INSPIRED BY NATURE
REVOLUTIONIZED BY SUREFOOT

SUREFOOT™

CONCRETE FREE FOOTING SYSTEM

EDISON AWARDS WINNER 2017

ENGINEERS AUSTRALIA

SUREFOOT SYSTEMS & ACCESSORIES

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 VS CONCRETE

	SUREFOOT	CONCRETE
Fixed costs	YES	NO
Excavations required	NO	YES
Dirt or spoil removal off site or relocation on site	NO	YES
Engineering inspection required	NO	YES
Concrete pump required	NO	YES
Propping materials for setting up posts	NO	YES
Gravel for bottom of post holes	NO	YES
Instant bearing capacity of foundations so your works can continue same day	YES	NO
Workplace health & safety risk	LOW	HIGH
Total installation time	SHORT	LONG
Rain delays - post holes full of water	NO	YES
Number of trades and materials required to organise	2	UP TO 10
Access issues for machinery & materials	NO	YES
Environmentally friendly	YES	NO
Re establishment of landscape required	NO	YES
Adjustable in both plumb & level after your foundation is installed	YES	NO

SUREFOOT™
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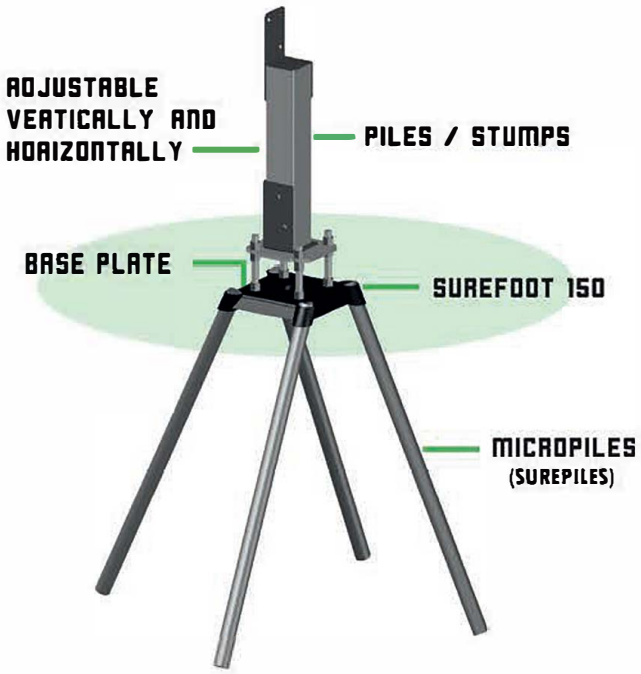


SUREFOOT FOOTINGS ARE

- 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

COST SAVINGS SUSTAINABLE TIME SAVER NO HEAVY EQUIPMENT QUALITYMATERIALS

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

T150 (SF 50)

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

S250 (SF 150)

Residential

Bolting pattern:
140mm centres x 4 x 22mm holes

Micro Piles:
4 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy

Load capacity: Up to 100kN

Average installation time:
10 minutes approx

4-WAY

3-WAY

2-WAY

S400 (SF 300)

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

S500 (SF 500)

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

S600 (SF 600)

Commercial

Bolting pattern:
350-400 PCD x 4 x 26mm holes
432-500 PCD x 4 x 32mm holes

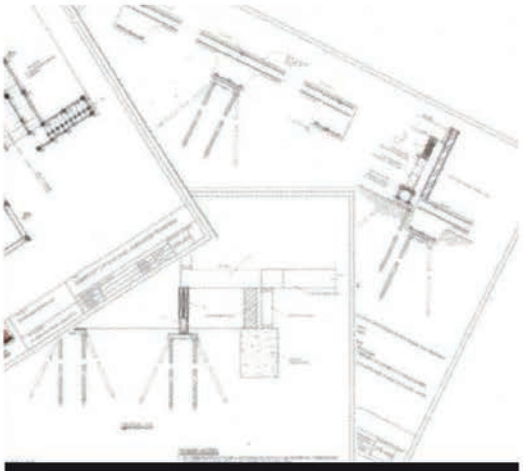
Micro Piles:
16 x 32NB (Nominal Bore) 42.40D
Galvanised Pipe Light, Medium, Heavy

