



# Roofing Sector Workforce Development Strategy 2017-2021

Research and Evidence Project

December 2016

FINAL REPORT



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### Acknowledgements

Skyblue Research Ltd would like to thank representatives from the NFRC and CITB (the Steering Group) for their continued support of this project, and for creating multiple opportunities for us to engage with stakeholders in the roofing industry. We would also like to thank RIA organisational members who have fed in to the project at various stages, along with the Regional Roofing Training Group representatives who came together in July to provide important local insights about market conditions in their geographical areas. We have been generously given the opportunity to test initial strategy ideas with over 200 contractors, manufacturers and suppliers at various conferences and events since September, and they have helped us shape the recommendations found in this report.

Most of all we would like to thank the individuals from **141 UK-based roofing contractors<sup>1</sup>, 11 manufacturers, and 16 representatives of the UK based training provider network for roofing** that have spared their valuable time to complete an interview, survey or focus group with the Research Team between June and November 2016. This report seeks to reflect their sentiments, their opinions and experiences as honestly and objectively as possible to help shape a workforce strategy that will benefit their organisations, and others in the roofing sector in future.

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<sup>1</sup> In order to retain their anonymity we have not listed the organisations that have participated, however, information is provided in the report about the characteristics of the companies in terms of size, geographical base, workforce size and roofing business activity in order to reassure the reader that the sample is free from skew and bias.

## Explanation of Terms

The roofing sector comprises nearly 8,000 enterprises in the UK of different sizes and type. It has a workforce that comprises people whose specialism is 'roofing', and people who have capabilities that are non-roofing related. The report will frequently refer to different members of this roofing workforce and in seeking to find a consistent set of terms the Steering Group advised the following:

- Roofing operatives ('roofers') – are referred to as **specialists**.
- Anyone employed by a roofing company but who is not a roofing operative ('roofers') is referred to as a **non-specialist**. This might include people in roles as diverse as sales, administration, finance, directors and general labourers depending on the composition of the workforce in the individual roofing firms.

## Limitations of the Research

The primary research process has successfully engaged 141 roofing contractors distributed across the UK, sampled by size, type and to ensure a mix of federated and non-federated companies. Whilst this is thought to be the largest single sample of roofing contractors researched in recent years at depth around the theme of workforce development, it is still a relatively modest sample in statistical terms. Of these companies, 117 completed the formal survey, with the balance contributing through qualitative focus groups. We therefore advise some caution in the interpretation of the data and recommend that findings not be generalised to the entire sector of 7,960 enterprises. The research is a valuable guide, however, as to the thematic areas of importance and priority reflected in the roofing contractor community during 2016 and should therefore be used as a contributing tool to inform strategic development; and continue to shape dialogue with the industry about how to tackle market failures through collective means to 2021.

## Explanation of Process

This Final Report is supplied to the Steering Group guiding this research project for validation and approval. It builds on the Interim Report supplied on the 5<sup>th</sup> of September which was subsequently revised and approved on the 27<sup>th</sup> of September following a range of incremental improvements<sup>2</sup>. This Final Report includes new sections and updated narrative as follows:

- A chapter describing the survey findings from Training Provider interviews
- A chapter describing the survey findings from Manufacturer interviews
- Short case study insights from additional interviews with selected roofing contractors requested by the Steering Group in September 2016
- A more detailed set of recommendations having now socialised the strategic options with over 150 stakeholders<sup>3</sup> within the industry and targeted conversations with senior investment decision and policy makers at CITB in November 2016
- A stand-alone Executive Summary that can be used to highlight the main implications of the research

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<sup>2</sup> Explanation of terms for the specialist and non-specialist workforce; inclusion of a 'limitations' section to avoid misinterpretation of the results; inclusion of insights revealed in a final roofing contractor focus group completed in Sandown after the draft report was first submitted; investigation of any additional insights provided by roofing contractors around the themes of workforce diversity and pre-Apprenticeship where available

<sup>3</sup> Including a formal presentation of the research to 127 suppliers and manufacturers 23<sup>rd</sup> November 2016, the 12 members of the RIA Board, 5 senior policy and investment decision makers at CITB, the representatives of the RTTGs, contractors at the Midlands AGM and members of the BCP Standardisation Group

## Introduction

**The Roofing Industry Alliance wished to develop an evidence base during 2016 that would enable it to create the conditions for an effective workforce development strategy that will benefit its industry between 2017 and 2021.**

A Steering Group was set up on behalf of the RIA in April 2016 that comprised representatives from the NFRC and CITB, who have generously funded and contributing expert insight to this 9-month research programme<sup>4</sup>. The study sought to gather insights from over 100 roofing contractors of different size and typology in the UK that would illuminate the skills, training and employment challenges they face now and in future. It describes these challenges within the wider market conditions and contexts within which they conduct their day-to-day business for customers. As such the research has also engaged the views of other stakeholders including manufacturers/suppliers, big contractors and roofing representative bodies to understand the possible drivers and incentives for roofing companies to grow, to improve and to train. Between April and June 2016, a literature review process led to the submission of the first formal report and 'thinkpiece' for this project. It summarised the size, value and growth forecasts for the sector, along with an assessment of the key workforce challenges apparently facing the sector. **8 key issues** were identified that appeared to differentiate the roofing sector from comparator specialist construction sectors:

1. It is a relatively low qualified workforce compared to other specialist roles in construction.
2. It is one of the least diverse specialist sub-sectors for specialist roles in construction.
3. Recruitment methods are nepotistic, traditional and may limit the ability to attract talent.
4. There may be a misalignment between locally available provision and industry training needs i.e. a shortage of supply to meet expected demand.
5. There is a limited assessor workforce and opportunity for more on-site assessment.
6. 93% of the sector is micro; and 69% is self-employed, making it harder to incentivise and engage firms in training and development activity.
7. Snagging rates are high and costly affecting productivity.
8. One in five deaths in construction work involves roof work<sup>5</sup>.

Following primary research<sup>6</sup> with 141 roofing companies in the summer, an Interim Report was supplied to the Steering Group in September 2016.

Following further research with training providers, manufacturers and interested stakeholders this Final Report completes the study's narrative having now exceeded the contractual requirements for the volume of research fieldwork expected and provides recommendations for action in 2017. These recommendations have been shaped by direct research input from 168 'survey' participants, the Steering Group and over 150 stakeholders that have had opportunity to hear about and challenge the research findings. The recommendations are placed in a wider, contemporary context as a result of the consultancy team attending conferences and events in 2016 where over 1,000 stakeholders across different parts of the industry have inspired the report's direction. Interest in the research is high and dissemination of key findings will be a valuable activity on completion<sup>7</sup>.

<sup>4</sup> We are especially grateful to each representative and the amount of time they too have been willing to give to this exercise which has included helping us identify sources of secondary research, market reports and importantly practical opportunities for engaging with roofing contractors and manufacturers through regionally focused events and focus group discussions. They have also enabled us to access representatives from other RIA organisations and Regional Training Group officers.

<sup>5</sup> <http://www.hse.gov.uk/construction/safetytopics/roofwork>. Some are specialist roofers, but many are just repairing and cleaning roofs

<sup>6</sup> June to August 2016 through a sampled approach using a mixed methodology of depth telephone interviews, online self-completion survey, structured focus group moderation and ethnography at wider RIA stakeholder events

<sup>7</sup> E.g. Roofing News would like to convey results to their 23,000 readers

## Executive Summary

**Research with 141 UK-based roofing contractors, 11 training organisations and 11 manufacturers, and over 150 wider stakeholders with interest in the performance of industry confirms the need for a long-term workforce strategy. This new, co-ordinated approach will seek to address a range of short-, medium- and long-term challenges inhibiting the growth of the sector to meet current and predicted market demand.**

The detailed evidence contained in the full research report points to challenges including:

- A lack of the right combination of levers, drivers and incentives to encourage greater investment in training to the level required
- A mismatch between some of the expressed training needs and preferences of roofing contractors and the availability of relevant, affordable, localised provision
- A range of disincentives to training investment by roofing firms that need to be removed through strategic co-ordination and influence across the whole 'value chain' (and clients)
- Recruitment difficulties for two thirds of roofing enterprises<sup>8</sup>
- Skills gaps reported amongst 1 in 3 firms affecting 25% of their directly employed workforce across roofing specialist and non-roofing occupations
- Missed opportunities to take on all work available at present due to a combination of factors including a lack of skilled labour, and poor payment cultures by clients
- An absence of planning for future opportunities such as lean and off-site / modern methods
- A lack in the volume of instructors and assessors in the UK possibly inhibiting the volumes of employees that could otherwise consider getting qualified
- A lack of sector attractiveness making it more difficult to recruit diverse talent
- Inconsistencies in the quality of training provision experienced by roofing contractors from different types of provider (FE, private, manufacturers)
- Much lower levels of investment per employee in training compared to construction as a whole
- Divergent approaches and attitudes towards multi-skilling in the industry
- Inconsistent approaches to training by manufacturers and suppliers whose standards of training are variable (but who are essential to the wider functioning of the industry's ability to stay up to date with technology and installation requirements given the lack of capacity within mainstream training provision to service this need)
- Different attitudes towards, and investment behaviours (i.e. training days and spend per worker per year) across the roofing industry, segmented by factors including size, roofing technology/marketplace/context, business aspiration and in-house capability to plan and deliver training for themselves or their workforce
- An out-dated roofing curriculum in the view of employers that is not always site relevant
- Divergent views about the opportunities and appetite for employing young people, and more widely in taking on apprentices in future owing to uncertainty around funding arrangements from 2017 onwards
- More demand for training than providers can meet; but limited appetite for increasing provision
- Huge regional variability in terms of what is available, what is needed and where shortfalls in training appear to be prevalent

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<sup>8</sup> partly owing to their own entrenched, traditional methods of taking people on and partly owing to external labour market conditions

Representatives from 30 roofing firms attending focus groups in Yorkshire, Wales, the Midlands and London & Southern Counties were extremely vocal about training and development challenges and opportunities. Themes emerged as follows:

<b>Convergent Themes</b>	<b>Divergent Themes</b>	<b>Other Interesting Themes</b>
The lack of suitable trade skills provision to meet all technical/specialist workforce needs	The value of, requirement for and enforcement or demonstration of CSCS cards	The preference for multi-skilling and multi-knowledge because firms are increasingly multi-disciplined
The frustration with having to send employees 'far away' to access relevant provision (additional cost burden)	The need for qualifications or not in the sector	Specific gaps in training provision and / or issues with its relevance (trade skills mismatch)
Prevalence of in-house experienced workers acting as trainers owing to lack of local, affordable training provision	The quality and relevance of all HS&E related training; and requirements for retraining in certain areas so frequently	The distribution of skills, knowledge and gaps across a workforce with difference between the age groups of workers
The importance of manufacturer-led training to fill gaps in local trade skills provision	Training investment and planning behaviours (formal, informal)	Propensity to use RRTGs or other external bodies for support (or not)
The use of manufacturer training to help develop multi-skilled workers and keep up to date with new technology/systems	Training practices, methods and extent to which firms do 'just enough / the minimum'	Business models that budget for snagging as a preference to upfront training investment to get things right first time
The principle (only effective) driver for stimulating training investment is legislation	The way in which companies train their directly employed workers	Gaps of capability in the wider value chain i.e. QS, architects, contractors/developers
Quality should be, but is not, the driver it could be to stimulate positive training behaviours and investment	<p><b>What's Missing?</b></p> <p>Despite the freedom to discuss training gaps and urgent business needs there was very little reference to the non-specialist workforce in the focus groups. This issue did however feature in the formal survey.</p>	Tactics to mitigate loss of investment in staff that are trained then leave
Quality / evidence checks, regimes and inspections are inconsistent and their value is therefore questionable		Apprenticeship requirements



## Future Needs

Looking to the future, the research with this sample of roofing contractors suggest a number of headline indicators of their future intentions and desires that impact the positioning of any future industry-led roofing workforce development strategy:

- 1 in 2 (52%) firms intend to grow in terms of £ turnover in the next year, with 35% expecting turnover to remain the same and 13% expecting turnover to decrease.
- One in three firms (37) intend to recruit c.180 staff next year (+ 10% net employment growth). Roofing specialists are more likely to be sought than non-specialists.
- Two thirds of firms say it is quite or very difficult to recruit (skilled labour) suggesting they might welcome support with this workforce challenge.
- A demand from 35 (out of 108) businesses to potentially employ 77-78 Apprentices next year. This is a slightly higher % of firms interested in Apprentices than currently employ them (31).
- Proactive efforts likely to be made by the (mostly larger) roofing contractors to take on the work that is available to them but that they cannot currently take on (which should result in a larger directly employed / subcontractor workforce).
- An increasing number of roofing firms (of all sizes) likely to be interested in multi-skills/knowledge to reflect the multi-disciplinary nature of the roofing industry.
- Demand from 1 in 2 businesses (56) for a range of (25) different training wants and needs for the next 12 months quantified as 578 'training incidences'<sup>9</sup>.
- Demand from at least 44 businesses for 25% of their workforce (191-242 staff) to achieve a formal qualification in the next 12 months.
- A very slight net increase in CSCS cards expected by this sample of firms without any other intervention.
- The suggestion that 4% more workers will be trained next year compared to this year; but that investment spend per worker (trainee) will unlikely increase (may reduce) against a context where firms expect c<10% net employment and £ growth.
- Demand for training and development driven in part by the recognition by (1 in 3) 40 firms that have identified skills gaps in their workforce (equating to 500 workers or 25% of their total directly employed workforce).
- 35% of roofing contractors identify unmet training needs, suggesting there is a 'potential' market for training that is currently untapped.
- 35% of firms say they find it quite or very difficult to 'train their staff' suggesting they might welcome support and solutions in this area of workforce challenge.

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<sup>9</sup> i.e. this is not the same as number of people that require training as 1 person may have > 1 type of training experience or incidence

## **Training Provider Summary**

Interviews with 11 different types of training provider organisation provided insights about their current levels and type of training to support the industry; and asked how they felt they would or could orientate their provision to better meet future needs. Providers vary in their provision, appetite for change, views about funding reform and engagement approaches. Though most say demand for training outstrips their supply, few have ambition to grow their provision. As such a range of interventions, stimulants and incentives may be required.

### **The need for a UK Network ‘Map’**

Creating a UK ‘map’ of assets, capacity and capability across all types of organisation<sup>10</sup> that contribute to meeting the current and future training and assessment needs of the industry will be a useful practical step in generating a dialogue with investors about where more specifically gaps in specific provision perhaps need to be plugged in future.

### **Barriers to training providers doing more in the roofing sector**

The main barriers described by this sample of providers included:

- The high costs associated with being able to offer roof training unless you happened to be heavily sponsored by large manufacturers or suppliers in the sector
- Issues with having to achieve English and maths skills outcomes linked to Trailblazers and the reality that many learners from this sector will struggle
- The difficulties in accessing funds to improve equipment / resources / training centre assets
- Difficulties in reaching self-employed / micro businesses and the effort therefore of engaging them and building up course numbers to be sufficiently viable.

### **Drivers to stimulate providers to do more in the roofing sector**

The main drivers were reported as being:

- The demand for qualified people ‘across construction’
- The driver of clients / contractors asking for CSCS cards and the NVQ2 qualification mandate that is triggered through this procurement behaviour
- A demand for lead (reported by a number of providers).

### **Big Ideas**

Providers were asked if they had any need for support to enable them to change their offer or improve or expand it to better meet the future needs of the roofing industry. There were very few suggestions but they included:

- A centre for ‘lead’ training in the North of England
- Funding support for providers who wanted to take training out on construction sites using purpose built vans (for mobile courses)
- Help in securing more quality, motivated assessors
- For one private provider any support they could receive to expand their facilities
- Support to enable them to expand roofing apprenticeships to older people with experience to help them get the NVQ and CSCS card.

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<sup>10</sup> FE, private providers, manufacturers and large employers that play a part now - or could play a greater part in future – of delivering more, relevant training to greater numbers of roofing companies in future



## Manufacturer Perspectives

Through interviews with 11 manufacturers during the research period, with one exception, these companies deliver training on their products directly to the industry and to professionals involved in specifying roofing e.g. architects, engineers and others.

### Training Provision

- The extent and depth of the training varies but is predominantly of short duration (5 days or less) and focussed on the product(s) and specific methods of installation. Most manufacturers also provide CPD workshops and seminars to update on product changes etc. Facilities, capacity and resources also vary but all those delivering training have dedicated training staff and many deliver training on site or at locations convenient for employers.
- In many instances manufacturers are using training as a mandatory requirement before roofing companies can seek to install their products. Training is delivered and vetted by the Manufacturer and companies and individuals are registered and given a “licence to install” the products / systems after completion of training. Those operating this process ensure quality by post installation inspections and sign off the work.
- The industry has also recognised the value delivered by such training as exemplified by the recent development by NFRC of the BCP scheme to capture and record such training as evidence of a roofer’s overall competencies. Given the evidence that manufacturer delivered training is responsible for much of roofing skills training and which also increases the multi-skilling in the workforce then it is worthy of consideration that such training should be given due recognition and directly incorporated into an accredited skills framework for roofing.

### Key Opportunities

- The training and skills development being delivered by manufacturers and suppliers has evolved into a vital and significant element of the training being accessed by much of the roofing workforce. There is an obvious attraction for employers and workers in such short duration and product focussed training over and against more formal off the job training delivered by colleges and independent providers, but neither should stand in isolation and due recognition awarded to the workers who complete any of these training elements.
- The industry will need to identify how best to incorporate such recognition when creating a unified roofing accreditation programme. There must be a process which will accept such training without creating barriers or hurdles that may see all parties – employers, workers, manufacturers and suppliers – dis-incentivised by such a process.
- The Steering Group believes that there is a need to encourage a greater consistency, prevalence and structure for different types of manufacturer training, observing that it is more mature in some technologies and contexts than others at present<sup>11</sup>.
- There is a great opportunity to integrate manufacturers into the proposed ‘Roofing Skills Partnership’; maximising their assets as part of the UK network to train and multi-skill the roofing sector; but also to support them with their workforce challenges (considering also that they may need support from out with CITB scope for lean / off site skills development)<sup>12</sup>.
- Some manufacturers have limited capacity to expand ‘fixed’ training centres and therefore satellite centre style solutions ought to be considered to improve accessibility of training for more contractors at a local level.

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<sup>11</sup> It was suggested that manufacturer training for tiling and sheeting and cladding is neither as prevalent or as structured as it could be

<sup>12</sup> Some manufacturers are reporting that they too have issues recruiting people into their workforce especially machine operatives and sales

Taken together, all the evidence suggests there are opportunities to tackle these challenges and future needs by focusing workstreams of activity around three Strategic Objectives:

### **Strategic Objective 1: Professionalising the Sector**

Any long-term workforce development strategy for the roofing sector should start with the core objective of building its status as a skilled profession characterised by employer-owned industry standards, valued learning and training, relevant qualifications and a more defined career proposition with accredited progression routes for those yet to discover the industry. It tackles the question: ‘how does the industry get recognition for roofing as offering vital skills?’

Through improvement of the status of roofing as a career, positive gains should be made long-term in respect of its attractiveness<sup>13</sup> for new entrants and as an industry that can command greater respect (and wages/rewards) for the skilled work undertaken. Professionalisation should also lead to a greater consistency in the quality and consistency of work undertaken by more contractors across more contexts meaning greater levels of client and customer satisfaction. It may increase the current very low barriers to entry in to the sector too.

### **Strategic Objective 2: Strengthening the UK-wide training and assessment infrastructure to upskill and multi-skill the workforce**

Any long-term workforce development strategy for the roofing sector should recognise that the network to meet the industry’s training and assessment current and future needs has great strengths in some parts/specialisms and deficiencies in others. This evidence project has found opportunities for better aligning training provision (‘supply’) to the skills and knowledge needs of roofing contractors (‘demand’) through a well-coordinated network of formal off-the-job; manufacturer-led; and relevant on-the-job site (OSAT) based training and assessment options. This could mean identifying a range of capital and non-capital provider solutions across the UK, allied to the need to encourage a curriculum and training offer that can meet the needs of a ‘multi-skilled’ roofing professional<sup>14</sup> in future.

Through improvement of the UK-wide network of training and assessment provision it is anticipated that more roofing contractors than in 2016 will engage with, and invest in skills development activity for themselves or their workforce because it is: more relevant, more accessible/local and more affordable.

It tackles the question: ‘how can we make it easier for more roofing contractors to access and invest in relevant training and CPD?’ Through improvement of the network, gaps in provision can be plugged to meet future demands. A menu of relevant training options<sup>15</sup> likely to be accessed by the roofing and non-roofing employees of roofing firms can be derived, promoted and incentivised to encourage a higher level of training penetration than is currently the case. There is divergence in opinion in the industry as to the extent of importance it is for the workforce to be fully qualified, but all appear to agree that all should be trained and have opportunity to improve their practice through CPD. Similarly, whilst the FE provider network appears to favour specialism in terms of its training provision for operatives, at least two thirds of roofing firms are multi-disciplined and would like their workforce to be multi-skilled allowing them to be more agile to changes in market pressures and opportunities.

<sup>13</sup> A situation report should be completed by the RIA to establish the full range of sector attractiveness activity already happening or planned across the various federations to identify whether this can be better co-ordinated and collectivised with a strong sector value proposition that will be more attractive to an agreed short-list of target groups e.g. pupils in schools, students etc.

<sup>14</sup> Mutual awareness, basic understanding and appreciation of each other’s roles by specialists and non-specialists within a roofing contractor business/context would boost performance too

<sup>15</sup> Aligned potentially to CITB’s latest thinking for Sector Specific Training Plans and ‘Training Lanes’

### **Strategic Objective 3: Developing a proactive customer engagement and brokerage model**

Any long-term workforce development strategy for the roofing sector should recognise that it is an industry that comprises a high proportion of very small micro-businesses, a large proportion of self-employed individuals (69%) and a small number of medium to larger sized contractors. Solutions, language, attitudes towards and ability to invest in training differs accordingly. Finding focus to create impact in each segment is understandably challenging. Training behaviours also differ from larger companies able to identify formal training budgets and smaller companies struggling to do anything more than the bare minimum to comply. As quality, safety and productivity issues can affect anyone and any firm in the industry, there is an opportunity to create a model that will better reach those that do not or cannot train (for whatever reason), and those who do train but whom could be encouraged to invest in ‘more than mandatory’ training to help develop their business. In this way, the overall bar of quality is raised steadily and at a managed pace across the industry.

It tackles the question: ‘how do we raise the bar of quality throughout the industry by making sure they are aware of, and can easily, engage with the skills and training system?’ By developing an engagement strategy based on the known, different characteristics of roofing enterprises (segments)<sup>16</sup> it should be possible then to align a devolved model of brokerage that will meet their preferences<sup>17</sup>. This is likely to be a multi-modal model i.e. self-guide/self-help solutions, telephone and face to face support with different depths and breadths of service and intervention required to reflect the business’ need. If successful, this improved depth and breadth of brokerage should lead to a great number of roofing companies feeling confident to invest in skills and training to raise their overall business/workforce competence.

Considering all evidence, three recommendations are made per Strategic Objective:

<b>Strategic Objective</b>	<b>Recommendations</b>
1: Professionalising the Sector	1.1: A Model for Driving Greater Training Engagement across the UK
	1.2: Stimulating investment in training that is ‘more than mandatory’
	1.3: Brokering the industry’s needs with a stronger UK provider network
2: Strengthening the UK-wide training and assessment infrastructure to upskill and multi-skill the workforce	2.1: Expanding the model to accredit manufacturer training in the industry
	2.2: Developing practical on site solutions for training, assessment and mentoring
	2.3: Plugging localised gaps in provision to meet industry training demands
3: Developing a proactive customer engagement and brokerage model	3.1: A Model for Driving Greater Training Engagement across the UK
	3.2: Stimulating investment in training that is ‘more than mandatory’
	3.3: Brokering the industry’s needs with a stronger UK provider network

**The detail underpinning each recommendation is found in the full report section entitled ‘Recommendations’.**

<sup>16</sup> Not just size, roofing technology and location but also characteristics such as their aspiration and ambition to grow their business and develop their capacity and capability

<sup>17</sup> Any model should take account of CITB’s current Training Group Review recommendations

## Next Steps

This study has generated a number of useful evidence-based outputs including:

- A sector wide literature review of strategies, plans and statistics that aimed to capture the key workforce challenges in roofing and opportunities for focus through a desire to create a long-term plan that will co-ordinate action for the industry.
- A formal survey and research exercise with 141 roofing contractors that has generated a contemporary picture of workforce challenges, skills and training needs.
- An Interim Report that suggested a range of strategic options to test with stakeholders and investors prior to completion of this final report.
- This report, which includes additional insights from training providers, manufacturers and selected roofing contractors (presented as case studies) to further help triangulate the results of the research process and shape the recommendations presented.

Stakeholder engagement to date has suggested opportunities to concentrate a collective effort around the 3 strategic objectives. Whilst all objectives are inter-related, Objective 1 commands primacy as nothing else could or should be undertaken without the governance conditions being solid to create a 'home' for a long term sector workforce development strategy.

### Step 1:

Disseminate this report and / or its key messages to agreed stakeholders.<sup>18</sup>

### Step 2:

Prioritise the strategic objectives and improve the recommendations with an industry-led governance group that could likely form the proposed 'Roofing Skills Partnership'. (This group to support step 3 and to agree the precise 'roadmap' or timeline for achievement of milestones linked to each recommendation in this report).

### Step 3:

Develop a Structured Fund proposal to CITB for catalytic infrastructure investment during the next funding round (7<sup>th</sup> February to 6<sup>th</sup> March 2017) focusing on Strategic Objective 1 and its associated recommendations. Make best use of the evidence in this report, any new analysis of the Glenigan 'industry pipeline' data and others as relevant<sup>19</sup>.

