



PRODUCT CATALOGUE

**Ground Screws & Equipment** 



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# We innovate, design, manufacture and deploy.

Working collaboratively with our partners, we combine decades of construction, engineering and manufacturing knowledge to produce effective, low-carbon foundation solutions that support all scales of projects with minimal impact on our environment.

RADIX facilities and teams are based across the UK, presenting over 80,000 sq ft of office space, fabrication workshops with state-of-the-art laser and plasma cutting technology, and high-capacity warehousing holding in excess 20,000 screws and our industry-leading installation machines and testing kits.

At RADIX, our team are ready to work with you, with the capabilities to design and manufacture any bespoke adapters, fittings, equipment and tools to meet your project requirements.



# **Ground Screws & Fittings**

RADIX is the UK's largest manufacturer, stockist and supplier of professional ground screws and extendable screw piles, the low-carbon and low-impact foundation solution capable of supporting all scales of projects across all sectors with minimal environmental impact.

RADIX Screw Piles have been independently tested to BS EN 1997-1:2004 (EC 7.7), achieving load-bearing capacities exceeding 75kN and safely supporting vertical uplift and horizontal forces exceeding 15kN per screw in suitable ground conditions. Engineers' documents are available on request.

Galvanised to BS EN ISO 1461:2009 for long-lasting protection, RADIX Screw Piles have an increased life expectancy exceeding 60 years, backed with a 35-year guarantee.

35 year

product guarantee on all screws and fittings

15kN +

vertical uplift capacities per screw in suitable ground

75kN +

load-bearing capacities per screw in suitable ground

### **Quick Reference Guide**

RANGE	PRODUCT NAME	800MM	1050MM	1100MM	1250MM	1300MM	1550MM	1600MM	2050MM	2100MM
RADIX PROFESSIONAL	RDX PRO RF140 M16 76mm	•	•		•		•		•	
RADIX PROFESSIONAL	RDX PRO RF200 M16 76mm	•	•		•		•		•	
RADIX PROFESSIONAL	RDX PR0 RF220 M20 89mm					•		•		•
RADIX PROFESSIONAL	RDX PR0 RF220 M24 114mm					•		•		•
RADIX PROFESSIONAL	RDX PRO N4 M12 76mm		•		•		•			
RADIX PROFESSIONAL	RDX PRO N4 M12 89mm			•		•		•		
RADIX PROFESSIONAL	RDX PRO N4 M12 114mm			•		•		•		

RANGE	PRODUCT NAME	500MM	1000MM	1250MM	1500MM	1550MM	2000MM	2050MM
RADIX EXTENDABLE	RDX EXT 76mm Screw			•		•		•
RADIX EXTENDABLE	RDX EXT 76mm Extension	•	•		•		•	
RADIX EXTENDABLE	RDX EXT 76mm Helical Extension		•					
RADIX EXTENDABLE	RDX EXT 89mm Screw					•		•
RADIX EXTENDABLE	RDX EXT 89mm Extension		•		•		•	
RADIX EXTENDABLE	RDX EXT 89mm Helical Extension		•					
RADIX EXTENDABLE	RDX EXT 114mm Screw					•		•
RADIX EXTENDABLE	RDX EXT 114mm Extension		•		•		•	

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### **RADIX PRO Ground Screws**

RADIX Professional Ground Screws are available in 76mm, 89mm and 114mm diameters and lengths ranging from 800mm to 2100mm, with fixed-flange and open nut topped screws, delivering an efficient and low-carbon foundation solution to support projects of all scales.

Combine screws with any RADIX universal fitting for a versatile solution for applications across all sectors, or work with our expert team, who can design and manufacture any bespoke fittings specific to your project requirements.

### Foundations for:

- Garden offices and studios
- Holiday cabins and glamping pods
- Solar arrays and battery storage
- Telecomms, security and lighting
- Temporary structures
- And more

## RADIX PRO with Fixed Flanges



### **Load Capacity**

13.5kN - 45kN\*

#### Available Lengths (mm):

800, 1050, 1250, 1550, 2050

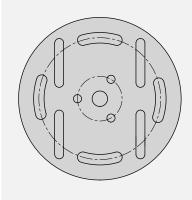
#### Anchors/Fixings:

140mm 8mm Fixed Flange, with M16 Captive Nut

### Surface:

Hot-dip galvanised according to BS EN ISO 1461:2009

**REQUEST DATA SHEET** 



### **RDX PRO RF200 M16 76mm**

### **Load Capacity**

13.5kN - 45kN\*

#### Available Lengths (mm):

800, 1050, 1250, 1550, 2050

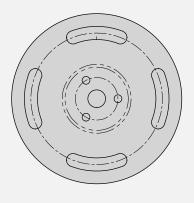
#### Anchors/Fixings:

