



MPS Civil Products

Stingray Solutions

Features >>>

- 60+ Kips
- No Digging, No Excavation
- Rapid Anchor Installation
- Anchors Load Tested to Exact Holding Capacity
- Required During Installation

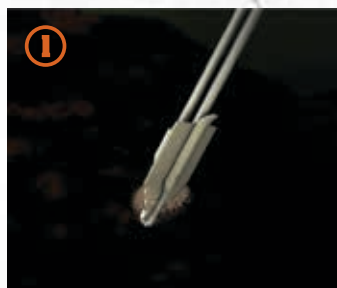
Breakthrough Earth Anchoring Technology



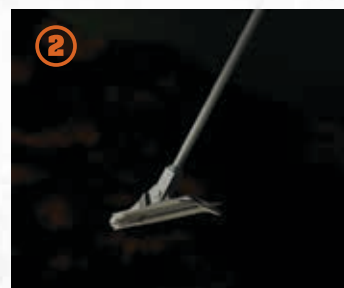
How It Works

STINGRAY® anchors, a patented labor and time saving device, work like a toggle bolt in soil. The anchors are driven into the ground with conventional equipment (with no excavation and no grout), providing a safe and environmentally sensitive installation.

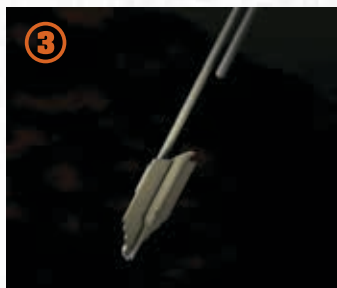
After driving the anchor to the required depth, the drive steel is removed and an upward pull on the anchor rod rotates the STINGRAY into a perpendicular “anchor lock” position in undisturbed soil. After the anchor is tipped it can be simultaneously load tested. The result: superb holding capacities. STINGRAY anchor systems offer breakthrough earth anchoring technology for applications where heavy capacities are required.



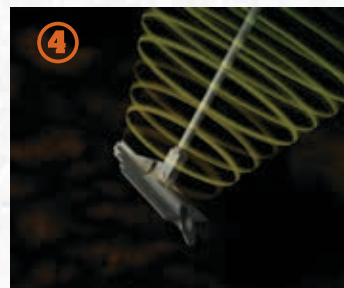
Drive Anchor



Remove Drive Steel



Pull On Rod

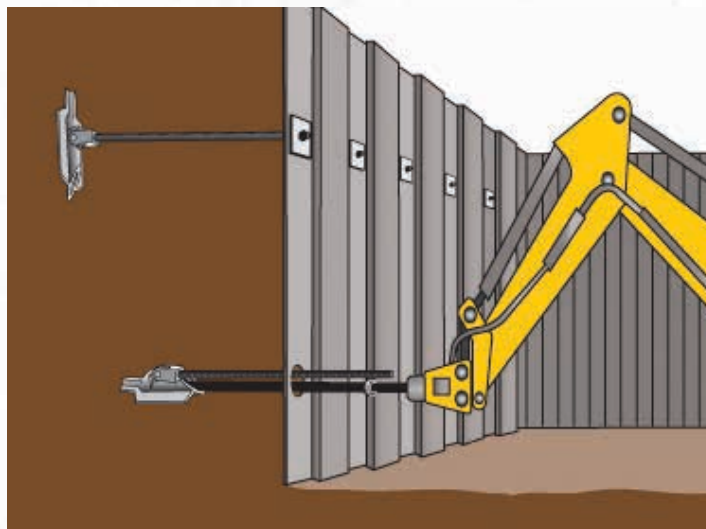


Load Tested

Installation

Once driven to the proper depth, a hydraulic anchor locker pulls up on the anchor rod, rotating the anchor into undisturbed soil like a toggle bolt. Anchors are simultaneously load locked and proof tested to ensure the capacity requirements are safely met.

NO MORE GUESSWORK!



What do you want to anchor?



There are three STINGRAY® anchor models. STINGRAY anchors are made of hot dip galvanized ductile iron. Structurally compatible anchor rods and end terminations for guy line or retaining structures are available for all anchor models.

SR-1



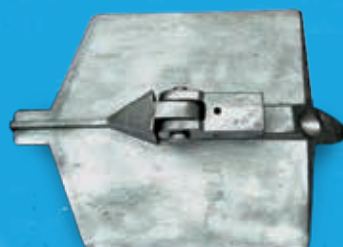
100,000 lbs Ultimate Strength Anchor – Working load (2-1 safety factor) 50,000 lbs. This anchor is hot dipped galvanized and designed to be used in harder soils. It accepts anchor rods 1 – 1 1/2 inch with a bearing surface of 115 sq/in.

SR-2



100,000 lbs Ultimate Strength Anchor – Working load (2-1 safety factor) 50,000 lbs. This anchor is hot dipped galvanized and designed to be used in normal soils. It accepts anchor rods 1 – 1 1/2 inch with a bearing surface of 250 sq/in.

SR-3



100,000 lbs Ultimate Strength Anchor – Working load (2-1 safety factor) 50,000 lbs. This anchor is hot dipped galvanized and designed to be used in softer soils. It accepts anchor rods 1 – 1 1/2 inch with a bearing surface of 375 sq/in.

Soil Description	Blow Count	SR-1		SR-2		SR-3	
		Kips	kN	Kips	kN	Kips	kN
Very Dense/Cemented Sands, Coarse Gravel & Cobbles	45-60	58-65	258-289	66-81	294-360	n/a	n/a
		(1)		(1, 3)		(5)	
Dense Clays, Sands & Gravels, Hard Silts & Clays	35-50	39-58	173-258	62-81	276-360	81	360
		(2)		(2,3)		(2,3)	
Medium Dense Sandy Gravel, Stiff and Clays	24-40	29-41	129-182	46-66	205-294	63-81	280-360
				(2,3)		(2,3)	
Medium Dense Coarse Sand & Sandy Gravel, Stiff to Very Stiff Silts and Clays	14-25	24-32	107-142	31-48	138-214	48-63	214-280
Loose To Medium Dense Fine To Coarse Sand; Firm Clays & Silts	7-14	16-24	71-107	27-36	120-160	37-48	164-214
		(4)		(4)		(4)	
Loose Fine Sand, Alluvium, Soft Clays, Fine Saturated Silty Sand	4-8	13-19	58-85	19-28	85-125	24-37	107-165
		(4)		(4)		(4)	

NOTE:

1. Drilled pilot hole required to install.
2. Ease of installation may be improved by drilling a pilot hole
3. Holding capacity limited by ultimate strength (120 Kips) of anchors. Maximum working load should not exceed 90% of yield strength (81 Kips / 360 kN).
4. Holding capacity limited by soil structure. Wide variation in soil properties reduces prediction accuracy. Pre-construction field test is highly recommended.
5. Not recommended in these soils.

Holding capacity in Kips and kN after anchor locking with no significant movement. Actual capacity must be tested with anchor load locker. Use this chart for estimation only.

MPS Civil Products - Building Solid Foundations.

MPS Civil Products is part of MacLean-Fogg, a diversified international manufacturing enterprise with more than half a billion dollars in sales. A result of the acquisition and merger of Joslyn, Dixie and Foresight, the three most prominent soil anchor manufacturers, MPS Civil Products is now one of the leading suppliers of steel deep foundation systems for use in residential, commercial and marine applications. Our comprehensive product line for residential and commercial applications includes engineered solutions for tension, compression and structural stabilization in many different soils. When Quality and Service is your focus, Solutions are the result.

Contact us to learn more about Earth Anchors

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