Discover how Knowledge Transfer Partnerships (KTPs) can accelerate growth and unlock new opportunities.

Hear from 3 guest speakers sharing real-world KTP success stories.

50 YEARS

50 years of KTP

UKRI Innovate UK | Knowledge Transfer Partnerships

Steve Hargreaves MBA
Knowledge Transfer Advisor
Innovate UK Business Connect

- Celebrating 50 years of supporting businesses and organisations with knowledge exchange and innovation
- Awards event every year – this years 50th Awards are in Manchester in October
- Regional advisers like myself cover the whole of the UK
- A proven model to support knowledge exchange and innovation
- Applications are open every 2 months – all year around
- Funding available to part fund KTP projects

Introducing Knowledge Transfer Partnerships (KTP)

KTP is:

A **three-way partnership** that provides;

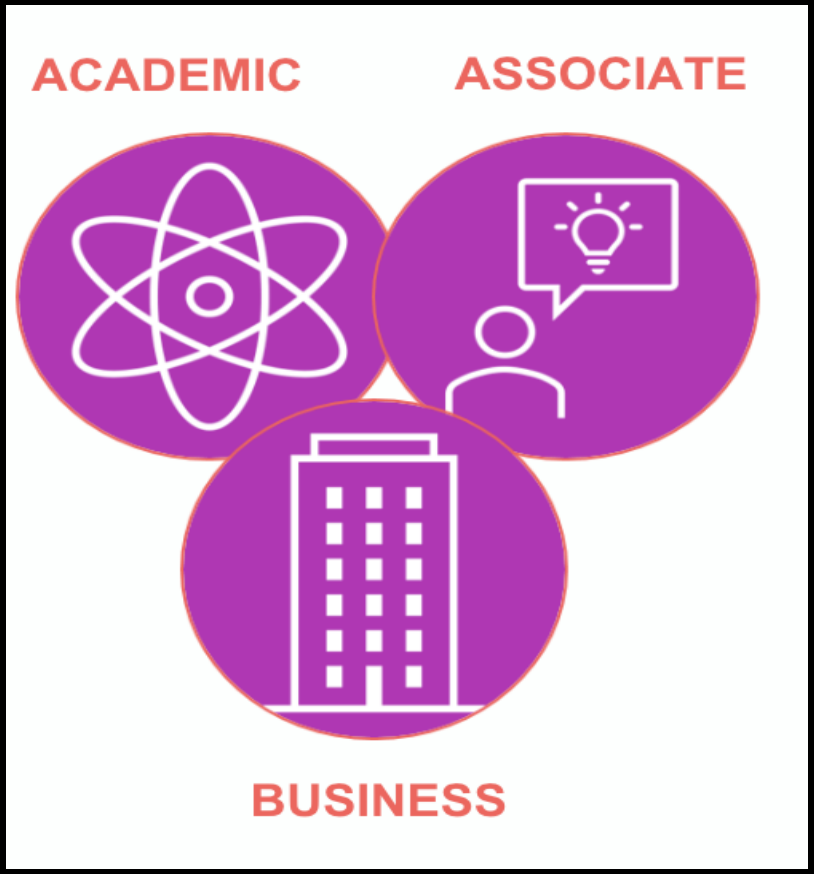
expertise to innovate

funding to enable

resource to deliver transformational change

Change can be economic, societal

and environmental (or all three)



What is a KTP and how is it funded?

Grant Funding Rates		
SME's	67%.	Third sector 25%.
Large companies	50%.	Welsh SMEs 25% *limited period.

- A strategic project run & managed by a knowledge base (University/catapult/college) in partnership with an organisation – business/charity/public sector
- It has top level buy in knowledge is embedded throughout whole organisation.
- The Knowledge Base gets paid by InnovateUK and in part by the company to cover the costs
- The organisations team are fully involved and integrated into the programme of work and decisions are made jointly.
- Project team meets regularly – formal review meetings every 4 months.
- R&D tax credits eligible.

KTP Project Features

Project and Associate **fully integrated into the business** with joint business & academic supervision

Knowledge Base Supervisor invests **time & expertise s**upporting the business & KTP Associate.

Associate is **employed** by the university partner, **recruited jointly**

Project can be delivered through a blend of **virtual, hybrid or face to face** working models

Project length of between **12 and 36 months**

We have a model called Accelerated KTP - 3 months projects/feasibility studies – defined areas such as fast fashion and this year its for addiction services –call is open now.

Partnerships

812 Current projects

Aspiration for 1000

- 779 Business Partners across the UK
- 111 Knowledge Base Partners
- 591 Current Associates

80-85% Success rate!

- 246 Associate vacancies

Benefits to Businesses

Access to **world class expertise**, brilliant **technology**; and **fresh thinking** to unlock:

- Accelerated, **de-risked innovation**
- **Competitive** advantage
- **Increased Revenue** and **profit** growth
- **New or improved products/services/ processes /productivity**
- **Potential for new IP**
- Positive **societal / environmental** impact
- A **culture** of innovation
- Attracting graduate **talent**

- **Expert support** from a dedicated Adviser from Innovate UK KTN
- **Ongoing collaborations** with academia to open up new opportunities

Benefits to Associates

Become future innovation leaders by delivering transformational strategic projects.