200mm 8mm Fixed Flange, with M16 Captive Nut

#### Surface:

Hot-dip galvanised according to BS EN ISO 1461:2009

**REQUEST DATA SHEET** 



### **RDX PRO RF220 M20 89mm**

### **Load Capacity**

30kN - 55kN\*

#### Available Lengths (mm):

1300, 1600, 2100

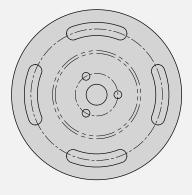
#### Anchors/Fixings:

220mm 12mm Fixed Flange, with M20 Captive Nut

#### Surface:

Hot-dip galvanised according to BS EN ISO 1461:2009

**REQUEST DATA SHEET** 



### **RDX PRO RF220 M24 114mm**

### **Load Capacity**

35kN - 66kN\*

#### Available Lengths (mm):

1300, 1600, 2100

#### Anchors/Fixings:

220mm 12mm Fixed Flange, with M24 Captive Nut

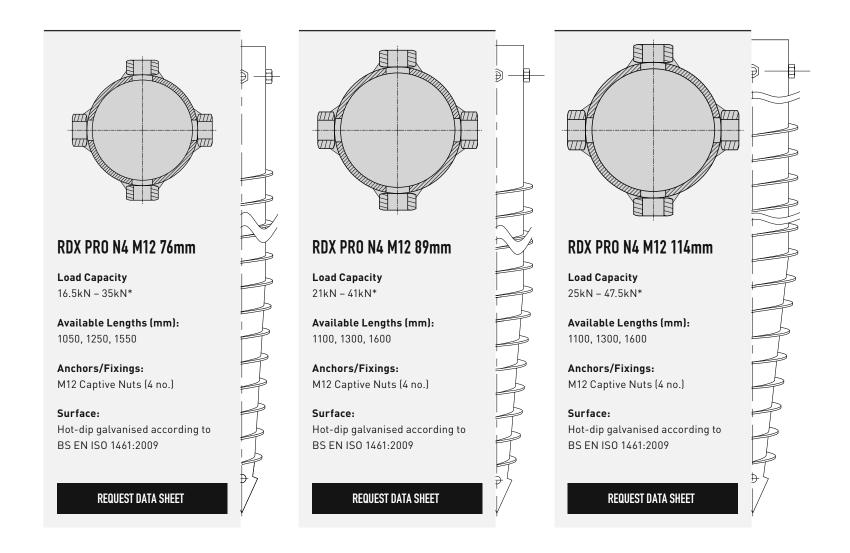
#### Surface:

Hot-dip galvanised according to BS EN ISO 1461:2009

**REQUEST DATA SHEET** 

<sup>\*</sup> Load Capacity is determined in soil type, semi-solid loam. RADIX Ground Screws must be selected based on static calculations and results of site-specific ground testing. The manufacturer is not liable for damage caused by insufficient or incorrect selection of ground screws.

# **RADIX PRO with Open Nut Top**



<sup>\*</sup> Load Capacity is determined in soil type, semi-solid loam. RADIX Ground Screws must be selected based on static calculations and results of site-specific ground testing. The manufacturer is not liable for damage caused by insufficient or incorrect selection of ground screws.



### RADIX EXT Screw Piles

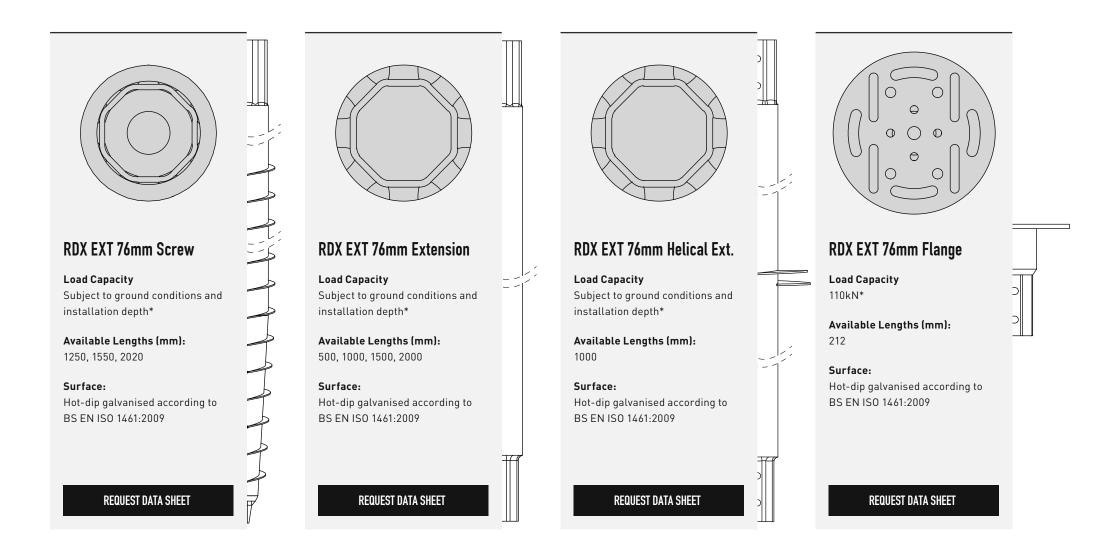
RADIX Extendable Screw Piles offer an efficient method for bringing up ground levels without extensive excavation and ensuring that foundations are installed to the required depths to achieve maximum load-bearing capacities in soft ground.