### Step 4:

Create a UK network 'map' of roofing training and assessment<sup>20</sup> and then arrange a meeting with relevant CITB Partnership Team members and those responsible for the Implementation Plan of the 'Right Training for Construction' Strategy to align opportunities for future investment in the UK provider and assessment network to support roofing<sup>21</sup>.

### Step 5:

Commission an independent evaluation of the BCP Programme in 2017 to link with the wider vision and opportunities referenced in this study.

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<sup>18</sup> NFRC's Head of Marketing has agreed to take forward a plan for communicating the results in a co-ordinated way including those who took part in the research and other interested stakeholders in the wider industry and trade press as well as key personal at CITB. There will also be value in sharing with stakeholders to which any new bid needs to relate e.g. the Home Building Skills Partnership

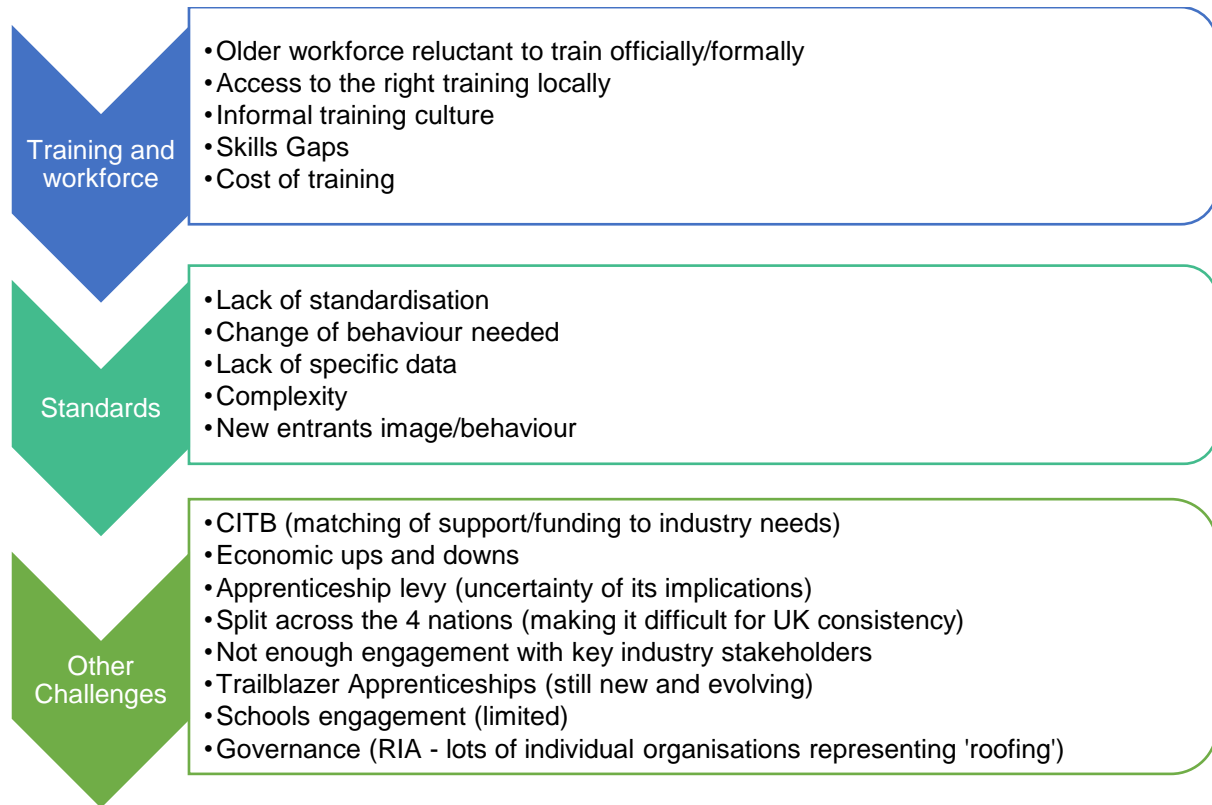
<sup>19</sup> Glenigan data analysis to be completed by one of CITB's Research Team noting its limitations re: £250k + project data only and 'new' work only i.e. does not take account of R&M market. Other data includes CPA Forecasts and CSN Forecasts and any data underpinning the recent Farmer Review or current Morrell Review of the wider construction industry where relevant and available. CITB's 'Onsite Assessment: Capacity research' report is also expected to be available in early 2017 which provides useful evidence for this style of intervention

<sup>20</sup> Detailing the locations, scale and type of assets across FE, private, manufacturer and large employers

<sup>21</sup> This may unlock further targeted resourcing for localised solutions / specialist solutions of a capital and revenue nature

## 1.0 Sector Challenges and the Need for Change

A series of scoping sessions between April and May 2016 with Steering Group representatives identified a number of market challenges in the roofing sector to help provide an understanding of 'what the problems and opportunities are in the roofing sector'.



Whilst the initial discussions focused on the desire to increase training investment, it was soon agreed that the sector challenges were wider than this, and thus a wider ambition to address longer-term workforce challenges was agreed. The workshops therefore identified a range of stakeholders relevant to the formulation of any long-term sector workforce development strategy for roofing between 2017 and 2021:

Stakeholders					
Roofing Contractors (All sizes and technologies) Main contractors Manufacturers Suppliers The supply chain	The Roofing Workforce Roofing Operatives Self-employed e.g. White Van Man Office Staff Managers and Supervisors	Training providers Schools Manufacturers (user training)	Government Local Authority CITB Other investors and partners e.g. NHBC	Construction Federations Roofing Trade Associations and Federations Outside Agencies	Client (Home owner or house builder)

Before framing the research objectives for this study, the Steering Group was prompted to consider what success would look like were a structured workforce development strategy commissioned and implemented. This meant looking at the difference that might be brought about for stakeholders. A range of outcomes was specifically identified for two of the material stakeholders: - **roofing contractors and training providers.**

### **Roofing Contractor Outcomes**

- Improved behaviours
- Training seen as a benefit not a burden
- More positive industry image = more new entrants and higher calibre applicants
- More diverse workforce
- Improved quality standards
- Increased ROI of training
- More skilled workers
- More access to the right skilled workers
- Reduced skills gaps
- Increased productivity i.e. fewer defects and lower snagging rates
- Increased work opportunities
- Better reputation for those who invest in their workforce
- Increased confidence to invest in training
- Access to the right training
- More compelling proposition for responding to PQQs and ITTs
- Trading of knowledge i.e. sharing of best practice
- Increased sector growth

### **Training Provider Outcomes**

- Increased simplicity
- Increased uniformity
- Increased capacity
- Increased capability
- Increased accessibility
- Increased quality
- More and better dialogue
- Greater engagement by providers with hard to reach roofing companies

Following this process of ideation and logic modelling, the Steering Group agreed a small number of research questions that they would ultimately like this study to address:

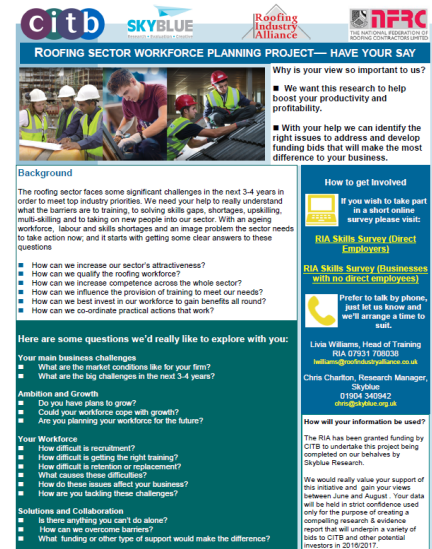
### **Key Research Questions**

- **How can we increase our sector's attractiveness?**
- **How can we qualify the roofing workforce?**
- **How can we increase competence across the whole sector?**
- **How can we influence the provision of training to meet our needs?**
- **How can we best invest in our workforce to gain benefits all round?**
- **How can we co-ordinate practical actions that work?**

The final report produced for this study in December 2016 will seek to answer these 'BIG' questions directly. In the meantime, this interim report seeks to provide emerging evidence and insights that will contribute to the wider ambition above, focusing on just one type of stakeholder namely 'the roofing contractor'.

A Briefing Paper (image right) was designed to encourage roofing firms to engage with the subject matter as follows:

*"The roofing sector faces some significant challenges in the next 3-4 years in order to meet top industry priorities. We need your help to really understand what the barriers are to training, to solving skills gaps, shortages, upskilling, multi-skilling and to taking on new people into our sector. With an ageing workforce, labour and skills shortages and an image problem the sector needs to take action now; and it starts with getting some clear answers to these questions:*



### Your main business challenges

- What are the market conditions like for your firm?
- What are the big challenges in the next 3-4 years?

### Ambition and Growth

- Do you have plans to grow?
- Could your workforce cope with growth?
- Are you planning your workforce for the future?

### Your Workforce

- How difficult is recruitment?
- How difficult is getting the right training?

- How difficult is retention or replacement?
- What causes these difficulties?
- How do these issues affect your business?
- How are you tackling these challenges?

### Solutions and Collaboration

- Is there anything you can't do alone?
- How can we overcome barriers?
- What support would make the difference?

This report now goes on to provide a summary of the types of roofing contractor that have taken part in the research, and their opinion and experience in relation to these topics.



## 2.0 Research Method and Sample Characteristics

Skyblue has used a range of formal and informal engagement techniques since this study commenced in April 2016 to consult with roofing contractors.

### *Informal Engagement Methods*

- Ethnography and informal face to face interviews with **6 roofing contractors**<sup>22</sup> at the **NFRC Awards Dinner** 13<sup>th</sup> May 2016 where over 100 delegates were gathered
- Ethnography and informal face to face interviews with 3 roofing contractors<sup>23</sup> at the **SPRA National Conference** on the 22<sup>nd</sup> June in Northampton where over 100 delegates attended, of which c. 15 were contractors<sup>24</sup> (the remainder being largely manufacturers)
- Ethnography and informal face to face interviews with **4 roofing contractors**<sup>25</sup> from 17 that attended the '**Morgan Sindall**' roofing sector supply chain event in Cambridge on the 12<sup>th</sup> of July 2016

13 face to face interviews were completed along with ethnography at three different national events where c 100 different roofing companies were in attendance.

### *Formal Engagement Methods*

Four focus groups have been delivered in Yorkshire, Wales, the East Midlands and South of England with the direct support of RRTGs and NFRC in those regions successfully engaging 32 individuals from 30 separate roofing companies:

- Yorkshire - 9 individuals from 8 separate roofing companies
- Wales – 5 individuals from 5 separate roofing companies
- East Midlands – 11 individuals from 10 separate roofing companies
- Sandown – 10 individuals from 7 roofing companies and representation from NFRC and the Lead Contractors Association

Finally, Skyblue Research launched a formal survey process on the 23<sup>rd</sup> of June 2016 for an 8-week fieldwork period until Friday 19<sup>th</sup> August that used a range of methods to reach and then invite roofing contractors to take part. In this period, over 3,000 roofing businesses were contacted by email<sup>26</sup> with invitations to take part in the survey using an online survey link or to request a telephone interview. Proactive telephone research was also completed with 56 companies (having telephoned 500 in the period) to ensure we achieved a preferred quota of companies by geographical location, size band (i.e. those with PAYE employees and those with no PAYE employees), their roofing business activity (technology/system) and whether they were federated or non-federated i.e. belonging to a federation organisation, in this case we defined this as whether they were a member of at least one RIA organisation or not.

A total of 121 individuals from 117 different roofing companies contributed to the survey.

<sup>22</sup> As well as attending manufacturers and employer representation bodies

<sup>23</sup> As well as 3 manufacturers, RRTG representatives and SPRA stakeholder representatives

<sup>24</sup> Representing just under a third of the 50 contractors thought to be members of SPRA

<sup>25</sup> As well as big contractors leading the event, a small sample of manufacturers and training providers in attendance

<sup>26</sup> Using four different databases supplied for the project: MINT database (kindly supplied by CITB's Research Team); the NFRC membership Database; a small database of non-NFRC member firms that were part of the competent Roofer Scheme; and a small sample database from the Institute of Directors for the Southern Region only. Across these database, 3,000 had an email address. The Research Team were careful to de-duplicate databases prior to fieldwork launch so that the same company did not receive the same invitation twice. A great deal of work was also spent pre-coding the databases in to two geographical domains – government office regions and NFRC membership regions. Work was also completed where possible to be able to pre-identify each business by their main business activity, their size expressed typically in either workforce number or financial turnover though this data was neither complete nor consistent across the different datasets.

## Research Sample Characteristics

### Number of Firms Taking Part

- Representatives from 117 roofing companies completed the formal survey.
- This is equivalent to c. 1.5% of all (7,960) roofing enterprises in the UK<sup>27</sup>.
- This means that we can be 95% confident<sup>28</sup> of the responses to within  $\pm 8.99\%$ <sup>29</sup>.

### Financial Turnover

- 74 of the 117 participating roofing companies were able or willing to provide an estimate of their annual financial turnover; collectively this was £313 million.
- Depending on which market value estimate used<sup>30</sup>, we believe that the sample is therefore equivalent to c.7.83% and 9.78% of market value (in 2015).

### Federated vs Non Federated

- Just over 1 in 2 businesses in the sample (Base=70, 58%) describe themselves as members of at least one of the RIA's member federations/ organisations<sup>31</sup>. The NFRC suggested that across the entire RIA c1,800 companies might be federated (equivalent to 23% of 7,960 roofing enterprises in the UK).

### CITB Registered

- Of the 117 businesses to participate, just under 2 in 3 (Base=75, 64%) state that they are registered with CITB. However, a much smaller number, (Base=35, 30%) state that they have claimed CITB grant – equivalent to 47% of those eligible for grant support. Fewer (Base=23, 20%) have a current CITB Training Plan i.e. 30% of those that are registered with CITB.

### Accreditations

- 109 businesses provided some information about their business' accreditation status. Just under half of these (Base=53, 49%) stated that they had at least one of the following accreditations:

Accreditation	Number of businesses
Competent Roofer	39 (36%)
CHAS	36 (33%)
Constructionline	30 (28%)
ISO 9001	19 (17%)
Safe Contractor	17 (16%)
ISO 14001	12 (11%)
Investors in People	9 (8%)
OHSAS 18001	9 (8%)
Achilles	6 (6%)
Other	25 (23%)
Base=109	

<sup>27</sup> Source: ONS Statistics for SIC07 43.91 roofing activities (2015)

<sup>28</sup> This is the confidence level. It tells you how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. The 95% confidence level means you can be 95% certain; Most researchers use the 95% confidence level.

<sup>29</sup> The confidence interval (also called margin of error) is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked that answer

<sup>30</sup> Our literature review report June 2016 identified sources that appeared to triangulate around the result that the roofing industry in 2015 was worth somewhere in the range of £3.2bn and 4bn

<sup>31</sup> National Federation of Roofing Contractors, Metal Cladding & Roofing Manufacturers Association, Lead Sheet Association, Single Ply Roofing Association, Lead Contractor Association, The Federation of Traditional Metal Roofing Contractors, Liquid Roofing Waterproof Associations, Confederation of Roofing Contractors, The Institute of Roofing, Mastic Asphalt Council, Metal Roofing Contractor Association

Additionally, 25 businesses describe a further **31 other accreditations/affiliations**:

- Acclaim Accredited
- Altius
- BS 8555
- CCRC
- CCS
- CPA
- Federation of Master Builders
- Flag-Soprema
- Gas Safe
- Guild of Master Craftsmen
- Heritage Roofmaster / Heritage Craft Roofer
- HSAS
- ICO
- IOSH
- IPAF
- Manufacturer registration (Base=2)
- MCS
- NAPIT
- NICEIC (Base=2)
- RECC
- Roof Assured
- ROSPA Construction Alliance
- Safe Mark
- Safe T-Cert
- Scottish Building Federation
- SMAS (Base=6)
- Trading Standards accredited
- Trust a Trader
- Trustmark
- William Morris Craft Fellow

Accreditations tend to be grouped; of the 53 to have at least one accreditation 39 (74%) have more than one. Qualitative research suggests that if major/key clients request a specific accreditation as a condition of contracting, the roofing firm will tend to invest in it. CHAS was reported by RRTG representatives, for example, as a particular driver of investment by roofing companies in training (around health and safety primarily as one might expect).

### **Size (directly employed PAYE workforce)**

- 113 firms were able to provide a numerical estimate of their directly employed workforce, comprising both roofing and non-roofing occupations. Collectively they employed between 1,598 and 2,181 people.
- As some respondents provided estimates expressed as 'ranges' we find that the directly employed roofing specialist workforce is somewhere between 1,031 and 1,408 people suggesting that the specialist workforce represents between 55% and 64% of their total directly employed workforce (the balance being 567 – 773 non-specialist employees employed by this sample of enterprises)
- Estimates similar vary about the precise number of people working in the roofing industry from 45,968<sup>32</sup> to 57,792<sup>33</sup>. The workforce in our sample is equivalent to c.1.87% and 2.7% of the total specialist workforce
- If our sample were representative of the wider sector, and the proxy between specialist and non-specialist directly employed workforce were to be true this would suggest a workforce of c.71,825<sup>34</sup> and 105,076<sup>35</sup>. This extrapolation would need more careful modelling and data weighting if important to the Steering Group, as our sample contains a larger number of larger companies than is found in the entire industry so the lower figure in the range is likely to be more reflective of the reality.

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<sup>32</sup> Estimate using CSN forecast data derived in 2014 for the 2016 period

<sup>33</sup> Source: CITB Triennial survey of employment by occupation extracting data for employees, trainees and self-employed people relating to sub-SOC code 5313 described as job holders that cover roofs and exterior walls with felt roofing, sheeting, tiles and thatch to provide a waterproof service. The code captures data for 8 occupations: built-up felt roofers, leadworkers, liquid applied roofers, mastic asphalters, sheeters and cladders, single ply roofers, slaters and tilers and thatchers.

<sup>34</sup> 45,968 (lower estimate of specialists) / 64 \* 100 = 71,825

<sup>35</sup> 57,792 (higher estimate of specialists) / 54 \* 100 = 107,022

An important finding from the literature review was that self-employment of roofers was running at 69% nationally, and is much higher still within certain regions. This compares with 39.8% for the construction industry as a whole. Armed with this insight, the primary research purposely sought to engage with these (traditionally very difficult) very small enterprises with no PAYE employees, along with firms that might directly employ staff. We expected in both instances to find that they might subcontract as well. The sample achieved comprised just over 1 in 4 respondents from businesses that had no PAYE employees (Base=33, 27%)

Size of workforce – direct PAYE employees	Number of firms	% of firms	Entire UK Roofing Industry Composition <sup>36</sup>
0	33	31%	6,580 enterprises (83%)
1-4	22	20%	
5-9	13	12%	805 enterprises (10%)
10-19	14-15 <sup>37</sup>	13-14%	390 enterprises (5%)
20-49	12-13	11-12%	150 enterprises (2%)
50-99	8-9	7-8%	25 enterprises (0.3%)
100-249	3-5	3-5%	5 enterprises (0.1%)
250+	0-1	0-1%	5 enterprises (0.1%)
BASE=108			

Compared to the composition of the entire industry, our research sample comprises proportionally larger companies (50+ employees), but has despite the difficulties traditionally associated with their engagement, successfully accessed the views of a decent sample of micro businesses with 63% of participants employing fewer than 10 staff. Firms with between 10 and 49 staff have also been slightly over-sampled.

### Location - geography

116 businesses provided a main business postcode giving a means to categorise their geographical location both against the NFRC Regional structure and the official Government Office Regions structure. These provide the following breakdowns:

#### NFRC Region

Region	Number of businesses
London & Southern Counties	34
Midlands	26
Yorkshire & North Eastern	18
Scotland	16
North West	11
South West	10
Northern Ireland	1

#### Government Office Region

Region	Number of businesses
Scotland	16
South East	14
East Midlands	13
West Midlands	12
Yorkshire & the Humber	11
East of England	10
North West	10
South West	9
London	7
North East	7
Wales	6
Northern Ireland	1

<sup>36</sup> ONS statistics for SIC07: 43.91 roofing activities suggests that in 2015

<sup>37</sup> This is a range because different individuals from the same company provided different estimates

## Business activity

117 businesses described their business activity in terms of the types of roofing system/technology they offered. Other than one business exclusively dedicated to roof glazing, each can be categorised as follows:

<i>CITB levy and CSN 2016-20 classification</i> → ↓ <i>NFRC Membership Classification</i>	Pitched Roofing	Flat Roofing	Sheeting & Cladding	Other
Slating and tiling	95			
Industrial roofing and cladding			33	
Reinforced bituminous membrane (RBM) roofing		54		
Mastic Asphalt		18		
Metal decking (for flat roofing)			27	
Liquid waterproof coatings		62		
GRP (fibreglass)		29		
Shingling (wood)	25			
Fully supported lead	44			
Heritage roofing				31
Solar collectors	12			
Green roofing		23		
Rainscreen			14	
Thatching				
Single ply		64		
Fully supported zinc, copper, aluminium and other tempered metals			14	
Roof Glazing				15
New / other	2	16	4	3
Non-roofing				6
<b>TOTAL FIRMS</b>	<b>99</b>	<b>98</b>	<b>52</b>	

Based on this we see that almost the same numbers of businesses offer pitched and flat roofing, with fewer working in sheeting and cladding. Across the 116 businesses whose work can be classified as one of the three high-level categories illustrated, just over 1 in 5 (Base=24, 21%) work within one single category while just over 1 in 4 (Base=32, 28%) work across all three. This leaves just over half (Base=60, 52%) who work across two roofing systems/technologies; of these almost all (Base=59) work in flat roofing:

Technology Type	Number of roofers (and % of sample)
Pitched only	17 (15%)
Flat only	4 (3%)
Sheeting & cladding only	3 (3%)
Pitched and flat	46 (40%)
Pitched and sheeting & cladding	1 (1%)
Flat and sheeting & cladding	13 (11%)
All three categories	32 (28%)
<b>BASE=116</b>	

Across individual technologies, most firms work in between 1-7 different technologies with the commonest response being 4 technologies (Base=19, 16% of the sample). Average responses: Mean = 4.56, median = 4, mode = 4.

## Construction Contexts

52 businesses that completed responses via telephone interview were asked to describe the business contexts in which they operated. As can be seen, almost all operate in the private housing market but most not exclusively so:

Business Context	Number of firms	% of firms
Private Housing	48	92%
Housing R&M	40	77%
Public Housing	30	58%
Commercial	27	52%
Non-housing R&M	24	46%
Industrial	15	29%
Public non-housing	12	23%
Infrastructure	3	6%

**The sector appears multi-disciplinary confirming that the majority of firms cross over the various roofing systems in order to make themselves resilient and attractive for different market demands, contexts and conditions.**

## Length of time in operation

Businesses that completed a telephone interview were asked how long their business had been in operation, and 50 were able to respond. Of these, over 3 in 5 (Base=32, 64%) stated that their businesses had been in operation for 11 years or more. The remaining businesses had been in operation for 6-10 years (Base=8, 16%), 3-5 years (Base=4, 8%) or 2 years or fewer (Base=6, 12%). Of the 32 businesses operating for 11 years or more, just over 1 in 3 (Base=11, 34%) have been in operation for 11-20 years, while just over 1 in 4 (Base=9, 28%) have been in operation for 21-30 years. Five of these businesses have been operating for over 40 years.

## Summary

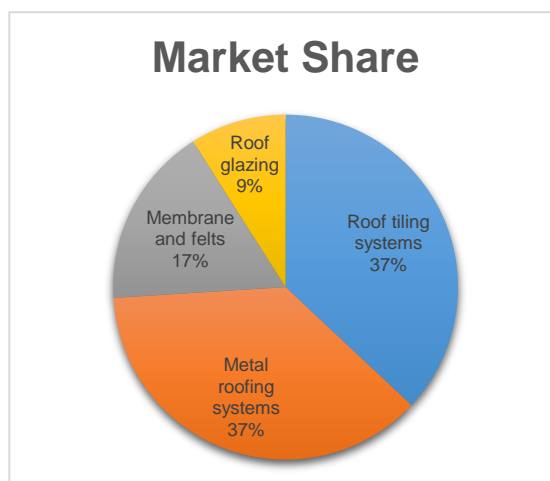
- 141 roofing firms have been engaged through formal and informal methods during the available research period to 14th September 2016.
- The formal survey provides an evidence base, that is, to our knowledge, the largest contemporary sample of research for UK-based roofing contractor specialists exploring workforce issues.<sup>38</sup>
- Research methods that yielded positive response included: NFRC emails to members; proactive telephone methods to reach non-PAYE employee and non-federated firms distributed across each of the regions (who would not otherwise have engaged either at all or in the way we wanted the sample to achieve); and capture of self-completion surveys at or immediately after focus groups.
- Over 3,000 firms were emailed and 500 telephoned (at least three times) to achieve the participation described in this research process.

<sup>38</sup> Note: assertion based on literature review completed in 2016. Previous CITB research studies have engaged with between 80 and 90 roofing contractors forming the basis of recommended approaches to support the sector at the time of those surveys, relative to issues arising in other specialist sectors of construction.