Unique career springboard applying subject expertise to solve real-world challenges.

Benefit from dedicated continuous personal improvement.

Mentoring provided by experienced KTA's and academics.

Offers a competitive salary & generous professional development

Develops valuable leadership, management and project management skills and experience.

Around 75% of associates are offered employment by the host business.

KTP – Getting started!

1. Organisation has the idea, opportunity or problem
2. Partners with a Knowledge Base
3. Initial project discussions identify a project outline to propose as a KTP on a fact-finding form.
4. Knowledge Transfer Advisor is engaged to meet, review and discuss the proposal.
5. Project scope finalised and drafting application begins.
6. Application via an online platform
7. Managed in an online platform and advertised online once successful
8. Recruitment exercise to find the right candidate to be the associate before starting

Useful to know:

- Admin light for businesses, (but some admin)
- KTA remains with the project from start to finish and becomes the monitoring officer of the project and meets the team every 4 months.

Example KTP Projects

KTP Case Study

Aquapak - Developing innovative polymers that reduce our reliance on harmful single-use plastics

Company Name: Aquapak
Department: Materials
Project Duration: 24 months

- Our two-year KTP with Aquapak supported the advent of alternatives to single-use plastics which could revolutionise the composition and manufacture of food packaging.
- Crisps are among the UK's favourite snacks. We reportedly consume between six to eight billion packets every year – averaging 150 packs each. This figure is estimated to rise to more than 11 billion by 2030.

The innovative material technology developed during the Aquapak-Loughborough KTP helped to address this challenge.

The company has developed HydropolTM, a polymer that is recyclable and biodegradable. While offering the benefits of plastic, it has multiple end-of-life options that are non-toxic, marine safe and integrate with existing manufacturing processes.

CONSUMERS WANT UK RETAILERS AND BRANDS TO DO MORE TO REDUCE THE USE OF PLASTIC PACKAGING

New research shows 59% of shoppers want alternative materials to replace conventional plastic packaging.

The technical knowledge and scientific approach developed during the project have been embedded in the company, and Aquapak's technical team has grown to support ongoing R&D. The company's turnover and customer portfolio has benefit greatly from these innovations.

In spring 2024, British Crisp Co., in partnership with Evopak and Aquapak, launched the UK's first fully recyclable crisp

DE MONTFORT UNIVERSITY LEICESTER

GLOBAL EMC
ELECTROMAGNETIC SHIELDING & ANECHOICS EST. 1994

Sutton-in-Ashfield based SME - 24 month KTP

Aim's and Objectives

Develop simulation tools to help drive innovation and increase understanding of RF shielding materials, components and design .

Develop new products and revenue streams through research, simulation and innovation.

Increase knowledge and education through the dissemination of high-quality resources, papers, workshops and presentations.

KTP Achievements to Date

Knowledge - White paper and guest lecture released on the Fundamentals of EMC, 2 presentations delivered to law enforcement on RF shielding and the protection of digital assets, delivered at national conferences.

Products – Launched 2 new products as a result of research and development from the KTP.

Revenue – Generated a new revenue stream for the business (Launched mid 2024) through annual maintenance and support contracts, 2.5% of gross income so far in 2025

Global EMC UK Ltd are experts in electromagnetic and RF shielding, anechoic chamber construction and all things RF. With over 30 years experience, Global have delivered products all over the world, including New Zealand, the US, Europe, Africa, Saudi Arabia, the UAE and many more. Global provide a range of products from shielded cabinets and boxes to digital forensic labs and 10m compliant EMC test chambers for a variety of clients, including academia, research, manufacture, military and law enforcement.

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University of Derby & Chatsworth KTP:

Finding a way to measure economic impact

Andrew Lavery, Chief Financial Officer for the Devonshire Group said: "The three-way partnership with the Devonshire Group, University of Derby and Innovate UK enabled us to design and implement a methodology to measure the wider impacts of our activities in a way that was rigorous, adopted best practice and that was repeatable from year to year."

Mel Powell, Senior Lecturer in Economics and Finance and Academic Supervisor said: "This KTP has generated a range of benefits for the University including new research output, enhanced academic knowledge and expertise, and creating cutting-edge innovation for use in teaching and learning"

James Pickering, the graduate, said "I got a lot of benefits from working between the two organisations and effectively having the support of both. Informing my PhD, my career options are a lot broader than before."

Aim:
To develop a methodology and set of tools that the Devonshire Group could use to measure its economic impact.

To ensure the Devonshire Group met these goals, an innovative economic impact assessment was conducted in conjunction with the University of Derby.

