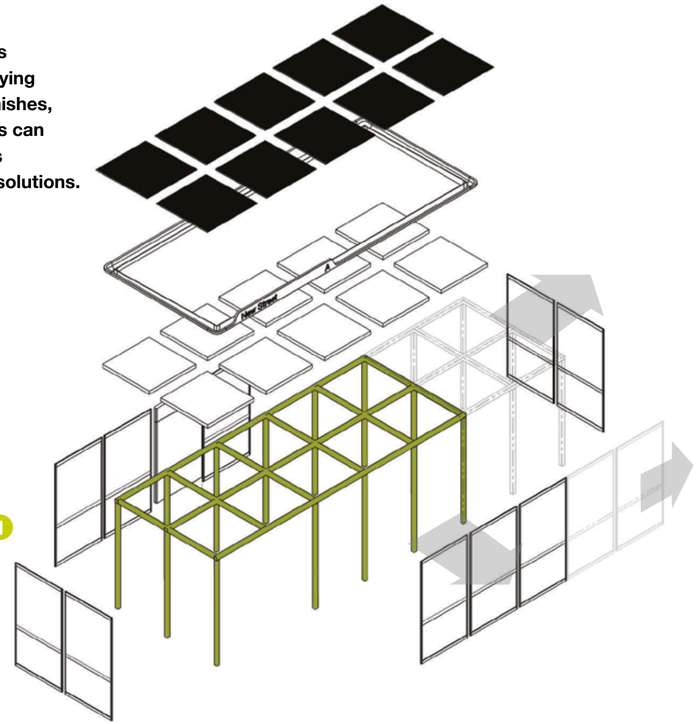
Desirable features that enhance comfort, ambience and safety

	Core	Enhanced	Smart	Sustainable
Shelter with draining roof	•	•	•	•
GRP Perch Seating	•	•	•	
GRP Rest Seating	•	•	•	
Timber Perch Seating	•	•	•	•
Timber Rest Seating	•	•	•	•
Timber Bench Seating	•	•	•	•
Poster Frame	•	•	•	•
High-level graphics	•	•	•	•
RTI	•	•	•	•
External spot lights		•	•	•
Internal area lights		•	•	•
Applied graphics		•	•	•
Decorative panels		•	•	•
Highlight entrance posts		•	•	•
External handrails		•	•	•
Over-hanging roof for external shelter			•	•
External timber Perch seating			•	•
‘6-sheet’ advertising screen			•	•
CCTV			•	•
Wireless charging arm rests			•	•
Digital information screen			•	•
Help point			•	•
AED Defibrillator			•	•
Sedum roof				•
Timber divider panel				•
Timber ceiling slats				•
Glazed roof section with solar panels				•
Bike docking				•
Bike repair station				•
Parcel lockers				•
Planters				•

Modular System

Sizes and Configurations

The modular construction allows maximum flexibility when specifying a new installation. Materials , finishes, colours, and graphics of all parts can be customised to the customers requirements to create tailored solutions.



BUILD YOUR SHELTER:

STEP 1:
WHAT SIZE?

1 STRUCTURE
Can be built to different lengths and widths with integrated cable management system and drainage.

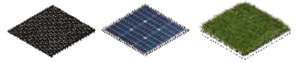
Frame is made of posts, allowing it to be extended in any direction by this size. All components are designed to fit onto or between the posts, allowing the shelter to be configured in many different ways.

STEP 2:
WHAT COMPONENTS?
Details of each of the following component options are on the following page.

- 2 ROOF PANELS
- 3 ROOF STRUCTURE
- 4 CEILING PANELS
- 5 WALL MODULES
- 6 SEATING
- 7 EXTRAS

2 ROOF PANELS
Standard sizes

STANDARD | GLAZING (SOLAR OPTIONAL) | GREEN ROOF



3 ROOF STRUCTURE

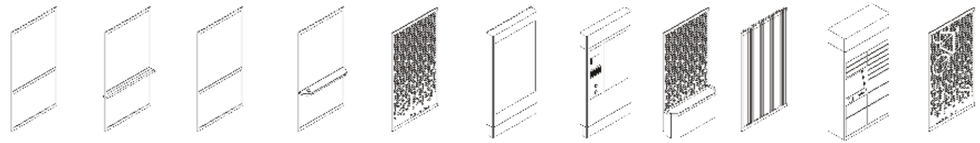
STANDARD | FRONT OVER HANG

4 CEILING PANELS
All standard sizes
Each can accept a range of different lighting types.

STANDARD | SLATTED | TIMBER

5 WALL MODULES
All standard widths.

STANDARD GLAZING | GLAZING WITH HANDRAIL | WALL WITH POSTER CASE | GLAZING WITH BAR | PERFORATED PANEL | DIGITAL AD-BOX | SMART ZONE MODULE | PLANTER WALL | TIMBER DIVIDER | PARCEL LOCKER | CYCLE ZONE MODULE



