



Fun at Work

Martech engineers carrying out an abseiling cleaning contract on a children's hospital building dressed up in super hero's outfits for a day much to the delight of the young patients.



Local Football Successes

Martech sponsor both the Peterborough Ladies FC, winners of the Cambs Senior Women's Cup 2010 and the Sawtry Colts U11 Girls who are presently 3rd in the League.

County Squash Success

Martech sponsor the Cambridgeshire County Squash Men's and Ladies' Teams



Stone Inspection

Stone cladding and stone built structures can suffer from ageing and decay with cracking and spalling as typical symptoms.



making safe and inspection of a stone built hotel.

The survey involved the close up inspection, using

Many buildings in our cities are built of stone and many predate the use of reinforced concrete, although the use of stone cladding persists today over structural steel or reinforced concrete frames.

This widespread use of what many consider to be an everlasting natural building material means the problems can go unnoticed until pieces falling off cause alarm.

Martech engineers are very experienced in surveying and identifying these problems and recently carried out a

Martech abseiling engineers, of the building facade surfaces.

Any loose material was removed safely so as to mitigate the risk of falling masonry in the short term.

All defects were logged by Martech on copies of old preserved drawings and cross referenced to a defects log in the final report submitted to the client on completion.

Martech surveys form the basis of many property owners building condition files giving data for maintenance or refurbishment planning.

Building Fabric Survey

There are many hundreds of high rise blocks of living accommodation within the UK with most in the big cities and towns fulfilling a need for inner city dwellings.

Martech are very experienced and knowledgeable in the traditional construction methods used to build tall buildings. As Martech's core business this information is very useful when asked to carry out inspections and surveys to determine the cause and extent of problems often experienced in these buildings in later life.

Recently Martech engineers abseiled three 15 story tower blocks to carry out a concrete and brickwork condition survey to ascertain the nature and extent of any concrete and

brickwork deterioration problems.

The survey found the concrete to be carbonated to a depth that combined with low cover to the reinforcement was causing cracking and spalling of the cover concrete.



The brickwork inspection looked at the wall tie density, condition, and slip brick detailing and found both to need remedial attention.

Martech reported the findings to the partnering contractor in a detailed report together with repair recommendations.

Another example of Martech working closely with all aspects of property management to help deliver decent homes.



Take a look at www.consultrve.co.uk

Issue Date Autumn 2010

"Britain will today set out a five-year plan to fill the hole in its public finances, unveiling an austerity budget that will define the course of the country and the fate of its coalition government"

"Shining a light on spending will help to put savings before cuts... more can be done to enhance better value for money for hard-pressed local taxpayers"

1990 - 2010
20
YEARS

In Austere Times – Make Do and Mend with Help from Martech

With government and the private sector committed to making savings and efficiencies it is inevitable that the cost of rebuilding as well as refurbishment and repair to existing buildings and structures will come under the spotlight.

Now is the time to seek true value for money and commit to looking in much greater detail at these vulnerable building projects. By spending relatively small amounts now on inspections and surveys it may be that the existing stock can be economically rebuilt or repaired to extend the useful life until better financial times return.

Martech can provide a thorough inspection and survey of all types of existing buildings and structures to determine the cause and extent of visible and latent damage.

With this detailed information the savings and efficiencies can be planned and written into tender specifications with the knowledge that the original aims of the project could be delivered rather than postponed indefinitely or scrapped altogether.

"Britain's public services face the longest, deepest, sustained period of spending cuts since at least the Second World War"

according to the independent Institute for Fiscal Studies (IFS). Never before in peacetime has the public sector seen budgets reduced every year for six years. Some departments will face cutbacks of a third.



"Brutal budget to start UK austerity drive"

Abseil Surveys



Situated in a remote area of Southern England is a reinforced concrete water tower that has as its neighbours rare species of birds and insects.

The tower is only a short distance from the coast and therefore subject to wind born chlorides from the sea. The remote location meant **Martech** putting in place extra health and safety considerations for emergencies should they have occurred.

