

Apprentices at Phoenix ME

Phoenix ME began in 1931 as an electrical contractor, although in 2008 it diversified into a mechanical and electrical (M&E) company. It completes M&E installations, from shell and core to categories A and B fitouts in commercial offices, education establishments, government buildings and data centres. The company's latest published accounts show an annual turnover of £87.6 million in the year to 30 September 2016, with an average of 193 direct employees during the year.

The company is based in central London and currently has around 80 electricians on 12 sites across the capital and the Home Counties. Phoenix ME engages JTL, a training provider that is the subject of another of our case studies, to manage its apprentices. When it expanded into mechanical work, Phoenix ME did not have sufficient in-house expertise, so it uses a core group of subcontractors, some of which also have apprentices usually provided through JTL. It also utilises electrical subcontractors to deliver services during periods of high demand, peaking at approximately 700 people at the workforce.

Richard Veroft is Phoenix ME's health and safety, environment and quality (HSEQ) manager, reporting directly to the managing director. Project safety is accountable to the operations director, with the local project teams – project managers, construction managers and project engineers – having day-to-day responsibilities for health and safety. Richard is supported by a HSEQ adviser, who was a former Phoenix apprentice and who monitors the projects' performance by completing routine inspections and also reactively supports sites with training and specialist advice, where needed.

Selecting apprentices

Phoenix ME's four-year apprenticeships are in "installing electrotechnical systems & equipment (buildings, structures and the environment)". During the first three years, an apprentice will attend college for one day a week as well as for three blocks of two weeks each year. The majority of time in the

first three years, and all of the fourth year, is therefore spent on site. At college, the apprentice will receive a health and safety induction followed by health and safety units in the NVQ.

Phoenix usually takes on five apprentices each year, with a maximum of 20 at any one time. It does not envisage any changes to these numbers over the next few years, despite the government's Apprenticeship Levy. Currently, all the apprentices are male; 11 are under 19 and seven are aged 19–24.

Around 90% of the apprentices remain employed with the organisation. Although JTL is actively encouraging female apprenticeships in the sector, and Phoenix has invited women applicants to interview, they have not attended in the past. The gender imbalance is a reflection of the sector more widely.

JTL maintains a list of approved applicant apprentices that is based on an online assessment (covering basic numeracy and literacy skills as well as checking for colour blindness). Each year, Phoenix ME tells JTL how many apprentices it needs and in what areas (five or six over each of the past two years). Phoenix then selects candidates from the list, who are invited to an informal interview with Greg Hall, Phoenix ME's labour relations manager, and Alex Brody, the site and HR coordinator, and, on occasions, a director. Together, Greg and Alex are responsible for managing apprentices and coordinating the apprenticeship process with JTL.

Inducting apprentices

JTL offers all new apprentice starts an online construction health and safety fundamentals course. It also provides the college with the training package and materials, including a complete health and safety unit. (More details of this are set out in the JTL case study).

At the start of the programme, apprentices receive an induction at Phoenix ME head office, which is usually also attended by a JTL representative. The induction includes basic health and safety information and the issuing of five- point PPE (hard hat, gloves, boots, light eye protection and his-vis

waistcoat) to the apprentice. The company does not distinguish apprentices from other employees through special markings or coloured PPE or clothing. There is no particular reason for this, other than the company has never marked out apprentices and it has not been raised as an issue.

At the induction, the apprentices sit the test for an ECS card (Electrotechnical Certification Scheme, which is the equivalent of the Construction Skills Certification Scheme for electrotechnical personnel). The pass mark is 38 out of 45, although Alex says that no apprentices have failed the test. The ECS manual contains all the information the apprentice needs for the test, including sections on work at height and the use of equipment. "A lot," adds Richard, "is common sense and the test is not arduous." The apprentices are, in any case, "conscious of the need to pass." Despite the apprentices having gained an ECS card, Phoenix "does not assume anything" and instead treats the apprentices as "starting from scratch". The test allows apprentices to "demonstrate their thought processes and allows them to show they can do it", says Richard, but while it affords "a certain confidence", Phoenix ME does not treat the card as a qualification.