### 3.0 Market Conditions, Biggest Challenges and Ambitions

Evidence reviewed in June 2016 suggested that the roofing sector was being reported on as being quite stable and positive (*pre-Brexit*) and that it could look forward to further modest growth until 2020 like much of the construction sector<sup>39</sup>. The overall requirement for roofing coverage was predicted by one expert source<sup>40</sup> to increase from 103.6 million m<sup>2</sup> in 2013 to 137.2 million m<sup>2</sup> by 2018 (a 33% forecast increase in 5 years). The review of (6) market reports found that market shares were distributed across 4 key roofing systems/technologies (see diagram below) and that:

- Overall market values and product breakdowns found that around 75% of the market is within slate and tile and metal cladding systems.
- Projections to 2020 suggested growth across all roofing systems with metal cladding having the edge.
- The contexts within which roofing systems are installed would likely have a bearing on understanding where most demand and growth might come from<sup>41</sup>
- The market shares by 2021 may shift towards pitched roofing (48.7% of total share by that time), with metal roofing accounting for 29.6% of demand and flat roofing 25.3% of demand<sup>42</sup>).



A CITB report in 2013 based on interviews with 84 roofing contractors found that conditions were mixed; new work existed but the market was felt to be saturated and that cash-flow problems existed. The same report found that regional variations were an important consideration with the South of England having most work and Northern Ireland the least. So against this contextual backdrop, we wanted to see what the industry was saying ‘now’ about market conditions. We did this in three ways between June and August 2016:

- Through formal surveys and telephone interviews with contractors individually
- Through focus groups with roofing contractors in 4 different geographical locations
- Through a discussion workshop with Regional Training Group (RRTG) Representatives

#### The RRTG discussion elicited these key insights

*“There is plenty of work around”*

- All RRTGs felt that contractors they deal with are busy and that growth opportunities were continuing; however, they were being squeezed on price by developers.
- Workload and advanced orders were increasing accordingly, and thought to be shifting from order books of 3 months to 12-18 months ahead acting as a driver to plan training more than was previously the case.
- Commercial and domestic markets were reported as being very different in terms of drivers, customer/procurement behaviours; and market conditions differed per region.

<sup>39</sup> Sources: CSN and CPA Forecasts (2016)

<sup>40</sup> Roofing Materials Industrial Report, October 2014

<sup>41</sup> As such data from Glenigan has been sourced for analysis later in the project

<sup>42</sup> Roofing Materials Industrial Report, October 2014



## RRTG Regional Insights

In the North West, single ply and rubber are *“very busy”* whilst slating and tiling in commercial had been *“quiet but was picking up and margins returning steadily”* (although tile supply was an issue, interestingly something triangulated in interviews with major homebuilders in August 2016). Slating in a domestic context had been slightly better with firms reported as being ‘quite busy; with margins *“OK”* but how they were being cautious about pricing.

In the South West, by comparison, it was reported as busy through new build (private homes). Training levels are reported as *“solid”* with apprenticeships programme described as ‘good’ suggesting the market is buoyant. *“There is more a feeling of longevity in the market so they can consider 2-year commitment around things like apprenticeships.”*

In Yorkshire and the Humber the importance of funding was highlighted. There was perhaps more work relating to social housing refurbishment and re-roofing than other areas which impacts attitudes towards the need for training. In the North East some companies are having to postpone training because they can’t release people from their sites. London was described as *“really busy, lots of contractors have full order books but labour sources are the issue.”*

In the South of England market conditions were described by the London and Southern Counties NFRC committee as *“busy and loaded”*, with some disciplines having pricing issues owing to new companies setting up in the area. *“There’s plenty out there if you want it, but we can’t always do it as we have not got enough people.”*

## Roofing Contractor Insights – Regional Focus Groups

Yorkshire and the North East (14<sup>th</sup> July 2016)

*“Currently reasonably healthy”*

- ◆ Busy with refurbishment work in particular
- ◆ There is a level of uncertainty from Brexit that might reduce/delay some projects with LAs
- ◆ Housebuilder market conditions could shift owing to drop in their share prices
- ◆ Cash-flow reported as being the biggest issue and being less stable than required

Wales (28<sup>th</sup> July 2016)

*“It’s all right at the minute”*

- ◆ Whilst positive compared to 5 years ago, conditions were felt to be uncertain
- ◆ Brexit might disrupt the previous benefits of EU funding flowing to Wales/businesses
- ◆ Manufacturers and suppliers were feeling the pinch due to currency exchange<sup>43</sup>
- ◆ Re-roofing work may pick up in the short-term but planning will still be myopic in general

Midlands (11<sup>th</sup> August 2016)

*“Currently very good”*

- ◆ Positive reports from this group about the amount of work ‘out there’ to win
- ◆ The shortage of housing was seen as a likely stimulant of more work for their business
- ◆ However, the prospect for the commercial sector was uncertain
- ◆ Tenders from major clients were increasingly onerous with conditions attached
- ◆ Brexit changes in freedom of movement might impact foreign worker recruitment
- ◆ Cash-flow issues: big companies want 12 month fixed prices and 60-90 day payment terms

London and Southern Counties (14<sup>th</sup> September 2016)

- ◆ All the companies were multi-discipline *“We have to diversify to get the business.”*
- ◆ The firms were keen on growth but cited skilled labour as a constraint
- ◆ The firms want growth with better margins, and ask for more consistency from big contractors

<sup>43</sup> The majority of flat roofing and cladding products are imported and this would impact on roofing customers

To complement these qualitative insights, we explored roofing contractors' assessment of their market conditions through the formal survey in August 2016.

Region	Number of businesses	% of sample
There is more work available to me than I can take on	43	37%
There is about the right volume of work available for my business	59	51%
There is not enough work available	11	10%
Something else	2	1%
<b>Base=115</b>		

**Key Point: 1 in 2 businesses (51%) reported having about the right volume of work, with nearly four in ten (37%) saying that demand outstripped their ability to supply and only one in ten saying there was not enough work available to them (10%).**

	Base	More work than can take on	Right amount of work	Not enough work
<b>All respondents</b>	<b>112<sup>44</sup></b>	<b>38%</b>	<b>52%</b>	<b>10%</b>
<b>ROOFING TYPE</b>				
Pitched	91	42%	51%	8%
Flat	90	37%	56%	8%
Sheeting & Cladding	48	33%	54%	13%
1 Category	24	38%	46%	17%
2 Categories	56	41%	55%	4%
3 Categories	31	35%	52%	13%
<b>FEDERATED STATUS</b>				
Federated	64	39%	48%	13%
Non-federated	48	38%	56%	6%
<b>SIZE OF WORKFORCE (TOTAL)</b>				
0-4	52	31%	63%	6%
5-9	10	40%	60%	
10-19	14	43%	36%	21%
20-49	13	31%	46%	23%
50-99	9	56%	33%	11%
100+	5	60%	40%	
0-4	52	31%	63%	6%
5-19	16	42%	46%	13%
20+	27	44%	41%	15%
<b>GOVERNMENT OFFICE REGION</b>				
East Midlands	13	46%	38%	15%
East of England	9	44%	56%	
London	3	33%	67%	
North East	7	42%	58%	
North West	9	33%	44%	22%
Northern Ireland	1		100%	
Scotland	16	31%	56%	13%
South East	13	38%	54%	8%
South West	9	33%	56%	11%
Wales	6		100%	
West Midlands	11	9%	64%	27%
Yorkshire & the Humber	12	67%	33%	
<b>NFRC REGION</b>				
London & Southern Counties	28	43%	54%	4%
Midlands	25	28%	52%	20%
North West	10	30%	50%	20%
Northern Ireland	1		100%	
Scotland	16	31%	56%	13%
South West	10	30%	60%	10%
Yorkshire & North Eastern	19	58%	42%	

<sup>44</sup> Base excludes the two respondents who stated 'other'

	Base	More work than can take on	Right amount of work	Not enough work
<b>CONTEXTS</b>				
Public housing	28	36%	64%	
Private housing	42	36%	60%	5%
Public non-housing	11	55%	44%	
Industrial	13	31%	62%	8%
Commercial	23	35%	61%	4%
Infrastructure	3	67%	33%	
Housing R&M	37	38%	57%	5%
Non-housing R&M	21	38%	62%	

More detailed analysis suggests therefore that:

- The smallest businesses are the most likely to perceive that there is the right amount of work available for them.
- Businesses employing 50+ direct employees are more likely to report there is more work available to them than they can take on.
- Businesses with 10-49 employees are most likely to identify a shortage of work.
- Businesses in Yorkshire & North Eastern (and specifically in Yorkshire itself) are most likely to state that there is more work available than they can take on.

### Contractor Order Books

The formal telephone survey asked contractors: *“How far ahead does your order book go i.e. thinking about confirmed orders you have when does the last one finish?”*

Notwithstanding high levels of positivity about the state of the market, most roofing firms to answer the question only have order books for the relatively short term; of 43 respondents to provide a view, over half (Base=22, 51%) only have confirmed orders within the next 3 months while a further quarter (Base=10, 23%) have confirmed orders for within 6 months.

Order books for sheeting and cladding firms tend to be slightly longer, with 5 out of 17 to respond (29%) having orders beyond a 6-month period. This compares to 24% of pitched roofers (10/42) and 17% of flat roofers (6/36).

### Insights from NFRC Awards Interviews with Contractors

Contractors interviewed reported clear and steady growth across all the sectors and product ranges of the roofing market. Without exception all stated they were experiencing increases in workload. One contracting company who have been in business for over 30 years and have 20+ employees said that they were busier now more than ever they could remember. The downside was that they are having to better manage their workload as they are finding it difficult to recruit experienced workers and finding new entrants is *“almost impossible”*. Another contractor – equally busy - relies solely on recruiting from family and friends and all 3 of their recent and current apprentices are family members. Another contractor and one of the roofing trade associations also commented that the “Eastern European” workers had become *“aware of their value”* and were demanding (and getting) top pay rates. The President of the NFRC in his address to the attendees commented on the definite growth factors and stressed the difficulty in accessing training for roofing trades and the problems they face in attracting new entrants to the industry.

## Biggest Challenges for next 3-4 Years

The RRTGs predicted before we commenced the roofing contractor survey that the top 3 challenges facing roofing companies, in order of magnitude would be:

1. **Recruiting people** – experienced workers and new entrants
2. **Retaining workers** – because employees will move to wherever the money is best
3. **Training workers** – because they are so busy they can't afford to have employees off site for training (and in some instances firms facing penalties for delaying work if they release men off site)

Additionally, however, they also reported on what has become a significant discovery for the project, namely that there is a severe **lack of Assessors** for roofing trades, despite NSAC analysis suggesting a sufficiency. RRTGs reported that there may be only 10 suitably qualified, active, available Assessors in the whole of England (numbers for Scotland, Wales and Northern Ireland were not suggested). Without this infrastructure RRTGs could not see how future demand for formal qualification achievement could be met (n.b. they did not think the lack of assessors restructured the opportunity for training per se).

Connection: CITB is completing a detailed research study at the time of writing this report that will enable an authoritative industry position statement on Assessor capacity, capability and requirement for / quality of On Site Assessment (OSAT). It will be important for this roofing research project to connect with that wider CITB commission before December 2016 to assess the perception against the reality of assessor capacity and capability.

This situation was further compounded, RRTGs reported, by **the lack of actual physical training provision in the regions** for all roofing systems.

Connection: CITB is completing ongoing detailed supply and demand research that will confirm the severity of shortage of training provision to meet the training demands of each specialist occupational industry. Early data suggests 5 regions in the UK have a more than 5% shortage in supply (of training) to meet demand in roofing. It will be important for this roofing research project to connect with that wider CITB commission in due course.

The biggest challenges were presented in another way by one RRTG as: - **time, money and attitude**. Experiences whereby investment in training of staff had left to them leaving for slightly more money for a competitor – or to set up their own roofing business - was also referenced as a barrier to investment in training and development for some firms with a direct workforce.

Focus groups with roofing contractors explored delegates' views about the biggest challenges they faced in running their business in line with their ambitions. In summary, the following issues appeared in order of magnitude, though they are all inter-related of course:

1. **Financial challenges** – specifically price, payment and cash-flow challenges
2. **Lack of skilled labour** – affecting ability to recruit skilled workers or the ability of their sub-contractors to recruit skilled workers (compounded by a lack of sector attractiveness)
3. **Ability to train affordably and locally** – insufficient resources to meet demand
4. **Ability to meet market demands relative to their size/aspiration** i.e. their desire for planned workloads to deploy limited (people) resources in a managed fashion

Roofing contractors attending the focus groups reported on a number of other challenges that give us insight as to the disincentives for investing in training and development that they believe are key challenges for any workforce development strategy to reflect:

1. The driver for contractor/clients/purchasers is almost invariably price over quality. This means that firms that do invest in training do not feel rewarded or recognised against those that do not invest because tenders are still awarded to those who have not made the same effort or risk. **Inconsistency of awarding culture by major contractors and developers therefore acts as a disincentive.**
2. Related to this, is the view that clients do not view roofing as a skilled profession that can or should command pay / pricing differentials observed amongst other specialist trades such as bricklaying and roofing. The image or the sector is a challenge and this in turn limits **wage attractiveness** relative to other trades/specialist sectors<sup>45</sup>.
3. It was suggested that **'quality'** was not the driver it could or should be in the sector; and that quality inspections and regimes for checking workforce certifications (CSCS cards) were inconsistent.

Thirty-nine roofing contractors responded to an open question included in the telephone survey administered during July and August 2016 around what they believed to be the biggest challenge for the roofing industry in the next 3 years. Thematic analysis identified 8 topics of prevalence, which were then organised into three higher order categories as illustrated below:



Importantly, the majority (8<sup>46</sup>) of those suggesting a challenge in securing labour for the industry (capacity), at the same time suggested that it was also a challenge to find sufficient capability amongst these new entrants/workers to the industry.

<sup>45</sup> National Careers Service data for roofing operative occupations suggests a wage spectrum of £16,000 - £31,000 whereas interestingly NFRC reported in May 2016 that a good roofer can get £50,000 'easily'. The mean might be around £30,000-£40,000 they asserted.

<sup>46</sup> 8 of the respondents said both capacity and capability whilst 1 said capability and market conditions.

## Capacity

*"I think getting enough staff to do the work. Economy means more people are doing up their own properties."*

*"Retention is hard - good people retire and subbies have no loyalty - will leave your job for a few extra quid."*

*"It's a challenge every day. Getting enough good labour into the business. Young people's attitude sometimes not good. Work ethic."*

## Capability

*"Skills possibly - lack of training has really opened our eyes. We've never explored the training - we didn't need to look into formal roofing training. We plodded along. No wonder there are shockingly poor roofers."*

## Market Conditions

*"Cash flow. It's very difficult."*

*"A lot of people are saying they're not getting work because big companies undercut."*

## Ambition and Growth

*"Ignore the name of the company, they do everything!<sup>47</sup> There is lots of cross-over<sup>48</sup>."*

RRTG representatives reported in July 2016 that aspirations and ambitions differed amongst the roofing contractors they engaged with in their regions, but a recurring theme from each of the research strands delivered is that there is an increasingly **multi-disciplinary** base of roofing contractors. This is explained, in the focus groups, as being a natural adaption by companies in order to go where the work is or will be i.e. to ensure that as one context for their revenue decreases because of market conditions or uncertainties, another context can offer them more stability.

In today's market, specialists' skills are more in demand than they have been since before the recession, but those lessons learned from 2008's crash mean that specialist firms are choosing profitable work, rather than stretching themselves too thinly<sup>49</sup>.

Allied to this shift is the finding that of those companies that do have ambition to grow, they want **managed rather than rapid growth**. This is partly explained by these kinds of roofing contractors saying they cannot secure sufficient labour to enable them to take on more jobs or demand for their service with confidence or without some potential consequences for the quality of their work. This sentiment was also found to be true amongst a sample of 21 roofing contractors surveyed in March 2016 as part of a specific investigation of supply chain companies that work primarily in the homebuilding (new build) context<sup>50</sup>.

<sup>47</sup> Mentioned at the scoping meeting with NFRC when describing the increasingly multi-disciplinary nature of roofing contractors within their membership and the industry more widely

<sup>48</sup> For example, 'metal roofers cross over into single ply', NFRC April 2016

<sup>49</sup> In today's market, specialists' skills are more in demand than they have been since before the recession, but those lessons learned from 2008's crash mean that specialist firms are choosing profitable work, rather than stretching themselves too thinly. August 22nd 2016

<sup>50</sup> Of interest from this research was the finding that of the 21 roofing companies surveyed, less than 1 in 3 were very confident they could meet the demand of homebuilders in the next 2-3 years



## Roofing Apprenticeship Workshop, Morgan Sindall, Kier, Wilmott Dixon and Vinci

At a 'supply chain' event on the 12<sup>th</sup> of July 2016, 17 roofing contractors, 12 manufacturers and suppliers, 4 roofing trade associations, 2 training providers and CITB came together to explore ways to address the identified constraint to growth of the construction industry in the East of England as a consequence (in part) of the lack of a skilled workforce. Roofing had been identified as a particular area of need<sup>51</sup>. Comments from two roofing contractors suggested a desire to grow inhibited by other factors:

*Paul Miller of Superior Roofing Co.* – his company would gladly take on more apprentices but there is a need for a sustainable workload to do so coupled with the problem of finding local training. In Harlow where they are based there is no provision and he has to send employees long distances which make it very costly.

*Micky White of White Roofing Services* – he needs his men to be multi-disciplined so that he can provide them with a regular flow of work. His main problem is many of his people are self-employed and both he and they can't afford formal training.

*“We don't want to grow much more; want to keep control of quality and I can't find the men!”*

Delegates at focus groups provided some perspectives too. In Wales, views converged for all contractors present suggesting that their ability to grow is hampered by their ability to recruit skilled workers owing to a skills shortage and / or owing to their desire to keep control of quality. One company said they were taking on more Apprentices because they couldn't find skilled workers so they think growth for them will be slow owing to the time lag to bring these types of worker to full productivity.

*“Do you really want to try and then go through another recession?”*

In Yorkshire, contractors converged on the importance of having stability in order to have the confidence to grow their business. It was also notable that only a half of the companies desired growth, and even those were seeking it in a managed way.

*“Some larger national companies would suggest that growth is important but we'd all settle for being where we are now in 5 years' time.”*

In the Midlands, the conversation suggested that as well as a lack of skilled labour another constraint was the 'big companies' and their behaviours in respect of constraining cash-flow for smaller roofing companies. This acts as a disincentive for companies to invest in their business (employment, training) with the confidence they might otherwise choose.

*“Big companies don't like to see you making profit.”*

The summary sentiment from the qualitative research is therefore that not all roofing contractors seek growth; those that do, want it in a managed way; and those that do have plans to grow think their workforce might not cope with rapid growth because of the problems finding suitably skilled labour. Those able to plan their future workforce range from 3-month to 18-month time-horizons depending on the context and markets within which they are delivering their business activity – correlating with the length of their order books.

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<sup>51</sup> A number of the contractors confirmed their need to have workers who do more than one speciality and again the comments in the room suggest they operate in one or more of the 3 roofing sectors: Applied/Built up Systems, Roofing & Cladding and Slate & Tile.



**Key Point: The results from the formal survey in August 2016 found that amongst 69 responding contractors 1 in 2 (52%) intended to grow in terms of financial turnover in the next year, with 35% expecting turnover to remain the same and 13% expecting turnover to decrease.**

In total 74 businesses were able to estimate their current annual turnover, which collectively equated to just under £313 million. Of these, 69 also provided an estimate of next year's turnover which suggested a rise of approximately 10% to just over £340 million.

	Base	Expecting turnover to increase	Expecting turnover to remain the same	Expecting turnover to decrease
<b>All respondents</b>	<b>69</b>	<b>52%</b>	<b>35%</b>	<b>13%</b>
<b>ROOFING TYPE</b>				
<b>Pitched</b>	54	54%	33%	13%
<b>Flat</b>	60	50%	38%	12%
<b>Sheeting &amp; Cladding</b>	30	53%	33%	13%
<b>1 Category</b>	10	80%	10%	10%
<b>2 Categories</b>	40	45%	45%	10%
<b>3 Categories</b>	18	56%	28%	17%
<b>FEDERATED STATUS</b>				
<b>Federated</b>	38	61%	26%	13%
<b>Non-federated</b>	31	42%	45%	13%
<b>SIZE OF WORKFORCE (TOTAL)</b>				
<b>0-4</b>	34	47%	38%	15%
<b>5-9</b>	7	42%	42%	17%
<b>10-19</b>	8	50%	38%	13%
<b>20-49</b>	8	50%	38%	13%
<b>50-99</b>	7	86%	14%	
<b>100+</b>	5	60%	40%	
<b>0-4</b>	34	47%	38%	15%
<b>5-19</b>	15	47%	40%	13%
<b>20+</b>	20	65%	30%	5%
<b>SIZE OF WORKFORCE (ROOFING SPECIALISTS)</b>				
<b>0-4</b>	41	49%	37%	15%
<b>5-9</b>	6	67%	33%	
<b>10-19</b>	8	38%	50%	13%
<b>20-49</b>	9	67%	11%	22%
<b>50-99</b>	4	75%	25%	
<b>100+</b>	1		100%	
<b>0-4</b>	41	49%	37%	15%
<b>5-19</b>	14	50%	43%	7%
<b>20+</b>	14	64%	21%	14%

Based on the figures above, it would appear that:

- In terms of high level categories there is little difference between the turnover growth expectations of businesses offering pitched, flat, and sheeting & cladding.
- While sample sizes are relatively small, specific technologies do appear to associate with greater or smaller growth expectations:
  - Higher levels of growth are expected in this sample for:- Rainscreen (Base=8, 75% expecting turnover increase), Solar collectors (Base=7, 71%), Fully supported zinc, copper, aluminium and other tempered metals (Base=7, 71%), Green Roofing (Base=12, 67%)
  - Lower levels of growth are expected in this sample for: - Mastic Asphalt (Base=10, 20% expecting turnover increase), Glazing (Base=6, 33%)
- Larger businesses are more likely to expect growth than smaller ones.

	Base	Expecting turnover to increase	Expecting turnover to remain the same	Expecting turnover to decrease
All respondents	69	52%	35%	13%
<b>GOVERNMENT OFFICE REGION</b>				
East Midlands	9	78%	11%	11%
East of England	7	42%	29%	29%
London	4	25%	75%	
North East	4	25%	50%	25%
North West	7	86%		14%
Northern Ireland	1	100%		
Scotland	7	57%	29%	14%
South East	5	40%	60%	
South West	5	40%	60%	
Wales	6	50%	33%	17%
West Midlands	6	67%	17%	17%
Yorkshire & the Humber	6	17%	67%	17%
<b>NFRC REGION</b>				
London & Southern Counties	17	35%	53%	12%
Midlands	16	69%	19%	13%
North West	8	88%		13%
Northern Ireland	1	100%		
Scotland	7	57%	29%	14%
South West	8	50%	38%	13%
Yorkshire & North Eastern	10	20%	60%	20%
<b>CONTEXTS</b>				
Public housing	18	39%	50%	11%
Private housing	28	43%	46%	11%
Public non-housing	8	38%	50%	13%
Industrial	9	56%	33%	11%
Commercial	16	56%	38%	6%
Infrastructure	2	100%		
Housing R&M	25	40%	48%	12%
Non-housing R&M	15	40%	53%	7%

Based on the figures above, it would appear that:

- Businesses in the London & Southern Counties and Yorkshire & North Eastern NFRC Regions are less optimistic in their turnover growth predictions than their colleagues in other parts of the country.
- The companies sampled in the North West region appear to be planning financial growth in the next year 'more' than other regions, followed by the East Midlands.
- Businesses operating in industrial, commercial and infrastructure contexts are more optimistic than those operating particularly in the public sector, but also in private housing and repairs and maintenance work.

### Key Points

- Market conditions for roofing were thought to be relatively positive pre-Brexit.
- 37% of sampled roofing companies said there was more work available to them than they could take on. Regional variations were reported in market conditions.
- One in two companies expect their financial turnover to increase in the next 12 months (c 10% increase) at a time when the industry is increasingly multi-disciplinary.
- Growth will be managed rather than rapid as challenges in terms of cash-flow/payment cultures allied to market uncertainties, and the ability to secure skilled labour (capacity and capability) appear to constrain accelerated growth.

## 4.0 Workforce Characteristics

As part of the formal survey completed with willing roofing firms, we gathered their best estimates of their workforce. We expected this to include a combination of directly employed individuals that were roofing operatives/supervisors, non-roofing staff (e.g. sales workers, administration works, director, general labourers and other types of supervisor); and sub-contracted labour. Aware that 69% of the industry is self-employed, we also knew that many participants would not have any PAYE employees.

### Directly Employed Workforce

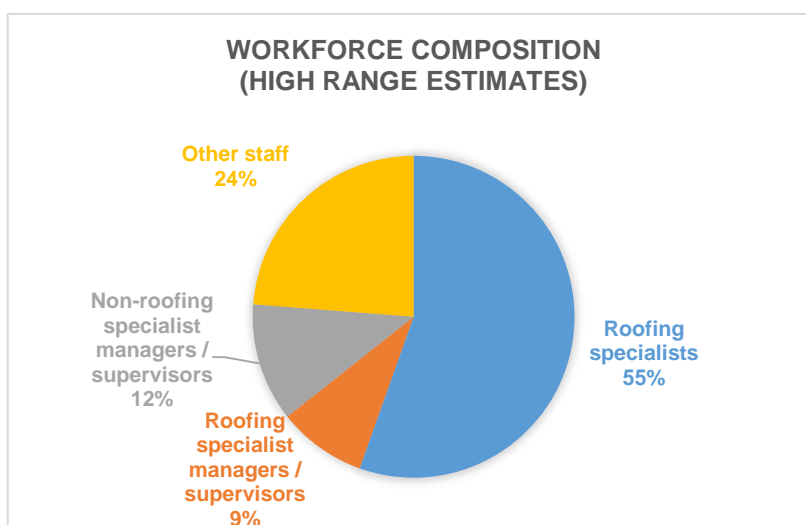
113 businesses were able to provide an estimate of their directly employed workforce (including 33 businesses that have no PAYE employees). Collectively this sample of firms employs between 1,598 and 2,181 workers<sup>52</sup>.

