

INSPIRED BY NATURE,
REVOLUTIONISED BY SUREFOOT



PATENTED
SUREFOOTTM
CONCRETE FREE FOOTING SYSTEM



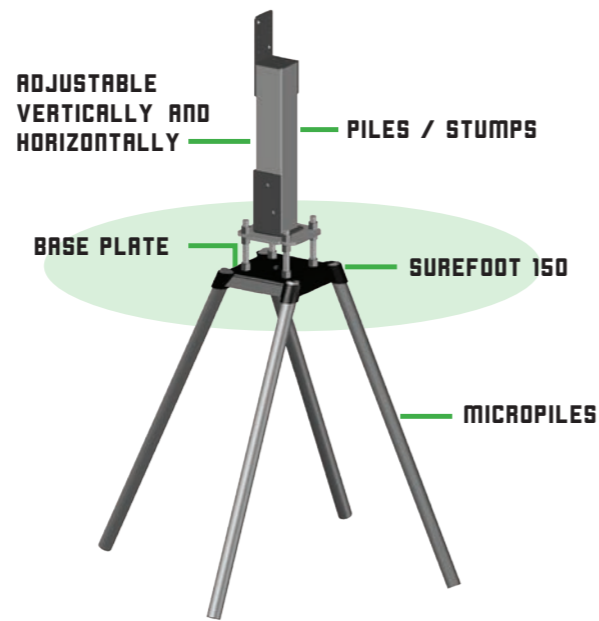
SUREFOOT SYSTEMS & ACCESSORIES

COST SAVINGS SUSTAINABLE TIME SAVER NO HEAVY EQUIPMENT QUALITY MATERIALS

THE SUREFOOT PRINCIPLE

Surefoot's engineering principles are based on a combination of shallow and deep foundation design methodology. It uses the theory of bearing capacity of a shallow foundation, plus the skin friction and toe resistance of a deep foundation in all soil types through a fully certified footing design. Micro piles are driven with a jackhammer. The footing has instant capacity and does not disturb the ground, therefore affording tremendous efficiency of time, labour, material and project cost.

Low cost, time saving, high strength & instant bearing capacity- Surefoot pile cap mimics a tree's root system through a series of steel micro piles in a battered array, resolving foundations at relatively shallow depths and efficient transfer of load and uplift forces with minimal soil disturbance.



SUREFOOT FOOTINGS ARE

- High strength
- Simple
- Cost effective
- Quick to install
- Minimal soil and site disturbance
- Recyclable and reusable
- Suitable for large floor spans of up to 4m
- Suitable in cyclonic regions
- Ideal for remote areas and difficult terrain
- Backed by our technical support team
- Independently tested to ASTM piling standards
- Green solution for low carbon footing system
- Ability to support various types of loading such as compression, uplift, lateral loads and bending moments
- Suitable in any penetrable soil such as sand, silt, clay, fine gravels and even sedimentary rock

SUREFOOT VS CONCRETE

| | SUREFOOT | CONCRETE |
|---|----------|----------|
| Fixed costs | ✓ | |
| Excavations required | | ✗ |
| Dirt or spoil removal off site or relocation on site | | ✗ |
| Engineering inspection required | | ✗ |
| Concrete pump required | | ✗ |
| Propping materials for setting up posts | | ✗ |
| Gravel for bottom of post holes | | ✗ |
| Instant bearing capacity of foundations so your works can continue same day | ✓ | |
| Workplace health & safety risk | LOW | HIGH |
| Total installation time | SHORT | LONG |
| Rain delays - post holes full of water | | ✗ |
| Number of trades and materials required to organise | 2 | UP TO 10 |
| Access issues for machinery & materials | | ✗ |
| Environmentally friendly | ✓ | |
| Reestablishment of landscape required | | ✗ |
| Adjustable in both plumb & level after your foundation is installed | ✓ | |

“Surefoot’s aim is to inform all industries that there are better, faster, cleaner and easier alternatives than using concrete.”

T150

Residential

Bolting pattern:
147 mm x 3 x 16mm holes
Micro Piles:
3 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy
Load capacity:
Up to 25kN
Average installation time:
10 minutes approx



SF250

Commercial

Bolting pattern:
140 centres x 4 x 22 slotted holes
Micro Piles:
4 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy
Load capacity: Up to 110kN
Average installation time: 10 minutes approx
4 way, 3 Way, 2 Way.