RADIX Extendable Screw Piles are available in 76mm, 89mm and 114mm diameters, with extension pieces in 500mm, 1000mm, 1500mm and 2000mm lengths, and with a flange to interface between any universal or bespoke fittings.

### Foundations for:

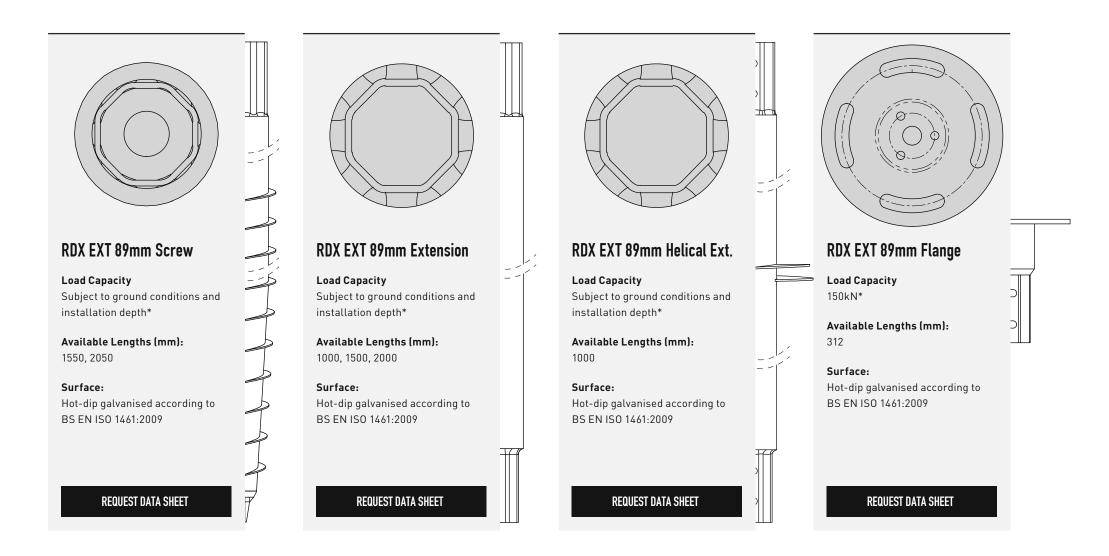
- Holiday lodges and log cabins
- Solar arrays and battery storage
- Steel and timber frame structures
- House extensions and modular construction
- Temporary structures
- And more

### RADIX EXT 76mm



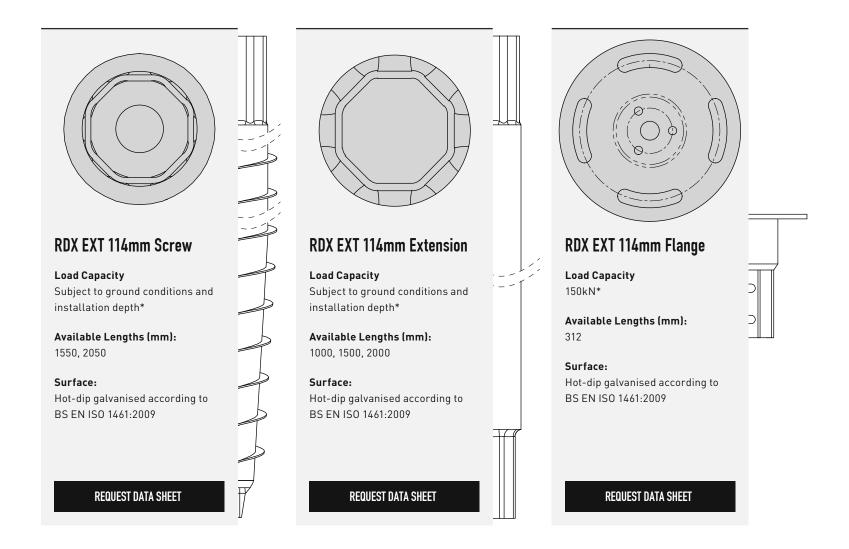
<sup>\*</sup> RADIX Screw Piles must be selected based on static calculations and results of site-specific ground testing. The manufacturer is not liable for damage caused by insufficient or incorrect selection of screw piles.