	Number of firms with at least one employee	Total number (low range)	Total number (high range)
Roofing specialists	66	868	1,211
Roofing specialist managers / supervisors	49-51	163	197
Non-roofing specialist managers / supervisors	28-30	103	255
Other non-specialist staff	59	464	518
Total		1,598	2,181

Using either range of workforce estimates provided, the result is the same in that the roofing specialist/technical workforce is almost two thirds of the directly employed workforce, and the remaining third is in other non-roofing related occupations.

### Apprentices

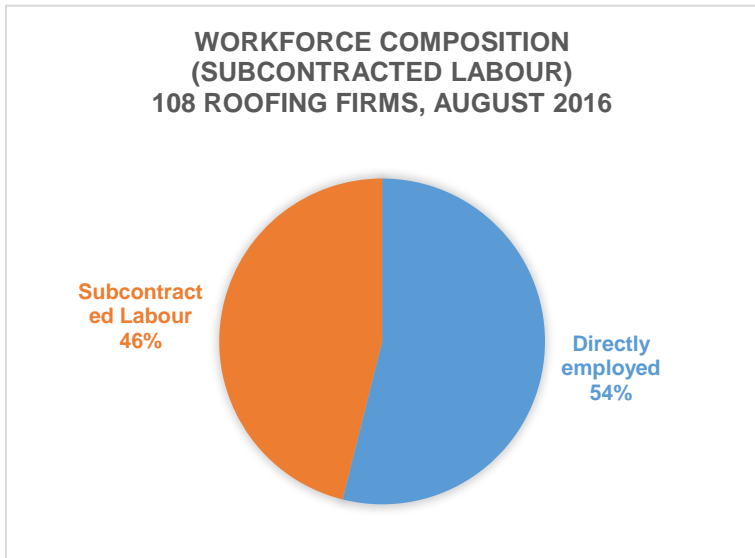
61 businesses (out of 75 given the opportunity to say) answered a question about the number of Apprentices they currently employ. Of these just under half (Base=30, 49%) employ no Apprentices. The remaining 31 businesses employ 99-101 Apprentices, with numbers per business ranging from 1-14. **Thirty-five businesses suggested that they would want to employ Apprentices next year, with the total number of new Apprenticeships totalling 77-78.**



<sup>52</sup> Because multiple representatives from four businesses gave an assessment of their workforce size and shape, it is difficult to be more precise than this.

### Sub-contracted workforce

In addition to their directly employed workforce, roofing contractors will tend to use subcontracted labour to help them deliver their service to customers. The survey confirms this behaviour. Of 103 businesses to answer, **4 in 5 (Base=83, 81%) confirmed that they deployed sub-contractors last year in addition to their directly employed workforce.** The sub-contractor workforce described by these businesses equates to approximately 1,600 individuals (range 1,582-1,649), the overwhelming majority of which are roofing specialists.



- The total deployable workforce by these businesses equates to approximately 3,505 individuals<sup>53</sup>; comprising c. 1,890 (54%) directly employed individuals and c.1,615 (46%) sub-contracted individuals.
- Based on the open responses provided by some of the 39 firms that completed much longer surveys in this project, it was clear that the overwhelming majority of labour they sub-contracted were roofing technical/specialists to the point where overall the proportion of these occupations being distributed across the industry would be weighted much more towards sub-contracted labour potentially as much as two thirds of all specialists being sub-contractors rather than directly employed. Incidentally, this proxy was offered up as ‘the normal distribution by focus group delegates.

### The Next 12 Months

Overall, 37 (out of a possible 108 responding) businesses intend to recruit approximately 180 additional staff in the next 12 months. **This equates to 1 in 3 businesses and a total net employment change of just under 10%** compared to their present situation. Roofing specialists are much more likely to be sought than non-specialists, as seen below:

	Number of firms intending to recruit in the next 12 months	Total number for recruitment (low range)	Total number for recruitment (high range)	% recruitment
Roofing specialists	28 (26%)	115	122	c. 10%
Roofing specialist managers / supervisors	14 (13%)	23	24	c. 13%
Non-roofing specialist managers / supervisors	7 (6%)	4	4	c. 3%
Other non-specialist staff	19 (18%)	34	34	c. 7%
108 possible respondents				

<sup>53</sup> Calculation is based on taking a mid-point between the low and high range estimates for directly employed and subcontracted labour

## Recruitment intentions – further insights

- Based on the sampled data in the survey, intention to recruit new roofing specialists is more prevalent in the Midlands and South West Regions (with 57% and 40% respectively of businesses in these areas intending to recruit roofing specialists) in the next 12 months.
- Sheeting and Cladding firms are slightly more likely to express an intention to recruit roofing specialists than Pitched roofing firms (30% compared with 23%, flat roofers 27%).
- A similar story emerges around roofing specialist managers and supervisors, with 30% of Midlands-based businesses anticipating a recruitment need in the next 12 months around these, and 20% of sheeting and cladding firms intending to recruit in this area compared with 8% of pitched roofing firms (flat 13%).
- 'Other staff' recruitment is again most strongly expected in the Midlands, but with Yorkshire and North Eastern businesses also expecting this to happen in the next 12 months.
- 26% of sheeting and cladding firms intend to recruit new non-roofing and management staff compared with 15% of pitched roofing firms (18% of flat roofers).
- Much of this relates to a correlation between existing size of business and expected workforce growth; five businesses each with a current roofing specialist workforce of over 50 account for 45% of all recruitment in this area between them. 55% of all future recruitment is predicted by eight businesses each with a total workforce of 50 or more.

Business Size	Number of respondents	Number intending to recruit specialists		Number intending to recruit non-specialists		Total number intending to recruit	
0-4	45 <sup>54</sup>	3 (7%)	8 (14%)	2 (4%)	3 (5%)	4 (9%)	9 (16%)
5-9	12	5 (42%)		1 (8%)		5 (42%)	
10-19	15	7 (47%)	12 (44%)	3 (20%)	11 (41%)	8 (53%)	17 (63%)
20-49	12	5 (42%)		8 (67%)		9 (75%)	
50-99	9	5 (56%)	10 (67%)	4 (44%)	7 (47%)	6 (67%)	11 (73%)
100+	6	5 (83%)		3 (50%)		5 (83%)	
<b>Total</b>	<b>99</b>	<b>30 (30%)</b>		<b>21 (21%)</b>		<b>37 (37%)</b>	

BASE=99 noting that a total of 108 firms had opportunity to answer this question but not all gave a response

### Key Points

- **Just over 1 in 3 firms say they intend to recruit in the next 12 months (37/99 = 37%)**
  - **30 of these 37 firms intend to directly employ at least one roofing specialist occupation. 21 of these 37 firms intend to directly employ at least one non-roofing specialist occupation**
  - **From the sample of enterprises with no employees, not a single one said they intended to recruit a directly employed member of staff in the next 12 months**
- In total, just under 1 in 6 businesses with 0-9 staff plan to recruit in the next 12 months (9/57 = 24%), just over 3 in 5 businesses with 10-49 staff plan to (17/27 = 63%) and just under 3 in 4 businesses with 50 or more staff plan to (11/15 = 73%).**

<sup>54</sup> Includes 26 businesses with no current PAYE employees, none of whom have any recruitment plans.

## 5.0 Recruitment Challenges

*“Finding skilled workers is a huge barrier to growth. What’s on the lad’s CV isn’t necessarily what you get.”*

Focus groups with 32 respondents from 30 roofing companies between July and September 2016 specifically explored the topic of recruitment, and it provided a rich vein of discussion, experience and insight, summarised as follows:

- Difficulty to take on direct hires because of the limited awareness, appeal and understanding of roofing as a career
- Recruitment tends to be from within family and friend networks rather than more diverse labour or talent pools – very little (if any) emphasis on diversity or succession planning

*“Have tried Job Centre but nobody actually wanted to work just wanted an interview to tick the box for claiming.”*

*“We bring in 2-3 new trainees each year as it’s the only way we can grow – but finding people to work in roofing is our main problem as it’s not the easiest industry to work in and not attractive to most young people.”*

- A reluctance to hire young people under 18 and regulations reported as meaning they cannot take young people on for work experience even if they wanted to

*“Problem is we can’t give youngsters work experience as we can’t get them insured on site.”*

- A reluctance to take on young people owing to past or current experiences of taking them on: - issues either with their attitude, an unacceptable work ethic, a lack of capability and their propensity to leave the business early in their development to another firm

*“We only take them 19+. May now try to take on a 17-year old as we know him!”*

- Experiences of taking on young adults with a nice manner, but limited technical capability despite, in theory, having meant to have learned this through their technical training or Apprenticeship (with some negative commentary about quality of training provision from some participants)
- Limited ability to attract workers in to roofing career because it cannot compete with the salaries offered by other specialist trades

*“Nobody comes to us saying they want to be a roofer”*

- Recruitment of directly employed staff is often mitigated by sub-contracting work but even this form of labour is reported as presenting challenges with the suggestion being that there was so much work available that the good ones are all fully deployed and there was virtually no floating workforce stock

*“Good workers are like rocking horse poo!”*

In the main therefore, a number of inter-related recruitment difficulties were reported; some stemming from the business’ own attitudes, behaviours and experiences and some relating to wider macro conditions such as market rates for roofing occupations, regulations relating to young people under 18 and the business’ own preferred model of delivering work through direct and sub-contracted labour. Common to all focus groups was agreement that finding skilled labour was difficult and that no single firm could solve the issue in isolation. **There was almost no discussion though around issues such as diversification of the workforce or succession planning by the roofing contractors – such solutions would need to be ‘sold to the industry’ proactively.**

To complement this qualitative research, RRTGs had previously suggested that recruitment would be the number one issue reported by roofing contractors. With the exception of financial challenges, they are correct, certainly in terms of human capital challenges investigated. This is asserted because of the formal survey results that compared the relative difficulties experienced by contractors in terms of recruitment, training and development and retention. Recruitment was the biggest difficulty by some margin.

**In total, just under 2 in 3 respondents stated that they found recruiting staff at least quite difficult, with 30% describing it as very difficult.**

	Base	Very difficult	Quite difficult	% experiencing some difficulty	Easy enough / OK	Not a problem	% experiencing little or no difficulty	Not relevant for us
<b>All respondents</b>	71	30%	35%	65%	18%	6%	24%	11%
<b>ROOFING TYPE</b>								
Pitched	53	32%	34%	66%	17%	6%	23%	11%
Flat	55	31%	31%	62%	22%	5%	27%	11%
Sheeting & Cladding	33	30%	27%	58%	30%	9%	39%	3%
1 Category	18	28%	50%	78%	6%	6%	11%	11%
2 Categories	34	26%	38%	65%	21%	3%	24%	12%
3 Categories	18	39%	17%	56%	28%	11%	39%	6%
<b>FEDERATED STATUS</b>								
Federated	55	31%	38%	69%	16%	7%	24%	7%
Non-federated	16	25%	25%	50%	25%		25%	25%
<b>SIZE OF WORKFORCE (TOTAL)</b>								
0-4	17	41%	18%	59%	6%	6%	12%	29%
5-9	12	25%	50%	75%	8%	8%	17%	8%
10-19	14	29%	43%	71%	21%		21%	7%
20-49	12	25%	42%	67%	33%		33%	
50-99	9	22%	22%	44%	44%		44%	11%
100+	6	33%	50%	83%		17%	17%	
0-4	17	41%	18%	59%	6%	6%	12%	29%
5-19	26	27%	44%	73%	15%	4%	19%	8%
20+	27	26%	37%	63%	30%	7%	37%	
<b>SIZE OF WORKFORCE (ROOFING SPECIALISTS)</b>								
0-4	27	33%	30%	63%	7%	7%	15%	22%
5-9	11	27%	45%	73%	27%		27%	
10-19	14	14%	57%	71%	21%		21%	7%
20-49	12	42%	17%	58%	42%		42%	
50-99	5	20%	40%	60%		40%	40%	
100+	1	100%		100%				
0-4	27	33%	30%	63%	7%	7%	15%	22%
5-19	25	20%	52%	72%	24%		24%	4%
20+	18	39%	22%	61%	28%	11%	39%	

Based on the figures above, it would appear that:

- More specialised businesses face greater difficulty recruiting compared to more generalist businesses.
- Sheeting and cladding businesses experience fewer problems with recruitment than their colleagues in pitched and flat roofing.
- Larger businesses experience the fewest problems with recruitment. If one discounts the businesses that describe the issue as 'not relevant to them' and focus just on those who do see it as relevant, this is even more stark.
- Firms with a direct workforce of between 5 and 19 experience above average difficulties; and some firms in the 20-49 bracket experience acute difficulties.



	Base	Very difficult	Quite difficult	% experiencing some difficulty	Easy enough / OK	Not a problem	% experiencing little or no difficulty	Not relevant for us
<b>All respondents</b>	<b>71</b>	<b>30%</b>	<b>35%</b>	<b>65%</b>	<b>18%</b>	<b>6%</b>	<b>24%</b>	<b>11%</b>
<b>GOVERNMENT OFFICE REGION</b>								
East Midlands	10	40%	40%	80%	10%		10%	10%
East of England	5	40%	60%	100%				
London	2							100%
North East	2	50%		50%		50%	50%	
North West	8	25%	38%	63%		38%	38%	
Northern Ireland	1				100%		100%	
Scotland	2		50%	50%	50%		50%	
South East	7	29%	14%	42%	14%	14%	29%	29%
South West	5	20%	20%	40%	20%		20%	40%
Wales	5	40%	20%	60%	20%		20%	20%
West Midlands	12	25%	58%	83%	8%	8%	17%	
Yorkshire & the Humber	11	27%	36%	64%	27%	9%	36%	
<b>NFRC REGION</b>								
London & Southern Counties	15	27%	33%	60%	7%	7%	13%	27%
Midlands	22	32%	50%	82%	9%	5%	14%	5%
North West	9	22%	33%	56%	33%		33%	11%
Northern Ireland	1				100%		100%	
Scotland	2		50%	50%	50%		50%	
South West	8	38%	13%	50%	25%		25%	25%
Yorkshire & North Eastern	13	31%	31%	62%	23%	15%	38%	
<b>CONTEXTS</b>								
Public housing	12	25%	25%	50%	17%	17%	33%	17%
Private housing	18	22%	28%	50%	17%	11%	28%	22%
Public non-housing	9	22%	22%	44%	22%	22%	44%	11%
Industrial	11	27%	27%	55%	18%	18%	36%	9%
Commercial	14	29%	29%	57%	14%	14%	29%	14%
Infrastructure	3	33%		33%	33%	33%	67%	
Housing R&M	15	20%	27%	47%	20%	13%	33%	20%
Non-housing R&M	11	18%	27%	45%	18%	18%	36%	18%
<b>SURVEY ADMINISTRATION</b>								
Telephone	22	27%	32%	59%	14%	9%	23%	18%
Self-completion	49	31%	37%	67%	20%	4%	24%	8%

Based on the figures above, it would appear that:

- There may be particular challenges in the NFRC Midlands Region associated with recruitment.

### Hard to fill vacancies

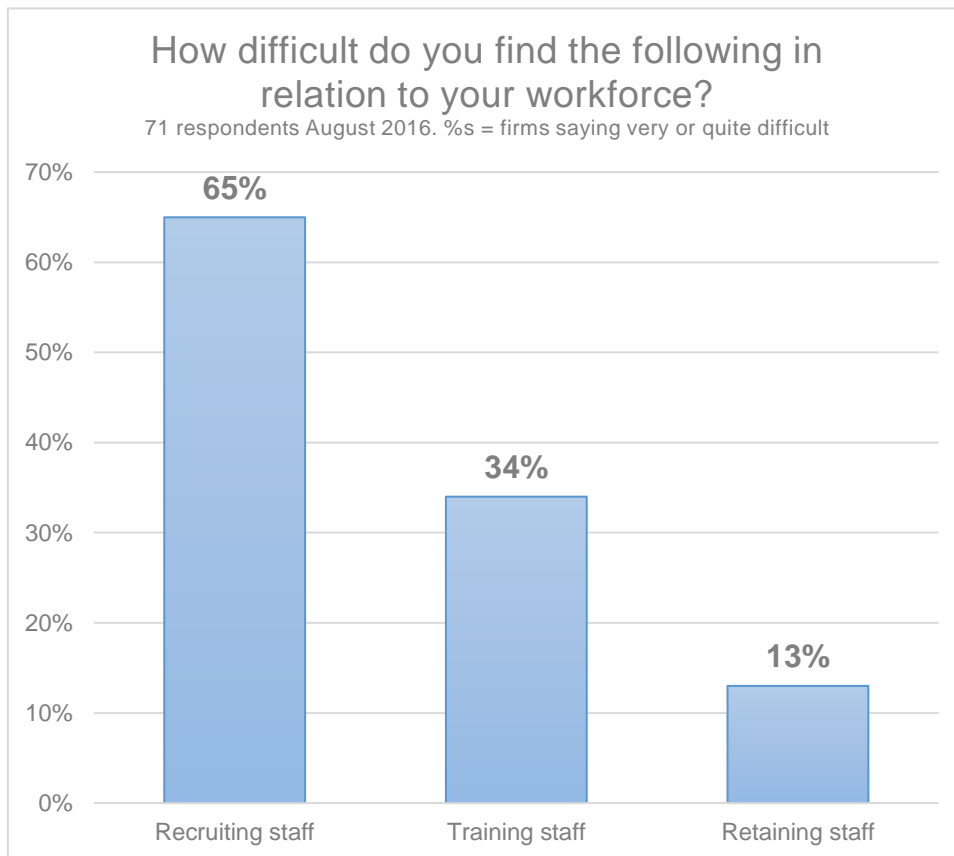
59 businesses were able to state whether or not they had had any vacancies in the last 12 months which they had found hard to fill<sup>55</sup>. Of these just under half (Base=27, 46%) stated that they had such vacancies. Very few were able to quantify or qualify whether these vacancies were skills shortage vacancies or not.

**Key Point: Approaches to recruitment are very traditional in most roofing companies we interviewed, with smaller companies retaining a purposeful ‘family and friends’ only policy. That said a small minority report useful engagement with schools and academies to develop a (pre) Apprenticeship pipeline, but overall the sector appeared to lack solutions regarding the way it might present itself as a career, and this is perhaps an opportunity for national co-ordination by the RIA with other bodies such as CITB and the Go Construct campaign.**

<sup>55</sup> Only businesses with at least 1 PAYE employee were asked this question

## 6.0 Retention Challenges

The issue of retaining staff has been a lower order issue for roofing contractors consulted during this project. They do not identify it as a serious issue, certainly when compared to recruitment and training and development. In fact, of 71 firms to give a view in the formal survey, only 9 reported this as being either very (1 firm) or quite difficult (8 firms).



Clearly people have been leaving their firms because of age or retirement generating a need for replacement of those jobs, which is perhaps why roofing contractors reported difficulties with recruitment instead. In total, 28 businesses (1 in 4 of all businesses in the sample) stated that 170 staff had left their firms in the last 12 months, distributed almost exactly evenly between roofing and non-roofing specialist occupations (83 and 87 respectively).

The number that have left these businesses in the past 12 months (170) is almost an identical number to the number of new recruits (180) that 37 businesses said they intend to recruit in the next 12 months. However, analysis revealed that the dynamic is not just about meeting replacement demand i.e. there is net additional job growth of 10%; and we would note that while 49% of departures have been roofing specialists in the last 12 months, approximately 80% of all planned recruitment for the next 12 months is for these types of occupation. In short, there should be a net requirement for roofing occupations amongst c 1 in 3 firms next year.

The only convergent theme identified in the focus groups was that young entrants tended to leave quite soon in their development which caused frustrations for employers who think they are already doing them a favour by giving them an opportunity to work.

## 7.0 Skills Challenges

### Skills Gaps<sup>56</sup> in the Workforce

The survey sought to quantify and qualify the kind of skills gaps experienced in the directly employed workforce of roofing contractors. In this way we might better understand how training provision could better meet the deficiencies in the existing workforce as perceived by roofing companies.

**From 108 roofing contractors willing to provide an estimate, 40 businesses (37%) stated that at least someone within the business has a skills gap. The UK construction comparison figure is 10% of employers experiencing skills gaps<sup>57</sup>.**

These skills gaps exist across both roofing specialist and non-roofing specialist occupations employed by these businesses:

- The total number of 'roofers' with skills gaps estimated by these 40 businesses is 353, or approximately 25-30% of the roofing workforce<sup>58</sup>.
- 23 businesses (21% of all to take part) identified skills gaps in their non-roofing workforce, which they estimated existed in 134 individuals or approximately 20% of the non-roofing workforce<sup>59</sup>.

**Thus in total just under 500 people in the combined workforces of these (40) businesses, or roughly 25% of the total directly employed workforce in the sample are likely to have skills gaps at present. The UK construction sector comparison figure is 3.8%<sup>60</sup>. If this were true of the entire roofing industry and we were satisfied with the calculation that this is approximately 70,000 individuals, then the immediate market for training would be c 17,500 individuals.**

Although 40 companies said they thought they had skills gaps in their workforce, not all of them either could or elected to describe what those gaps were, with a number of their open comments suggesting that they did not know exactly what or who they affected.

*"Can't think off hand of any gaps but I'm sure the whole office team aren't perfect. Just can't think of where the gaps are."*

Some respondents were eager to point out that gaps were distributed across their workforce:

*"All staff require upskilling, all skills, not just roofing."*

Others talked about gaps that would enable them to do something more advantageous to their firm, such as a multi-skilled roofing workforce:

*"Not all of them (roofers) can do everything. It would be useful to be able to send any roofer to any job!"*

*"Would like to be trained in glass fibre roofing, but never had the funds to explore this. Can you assist please?"*

<sup>56</sup> A skills gap exists where an employee is deemed by their employer to be not fully proficient i.e. is not able to do their job to the required level. UKESS Glossary of Key Terms 2015

<sup>57</sup> UK Employer Skills Survey 2015, Data Analysis of Construction Sector Extracts

<sup>58</sup> Exact percentage depends on whether respondents felt that 'roofers' included roofing managers as well

<sup>59</sup> 17-24% depending on which estimate of overall workforce size is taken

<sup>60</sup> UK Employer Skills Survey 2015, Data Analysis of Construction Sector Extracts

## Types of Skills Gaps in the Workforce

The 'skills gaps' described by roofing contractors were in fact a mix of skills, knowledge and experience requirements, classified below for the different elements of their directly employed workforce.

Roofing Specialist Employees	Non-Roofing Specialist Employees
<p><u>Technical skills</u>            Felt roof training<sup>61</sup> (2)            Roped access (2)            SAP/Apprenticeship            Mastic asphalt (qualification required<sup>62</sup>)            Lead work (3) i.e. flashing, flat roofs and welding            'Eye for detail' skills            More intensive training in 'good practice'            Single ply (3) (certificate needed<sup>63</sup>)            Liquid membrane skills (2)            'S/NVQs' (6)            Slating (2)            Tiling specialisms especially around refurbishment            Torch skills on flat roofing            Glass fibre roofing skills</p> <p><u>Multi-skills</u>            Skills so a roofer can go to 'any job'</p> <p><u>Supervisory &amp; management skills</u>            SSSMS (3)            SSSTS            'Management' (2)</p> <p><u>Non-technical skills</u>            Administration and paperwork            Software design tools</p> <p><u>Knowledge</u>            Training in associated trades like scaffolding and nets            Cross over learning of other systems            Product knowledge (training)</p> <p><u>Experience</u>            For those in the commercial context</p> <p>Respondents: 40</p>	<p><u>Business skills</u>            Accountancy            Basic business strategic management            Use of computers, software &amp; systems (2)            Time management            Communication</p> <p><u>Commercial Skills</u>            Estimating (3)            Drafting            Commercial management            Obtaining work (sales skills)</p> <p><u>Management skills</u>            Sequencing skills<sup>64</sup> (management skills)            Project supervision            Contract management</p> <p><u>Knowledge</u>            Knowledge about fibre glass roofing            Product / technical / manufacturer systems knowledge (3)</p> <p><u>Experience</u>            Industry experience            Supervisory experience</p> <p>Respondents: 24</p>

<sup>61</sup> "...not available in Scotland like it is in England"

<sup>62</sup> "...when previously grandfather rights have been accepted."

<sup>63</sup> "I know how to do it but need a certificate."

<sup>64</sup> "It's not the technical side but the being able to get the work sequenced right – management skills."