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

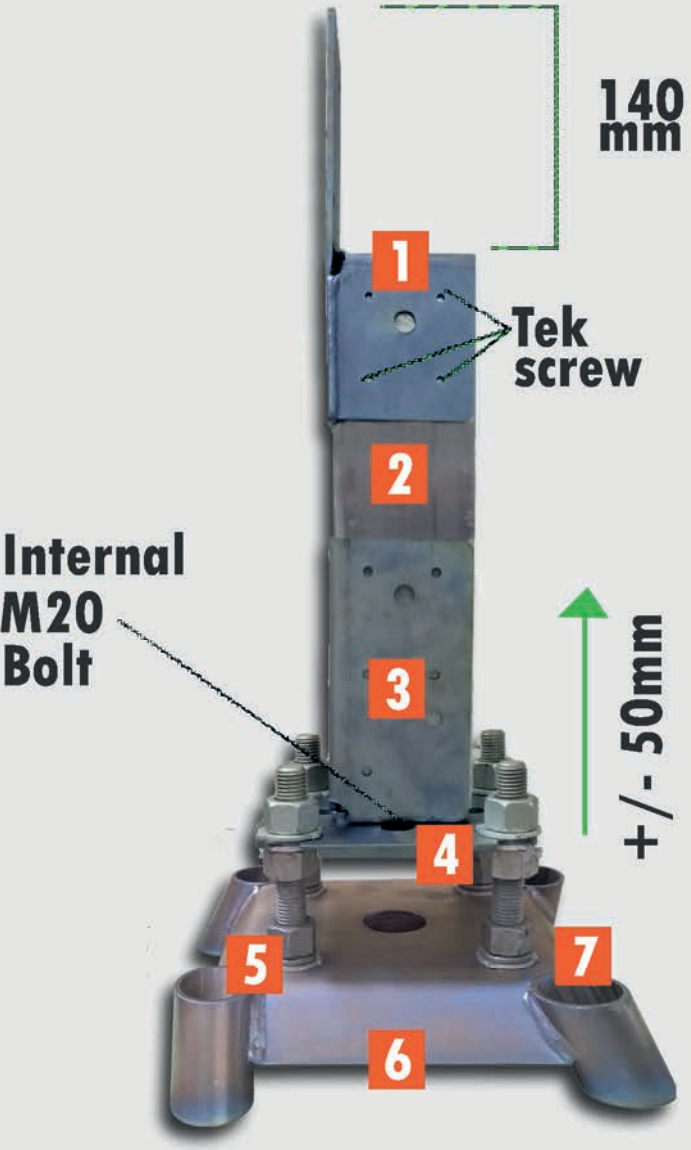


ENGINEERING DESIGN

PLACE SUREFOOT LEVEL

SUREFOOT SYSTEM SIMPLE INSTALL

FULLY ADJUSTABLE



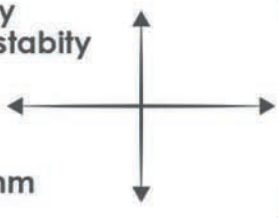
1 **Adjustable universal top** Bracket with Angle 2xM12 bolt

2 Available to suit **75 x 75 / 90 x 90 / 100 x 100 SHS or timber stumps**

5 **4X M20 – 8.8** grade nuts, bolts and washers

6 **Surefoot**

4 **4 way adjustabity**



+/- 100mm

7

JACK HAMMER MICRO PILES

ADD BASE PLATES

PLACE SYSTEM

SEMI ADJUSTABLE / WELD DIRECT

3

Adjustable universal base Bracket with Angle M20/M12 bolt

4

12mm Adjustable Base Plate

7

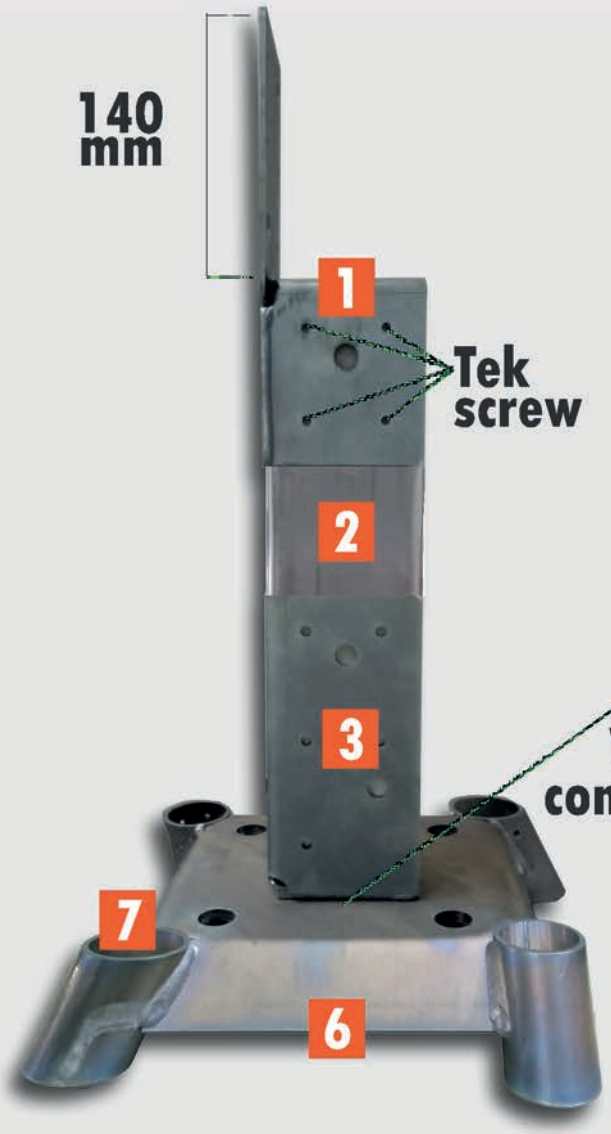
32NB galvanised pipe Light, Medium, Heavy

8

Jackhammer Driver

6

Rotate anywhere on the Surefoot plate. Use4x Series 500 Tek to secure or via M20 bolt.



HOUSING

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

DIY

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

COMMERCIAL

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

CIVIL

- Defence industry
- Mining industry
- Energy industry
- Signage, banner & flag industry
- Communication industry
- Tethering industry
- Event industry
- Renewable energy, solar & wind farms

SUREFOOT™

PATENTED

CONCRETE FREE FOOTING SYSTEM

BMSA ANCHORING SYSTEMS

Unit 19/22 Mavis Court, Ormeau, QLD 4208
1300 809 565
info@bmsaanchoring.com.au
www.bmsaanchoring.com.au

AUSTRALIAN STANDARDS

AS 2870-2011
AS/NZS 4600-2005
AS/NZS 1170.2-2011
AS 2159-2009
AS 1074-1989
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

FEB 10-06/17