### **RADIX EXT 89mm**



<sup>\*</sup> RADIX Screw Piles must be selected based on static calculations and results of site-specific ground testing. The manufacturer is not liable for damage caused by insufficient or incorrect selection of screw piles.

### RADIX EXT 114mm



<sup>\*</sup> RADIX Screw Piles must be selected based on static calculations and results of site-specific ground testing. The manufacturer is not liable for damage caused by insufficient or incorrect selection of screw piles.

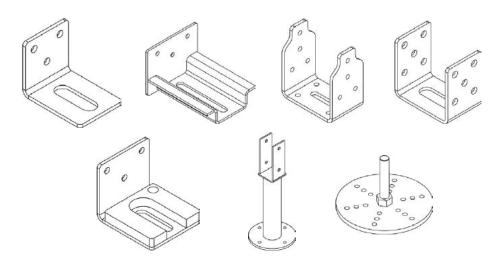


# **RADIX Fittings**

At RADIX, as well as having an extensive range of universal fittings available to meet your project requirements, we can produce any pattern you require.

Our team will work collaboratively with you through a careful and practical design process, manufacturing your bespoke fittings using state-of-the-art laser and plasma cutting technologies.

Please get in touch to discuss your project needs.





### **Installation Machines**

At RADIX, we have a comprehensive range of installation machines capable of installing ground screws and extendable screw pile foundations to the required load-bearing depths for your projects.

Our Ground Screw Starter Kits equip you with everything you need to install efficient and sustainable foundations, meeting the needs of all scales of business.

Get the right tools from a partner you can trust with RADIX.

### Installation Machines:

- RDX 4.0
- RDX 7.0
- Hydraulic Crawler Rigs & Masts
- Drive Adapters

### **RDX 4.0**

The RDX 4.0 delivers a powerful 4,000 Nm of torque, aimed toward supporting professionals installing ground screws at greater capacities and when more significant load-bearing depths are required.

### **RDX 4.0**

Rated Voltage: 230v~

Rated Output - Low Gear (L): 4,000Nm 8rpm

- High Gear (H): 1,800Nm 22rpm

✓ Dimensions (HWD): 650 x 500 x 500 mm

✓ Weight: 28.5kg without telescopic arm

✓ Telescopic Arm Dimensions: 1500 x 80 mm

✓ Telescopic Arm Weight: 12kg







### **RDX 7.0**

The RDX 7.0 is equipped with an integrated gearbox and offers a maximum 7,000Nm of torque to deliver our most powerful hand-held installation machine. Aimed toward professionals, the RDX 7.0 is suited to installing ground screws where greater capacities and load-bearing depths are required.

### **RDX 7.0**

✓ Rated Voltage: 230v~

✓ Rated Output - Low Gear (L): 7,000Nm 5rpm

- High Gear (H): 23,800Nm 9.5rpm

✓ Dimensions (HWD): 700 x 600 x 600 mm

✓ Weight: 36kg without telescopic arm

✓ Telescopic Arm Dimensions: 1500 x 80 mm

✓ Telescopic Arm Weight: 14kg







## **Hydraulic Crawler Rigs & Masts**

We can equip you with a range of hydraulic crawler rigs and drive masts for installing ground screws and extendable screw piles to greater capacities.

Capable of delivering greater levels of torque and installing over 150 screws per day, hydraulic drive masts can be attached to bobcats and diggers for a robust and affordable solution, or we can equip you with a complete hydraulic crawler rig, like our Mazaka 600 - REX.

If you need more power for your installations, please get in touch with our team on +44 (0)1382 819 458, and we'll be happy to support you.





### **Drive Adapters**

RADIX Drive Adapters make it possible to install our full range of ground screws with an accurate and secure fitting between equipment and screw.

We can also design and manufacture bespoke fittings for all requirements, so if you need a new tool for the job, please get in touch, and we'll be happy to help.



