

apprenticeship FRAMEWORK

Glass Industry - Non-Statutory (Wales)

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Glass Industry - Non-Statutory (Wales)

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Framework summary

Glass Industry - Non-Statutory

Foundation Apprenticeship in Glass Industry Occupations

Pathways for this framework at level 2 include:

Pathway 1: Curtain Wall Installation

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Certificate in Curtain Wall Installation

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 2: Domestic Fascia, Soffit and Bargeboard Installation

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Certificate in Domestic Fascia, Soffit and Bargeboard Installation

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 3: Glass Processing

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Certificate in Glass Processing

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 4: Glass Container Processing - removed 23.09.14

Competence qualifications available to this pathway:

N/A

Knowledge qualifications available to this pathway:

N/A

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 5: Fenestration Installation

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Diploma in Fenestration Installation

C2 - Level 2 NVQ Diploma in Fenestration Installation

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 6: Fabrication of Glass Supporting Structures

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Certificate in Fabrication of Glass Supporting Structures

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 7: Flat Glass Manufacture

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Certificate in Flat Glass Manufacture

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 8: Glass Container Manufacture - removed 23.09.14

Competence qualifications available to this pathway:

N/A

Knowledge qualifications available to this pathway:

N/A

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Essential skills

Pathway 9: Glazing

Competence qualifications available to this pathway:

C1 - Level 2 NVQ Certificate in Glazing

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 10: Photovoltaics Installation

Competence qualifications available to this pathway:

C1 - NVQ Diploma for the Installation of Photovoltaic Panels

C2 - Level 2 NVQ Diploma for the Installation of Photovoltaic Panels

Knowledge qualifications available to this pathway:

K1 - Level 2 Certificate in Glass Related Operations

K2 - Level 2 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 11: Glass Related Distribution and Warehousing

Competence qualifications available to this pathway:

C1 - Level 2 Certificate in Glass and Glass Related Distribution and Warehousing (QCF)

Knowledge qualifications available to this pathway:

K1 - I 2 Award in Knowledge of the Principles of the Glass Related Working Environment

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Glass Industry - Non-Statutory

Apprenticeship in Glass Industry Occupations

Pathways for this framework at level 3 include:

Pathway 1: Automotive Glazing

Competence qualifications available to this pathway:

- C1 - Level 3 NVQ Certificate in Automotive Glazing
- C2 - Level 3 NVQ Certificate in Bodyshop Automotive Glazing
- C3 - Level 3 NVQ Certificate in Automotive Glazing Supervision

Knowledge qualifications available to this pathway:

- K1 - Level 3 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 2: Fabrication of Glass Supporting Structures

Competence qualifications available to this pathway:

- C1 - Level 3 NVQ Certificate in Fabrication of Glass Supporting Structures

Knowledge qualifications available to this pathway:

- K1 - Level 3 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 3: Glazing

Competence qualifications available to this pathway:

- C1 - Level 3 NVQ Certificate in Glazing

Knowledge qualifications available to this pathway:

- K1 - Level 3 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities

- Essential skills

Pathway 4: Fenestration Installation

Competence qualifications available to this pathway:

C1 - Level 3 NVQ Diploma in Fenestration Installation

Knowledge qualifications available to this pathway:

K1 - Level 3 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 5: Fenestration Surveyor

Competence qualifications available to this pathway:

C1 - Level 3 NVQ Certificate in Fenestration Surveying

Knowledge qualifications available to this pathway:

K1 - Level 3 Certificate in Glass Related Operations

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 6: Glass Processing

Competence qualifications available to this pathway:

C1 - GQA Level 3 NVQ Diploma in Glass Processing

Knowledge qualifications available to this pathway:

K1 - GQA Level 3 Certificate in Glass Related Operations (QCF)

K2 - BTEC Level 3 National Diploma in Operations and Maintenance Engineering

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Essential skills

Pathway 7: Glass Related Distribution and Warehousing

Competence qualifications available to this pathway:

C1 - Level 3 Certificate In Glass and Glass Related Distribution and Warehousing (QCF)

Knowledge qualifications available to this pathway:

K1 - Level 3 Certificate In Knowledge of the Principles of the Glass Related Working Environment (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities

- Essential skills

Framework information

Information on the Publishing Authority for this framework:

Proskills

The Apprenticeship sector for occupations in printing, mineral extraction and processing, health and safety and process and manufacturing of furniture, glass, ceramics, coatings and paper (also includes glazing, building products, wood and mining).