## Consequences of skills gaps

Despite the apparent prevalence of skills gaps, very few roofing contractors elected to suggest what their consequence was for their business. Of those able to comment:

- 4 said there was no impact
- 3 said they were losing business or orders to competitors
- 3 said they were increasing the workload for other staff
- 2 said they were outsourcing work to sub-contractors
- 2 said it restricted new tendering opportunities or getting on site<sup>65</sup>
- 1 said they were having difficulties in meeting quality standards
- 1 said it had the effect of increasing operating costs
- 1 said they had to be more vigilant and guard their reputation for good workmanship

*“We work around it. It makes life harder but we’re used to it.”*

Some firms mitigate skills gaps by procuring skilled sub-contractors instead:

*“We don’t have any roofing specialists directly employed and the ones we do we ensure are trained and qualified.”*

RRTG Insights, July 2016: Metal roofing and leadwork specialists are reported as being busier than they were and there is a high demand for skills. Some cannot respond quickly enough to meet client demands so those clients are going to non-specialists without the necessary levels of skill and training. *“Contractors are taking on projects beyond their skill.”*

## Multi-skills

*“It would definitely be useful if everyone could do everything but you’ll always end up wanting to specialise.” (or) “If you aren’t multi-skilled you get pigeon-holed.”*

The survey sought views about multi-skilling. 21 roofing company respondents said they had a multi-skilled roofing operative workforce<sup>66</sup>. In fact, they identified 97 of their 185 directly employed roofing employees as multi-skilled, suggesting that 1 in 2 are multi-skilled. In addition, they thought that 98 of their sub-contracted roofers were multi-skilled as well. Looking at the qualitative comments offered by 21 roofing contractors that completed a depth telephone interview with the Research Team, some themes emerged:

- Multi-skilling was seen as a way of maintaining or deriving competitive advantage
- Operatives may be multi-skilled but are not necessarily carded for all these skills
- Multi-skilling can help contractors get into new markets/contexts
- There are wider team beneficial impacts of them all being multi-skilled
- The multi-skills required relate to IT and new technology as much as technical / trade skills e.g. IT skills, use of cameras for photographing/reporting
- The multi-skills for Foreign Nationals in the workforce include the need to be fluent in England as a critical means to understanding Health and Safety
- A multi-skilled workforce eases the ability for a firm to deploy ‘any roofer to any job’ the knock-on being that it is easier to line up all jobs
- The extent of multi-skilling differs between gangs (i.e. it is not consistent)

<sup>65</sup> Linked to the need for CSCS cards

<sup>66</sup> i.e. that one, some, most or all of their roofing operatives had the skills and knowledge to work across more than one type of roofing technology/system



## Qualifications in the Workforce

The literature review found sources<sup>67</sup> that quantified the current qualification level of ‘roofers’ in the UK, finding that:

- 91% of roofers began their construction careers with no formal qualifications (compared to the whole construction sector average of 75%).
- 53% of roofers held no qualifications whilst 47% (as at 2015) held some form of construction-specific qualification (a decline from 56% in 2012)<sup>68</sup>
- These occupations were characterised with proportionally lower Level 3 (10%) and 4 (3%) qualified workers compared to the UK 2015 average at these levels (28%).
- Formal analysis of SOC 5313 (‘roofers, roof tilers and slaters’) qualifications data distributed across a base of 45,537 roofers in 2016 found a more encouraging picture with 14% having no qualifications; 17% holding NVQ Level 1 qualifications; 24% holding NVQ Level 2 qualifications, 12% holding NVQ Level 3 qualifications and 9% holding a NVQ Level 4 or above; and the remainder having a mix of trade apprenticeships (13%) and other qualifications (11%). Level 2 was the modal response where the majority of these types of worker are qualified.

In the formal survey with roofing contractors in August 2016, 90 respondents from 87 businesses gave an estimate of the number of staff within their businesses with relevant roofing qualifications.

- Of these, just over 1 in 4 (Base=23, 26%) stated that no-one in their business had such a qualification.
- The remaining 67 respondents, representing 64 businesses, indicated that between 581 and 782 individuals had a relevant roofing qualification<sup>69</sup>.
- The combined workforces of these businesses are between 1,564 and 1,603 meaning that between **37% and 49%** of the workforce is described as qualified,
- If we were to assume, however, that only roofing specialists employed by these firms could reasonably be expected to be more likely to require a roofing qualification than their non-roofing specialist colleagues in their business, then we would calculate differently. In these 64 businesses they employ between 869 and 1,044 roofing specialists thus the % of those with a relevant qualification jumps up to a range anywhere between **56%<sup>70</sup> and 90%<sup>71</sup>**.

<sup>67</sup> CITB Workforce Mobility and Skills in the UK Construction Sector 2015, and a formal analysis of data by the CITB research Team in May 2016 using SIC 2007 data applying a four quarter average summer 2014 to spring 2015 inclusive

<sup>68</sup> The lowest occupational category out of 13 analyses with the exception of labourers / general operatives and banksman/person.

<sup>69</sup> noting that some of the examples they provided were not formal qualifications

<sup>70</sup> 581 / 1,044 \* 100

<sup>71</sup> 782 / 869 \* 100



Examples of the qualifications included by respondents include:

- Apprenticeship
- Asbestos Awareness
- CITB Roofing Training (one states carried out in 1991)
- City & Guilds (subjects mentioned include Leadwork, Mastic Asphalt, Single Ply Roofing)
- CSCS Cards (including the Heritage Level 3 Card, Level 6)
- Degree (subjects mentioned include Property and Construction, BSc Building Surveying)
- First Aid
- Green Roofing (supplier trained)
- Health and Safety Award Level 1
- HNC (subjects mentioned include Building Surveying)
- Industry Accreditation (described as in house or City & Guilds)
- IPAF
- IoR Memberships, Fellowships, Associateships
- NVQs (subjects mentioned include Tinsmith)
- NVQ L1 (subjects mentioned include Slating & Tiling)
- NVQ L2 (subjects mentioned include Liquid Roofing, Roof Slating & Tiling, Roof Sheeting & Cladding, Single Ply, Built Up Felt Roofing)
- NVQ L3 (subjects mentioned include Roof Sheeting & Cladding, Roof Slating & Tiling, Heritage Skills Slating & Tiling, Construction Supervision)
- NVQ L6 (subjects mentioned include Heritage Registration, Construction Management)
- OND
- O-Levels
- PASMA
- Product specific training
- SAPs
- SUPs
- SMSTS
- SSSTS
- Working at height

*"Years of Experience - NVQs - don't mean anything though! 80-90% of NVQs can't do the job. It takes 5-6 years to learn how to be a roofer, you can't short cut that. Training doesn't mean anything, waste of time. You have to learn it from someone else good up on the roofs."*

83 businesses were able to give a view on how many workers they expected to gain a formal qualification in the next 12 months.

- Of these, just under half (Base=39, 47%) expected no further staff to gain such a qualification in the next year.
- The remaining 44 collectively estimated between 191 and 242 staff would complete a relevant formal qualification out of a current roofing workforce of between 756 and 931 meaning that about 25% of the workforce is expected to complete a formal qualification within these businesses in the next 12 months.
- Including the businesses who do not expect any staff to gain formal qualifications, the total roofing workforce rises to 879-1054 meaning that the total % expected to gain a qualification drops to approximately 23%.



Examples of the qualifications expected in the next 12 months include:

- AAT
- Apprenticeships - Level 2
- AS & T
- Asbestos Awareness
- Certificate in Accounting (Level 2)
- CPD Courses
- CSCS Level 6
- CSR Training
- First Aid
- Harness Training
- HNC Building Surveying
- Institute of Roofing
- IPAF
- LSA Leadwork
- Manual Handling
- NEBOSH
- NVQs (subjects mentioned include Built up Felt, Liquid, Site Supervisor, Roof Slating & Tiling, bituminous)
- NVQ Level 2 (subjects mentioned include fascia soffits, Roof Slating & Tiling, Single Ply)
- NVQ Level 3 (subjects mentioned include slating & tiling)
- NVQ L4
- NVQ L5
- NVQ L6 (subjects mentioned include construction management)
- OSAT
- PASMA
- SAP
- Single Ply
- SMSTS
- SSSTS
- SUP
- Supplier trained heritage training

*"We wouldn't expect subbies to get qualified as long as their H&S was up to date."*

#### Key Point

**Of 50 respondents who gave a view on both future qualifications and present skills gaps, 36 described at least one skills gap in their business. Of these, 24 (67%) expected at least one member of staff to complete a formal qualification in the next 12 months. This compares with 43% of those who did not describe a skills gap (Base=6/14). So, whilst a good number of firms knowing they have skills gaps are planning to qualify some of their workers next year, some are not specifically seeking to gain qualifications through any training efforts they invest in over the next 12 months.**

#### CSCS Cards in the Workforce

The literature review process identified that there are an estimated 14,124 cards held that are specific to the roofing industry across 10 possible categories. Even without any issues of double-counting the penetration of cards vs total specialist workforce (46,000-58,000 in the UK) is very limited suggesting a 24%-30% penetration level. This is why a variety of initiatives and investments are being made by CITB and the RIA to drive an increase in cards across the industry, to increase the penetration, and importantly the training and qualification behaviours that should underpin the achievement and maintenance of said cards. The survey with roofing contractors in August 2016 revealed a higher distribution of cards than the national proxies above. 67 businesses (62% of the total) stated that at least some of their directly employed workforce had CSCS Cards. In total, these firms have a carded workforce of 979 or just under half of their total workforces - and about 70% of their roofing specialist workforces.

<b>Card Colour</b>	<b>Number of workers with this card</b>
Blue Skilled CSCS Card	586
Green Labourer CSCS Card	200
Gold CSCS Card (Advanced Craft / Supervisory)	81
Black CSCS Card (Manager)	92
Yellow CSCS Card (Site Visitor)	3
Red CSCS Card (Trainee / Apprentice)	9
White CSCS Card (Professionally / Academically Qualified Person)	8

There is some evidence of double counting or respondents including cards held by their subcontractors as opposed to just their directly employed workforce; 10 businesses describe more CSCS cards held than they have people in their workforce. Discounting these businesses (but factoring in the 12 non-employers who personally hold CSCS Cards), we see a carded workforce of 883 - still over 40% of the total workforce. However, it appears that some businesses in answering this question have included their sub-contracted workforce as well as their directly employed and factoring in subcontractors we can say that within this sample at least 25% have a CSCS card. In total 47 businesses stated that some of their workers would have CSCS cards next year. Of these, 46 also provided an estimate for their carded workforce next year, which is found below:

<b>Card Colour</b>	<b>Number of workers with this card this year</b>	<b>Number of workers with this card next year</b>
Blue Skilled CSCS Card	443	462
Green Labourer CSCS Card	150	102
Gold CSCS Card	74	74
Black CSCS Card	79	75
Yellow CSCS Card	5	4
Red CSCS Card	4	7
White CSCS Card	7	2
BASE=46		

Overall these businesses are planning on decreasing their total carded workforce from 762 to 726 (a drop of 5%); however, this may reflect some businesses only providing figures for new cards (i.e. the real figure for them is their figure for this year PLUS their figure for next). There is also within this a specific intent to increase the number of Blue Skilled Cards (projected to rise by 4%) and to potentially decrease the number of Green Labourer Cards (projected to fall by 32%).

## 8.0 Training Behaviours

Representatives from 30 roofing firms attending focus groups in Yorkshire, Wales, the Midlands and London & Southern Counties were extremely vocal about training and development. Themes emerged as follows:

Convergent Themes	Divergent Themes	Interesting Themes
The lack of suitable trade skills provision to meet all technical/specialist workforce needs	The value of, requirement for and enforcement or demonstration of CSCS cards	The preference for multi-skilling and multi-knowledge because firms are increasingly multi-disciplined
The frustration with having to send employees 'far away' to access relevant provision (additional cost burden)	The need for qualifications or not in the sector	Specific gaps in training provision and / or issues with its relevance (trade skills mismatch)
Prevalence of in-house experienced workers acting as trainers owing to lack of local, affordable training provision	The quality and relevance of all HS&E related training; and requirements for retraining in certain areas so frequently	The distribution of skills, knowledge and gaps across a workforce with difference between the age groups of workers
The importance of manufacturer-led training to fill gaps in local trade skills provision	Training investment and planning behaviours (formal, informal)	Propensity to use RRTGs or other external bodies for support (or not)
The use of manufacturer training to help develop multi-skilled workers and keep up to date with new technology/systems	Training practices, methods and extent to which firms do 'just enough / the minimum'	Business models that budget for snagging as a preference to upfront training investment to get things right first time
The principle (only effective) driver for stimulating training investment is legislation	The way in which companies train their directly employed workers	Gaps of capability in the wider value chain i.e. QS, architects, contractors/developers
Quality should be, but is not, the driver it could be to stimulate positive training behaviours and investment	<b>What's Missing?</b> Despite the freedom to discuss training gaps and urgent business needs there was very little reference to the non-specialist workforce in the focus groups.	Tactics to mitigate loss of investment in staff that are trained then leave
Quality / evidence checks, regimes and inspections are inconsistent and their value is therefore questionable		Apprenticeship requirements

Convergence of opinion emerged around these themes:

- The lack of suitable trade skills local provision to meet all their technical / specialist workforce needs<sup>72</sup>

*“It means forever pulling lads off site for training and we can’t afford that.”*

*“We can get brickies, painters and joiners trained locally but not our roofers.”*

- The increased costs thus associated with sending employees to distant locations to access the specialist training required (meaning time off site, travel and accommodation that they would prefer not to have to pay for) is a frustration for roofing companies<sup>73</sup>

*“...we now focus on in-house training as he can’t get the right training anywhere locally.”*

*“It’s not good. We have to travel for it. Our nearest centre is in Bognor.”*

*“Many of our guys don’t want to travel for training.”*

- The consequential prevalence of in-house experienced workers acting as trainers where such individuals could be persuaded to undertake this role

*“We all use experienced staff to deliver enhanced training on site.”*

- The importance of manufacturer-led training to fill gaps in local trade skills provision, enrich specialist skills and help firms develop multi-skilled workers and stay on top of new technological or system developments

*“Most trade-specific training is manufacturer led - specific skills on specific products.”*

*“We have sheeters fully qualified but send them on manufacturer training for single ply.”*

In the London and Southern Counties focus group it was notable that the group seemed to take a view that manufacturer training was an integral part of how they develop their workforce. In Wales, the roofing companies said they all sought to get at least some of their people formally qualified in one discipline. But as they all offer wider roofing services they tend to use manufacturer product training to get workers additional skills in other disciplines. They also thought that, with greater awareness and understanding amongst the roofing contractor community, BCP could add value.

*“Lots of us use manufacturer training to enhance skills – e.g. tilers doing lead training.”*

*“Modern technical and product changes are very different from 10-20 years ago. We try to keep up with new products.”*

- The driver for doing training was universally accepted as being legislation-led and that all delegates reported their firm undertook required mandatory training in their business

*“Regulations (if followed) such as British Standards will also drive this.”*

*“HS&E has been the main driver of changes in training and impacts on how we work.”*

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<sup>72</sup> In Wales roofing companies were positive about the work that the WNRRTG had done in providing a facility in Caerphilly for training that currently covers slate and tile, single ply and leadwork and HSE but their needs went beyond this requirement and they perceived important gaps in locally available trade training resources still.

<sup>73</sup> For example, companies attending the focus group in Caerphilly, Wales reported that owing to a lack of suitable local provision they had to send their people to Birmingham for BUFR Training, Exeter for Cladding and St. Helens for more specialist training.

- Lack of quality acting as a driver over price (acting as a disincentive to train)

*“We have to prove we have put everyone through Health & Safety training to meet the contractor requirements but they don’t ask for trade qualifications and don’t pay extra for quality.”*

This was a theme across all four focus groups, largely a negative set of views about the way in which contractors and developers ask for things but don’t seek evidence; or ask for certain credentials in ITT/procurement but then award bids to firms without them which puts firms that do invest in their workforce off.

*“Increasing quality - clients don’t want to pay for some of the processes e.g. one insists on a blue hat supervisor but don’t mention it until final contract - has to come off your bottom line.”*

*“Quality is not what they’re asking for – evidence of H&S trained is.”*

*“Sick of hearing year on year that tenders go to people who sub-let works (we don’t) even for businesses that have a policy not to. Loads of it goes on - they ask at meetings but they don’t check! If you’re going to give work to the cheapest person anyway, why are we training?”*

*“Heritage – we skill our guys but clients are not asking for evidence!”*

*“Lost a 22 house roofing contract to a company who had never laid roofs before!”*

*“Clients will pay for less than quality as long as they’re paying less!”*

More seriously were the comments suggesting that quality inspection regimes were inconsistent to the point where their value is questionable.

*“Quality Inspection Test Plan provides the quality aspect ((ethnographic note: said with tongue firmly in cheek). Every job we do is perfect (!)”*

*“Independent quality checking achieves reduced snagging - SANA, Armaplan (don’t see one inspector in 6 months). We employ an independent inspector to do the quality checking methodically.”*

*“NFRC members have all been trained on updated standards - roof tile manufacturers have no input into quality of work carried out. If housebuilders tell you otherwise it’s a fallacy. Or it’s the subcontractor bit. Contractors not vetting people they’re employing.”*

*“Manufacturers look after things with some flat roofs - SANA checks (though not foolproof in one delegate’s opinion). None in slating and tiling. Would be brilliant - cut the cowboys out straight away! But manufacturers driven by profit - will they afford it?”*



Divergence of opinion was found in relation to:

- Views about the value of, requirement for and enforcement/demonstration of CSCS cards depending on the contexts wherein they were providing their roofing service

*“Major contractors/developers you need a CSCS card - that’s first order of business for us because I can’t get the guy on site without one. But if your work is domestic / for smaller builders you can get on there without any qualifications as long as the quality is good enough to sustain the business.”*

*“Our customers don’t ask for cards so we don’t do CSCS etc.”*

- The need for qualifications or not; with the suggestion that an individual’s attitude and abilities are first orders of business, and only if they are in place do firms think about the cost benefit of getting them any qualifications
- The quality and relevance of ‘all’ health and safety related training that roofing companies are expected to undertake with some saying it has saved lives and changed cultures over the years, and others thinking that certain things are illogically conceived e.g. the need for annual retraining on asbestos awareness

*“A lot of stealth things coming in to the industry - lots of them don’t make sense (can use a stihlsaw without a ticket but can’t change a blade without training accreditation).”*

- Training investment planning behaviours

In Yorkshire firms tended to say their training budgeting was largely ad hoc rather than proactive

*“Budgets for training played on the wing rather than planned ahead.”*

In Wales there were companies who took a more planned approach with specified annual budgets set in advance for formal training, use of CITB grant to offset training costs<sup>74</sup> and purposeful design of in-house training as a measure to keep training costs down overall.

And some firms exhibited both formal and informal investment behaviours.

*“We always have unforeseen training pop up especially if we start a new guy who turns out not to have the H&S training for example.”*

- Training practice – ‘minimum requirement’ and mixed methods

Most contractors we met said they do most of their training on site; they comply with HSE training regulations. Some operated a model of multiple ‘family gangs’ where no formal training ever took place other than HS&E. Some started people off as labourers, and after 6 months if they were any good developed them on site and sent them for OSAT.

*“Most roofing companies are owner managed and so only do the minimum plus CSCS if demanded – but we do need local training and assessors and then we might do some training!”*

Some firms offered employees a mix of formal and informal training, so for example CITB Apprenticeships and in-house training; or roof tilers going to college for a course; or more commonly a model involving mandatory HS&E training + in-house on-site training (with experienced workers) and some manufacturer training.

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<sup>74</sup> The Research Team note that Nautilus may be a firm exhibiting extremely good practice that could perhaps provide good potential for case study development by the RIA after this research study is complete.



Formalised training and achievement of formal qualifications was far less common amongst roofing contractors. One of the largest roofing companies in the UK said that even they did not have the budget to work with full apprenticeships for all staff.

*“We do SAP & SUP and VQs – but we still struggle to get older workers to take a qualification.”*

*“The proposed new frameworks for apprentices in roofing are unrealistic – grade C in Maths and English, no chance, you have just lost 90% of our new entrants!”*

Roofing contractors in the London and Southern Counties focus group pointed to the need for industry consistent standards because: -

*“We are all training our people but in our own way!”*

Interesting themes also emerged around:

- The need perhaps for a multi-skilled or at least multi-knowledgeable/aware workforce

*“Multi-skilling is a big need for many companies.”*

Contractors referenced that breakdown in communication between different trades can be an issue implying that a greater awareness between them would be of benefit. They reported that most roofers probably do two out of three in terms of slating, tiling and flat-roofing. However, insight suggested that ‘refurb people don’t touch slating if they can help it’.

*“Occasionally you get a really helpful gang that can do all three - they’re like gold dust.”*

- Specific gaps in training provision or issues with its relevance

*“Generic courses are lacking - e.g. the finesse of the job.”*

In the Midlands, there were numerous comments about the mismatch of provision to meet their business needs:

*“SAPs & SUPs are aimed at adults but older workers don’t like being assessed.”*

*One delegate has set up a training centre targeted for heritage skills because his company couldn’t find the right training.*

*“The course content is not all relevant to what we do on site (Slate & Tiler).”*

*“We are having to train them ourselves – can’t get the people and when we do we can’t get the right training.”*

*“Difficult – we don’t have the time to release guys and don’t have enough good staff to show them how to do it.”*

*“Most training content is outdated so we have to make sure our guys are kept up to date – manufacturer product training really helps us.”*

- The distribution of skills and knowledge (and gaps) in the workforce

*“Products are now more complicated. Older ones are trained and skilled but not in the modern technologies; the younger ones don’t have the generic skill; in the middle is where they’re OK.”*



- Use of RRTG and other external support towards training (working with others)

In Wales, roofing contractors were positive about the work of their RRTG who were said to be helping firms with advice to identify the right training for their business ('brokerage'). They were also positive about the 'good information from NFRC' on standards and changes, but then expressed concern (as did firms in Yorkshire) about non-federated companies:

*"What about those companies who aren't in NFRC? What about the cowboys?"*

There was comment on the diverse range of trade associations in roofing and all firms in Wales said they had experience of the lack of sharing across these bodies – even though RIA was trying to make things better in their view.

- Approaches to snagging vs costs of pre-investment in training

Some businesses prefer to run a business model where they expect to pay for snagging costs rather than pre-invest in up-front training and qualification

*"Snagging costs always faced - we have £30k in the annual budget for repairs under guarantee (but not a budget for training) - it is tax efficient to have such a provision in your account (!)"*

- Gaps of capability in the wider value chain

Contractors pointed to skills, knowledge and experience deficiencies amongst other actors in the value chain, including architects, Quantity Surveyors and client/main contractor. This, interestingly, was a key take-out for the research team on attending the SPRA Conference too, how it needed the whole workforce pre-, during and post-installation to be in tune with each other's requirements and contributions to a 'roof that works'.

*"Main contractors have driven mark-ups down so there's no contingency if anything goes wrong. Tender quality isn't what it should be so you have to be on the ball on site."*

*"QSs not doing their jobs - don't know what's there and what the costing implications are. QS training is an issue! Ditto architects. Concept architecture is now where we're at - so we need to be more in terms of advising what needs to actually be done to get it built."*

- Tactics to mitigate loss of investment in staff that are trained up then leave

*"I had one guy; on the day he got his VQ left to work for another company for more money!"*

Although staff retention and poaching of staff did not really raise itself as a particularly serious difficulty in focus groups, with the exception of young people early in their development at roofing firms, one company had tried to introduce a tactic to protect themselves from the risk of investing in staff.

*"We have new staff sign an agreement to pay back training costs if they leave early but you can't do that with an apprentice."*

- Apprenticeship Requirements

In Wales, it was reported that apprentice volumes are minimal<sup>75</sup>; and this lack of demand was correlated with the lack of appetite generally from roofing companies to employ school leavers. None of the companies present took anyone on under 18. In London and the Southern Counties those present said that taking Apprentices on was a very slow process. Most, however, were not pre-disposed towards apprentices preferring to recruit people in their mid-20s and upwards because *"they appreciate the work more and are willing to learn."*

<sup>75</sup> The RRTG confirmed there are currently 5 or 6 new roofing apprentices in this region

## Training Investment Culture

This section explores the responses provided by roofing contractors in the formal survey about how they deliver training and how much they invest in workforce training and development. For context, we sought to use the same types of question used on the UK Employer Skills (ESS) Survey 2015. For context, here are some of the key findings from the ESS.

### ***'All construction' companies:***

- 57% had funded or arranged training or development for their staff over the previous with just under a half providing any off-the-job training (46%) and nearly four in ten on-the-job training (37%)
- The proportion of staff being trained was 53%
- The average number of days training per trainee was 6.6 days
- Investment per person trained was £4,090 and investment per employee was £2,170

We wanted to contrast these investment behaviours with our sample of roofing contractors, and whilst many found the process of estimation quite challenging (or impossible because they did not either think this way or keep any record that would enable calculation), some useful data was revealed though it must be treated with caution given the sample size for these sets of question.

### ***Roofing Contractors, August 2016***

- 63 firms out of 108 (58%) had funded or arranged training or development for their staff over the previous 12 months
- All 63 firms said they had provided some off-the-job training (58%) – on further analysis of responses this is largely explained by their investment in off-the-job HS&E mandatory training activity
- 33 firms said they had provided some on-the-job training (31%) – this result is perhaps slightly surprising given the consistency of experience shared at focus groups where participants said on-the-job was far more prevalent than off-the job training in the industry
- The proportion of staff being trained off-the-job was somewhere in the range of 63%-71% based on estimates provided by 56 businesses arranging this type of training
- The average number of days off-the-job training per trainee was 5.5 days
- The average number of days on-the-job training per trainee was 6.6 days
- Investment per person trained was £743 (or £515.08 without one large company 'outlier')

#### **Key Point**

**The sample of roofing contractors able to provide information about their training behaviours appear to train 'more' than the construction sector overall, provide proportionally more off-the-job compared to on-the-job training, offer a greater proportion of their workforce with training opportunities, but spend considerably less per trainee than the average construction trainee investment. Qualitative coding found a very high prevalence of off-the-job HS&E training amongst this community which may go some way to explaining this apparent dynamic which is at odds somewhat with the experiences reported by contractors taking part in the focus groups.**

## Off-the-Job Training

In total, 56 businesses were able to provide an estimation of the number of workers that had completed some off-the-job training in the last 12 months. These businesses collectively estimate that between 1,014 and 1,153 of their workforce of either 1,620 or 1,621 had received some training which is 63%-71% of the total. 52 of these businesses were also able to estimate the total number of days training that they provided which was 5,779 days. Against a total of 1,044 workers that received this training and a total workforce of 1,504, that suggests an average of 5.5 days training per worker trained ('trainee') and 3.8 days training per worker in the total workforce across these businesses. In total 39 businesses estimated the number of workers they had trained off-the-job in the last year, the number they intended to train in the coming year, and the number of days of training delivered and planned.