6 SEATING
All standard widths.

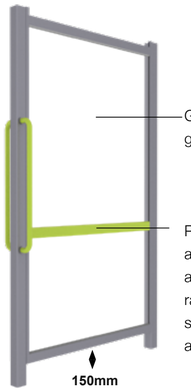
PERCH | REST | BENCH | BENCH WITH CHARGER | CORNER BENCH

7 EXTRAS
Details available.

GRAB RAILS | CCTV | CYCLE REPAIR STAND | CYCLE DOCKS | E-SCOOTER DOCKS | AREA LIGHTING | STRIP LIGHTING | UP LIGHTING | RTI | POSTER FRAMES

Glazing Panels

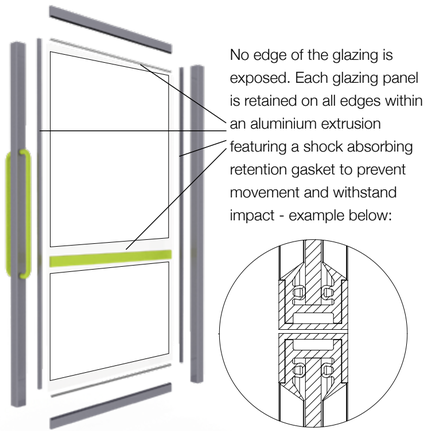
The Smart Multimodal Travel Point™ is as transparent as possible, in order to reduce the masking effect on any property behind the shelter, whilst remaining visible to the visually impaired.



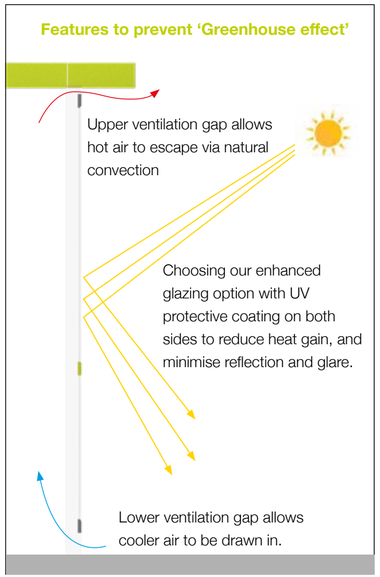
Glazing: toughened safety glass as standard

Panels along the length and width of shelters have a visually contrasting mid-rail, providing a physical separation between top and bottom.

150mm maximum gap between the bottom edge of a shelter and ground level.



No edge of the glazing is exposed. Each glazing panel is retained on all edges within an aluminium extrusion featuring a shock absorbing retention gasket to prevent movement and withstand impact - example below:

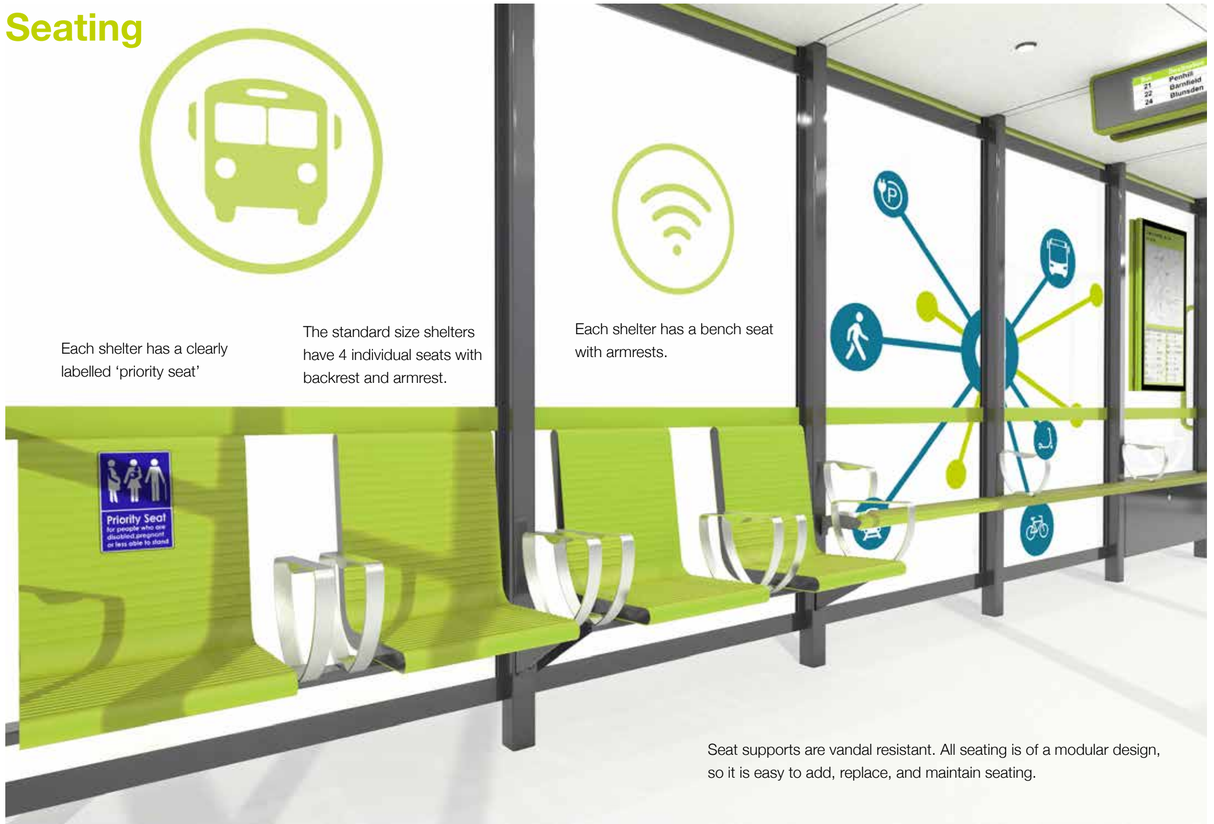


Seating

Each shelter has a clearly labelled 'priority seat'

The standard size shelters have 4 individual seats with backrest and armrest.

Each shelter has a bench seat with armrests.



Seat supports are vandal resistant. All seating is of a modular design, so it is easy to add, replace, and maintain seating.

Lighting

Safety, Access & Egress / Inclusivity & Comfort

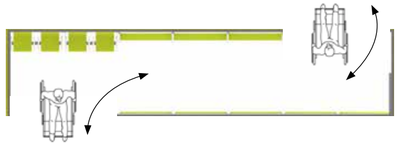
The Smart Multimodal Travel Point™ complies with the Inclusion Act 2010. They provide a safe and welcoming environment, with DDA-compliant features, and other features that will benefit older passengers and those with disabilities (including wheelchair users and people with sight loss), and for people accompanied by children.

High contrast colours are used throughout, meeting guidelines on Light Reflectance values (LRV) for the visually impaired. RTI displays comply with legibility standards.

All finishes are durable and hardwearing; easy to clean and to remove stickers or flyposters. There are no large flat blank areas that can attract graffiti.

Loitering, vandalism and rough sleeping is deterred by bright and welcoming lighting, armrests on benches, and transparent walls on all sides that provide no spaces to hide.

The enclosed design protects from rain and wind. Temperature is regulated to a comfortable level through the design and materials of the glazed walls.



Access and egress points through each shelter are clearly distinguished from the rest of the framework by dedicated lighting and colour contrasts, one gap at the back of the shelter for rear access, in addition to kerb-side access adjacent to where the bus doors will open.

They are large enough for several passengers to pass through at the same time, including parents with buggies and wheelchairs users with carers.

Smart Multimodal Travel Point™ Identification / Brand Application

Brand Application

We propose a strong and bold brand application to ensure that the Smart Multimodal Travel Point™ has a consistent look and feel that is visually attractive, enhances the look of the area, makes a positive contribution to the streetscape, and reinforces a sense of place through the use of the location's visual identity.