Issue number: 11	This framework includes:
Framework ID: FR03107	Level 2 Level 3
Date this framework is to be reviewed by: 31/07/2014	This framework is for use in: Wales

Short description

The Glass Industry Occupations framework provides work based training for young people and adults to undertake key manufacturing, craft and technical roles in the Glass and Glazing industry.

There are 2 levels of apprenticeship contained in this framework:

- The Level 2 Foundation Apprenticeship in Glass Industry Occupations (usually takes 12-18 months to complete)
- The Level 3 Apprenticeship in Glass Industry Occupations (usually takes 24-36 months to complete)

The framework contains details of the vocational qualifications, knowledge based technical qualifications, Essential Skills Wales (Communication and Application of Number), and employee rights and responsibilities that are required for an Apprenticeship in Glass Industry Occupations.

Apprentices undertake training both on and off-the-job at their workplace and training is also often undertaken away from the workplace, delivered by a local training provider or a further education college.

Contact information

Proposer of this framework

This framework is published by Proskills UK on a non-statutory basis prior to the designation of Issuing Authorities for Wales

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Revising a framework

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Why this framework is being revised

September 2014

The following pathways have been removed due to low take up/qualification expiry:

- Level 2 - Pathway 4 Glass Container Processing
- Level 2 - Pathway 8 Glass Container Manufacture

The following Level 3 qualification has been removed from Pathway 1:

- Automotive Glazing Supervision

Summary of changes made to this framework

September 2014

The following pathways have been removed due to low take up/qualification expiry:

- Level 2 - Pathway 4 Glass Container Processing
- Level 2 - Pathway 8 Glass Container Manufacture

The following Level 3 qualification has been removed from Pathway 1:

- Automotive Glazing Supervision

Qualifications removed

500/7824/0 GQA Level 3 NVQ Certificate in Automotive Glazing Supervision (QCF)

500/7766/1 GQA Level 2 NVQ Diploma in Glass Container Manufacture (QCF)

500/7823/9 GQA Level 2 NVQ Certificate in Glass Container Processing (QCF)

Qualifications added

Qualifications that have been extended

(no information)

Purpose of this framework

Summary of the purpose of the framework

Manufacturing is a key sector in the Welsh economy and Glass is one of the three largest industries in the Welsh footprint. The Glass industry is of vital importance to other industries, either as an important part of the supply chain or as a supplier of end products, making a substantial contribution to the economy.

The Glass Occupations industry covers:

- Manufacture of flat glass
- Shaping and processing of flat glass
- Manufacture of hollow glass
- Manufacture of glass fibres
- Manufacture and processing of other glass, including technical glassware

Additional industries include:

- Glazing and Curtain Walling
- Manufacture and installation of windows, doors and conservatories
- Automotive Glazing
- Architectural Stain Glass and Stain Glass Conservation
- Photovoltaics

The tough economic climate will continue to have an impact on companies in the sector, as will competition, advancing technology, and changing working practices. These are all factors that companies in Wales have identified will have a significant impact on their businesses over the coming years. It will be vital to ensure the presence of appropriate training for the Glass industry to help them prepare their employees for the future and continue to improve productivity and competitiveness.

Although there is likely to be a drop in the overall size of the Welsh workforce during the coming decade, industries like Glass in Wales will still require additional workers in this period. There is predicted to be a fall in lower level occupations but a rise in the demand for higher skills as the continuing automation of processes requires more highly skilled workers.

Proskills will continue to work with employers across Wales to ensure that the right skills platform is in place and the right framework exists to support skills investment. This is in line with the aims and objectives set out in the "Skills That Work for Wales" strategy. For more information please read:

wales.gov.uk/docs/dcells/publications/081217stfwstrategyandactionen.pdf

Training, in the form of the Glass Industry Apprenticeship framework, has been welcomed by Welsh employers since the early 1990s as a mechanism to provide highly specialised, suitable skilled staff in the use of advanced technologies associated with the Glass Industry.

In 2009, employers reported skills gaps in a third of employees in the Skilled Trade, Process, Plant and Machine Operatives occupational groups. These skills gaps result in decreased productivity, increased operating costs and difficulties in introducing new working practices. Currently over half of all Glass companies are training their employees to address the issue of skill gaps. The vast majority, despite recession, want to maintain their level of training and a fifth agreed that the need to increase workforce skills will continue to be a key factor in the coming years.

