



### Innovators, Designers and Consultants

At your service - Lipsker provides smart solutions using polymer anchors at sites where steel anchors cannot be used.

Contact us and our engineers will get back to you as soon as possible.



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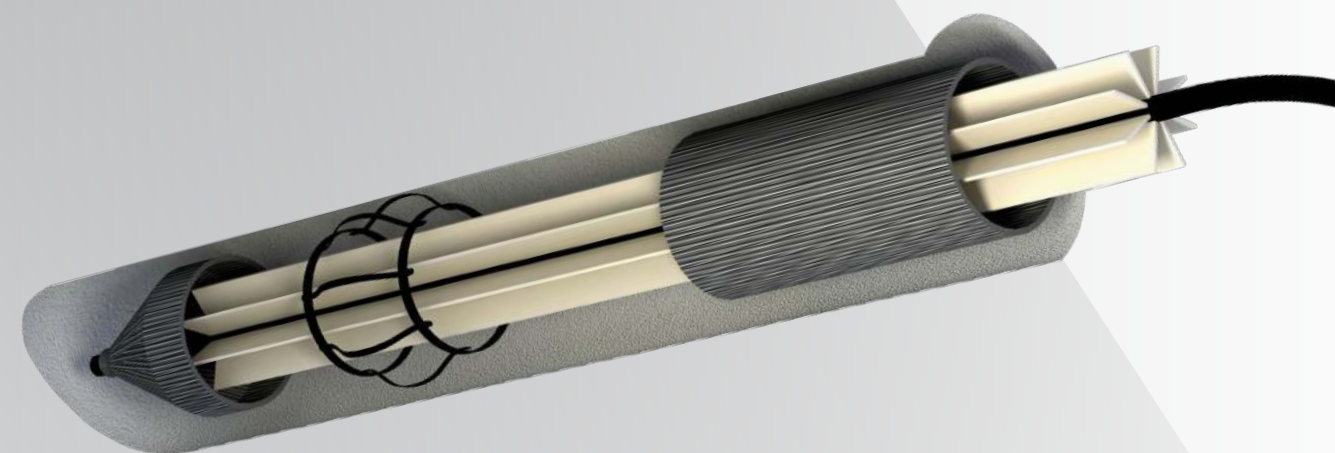


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## Lipsker & Co. Advanced Geotechnics

Over  
50 Years'  
Experience



## MULTI-STRIP POLYMER ANCHOR The New Lipsker System - A Unique Innovation





# MULTI-STRIP POLYMER ANCHOR

## Development, Manufacture and Execution

The Multi-Strip Polymer Anchor for use in retaining walls, tunneling and nailing, is a unique, innovative development from the Lipsker Company.

Over a long period, Lipsker used polymer strips and bars from a wide range of manufacturers to develop and test the optimal polymer ground anchor.

Through that research and development program, Lipsker developed a unique, patent protected anchor and tensioning system with **maximum load capacity** for standard drill hole diameters. These anchors, which have no couplers and no steel parts, comprise up to eight polymer strips along its entire length.

The Lipsker Polymer Anchor provides a complete solution for sites where execution constraints preclude the use of steel anchors.

Lipsker Polymer Anchors have been installed at sites along the route of the **Tel-Aviv Metro line** and many other sites in Israel.

## Advantages of the Lipsker Polymer Anchor

- The structure of the Polymer Anchor is designed for use in standard drill holes. Polymer Anchors comprise up to eight polymer strips providing maximum strength and load bearing capacity.
- This anchor comprises polymer strips along its entire length; it has no couplers or steel parts.
- Polymer strips are supplied by the manufacture as a reel, which is cut to fit as required. Large quantities can be shipped at low cost.
- The polymer strips are coated with a special material, which improves grip on the soil using cement grouting.
- Anchor installation does not interfere with tunneling using TBM or any other tunneling system.
- Polymer anchors do not impede excavation work in adjacent plots.
- When the anchor is no longer needed, it remains in the hole. No dismantling or removal work is required.
- This Polymer Anchor is protected against corrosion and aggressive materials in the soil and it is not sensitive to electromagnetic fields.
- The installation of the Polymer Anchor is simple, without any need for a crane or lifting equipment.
- Tensioning strength for the polymer anchor strips is twice that of steel and the polymer strips weigh 75% less than steel.