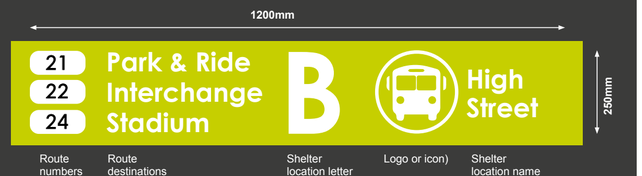
The strong brand application will reflect the distinctness of the local community, which in turn helps to create an improved sense of place. This can aid a positive customer experience and in some cases support community ownership and responsibility for the Smart Multimodal Travel Point™. We show a bold brand application with strongly contrasting colours, but this can be modified or refined as required.

Smart Multimodal Travel Point™ Identification

The Smart Multimodal Travel Point™ is clearly labelled with a shelter location name and letter, which will be used to assist passengers in locating the correct shelter for onward destinations. Brand, naming convention and design is to be agreed with the client.

The Smart Multimodal Travel Point™ have an identifying sign at 3 locations, the approach end, footway side, and the departures end. This location point is uniform across all shelters.

The Smart Multimodal Travel Point™ name and letter are clearly marked in the centre of the shelter at roof rail height. The bus route numbers and destinations are also clearly shown.



The colours shown have a contrast of over 70%; highly visible and legible to all users, including the visually impaired.

Power Supply / WiFi

Integrated electrical enclosure, a secure key lockable cabinet, including: a main switch, separate RCBOs for each real time unit, internal lighting circuit, external lighting circuit, digital advertising unit (if required), and for each further electrical components, and time controllers as required.

Maintenance

The Smart Multimodal Travel Point™ has been designed to be ultra low maintenance.

A complete O&M manual for each Smart Multimodal Travel Point™ configuration will be made available upon completion of installation to share with the shelter maintenance contractor.

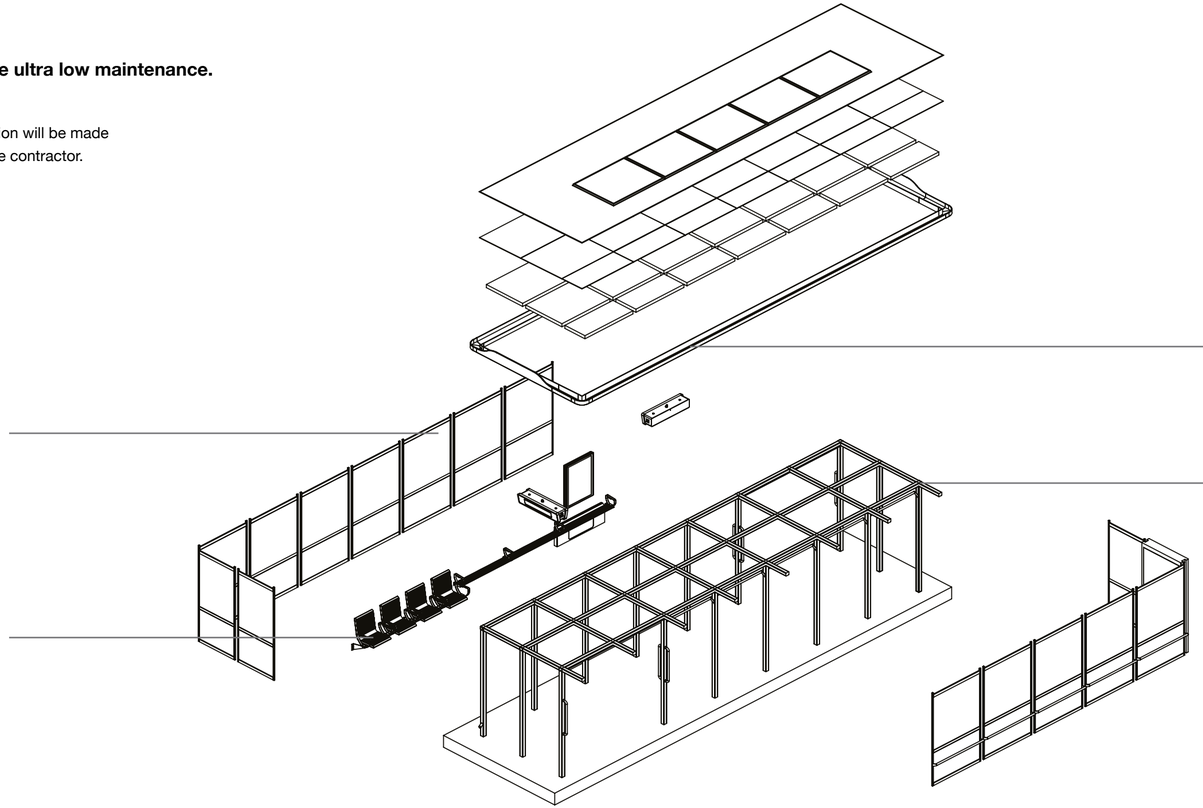
All parts are modular to allow simple replacement or upgrade of parts.

