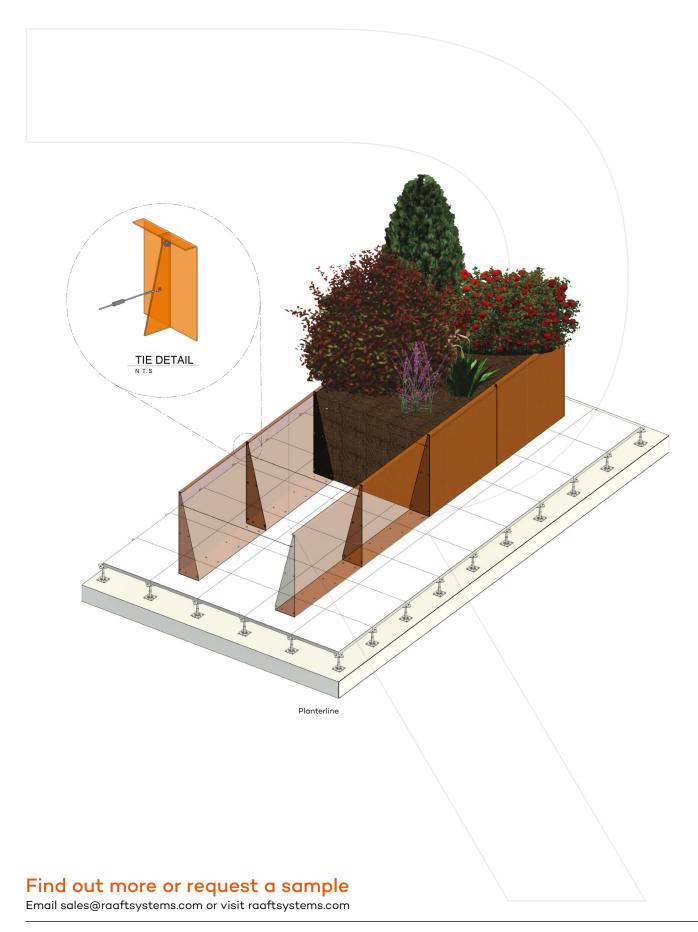


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TECHNICAL DATA SHEET



TECHNICAL DATA SHEET

Planterline

PRODUCT NAME	COLOUR	DIMENSIONS		OTHER	
	Powder Coated CorTen	Maximum straight panel length	2400mm	Material specification	CorTen A steel materials class A EN10029
Planterline Planterline Bespoke		Maximum returns at corners	1000mm (Limited to one side)		
		Height Range	300-1100mm	Corner types	Folded
		Steel thickness	3mm	Top return	40mm single top

