Cardiff Scaffold Collapse Dec 2000

Two building companies were fined a total of £320 000 after 12 storeys of scaffolding partially collapsed onto a road and railway in Cardiff.

Miraculously, nobody was hurt as the incident occurred late at night. The collapse, which happened in December 2000, caused major disruption as the road and railway were closed for five days.

An HSE investigation identified a catalogue of errors, which contributed to the collapse:

- The scaffold design was defective in certain areas. In particular, the design drawing for the scaffolders did not provide adequate information on the number, location and make-up of the ties.
- A decision was taken at site level by the contracts manager and scaffolder to change the design, without checking with the designer. This was because the design drawing supplied was poorly prepared and ambiguous.
- Ninety-one anchor ties were installed, rather than the required 300.There were no drilled fixings in the topmost 6 m of the scaffolding.

- Each tie consisted of two ringbolts with drilled anchors. The ties were defectively installed, as the scaffolders were not trained in the proper fixing of the anchors and associated ringbolts. As a result the ties failed prematurely in high winds.

- The principal contractor did not carry out checks on either the design of the scaffolding or the adequacy of the installation. A scaffolding register was not completed, nor was there a system for carrying out weekly inspections of the scaffolding. The number of ties installed was not checked at hand-over, nor had any been tested.

Andrew Knowles, the HSE inspector who led the investigation, said: 'This is the worst scaffold collapse I have investigated.

It is only a matter of good fortune that nobody was injured. Had the incident happened during the daytime, the consequences could have been catastrophic. 'Since the incident the principal contractor has trained over 40 engineers in scaffold inspection and the scaffolding contractor has carried out a company-wide retraining programme.

Via: Safety Photo