



# FirstShield Tree Protection Round Top Panel Frame Kit 6.4m Wide TREE-KIT-0010

# FirstShield Tree Protection Temporary Panel Frame Kit 6.4m Wide - No Brace TREE-KIT-0020

Operations, Maintenance & Installation Manual

Proudly Compliant with:



Proud to work with our partners



This manual provides a comprehensive overview for the installation, operation, and maintenance of the FirstShield Tree Protection Round Top Panel Frame Kit (6.4m wide) TREE-KIT-0010 and FirstShield Tree Protection Temporary Panel Frame Kit (6.4m wide) - No Brace TREE-KIT-0020. This system is designed to establish a robust protective barrier around trees on construction sites, ensuring compliance with the recommendations set out in BS 5837:2012 'Trees in relation to design, demolition and construction.'

**Disclaimer:** This guide is for informational purposes only. The installer is responsible for ensuring the installation complies with all relevant British Standards, including BS 5837:2012 'Trees in relation to design, demolition and construction', local building regulations, codes of practice, and site-specific risk assessments. While every attempt has been made to verify the accuracy of the content in this guide upon its release, we cannot accept liability for any losses or damages resulting from inaccuracies. All tasks outlined must be carried out by certified professionals. Any deviation from these instructions nullifies any guaranteed entitlement or liability from the manufacturer.

**Copyright:** The copyright of this guide is owned by First Fence Ltd and is protected at all times. Reproduction of this guide by any means is strictly prohibited without prior written consent from First Fence Ltd.

**Contact:** For enquiries regarding the installation, operation or contents of the guide in relation to this product please direct your questions to : The Product and Drawing Office Manager, First Fence Ltd, Off Kiln Way, Swadlincote, South Derbyshire DE11 8EA. Or The Product and Drawing Office Manager [sales@firstfence.co.uk](mailto:sales@firstfence.co.uk) +44 1283 380054.

**Manufacturer and/or Reseller:** First Fence Ltd, Off Kiln Way, Swadlincote, South Derbyshire DE11 8EA. [www.firstfence.co.uk](http://www.firstfence.co.uk) +44 1283 380054.

**Competence:** This product must be installed by a person of competence, defined as an individual who possesses the necessary knowledge, skill and experience in the installation of fences and gates.

**Liability:** This installation guide should be understood and followed before any installation activities commence. If any area of the installation is unclear, the installer must contact the manufacturer, outlined in 'Contact.' First Fence Ltd takes no responsibility for incorrectly installed systems, product, material or components.


# 1.0 Safety & Tools

## Personal Protective Equipment (PPE)

The following minimum PPE is required for installation:


Hard Hat

Must be worn




Eye Protection

Must be worn




Safety Gloves

For all material handling



Foot Protection

Must be worn



## Risk Assessment

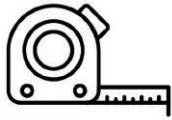
Installers are responsible for completing a site-specific risk assessment and complying with all local risk assessments before starting work. This responsibility includes, but isn't limited to, the following:

Activity	Risk Assessment Requirements and Not Limited to
Breaking ground for post hole excavations	Noise Vibration Manual Handling
Post Installation	Manual Handling
Installation of Fixings	Noise Vibration Working at Height

## Tools & Equipment

### Tape Measure

For setting out and measuring distances



### Post Rammer/Driver

To ensure upright scaffold poles are driven securely into the ground to the required depth of 600mm



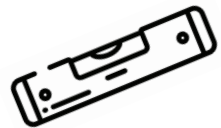
### Coupler Spanner

Required for scaffold couplers



### Spirit Level

For plumb (vertical) and level installation



### Cable Avoidance Tool

To identify hidden services embedded in the ground



## 2.0 Pre-Installation

### Site Survey & Preparation

**Tree and Root Protection Area:** Clearly define the tree protection zone (TPZ) based on arboricultural recommendations or local regulations. This system is designed to protect this area.