With no standard methodology available to estimate the full economic impact of organisations, the KTP developed a new methodology that considered five different impact streams:

- **Direct impact:** impact of their own operations
- **Supplies:** their spend with suppliers and suppliers' own supply chains
- **Payroll:** employees – expenditure on consumer goods and services
- **Visitors:** visitors – spillover impacts on other sectors in the economy
- **Tenants:** businesses – economic activity of tenants

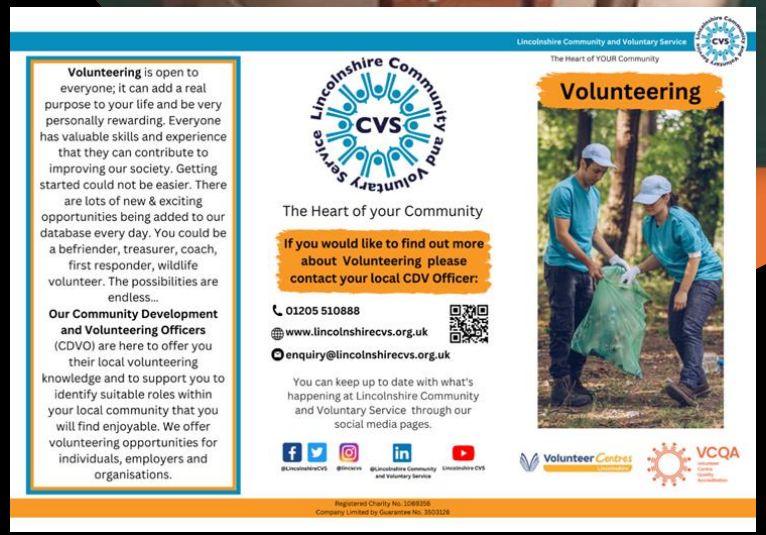
Together, these impact streams made up the total economic impact of the organisation on the local and UK economy over three financial years: 2019/20, 2020/21 and 2021/22. The economic impact was measured in Gross Value Added (GVA) and full-time equivalent (FTE) jobs.

A successful partnership:
This KTP has benefitted all parties and the wider community. The Devonshire Group has an accurate measure of its economic impact over the last three years, and now has a set of user-friendly tools and processes in-house to continue measuring its activities and informing its strategy, benefiting a range of local economies.

TEF 2023 Gold
UNIVERSITY OF DERBY

Lincolnshire CVS & BGU University

- *To improve the quality of strategic decision-making and embed new operational capabilities such that the organisation can increase the usage of existing services, develop new services, promote new business opportunities and communicate the charity's impact successfully to its wider audience.*
- Identify and service new markets and stakeholders by:
- Embracing appropriate analytical methods by which to identify potential opportunities for market development or diversification.
- Develop the capacity to design effective marketing campaigns to promote new and existing strategic ambitions.
- Identify potential opportunities for market penetration that attracts new and existing users.
- Establish methods for analysing and reviewing the effectiveness of all forms of communication.



Innovate UK | Knowledge Transfer Partnerships

Questions?