Martech engineers were instructed by the water company's contractors to carry out a detailed survey of both the outside and inside of the structure, excluding the storage tank, to determine the nature and extent of any deterioration problems for future maintenance planning.

Martech staff abseiled the external elevations inspecting both the concrete and brickwork for defects and took samples of the reinforced concrete for laboratory analysis to determine the extent if any of the chloride penetration. This proved to be the case giving results highlighting the need for future attention. Inside the water tower



Martech tested and inspected the steel ladders and pipe work supporting structure and found this needed maintenance attention with renewal of some of the elements.



Another example of Martech working closely with the client to deliver their requirements in an efficient and safe manner.

Testing and Inspection

In the drive to provide excellent educational facilities it is understood that the learning environment can have an effect on student performance and it is therefore seen as essential that educational buildings be safe and weatherproof at the least to meet the required standards.



Martech have carried out a concrete condition survey on a regional college that was constructed using pre-cast concrete cladding panels some forty years or more ago.

and low cover but are repairable using modern techniques and corrosion inhibitors.

In a subsequent phase of works a trial of remedial restraint bolts was installed for the college.

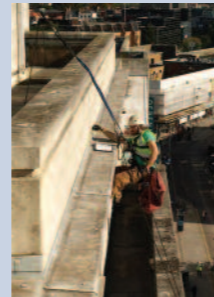
Martech worked closely with the structural engineers and the college staff to ensure the survey did not inconvenience the teaching and learning process nor compromise the safety of the staff and students.



As part of the testing and investigation process **Martech** engineers probed the pre-cast panels and their method of fixing, which on inspection required the opinion of the client's structural engineers for their view on the fixings. The concrete panels themselves are suffering from carbonation

Store Design of the Year

Martech are proud to be associated with the awards made to Primark Stores Ltd for their refurbished store in Bristol.



Primark Stores Ltd was awarded the "Store Design of the Year" and "Lifetime Achievement Award in Retail" and "Retailer of the Year" at the Retail Week Awards during March 2010.

Martech were instructed by Primark consultants to carry out a visual examination and hammer test of the reinforced concrete and stone panel external facades of the Bristol building to confirm the extent of any visible deterioration and to log the results in a detailed report.



The information given by **Martech** was used to assist in the extensive refurbishment of the Bristol building leading to the awards made earlier this year in particular the award "Store Design of the Year".

Recycling buildings in our cities and towns is an efficient use of existing resources and with imaginative design coupled with accurate **Martech** information on the existing building or structure condition many similar successes are possible in the future.



Making Safe

Carrying out safety and inspection works on active water and waste water treatment plants is a **Martech** speciality where many reinforced concrete buildings and structures have had their service life extended by their intervention.



Martech were recently requested to encapsulate three elevations of the reinforced concrete powerhouse on a waste water treatment plant. The building has pre-cast concrete cladding panels which over time show signs of potential deterioration and as an exercise in prevention the water company engineers decided to cover the affected area with neatly applied safety debris netting. This followed a previous concrete condition survey by **Martech**.

Martech staff used an aerial platform to access the three walls and fixed the debris netting using battens fixed to sound

concrete whilst recording the amount of existing damage which was found to be significant.

During this essential work there was no shutdown of processes and little or no inconvenience to the normal plant operation.



Concrete Testing

Sporting venues have a duty of care to provide safe viewing facilities for their spectators and fans and that these structures meet the required standard for a Safety Certificate to be issued.



There are many examples around the UK of reinforced concrete grandstands from the grandest international stadiums to regional stadiums hosting professional contests.

Martech recently carried out a concrete condition survey to the main stand belonging to a professional rugby union club.

The structure was found to be suffering from visible and latent deterioration of the concrete with advancing carbonation causing reinforcement corrosion due to both low cover and loss of alkaline conditions around the steel.

Martech recommend that the concrete be repaired by traditional patch repairs with the addition of corrosion inhibitors combined with the application of suitable concrete coatings for long term durability.

Martech have the experience to advise on sports related structures having carried out many detailed surveys and inspections during the past twenty years.