### Ground Conditions

**Stability:** Assess the stability and composition of the ground where the vertical scaffolding tubes will be inserted. Ensure the ground can adequately support the structure and provide secure anchoring.

**Underground Services:** Before any digging, identify and mark the location of all underground services (e.g., pipes, cables, irrigation lines) to prevent damage. Use a Cable Avoidance Tool (CAT) and consult site plans if available.

**Level Ground:** While the system can likely adapt to slight variations, a relatively level ground line will simplify installation and improve stability.


**Obstructions:** Clear the area of any debris, rocks, or other obstructions that could impede installation or compromise the stability of the structure.

### Materials Check

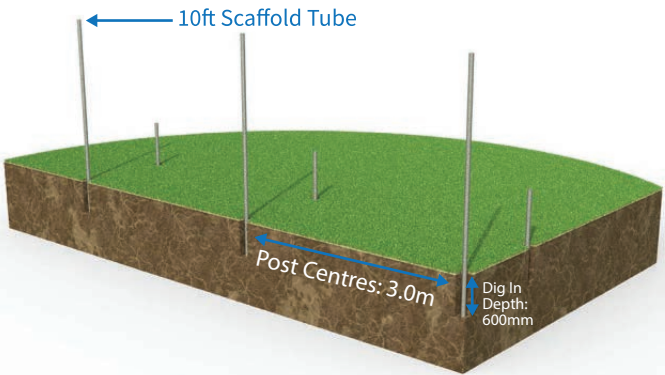
Unpack the kit and verify all components are present and undamaged, checking against the Bill of Materials (Section 4.0). Ensure all components are free from excessive corrosion or damage.

# Installation - Full Back-Braced System


1



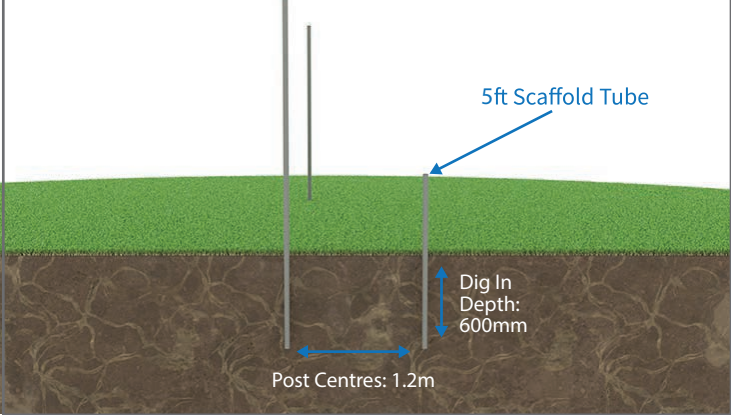
Install the 10ft Scaffold Tubes at 3.0m post centres. The dig in depth is a minimum of 600mm to comply with BS 5837 for root protection. Ensure that these uprights are plumb and securely anchored. Use a Post Driver/Rammer to drive the pole into the ground.




2



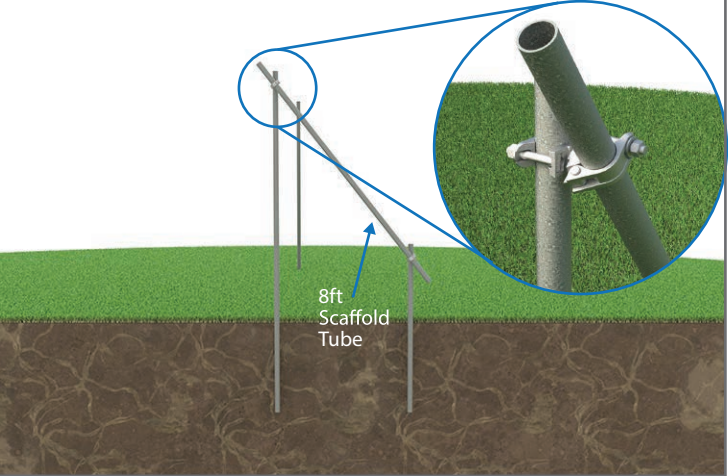
Install the 5ft Scaffold Tubes at 1.2m post centre from the 10ft pole. The dig in depth is 600mm. Use the Post Driver to drive it into the ground. Ensure these tubes are upright and securely in the ground. These scaffold tubes conform to BS EN 10219-1.