Loading analysis

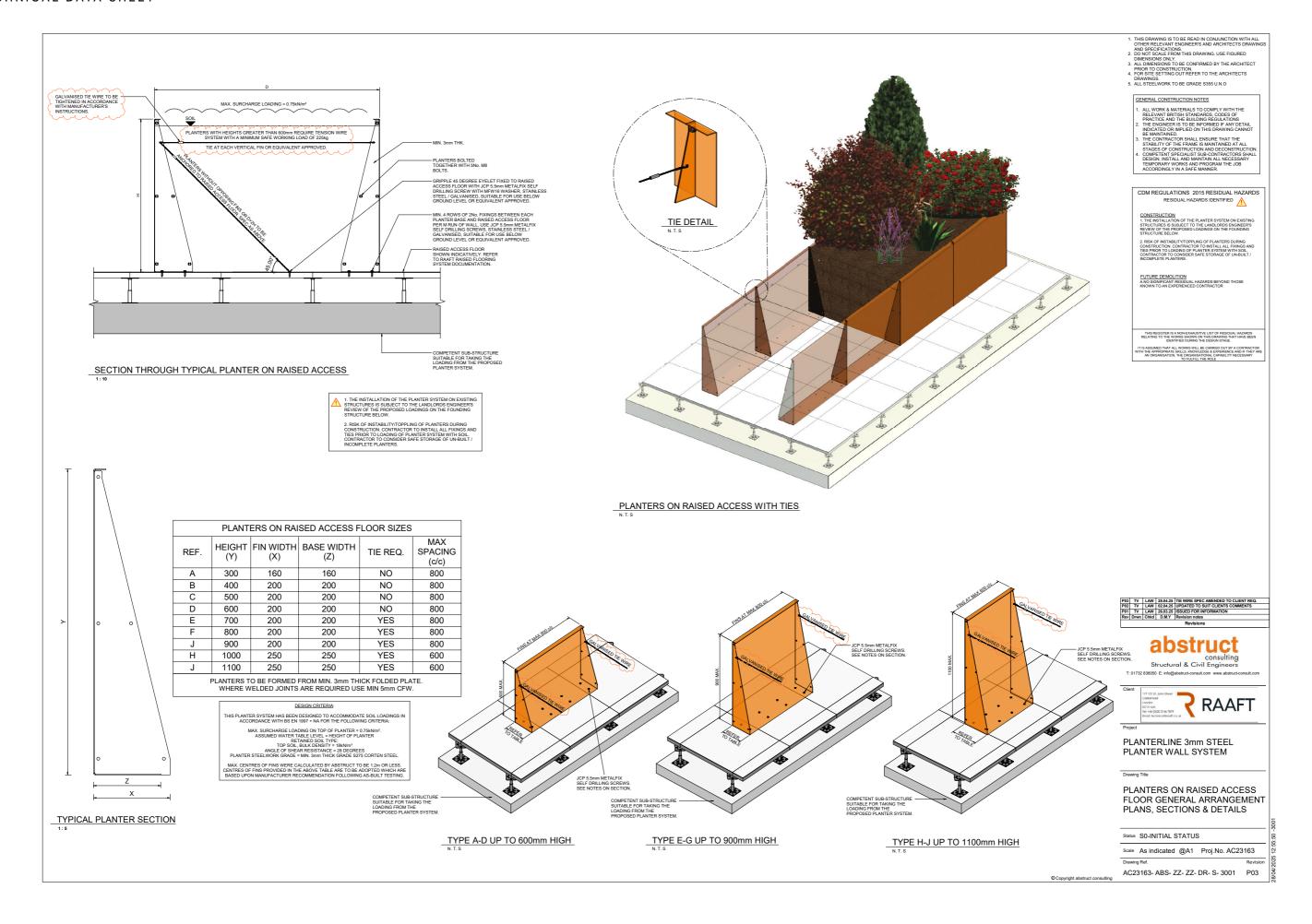
PLANTER HEIGHT	PANEL DEFLECTION	WET SOIL LOAD PER M ²	
300mm	0.02mm	300H - 510kg 400H - 680kg	
600mm	0.14mm	500H - 850kg 600H - 1020kg	
900mm	0.66mm	700H - 1190kg 800H - 1360kg 900H - 1530kg 1000H - 1700kg 1100H - 1870kg	
1100mm	1.1mm		

Structural calculations for our Planterline planters have been completed to ensure they are fit for standard use. Based on the calculations made, a deflection amount was measured on four planter heights as per the below above.