Following the induction, Phoenix divides the apprentices into two groups so that it can stagger the site starts, which allows either Alex or Greg to attend the site with them. "We don't expect them to walk onto site without knowing anything or anybody. We introduce them and take them up to the point of the main contractor's induction," explains Alex.

Starting work

Phoenix ME will place apprentices on any of its construction sites, avoiding those at pre-construction or snagging stages. It can have several apprentices on a single site, although this is dictated by the projects and the capabilities of the apprentices. The company will try to place apprentices on larger projects because they last longer and are not so programme intensive. Over the four years of the apprenticeship, it is more likely that each placement will last between six months and a year, although occasionally a placement

could stretch to two years if the project is large and the experiences available to the apprentice are sufficiently varied.

Before an apprentice starts work on site, Phoenix ME will carry out a young persons' risk assessment. "Essentially," says, Richard, "this is no different to our standard risk assessment, in that we identify the hazards and rate the risks, and we do this for each apprentice on each task. We take into account the possibility of a lower perception of risk, immaturity, confidence (too much or too little), physical limitations and any individual physical or health condition." The risk assessment is a Phoenix document based on a general risk assessment template that takes into account the HSE's guidance on young persons, as well as information from JTL and Phoenix ME's own procedures.

The types of additional controls for apprentices that Phoenix ME will typically need to introduce involve work at height (mobile elevating work platforms), limitation of access to switch rooms and the use of machinery and power tools in early stages. Although many of the controls will be mandatory until the apprentice is 18, Greg and Alex emphasise that the company does not allow an apprentice, upon turning 18 or completing the first year, simply to use all the equipment.

At the site, apprentices attend the main contractor's induction, which covers "all of the site's 'dos and don'ts", says Alex, as well as an induction by the Phoenix ME construction site team manager, who will have a Site Management Safety Training Scheme certificate run by the Construction Industry Training Board (CITB). The Phoenix ME site induction will cover information that is particular to the company and the apprentice, including the company's safety plan, emergency and first-aid arrangements, the risk assessment and method statements for the tasks, the recording of medical information and emergency contact details. Apprentices are also issued with specific PPE needed for the project, for example gauntlets for underfloor work and hearing protection.

Mentoring apprentices

Apprentices have a one-to-one mentor who is an experienced qualified electrician to cover all aspects of work. An electrician is the third highest of eight electrotechnical grades. At the start of placement, the apprentice will follow and shadow the mentor. Over time, the electrician will give the apprentice a task, check the work and raise any issues with the apprentice. Phoenix ME selects mentors on the basis of age and experience; many have been in the business a long time. There is “no one” with whom the company would not place an apprentice, says Alex, although, as in any workplace, “we know that some are better suited than others”.

The mentors have no specific training in mentoring but most have undergone the CITB’s Site Supervisors Safety Training Scheme. They would check basic health and safety compliance, for example the correct PPE and highlighting hazards. Health and safety is, though, ultimately the responsibility of the supervisor or the construction site manager.

Apprentices also have a supervisor, who would typically be in charge of a floor or a group of up to six workers, including apprentices. A supervisor would be an approved electrician (the second highest grade) or sometimes a technician electrician (the highest grade). The supervisor will organise and go through the work with the electrician, with the apprentice present.

Multiple monitoring approaches

The company and JTL monitor the health and safety of the apprentices in various ways. JTL is contractually obliged to visit every 12 weeks, although this can be more frequently. During the visit, a JTL training officer will sit down with the apprentice and mentor with a review sheet and ask how things are going at the workplace and college. This process will explicitly include health and safety. JTL may also walk around the site, taking pictures. Any issues are formally recorded and either resolved at the site level or with the employer centrally.

In addition to the checks by Phoenix ME’s mentor and supervisor, Greg or Alex will visit most sites every fortnight or so. During these inspections, they will speak to the apprentices, asking generally how things were going and

whether they were being treated properly. They will also ask about health and safety. Sometimes, says Greg, an apprentice might not be willing to talk to a project manager about a problem but would be happy to talk to themselves. The two men also carry out formal reviews mid-way through the projects and an end of site review. This, says Alex, is “pretty much a three-sheets gap analysis: what do they need to be able to do; what have they done; and what sites have we got that offer what’s not been done?” Again, the review would include health and safety considerations.