3



Attach the 8ft Scaffold Tube to the installed 10ft and 5ft poles using the provided Swivel Couplers, this forms the diagonal shown below. Tighten with a Coupler Spanner. The horizontal and diagonal bracing forms a rigid structure.




4




Swivel Couplers allow two scaffold tubes to be connected together at any angle. See below for how to attach Swivel Couplers.


1




2




3




4

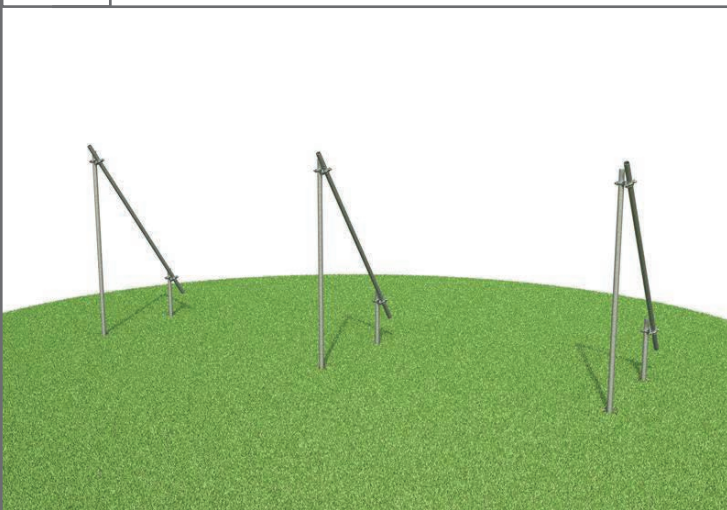



5

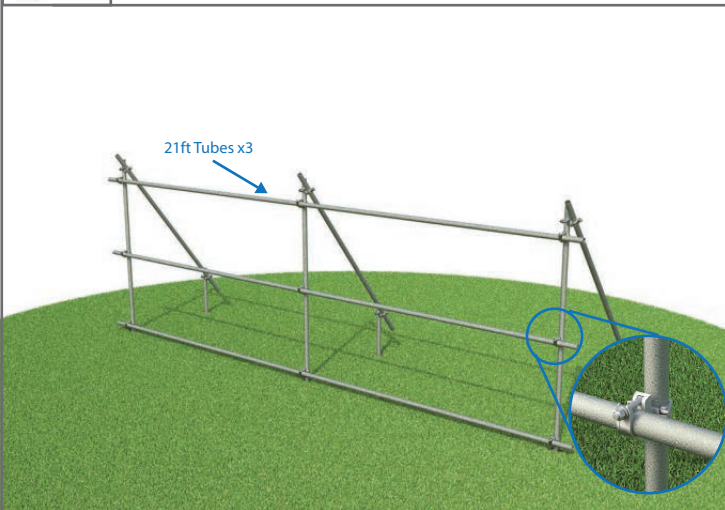





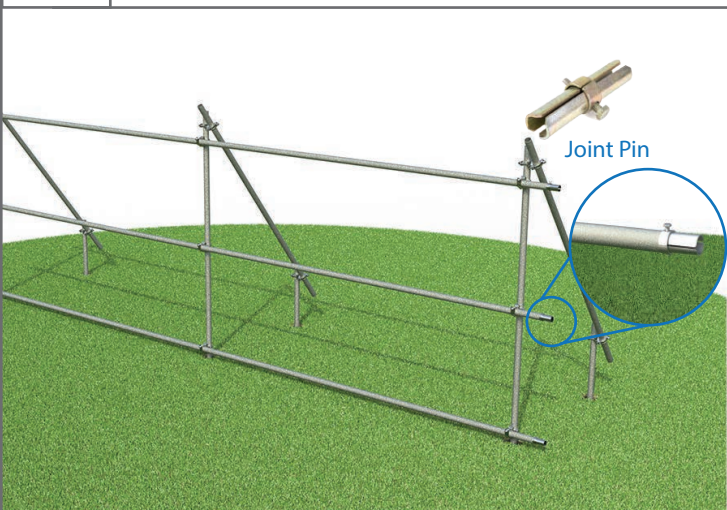
5	Repeat Step 3 three times so that all upright parts of the system are securely in place. Check to ensure all clamps are tightened.
	