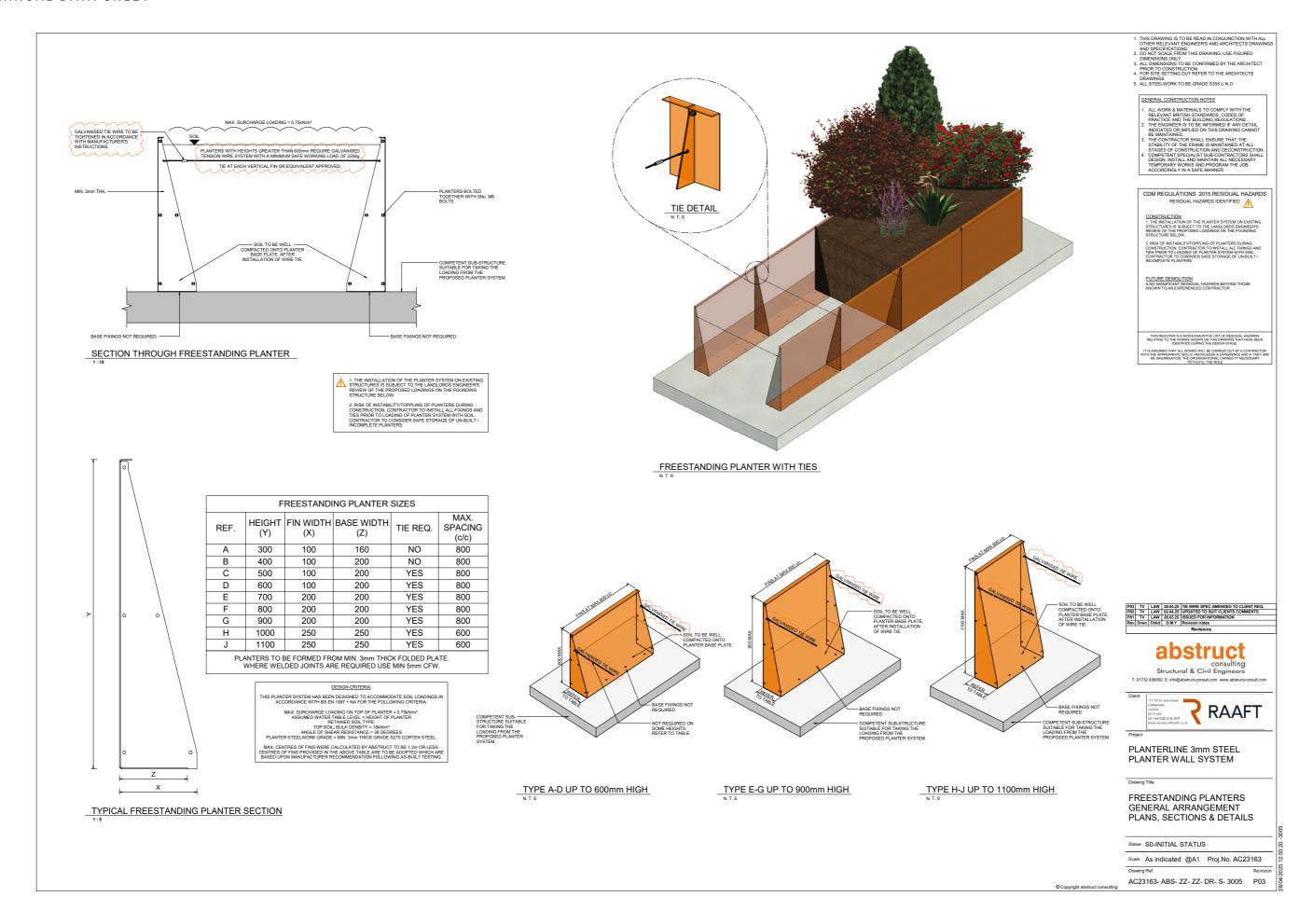
Please note this information should be used as a guide only. Please contact us if you would like further information on the structural calculations made.