Phoenix ME’s HSEQ adviser, Jack Rixon, also visits sites and sits in on site inductions. Although he is not formally monitoring the inductions, he looks for new starters on the site register and checks the documentation to make sure apprentices have received their inductions. Essentially, this is a paper trail that ensures apprentices have all they need and that Phoenix ME’s system is being followed at site level.

The March 2017 report to the Phoenix ME board shows just one recorded accident in the previous three years involving an apprentice. This was a minor incident in which some dust lodged in an apprentice’s eye while he was pulling cables in a ceiling, even though he was wearing eye protection. It did not result in any lost time. Richard shared the incident around the construction teams, from where it was variously rolled out as a toolbox talk and a “watch out” addendum to team meetings.

Providing assurance

Phoenix and JTL have a longstanding relationship, and Richard believes its provider takes confidence in the presence of a full time safety manager and assistant at Phoenix ME and its various accreditations and memberships. These include OHSAS 18001 (audited by SGS), Constructionline (online) and Achilles BuildingConfidence (level 5, which involves a two-day audit), as well as membership of the Building Engineering Services Association and the Electrical Contractors’ Association. Richard adds that although not all of the accrediting bodies ask specifically about apprentices, they do cover young workers. JTL, adds Alex, also “knows that we work for major contractors that

will set out their own requirements and want us to maintain certain standards”.

JTL assessed Phoenix ME when it first placed apprentices with the company. It carries out a brief check each year and a more detailed review every three years. Richard says that while Phoenix ME does not need much in the way of ongoing health and safety assistance from JTL, he acknowledges that he is well supported by JTL and knows that the help is there if needed. JTL, he points out, is potentially dealing with any organisation that will take on an apprentice, and one-person bands will be significantly more in need of JTL’s help. “If we were a smaller company that didn’t tick the boxes, or we didn’t have the safety management system,” adds Richard, JTL would be “onto us, offering help and advice”.

Empowering apprentices

Phoenix ME encourages apprentices to be proactive and confident about raising health and safety issues, both with their mentors and supervisors, and during the visits of Jack, Greg and Alex. The latter emphasises: “We have very open communication, but some are more proactive than others about raising issues.”

One way of empowering apprentices is through trade union membership. Phoenix ME recognises the Unite trade union and meets regularly with its regional official. Union membership is offered to apprentices; “the take up is not initially fantastic but over time as they come into the fourth year, they do sign up as they discuss and realise the benefits,” says Alex.

Although around 75% of site employees are members of Unite, the union no longer has formally appointed health and safety representatives. Richard says the company has electricians in the field who are in effect representatives. We use them for communication purposes and also as our eyes and ears to detect any health and safety issues and they attend the company health and safety committees by rotation.”

More recently, Phoenix ME has started to bring apprentices to the quarterly

health and safety committee meetings, with the aim that all apprentices will attend at least one meeting during their apprenticeship. This, Richard believes, exposes the apprentice to what actually goes on and break down any preconceptions the apprentice may hold. A director attended the last meeting, which emphasised the importance of the meeting and “opened the eyes” of the apprentice. The apprentice was able to listen to how the company was “planning to manage dust in the workplace. He watched the whole process of selecting an alternative tool, and a director buying into making that spend on the drills. He was also able to listen to information on previous incidents, look at the benefits and what we are going to try to achieve this year. It is a good way for an apprentice to find out that people are doing something active.”

Persuading main contractors

Phoenix ME sometimes faces challenges with the main contractors that have concerns over age and ability. “Main contractors are happy we are bringing apprentices on site but this does not always filter through from the business to the site management and operational teams ... where they may perceive apprentices as a bit of a risk – one that they would rather not have,” says Alex. “Lots of them have the boards outside with ‘x number of days without an incident’ and don’t want to jeopardise that.”

It may also, adds Richard, just be that the main contractor’s policies require additional procedures and documentation if there are apprentices on site, which the site management teams may “see as more work”. More often than not, Alex deals with the calls. “It used to happen quite a lot. Now, it occurs far less and tends to be the day one challenge: ‘has he got this bit of paper’; ‘where is his card?’”