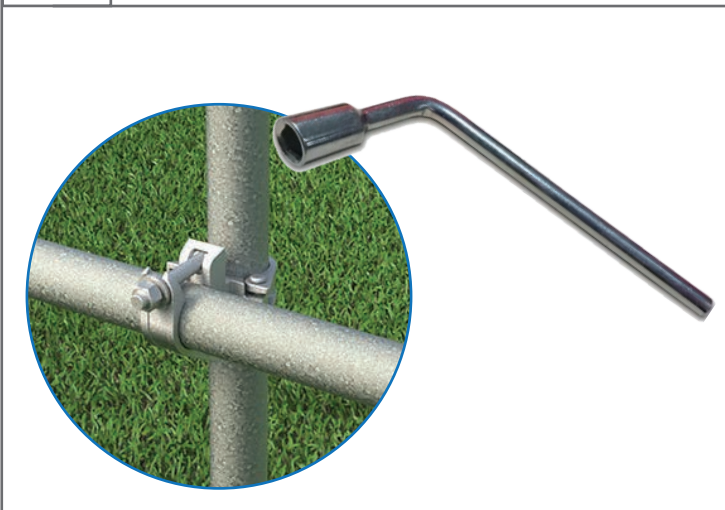
6	Attach the 21ft Scaffold Tubes horizontally at the top, middle and bottom of the structure using the swivel connectors. These tubes should be straight, level and firmly attached to the uprights.
	