## Intellectual properties

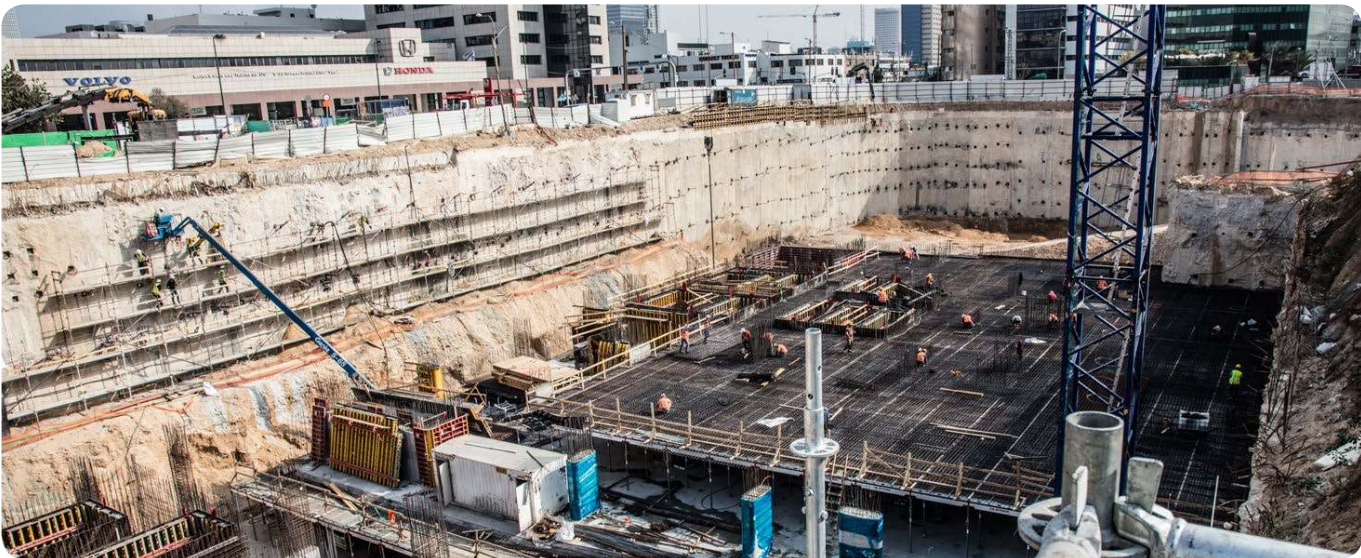
The polymer anchor (system and method) is a registered patent and trade mark in Israel, Europe and USA.



## Polymer Anchors Installed in Israel

Lipsker & Co. is Israel's sole manufacturer of polymer anchors **without any steel parts**, used to anchor retaining walls. **Thousands of Lipsker System Polymer Anchors** tested up to 95 tons have been installed at major projects in Israel's central region:

- Midtown Project (144 Begin Road, Tel Aviv) - 73 ton working load anchors. A total of **723 Polymer Anchors** were installed at this site.
- Galei Gil Launch Shaft for the Tel-Aviv Metro line (Ramat Gan) - 60 ton working load anchors.
- Em-Hamoshavot launch shaft for the Tel-Aviv Metro line (Pethach-Tikva) - 70 ton working load anchors.
- Zamarot Dan Tower (105 Jabotinski St., Ramat Gan) - 65 ton working load anchors.
- The Metromol Building (2 Oppenheimer St., Rechovot) - 55 ton working load anchors.
- Rubinstien Twin Towers (Yitshak Sade St., Tel-Aviv) - 60 ton working load anchors were executed at great height.
- Azriely Tower (146 Menachem Begin St., Tel-Aviv) - 50 ton working load anchors were installed.
- Sarona Hotel (7 Maklef st., Tel-Aviv) - 55 ton working load anchors (some under water, project in progress).
- Semel Project (101 Ibn Gabirol St., Tel-Aviv) - 41 ton working load anchors.



## Polymer Anchor Strip Manufacturer: The Sireg Company

The Sireg Company was founded in Italy in 1936. Since then, Sireg has grown in both size and reputation. Today, Sireg is a world leader in manufacture of plastic, fiberglass and polymer products for use in geotechnical and civil engineering applications. Sireg Company products have been installed in major projects in many countries worldwide. Lipsker Co. is the exclusive representative of Sireg in Israel.



Recommended Load Capacity - 9 x 40 mm Strips			
Test Load (ton)	Working Load (ton)	Number of Strips	
50	40	4	⊕
65	50	6	⊗
95	70	8	⊗

