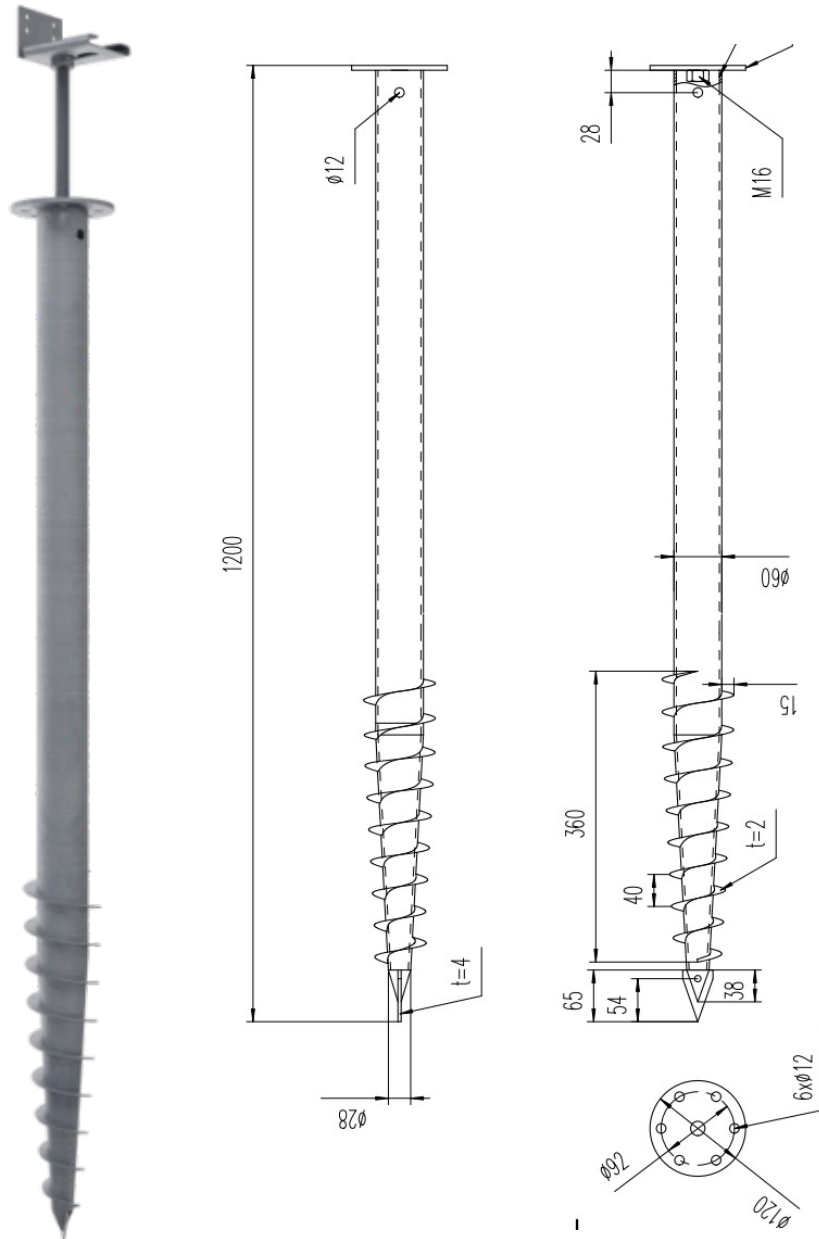


**SPIRAL® FOUNDATION SCREW**  
AN EASY, ECONOMICAL AND ENVIRONMENTALLY FRIENDLY  
ALTERNATIVE TO CONCRETE FOUNDATIONS



## ALL YOU NEED TO KNOW

- Durable - Galvanised steel
- Robust - Body diameter 60 mm
- 120 mm diameter head for a variety of brackets
- Firm anchoring - 75 mm thread
- Resistance to tearing
- Pressure resistance
- Penetrating tip

# A SOLUTION PRACTICAL & ECOLOGICAL



The SPIRAL foundation screw is a galvanised steel pile with a thread designed to be driven into the ground and firmly anchored.