7	Use the Joint Pins provided to connect to the next FirstShield Tree Protection Fencing.
	



8	Ensure all coupler bolts are tight as loose fittings can compromise structural integrity.
	





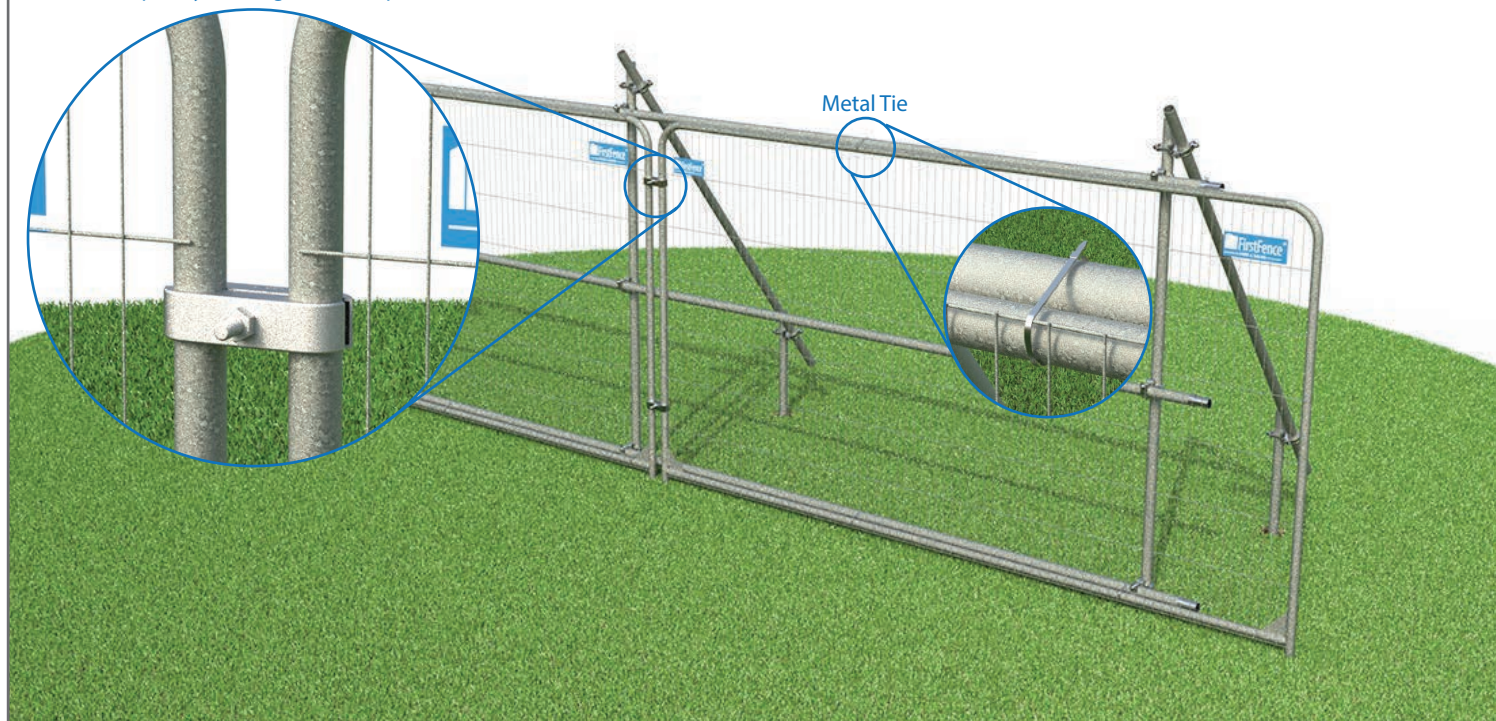
9

Attach temporary fence panels to the structure using scaffold couplers and metal ties (use 8-12 ties per panel, at least 2 at each corner and at regular intervals along the top, bottom and sides). Each assembled 6.4m support structure will take approximately 2 temporary panels (each panel is 3.45m wide). Additional tree protection frames can be added to make a structure of the required site length, these frames are attached together with the provided joint pins and couplers.

