



NAV AND GRAEME GILL

From cold and wet to snug and dry - and thanks for that go to Brick-Tie!

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DAVID ALLWOOD

The problems of falling brickwork and how Brick-Tie solved them.

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Churchwarden Annette Slater



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Insight

How Brick-Tie helped St Andrew's Church in Leeds to give it a unique identity.

Churchwarden Annette Slater says the church, built in 1967, has become an increasingly popular venue for the community - But, says Annette:-

"There was no cross on the building, or anything to identify it as a church and because of its modern design, from certain perspectives, it could be almost anything - a sports centre, bank or even a supermarket!"

Fate stepped in when Annette and St Andrews' vicar, Rev Lesley Ashton, were told of a fund, raised years ago by the parishioners; enough for a bespoke cross.

However, Ripon diocese structural engineers reported that the church façade would not take the weight of the cross, without significant strengthening.

CINTEC



Cintel's grouted anchoring system provides a secure fixing for the cross.

Solid Oak Cross

A specialist was needed, and Brick-Tie was appointed, to work alongside retired engineer, parishioner and master wood-turner Eric Webster who had volunteered to make the cross:-

"The cross is solid green oak, which is very heavy," commented Eric,

"Thanks to Brick-Tie's strengthening work; weight was no longer a problem. The real issue then was; how to fit it to a curved random stone wall?"

Brick-Tie technician, Stuart Lattimer, explains:- *"Helifix remedial cavity wall ties were chosen for some of the strengthening work. However, there was also the question of how to securely fix the cross to the fragile stone; Cintel's grouted anchoring system was chosen - custom-designed for St Andrew's. A template of the cross was made and I grouted the anchors in exactly the right position; it fits the curved wall surface like a glove"*

Heritage

"We volunteered to put the cross in place at no cost; there's now no mistaking St Andrew's for anything but a proud church!"

Having experience and approval by Helifix and Cintel gives Brick-Tie enough options, to tackle any masonry repair problems."



Eric Webster in his workshop, where he made the cross.

Annette concluded:- *"Brick-Tie were first class from start to finish. Very professional and they really know their job. We always got a straight answer to any question we had and you wouldn't find many companies willing to go the extra mile like they did."*



25th Anniversary Edition: 1986 - 2011

Brick-Tie preservation launch new web site: www.btpreservation.co.uk

Inside... Helifix masonry strengthening, expansion joints and ties for a Leeds office block; Cintel grouted anchors for a church; Basement waterproofing to BS8102; Helifix lateral restraints for a listed building; high tech micro-drilling for analysis of structural timbers, and even more qualifications and awards for our team....



“ Another 25 year wall-tie guarantee is issued, in Brick-Tie’s 25th year of trading! ”



Having grown up in East Leeds, Civil Enforcement Officer Robert Bailey and his wife Irene decided to return there following an eight year spell in Castleford...

They found the property they wanted - with good schools and facilities nearby - but the sale almost fell through when a surveyors' report indicated horizontal cracking to the outer brickwork, together with a warning that failing wall ties could be causing the problem. The wall was, in effect, separating into sections.

"The house was built in 1935," says Robert, "but as it really suited us we grasped the nettle and bought it, reckoning if we sorted the wall tie issue we'd have a property to outlive us..."

External Cracks

Robert shakes his head in disbelief and wry humour as he recounts that "We met more cowboys than you could find in Texas. With hindsight, some of the quotes we got were just ridiculous! One company said 'Just send us a photograph and we'll get back to you with a quote...' absolute nonsense!"



Bryan shows Robert and Irene a Boroscope view of one of the corroding ties.

"In my job as a community policeman you develop an instinct for what is the truth and whether folk are just pulling the wool over your eyes. As soon as we met Bryan Hindle we were immediately comfortable with him and with what he told us. Using a special camera, Bryan was able to show us, visually, that the ties were disintegrating, being eaten away by acidic impurities in the black-ash mortar.

25 Year Warranty

I'd recommend the Brick-Tie team to anybody - their professionalism comes through in their attitude to work; always on time, keen to be in work each day and keeping us fully up to speed on what they were doing and why..."

The house is now safe and secure - with the backing of a fully insured 25 year warranty. This, as Bryan Hindle points out, was also issued in Brick Tie's 25th year in business: "It's very satisfying to pass our 25th year and see some of the guarantees we issued in 1986 expire. We're all very proud that when we say we'll guarantee the work for 25 years, we've actually achieved that for past clients."

Asked, somewhat unfairly, to sum up Brick-Tie in one word, Robert didn't hesitate: "Integrity!" he said.

SEJC's Mike Wagstaff was impressed with Brick-Tie's work.



