

## **RIM-Cell**<sup>®</sup> PROOF LOADING

The Reliability Improvement Method, or RIM-Cell, is the latest technology in drilled shaft design load confirmation and QA/QC. RIM-Cell is a tool used to statically verify shaft performance throughout the project site. By loading a representative number of shafts to 1.2 - 1.3 times design load, engineers can minimize the impact of the two most troubling sources of uncertainty: site variability and construction defects.

The RIM-Cell is designed with drilled shaft constructability in mind with its large open center to eliminate possibility of shaft toe disturbance or concrete flow obstruction during placement. Lightweight and simple, the RIM-Cell attaches easily to the tip of the reinforcing cage.

Maximize usable drilled shaft capacity and economy by using O-Cell<sup>®</sup> and RIM-Cell technology together.

 Calibrate with the O-Cell by performing full-scale load tests to determine ultimate shaft capacity for the subsurface conditions to optimize final shaft design.  Verify with the RIM-Cell by proof-loading production shafts to confirm the expected performance of shafts.

The RIM-Cell can also be used as a post-construction stressing device.

Improve with the RIM-Cell by engaging shaft end-bearing resistance to reduce settlement or to consolidate loose material at the shaft toe. Unlike traditional base-grouting, the grout pressure confinement offered by the RIM-Cell allows for high static pressure and a known load in every soil condition.





RIM-Cell mounted on a reinforcement cage to perform a service load verification

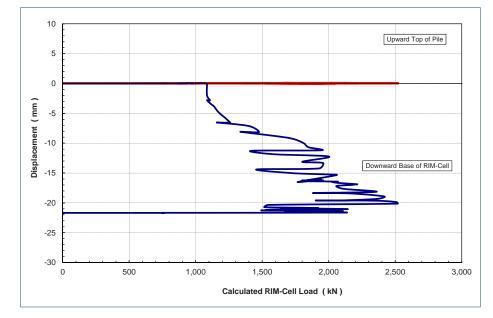
## SERVICE SHEET RIM-Cell' PROOF LOADING



## **ADVANTAGES**

Performance verification and post-stressing advantages of the rim-cell include:

- Reduces uncertainty
- Improves reliability
- Economical
- Light-weight and easy to install
- Won't interfere with concrete placement
- Works reliably in every soil condition
- Generates bi-directional LM curves
- Provides full verification of base improvement
- Uses a known effective area to calculate applied load
- No plates or gravel required
- Low volume of grout needed



RIM-Cell load displacement sample output

## Loadtest

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