Glazing Panels - Each section bolted to Legs. Each section can be individually removed and replaced for maintenance.

- Top, mid and bottom rails - Extruded aluminium with architectural grade UV protected polyester powder coating.
- Glazing retainers, on each glazing edge - Extruded aluminium with architectural grade UV protected polyester powder coating, includes rubberised shock absorbing gasket
- 6mm hardened Polycarbonate glazing with UV blocking film coating

Seating - Any seat type can fit in any position for flexibility and easy maintenance.

- Individual Seats with arm and backrests - Aluminium construction with hard wearing Polymer warm-touch coating
- Bench Seats with armrests - Aluminium construction with hard wearing Polymer warm-touch coating
- Seat supports bolted to legs - Galvanised mild steel with architectural grade UV protected polyester



Roof Trim - Extruded Aluminium sections with architectural grade UV protected polyester powder coating. Bolted to Structure. Incorporates drainage gutters and Shelter Identification panels. Gutters easily accessible for cleaning. Easy to remove and replace should impact occur.

Structure - Bolted connections between beams and legs to enable easy construction and maintenance.

- Legs - bolted to reinforced concrete slab with Resin Anchor bolts
- Lateral and longitudinal roof beams

Sustainable & Eco Friendly
Made in the UK

Trueform's innovative, eco Smart Multimodal Travel Point™ is manufactured in house, within our UK based, carbon neutral, mobility hub manufacturing & technology centre.

Using low carbon, energy efficient materials and innovative manufacturing techniques, we ensure that the Smart Multimodal Travel Point™ has the lowest carbon footprint, providing significant environmental and social value benefits.

The eco Smart Multimodal Travel Point™ is 'Planet Marked', for approved sustainability, and use both smart and renewable technology for a minimal environmental impact.

Trueform are a leading ESG company (Environmental, Social and Governance). Trueform's eco infrastructure has been assisting towns, cities and public transport authorities achieve ESG - the three central factors in measuring sustainability and societal impact.

Trueform work with their clients to 'transform cities', providing solutions that deliver a promising and sustainable future.

Trueform holds ISO 14001 and PAS 2060 Carbon Neutral Certification.

Towns and cities throughout the world are using Trueform's range of low carbon, eco infrastructure to facilitate and encourage low carbon mobility and active travel, whilst improving public health, air quality and quality of life.

Trueform's eco Smart Multimodal Travel Point™ and digital display products are the most sustainable, lowest carbon, ethically manufactured products available in the industry. Trueform is the first choice for towns and cities looking to achieve the very highest ESG status.

Modular Construction

Trueform's Smart Multimodal Travel Point™ design is crafted with scalability in mind, allowing for seamless expansion or adaptation to meet changing requirements. The modular approach means that components can be added or removed based on space, functionality, or usage demands without compromising the integrity or aesthetic of the structure.

The Smart Multimodal Travel Point™ is designed as interlocking modules, which enables flexibility in size and configuration. This approach supports various settings, from busy urban centres requiring larger, multi-panel structures to more compact, rural locations needing simpler units.

Additionally, modularity allows for easy upgrades to incorporate new features like digital screens, additional seating, or enhanced lighting as needs evolve. Scalability also supports efficient installation and maintenance, with modules designed for quick assembly and minimal disruption.

If a client's requirements grow, additional modules can be installed in a streamlined process, saving both time and cost. This flexibility makes the modular Smart Multimodal Travel Point™ an ideal, future-proof choice for councils and organisations seeking adaptable solutions, ensuring they remain functional and visually cohesive as community needs change over time.