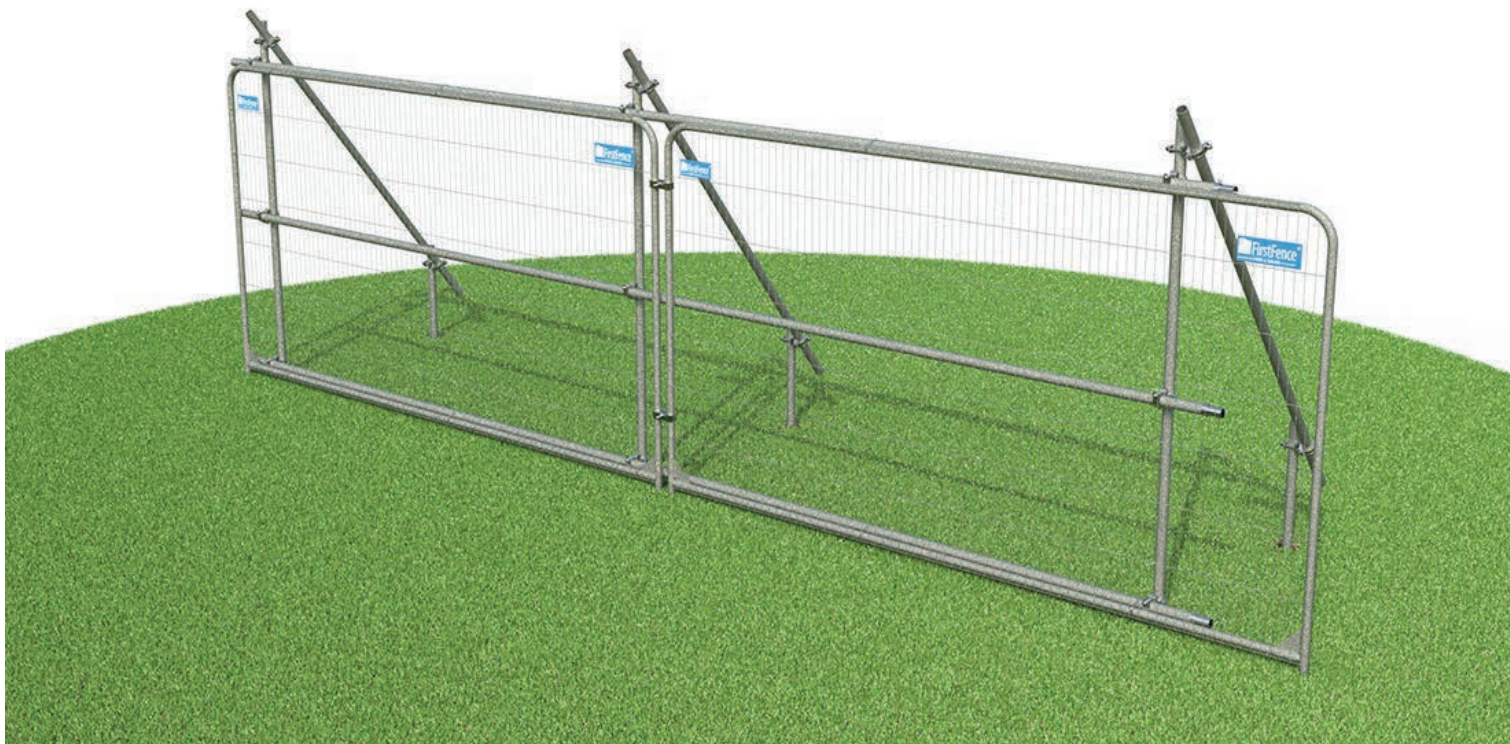


Temporary Fencing Panel Coupler

Metal Tie




## Assembled FirstShield Tree Protection



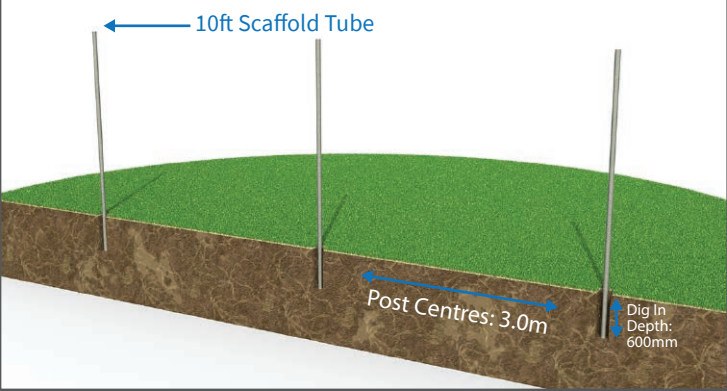


# Installation - Vertical Bracing Only System


1



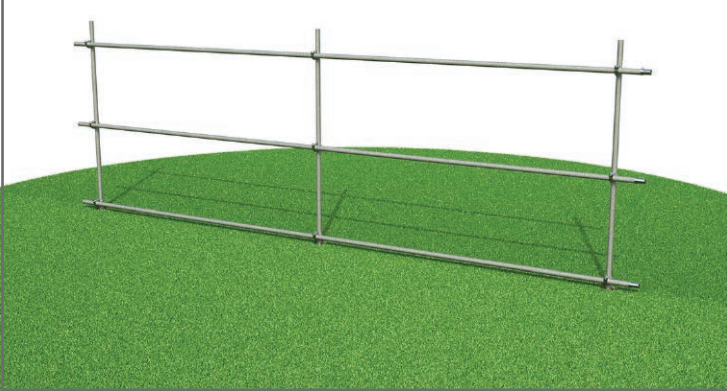
Install the 10ft Scaffold Tubes at 3.0m post centres. The dig in depth is a minimum of 600mm to comply with BS 5837 for root protection. Ensure that these uprights are plumb and securely anchored. Use a Post Driver/Rammer to drive the pole into the ground.