It allows you to install a perfectly stable and level wooden or aluminium structure that can support heavy loads. Installation of the structure is simplified thanks to the possibility of adjusting and correcting imperfections.

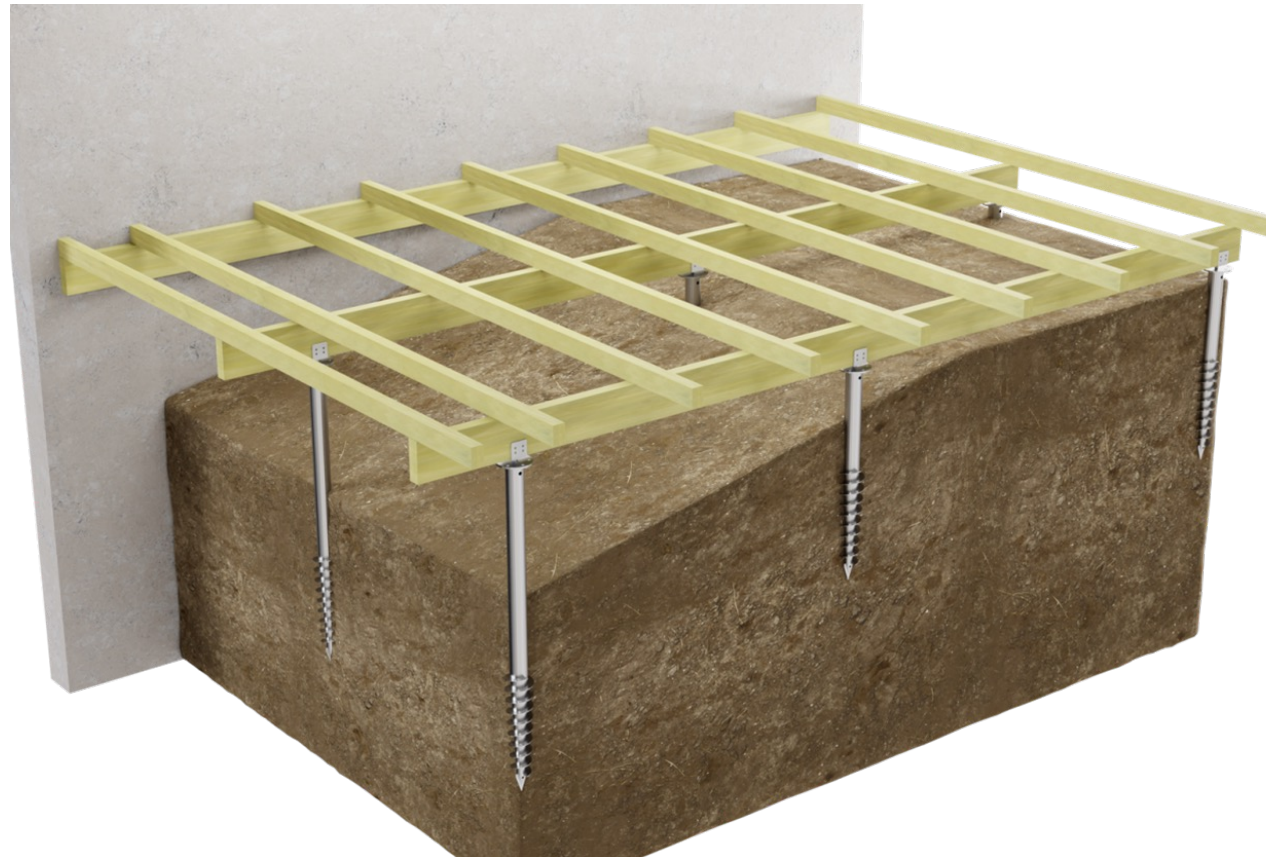
The foundation screw is suitable for all kinds of installations: terrace, swimming pool, jacuzzi, carport, shelters, ...

Available in several sizes and for different uses, it meets the need to correct a steep slope, raise a structure or create different structural levels without complicating construction.

This solution **is a perfect alternative to creating a concrete slab.**

Less expensive, less time-consuming foundation work, which preserves the garden and encourages drainage in the soil.