Wide Range Of Benefits

Robust & vandal resistant

High grade, vandal resistant materials, the Smart Multimodal Travel Point™ provides an easy-to-maintain and safe structure

Green Living Roofs

Designed to allow for habitat creation and low maintenance native planting

Modular design

Available in a range of configurations and sizes due to it's modular, flexible and innovative design

Fully DDA & ADA compliant

Providing optimum inclusivity to everyone

Custom colour & branding

Choose from a wide range of enclosure colours to suit your specific branding

Bespoke materials and finishes

Supplied in a range of elegant, robust materials and finishes to suit individual architectural requirements and to exacting customer requirements

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Anti-tamper fixings

Anti-tamper fixings help protect equipment and other secured items against tampering, theft or unauthorised access

Easy maintenance

Quick release, yet tamper proof features for rapid, cost effective maintenance

Bomb resistant shelter glazing

Optional specialist blast glazing and retention system provides maximum safety

Climate controlled shelter

Trueform can provide climate controlled shelter environments to suit all climatic conditions, including heating and air conditioning

Real time information displays

The Smart Multimodal Travel Point™ has been proven to accept a wide range of real time information displays

Cycle rack designs

Wide range of cycle rack options including two tier and vertical racks

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6 sheet illuminated advertising displays

The Smart Multimodal Travel Point™ illuminated 6 sheet advertising displays have been designed to exclusively fit the structure

'Shock absorbing' glazing

A range of glazing materials and options are available, including the special 'shock absorbing' glazing retention system introduced by Trueform

Future proofed & technology enabled

Ready to accept a wide range of digital technologies

Solar energy solutions

Including courtesy lighting utilising latest energy efficient LED illumination technology

Wide range of glazing materials

Including glass, polycarbonate, GRP & perforated mesh glazing printed directly to glass

CCTV security cameras

Can be securely installed in the shelter structure to record footage of both inside and outside the shelter

Solar Powered Lighting

Trueform is also the largest provider of off-grid solar on stops and shelters, with over 5,000 solar stops and shelter installed by Trueform on stops and shelters in the UK, as well as providing many more in other major cities globally.

Our ‘low-power’ lighting and digital display solutions are optimised to reduce energy during operation, to save on energy running costs, reduce temperatures whilst increasing efficiency and long term performance. Trueform’s dedicated solar engineers work continuously on leading edge solar, LED energy management and battery technology developments to ensure that we are supplying the most reliable, value for money solar products at all times. Trueform supply a range of solar lighting modules for a wide range of shelter designs, including flat, curved and pitch roof configurations. Trueform’s solar lighting systems can be custom made to fit new shelters or retro fit existing shelters to suit all customer requirements.

Trueform’s Green Living Roofs

In partnership with

Trueform are corporate partners with the Woodland Trust and the Bumblebee Corporate Partners with Conservation Trust who we support by providing habitats for insects & wildlife with our Green Living Roofs.

Made from recycled materials, our range of green living shelters help reduce CO2 emissions, purify air, and provide ideal habitats for our endangered insects & wildlife. We can supply a roof garden substrate that is a great lightweight growing media for green roofs. This is accompanied by a root resistant waterproof drainage system, finished with wildflowers to encourage native pollinating insects.

We bring together some of the foremost experts in green roofs planted for biodiversity, designing habitat creation, and low maintenance native planting, alongside designers experienced in producing buildings, structures, and retrofit products that enhance our environment.

We will work with councils and organisations to identify suitable bus shelters for green living roofs to enhance biodiversity and improve air quality. Use of drought resistant plant species to minimise maintenance requirements. In addition to living roofs, we can also fit living walls to shelters.

The type of green roof planting and habitat creation we provide is designed to enrich an area or structure with biological diversity. We promote the use of native plants, especially in terms of meeting local and regional biodiversity targets for butterflies, insects and other invertebrates. We would typically include non-native flowering plants to extend the nectar season for solitary bees, hoverflies, butterflies and moths.

Benefits of Green Living Roofs

- 54% reduction precipitation runoff
- 8-12% increase in insects /metre sq
- 5-15 insulation level
- 239 g carbon reduction /metre sq
- 2-12 dB sound reduction

Digital Displays For Public Transport Environments

LED displays, LCD-TFT displays, E-Paper and Low Power Displays

Trueform Digital Passenger Transport Displays is a division of the Trueform Manufacturing and Technologies Group.