A key challenge for the Glass industry in Wales is that the current workforce is ageing, with a particular shortfall of employees aged 16-24. In these tough economic times it remains essential that Apprenticeships continue to be a viable option for young people so that Wales maintains a highly skilled and qualified workforce.

The Glass industry is currently not attracting females, applicants from black and minority ethnic groups or those with a difficulty or disability in sufficient numbers. The Glass industry recognises that it is not making the most of the pool of talent that is available – this is untapped talent which could help to meet their skills gaps and shortages thereby contributing to increased productivity and competitiveness.

The Level 2 and 3 Apprenticeships have been designed to help fill the skills gaps and shortages caused by an ageing workforce, by attracting younger people into the Glass Industry and providing them with the skills, knowledge and experience which employers are seeking to recruit and retain. In addition, it will provide a progression route which will help to upskill the existing workforce to meet the future economical, environmental and technological changes.

The Level 2 Foundation framework includes a range of job roles at craft and technical level working with glass using a range of processes such as cutting, engraving, glass blowing, the manufacture and installation of windows, doors, conservatories, soffits and bargeboards, the repair and replacement of automotive glazing and installation of photovoltaics.

The Level 3 framework builds and develops the craft and technical knowledge in these occupational areas and also offers a route to opportunities for team leading and leading hand roles and also in fenestration surveying.

More pathways are being built as technology advances and new processes develop, For example, fire resistant glazing.

For more information about the Glass Industry, please visit www.advice-resources.co.uk. The

report outlines information on careers available, new emerging jobs, transferability of skills, career paths and opportunities for progression. There is information on pay scales, how to enter the industry and what qualifications are available. The report also shows trends in the industry, where skills gaps lie, what influences the recession has had and the future of the industry in terms of a green agenda and job requirements.

Aims and objectives of this framework (Wales)

The aim of the framework is to continue to meet the changing skills needs of employers in the Glass Industry by attracting new recruits from a range of diverse backgrounds and up skilling the existing workforce to ensure that the workforce has the skills, knowledge and experience to help Welsh businesses to remain competitive and profitable.

The objectives of this framework are:

1. To contribute to the tackling of the intermediate skills gaps in Wales, by expanding our Glass Apprenticeship numbers to create a modern class of technicians. They will have transferable skills, gained as a result of both academic study and practical on-the-job experience.
2. To attract new recruits into the Glass Industry from a range of diverse backgrounds to address current skills gaps in the industry and to increase the number of previously unrepresented groups (women, ethnic minorities and those with a disability) It also aims to meet the specific challenges of an ageing workforce.
3. To provide opportunities for existing staff in the Glass industry to upskill to equip them with the necessary skills and knowledge to face the many challenges facing the industry and that they can respond effectively to the changes in developing new products, new markets, technological advances and legal and environmental requirements.
4. To provide quality, sector specific skills development for those who wish to attain the highest possible standards within their chosen occupational area and work to their greatest potential.
5. To provide career progression into employment at higher levels within the Glass industry or, for those who wish to pursue additional learning in a Further or Higher Education arena.

Entry conditions for this framework

The selection process for all Glass employers is likely to include an interview to ensure that potential Apprentices have selected the right framework to meet both their needs and those of the employer. This process provides an opportunity for employers and Apprentice applicants to consider, discuss and assess an individual's prior learning and experience. An employer can then identify where this may be suitable as an appropriate foundation for undertaking the selected Apprenticeship and the individual's potential to successfully complete the framework. Where appropriate, they can also use this initial interview process as a way of tailoring the programme to meet individual learning and support needs.

Apprenticeship applicants are welcomed from a range of diverse backgrounds and it is anticipated that they may have a range of differing experiences, achievements and/or qualifications. The demonstration of relevant, transferable prior learning will form an important part of any employer's Apprentice selection process.

There is a possibility that much of the evidence presented for previous achievements and/or qualifications can be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfers, where this is possible.

Examples of requirements that will be considered as a suitable basis for entry to the framework include:

- Previous work experience or employment, supported by a portfolio of evidence **or**
- Voluntary or community based work **or**
- Proof of completion of non accredited courses **or**
- Achievement of Awards, Certificates or Diplomas in a related industry such as Manufacturing, Engineering, Construction or Creative industries **or**
- Achievement of a 14-19 Diploma in Manufacturing & Product Design or Construction & the Built Environment or Creative and Media **or**
- Welsh Baccalaureate - Foundation, Intermediate or Advanced Diploma **or**
- GCSEs in English, Maths and Science **or**
- A Levels in English, Maths and Science

Literacy and numeracy skills are highly desirable, and the Glass Apprenticeship framework does facilitate the development of these skills and learning support can be tailored to provide Apprentices with the individual assistance they require.