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Browne Jacobson

University of Nottingham
UK | CHINA | MALAYSIA

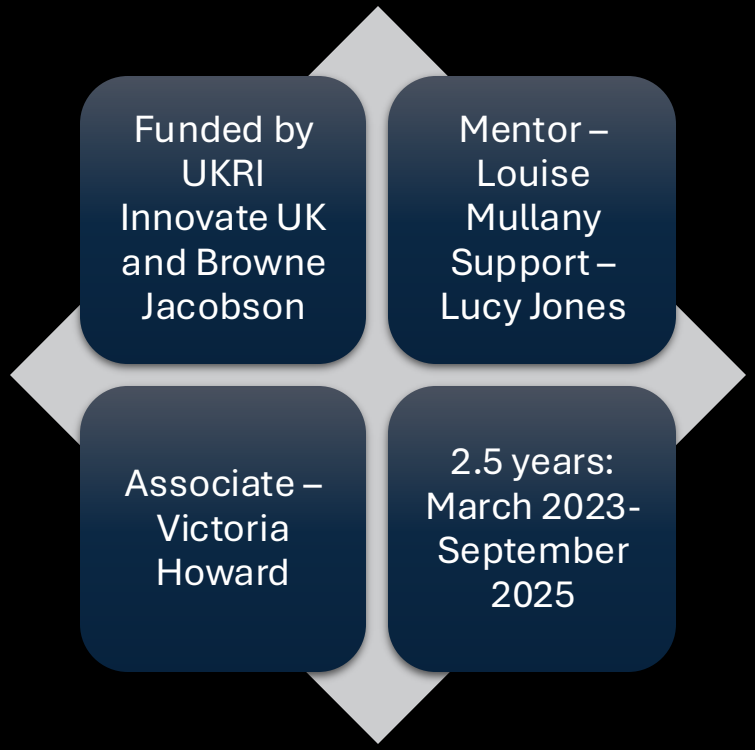
UKRI Innovate UK

Knowledge Transfer Partnership

University of Nottingham and Browne Jacobson LLP

Dr Victoria Howard

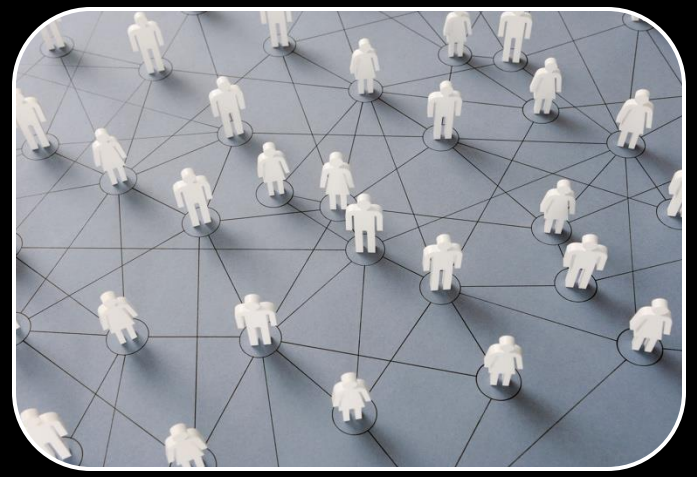
What's our KTP?



Aims

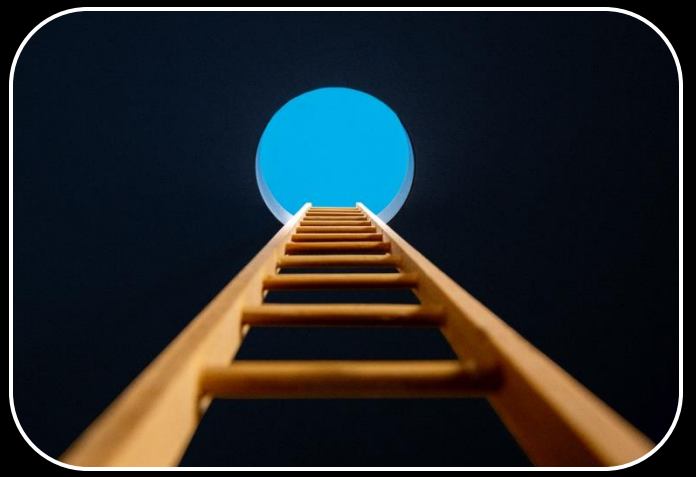
- Expand and develop the ability to communicate, act and deliver inclusivity
- Embed long-standing equality, diversity and inclusion (EDI) principles into business practices and people processes across:
  - Browne Jacobson
  - firm's key client bases
  - national legal sector