The nature of the soil will determine the type of screw and its correct installation.



# THE RANGE SPIRAL SCREW

G800, G1200 AND G1500 SCREWS FOR  
FIRM GROUND AND BACKFILLS  
(FD1577-1578-1806 / NL2804-2805-2806)

- Galvanised steel
- 3 sizes available: 800, 1200 and 1500 mm
- 60 mm diameter
- Minimum burial depth of 70 cm (80 cm for the G1500)



Screws		F60x G800 & G1200	Type of soil	Earthworks
		Maximum floor area per Screw (m <sup>2</sup> )		
Consistency	Maximum load per screw (N)	Solicitation 1 of DTU 51.4	Solicitation 2 of DTU 51.4	
Very soft	1395,15	0,40	0,56	
Soft	2172,98	0,62	0,87	
Farm	4432,38	1,27	1,77	
Rigid	8870,93	2,53	3,55	
Very rigid	17735,69	5,07	7,09	

Screws		F60x G1500	Type of soil	Earthworks
		Maximum floor area per screw (m <sup>2</sup> )		
Consistency	Maximum load per screw (N)	Solicitation 1 of DTU 51.4	Solicitation 2 of DTU 51.4	
Very soft	2417,55	0,69	0,97	
Soft	3765,39	1,08	1,51	
Farm	7680,53	2,19	3,07	
Rigide	15371,77	4,39	6,15	
Très rigide	30732,83	8,78	12,29	

# THE RANGE SPIRAL SCREW



S1200 SCREW FOR SANDY & SOFT FLOORS  
(FD1807 – NL2808)

- Design suitable for soft surfaces, especially sand
- Enhanced resistance to tearing
- Length 1200 mm
- Minimum burial depth of 80 cm



SCREW P800 FOR POSTS  
(FD1808 – NL2807)

- Designed for post installation
- Crosspiece designed for increased resistance to lateral forces
- Length: 800 mm

Screws		DFF60x S1200	Type of soil	Sand
		Maximum floor area per screw (m <sup>2</sup> )		
Consistency	Maximum load per screw (N)	Solicitation 1 of DTU 51.4	Solicitation 2 DTU 51.4	
Very loose	281,69	0,08	0,11	
Soft	2213,29	0,63	0,89	
Moderately dense	3712,93	1,06	1,49	
Dense	8201,78	2,34	3,28	
Very dense	13123,86	3,75	5,25	

Screws		F60x P800	Type of soil	Earthworks
		Maximum floor area per screw (m <sup>2</sup> )		
Consistency	Maximum load per screw (N)	Sollicitation 1 du DTU 51.4	Sollicitation 2 du DTU 51.4	
Very soft	1395,15	0,40	0,56	
Soft	2172,98	0,62	0,87	
Firm	4432,38	1,27	1,77	
Rigid	8870,93	2,53	3,55	
Very rigid	17735,69	5,07	7,09	

# THE ACCESSOIRES

## SPIRAL



### SUPPORT FOR JOISTS (FD1809 – NL2810)

- L-shaped support for the support and fastening of joists or beams
- Lateral and axial adjustment
- Adjustment threaded rod, 200 mm in length
- M16 nut



### POST SUPPORTS (FD1901 – NL2864 / FD1902 – NL2865)

- U-shaped post support
- 2 sizes 90 x 90 and 120 x 120 mm
- Height 150 mm, Thickness 3 mm
- M 16 x 50 central fixing screw and washer included