SEJC Consulting Engineers Limited is an established Structural Engineering company based in Leeds with an impressive roster of clients.

Headed by Steve Entwistle, the company works across the region on domestic and commercial properties involving both new-build and refurbishment work.

SEJC's Mike Wagstaff recently commissioned Bryan Hindle and the Brick-Tie team for a project near Wakefield, to change three existing and connected farm outbuildings to a private dwelling. A new build was also part of the scheme but the main issue was the condition of the original trusses and timbers within the barns.

Mike was impressed with Brick-Tie's work: "This was the first time I had commissioned Brick-Tie Preservation for timber micro-drilling

“ If it wasn't for Brick-Tie's expertise we couldn't do our job properly ”

work, though Steve had relied on them for years for masonry repairs and tie work. Bryan and his team are so helpful; he's very good at what he does."

The project required a detailed examination of the roof and the flooring timbers to determine if rot was present and, if so, how far it had penetrated and whether it would be necessary to cut the timbers back.

Investment

Brick-Tie has always invested significantly in state of the art equipment and Bryan suggested the Sibtec micro-drilling probe as the best way to assess the large section timbers at the farm. Micro-drilling is a non-destructive timber investigation tool which "reaches the parts others can't reach" by pushing a fine 1mm probe into suspect trusses, beam ends and other large timbers - particularly useful on older historic properties and conservation projects.

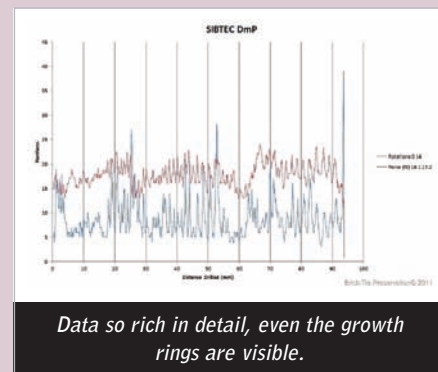
The probe data is captured via computer, taking readings every 0.1mm as the probe penetrates the wood, building an exact picture of the timber strength. Rot, sound timber and even spring and summer wood can be plotted - all without damage or disfigurement...

Says Mike: "Micro-drilling and Brick-Tie's expertise saves us hours of time. That, coupled with Bryan's concise, precise and jargon-free recommendations, makes our job a great deal easier!"

SEJC worked on the farm project with Mark Brotherton of Wakefield's Fox Architecture and Design practice.



The micro-probe in action, checking a 17th century timber frame infested with Death Watch Beetle



Data so rich in detail, even the growth rings are visible.

www.sejc.co.uk
www.foxarchitecture.co.uk



We've achieved Investors In People status for a second time, *and* a new award for management.

Head of administration Katrina Jackson successfully took the company through the rigorous IIP vetting procedure for a second time, having already done so back in February 2007, when we first met the standard. *"It's all about teamwork really, getting everyone involved and making the most of the company's best resource; its people"* enthuses Katrina.

Improved Customer Service

And MD Bryan Hindle agrees *"I've seen a positive change in our fortunes since we started down the IIP road and just at the right time too, what with the difficult trading conditions out there. Following completion of Esteem's Performance Plus course, Katrina & I have been awarded NVQ level 4 in business management and we're implementing improved management and customer service procedures all the time"*.

Running the business well is important for customers, employees and trading partners. In the past year we've strengthened our team in depth, from site through to management. Bryan is delighted; *"Our thanks go to Esteem and to the Federation of Master Builders, who co-sponsored the 6 week course, with help from Construction Skills."*



Bryan and Katrina proudly show their NVQ certificates and (right) with members of the team.

www.esteem.uk.com • www.fmb.org.uk • www.cskills.org

A listed building with a host of issues is saved from decay...

Chapel Allerton is a "leafy and architecturally notable area of Leeds" and in recognition of its special architectural and historic interest parts of the suburb are now designated conservation areas...

The area is thriving, and typical of the incoming generation are our clients Nav and Graeme Gill who found just the property they wanted - a magnificent 180 year old Grade 2 Georgian terrace house.

Challenge

But, to put it mildly, it was somewhat neglected and definitely a restoration challenge!

Nav takes up the story:- *"It's a very big, four storey house, but everything below the ground floor was absolutely wet through; the basement was terrible and you could smell the damp the minute you entered the property..."*

With detailed survey reports to hand, the couple's first port of call was Brick-Tie:-

"I'd used Brick-Tie before on a rental property so I invited Bryan to inspect our new project! I can't praise them enough; they're reliable, efficient and straight as a die".



"This is how they work!" Bryan explains what's keeping the house together and how they do it...