Internal insights



Social mobility

Performance reviews & line management



Senior promotions

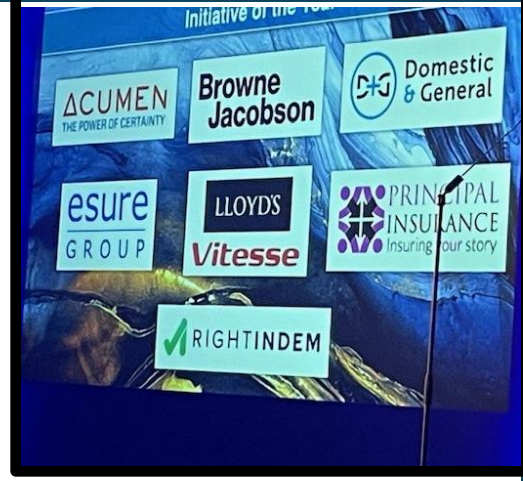
External profile

Transforming EDI Practices in UK Insurance

Organisational “talk” about ESG/Sustainability

Communicating with people with vulnerabilities

Civil Service Live



Highlights

HOUSE OF LORDS

Social Mobility Policy Committee

Uncorrected oral evidence: Manufacturing, professional and construction sectors

Thursday 27 March 2025

London Business School

Leadership Institute

Thank you

Dr Victoria Howard

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Whitehouse

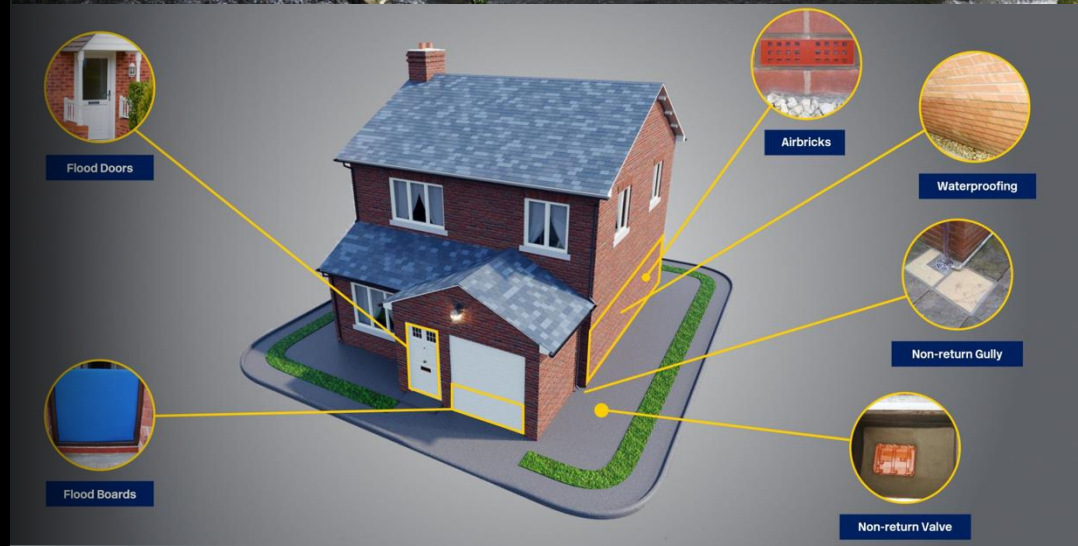
www.whitehouseconstruction.co.uk

UNIVERSITY OF DERBY

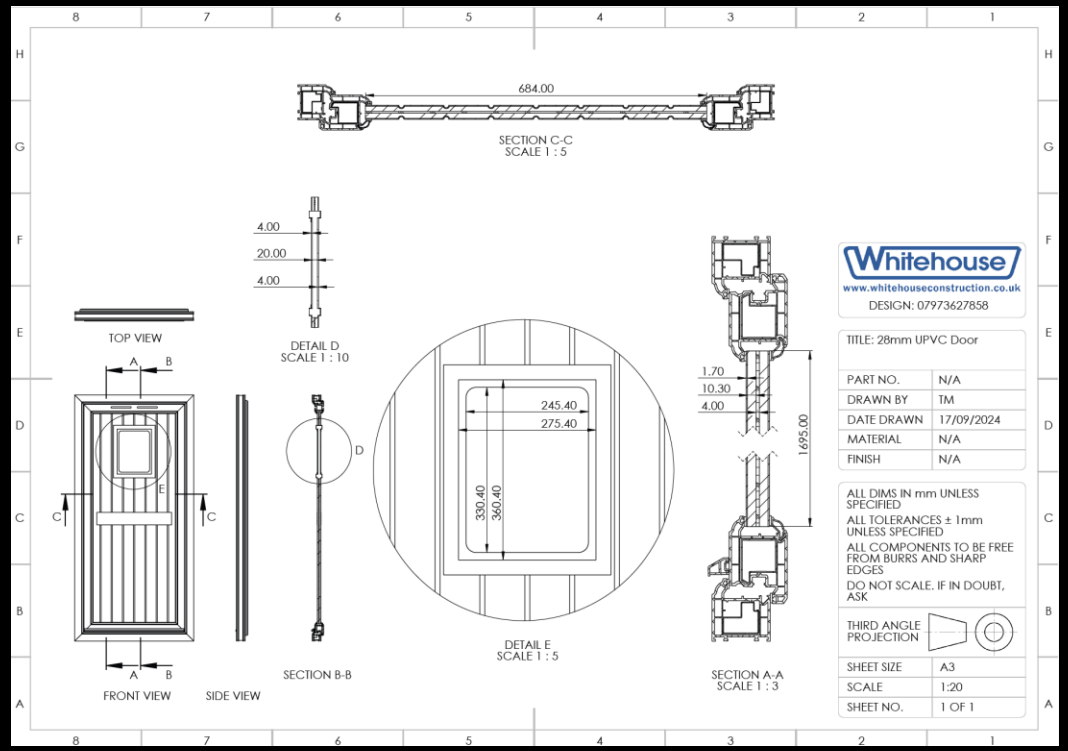
Whitehouse

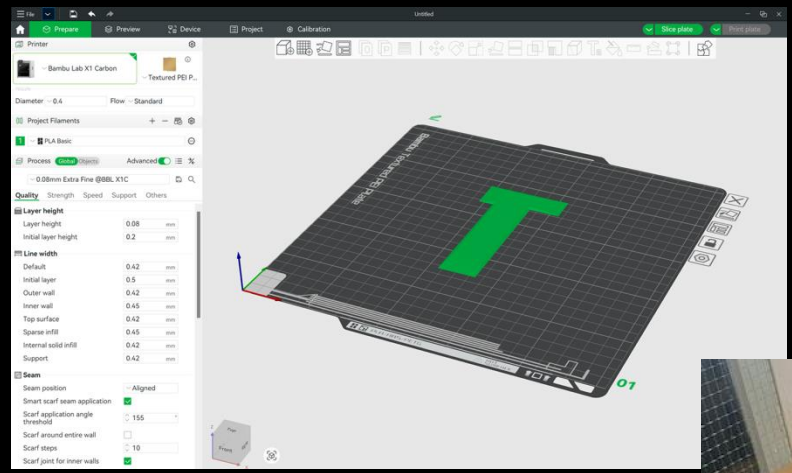
www.whitehouseconstruction.co.uk

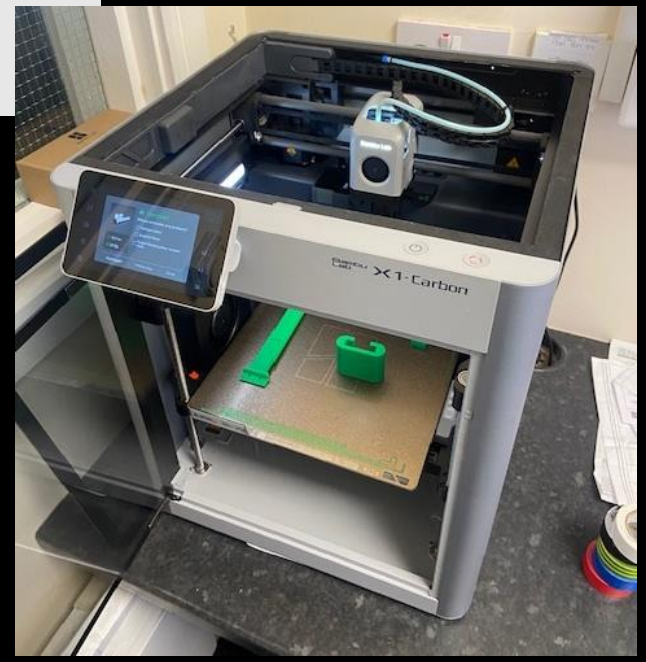
- Civil Engineering Company
- Looking to branch out into flood resilience
- No in-house design
- Seeking specialist knowledge to catalyse R&D



Computer Aided Design And Manufacturing

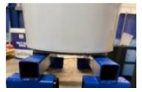






Material Science

Note: A spirit level was placed on the surface this experiment was taking place on to ensure a flat surface was present for equal distribution of force onto the 4 EPDM cuttings.



After 3mm of deformation was achieved on all 4 cuttings, the buckets and steel plate were weighed in order to understand the force applied to the EPDM.