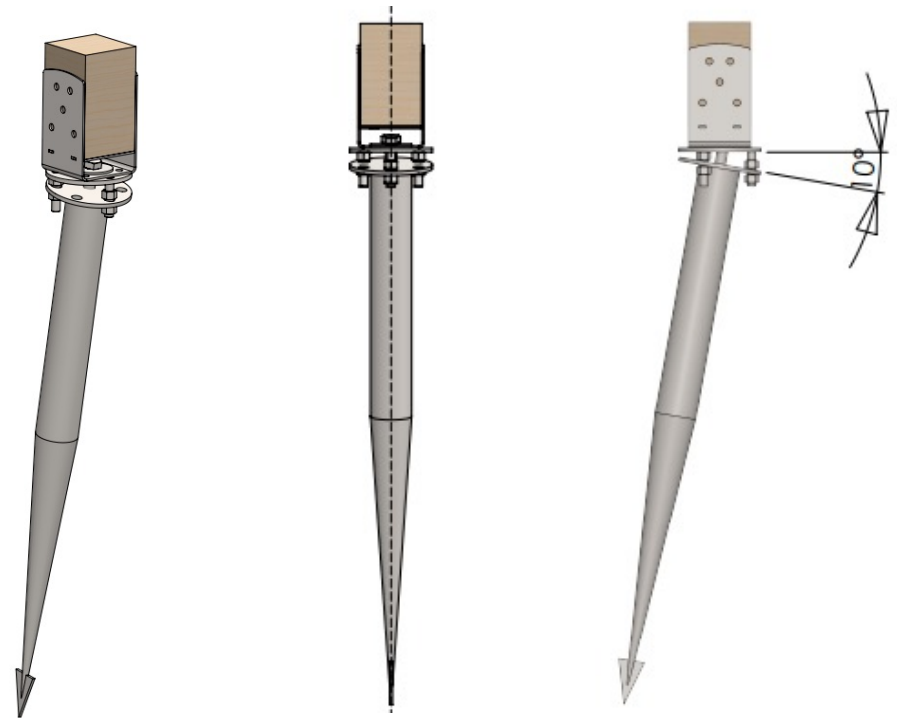
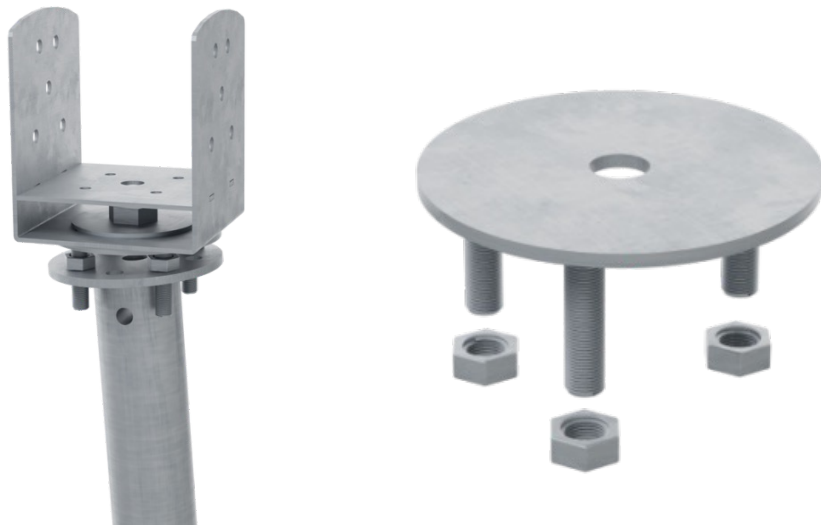
### MULTI-PURPOSE SUPPORT (FD1221 – NL2618)

- 90 x 90 mm square support
- Multiple fixing options
- Adjustment threaded rod, 200 mm in length
- M16 nut

# THE ACCESSOIRES SPIRAL

## LEVELING CORRECTION DISK (FD1904 – NL2866)

- 3 threaded rods suitable for the foundation screw head
- 3 M12 nuts for easy and precise adjustment
- Thickness of the disk: 4 mm
- Central opening for the installation of SPIRAL accessories



# THE ACCESSORIES SPIRAL



## ADAPTER FOR IMPACT WRENCH (FD0616 – NL2385)

- Ensures the connection between the installation tool and the foundation screw.
- Central fastening with a single screw for easy, and secure assembly.
- 6 peripheral tabs.
- Integrated bubble level to check the verticality of the installation.
- Hexagonal central head M41





