

## Construction's need for roofing innovation

Our ambition is to help confront the issues facing the future of the construction industry; addressing skill shortages, length of build time & green construction challenges



Brexit has cast a shadow of doubt over the future of the UK construction industry

To steady the ship, the UK GOVERNMENT has made a **£44 billion** commitment to help boost the industry

**AND...**

promises to

reduce the initial cost of construction by

**33%**

and build an extra **300K** new homes per year over the next **5 years**



The Government's 2025 strategy also promises 50% faster delivery of newbuilds



and a **50%** reduction in

**GREENHOUSE GASES**

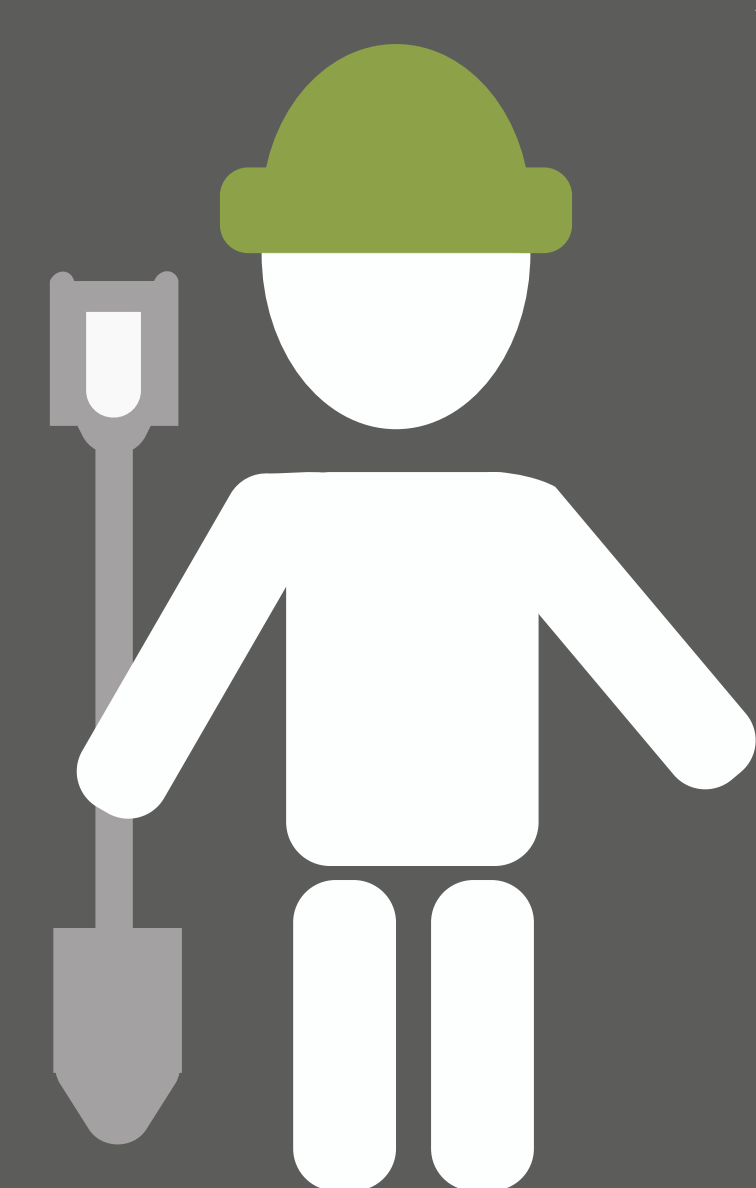


## BUT...there's a **skill** shortage

The effects of the UK's ageing workforce affects the construction industry more than any other.

Furthermore, the lack of sufficient training & funding, fewer apprenticeships and shifts in culture exacerbates the issue even further.

According to a Redland survey, the most common reasons trainees gave for joining the industry were:



An alarming number of today's roofers are approaching retirement age

and **22%**

of construction workers in the UK are aged over 50 & **15% are over 60**



- 22%** inspired by friend's & family already in the industry
- 14%** wanted an outdoors profession
- 12%** attracted to the industry by money
- 12%** wanted to have a trade
- 2%** attracted to the industry through school or college
- 2%** joined through apprenticeships or work experience

## ROOFING is RISKY BUSINESS!

Out of the **212** trainee roofers surveyed by Redland:

**43%**

revealed that health & safety and fear of death is a career **TURN OFF**

AND with good reason, as

**1 in 5**

**UK CONSTRUCTION DEATHS involve ROOF WORK!**



**BUT 47%** of trainee roofers fear the good ol' British weather more than anything else!!

## THE EFFECT

**46%**

OF construction SME's are experiencing difficulties hiring roofers



\* Results taken from a trade survey in 2015 by the Federation of Builders

A figure that has almost doubled over the space of **one year!**

To meet building targets we need to recruit **2,200** roofers over the next four years

But we're projected to lose **550** (a **7%** deficit in the workforce!)

## What can we do?

The housing sector will account for **37%** of the UK's construction annual output in 2018

But an estimated **27,000** projects will suffer due to the skills shortage

With global construction forecasted to grow 80% by 2025, the UK must reduce the skills gap to compete on the global stage

The government & industry must work together to inspire younger generations and improve cultural attitudes towards roofing & construction

Offsite construction and modular 'prefab' housing is already proving popular across Europe; in 2015 **20%** of new homes in Germany were modular. Deskill roofing and investing in modular, offsite innovation & tech could enable current roofers to complete contracts faster & safer; plus allow for crossover trades to take on some of the work load

The government has addressed the skills shortage by providing an extra £34m funding towards training, but the UK is still seeing waiting times of up to **16 weeks** for pitched roof materials. To fulfil the growing demand, manufacturers are turning to imported solutions but the low value of the pound coupled with supply interruptions is having a devastating effect on the industry, most particularly smaller contractors. Investing in SMART/ Industry 4.0 manufacturing solutions could secure the UK supply chain for generations to come

**OUR SOLUTION**

**Carapace**  
SLATE

**LOW COST**

and **IDENTICAL** to **NATURAL SLATE**



**SNAPFIT**

Each slate self-aligns and interlocks without nails or screws, reducing the skill involved, extending the resources of skilled roofers and expanding the competency base of general builders and labourers

**RAPIDFIT**

**90%** quicker build speed resulting in lower labour & overall projects costs, and less delays due to bad weather

**LOW CARBON**

We don't use any pressure or high temperatures during our manufacturing process. Our slates are also lightweight, reducing the energy needed for transportation

**SUSTAINABLE**

We're collaborating with our industrial partners to create a revolutionary new bio-composite, taking our all natural material content up to **92%**

**UPCYCLED**

Each slate uses **80%+** slate powder taken from the **700 million tonnes** of waste slate piled up in North Wales