Result

It was found that
deform the EPDM

Multiplying this re
(9.80665m/s^2) g
1dp for simplicity

Since each cuttin
the values of the
0.0036m^2.

Multiplying 374.5

Equation 1

Conclusion

104,027 pascals
now be added to
helping to optimi

Research Log 02: Force Required to Compress 6mm

EPDM Foam to 50% of Original Depth

Abstract

In order to understand the stresses imparted on the flood board products, proper understanding of the generic 6mm thick EPDM foam bought from Derby Gaskets (Product code: DG-WH-131023-2) is needed, specifically the amount of force needed in order to compress it to a sufficient level.

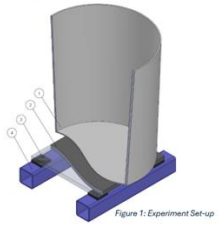


Figure 1: Experiment Set-up

As found in Research Log 01, it was found that the foam can be compressed to 3mm (50% original depth) for a 12-hour period with no discernible permanent deformation from to the material's viscoelastic properties. Finding this to be the optimum compression of this gasket so as to ensure the best of the product's watertight properties as well as it's reusability, it was important to now find the force needed to compress the foam to this prescribed deformation in order to calculate a Pascal value. This value can then be taken and applied to other components in the assemblies to run accurate FEA and CFD simulations.

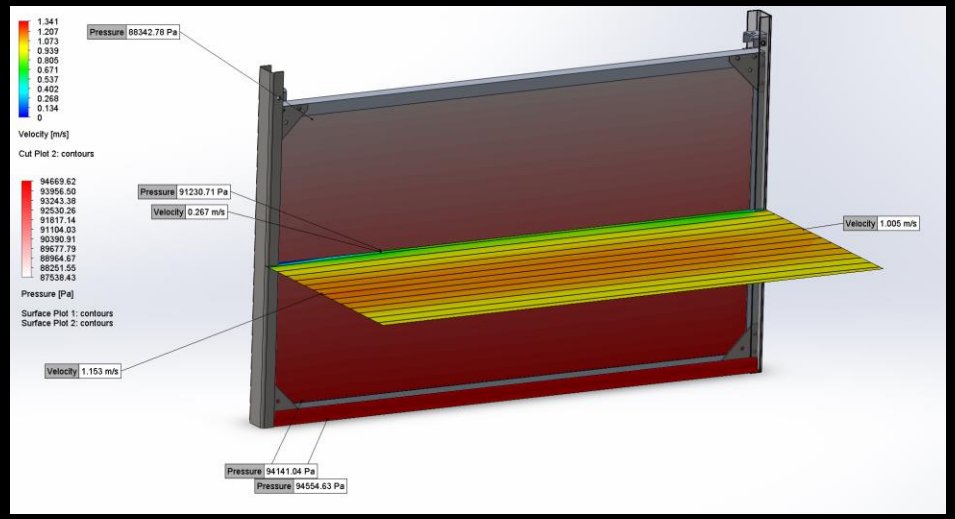
Figure 2: Physical experiment with second 20l bucket