2



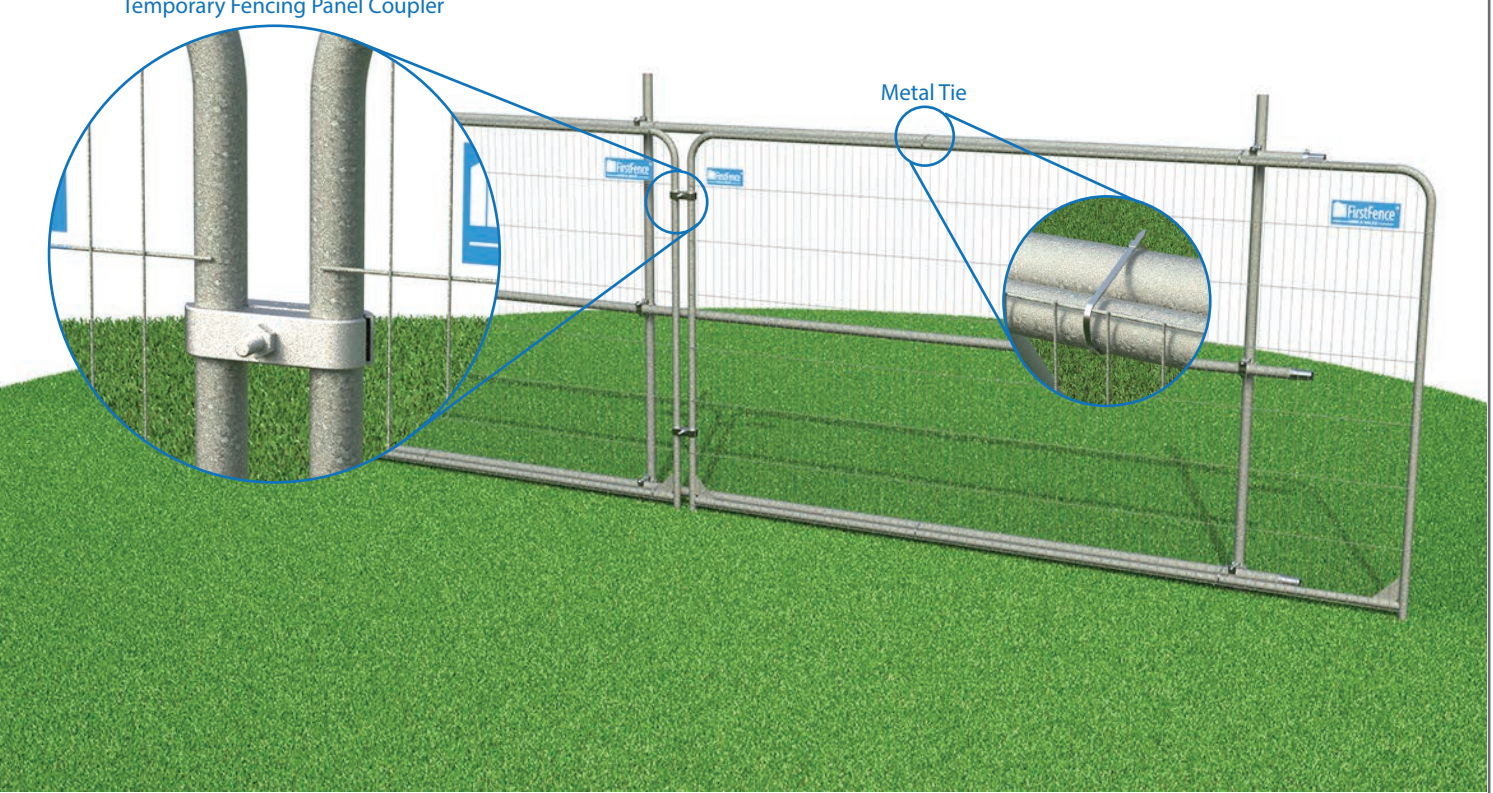
Attach the 21ft Scaffold Tubes horizontally at the top, middle and bottom of the structure using the swivel connectors. These tubes should be straight, level and firmly attached to the uprights.