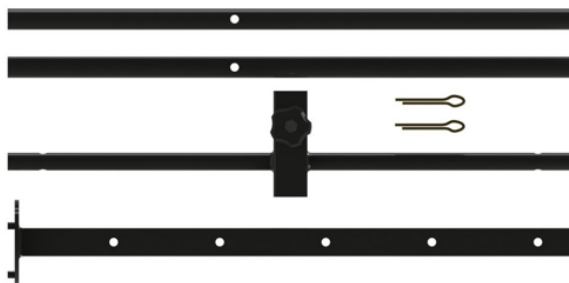
# THE ACCESSORIES

## SPIRAL



### MANUAL SCREWING BAR (FD0615 – NL2384)

- Manual screwing kit for anchoring the foundation screw manually.
- Consists of a pre-drilled rod for adjusting the height of the bar as screwing progresses
- Span of 160 cm and thickness of 3 mm, providing a lever arm for easy tightening
- 3 bolts + nuts to secure the tool on the screw.
- The bar can be lifted during screwing to facilitate the pushing motion



# INSTALLATION OF THE SCREW

The ease of driving in the screw depends on following the installation steps, the equipment used, and the nature of the soil.



## ASSEMBLY OF THE SCREW AND THE DRILLING TOOL

- 1 - Securely couple the drilling tool with the head of the foundation screw. Use the M41 adapter for the use of an impact wrench (1).
- 2 - Perform the necessary rotations to reach the desired anchoring depth (minimum burying of 70 cm, 80 cm for G 1500 and S 1200 screws).
- 3 - Remove the tooling from the head of the foundation screw and install the required screw head (2).

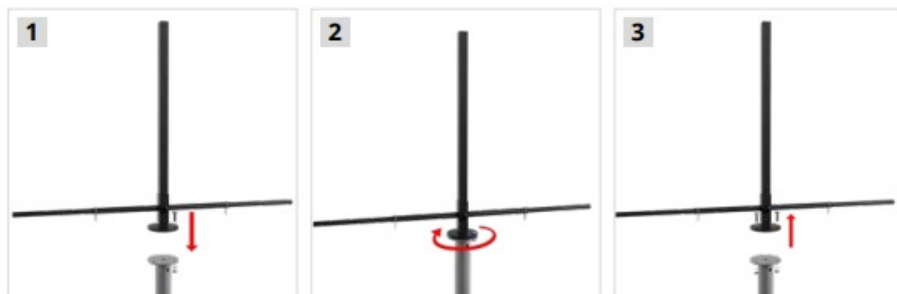


## INSTALLATION WITH AN IMPACT WRENCH



(1) When using an impact wrench, the M41 adapter is required. Subjected to vibrations and significant stress during drilling, it must be assembled with sufficient torque. It is highly recommended to use an impact wrench to securely tighten the central clamping nut.

## INSTALLATION WITH THE MANUAL TOOL



(2) Screw the required head according to its use, whether for joist support or flat support, and precisely adjust the threaded rod to the desired height. Adjustable from 0 cm to a maximum of 15 cm

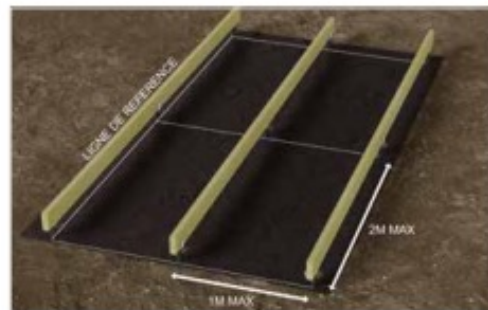
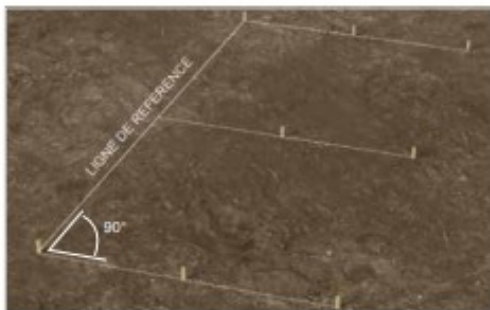
# INSTALLING THE SCREW



## MARKING

Marking is crucial as it allows determining the precise locations of the necessary screws and ensures the alignment of the structure to be fixed.

- 1 - Establish a reference line to align one side of the construction to be carried out.
- 2 - Lay the geotextile fabric.
- 3 - Establish points of perpendicularity to this reference line for creating right angles.
- 4 - Stretch a string between the markings.
- 5 - Place drilling markers for the screws based on the layout plan of the structure to be built, following the recommended spacing between support points. et entre les solives.