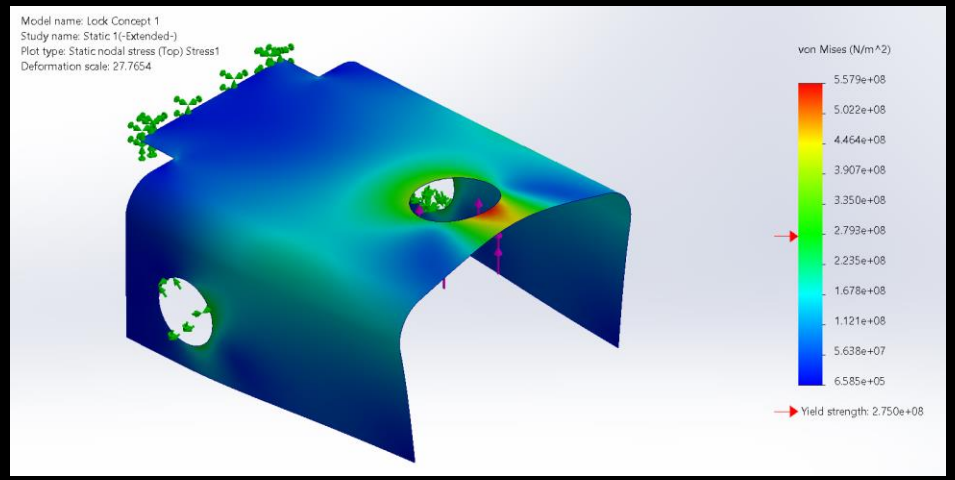
Experiment

4no. 30mm x 30mm cuttings of the 6mm foam (3) were placed on top of a solid platform (4) then a 10mm x 200mm x 200mm steel plate (2) is placed on top of the EPDM cuttings. A 20-litre bucket (1) was then placed on top of the steel plate.

A set of Vernier callipers was then used to check the distance between the steel plate (2) and the solid platform (4), this distance represents the depth of the foam.

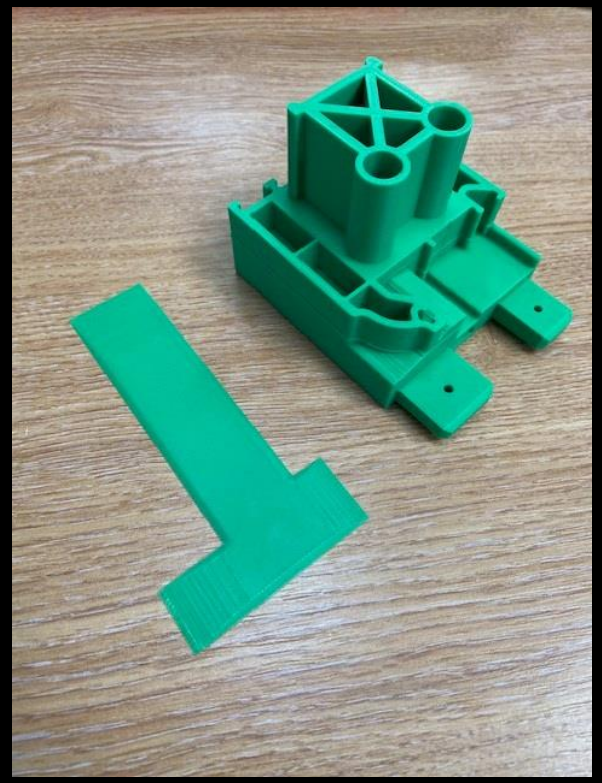
Slowly, water was added to the 20l bucket (1), imparting more force onto the EPDM cuttings (3). As the bucket was filling, checks were performed with the callipers to measure the deformation of the EPDM. After the first bucket was filled, the compression of the EPDM was at an average of 1.6mm. Another 20l bucket was added on top of the first in order to add more weight.

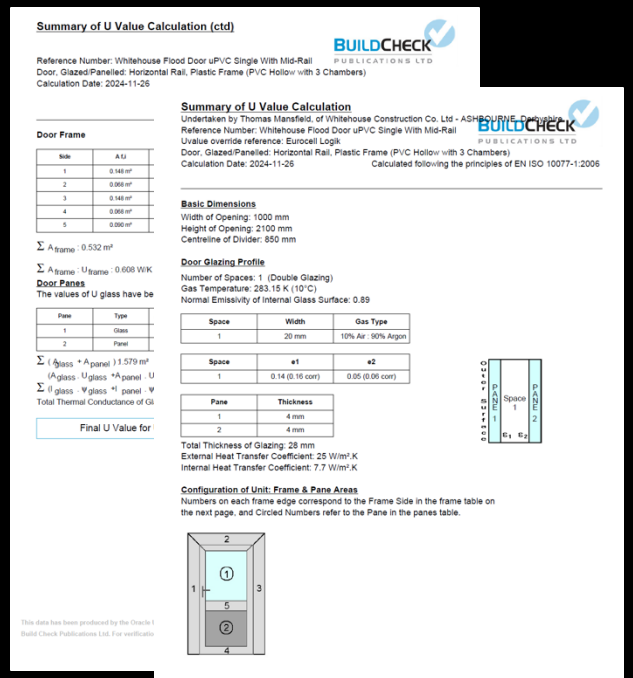




Networking & Professional Development

Outcomes (so far)