Find out more or request a sample

TECHNICAL DATA SHEET

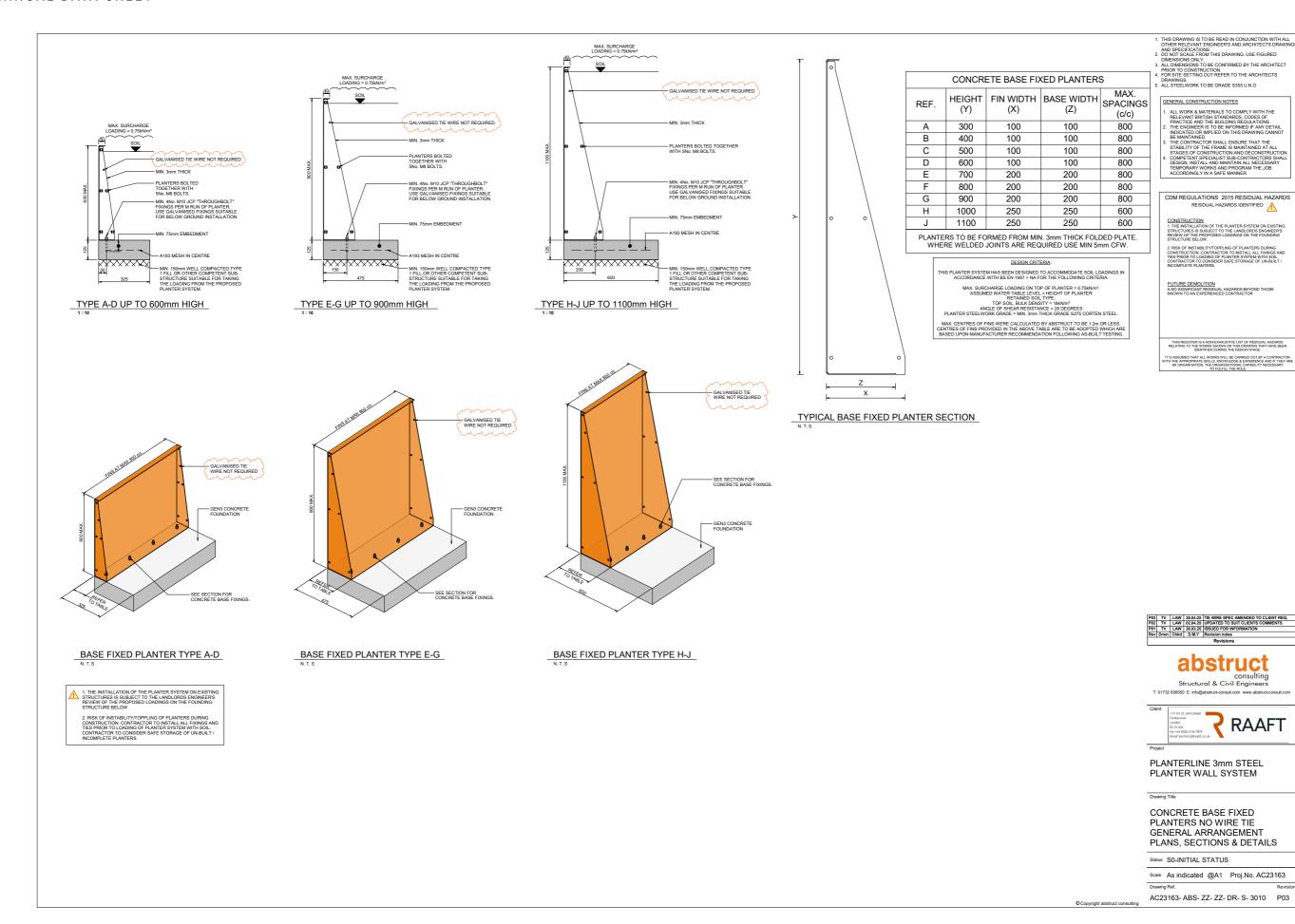


TECHNICAL DATA SHEET



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TECHNICAL DATA SHEET



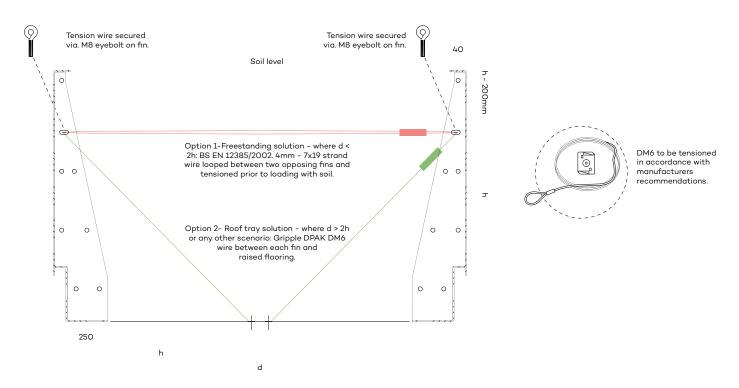
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TECHNICAL DATA SHEET

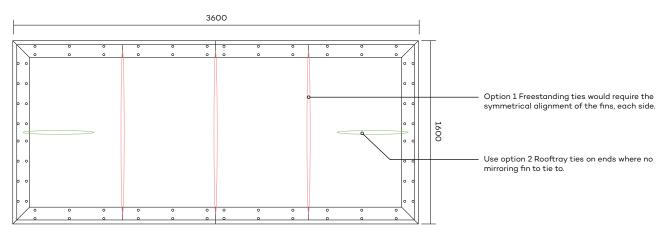


Strengthening options

All planters higher than 600mm.



Plan view of both bracing solutions (Freestanding and Rooftray)



Find out more or request a sample

TECHNICAL DATA SHEET



Accessories





Lockable cabinet

Used within the planter walls (welded in place) for access or storage of weatherproof products/items. It can accommodate P67 rated power sockets and lighting boxes for external lighting.

For added security, a panel lock, complete with a key, prevents unauthorized access.

The cabinet comes in the following sizes:

500(H) x 600 x 200 mm

400(H) x 500 x 200 mm

250(H) x 300 x 200 mm

Lighting detail

Illuminate your planters with our lighting options. Feel free to contact any member of our team if you're keen on enhancing your planters with a touch of light.



Installation Information

The installation is then completed by covering the extent of the floor structure panels, which pass beyond the planter perimeter with porcelain tiles. To secure the planter into concrete, we advise from past planter installations, the creation of a 300mm wide by 150mm deep concrete race around the planter's perimeter. M10 through bolts (supplied by Raaft®) are used for fixing down the planter into the concrete. Bracing becomes necessary for planters exceeding a height of 600mm. This is to account for potential loads imposed by soil and any additional stresses within a terrace environment. The recommended bracing solutions for Raaft® planters include tensioning wire or a metal strap spanning from one side to the other.