SF400

Commercial

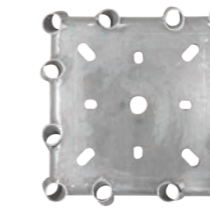
Bolting pattern:
198-250 PCD x 4 x 22mm holes
300-350 PCD x 4 x 26mm holes
Micro Piles:
6 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy
Load capacity: Up to 160kN
Average installation time: 15 minutes



SF500

Commercial

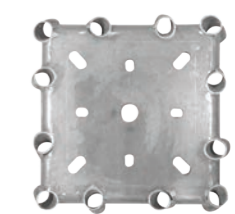
Bolting pattern:
233-300 PCD x 4 x 22mm holes
350-400 PCD x 4 x 26mm holes
Micro Piles:
12 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy
Load capacity:
Up to 300kN
Average installation time: 25-30 minutes approx



SF600

Commercial

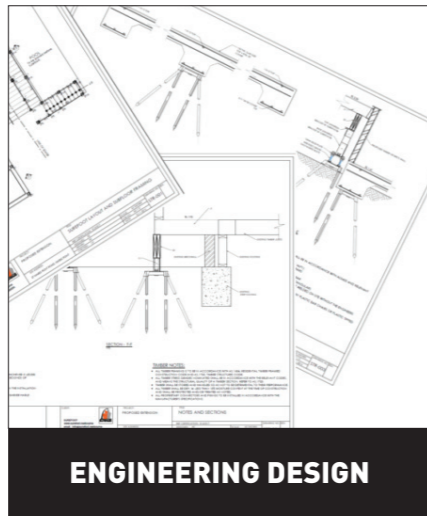
Bolting pattern:
350-400 PCD x 4 x 26mm holes
432-500 PCD x 4 x 32mm holes
Micro Piles:
16 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy
Load capacity: Up to 360kN
Average installation time: 40 minutes approx



Surefoot Load capacities are indicative and are dependent on soil type and pile embedment depth, for specification, please contact Surefoot directly.



