SmartSpace is an innovative approach to public realm furniture, whereby products are designed and can be arranged to meet the varying and changing requirements of outdoor spaces. RailRoad is the latest addition to the SmartSpace family.

At Furnitubes we believe in the positive promotion of UK manufacturing and the benefits that it brings to the UK economy. Manufacturing in the UK also offers a more sustainable solution, with transportation distances and associated environmental impacts minimised. Wherever you see our UK Made logo you can be assured that the product is manufactured in the UK.
INTRODUCTION

**Uniun: the concept**

The cornerstone of the Uniun concept is that informal seating and / or planter ‘islands’ encourage more social use of spaces than conventional linear forms. Seating can be arranged so that people face different directions, or face each other rather than only allowing people to sit in a line facing the same way. Planting and seating can be combined, creating green buffers and backdrops between and around seating provision. It is the trapezoidal geometry that affords the characteristic angular configurations of the Uniun range, with a single common form (that can also be flipped and rotated for the reverse hand module) that can be used for both seating and planters, and also sub-divided to provide seating and planting in the same module. Whether used as stand-alone items or combined in larger numbers, Uniun is a unique approach to seating and planting for external public spaces, offering the following features and benefits:

- An almost infinite number of configurable layouts to suit almost any site situation
- Readily movable so can be reconfigured to suit changing spaces
- Close proximity of seating and planting
- Lightweight but tough polyethylene base moulding, in multiple finish options, including bright colours
- Height adjustable feet to accommodate variable site levels
- Freestanding or bolt-down installation
- Grooved feature lines on base moulding and seating surfaces to aid alignment of adjacent modules

**The geometry**

The UK definition of a trapezoid is a 4-sided flat shape with straight sides and no parallel sides. Adding two opposite right-angled corners introduces further relationships between the two pairs of sides, with one adjacent pair being equal length and for the second pair, one side being twice the length of the other. It is these principles that enable different sides of the product modules to be abutted and aligned to form unusual geometric and organic configurations.
Uniun: flip and rotate
As well as the clever trapezoid geometry that offers so many different configuration options, another unique feature of the Uniun design is that the base moulding is common to all seating and planter modules by virtue of it being able to be flipped and rotated, and used in either of its upright orientations. The base moulding is essentially a ring, to which either a lid and / or a base is added.

![Diagram of Uniun design showing base moulding, seating, planter, and split seating / planter options.]

Seating
Lid fitted on top of moulding to form seating surface

Base moulding
common to all seating & planter products, in standard orientation or flipped and rotated for reverse hand

Planter
Base plate fitted to underside of moulding for containment of topsoil and planting

Split seating / planter
A planter can also have just a part lid to provide a small seating surface. Seating platforms can be at either side or end, with further options on the direction of the feature lines. With standard and reverse hand options this gives 8 possible configurations, all using a common base moulding.

Logo
'Uniun' as a brand name and logo also adopts the flip and rotate concept - an ambigram that reads the same when rotated 180 degrees, with the font derived from the trapezoid plan of the product.
**Module options**

From a single common base moulding, which can be flipped and rotated for a reverse hand version of the trapezoid in plan, 14 different individual modules are created, offering:

- 4 all-seating units, each with a different platform configuration and detailing
- 2 all-planter units, in the standard and reverse hand forms
- 8 split seats / planters, each with a different half for the planting and with seating platform details to match the all-seating units

Full seating platforms accommodate a minimum of 3-4 adults and half platforms generally 2 people, though when used in children-centric locations they can offer an increased seating capacity.

<table>
<thead>
<tr>
<th>Module Options</th>
<th>Full Bench</th>
<th>Combined Bench / Planter</th>
<th>Full Planter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Module</strong></td>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>Reverse Hand Module</strong></td>
<td><img src="image4.png" alt="Diagram" /></td>
<td><img src="image5.png" alt="Diagram" /></td>
<td><img src="image6.png" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>Longitudinal Timbers</strong></td>
<td><img src="image7.png" alt="Diagram" /></td>
<td><img src="image8.png" alt="Diagram" /></td>
<td><img src="image9.png" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>Transverse Timbers</strong></td>
<td><img src="image10.png" alt="Diagram" /></td>
<td><img src="image11.png" alt="Diagram" /></td>
<td><img src="image12.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>
**Plastics base unit**

The common bench base unit and planter moulding are UK manufactured in rotationally-moulded LLDPE (linear low density polyethylene) and are available in a wide range of colour options. These are all ‘through-colours’ (i.e. not just a surface coating) meaning scuffs will not expose any base material of a different colour, as is the case with coated steel products for example. The LLDPE moulding is fully recyclable. Standard colour options are shown below; special colours can be offered for large volumes.

**Mottled / stone effect colours**

These colours comprise a mix of colours that combine as a mottled finish, with the benefit of better disguising scuffs and marks.  

- Dark grey 7276  
- Light grey 7275  
- White 1000  
- Dark green 6137  
- Light green 6136

**Black (100% recycled)**

Black is offered in fully recycled material.

