



## James RM-8000 OHM CORR

**Resistivity meter to assess  
corrosion currents in concrete.**

### ***Features and Benefits***

- Assesses damaging corrosion currents in concrete.
- Economic and easy to use.
- Direct digital readout of resistivity. Measuring from two small holes avoids the problems and errors of surface measurements.
- Used in conjunction with CorMap System to produce resistivity plots.



**OhmCorr Resistivity Meter**



**RM-8000 Components**

## Technical

The electrical conductivity of concrete is an electrolytic process that takes place by the movement of ions in the cement matrix. This ionic movement will occur when contaminants such as chloride ions or carbon dioxide are introduced into the cement mortar matrix.

A highly permeable concrete will have a high conductivity and low electrical resistance. Because resistivity is proportional to current flow, the measurement of the electrical resistance of concrete provides a measure of the possible rate of corrosion. Since carbonation seriously affects surface resistance, measurement on the concrete surface should be avoided.

The James resistivity meter, OHMCORR, has two probes spaced 5cm (1.97 inches) apart which are placed in two holes drilled to a depth of 8mm (3/8 inch) and filled with conductive gel. The concrete resistivity is displayed on an LCD when the control switch is activated.

The following table correlates a range of values vs. the possible rate of corrosion of the reinforcement bars.

RESISTIVITY LEVEL (K OHMS CM)	POSSIBLE CORROSION RATE OF REINFORCEMENT REBARS
<5	Very High
5 to 10	High
10 to 20	Moderate to Low
>20	Insignificant

The James OHMCORR, when used in conjunction with the James CORMAP System provides an economic and sound means of diagnoses of corrosion in reinforced concrete.

## Sales Numbers

### C-RM-8000 Complete System:

C-RM-8030	Electronic Meter
C-RM-8040	Probe
C-RM-8042	One 10ft (3M) Cable with Connectors
C-RM-8045	3oz (85ml) Jar of Conductive Gel
C-RM-8055	1/4" Drill Bit

## Specifications

Weight complete in carrying case	8 lbs (4 kilos)
Display:	4 1/2" Digit in LCD
Resolution:	± 0.1K ohms cm (± 1 Digit)
Battery:	9 Volt
Range:	0.5 - 20K ohms cm

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NON DESTRUCTIVE TESTING SYSTEMS