Richard acknowledges that getting round the occasional opposition can be a “challenge”. He has had conversations with heads of health and safety in the main contractors. “They sometimes take that away and have conversations with their operational teams. Other times you don’t get anywhere and you may have to reallocate labour.” JTL also provides Phoenix ME with letters to

hand out to main contractors, which can prove helpful.

Richard also emphasises that Phoenix ME's apprentice incident rates show "there is nothing to suggest apprentices are less safe than other groups. This is partly because they are restricted, mentored and closely supervised. They are not cheap labour. They have more to prove that they can run with the big boys. You can say that until you are blue in the face but there will be a certain senior project manager in the contractor world who just does not want that risk to their couple of million hours worked without incident."

"The future of our company"

"We need apprentices," says Alex, "as they are the future of our company." Indeed, Phoenix ME's latest annual report advises that the "recruitment of high quality new staff is a key function for the directors".

"We have always had apprentices but in years gone by, there was an element of seeing them as cheap labour and a means to get a job done", says Greg. "We were spending a lot of time and money and then watching them go elsewhere". Now, the company's apprentices "see there is a career path available": two of the company's operations directors, project managers, the HSQE adviser and several engineers and construction managers, aside from the retained electricians, were apprentices with Phoenix ME. The company currently retains around 90% of its apprentices.

The benefits that arise from apprentices remaining within the organisation include familiarity, team working and culture, including the health and safety culture. Richard says it is "difficult to find tangible health and safety benefits", although they undoubtedly exist and include a "fresh pair of eyes". Moreover: "Apprentices don't know any different as the rules have always been like that from day one of the apprenticeship." In contrast, employees who have been working for 30 years have "to start doing this and that", which can be more of a challenge. Apprentices, adds Richard, generally "come with a buy-in to health and safety from day one, and not just the last resort of PPE". Greg is not certain from where the buy-in

originates, but believes: “Some of it is introduced in school. When they are on work experience, they have to fill in the health and safety side when they go back to school.” Those applying for apprenticeships have, adds Greg, clearly “done their homework” and have looked online at the company and details such as its MD and turnover. “Construction,” he says, “has a different image now. It is a career that is valid with requirements.”

A further benefit of investing in apprentices is the fact that its HSEQ adviser is himself an ex-apprentice. The “immediate benefit” of this, says Richard, “is his knowledge of, and skill base in, the electrical industry. The other side is that he is also a very good communicator who has recent knowledge of being an apprentice, so can engage with apprentices.” With time, adds Richard, “hopefully there will be other apprentices who develop a strong interest in health and safety and come on board as a qualified electrician as part of the team of safety reps. We use these reps as a bit of a conduit between the operational team when they are sitting there having their teabreak saying they don’t know what they do in head office.”

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HEALTH AND SAFETY AT PHOENIX ME

As Phoenix ME’s health and safety, environment and quality (HSEQ) manager, Richard Veroft is responsible for the maintenance and development of the systems, policies and procedures to ensure that the business has the appropriate resources to deliver on its HSEQ requirements. He has worked in health and safety since 2005 and construction since 2010, before when he worked in the chemical, automotive and fast moving consumer goods sectors.

Phoenix includes its sub contractors in its accident statistics. With four times as many contractor staff as direct employees on site, it would, says Richard, be “foolish” to exclude them. The March 2017 board report shows 12-month rolling average rates of 2.87 accidents per 100,000 hours and 0.11 reportable (RIDDOR) accidents per 100,000 hours worked.

Phoenix ME has the systems and policies that are commensurate with an organisation accredited to OHSAS 18001. Recent developments include the introduction of an online hazards reporting system. The company had previously used postcards in a post box, which last year resulted in 92 reports in total. When Richard looked at potential hindrances to reporting hazards, a major factor was “not being in the right place at right time, with a pen

to hand". The company therefore developed an online Google form and smart phone reporting in which the report goes straight into a spreadsheet accessed by all management. This has already elicited 210 reports since March 2017.

Richard is also currently running a campaign around perception of risk, "It won't happen to me". Using Jason Anker (Proud2BSafe), who became a motivational speaker after he made a poor decision that left him in a wheel chair, the campaign talks about the effects of such misperceptions. This, Richard hopes, will be as persuasive for apprentices as for all of Phoenix ME's workers.