	Number of workers trained	Total number of days off-the-job training	Average Number of days / worker trained
<b>Last Year</b>	934	5,229	5.60
<b>Next Year</b>	974 (+4%)	3,511 (-33%)	3.60 (-36%)
<b>BASE=39</b>			

At face value the figures suggest that training will reduce by a third next year, but this is driven by a single large business which plans to reduce the amount of training it delivers to its 150-strong workforce from 15 days to 3 (we call this an 'outlier'). Discounting this one business' predicted dynamics, the remaining 38 companies will deliver 3,060.5 days of training compared with 2,979 last year - in other words slightly more training days for slightly more workers, but the average days per worker shifts slightly downwards from 3.8 days to 3.7 days.

## On-the-Job Training

47 businesses were able to provide an estimation of the number of days of on-the-job training received by members of their workforce - of these, 20 (42%) stated that no such training had been delivered (conversely another six businesses stated that some on-the-job training took place but were unable to estimate how much). The 26 businesses to deliver some on-the-job training have a total workforce of 1,143. Of these, they estimate that 765 (67%) received just over 5,000 days of on-the-job training, equivalent to just over 6.5 days per 'trainee' (or 4.4 days per worker). In total 43 businesses estimated the number of workers they had trained on-the-job in the last year, the number they intended to train in the coming year, and the number of days of training delivered and planned.

	Number of workers trained	Total number of days on-the-job training	Average Number of days / worker trained
<b>Last Year</b>	760	4,909	6.46
<b>Next Year</b>	787 (+4%)	4,998 (+2%)	6.35 (-2%)
<b>BASE=43 (of whom 18 planned and delivered no on-the-job training)</b>			

While both the number of employees likely to be trained on the job and the total number of training days delivered are expected to rise next year, the overall average number of days per trainee is predicted to very slightly drop; however, it is possible that this relates to issues around rounding to the nearest full day for respondents and in reality the average amount of on-the-job training per worker will remain broadly the same. It should be stated that the difference between the two amounts above equates (based on an 8 hour working day) to just over 1 hour and 20 minutes of a worker's time over the course of a year.

## Investment in training

44 businesses with a combined turnover of just under £236 million were able to provide an estimation of their investment in training. In the last 12 months they have spent just over £727,000 (or 0.3% of their turnover) on training just under 1,000 directly employed workers (total 979<sup>76</sup>). This equates to a total training investment of £743.34 per trainee in the last year.

*NB. This figure is skewed upwards by one large business which has invested £2,000 on average in each of 150 workers trained. Without this outlier, total training spend is £427,000 and spend per trainee is £515.08.*

Next year these businesses predict growth (by 14%) to £268 million but appear to have plans to invest slightly less in training slightly fewer workers - a total investment of £695,000 (0.2% of turnover) in training 966 workers at an average of £719.55 per trainee. Removing the outlier mentioned above, these figures drop to £395,000 invested in 816 workers at an average of £484.07 per trainee.

## Training Demand

56 Businesses (1 in 2 from the full sample) were able to identify a range of different training wants and needs for the next 12 months which are quantified below. As can be seen, the greatest demand is for Health and Safety; and only 1 firm mentioned SAPs unprompted:

	Number of businesses requesting	Number of staff for whom training requested (NB minimum number - some businesses unable to provide numbers)
Health and Safety Training (Asbestos, COSHH, Manual Handling, Abrasive Wheels)	23	391
NVQ L2	17	35
Access Training (PASMA, IPAF, Scaffold Insp)	9	22
NVQ L3	8	19
Specialist training (Lead, hard metals)	6	6
Site Safety Plus (SMSTS, SSSTS, H&S)	6	3
First Aid	5	31
Apprenticeships	5	22
Management training (Surveying, estimating, NEBOSH etc)	4	10
NVQ L6	3	2
CAD	2	2
Accountancy / Finance	2	1
Heritage	2	
NBS Create	1	10
Driver Training	1	8
Hot works	1	5
Roof Tiling	1	5
BIM	1	3
EPDM Rubber Roofing	1	2
IT	1	1
City & Guilds in Plumbing	1	no estimate
CIPD	1	no estimate
Environmental Awareness	1	no estimate
QS degrees	1	no estimate
SAPs	1	no estimate
NVQ L4	0	0
Skills training (Pre-NVQ or Upskilling)	0	0

<sup>76</sup> We noted from some responses that contractors may have, despite the instructions and guidance in the survey, have included an unspecified number of subcontractors in their estimates

## Barriers to Training and Development

Complementing the detailed qualitative insights found earlier in this report chapter from the focus groups, 34 contractors also provided some insights through the phone research that reinforce some of the reasons as to why they perhaps do not train as much as they could, should or would like to. These broke down into 5 key areas which are outlined below, with the biggest barriers appearing to be time away from work for roofers and the direct costs associated with training.

Barrier	Number of businesses identifying	Example quotations
Time	13	<i>"Time away from work, training needs to be on site to maintain progress on site, not losing staff for a day a week or more."</i>
Cost	11	<i>"Budget restraints and resource."</i>
Geography	8	<i>"Distance from colleges recognised by the industry."</i>
Course / trainer availability	7	<i>"Gaining access to training courses."</i>
Quality of candidates	4	<i>"Difficulty in recruiting people with the correct attitude."</i>
BASE=34. Multiple responses possible		

## Unmet training needs

82 businesses answered a question about whether they had unmet training needs. Just over 1 in 3 of these businesses (Base=29, 35%) stated that they did.

- There was significant regional variance with respondents in the Midlands and North West reporting higher levels of unmet need and much lower levels reported in London & Southern Counties and the South West.
- Federated businesses were more than twice as likely to report unmet training needs than non-federated businesses.
- Half of all sheeting & cladding businesses stated that they had unmet training needs compared with just over a third of pitched and flat roofing businesses.
- Larger businesses were more likely to report unmet training needs than smaller ones; 71% of businesses with over 50 workers reported unmet training needs compared with 23% of businesses with fewer than 10.

Examples of unmet training needs include:

- A general lack of courses and qualifications (specifically mentioned in Scotland)
- A lack of roofing specialist colleges
- Geographically specific L2 Apprenticeship training (specifically mentioned in Kent)
- New Technologies
- Asbestos
- Slating and some tiling specialisms
- Single ply
- Lead work
- Flat roofing
- Scaffolding

The Steering Group had identified at the beginning of this project a number of market challenges that were preventing a greater penetration of training within the roofing industry including: the older workforce being reluctant to train officially/formally towards qualifications; access to the right training locally; an informal training culture; prevalence of skills gaps and knowing how to solve them; and the cost of training. Quantitative assessment of some of these issued was included through the formal surveys with roofing contractors who were asked to rate the following aspects of training provision available to firms like their own:

	Excellent	Good	OK	Not very good	Poor	Don't know
Affordability of training (i.e. the cost of training)	5%	25%	<b>39%</b>	13%	3%	16%
Ease of access (i.e. availability of training locally)	9%	17%	<b>30%</b>	17%	17%	10%
Relevance of training	10%	<b>29%</b>	28%	14%	10%	10%
Quality of training available from colleges	-	14%	17%	15%	19%	<b>36%</b>
Quality of training from private training providers	8%	25%	26%	3%	4%	<b>35%</b>
Quality of 'user' training from manufacturers	8%	<b>38%</b>	21%	5%	3%	26%
Duration of training courses	1%	25%	<b>43%</b>	5%	1%	20%
BASE=79-81						

#### Key Points:

Amongst this sample there are some positive training cultures and investment so we cannot be certain how representative they are of the wider sector. However, it is clear that they have identified a combination of barriers and disincentives that inhibit the full amount they might invest relating to: time and cost (away from site especially), proximity/ease of access and their opinion about the quality of training from colleges. There are encouraging opinions about the quality of training from private providers and manufacturers for the strategy to build on. On site solutions would also seem a beneficial pursuit based on the insights shared by roofing contractors.



### **Case Study 1#: Investing for Growth**

This Scottish based roofing contractor working in public housing, commercial, new house build and re-roofing contexts has direct workforce of 125 and has consciously invested in 24 apprentices with view to taking on 12 more again in 2017. Having seen good demand for their services and the ability to look ahead at an order book for 3 years the business took a proactive approach to training for the future linked to the wider treatment of its workforce.

*“We train our staff because a highly trained workforce is a safer workforce. We are also thinking that our £250k investment in apprentices (just for year 1) and wider upskilling means we’ll have resourcing in control.”*

This is not a typical roofing company though. It is palpably progressive and enlightened. It says it hasn’t had much contacts with outside bodies or roofing membership organisations but does claim CITB grant. It provides mentors, it has a forward plan for skills training, a track record in analysing the skills and knowledge gaps of its workforce and duly plugging them and it is on a mission to ensure relevant contextualised training helps workers get things right first time. As well as accreditations prevalent in the sector, there are different ones that perhaps create that extra edge and competitive advantage for a firm who is serious about investing for growth.

*“Resourcing, productivity and quality standards are our priority. And the world is moving to digitisation such as digital self-certification of roofs and digital time recordings. The impact will be humungous so we’re looking to go down that route.”*

### **Case Study 2#: What to do with young people and the supply chain?**

Despite this roofing contractor’s size (with over 550 including the subcontractor base) and maturity (over 20 years serving the industry) and wider general experience of managing gangs and raft of accreditations it has been unable to integrate young apprentices into its workforce.

*“We tried but it’s too tough on site for young people. They struggle to get to work on time and their physical ability is limited. We are stretched now and trying to integrate them into commercial and design but people are not keen so we are having to create our own framework.”*

The business says it struggles to plan ahead for training because it is too reactive to achieve; however, it is using a new skills matrix that is helping identify gaps.

“Everyone has core training but we want them to have complex project capability. The consequences of not getting this right could mean project delays and issues with quality.”

What would help this business? Funding for management and leadership and someone else taking on the responsibility for upskilling the supply chain.

*“There ae so many unskilled, workers, too many operative out there. They are so transient – need to get them through NVQs.”*

Tied to a small number of main products the £200k training budget (2% of turnover) for direct workers does not equip them for multi-skilling; and nor does it extend to their subcontractor base. It makes a 4 day on and off the job average training day investment per employee per year and says that generally the situation for training is not a problem; it is recruiting and retaining staff that is more difficult.



### **Case Study 3#: Two in five with skills gaps**

Despite the headline, the training needs analysis exercise just completed by this large roofing company has suggested nothing major in terms of skills gaps consequences. Three fifths of direct workers have formal roofing qualifications and this figure will remain largely static in the next 12 months. Managers are doing management VQs and apprentices, though fewer in number than they would have originally been this year (because of the uncertainty around the apprenticeship levy) are also going to be getting their NVQs.

With a broadly traditional approach to skills and development the business does invest more than the sector average in off the job (4 days) and on the job (6 days) training per employee per year and most experience some form of training each year. Training investment is approximately 1% of total turnover. There is no cross over between the types of roofing that operatives carry out.

*“There is more work available to us than we can take on. Everyone knows where they stand. We have a 3-year order book. We train our staff to meet our legal, regulatory and compliance requirements.”*

What would help this business? Some more certainty around apprentices and according funding support as they consciously cut back this year which means some people haven't had the employment opportunity they might otherwise have had. More generally, there is not enough skilled labour to meet demand which means there is a need to boost the labour pool for recruitment purposes.

## 9.0 Future Needs

Looking to the future, the research with this sample of roofing contractors suggest a number of headline indicators of their future intentions and desires that might impact the positioning of any industry-led future roofing workforce development strategy:

- 1 in 2 (52%) firms intend to grow in terms of £ turnover in the next year, with 35% expecting turnover to remain the same and 13% expecting turnover to decrease.
- One in three firms (37) intend to recruit c.180 staff next year (+ 10% net employment growth). Roofing specialists are more likely to be sought than non-specialists.
- Two thirds of firms say it is quite or very difficult to recruit (skilled labour) suggesting they might welcome support with this workforce challenge.
- A demand from 35 (out of 108) businesses to potentially employ 77-78 Apprentices next year. This is a slightly higher % of firms interested in Apprentices than currently employ them (31).
- Proactive efforts likely to be made by the (mostly larger) roofing contractors to take on the work that is available to them but that they cannot currently take on (which should result in a larger directly employed / subcontractor workforce).
- An increasing number of roofing firms (of all sizes) likely to be interested in multi-skills/knowledge to reflect the multi-disciplinary nature of the roofing industry.
- Demand from 1 in 2 businesses (56) for a range of (25) different training wants and needs for the next 12 months quantified as 578 'training incidences'<sup>77</sup>.
- Demand from at least 44 businesses for 25% of their workforce (191-242 staff) to achieve a formal qualification in the next 12 months.
- A very slight net increase in CSCS cards expected by this sample of firms without any other intervention.
- The suggestion that 4% more workers will be trained next year compared to this year; but that investment spend per worker (trainee) will unlikely increase (may reduce) against a context where firms expect c<10% net employment and £ growth.
- Demand for training and development driven in part by the recognition by (1 in 3) 40 firms that have identified skills gaps in their workforce (equating to 500 workers or 25% of their total directly employed workforce).
- 35% of roofing contractors identify unmet training needs, suggesting there is a 'potential' market for training that is currently untapped.
- 35% of firms say they find it quite or very difficult to 'train their staff' suggesting they might welcome support and solutions in this area of workforce challenge.

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<sup>77</sup> i.e. this is not the same as number of people that require training as 1 person may have > 1 type of training experience or incidence

The research process asked roofing contractors: “If the RIA were to develop a case for funding to support businesses like yours to help you recruit, train or retain staff in future, what would be most helpful?” The following themes emerged from the respondents:



## Financial

*“There should be a law to make people pay the money they owe - cash flow is very difficult.”*  
*“There's nothing better than on the job training. I'm fully compliant but in order for me to do that it costs 4-5k a year. All I get is three stickers.”*  
*“I have three young lads who work for me - trying to train up in house. I can't fund college - too expensive. They are self-employed, but they work for me full time. I pay their taxes.”*  
*“It would be good to have a grant for training because when you take a day out you lose money.”*

## Training

*“We had CITB apprentices in the past. The paperwork was a nightmare. Also they were gone for 2 weeks at a time. It put us off. Training should require less time off. A couple of days a month.”*  
*“Years ago C&G was by far superior training. You felt very certain. We need one authority to do the training. No accelerated courses - need experience.”*

## Promote the sector as a career (to help firms recruit with less difficulty)

*“Apprenticeship scheme - can't get young kids in”*  
*“Training and keeping young apprentices.”*  
*“Showcases for the industry - getting young people some hands-on experience so they know what they're getting into.”*

## Nothing

*“Help no longer needed. Encourage people to go into the trade.”*  
*“Not needed. Just take on people with the qualification.”*

A further follow up question was asked to help shape future solutions: *“The RIA is obviously very keen to help any roofing company to be as productive, safe and profitable as possible. Is there any practical help they could provide to help your business with this in the next 12 months? “*



### **Nothing**

*“Nothing. These companies try to get you in debt and hang you. You should provide a good service without an outside organisation, there's something wrong.”*

*“We're pretty good on snagging - again a lot depends on how good the guys on the job are but we do mainly know each other.”*

### **Advice and Reassurance**

*“Hard to say - some kind of reassurances about the state of the market could help (it feels like there's uncertainty around but that means more people are refurbishing rather than building from new and that's our core market).”*

*“If there was an innovative new product, they should come out and tell you how to use it. (Manufacturers)”*

### **Funding**

*“One area could be an improvement is contract managers. At the moment all our managers have Black CSCS. None will do NVQs so 5/7 have got their cards through industry accreditation, two have got NVQs. would like soft skills funding - contracts, tenders that type of thing.”*

*“Make sure we get the people on training - subbies don't get paid for training - more likely not to attend training. Funding for subbies.”*

## 10.0 Emerging Solutions at the Interim Stage of this Project

Taking stock of the different insights collected from roofing conferences and supply chain events, the formal survey, the focus groups, the Steering Group's ongoing expert steer, the local insights of the RRTGs and RIA representative, the BCP Standardisation project, and the wider literature review preceding this report, a number of thematic solutions are starting to emerge worthy of development in the next stages of the research.

Firstly, we must not make the mistake of suggesting that roofing companies don't train. The companies we have met and interviewed all appear to train in some form, and where they have a workforce, offer a good proportion of those workers the opportunity to train if it is driven by regulation (law) and / or clients demanding evidence of HS&E.

This behaviour appeared common amongst both federated and non-federated roofing enterprises. But beyond the mandatory requirements, training cultures, attitudes and behaviours start to vary between these two types of enterprise. It could not have been made any clearer through our consultations that unless training was required either by law or by clients as a condition of them being able to win or deliver a contract, investment in training would likely be 'the bare minimum' or 'just enough'. So any strategy to stimulate investment in training and development in future must seek to affect the drivers and levers used in combination to change behaviours otherwise sector-wide change is unlikely to be achieved. This means tackling a number of issues that go far beyond simply engaging with roofing contractors and making them aware of what is available, and even beyond the means of enhanced incentives or funding (though these activities do indeed help firms once they have committed to something and engaged with the support system available). It means:

- Putting 'quality' at the heart of the industry – quality of workmanship, quality as a prime driver rather than secondary driver of client procurement, having inspections and evidence (of workforce capability) checks that contractors believe in and value (or at very least are driven by the desire to avoid legal and financial penalties) and courageously asking whether the proliferation of accreditations and organisational affiliations and schemes are all pointing in the same direction with the same level of consistency and rigour to help raise the benchmark for skills and quality in roofing
- Looking not only to CITB and other outside external funders for financial support to help the industry tackle deeply entrenched methods of recruitment and attitudes towards training, but also to the industry itself, to invest its own money and energy into its directly employed and subcontractor workforce 'together', collectively and with confidence that what they do invest in is of a recognised 'industry standard'; and that it will be appreciated by the customers and clients that buy their service
- Working with other strategic bodies who have already identified issues that inhibit investment in training such as poor or late payment cultures that naturally knock-on to smaller roofing firms' attitudes towards, indeed ability to take risk, to employ or to train differently
- Examining not only the availability, affordability and accessibility of formal training providers in the UK, but their quality, their value, their reputation and where possible identifying how that supply side can be strengthened to meet both the specialist and increasingly multi-skilled roofers required in the future

There are underlying factors in why many roofers appear so reluctant to engage in formal training and qualification achievements beyond compliance training. Three selected comments highlight this:

- *“Roofing isn’t seen as a skilled trade”*
- *“We have to prove we have put everyone through Health & Safety training to meet the contractor requirements but they don’t ask for trade qualifications and don’t pay extra for quality”*
- *“In 30 years running this company nobody has ever come to me asking to be a roofer”*

Perhaps it is a legacy from 40 years or more of roofers not adopting formal training programmes or seeking to develop the workforce and the sector but there is a perception from clients and notably from parts of the industry itself that roofing is not a skilled trade or a career to consider. This attitude pervades every discussion one of our lead consultants has had to date with roofing contractors. Pay rates for roofers are lower than other trades such as joinery and bricklaying. Profit margins are tight and recruiting new workers is extremely difficult and training them through formal qualification programmes is not a priority. All of this is reflected in the lack of training provision and perhaps allows roofers to proclaim the difficulty in finding local and good training.

Hence and perhaps why this attitude becomes self-fulfilling with an industry that has relatively lower wage rates and is predominantly made up of SME and micro contracting “teams” operating on tight margins and where training is thought to be done on the job via more experienced workers. So how do we go about demonstrating to roofing companies how investing time and money in training and developing their workforce through accredited training programmes will show a viable return on such investment?

Without clearly demonstrating the ability to gain returns on training investment including the ability to win more work, increase turnover, productivity and profits then we will still struggle to create demand for training. This is why we think central to any future workforce strategy is the need to establish roofing as a skilled and professional sector that encourages companies to identify the kudos and added value that comes with it should be the priority for the RIA.

### **Learning from the Scaffolding Sector?**

In discussions with roofers the research team has been reminded that scaffolders and roofers were always considered as the “rough end” of construction. Well, scaffolders have very successfully moved their sector forward through creating their own Industry standard for training and assessment via the Construction Industry Scaffold Registration Scheme (CISRS). These are 5 and 10 day programmes which every scaffolder seeking to be registered under the CISRS scheme must undergo – this is in addition to the scaffolding VQ and has become the benchmark standard that Scaffolding companies use to verify their workforce capabilities. The HSE and all the major construction companies now mandate CISRS registration on site for scaffolding companies. Is there something for the Roofing sector to learn from here?

The RIA and CITB recognise that there is a limited network of (c60<sup>78</sup>) colleges and training centres distributed across the UK that does not supply ‘all’ specialist training for the different roofing technologies that contractors in each regional locality requires. This theme is explored in the next chapter which considers the ‘provider network’ perspective.

<sup>78</sup> This is the number of centres listed in the most current RIA Training Prospectus 2016 allied to a number of providers identified by CITB’s Research Team in September 2016 that offer qualifications with the term ‘roofing’ in their title (this figure does not include the training delivered by the network of manufacturers located across the UK)



In developing any training solutions, the research team would highlight the need to look at each of the 3 principle roofing systems to identify any differences in training behaviours and why. It would appear that the flat roofing systems and sheeting and Cladding are the areas where clients are most likely to seek evidence of training (though opinions suggest this is rarely a consistent process).

- In flat roofing systems there are 2 principle areas – the hot systems such as mastic Asphalt and bitumen where the risks from using hot products demand some clear evidence of skills and knowledge and importantly the insurance levels for such work will drive companies to minimise risk on site through training.
- The sheeting and cladding sector operate in a more commercial environment working for major construction clients who demand on-site supervision, CSCS cards and proof of Health & Safety training and accreditation (though again the consistency of these checks was questioned by contractors we interviewed).

Client demand for such evidence would appear to be significantly lower in the pitched roofing sector where much of the work is domestic refurbishment or working for small developers/homebuilders who do not call for (or even understand the need for) companies to demonstrate any accredited skills within their workforce. Even when working with major developers, housing associations and homebuilders there appears to be little evidence of these clients demanding proof of the workforce skills and experience of their supply chain roofing contractors we have been told through this research.

Increasingly, one can observe responses from roofing manufacturers and suppliers as they strive to provide training on their systems and products in order to promote better quality installation and minimise brand degradation from poor workmanship.



So there are some drivers in existence but if client expectations and demand for quality and increased productivity do not gain momentum then RIA is unlikely to produce the levels of demand for training that will engender growth in such provision. Given the nature of the sector with high levels of self-employed labour, micro and small companies accounting for the majority of the workforce and a significant lack of supervisory and management then without a clear set of drivers it is unlikely that roofing companies will seek to engage with formal training as much as they ought to or the RIA feels they need to.

### **Making connections to drive change – Roofing Industry Standards and Accreditation**

Long-term programmes such as the Home Building Skills Partnership could prove a catalyst for change as they use their partnership with major developers, trade bodies and supply chain collaboration to encourage workforce development to become the norm. This will allow homebuilding to drive up standards as has happened with construction bodies such as Build UK and CECA and will also expand client expectations within the Housing Associations, Local and Regional Authorities. The RIA could be taking ownership of and setting standards that creates the brand of “Accredited Roofer” as “the” level of proven competence and capabilities and presents roofing as a viable and credible trade within homebuilding, and the other contexts in which roofing firms provide service.



## 11.0 Training Provider Perspectives

The Skyblue team completed interviews with 16 representatives of the following 11 training providers:

### 5 Colleges

- Cornwall College
- Hackney Community College
- Leeds College of Building
- National Construction College
- South Devon College

### 2 Roof Training Groups

- South West
- Wales

### 4 Private Providers

- CC Training
- CNB Consultants
- Heritage Skills and Building Centre
- Lead Sheet Association

In addition one self-employed roof trainer gave their views, thus **in total 17 responses were received.**

Of the 17 respondents, 9 were roofing specialists (i.e. within their organisations they were directly responsible for the delivery of roof training) while 8 held more strategic roles with oversight for and some involvement in strategic decision making.

### Training Delivery

Within traditional colleges interviewed all roof training is Apprenticeships. Private providers and the National Construction College are the only organisations delivering non-Apprenticeship training. In terms of subject matter, 6 of the 9 roofing specialists deliver slating and tiling training, 3 deliver flat roofing training and 3 deliver sheeting and cladding.

Across 8 providers in this sample there is a capacity to deliver 266 Roofing Apprentices; and 202 learners from other learning (across 4 providers of whom Lead Sheet Association represent half).

**Key Point:** While Apprenticeships are not particularly highly in demand from roofing contractors<sup>79</sup>, both in breadth and overall capacity they represent the bulk of roofing delivery amongst this small sample of training providers.

Perspectives vary by region – respondents in the South West describe low levels of ambition and less than positive self-perceptions – “Very poor” in Cornwall and “13 Slating and Tiling Apprentices – at present we’re fine” in South Devon. In Leeds, there is greater positivity and self-confidence in capacity and capability, with 2 full time tutors and the ability to take on overspill from Birmingham. The National Construction College also report sending learners from Birmingham (in their case to Scotland) suggesting that there may be a shortage of capacity in the West Midlands in particular.

Most roofing specialists are unsure of the costs of Apprenticeships – those that are can describe the government funding (c. £6,000) but not the employer contribution.

<sup>79</sup> Although we have interviewed some larger contractors that need support to take on apprentices to the volume they used to or wanted to, but haven't done so owing to uncertainties with Apprenticeship Levy reform in 2017

## Market Attitudes

Seven of the eight strategic leads interviewed were able to give a view on the current state of the market for construction training; of these three stated that there was more work available than they could take on, three stated that there was the right amount of work available, and only one that there was insufficient demand to sustain their current provision (this last respondent was from one of the Regional Training Groups).