Product finishes

CorTen A is a type of weathering steel which was developed to remove the need for regular painting and rust-prevention maintenance

Note: Refer to the CorTen guide for more information.

This is achieved by the formation of a natural stable coating of dark brown oxidation across the metal's surface which acts as a barrier to the corrosive effects of rain, snow and other weather conditions. When delivered the CorTen will contain mill-scale which will remove over time prior to the natural stable coating of dark brown being achieved. The weathering process can take around 18 months.

Powder coating starts with shot-blasting of the steel which removes mill-scale, oxide dirt, oil and grease from the substrate; followed by

a 7-stage zinc phosphate pre-treatment process for to prepare the surface. The product then receives the polyester powder coating to the requested colour. Polyester has excellent exterior durability and colour retention. Numerous colour options from world leading powder manufacturers are available.

Choose from these finishes:





CorTen

PPC

Find out more or request a sample

TECHNICAL DATA SHEET



Sustainability

Planterline is crafted from two material options: Untreated steel or Stainless Steel, and it boasts 100% recyclability. Consequently, Planterline stands out for its outstanding whole-life cost, as it is marketed with recycling in mind rather than incurring disposal costs. The primary component in steel production is iron, ranking second only to aluminium in terms of its natural abundance in the Earth's crust. Considering current extraction rates, there exists a sufficient iron supply to sustain production for well over 1000 years.

Stee

Mild steel is widely recognized as a sustainable material for several compelling reasons:

1. Longevity and Durability

Mild steel boasts exceptional longevity and durability. When compared to less robust materials, it provides extended service over many years. For instance, while other materials may require annual replacement, using mild steel every five years significantly reduces the environmental impact, as it necessitates less energy for continuous replacement.

2. Versatility

Mild steel offers high versatility in terms of shapes and sizes during production. Its malleability allows it to take on various forms, making it highly adaptable and suitable for a wide range of applications.

3. Recyclability

One of the most significant sustainable advantages of mild steel is its recyclability. While the percentage of recyclable content may vary by type, it typically contains a high percentage of recyclable material. This aligns seamlessly with its versatility, as any surplus steel from manufacturing processes can be repurposed for smaller products or recycled, making it an environmentally friendly metal choice.

4. Absence of Harmful Chemicals

Unlike some other metals, the production of mild steel does not involve the release of harmful chemicals or toxins. This characteristic contributes to its eco-friendliness.

Product maintenance

Steel

For the Planterline, the steel is powder coated. This will require little/no maintenance as there won't be any interaction between this part of the product and the user.

Fire protection

Planterline planters are made using CorTen A, or Mild Steel, neither of which burn nor pose a fire hazard.

CorTen A is high performance materials that display excellent resistance to atmospheric corrosion when compared to other steels, making them exceptionally suitable for bespoke planter applications.

Protective equipment

We recommend that PPE (Personal Protective Equipment) is used when installing the Planterline:

- a) Good strong safety boots/shoes to protect the feet.
- b) Protective eye wear such as safety glasses.
- c) Strong gloves to protect the hands.
- d) If using loud cutting equipment then ear plugs or defenders should be worn.

General construction notes

- All folding tolerances are ± 1.2mm with and angle variation of ± 1°
- All rolling tolerances ± 8mm
- All fabricated and welded components are manufactured to a tolerance of ± 2mm
- Tolerance of ± 5mm across a diagonal measurement
- Where powder coated components are applicable, they are completed to the following specification:

Pre-treatment - shot blast SA 25

Primer - Zinc-rich primer with a minimum of 60μ

Top coat - Final top coat to be a minimumu of 60µ

• All Cor-Ten finishes are supplied as untreated/unweathered

Find out more or request a sample

TECHNICAL DATA SHEET



Storage and handling

The product is securely packed and sealed to ensure no movement of the product in transit. Depending on the size / weight of the consignment this may be palletised.

Whilst there is no specific weight restrictions on what is or is not safe to lift in manual handling, an assessment of the health and safety risks should be undertaken and measures taken to reduce the risk of injury so far as reasonably practicable.

The following guidelines may be useful:

- a) Each person should be fully trained in manual handling techniques.
- b) The use of handling aids such as a trolley, folk-lift, pallet truck or conveyor should be used if moving large volumes of cartons.
- c) Break up large consignments into more manageable loads.
- d) Ensure that the product is stored at a reasonable height, so avoiding the lifting of cartons from floor level or above shoulder height.



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