**Neutral / natural colours**

Flat neutral colours help accentuate the contrasting natural colour and texture of the timber top on benches and greenery in planter modules.

- Red 4518  
- Pink 4515  
- Orange 3601  
- Yellow 2704  
- Purple 5417  
- Light blue 5747  
- Dark blue 5748

**Bright colours**

Vibrant colours make a bold statement and brighten up any space. They are particularly popular in lower school environments.

**Timber bench top**

Bench tops are laminated from iroko - a West African hardwood that is rich in natural oils and with a ‘Very Durable’ classification. Freshly machined iroko ranges in colour from a medium brown to pale yellow, which if left untreated in an exterior situation will typically fade to a silver-grey patina within 6-12 months. As standard we apply a UV protective finish in a ‘teak’ colour, which helps to retain the natural colouration of iroko and protect the timber over a longer period. Other colours are available which will more significantly change the appearance of the timber, as shown below. To maintain a good long term colouration we would typically recommend re-coating after 12 months. If preferred, bench tops can be supplied in a natural untreated state, without any finish coat.

**Natural timber colours**

Teak is our standard colour as it is closest match to natural iroko. All natural colours allow the grain of the iroko to clearly show through the finish coat.

- Dark grey 7276  
- Light grey 7275  
- White 1000  
- Dark green 6137  
- Light green 6136

**Neutral colours**

Greys and blacks can be particularly effective when combined with plastics base mouldings in the bright colour range.

- Grey 4518  
- Graphite 5747  
- Ebony 5748

*Standard colour / finish combination*

Unless specifically requested otherwise, standard colour combination is:

Plastic base unit: Mottled 9210; Bench top: Teak colour UV protective finish.
UNIUN® SEATING & PLANTERS RANGE

www.furnitubes.com  tel: 020 8378 3200
Formal geometric configurations
The trapezoid shape of the Uniun module - with two adjacent sides of equal length and the second pair having one side twice the length of the other - means they can be placed together in geometrical arrangements that are both decorative and functional at the same time. Layouts generally fall into two broad categories - linear and island - with just a few of the possible layouts shown below. Mixing seating and planter units can further reinforce the geometrical patterning, or introduce an informality, depending on whether or not they are placed in an obvious sequence. Using different seat platform types offers even more possibilities.

Linear layouts, straight and angled
When adjacent Uniun modules are joined on singular sides the overall arrangement inevitably takes on a linear form, though still retaining some informality as opposite sides of individual modules aren’t parallel. Linear arrangements can be straight or angled, or a combination of the two.

Island clusters
Placing adjacent modules so that at least two of their adjacent sides touch the neighbouring unit results in larger, more solid configurations, creating island-like clusters of seating and / or planter provision. Such arrangements are particularly suited to large open spaces.
Informal organic configurations
Whilst many interesting geometric arrangements are possible with the Uniun modules, these might not always fit the available space on a site. However, when arranging the modules more informally, almost any overall shape and size can be achieved and such arrangements arguably will be visually much more interesting. With more changes in direction the seating in particular can be less formal and more fun to use. Again, arrangements can be broadly viewed as either linear or island, as shown on the examples below, but these can be combined to form almost any layout.

Linear layouts, straight and angled
Joining adjacent modules on random different sides, combined with using standard and reverse hand units, variable seating platform types and occasional planters can create an informal linear chain, much like an island archipelago.

Island clusters
When seating modules are clustered they form larger scale platforms, facing different directions and with an informal perimeter edge. Adding planters provides green buffers between the seating, creating small more private and informal seating areas. The layout permutations are almost endless.
UNIUN® SEATING & PLANTERS RANGE

UNIUN ALL-SEATING MODULES
Low density polyethylene base moulding, mottled dark grey (ref. 9210), supplied c/w brackets for bolting down
Iroko laminated seating platform, smooth planed with UV protective finish (teak)
1160mm x 875mm overall plan x 480mm high

UNI SBL
Seating unit, full-size platform with longitudinal feature lines

UNI SBT
Seating unit, full-size platform with transverse feature lines

OPTIONS (ALL MODELS):
- Base moulding in alternative colours
- Timber platform in alternative colour UVP treatment
UNIUN® SEATING & PLANTERS RANGE

UNIUN ALL-SEATING MODULES - REVERSE HAND MODULES
Low density polyethylene base moulding, mottled dark grey (ref. 9210), supplied c/w brackets for bolting down
Iroko laminated seating platform, smooth planed with UV protective finish
1160mm x 875mm overall plan x 480mm high

UNI RBL
Seating unit, full-size platform with longitudinal feature lines

UNI RBT
Seating unit, full-size platform with transverse feature lines

OPTIONS (ALL MODELS):
- Base moulding in alternative colours
- Timber platform in alternative colour UVP treatment

www.furnitubes.com  tel: 020 8378 3200
UNIUN® SEATING & PLANTERS RANGE

UNIUN COMBINED SEATING / PLANTER (MAJORITY SEATING) MODULES
Low density polyethylene base moulding, mottled dark grey (ref. 9210), with galvanised steel base plate and partition, supplied c/w brackets for bolting down
Iroko laminated seating platform, smooth planed with UV protective finish
1160mm x 875mm overall plan x 480mm high