The Glass sector is varied, ranging from large mass production and fabrication plants to small,

specialised studios designing glass vases. A diverse range of careers are available from glass manufacturing and processing jobs to window, door and conservatory installations in domestic and commercial properties. Also, specialised glass design and architectural stain glass. For craft glass workers and stain glass makers, having skills and an interest in design and art work would be advantageous but not essential. Some job roles (e.g. Furnace Operator and Glass Blower) will involve working under hot conditions and many jobs are factory based.

For the home improvements sub-sector, an ability to work with tools, be happy working outdoors in all weathers, good attention to detail and working well with customers are all regular requirements. Some roles will involve individuals working at heights.

In all roles, on the job training is available and most employers are especially interested in applicants who can demonstrate enthusiasm, good communication skills, a positive, “can do” attitude with a willingness to work hard and develop new skills and knowledge.

Level 2

Title for this framework at level 2

Foundation Apprenticeship in Glass Industry Occupations

Pathways for this framework at level 2

Pathway 1:	Curtain Wall Installation
Pathway 2:	Domestic Fascia, Soffit and Bargeboard Installation
Pathway 3:	Glass Processing
Pathway 4:	Glass Container Processing - removed 23.09.14
Pathway 5:	Fenestration Installation
Pathway 6:	Fabrication of Glass Supporting Structures
Pathway 7:	Flat Glass Manufacture
Pathway 8:	Glass Container Manufacture - removed 23.09.14
Pathway 9:	Glazing
Pathway 10:	Photovoltaics Installation
Pathway 11:	Glass Related Distribution and Warehousing

Level 2, Pathway 1: Curtain Wall Installation

Description of this pathway

Curtain Wall Installation

(Total Credit Value = 61)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Curtain Walling Installer	Install curtain walling systems on site. A curtain wall is an outer covering of a building where the outer walls are non-structural. Curtain walls can be made of a lightweight material reducing construction costs - glass is often used, allowing natural light to penetrate deeper within the building.
Screen Wall Installer	Installing screen wall systems on site. A screen wall construction is used to form internal screens/partitions.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Certificate in Curtain Wall Installation					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7843/4	GQA	33	214-225	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly relate to, and underpin, the competency requirements for this pathway.

COMPETENCE: - The qualification comprises of 6 mandatory units and 3 optional units. To achieve the qualification a minimum of **33 credits** must be achieved in total, 30 credits from the 6 mandatory units and a minimum 3 credits from the 3 optional units. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Knowledge of Curtain Walling Systems

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience in the Glass industry, or a related discipline, is also a valuable foundation for entry into this

pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience as a Curtain Wall/Screen Installer and strive to "be the best" in your chosen occupational route and have pride in your work.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Glass Manufacture, Glazing, Automotive Glazing, Installation of Windows, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

Take a closer look at your career options and progression opportunities in the Glass industry by visiting: www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from: www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 2: Domestic Fascia, Soffit and Bargeboard Installation

Description of this pathway

Domestic Fascia, Soffit and Bargeboard Installation

(Total Credit Value = 58)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Fascia, Soffit, Bargeboard Installer/Fitter	Working on customer's premises, removing and installing fascias, soffits and bargeboards.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Certificate in Domestic Facia, Soffitt and Bargeboard Installation					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7826/4	GQA	30	206-225	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly relate to, and underpin, the competency requirements for this pathway.

COMPETENCE: - The qualification comprises of 8 mandatory units and 4 optional units. To achieve the qualification a minimum of **30 credits** must be achieved in total, 27 credits from the 8 mandatory units and a minimum 3 credits from the 4 optional units. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Knowledge of the Fascia, Soffitt and Bargeboard Removal and Installation

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience as a Domestic Fascia, Soffit and Bargeboard Installer and strive to "be the best" in your chosen occupational route and have pride in your work.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Glass Manufacture, Glazing, Automotive Glazing, Curtain Wall Installation or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

Take a closer look at your career options and progression opportunities in the Glass industry by visiting: www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 3: Glass Processing

Description of this pathway

Glass Processing - this also includes Architectural Stain Glass

(Total Credit Value = 51)

Entry requirements for this pathway in addition to the framework entry requirements

None.