We provide complete integrated digital display and technology solutions, delivering high-quality passenger and real time information across a range of display technologies. We provide innovative, high quality, value for money digital display products that enable our passenger transport customers, Worldwide, to deliver intelligent, accurate and reliable information to the public.

Our displays have been proven to increase passenger satisfaction, sense of safety and security, supporting the aim of increasing public transport usage and improving the sustainability of transport services.

With its origins based on the Ferrograph® brand of Passenger Information Display hardware, which was acquired by Trueform in 2007, we provide indoor and outdoor digital display solutions, in combination with in-house manufacturing, nationwide installation and maintenance support services.

The World's Leading Shelter Supplier

Trueform have a comprehensive 'off the shelf' range of innovative transit shelter designs to suit virtually all customer requirements.

Trueform's ability to blend creative new shelter design with sound engineering expertise coupled with its hands-on installation and maintenance experience enables it to provide shelters that are not only a powerful visual calling card for the promotion of public transport but are robust, vandal resistant and easy to maintain.

Trueform designs meet the demands of busy global cities. They are functional, comfortable, safe, modular and ecological. Each shelter has been individually designed and engineered to provide unrivalled customer benefits.

Style & Branding

- Visual appearance to complement a variety of architectural surroundings
- High profile tool for the promotion of public transport service

Strength & Performance

- Robust, vandal, graffiti and weather resistant materials and finishes
- Stainless steel, steel & aluminium construction options for lasting performance and appearance

Simplicity

- Strong, modular components for fast and safe erection on site
- Ability to accept RTI displays, digital information and Journey Planning modules
- Designed to accept covert CCTV cameras within shelter body
- Future Proofed and Technology enabled
- Range of Solar power lighting systems available
- Full compliance with regulations and guidelines (DDA)

Why Choose Trueform?

The UK's and World's leading supplier Mobility Hub Hardware & Infrastructure. Established in 1977, we have provided over 150,000 transport & mobility products to towns and cities throughout the World.

Trueform Manufacturing & Technologies Group are global leaders in the provision of hardware and integrated technology solutions for Smart City, public transportation, intelligent mobility, active travel, e-mobility, low and zero emission travel, clean-tech, telecommunications, digital advertising and digital display applications.

A pioneering British technology & manufacturing SME, Trueform provide custom manufacturing, technology and installation solutions for public spaces. Trueform develop and harness leading technology and advanced manufacturing techniques to create market leading products.

With over 40 years of experience and significant depth of knowledge and expertise gained internationally, Trueform have provided some of the largest and most successful cities and clients in the World with their supporting infrastructure and systems, including London, Manchester, Birmingham, Glasgow, New York, Seattle, San Diego, San Francisco, Las Vegas, Toronto, Abu Dhabi and Bahrain.

Incorporating advanced design and manufacturing, pioneering digital display, communication, smart sensors, AI and IoT technologies, Trueform's solutions enable the smarter, greener and more efficient movement of data, information, communications media and people around the World.

Trueform's products transform urban landscapes into networks of dynamic, digital, hyper-connected, Smart City streetscapes.

Trueform works with its clients to build ultra-connected, highly intelligent, Smart City streetscape infrastructure for city streets and public spaces to provide powerful, media rich communication hubs which transform cities, communities and businesses.

Trueform's clients include cities, transit agencies, outdoor advertisers and communication companies across the emerging digital transportation, out of home advertising and retail advertising sectors.

Trueform is a synthesis of creative designers, technologists, engineers, IoT, Smart City, AI and advanced manufacturing professionals. Our aim is to enrich the human experience with meticulously designed innovative products and technology, developed by creative thinkers that craft beautiful and compelling visions for a better way. We bring to bear focus and tenacity through the discipline and rigor of engineering and technology to realize these visions. As Trueform emerges into new markets it is committed to building what is needed for our times.

Trueform's have over 150,000 deployments at premium locations in major cities throughout the World.

For further information on any of our mobility hub products please visit **www.mobilityhubs.com** or **www.trueformshelters.com**

Trueform Engineering Ltd ı Pasadena Close ı Hayes ı Middlesex ı UB3 3NQ
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Public Transport Infrastructure