UNI SLL
Longitudinal half seating platform / half planter unit
Planter capacity 80 litres

UNI SLT
Transverse half seating platform / half planter unit
Planter capacity 70 litres

OPTIONS (ALL MODELS):
- Base moulding in alternative colours
- Timber platform in alternative colour UVP treatment

www.furnitubes.com  tel: 020 8378 3200
UNIUN® SEATING & PLANTERS RANGE

UNIUN COMBINED SEATING / PLANTER (MAJORITY SEATING) - REVERSE HAND MODULES
Low density polyethylene base moulding, mottled dark grey (ref. 9210), with galvanised steel base plate and partition, supplied c/w brackets for bolting down Iroko laminated seating platform, smooth planed with UV protective finish
1160mm x 875mm overall plan x 480mm high

UNI RLL
Longitudinal half seating platform / half planter unit
Planter capacity 80 litres

UNI RLT
Transverse half seating platform / half planter unit
Planter capacity 70 litres

OPTIONS (ALL MODELS):
- Base moulding in alternative colours
- Timber platform in alternative colour UVP treatment

© Furnitubes
www.furnitubes.com  tel: 020 8378 3200

Registered Designs of Furnitubes International Ltd
Registered Trade Mark of Furnitubes International Ltd
UNIUN COMBINED SEATING / PLANTER (MAJORITY PLANTER) MODULES
Low density polyethylene base moulding, mottled dark grey (ref. 9210), with galvanised steel base plate and partition, supplied c/w brackets for bolting down
Iroko laminated seating platform, smooth planed with UV protective finish
1160mm x 875mm overall plan x 480mm high

UNI SSL
Longitudinal half seating platform / half planter unit
Planter capacity 110 litres

UNI SST
Transverse half seating platform / half planter unit
Planter capacity 115 litres

OPTIONS (ALL MODELS):
• Base moulding in alternative colours
• Timber platform in alternative colour UVP treatment
UNIUN COMBINED SEATING / PLANTER (MAJORITY PLANTER) - REVERSE HAND MODULES

Low density polyethylene base moulding, mottled dark grey (ref. 9210), with galvanised steel base plate and partition, supplied c/w brackets for bolting down
Iroko laminated seating platform, smooth planed with UV protective finish
1160mm x 875mm overall plan x 480mm high

UNI RSL
Longitudinal half seating platform / half planter unit
Planter capacity 110 litres

UNI RST
Transverse half seating platform / half planter unit
Planter capacity 115 litres

OPTIONS (ALL MODELS):
- Base moulding in alternative colours
- Timber platform in alternative colour UVP treatment
UNIUN® SEATING & PLANTERS RANGE

UNIUN ALL-PLANTER MODULES
Low density polyethylene base moulding, mottled dark grey (ref. 9210), with galvanised steel base plate, supplied c/w brackets for bolting down
1160mm x 875mm overall plan x 430mm high
Planter capacity 150 litres

UNI SFP
Planter unit

UNI RFP
Planter unit, reverse module

OPTIONS (ALL MODELS):
- Base moulding in alternative colours
- Timber platform in alternative colour UVP treatment

www.furnitubes.com  tel: 020 8378 3200
**Placement and alignment**

Grooves on both the side faces of the base moulding and on the top face of the seating platform are designed to aid placement of adjacent modules, in many different configuration options, as shown on the examples below.

**Levelling and fixing down**

All modules have adjustable feet, allowing for levelling on sloping ground of up to 50mm height difference on adjacent feet. On secure sites, products can be left freestanding, but if preferred can be fixed down via ground fixing plates fitted to two of the feet.

Aligning centre lines of adjacent seating platforms

Aligning outside lines of adjacent seating platforms

Aligning seating platforms and planters

Ground fixing plate

Adjustable foot

Fixing plates can be rotated so that ground fixings are located in discrete positions

Base moulding

Adjustable foot

Ground fixing plate with Ø15mm hole for M10 or M12 ground anchor

Ground anchor
Endless possibilities
Uniun is a trapezoid-shaped building block that lends itself to unusual angular configurations that can create unique combinations of multi-directional seating and planters. Modules can be arranged in straight lines, clusters or even to create seating alcoves. Planters can be used to provide green buffers, so that seating spaces become more private. These types of arrangements are ideal for large open paved spaces, introducing seating and planting in a coordinated range of contemporary-styled products.

Key: Modules shown on example configuration:
Seating
S1 Full platform module
S2 Full platform reverse hand module
Planters
P1 Planter module
P2 Planter reverse hand module

All platforms are longitudinal feature line versions. Platforms with transverse feature lines and half bench / half planter combinations offer more variety.
UNIUN® SEATING & PLANTERS RANGE

View or download other product e-brochures at the following link:
www.furnitubes.com/brochures

© Furnitubes

3rd Floor, Meridian House, Royal Hill, Greenwich
LONDON SE10 8RD
T: +44 (0)20 8378 3200
F: +44 (0)20 8378 3250
sales@furnitubes.com
www.furnitubes.com