3









Attach temporary fence panels to the structure using scaffold couplers and metal ties (use 8-12 ties per panel, at least 2 at each corner and at regular intervals along the top, bottom and sides). Each assembled 6.4m support structure will take approximately 2 temporary fence panels (each panel is 3.45m wide). Additional tree protection frames can be added to make a structure of the required site length,









## 4.0 Bill of Materials (Per FirstShield Kit)

Illustration	Component Name	Component Code	Quantity
	10ft Scaffolding Tube	SCAF-TUB-1010	3
	5ft Scaffolding Tube	SCAF-TUB-1005	3
	8ft Scaffolding Tube	SCAF-TUB-1008	3
	21ft Scaffolding Tube	SCAF-TUB-1020	3
	Swivel Coupler	SCAF-FIX-0003	30
	Scaffolding Joint Pin	SCAF-FIX-0019	3

## Bill of Materials (Per FirstShield Kit - Vertical Bracing Only )

Illustration	Component Name	Component Code	Quantity
	10ft Scaffolding Tube	SCAF-TUB-1010	3
	21ft Scaffolding Tube	SCAF-TUB-1020	3
	Swivel Coupler	SCAF-FIX-0003	15
	Scaffolding Joint Pin	SCAF-FIX-0019	3

# 5.0 Installation Sign-Off Checklist

Action	Description	Pass/Fail
Fence Line	Fence is positioned correctly as per site plan, outside the Root Protection Area.	
Post Verticality	All vertical posts are plumb and secure.	
Foundation Depth	Vertical posts are embedded to the minimum recommended depth of 600mm.	
Bracing	All diagonal braces are correctly installed and secure.	
Fixing Security	All scaffold couplers are fully tightened and secure	
Panel Security	Panels are securely attached to the frame with no large gaps	
Site Clean Up	Installation area is clear of surplus materials, tools, and debris	

Sign Off Declaration:  
I hereby confirm the this product has been assembled and installed in accordance with the above requirements and any remedial works have been carried out before the final sign off:

Site Supervisor

Sign Off Date

Relationship to the Client

Signature

## 6.0 Maintenance Schedule

Regular inspection and maintenance are critical to ensure the system remains safe and effective, in line with the requirements of BS 1722-18:2011 for temporary fencing. The person responsible for site safety should ensure these checks are carried out.

Check Area	Recommended Action	Frequency	Reference
General Fence Line	Visually inspect the entire fence line for signs of damage, post movement, or ground erosion near Foundations. Ensure it has not been moved from its original position.	Weekly & After Adverse Weather	BS 1722-18
Structural Integrity	Check all posts and rails for bending, displacement, or damage. Verify that all bracing is intact and secure. Check timber posts (if using) for signs of rot or damage.	Weekly	BS 5837
Fittings & Couplers	Physically check a sample of couplers on each visit to ensure they remain tight. Visually inspect all other accessible fittings for signs of loosening.	Weekly	Manufacturer's Spec
Fence Panels	Ensure all temporary fencing panels remain securely attached to the scaffold frame. Check for any damage to the mesh or frame that could compromise security.	Weekly	BS 1722-18
Steel Condition	Inspect steel components for signs of significant corrosion or damage to the galvanised coating. Clean off any corrosive matter or debris.	Monthly	Manufacturer's Spec
Signage	Ensure any "Tree Protection Area - Keep Out" signs are still in place, legible, and securely fixed to the fence.	Weekly	BS 5837

### Take the hassle out of your maintenance schedule

First Fence Limited offers an annual inspection programme for your FirstShield system. Contact our sales team today to include this quote onto your sales order.

[highsecuritymaintenance@firstfence.co.uk](mailto:highsecuritymaintenance@firstfence.co.uk)