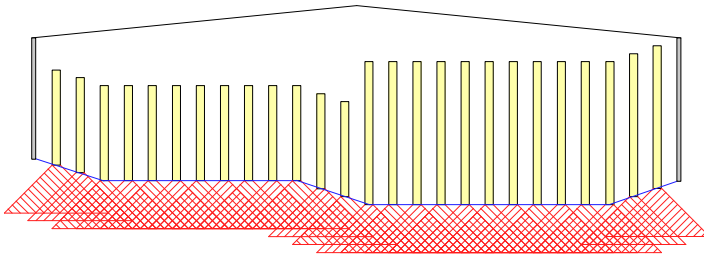




## SETTLEMENT SURVEYS

### For Concrete Floors New and Old

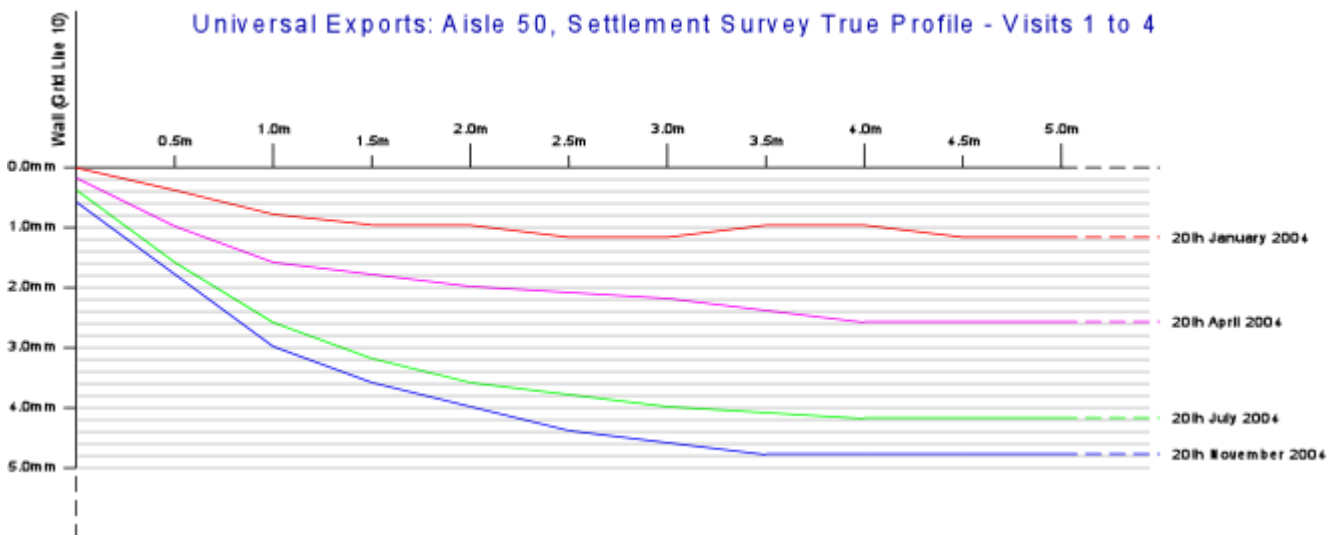
“Unexpected settlement of the ground or of piles may affect the levelness and flatness of a floor.”



While there is no specific minimum requirement for the degree of settlement of a concrete floor slab in the Concrete Society's Technical Report No. 34, the Federation Europeenne De La Manutention (FEM) sets a standard for deformation and settlement in a floor slab. It gives no guidance, however, on how this deformation and settlement should be checked and monitored, so FACE Consultants have devised the following method of monitoring movement:

### The Survey Method:

A settlement survey conducted by [FACE Consultants](#) is a non-invasive process that does not disrupt the warehouse operation. Level readings are taken at regular, easily repeatable survey points in lines across the slab using an Engineers' Precise Level, PPM and Invar Staff and recorded on [FACE Consultants'](#) hand-held data logging device, from which sectional graphs of the floor (below) are automatically generated. A drawing that accurately shows the location of the sections is provided.



The initial [FACE Consultants](#) settlement survey is, ideally, conducted before the slab is loaded and is then repeated after either three, six or twelve months (depending upon Client requirements). The results of the surveys are compared to ascertain the degree of settlement that has occurred.

The [FACE Consultants](#) settlement survey can be repeated at regular intervals to monitor movement – or non-movement – within a concrete floor slab to ensure that the required specification continues to be complied with. Settlement is generally a long term phenomenon that adversely affects the quality of the floor and often goes unnoticed until it is the cause of an accident.

**Don't let an accident be the first indication of slab settlement.  
If in doubt, call FACE out.**