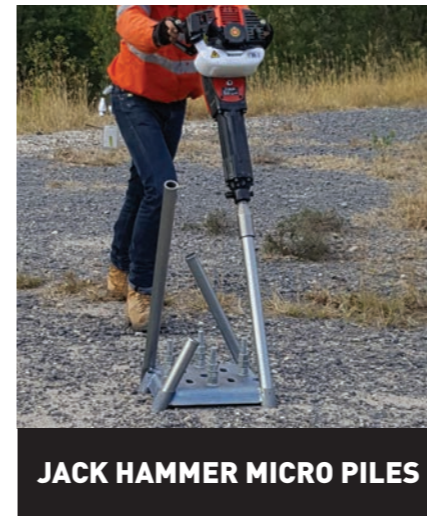
SOIL TEST



ENGINEERING DESIGN



PLACE SUREFOOT LEVEL



JACK HAMMER MICRO PILES



ADD BASE PLATES



PLACE SYSTEM

SUREFOOT SYSTEM SIMPLE INSTALL

 **SUREFOOT COMPONENTS**

1



Surefoot footing baseplates.
50, 75, 150, 300, 500, 600

2




32NB Galvanised pipe
Light, medium, heavy

3



Galvanised pipe is jack hammered into the baseplate

5



4 X M20 - 8.8 grade nuts, bolts, and washers

6



Adjustable universal base bracket
With angle M20 / M12 bolt

7



Steel stump
75 x 75 / 90 x 90 / 100 x 100
SHS or timber stumps

4



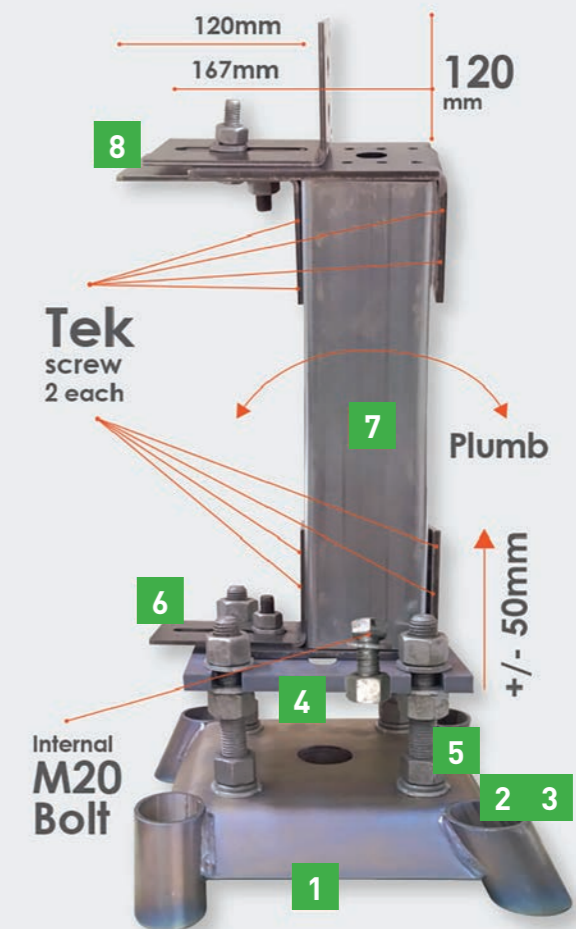
12mm adjustable baseplate
4 way adjustability
+/- 100mm

8



Adjustable universal top bracket with angle 2 x M12 bolts

 **FULLY & SEMI ADJUSTABLE**





- Housing - ideal for sloping sites
- Prefabricated structures
- Modular construction
- Decking
- Pergolas
- Fencing
- Sheds
- Carports
- Shade structures/ sails
- Playground equipment
- Green building
- Temporary structures



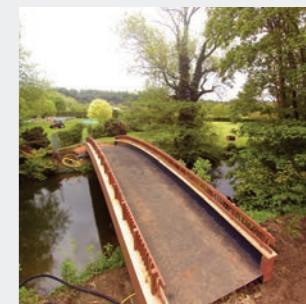
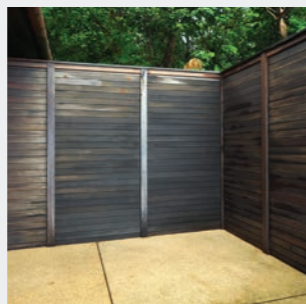
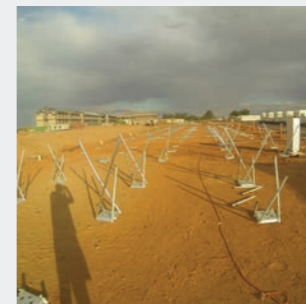
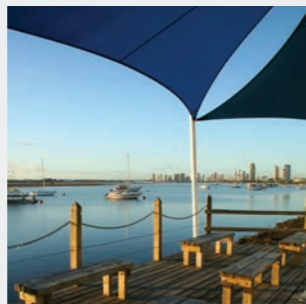
- Deck footings
- Shade sails
- Umbrellas
- Fences
- Backyard sheds
- Light poles
- Stock yards
- Remedial work
- Retaining walls & sound barriers
- Light poles



- Commercial construction
- Portal frame construction
- Civil construction
- Concrete slab support
- Suspended floors/ slabs
- Cyclonic tie downs
- Stabilisation
- Boardwalks and jetties
- Bus shelters
- Bridges
- Winch points



- Defence industry
- Mining industry
- Energy industry
- Signage, banner & flag industry
- Communication industry
- Tethering industry
- Event industry
- Renewable energy, solar & wind farms
- Renovations
- Underpinning
- Restricted access sites





**DESIGN IS THE TOOL
THAT ENHANCES OUR HUMANITY**

CONTACT

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NEW ZEALAND AND AUSTRALIAN STANDARDS

AS 2870-2011
AS/NZS 4600-2005
AS/NZS 1170.2-2011
AS 2159-2009

AS/NZS-2041.1 2011
AS/NZS-4680:2006
AS 3566.2-2002
AS 1726-1993

ASTM TESTING

ASTM 1143
ASTM 1143-81
ASTM D1143/D1143M-07
ASTM D3689
FHWASA-97-070

EUROCODE TESTING

EUROCODE EN1990
EUROCODE 1 EN1991
EUROCODE 3 EN1193
EUROCODE 7
EN14199
EN12699