However, only one of the eight strategic leads expected to increase their construction offer (specifically around site supervision); of the remainder, three specifically did not intend to while the remaining four were unsure; challenges highlighted by respondents in terms of not being able to commit to expansion (in the face of a relatively buoyant market by their own assessment) were:

- **Variable contractor demand**
- **Supply of quality assessors and tutors**
- **Space**
- **Delays in engagement by major stakeholders**

Understanding demand and industry requirements is critical to the decision making process of training providers in terms of what courses to offer; the process described by providers is very much one of them being led by external factors rather than driving demand.

Among the roofing specialists, six out of nine believed they had sufficient tutors and assessors to meet demand at present, though within the comments four describe a shortage of staff to meet the current needs of the market:

***“Has anyone got enough? Finding good tutors is very difficult. Good trades don't teach.”***

***“I am the only full time instructor in the area that I know of. There is growing demand but I don't see colleges expanding. Not aware of any new instructors coming through for roofing.”***

***“When I talk to people in the industry they're tearing their hair out...a database needs to be created to identify where those assessors are. We don't know where and who they are. Most seem to be in the later stages of their careers so there will be churn.”***

***“We cope with demand so far but would like to do more.”***

## Employer Engagement

Views on employer engagement are variable; while four out of seven strategic lead respondents describe their attitude to engagement as proactive in terms of seeking out training business, one describes themselves as reactive and two (one private provider and one college) as passive.

This engagement is through meetings, open days, events, and conversations with specifiers and contractors; one provider describes a focus of their engagement on 'large contractors' which will of course exclude at least the 93% of the roofing sector's businesses that have fewer than 10 employees. School engagement is seen as a challenge by two providers, while three specifically state that their engagement strategy around roofing is no different to their wider construction strategy.

## Key Point

Roofing does have certain specific characteristics as a sector compared with wider construction; an even greater lack of diversity in the workforce and an employer base overwhelmingly dominated by micro-businesses. There is no evidence from these strategic leads to indicate that these differences are being reflected in the approaches providers take, and a provider education process may be required to ensure that provision is best placed to engage with and meet sector demand.

## Trends

The expectation prior to this research was that apprentice delivery had been at the very least different (particularly influenced by Trailblazers and Levy), but four providers suggest that they had experienced increased demand.

There was no convergence of opinion around other types of training – three providers thought that SUPs had been a growth area, two that short duration training had been. Only one respondent described a reduction in any types of training – conferences and online learning, and a subject-specific reduction around flat roofing.

While responses were less certain around the future direction of roofing training, there was convergence of opinion around the idea that there would be increased demand for apprenticeships and assessment services in the next 12 months, and some agreement that short courses and SUPs would be a growth area.

## Capability

Themes that emerged around capability were a high level of reliance on individuals (*“I have the capability – the college doesn’t”* – *“It’s my skill sets as an instructor & assessor that we focus on.”*) and a shortage of capacity which was seen as a negative in some areas (*“We could need another instructor if we get the demands we’re expecting”*) and a positive in others, particularly around specific subject matter – *“We are the only real lead training centre so nowhere else for them to go”*.

Providers describe three different approaches to keeping up-to-date, all of which bring challenges:

- 1: They assume that there will be no major changes in their area(s) of expertise; this is obviously an issue if they prove to be wrong.
- 2: Roofing trainers spend time outside their contracted hours reviewing reports and articles; on the one hand this means that providers keeping knowledge contemporary is reliant on individual employees being willing to work outside their contracted hours, while on the other there are serious question marks about the extent to which literature review enables an individual to remain truly up to date.
- 3: Roofing trainers work part time as trainers and part time on site. This does ensure that practical knowledge remains and is developed through practice, but it comes at a price of capacity as it reduces the number of available hours a trainer can train.

The most important criterion for successful roof training are seen as being willing learners and trainers with site experience. Other criteria include a mix of different experiences in the learner pool, a block release teaching model, and training providers that are passionate about apprenticeships.

Engaged employers were conspicuous as a factor in this only by their absence – though they are seen as important in seeing that learning is transferred to site; the other key component in ensuring this is on-site assessment. Two providers observe that the nature of the curriculum creates challenges in ensuring that all learning is site-relevant – *“I try to keep it relevant to what they’re going to be doing on site but not always possible.”*

Staff shortages are the cause of the biggest gap in providers’ offer – though there is also some evidence of a lack of ambition (redundancy and non-recruitment, along with the observation that, *“No gaps in our offer – we could take on 15 Apprentices”*)

### **Reducing Skills Gaps**

Leadwork is the most commonly identified skills gap by providers, which reflects the LSA’s self-perception as the only providers of that training. Slating and tiling is also identified as a gap by two providers, but there is a return to the theme of a broader shortage of training capacity.

Multiskilling is an area where provider perceptions vary from those of employers – while employers would value it, providers are concerned about creating *“Jacks of all trades and masters of none”* and would rather deliver specific curriculum-area focused training.

### **Meeting Employer Demands and Gaps**

The interviews with providers described some of the training needs that roofing contractors had reported over the summer that they could not get; as well as providing some opinions about the quality of providers reported by employers. This created a range of emotive reactions from providers who thought that these opinions would vary depending on the employer you spoke to. At best this indicates that ‘the network’ of training providers and any reputation it commands will at best be highly inconsistent.

### **Apprenticeship reform**

All eight strategic leads described themselves as very aware of planned reforms to the structures and funding around training in general and Apprenticeships in particular. Trailblazers are seen as an area of uncertainty (with two providers critical of a process whereby Apprenticeship standards are developed largely by employers with no experience of developing training programmes (*“...people who don’t have a clue...”*)) and they are indeed described by one provider as “scary”. The overall picture however is one of providers determined to make the best of a future which is as yet unclear; as one provider commented, *“There are more questions than answers at the moment. It’s about communication with employers. And we need clarity. It’s frustrating.”*

### **The Future**

The key challenges seen to be facing the sector for the future were:

- Improving sector attractiveness
- Greater consistency of curriculum
- More instructors

The BCP programme was mentioned by two strategic leads as a key component in training delivery looking to the future and a process of mapping manufacturer training to the NVQ pathway was seen as important. The one ‘big idea’ identified by training providers outside this was the idea of a Lead Sheet Association training centre in the North of England (based on feedback from Leeds College of Building, possibly as a partnership with them) to mirror the one training centre currently operating in Kent.

## Summary

### The need for a UK Network 'Map'

These interviews were with a sample of just some of the actors that form part of a wider UK training and assessment network to support the training and assessment needs of the roofing industry. The entire network would look larger and different as it would include the assets of not just FE but all private providers, manufacturers and large employers that play a part now - or could play a greater part in future – of delivering more, relevant training to greater numbers of roofing companies in future. Creating this 'map' of assets, capacity and capability will be a useful practical step in generating a dialogue with investors about where more specifically gaps in specific provision perhaps need to be plugged in future.

### Barriers to training providers doing more in the roofing sector

The main barriers described by this sample of providers included:

- The high costs associated with being able to offer roof training unless you happened to be heavily sponsored by large manufacturers or suppliers in the sector
- Issues with having to achieve English and maths skills outcomes linked to Trailblazers and the reality that many learners from this sector will struggle
- The difficulties in accessing funds to improve equipment / resources / training centre assets
- Difficulties in reaching self-employed / micro businesses and the effort therefore of engaging them and building up course numbers to be sufficiently viable

### Drivers to stimulate providers to do more in the roofing sector

The main drivers were reported as being:

- The demand for qualified people 'across construction'
- The driver of clients / contractors asking for CSCS cards and the NVQ2 qualification mandate that is triggered through this procurement behaviour
- A demand for lead (reported by a number of providers)

### Big Ideas

Providers were asked if they had any need for support to enable them to change their offer or improve or expand it to better meet the future needs of the roofing industry. There were very few suggestions but they included:

- A centre for 'lead' training in the North of England
- Funding support for providers who wanted to take training out on construction sites using purpose built vans (for mobile courses)
- Help in securing more quality, motivated assessors
- For one private provider any support they could receive to expand their facilities in Milton Keynes
- Support to enable them to expand roofing apprenticeships to older people with experience to help them get the NVQ and CSCS card

## 12.0 Manufacturer and Supplier Training in the Roofing Industry

As part of the research carried out by Skyblue for the NFRC on Workforce Development we have interviewed 7 manufacturers/suppliers and had informal discussion with 4 more. With one exception, these companies deliver training on their products directly to the industry and to professionals involved in specifying roofing – e.g. Architects, Engineers etc.,

The extent and depth of the training varies but is predominantly of short duration (5 days or less) and focussed on the product(s) and specific methods of installation. Most manufacturers also provide CPD workshops and seminars to update on product changes etc. Facilities, capacity and resources also vary but all those delivering training have dedicated training staff and many deliver training on site or at locations convenient for employers.

In many instances manufacturers are using training as a mandatory requirement before roofing companies can seek to install their products. Training is delivered and vetted by the Manufacturer and companies and individuals are registered and given a “licence to install” the products / systems after completion of training. Those operating this process ensure quality by post installation inspections and sign off the work.

The flat roofing sector demonstrates major commitment from manufacturers and suppliers. Over recent years’ technological advances and product development have introduced significant changes in flat roofing. Single ply, liquid membrane, green roofs are all examples of where traditional training content for flat roofing has not kept pace with technology and manufactures have had to address this issue and have taken it upon themselves to deliver appropriate training.

Within the slating & tiling sector we identified only one manufacturer delivering training that whilst focussed on their products has relevance across the sector. In addition, all the companies (including the one who does not deliver training) identified that the roofing industry has a workforce who overwhelmingly don’t have evidence of training and thus have no recognition for their skills and knowledge. They see their training programmes as a way of ensuring training is delivered but equally is registered and recognised even if only by their own company and in relation to their own products & systems.

We can reflect on the reasons behind the drive to provide training which include the obvious commercial element for protecting brand name and ensuring their products are properly installed. This applies even more so where manufacturers offer extended lifetime guarantees for their products but only when installed by an accredited roofing company. However, it is evident that manufacturers have had to act to facilitate training due to the lack of available, appropriate and relevant training within existing provision. A good example being in Lead work for roofing where the 4 principal manufacturing companies directly sponsor delivery of training via the Lead Sheet Association as without this there would be no provision at all.

A further driver is the lack of capacity within mainstream training provision where there is significant under resourcing of Instructors and Assessors combined with major differences in regional delivery. There is some criticism from employers that the curriculum for roof disciplines is quite often outdated or does not cover the latest technologies and products and that manufacturer training is always current and directly relevant. Therefore, we should not be surprised that manufacturers and suppliers have sought to address the issues around workforce development and capability and whilst driven by commercial necessity the outcomes have become significant for the Roofing Industry. It is evident that most roofing contractors engage with manufacturer training. The research carried out by Skyblue confirms

this and 100% of the companies interviewed state they have used this form of training for at least some if not all their workers.

The industry has also recognised the value delivered by such training as exemplified by the recent development by NFRC of the BCP scheme to capture and record such training as evidence of a roofer's overall competencies. Given the evidence that manufacturer delivered training is responsible for much of roofing skills training and which also increases the multi-skilling in the workforce then it is worthy of consideration that such training should be given due recognition and directly incorporated into an accredited skills framework for roofing.

On presentation of these findings to the Steering Group in December 2016 a number of expert observations were made which should be considered when thinking of how best to position manufacturers in the wider ambition for a long-term co-ordinating Partnership:

- Consistency of training standards and approaches (to vet installers) are said to be highly variable and inconsistent between manufacturers
- Some manufacturers are reporting that they too have issues recruiting people into their workforce (especially machine operatives and sales); and skills gaps so how can they be supported through any new long-term workforce development strategy for 'roofing'?
- In respect of meeting some of those needs there may be a need to ensure any industry-led Partnership can extend beyond the specific scope of CITB, especially if the areas of off-site and lean manufacturing become a very important opportunity for the roofing industry
- Some manufacturers will also report that they have great enthusiasm for delivering training but that they – like other forms of training college or centre – may have fixed centres with limited or no capacity to expand, so what is the opportunity for developing satellite centre solutions as part of a wider Network solution approach?
- As a driver to change training behaviours 'approved contractor lists' are most effective so having this kind of approach more consistently (by clients / manufacturers) will likely be a useful intervention to raising the standard of quality amongst the supply chain for roofing
- It was suggested that manufacturer training for tiling and sheeting and cladding is neither as prevalent or as structured as it could be; and therefore having specific workstreams of activity 'by technology' may in this instance be highly appropriate

## **SUMMARY**

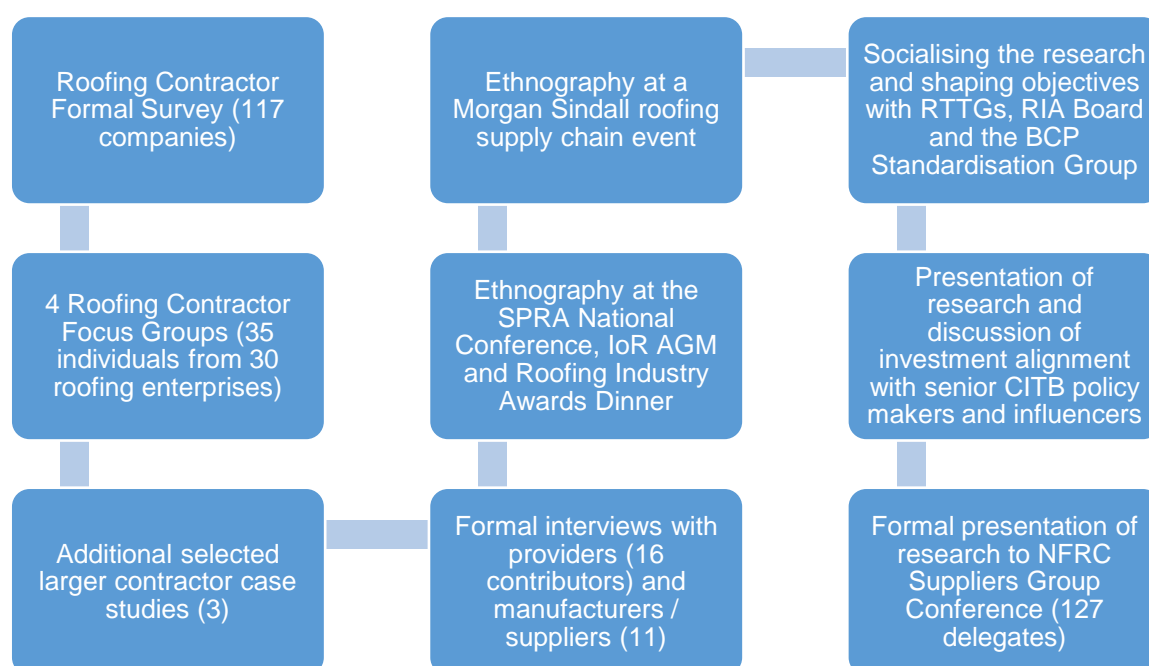
The training and skills development being delivered by manufacturers and suppliers has evolved into a vital and significant element of the training being accessed by much of the roofing workforce. There is an obvious attraction for employers and workers in such short duration and product focussed training over and against more formal off the job training delivered by colleges and independent providers but neither should stand in isolation and due recognition awarded to the workers who complete any of these training elements.

The industry will need to identify how best to incorporate such recognition when creating a unified roofing accreditation programme. There must be a process which will accept such training without creating barriers or hurdles that may see all parties – employers, workers, manufacturers and suppliers – dis-incentivised by such a process.



## 12.0 Stakeholder Engagement to Shape the Recommendations

On completion of the roofing contractor survey, which we felt necessary to lead the dialogue for this study, it was necessary to engage with a range of stakeholders through formal and informal means to socialise the three suggested strategic objectives; to test them; validate them; and add detail in order to produce some actionable recommendations. Here are just some of the means by which we have developed and evolved the recommendations that you will read about in the next chapter.

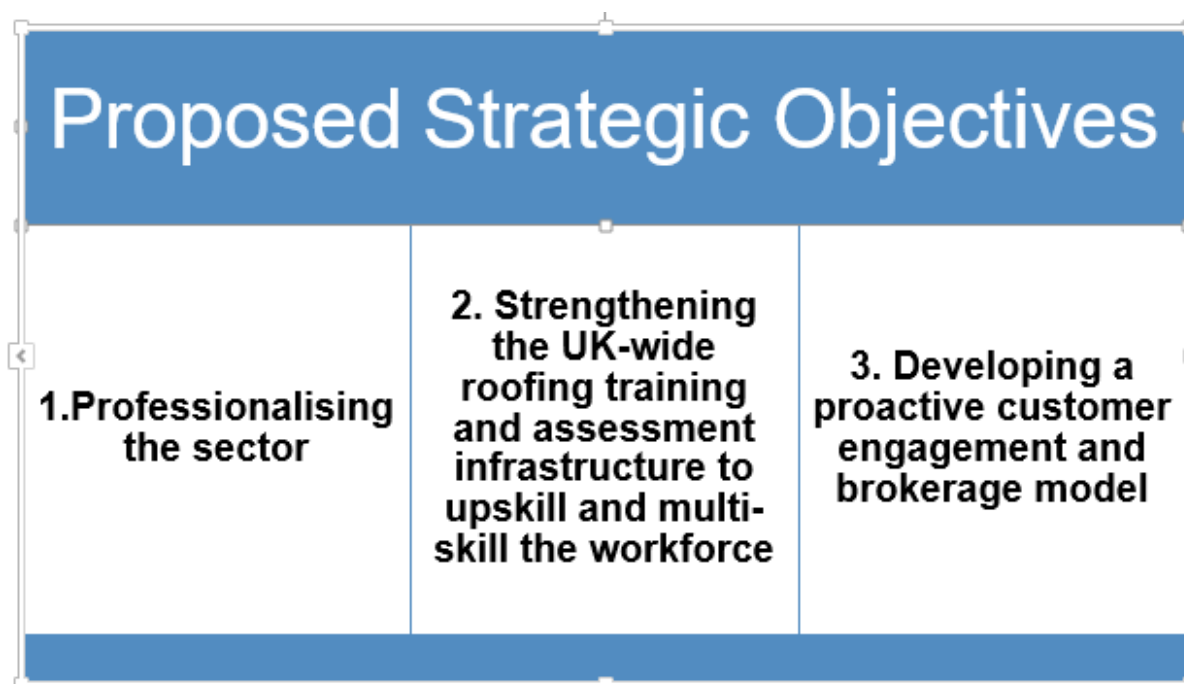


Between the supply of the interim report in September 2016 and this final report delivered in December 2016, the strategic objectives have been formally tested and socialised with over 150 different stakeholders. Their focus has held true, and the detailed recommendations that sit under them have become increasingly robust as a result.

Particularly important has been the discussions with CITB senior policy, investment and research decision makers and influencers who have really welcomed the opportunity to see this evidence base compiled in such a rigorous fashion. Alignment of its findings to CITB's future funding and investment plans, its recently published Onsite Assessment Report and Partnership Team on the ground mobilisation plans to support sector such as roofing has been confirmed. The research adds to the evidence base that CITB continues to collect and interpret in relation to 'supply and demand' at occupational levels; and can provide the basis for further discussions with a range of staff across CITB that could add value to the implementation of the recommendations that follow.

Outwith CITB, feedback from the various presidents and chairs of groups that have received the opportunity to see the emerging research results and discuss the potential for a long-term co-ordinated plan to address workforce challenges in the sector has been positive. There will be divergence in opinion about how precisely to operationalise the study's recommendations, but they are united in their belief that without a long-term collective measure nothing significant will change in the sector's approach to skills and training.

## 13.0 Strategic Objectives and Recommendations



### Strategic Objective 1: Professionalising the Sector

Any long-term workforce development strategy for the roofing sector should start with the core objective of building its status as a skilled profession characterised by employer-owned industry standards, valued learning and training, relevant qualifications and a more defined career proposition with accredited progression routes for those yet to discover the industry. It tackles the question: ‘how does the industry get recognition for roofing as offering vital skills?’

Through improvement of the status of roofing as a career, positive gains should be made long-term in respect of its attractiveness<sup>80</sup> for new entrants and as an industry that can command greater respect (and wages/rewards) for the skilled work undertaken. Professionalisation should also lead to a greater consistency in the quality of work undertaken by more contractors across more contexts meaning greater levels of client and customer satisfaction. It may increase the current very low barriers to entry in to the sector too.

There are 3 core recommendations to translate this strategic objective into action:

- 1. Creation of the Roofing Skills Partnership**
- 2. Development of the ‘Accredited Roofer’ model**
- 3. Driving quality through client procurement behaviours**

<sup>80</sup> A situation report should be completed by the RIA to establish the full range of sector attractiveness activity already happening or planned across the various federations to identify whether this can be better co-ordinated and collectivised with a strong sector value proposition that will be more attractive to an agreed short-list of target groups e.g. pupils in schools, students etc.

## 1.1 Roofing Skills Partnership

There is merit in considering the development of a long-term 'Roofing Skills Partnership' that will be industry-led and oversee all recommendations in this study. This will likely require a small, skilful leadership group drawn from industry including roofing contractors across the main contexts and technologies, manufacturer<sup>81</sup> and client representation. The Leadership Group for this Partnership will require expert facilitation and a dedicated resource to enable actions to be taken forward. Its purpose will be to:

- Create an infrastructure to deliver agreed workstreams of activity that will make the biggest impact to the industry between 2017 and 2021.
- Develop a 4 year Business Plan and associated Engagement Plan that will see more roofing businesses in the UK decide to participate in 'more than mandatory or compliance' training and more roofing companies feeling confident to plan ahead and invest in themselves (mindful that 69% of roofers are self-employed) and their workforce (where they have one).
- Galvanise co-investment (from industry, Government, CITB, other sector bodies<sup>82</sup>, clients, manufacturers, suppliers, providers and other relevant federations or initiatives (e.g. the Home Building Skills Partnership) to tackling agreed skills gaps, skills shortages and sector attractiveness challenges.
- Raise the status and professionalism of the sector through co-ordinated action to develop and own industry accredited standards and contextualised training that will be more attractive to more of the UK's 8,000 roofing enterprises.
- Develop practical action at local levels through pilots that have the effect of more roofing companies accessing more relevant training to meet their current and future needs; areas should be targeted that are 'vulnerable' or 'specialist' in terms of having an evidenced shortfall<sup>83</sup> in the ability of training supply to meet industry forecast training demand<sup>84</sup>.
- Improve the overall cohesion and joint capability of the training and assessment network (including FE, private, manufacturer and large employer training assets) in place to support roofing in the UK through a mix of capital and revenue investments leveraged in by the Partnership to fill gaps where they are most inhibiting the performance of the sector<sup>85</sup>.
- Encourage training solutions that meet the identified skills gaps not only for roofing occupations, but individuals employed in roofing companies that are non-roofing occupations, but which are still critical to that business' success (with an emphasis on encouraging awareness of each other's roles to improve productivity).
- Recommend the best model for stimulating greater investment in training and development amongst the directly employed and subcontractor workforces that deliver roofing services.
- Improve the value attached to skills by clients reflected in their procurement cultures.

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<sup>81</sup> The Steering Group suggests the importance of incentivising slater and tiler manufacturers to get more involved in skills through this vehicle

<sup>82</sup> Including any with responsibility for off-site / lean manufacturing skills funding and interventions

<sup>83</sup> Through ongoing supply and demand research CITB has identified shortfalls of training provision to meet supply in 5 regions flagged as 'red' where more active support is required: North East, North West, South West, Wales and Yorkshire and the Humber.

<sup>84</sup> These terms are CITB definitions linked to their overall assessment of the extent to which an area has sufficient training supply to meet (specialist occupation/sector) training demand. It will be important in any future positioning of local pilots to connect fully with CITB's implementation plan (2017) for its 'Right Training for Construction Strategy' and to maximise its 'value chain' offer which includes activities such as focused local level granular research (if required); collaboration support at local level; mobilisation of CITB Partnership Teams on the ground where welcomed; and active facilitation (based around the premise of a local construction skills strategy which could be devised for roofing companies in local target areas. CITB may also help bring local partners together to support a 'roofing skills partnership' at that level through engagement with local authorities, LEPs and providers if this model is appropriate.

<sup>85</sup> It is uncertain at the time of this report whether we can expect a 'Provider Investment Fund' via CITB in future to complement its industry-focused 'Structured and Flexible Fund' arrangements; but if this were the case, discussions about capital requirements and industry and provider investments could usefully be held

## 1.2 'Accredited Roofer'

How can the roofing industry take ownership of skills and standards for workforce development that will recognise and accredit the training that is already being delivered? A potential solution is creation of industry standards that define the level for an "Accredited Roofer" in each job role and which will allow for recognition of multi-skilled and multi-discipline workers. Such a programme would cover differing routes of entry but with a final accreditation outcome that captures all workers who demonstrate achievement across the standard requirements.

Owned and accredited by the roofing industry this can complement formal qualification frameworks at any level VQ, ILM, CIOB, IoR or similar technical or professional registration. To attain the title of an **Accredited Roofer** would involve options for:-

- New entrants going through formal VQ based frameworks training. Best suited to apprenticeships, but which allows for achievements within the state funded/regulated system. This will include trailblazer qualifications.
- Workers who can demonstrate knowledge and ability to carry out their roles against an industry set of standards. This will enable the industry to accredit training that has previously been considered informal or unrecognised. *Note: this would benefit those workers who have previously achieved as they could gain recognition for other training and thus "enhance" their status through this industry accreditation.*

### **Entry Route 1:**

A formal training achievement via apprenticeship or other framework based programmes applicable to their job role.