# **Testing Equipment**

We know the importance of working from accurate information at RADIX, so we have engineered our rigorous testing systems to ensure you can collect the empirical data required for your projects.

Our testing kits support the site-specific survey of ground conditions for compression, tensile and horizontal loads, with load-bearing capacities for a single ground screw up to 150kN.

### **Testing Equipment:**

- 150kN Compression Test Kit
- 120kN Tensile Test Kit

### **150kN Compression Test Kit**

The 150kN Compression Test Kit determines site-specific compression resistance values and load-bearing capacities of screw pile foundations according to BS EN 1997-1:2004 (EC 7.7).

- ✓ Cross Beam 1800mm x 440mm (57kg)
- ✓ Test Beam 2200mm x 500mm (103kg)
- ✓ Clamp Plates & Fixings
- ✓ Hydraulic Cylinder and Manual Pump Set
- ✓ Digital Plunge Indicator
- ✓ Adjustable Freestanding Crossbar
- Magnetic Stand with Adjustable Arm
- ✓ Total Weight 160kg (+/- 5%)

Also available with bluetooth plunge indicator and pressure sensor with wireless transmission. Please contact us for further details.

Training arranged on request at RADIX HQ.





### 120kN Tensile Test Kit

The 120kN Tensile Test Kit determines sitespecific tensile resistance of screw piles according to BS EN 1997-1:2004 (EC 7.7). Derived values of vertical compression bearing capacity may also be obtained using this equipment.

- ✓ Test Rig 800mm x 500mm x 435mm (60kg)
- ✓ Clamp Plates & Fixings
- ✓ Hydraulic Hollow Plunge Cylinder and Manual Pump Set
- ✓ Digital Plunge Indicator
- ✓ Adjustable Freestanding Crossbar
- Magnetic Stand with Adjustable Arm
- ✓ Total Weight 60kg (+/- 5%)

Also available with bluetooth plunge indicator and pressure sensor with wireless transmission. Please contact us for further details.

Training arranged on request at RADIX HQ.









### **Accessories & Parts**

We stock and supply a range of accessories and all components from our installation and testing kits, ensuring we can equip you with everything you need.

Our team can also work with you to design and manufacture any bespoke adapters, fittings, equipment or tools to meet your specific project requirements.

Please get in touch to discuss your project needs.

### Manual Tools:

- Sliding Hammer Spike
- PT-Bar
- Cable Avoidance Scanner

### **Manual Tools**

We provide a range of manual installation and surveying tools available for purchase alongside our ground screw installation machines and testing kits.













### **Sliding Hammer Spike (The Pilot)**

The RADIX Sliding Hammer Spike is a portable, hand-driven multitool for installing ground screw foundations, saving professionals time and hassle on projects.

- Mark out your ground screw layouts quickly and accurately
- Save time creating pilot holes for your projects, as opposed to drilling
- Secure the torque arm of any ground screw turning machines

### PT-Bar (The Personal Trainer)

The PT-Bar can be deployed to manually install 76mm ground screws up to a length of 1050mm in suitable ground, perfect for smaller garden projects and structures.

### **Cable Avoidance Scanner (The Cat)**

Scan sites with confidence that there are no underlying cable lines before beginning the installation of any project.

# **Supply & Distribution Network**

At RADIX, our business is to support yours as effectively as possible, ensuring there is no weak link in our supply chain.

Our UK-based warehouses have the high-capacity storage for our comprehensive range of products, holding stock in excess of 20,000 screws and our industry-leading installation machines and testing equipment, all available for rapid dispatch across the UK and Europe.

Communication is key, and our experienced team can help you with any technical information you require, with our fulfilment team ensuring orders are processed swiftly and delivered safely.

For a partner you can trust, call our team on +44 (0)1382 819 458.

We're ready to support you.



# Supporting a net-zero future on the right foundations.

As the UK's largest stockist, supplier and installer of ground screws and screw pile foundations, we are ready to support you.

- Industry-leading ground screws and screw piles
- Installation machines and testing equipment
- Robust solar racking systems
- Bespoke base system design and manufacturing
- Specialist screw pile testing and installation

Learn about our efficient and low-carbon solutions and sustainability goals at radixgroup.co.uk/sustainability



### **Product Sales**

Unit 1 Edison Place, Dryburgh Industrial Estate, Dundee, DD2 3QU

+44 (0)1382 819 458

sales@radixgroup.co.uk

### **Testing & Installation**

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+44 (0)1245 676 070

installations@radixgroup.co.uk

### Website

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