Summary of U Value Calculation (ctd)

BUILDCHECK PUBLICATIONS LTD

Reference Number: Whitehouse Flood Door uPVC Single With Mid-Rail
Door, Glazed/Panelled: Horizontal Rail, Plastic Frame (PVC Hollow with 3 Chambers)
Calculation Date: 2024-11-26

Door Frame

Side	A U
1	0.148 m²
2	0.066 m²
3	0.148 m²
4	0.066 m²
5	0.000 m²

ΣA_{frame} : 0.532 m²

$\Sigma A_{frame} \cdot U_{frame}$: 0.608 W/K

Door Panes

The values of U glass have be

Pane	Type
1	Glass
2	Panel

$\Sigma (A_{glass} + A_{panel})$ 1.579 m²

$(A_{glass} \cdot U_{glass} + A_{panel} \cdot U$

$\Sigma (l_{glass} \cdot \Psi_{glass} + l_{panel} \cdot \Psi$

Total Thermal Conductance of Gl

Final U Value for

Summary of U Value Calculation

BUILDCHECK PUBLICATIONS LTD

Undertaken by Thomas Mansfield, of Whitehouse Construction Co. Ltd - ASHBOURNE, Derbyshire
Reference Number: Whitehouse Flood Door uPVC Single With Mid-Rail
Uvalue override reference: Eurocell Logik
Door, Glazed/Panelled: Horizontal Rail, Plastic Frame (PVC Hollow with 3 Chambers)
Calculation Date: 2024-11-26 Calculated following the principles of EN ISO 10077-1:2006

Basic Dimensions

Width of Opening: 1000 mm
Height of Opening: 2100 mm
Centreline of Divider: 850 mm

Door Glazing Profile

Number of Spaces: 1 (Double Glazing)
Gas Temperature: 283.15 K (10°C)
Normal Emissivity of Internal Glass Surface: 0.89

Space	Width	Gas Type
1	20 mm	10% Air : 90% Argon

Space	e1	e2
1	0.14 (0.16 corr)	0.05 (0.06 corr)

Pane	Thickness
1	4 mm
2	4 mm

Total Thickness of Glazing: 28 mm
External Heat Transfer Coefficient: 25 W/m².K
Internal Heat Transfer Coefficient: 7.7 W/m².K

Configuration of Unit: Frame & Pane Areas

Numbers on each frame edge correspond to the Frame Side in the frame table on the next page, and Circled Numbers refer to the Pane in the panes table.

This data has been produced by the Oracle U Value Calculator. The results have not been independently checked or verified by Build Check Ltd / Build Check Publications Ltd. For verification contact publications@buildcheck.co.uk. Calculations valid for one month.

Software Version: 2.5

Knowledge Transfer Partnership

Lincolnshire Chamber of Commerce

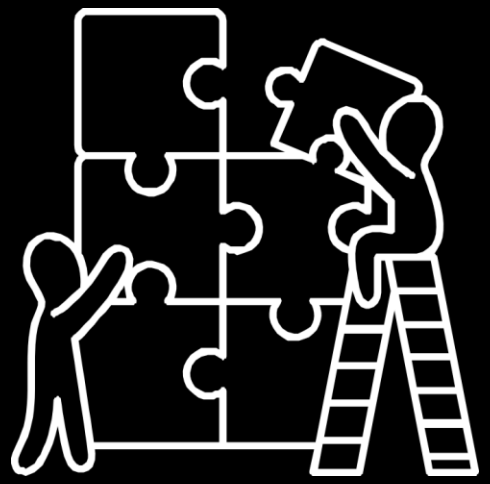
University of Lincoln

Our Vision - To help create a sustainable and connected economy for Lincolnshire businesses

Accredited by the British Chambers of Commerce

Supporting businesses across Greater Lincolnshire

The Project



SMALL
BUSINESS
SUSTAINABILITY
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Create a sustainability service and hub for businesses in Greater Lincolnshire

Launch an accreditation scheme for SME's and micro-businesses

The Process

Consultation from business in Greater Lincolnshire

Expert Input from academic and industry and local councils

Development onto a digital platform

Outcome for the Chamber

Chambers own sustainability improvements

new support service to offer to our members

sustainability performance tool and hub for all businesses

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My Experience

Career Development and skill enhancement

Dual mentorship and support

Long-term employment

Any Questions for our panel?