### **Entry Route 2:**

Recognition for a minimum level of experience in any roofing job role – e.g. 3 years working on site roof tiling. Recognition would be gained via a professional interview carried out by an accredited assessor<sup>86</sup> and by written evidence from the employer or previous employers in the case of self-employed workers<sup>87</sup>.

### **Plus:**

- Certified training and assessment on systems or products delivered by an industry accredited manufacturer/supplier/trade body.
- Accredited achievements in HS&E relevant for site – e.g. Manual Handling, Working at Heights plus a L1 Health & Safety and a CITB HS&E Test pass for a site operative.
- SSSTS or SMSTS or similar higher level achievement for Managers and Supervisors.

This programme creates standards applicable to all workers going through training (both on and off the job). All must demonstrate skills and knowledge in their job roles as well as product specific installation knowledge and have undergone appropriate HS&E training to make them fit for site.

This process would enable recognition of regional differences in qualification frameworks as those elements can be accommodated across the accreditation programme.

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<sup>86</sup> Accredited Assessors could be drawn from industry and be trained as work based recorders who have the skills and knowledge to interview, assess and advise workers and employers.

<sup>87</sup> An additional or alternative approach to written evidence would be the presentation of photographic evidence of work completed (i.e. the digitalisation agenda for the industry)

### 1.3 Client Procurement Behaviours

Local and regional government, housing associations, major construction clients, architects and specifiers and the domestic consumer all need to understand how they can engage with a professional and competent roofing installer.

Whilst the approach for each type of client may need to be tailored the overarching one involves demonstrating that the industry sets, maintains and manages standards across the range of roofing disciplines and works to ensure a fully trained and competent workforce is in place to carry out the installation on their project.

The core elements of this would include:

- A unified roofing Industry delivering consistent solutions in workforce and industry development.
- Industry facilitating the right training and ensuring ongoing development of the workforce at all levels.
- Clear standards for professional roofing skills that enable clients to make decisions when selecting a roofing company.
- Advice and guidance for public procurement bodies on finding the right companies when going out to tender.
- Support for the domestic customer so that they will have confidence when selecting someone to refurbish their roof.

Solutions are not just about marketing and PR but need to demonstrate the commitment and support industry is willing and able to make to help its clients and customers feel confident when commissioning roofing companies for projects of any size and value.

Competent Roofer is a clear example which can be built on to enhance the standing of Roofing Companies across all disciplines and widened to include status of each company and its workforce capabilities.

Allied to this recommendation too is the identification in the research with roofing contractors that there is a proliferation of (40) different 'business accreditations' that in different contexts and for different clients appear to carry weight. Contractors appear to 'jump' when a client insists on a specific accreditation requirement as evidence for part of an Invitation to Tender, but sometimes do this without really believing in the value of said accreditation. Two further frustrations were noted:

- Those roofing contractors who say they have invested in such accreditations say that work will often still go to a contractor that has not invested in them and as such they feel that it has been a wasted investment if the procurement is still weighted towards price not quality.
- Clients say they expect a competent workforce, sometimes a qualified workforce at ITT stage, but that these requirements are not sufficiently enforced on site or during a job. This has the effect of undermining the perceived value of such investments.

Clients are different of course in each construction context for roofing and so influence that can be brought to bear in each situation may be variable; but at the heart of this recommendation is the need to add value to the accreditations that are being requested by clients and to encourage those that do invest to see the follow-through benefits of that risk and investment being made. A directory of all the different accreditations, their components and how they differ may also be a useful resource to educate both the client and roofing contractor communities and shine a light on the various benefits / overlaps between them.

## **Strategic Objective 2: Strengthening the UK-wide training and assessment infrastructure to upskill and multi-skill the workforce**

Any long-term workforce development strategy for the roofing sector should recognise that the network to meet the industry's training and assessment current and future needs has great strengths in some parts/specialisms and deficiencies in others. This evidence project has found opportunities for better aligning training provision ('supply') to the skills and knowledge needs of roofing contractors ('demand') through a well-coordinated network of formal off-the-job; manufacturer-led; and relevant on-the-job site (OSAT) based training and assessment options. This could mean identifying a range of capital and non-capital provider solutions across the UK, allied to the need to encourage a curriculum and training offer that can meet the needs of a 'multi-skilled' roofing professional<sup>88</sup> in future.

Through improvement of the UK-wide network of training and assessment provision it is anticipated that more roofing contractors than in 2016 will engage with, and invest in skills development activity for themselves or their workforce because it is: more relevant, more accessible/local and more affordable.

It tackles the question: 'how can we make it easier for more roofing contractors to access and invest in relevant training and CPD?'

Through improvement of the network, gaps in provision can be plugged to meet future demands. A menu of relevant training options<sup>89</sup> likely to be accessed by the roofing and non-roofing employees of roofing firms can be derived, promoted and incentivised to encourage a higher level of training penetration than is currently the case. There is divergence in opinion in the industry as to the extent of importance it is for the workforce to be fully qualified, but all appear to agree that all should be trained and have opportunity to improve their practice through CPD. Similarly, whilst the FE provider network appears to favour specialism in terms of its training provision for operatives, at least two thirds of roofing firms are multi-disciplined and would like their workforce to be multi-skilled allowing them to be more agile to changes in market pressures and opportunities. In an ideal situation, any roofing contractor could access what they wanted locally or on site; it should at least be possible to have lots of places where they can 'drop in' for training but again the network is limited in this regard presently. One practical suggestion that relies less on capital facilities but more on having 'on site solutions' is to create a mentoring system that perhaps more formally recognises the fact that the industry relies very heavily on experienced people on site to train others. There may be merit in looking at how such a network or system could be created 'across roofing', and how such individuals on site could be incentivised to act as champions / advocates / sign posters to other training for staff on site as part of their role. An ambition could be articulated for example in having a mentor in every roofing company with more than 10 staff by 2021<sup>90</sup>.

There are 3 core recommendations to translate this strategic objective into action:

- 1. Expanding the model to accredit manufacturer training in the industry**
- 2. Developing practical on site solutions for training, assessment and mentoring**
- 3. Plugging localised gaps in provision to meet industry training demands**

<sup>88</sup> Mutual awareness, basic understanding and appreciation of each other's roles by specialists and non-specialists within a roofing contractor business/context would boost performance too

<sup>89</sup> Aligned potentially to CITB's latest thinking for Sector Specific Training Plans and 'Training Lanes'

<sup>90</sup> This would equate to approximately 575 enterprises Source: Skyblue Literature Review Report June 2016

## 2.1 Expanding the model to accredit manufacturer and supplier training in the industry

Independent survey work with contractors has confirmed the importance attached to training they receive from manufacturers across the UK. Together, this network makes available a range of training assets that enhance the abilities of roofing operatives to install their products. Whilst there are inevitably inconsistencies in workmanship, manufacturers have a particular drive to ensure the roofing companies they select are as good as they can be because it affects brand and customer reputation. Building on this driver, there is an opportunity to further incentivise and support a UK-wide manufacturer network to achieve more consistent (and higher) levels of training standards to the point where 'all' training can be accredited.

Subject to independent evaluation of the current Basic Competency Programme<sup>91</sup>, this recommendation effectively builds on the momentum that should be created and sets the ambition for manufacturer and supplier training to be accredited as part of an overarching vision for the industry to take full ownership of accreditation; something akin to a concept of 'BCP+'. The effects of this intervention over time would include a more multi-skilled, qualified workforce (contractors, specifiers and architects) that has a range of localised solutions linked to continuous professional development across a broader range of roofing technologies than is currently the case<sup>92</sup>. The Roofing Skills Partnership would own this recommendation and expect to receive the results of independent evaluation of BCP in order to progress appropriately.

## 2.2 Developing practical on site solutions for training, assessment and mentoring

Roofing contractors explained that barriers to them training include cost, time, distance to a relevant training 'centre' and risk aversion. They welcome training solutions that are increasingly local, if not site-based, short and modular in their design. Regional Roofing Training Group and FE provider consultation suggested there was also a shortfall in active, trained assessors for roofing, a fact supported by the recently completed CITB 'Onsite Assessment; Capacity Research and Evaluation of the Current Model for Delivery'<sup>93</sup> (November 2016). It is therefore recommended that The Roofing Skills Partnership (if created) owns a workstream of activity that aims to make more relevant training and assessment available on site (aligning with the solutions recommended in the CITB report where possible to maximise joint investment approaches). There is also an opportunity to increase the assessor workforce through targeted incentives and support.

Specific to the roofing industry, there may also be an opportunity to increase the number of **work based recorders (on site)** as part of this 'assessment workforce' and this idea should be tested for feasibility. Similarly, the idea to create a network of (575) mentors in firms with more than 10 staff by 2021 merits feasibility testing.

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<sup>91</sup> The Roofing Industry Alliance (RIA) has secured a three year major CITB investment which will support four roofing federations with the development and the delivery of the BCP; The National Federation of Roofing Contractors (NFRC), Single Ply Roofing Association (SPRA), Liquid Roofing Waterproofing Association (LRWA) and the Federation of Traditional Metal Roofing Contractors (FTMRC). As part of this investment NFRC may wish to use its available budget for independent evaluation to identify the learning lessons and opportunities for creating the optimum conditions for success and alignment to the recommendations in this report

<sup>92</sup> A number of manufacturing companies have now been accredited to deliver BCP training including but not limited to those found on these press releases [http://www.langley.co.uk/news/-/first\\_nfrc\\_supplier\\_member\\_in\\_the\\_uk\\_to\\_be\\_awarded\\_bcp\\_training\\_status\\_for\\_rbm\\_70/](http://www.langley.co.uk/news/-/first_nfrc_supplier_member_in_the_uk_to_be_awarded_bcp_training_status_for_rbm_70/) and <http://rcimag.co.uk/company-news/kingspan-academy-launches-roofing-and-cladding-bcp>

<sup>93</sup> Research confirms that roof sheeting and cladding and lead roofing are within the top 20 occupations not completing an onsite assessed qualification over the past two years due to issues/barriers encountered; and that there are shortages in assessors for meeting future demand in sheeting and cladding and slating and tiling (in England). See pages 29, 30 and 33 of main report for key 'roofing' references



## 2.3 Plugging localised gaps in provision to meet industry training demands

Focus groups with contractors confirmed multiple examples where they could not access relevant provision to meet their needs. The formal survey with contractors also confirmed skills gaps amongst their roofing professional workforce and their non-roofing workforce that impacts on performance and quality. It is also a further constraint for the 1 in 3 contractors that say there is more work available than they can currently take on.

### Skills Gaps

Roofing Specialist Employees	Non-Roofing Specialist Employees
<ul style="list-style-type: none"> <li>• Technical skills</li> <li>• <b>Multi-skills</b></li> <li>• Supervisory &amp; management skills</li> <li>• Non-technical skills</li> <li>• Knowledge</li> <li>• Experience</li> </ul>	<ul style="list-style-type: none"> <li>• Business skills</li> <li>• Commercial Skills</li> <li>• Management skills</li> <li>• Knowledge</li> <li>• Experience</li> </ul>

35% identify unmet training needs

This recommendation requires an expert task-group to be formed once the Roofing Skills Partnership is established to lead on a range of feasibility testing to determine the best combination of capital and revenue based solutions to plug a short-list of 'high impact' skills and training gaps that the industry wishes to see prioritised. CITB's role in helping with these discussions is seen as valuable because it should allow for a short series of practical discussions and resolutions including, but not limited to:

- How appropriate would any capital interventions be for the sector? Two specific capital ideas have been put forward:- (1) an iconic 'roofing centre' that could help raise the status and recognition of the industry (linked to the first recommendation) along similar lines to the 'concrete centre' (2) a capital training centre for lead sheeting 'in the north' to recognise that there is currently only one centre (in Kent) to meet most industry needs.
- How any 'Provider Investment Fund' opportunities for the future could support manufacturers, suppliers, FE and private training providers overcome shortfalls in capacity and capability they mentioned in the consultation<sup>94</sup>.
- Maximising the support of CITB's Partnership Teams 'on the ground' aligned to their evolving offer (known as 'value chain') to:
  - Support Sector Specific Training Plans
  - Incentivise different types of training aligned to their 'Training Lanes'<sup>95</sup>
  - Complete further localised, granular research where feasibility is required and then commission localised pilots
  - Active facilitation of local partnerships to raise the profile of sectors e.g. roofing contractors with local authorities, providers and LEP to collective investment.

Supply and demand evidence research by CITB has found there to be a recognised shortfall in provision to meet industry needs in the North East, Yorkshire and the Humber, the North West, South West and Wales. These 'vulnerable' regions may provide a locational focus for prioritising work to take this recommendation forward.

<sup>94</sup> This might relate to equipment which is described as expensive by most centres that do not benefit from heavy corporate sponsorship; it could also include 'mobile' purpose built training cans on construction sites; or capacity building support to increase their tutor and assessor workforce or for smaller private providers an expansion of their facilities where they have an ambition to do more training with roofing contractors locally

<sup>95</sup> Lane 1: New entrant training Lane 2: Generic training Lane 3: Craft operative training Lane 4: Supervisory and management training

### **Strategic Objective 3: Developing a Proactive Customer Engagement and Brokerage Model**

Any long-term workforce development strategy for the roofing sector should recognise that it is an industry that comprises a high proportion of very small micro-businesses, a large proportion of self-employed individuals (69%) and a small number of medium to larger sized contractors. Solutions, language, attitudes towards and ability to invest in training differs accordingly. Finding focus to create impact in each segment is understandably challenging. Training behaviours also differ from larger companies able to identify formal training budgets and smaller companies struggling to do anything more than the bare minimum to comply. As quality, safety and productivity issues can affect anyone and any firm in the industry, there is an opportunity to create a model that will better reach those that do not or cannot train (for whatever reason), and those who do train but whom could be encouraged to invest in 'more than mandatory' training to help develop their business. In this way, the overall bar of quality is raised steadily and at a managed pace across the industry.

It tackles the question: 'How do we raise the bar of quality throughout the industry by making sure they are aware of, and can easily, engage with the skills and training system?'

By developing an engagement strategy based on the known, different characteristics of roofing enterprises (segments)<sup>96</sup> it should be possible then to align a devolved model of brokerage that will meet their preferences<sup>97</sup>. This is likely to be a multi-modal model i.e. self-guide/self-help solutions, telephone and face to face support with different depths and breadths of service and intervention required to reflect the business' need. If successful, this improved depth and breadth of brokerage should lead to a greater number of roofing companies feeling confident to invest in skills and training to raise their overall business/workforce competence.

There are 3 core recommendations to translate this strategic objective into action:

- 3.1 A model for driving greater training engagement across the UK**
- 3.2 Stimulating investment in training that is 'more than mandatory'**
- 3.3 Brokering the industry's needs with a stronger UK provider network**

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<sup>96</sup> Not just size, roofing technology and location but also characteristics such as their aspiration and ambition to grow their business and develop their capacity and capability

<sup>97</sup> Any model should take account of CITB's current Training Group Review recommendations

### 3.1 A Model for Driving Greater Training Engagement across the UK

This research study has found that approximately 1,500 – 1,800 separate roofing enterprises are in some way affiliated to one of the roofing federations and trade bodies, each of whom have a slightly different ‘training offer’ to their members. Of 4,334<sup>98</sup> registered roofing companies with CITB 1,589 (37%) paid levy of whom 76% were ‘pitched roofing’, 19% were metal roof and cladding and 5% were felt roofing firms. At least £2.868m is paid through levy and potentially more than £10m is paid depending on the assumptions to extrapolate the data. Corresponding data finds that there were 1,083<sup>99</sup> trainees coming through the system in 2015 which could represent fewer than 3% of the total roofing workforce<sup>100</sup>. Data supplied by NFRC suggests that whilst there has been engagement with some roofing companies via Training Groups, overall penetration levels are felt to be lower than the potential in the sector and there has been a tendency for training investment (and use of grant) to gravitate towards health, safety and mandatory or regulatory driven skills training. Co-ordinators in each region suggest that the best gains are made through proactive brokerage and supporting individual firms with a service that meets their individual needs.

As such, linked to the early creation of a **sector engagement strategy**, the Roofing Skills Partnership should seek to:

- Proactively engage with more roofing companies that are expecting growth but do not have equivalent forward looking action plans for investing in training and development.
- Encourage a greater % of the (4,334) firms registered with CITB that do not take advantage of grant support available to them to do so in a beneficial way (linked to new investment / mainstream funding for ‘Training Lanes’).
- Engage with a greater proportion of the 75% of non-federated roofing firms in the UK (c.6,000) to incentivise their investment in training and workmanship quality.
- Encourage those that do invest in training to train differently to fill skills gaps that are non-mandatory in their nature and more developmental (thus more likely to impact on their overall business / service).

Having reviewed the requirements of each roofing ‘segment’ it would seem sensible to explore the feasibility of reviewing and improving any existing structure designed to broker in skills and training solutions along the principles suggested above. The new model is not just about engagement volumes, it is about the breadth, depth, diversity of roofing enterprises brought in to the marketplace for skills and training; and how they are encouraged to improve their business through interventions that they would not do otherwise, as quickly or as effectively. That is to say, a far greater weight in any new system should be aimed at achieving ‘additionality’ outcomes and in reaching those that are traditionally harder to reach. Ultimately, the brokerage model will require a mix of formats to meet the preferences of different firms, and may vary in terms of its size, scale, targets and focus by agreed locality. Given the need for more on site solutions and an improved network of provision for training and assessment, the brokerage model that emerges from this strategic objective may differ markedly in its operational format because of the availability of said provision as it evolves over time.

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<sup>98</sup> Source: CITB Levy Assessment Information, 2014-2015

<sup>99</sup> This is 1,083 trainees out of a total of 43,767 across the assessment in 2015 or 2.47% of all trainees

<sup>100</sup> This figure is just the ‘roofing operative’ roles i.e. not the wider non-roofing workforce employed by roofing firms

### 3.2 Stimulating investment in training that is ‘more than mandatory’

There were two ‘skills’ areas that merit prioritisation in any new brokerage model:

#### **Supervisory and management skills**<sup>101</sup>

- Large numbers of owner managed micro businesses using self-employed labour creates a difficult environment for development of supervisory and management skills. The needs for such skills are just as vital in small operations as within larger businesses. The focus groups with roofing contractors identified that many owner managers are unable to get appropriate CSCS cards as they have no formal training or qualifications at managerial level.
- A review of 100 companies with a total workforce of 1,654 between them and submitting training plans to CITB in 2015 revealed only 9 of these planned to put a total of 14 of their workers through supervisory and management training.
- Commercial awareness, motivating others, problem solving, planning and being able to prioritise are key areas where all businesses can seek to improve. Addressing the individual needs of companies and people is the first step to this. Ensuring appropriate and focussed training contextualised to roofing will be paramount in encouraging uptake.
- Improved supervision on site will deliver increased quality and minimise snagging and remedial works. The return on investment in training at supervisory and managerial levels will likely show the greatest added value<sup>102</sup>.

#### **Multi-skills/knowledge** to impact the productivity and agility of the roofing workforce:

- Skills for roofing operatives equipping them with the ability to provide their technical service in more than one roofing context or market-place is important reflecting the finding that two thirds of roofing firms are multi-disciplinary. Having roofers that ‘can be sent to any job any time’ is aspirationally very attractive.
- Not all firms, however, want multi-skilled workers. Some of the larger firms prefer to have specialists that ‘know where they stand’ and work on specific contexts linked to a 1-3 year order book. FE providers tend to prefer aligning their curriculum for training around a more traditional, specialist model too<sup>103</sup>.
- Mistakes are not solely down to poor workmanship by installers, instead a lack of understanding by the wider workforce of the impact of their decisions e.g. how an architect and specifier is not entirely in tune with the installation practicalities. This ‘multi-knowledge’ is about getting each person in the ‘roofing chain’ to appreciate each other’s role to a greater degree.
- Apprentices engaged in this research said that if they could change one thing it would be that they had more appreciation of the role and decisions made by colleagues in the ‘back office’ and an appreciation by those colleagues of the practicalities of working on site. Again, this multi-knowledge is about mutual appreciation to make better decisions that improve sequencing, use of materials and reduces errors, remedial work and downtime.

The Roofing Skills Partnership (if created) is asked to give profile and priority to these two skill areas that can work across roofing and non-roofing occupations in the industry and provide a common agenda for the roofing workforce more generally.

<sup>101</sup> sometimes larger contractors will also reference ‘leadership’ skills in the same family of skills gaps and needs

<sup>102</sup> Creating standards that are appropriate for roofing industry needs and represent the move to developing professional management will benefit the industry and encourage client engagement.

<sup>103</sup> which is why we observe so many roofing firms using manufacturer training for ‘multi-skilling’ and new methods / technologies training

### 3.3 Brokering the industry's needs with a stronger UK provider network

At the commencement of this study the research team were of the impression that the training network across the UK was limited to 27 'centres', but in fact the total network comprises many more 'providers' that together create a potentially stronger network if supported and promoted accordingly. This network includes:

- Further education providers (including specialist roofing training centres) that deliver specific types of roofing provision based on what they have always or can provide; what they can afford (because of the cost of capital / equipment required for roof training).
- Smaller private providers (either led by individuals or run as enterprises that employ staff) that are typically meeting very local demands in the roofing market.
- Larger contractors who have in-house assets to train their direct workforce.
- Manufacturers and suppliers who have significant infrastructure and assets to train individuals to their own quality standards.

The 'training offer' is, however quite complicated – or so say roofing contractors that were engaged in the study. Different acronyms, offers and grant appear to create a sense for some that the system is not that easy to navigate. Simplification would therefore seem important to remove any barrier of this nature. Some opportunities present themselves at this juncture:

- The RIA Training Prospectus is a good start; perhaps it can evolve further to act as a platform for raising awareness of the 'full' offer available from this network of providers and assets as described above so that it has a map of where providers are and is fully searchable (perhaps as a digital / web-based interactive tool that contractors can search for themselves)
- There would seem sense in aligning to the recommendations made in the 'Onsite Assessment' Report for CITB which suggests the need for a national register of assessors, fully searchable by occupational specialism, location, centre (and potentially) individual named assessors.

As well as providing information on what is available, where, at what cost there will still be need to provide further incentive and encouragement to roofing companies because they still lack the confidence or drive to invest in appropriate skills, CPD and training for their business. This requires stimulation, and likely a team of dedicated, skilful brokers that can provide better information tailored to each business segment (especially micro-businesses and larger contractors that could behave differently to support their sub-contractor supply chains).

At aggregate level, the model should see co-investment in a brokerage model that will deliver business-specific, customised brokerage solutions that allows more roofing firms to engage in relevant training for their business; in a range of training contexts whether that be FE, training centre, with a private training provider, at a manufacturer/supplier premises / satellite centre and or at their own premises/on site. Brokers will be authoritative on what support is available at any given time and what solution (towards industry owned 'accredited roofer' standards) will suit their customer.

## Next Steps

This study has generated a number of useful evidence-based outputs including:

- A sector wide literature review of strategies, plans and statistics that aimed to capture the key workforce challenges in roofing and opportunities for focus through a desire to create a long-term plan that will co-ordinate action for the industry.
- A formal survey and research exercise with 141 roofing contractors that has generated a picture of workforce challenges, skills and training needs.
- An interim report that suggested a range of strategic options to test with stakeholders and investors prior to completion of this final report.
- This report, which includes additional insights from training providers, manufacturers and selected roofing contractors (presented as case studies) to further help triangulate the results of the research process and shape the recommendations presented.

The consultants recommend the following next steps:

### Step 1:

Disseminate this report and / or its key messages to agreed stakeholders.<sup>104</sup>

### Step 2:

Prioritise the strategic objectives and improve the recommendations with an industry-led governance group that could likely form the proposed 'Roofing Skills Partnership'. (This group to support step 3 and to agree the precise 'roadmap' or timeline for achievement of milestones linked to each recommendation in this report).

### Step 3:

Develop a Structured Fund proposal to CITB for catalytic infrastructure investment during the next funding round (7<sup>th</sup> February to 6<sup>th</sup> March 2017) focusing on Strategic Objective 1 and its associated recommendations. Make best use of the evidence in this report, any new analysis of the Glenigan 'industry pipeline' data and others as relevant<sup>105</sup>.

### Step 4:

Create a UK network 'map' of roofing training and assessment<sup>106</sup> and then arrange a meeting with relevant CITB Partnership Team members and those responsible for the Implementation Plan of the 'Right Training for Construction' Strategy to align opportunities for future investment in the UK provider and assessment network to support roofing<sup>107</sup>.

### Step 5:

Commission an independent evaluation of the BCP Programme in 2017 to link with the wider vision and opportunities referenced in this study.

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<sup>104</sup> NFRC's Head of Marketing has agreed to take forward a plan for communicating the results in a co-ordinated way including those who took part in the research and other interested stakeholders in the wider industry and trade press as well as key personal at CITB. There will also be value in sharing with stakeholders to which any new bid needs to relate e.g. the Home Building Skills Partnership

<sup>105</sup> Glenigan data analysis to be completed by one of CITB's Research Team noting its limitations re: £250k + project data only and 'new' work only i.e. does not take account of R&M market. Other data includes CPA Forecasts and CSN Forecasts and any data underpinning the recent Farmer Review or current Morrell Review of the wider construction industry where relevant and available. CITB's 'Onsite Assessment: Capacity research' report is also expected to be available in early 2017 which provides useful evidence for this style of intervention

<sup>106</sup> Detailing the locations, scale and type of assets across FE, private, manufacturer and large employers

<sup>107</sup> This may unlock further targeted resourcing for localised solutions / specialist solutions of a capital and revenue nature

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**Disclaimer**

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