Externally safe and sound, too - restored to its former glory using traditional lime-based materials

Externally, too, there was a more immediate problem for Brick-Tie to deal with. A gable end was coming away from the rest of the house, with the very real threat of a significant portion of it ending up in next door's bedroom!

Bryan Hindle explains the remedies:- *"This was a complex job; the building's listed, so we needed to consult with the local conservation officer. The basement needed waterproofing to a high standard so that Nav and Graeme could fit a new kitchen, under-floor heating, a snug and a bathroom down there."*

We found wet rot and woodworm in the floors, and the gable wall was coming away due to a lack of lateral restraint. Previous repairs had been done using hard cement and this looked ugly and was causing the stone to erode, with many stones having already lost their face."

We specified an Oldroyd cavity drain membrane system in the basement, backed up by Safeguard's Sentry 2 sump system.

Insured Guarantee

Compliance with BS8102 and an insured guarantee were essential. Safeguard's Soluguard range of wood preservatives sorted the infestation issue too.

The gable needed dismantling and re-building using lime mortar. Helifix remedial ties and BowTie lateral restraints were installed, along with bespoke straps. The cement pointing was raked out by hand and the house re-pointed in a weakly hydraulic lime mortar. The badly eroded stones were conserved, using plastic stone repair mortar. My teams' experience in combining hi-tech materials, with traditional skills and methods was crucial on this project."



“ The consequences of falling brickwork can't begin to be imagined. We'd no hesitation in calling Brick-Tie for help. ”



Technicians Ryan Shann and Craig Tarbotton take a break - Leeds City Centre skyline below



David Allwood checks the tension rig gauge readings at fourth floor level. Yes... 5Kn!

Structural engineer David Allwood, of JPG Civil and Structural Engineering of Leeds, uncovered a major problem with a client's office block near the city centre; he needed help fast, and turned to Brick-Tie:-

"This is a '60's office building where cracks were beginning to appear in the brickwork. More seriously, slip bricks were working loose and falling into a shared car park immediately below - so we needed to move quickly."

Extremely Knowledgeable

Brick -Tie's initial investigation, using endoscopic photography and exposure work revealed a mix of issues including very severely corroded wall ties and stresses caused by a lack of expansion joint provision in the external brickwork cladding.

Said David, "We'd no hesitation in calling Brick-Tie for help. It's difficult to find reputable companies with the level of professionalism required to work on commercial buildings. Bryan Hindle and his teams are extremely knowledgeable and passionate about what they do..."

Says Bryan:- "A prestigious building has to look good too, so the remedial work needed to be effective and as neat as possible. The inner leaf material was a hollow pot type block, so I specified Helifix's Retro Ties which we proof tested before 2000 of them were installed through the bed joints. My team formed new expansion joints using our dust -free diamond chasing system and utilising Helifix 'slip ties'."

True Professionals

Helifix Helibeamers were installed, to stabilise the situation, before technicians removed the slips and installed bespoke stainless steel angle supports and stainless steel fixings. Each fixing was tension tested to 5Kn. The steel was then encapsulated in Weber's Mulsifix cementitious soffit repair mortar and stainless steel stop beads finished the job.

David commented:- "At JPG we work closely with our construction partners to bring about the best results for our clients. Brick-Tie Preservation shares our philosophy and it's great to work with true professionals".

www.jpgleeds.com

Andrew Rimmington is Managing Director of ARC Engineers Limited in Morley, near Leeds, a company he formed in late 2007:-

"Brick-Tie Preservation's technical knowledge is far better than most; when you're talking to them you are talking to the experts - what product to use and why"

"They're not sales people, like so many we meet."

As a Chartered Member of the Institution of Structural Engineers, Andrew is committed to its policy of Continued Professional Development (CPD) and it was in this context that he was introduced to Bryan Hindle:- "Of course, we had heard the Brick-Tie name for many years, but we first met Bryan when he was invited to talk to us about waterproofing and basement issues in particular. He certainly knows

his stuff - as a look at Brick-Tie's website and Bryan's blog confirms. He has real passion and we respect his specialist expertise. Valuable knowledge we can call upon as and when required without the necessity of adding a specialist staff member!"

Specialist Expertise

"Although the new-build sector is a significant part of our business, we also advise on the care and maintenance of older, historic buildings, of which there are plenty in our local region. In fact, Brick-Tie have just completed work on our project at the landmark Viaduct public house in Leeds - installing Cintec pressure grouted stitching anchors to restore weakened masonry..."

www.arc-engineers.co.uk



"Brick-Tie's technical knowledge is far better than most..." Andrew Rimmington



- Complete Building Preservation Services
- Structural Repair and Waterproofing Services
- Full Property Care Association Members
- Wall Tie Installers Federation Members
- Structural Waterproofing to BS8102 with GPI Protection