Example for a cross-wood structure with joists of 45x145 mm and bearers of 45x70 mm



Beams	Distance between supports
Wooden 45 x 145	2 Meters
Structural Alu 60 x 80	2 Meters
Structural Alu 60 x 80	3 Meters

## GROUND PREPARATION

The creation of pilot holes and lubrication is essential to aid in the implementation of the foundation screw.

- 1 - The pilot hole, whether manual or mechanical, will check the nature of the soil in depth and then facilitate the penetration of the screw into the ground. Use a crowbar and a mallet or a drill with a bit of at least 35 mm in diameter. Create a hole with a depth less than the length of the screw that will be buried. Ensure beforehand that there are no cables, pipes, etc., in the location where the screws will be positioned.
- 2 - Lubrication with water, especially in hard or very dry soil, will allow for easier drilling and put less strain on the equipment used.
- 3 - Initially engage the foundation screw by hand in the pilot hole to start the burying phase.



Avant trou manuel ou mécanique

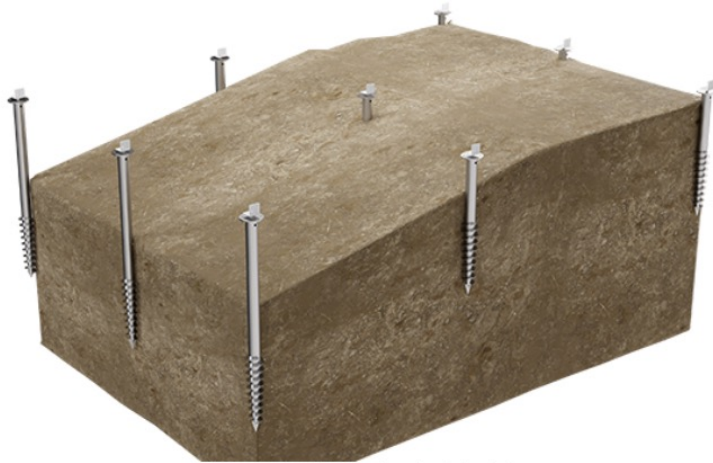
Lubrification

### NECESSARY EQUIPMENT:

Tape measure - Chalk line - Ruler - Level - Mallet - Stakes - Crowbar and mallet or Drill and minimum 35 mm drill bit - Watering can - Screwdriver bar or Impact wrench - Impact drive

# IMPLEMENTATION OF THE SCREW

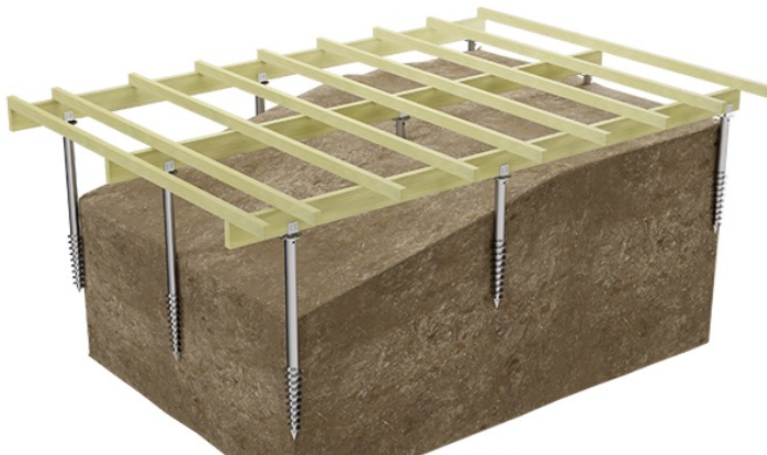
CAUTION, THE USE OF FOUNDATION SCREWS REQUIRES  
**CHECKING FOR THE ABSENCE OF OBSTACLES AT THE DRILLING POINTS**



*Step 1: Installation of foundation screws*



*Step 2: Placing the joists*



*Step 3: Double joisting*



*Step 4: Placing the planks*

