

Cold Storage Facility Re-levelled by JOG

INDUSTRY

Commercial

STRUCTURE

Freezers store

PROBLEM

Earthquake remediation

LOCATION

Christchurch, New Zealand

DURATION / YEAR

14 days / 2013

TECHNOLOGY

JOG Computer
Controlled Grouting

BUSINESS UNIT

Mainmark New Zealand



Summary

This freezer store, with walls built of precast tilt panels, suffered earthquake subsidence to the extent where the storage racking could not be fully utilised.

In two weeks Mainmark rectified the settlement, with JOG integrated computer grouting.

Objectives

To raise and re-level the building to enable the racking to be used to its full capacity.

Solution

A continuous JOG circuit of 36 primary injection ports was installed along 56 lineal metres of 11m high wall. We then proceeded with a sustained sequence of injections of JOG cementitious grout.

Continuously monitored and computer controlled, the lifting of the very heavy structure was uniform and gentle. This process raised the side of the building as much as 57mm, bringing the area to the required level.

The integrated computer grouting was completely successful. The freezer store was returned to 100% operation.

The client's satisfaction resulted in an extension of the remediation with our raising another 30m section of wall & drive-through slabs, requiring lifting of up to 30mm.

Above, top: The freezer building which bore very heavy storage loads. Above, left: The grout batching centre. Above, right: A section of the JOG injection array along the principal area to be rectified.