Job title(s)	Job role(s)
Autoclave Operator	Working in glass processing operations and working with glass and glass-related materials or semi-finished. Often related to the production of laminated glass in a specialised unit of business.
Cold End Operator	Working in glass processing operations and working with glass and glass-related materials or semi-finished.
Craft Glass Worker/ Stain Glass Worker	Craft glass workers may be involved in glass painting, staining, enamelling, leading or cutting.
Double Glazing Unit Maker	Producing double glazed sealed units.
Engraver	Engravers decorate glass by using hand tools or machinery to cut designs or inscriptions into the surface. They may produce original designs or copy existing ones on a variety of items including goblets, bowls, decanters, mirrors and glass panels.
Glass Cutter	Cuts flat glass and mirrors to specified size and shape, using patterns, straightedge, tape measure, and glass cutting tools: Positions pattern on glass or measures dimensions and marks cutting lines, using glass cutting tool.
Glass Processor	Working in glass processing operations and working with glass and glass-related materials or semi-finished.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Certificate in Glass Processing					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7822/7	GQA	23	138-178	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 5 mandatory units and 9 optional units. To achieve the qualification a minimum of **23 credits** must be achieved in total, 16 credits from the 5 mandatory units and a minimum 7 credits from the 9 optional units. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Know How to Operate Glass Processing Equipment

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience as a Glass Processor and strive to "be the best" in your chosen occupational route and have pride in your work.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Glass Manufacture, Glazing, Automotive Glazing, Installation of Windows, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

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www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the

delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 4: Glass Container Processing - removed 23.09.14

Description of this pathway

Pathway removed 23.09.14 due to qualification expiry

Entry requirements for this pathway in addition to the framework entry requirements

(no information)

Job title(s)	Job role(s)
(no information)	

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

(no information)

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	N/A	N/A
Application of numbers	N/A	N/A
IT	N/A	

Progression routes into and from this pathway

(no information)

Employee rights and responsibilities

n/a

Level 2, Pathway 5: Fenestration Installation

Description of this pathway

Fenestration Installation

(Total Credit Value = 65)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Conservatory Installer	Working on customer's premises and installing conservatories.
Window and Door Installer	Working on customer's premises and installing windows and doors.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Diploma in Fenestration Installation					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7825/2	GQA	37	232 - 261	N/A

C2 - Level 2 NVQ Diploma in Fenestration Installation					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C2a	600/5884/5	IQ	37	227-261	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

Knowledge qualifications available to this pathway (cont.)

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 4 mandatory units and 10 optional units split into 3 groups. To achieve the qualification a minimum of **37 credits** must be achieved in total, 15 credits from the 4 mandatory units, a minimum 8 credits from optional unit group 1, a minimum 11 credits from optional unit group 2 and a minimum 3 credits from optional unit group 3. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Know How To Install Glass Supporting Frames

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience

in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience within Fenestration Installation and strive to "be the best" in your chosen occupational route and have pride in your work.
- Participating in relevant in-house company training or external learning where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Manufacture, Glass Processing, Curtain Wall Installation, Automotive Glazing, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering

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www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

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Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 6: Fabrication of Glass Supporting Structures

Description of this pathway

Production of glass supporting fabrications.

(Total Credit Value = 53)

Entry requirements for this pathway in addition to the framework entry requirements

None.

Job title(s)	Job role(s)
Aluminium Fabricator	Fabricators undertake work to produce fabricated products such as door and window frames and units. Including the processing of materials, applying coatings and treatments and fabricating of frames by joining and assembly.
Conservatory Fabricator	Fabricators undertake work to produce fabricated products for conservatories. Including the processing of materials, applying coatings and treatments and fabricating of frames by joining and assembly.
Framemaker/Window and Door Maker	Fabricators undertake work to produce fabricated products such as door and window frames. Including the processing of materials, applying coatings and treatments and fabricating of frames by joining and assembly. This could also include the addition of glass & panels to the window frames & doors.
Curtain Wall Fabricator	Fabricators undertake work to produce fabricated glazing systems used in curtain walling. Including the processing of materials, applying coatings and treatments and fabricating of frames by joining and assembly.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Certificate in Fabrication of Glass Supporting Structures					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7767/3	GQA	25	162 - 171	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 5 mandatory units and 5 optional units. To achieve the qualification a minimum of **25 credits** must be achieved in total, 14 credits from the 5 mandatory units and a minimum 11 credits from the 5 optional units. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Know How To Operate Equipment for Fabricating Glass Supporting Systems

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience

in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in the Fabrication of Glass Supporting Structures and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Glass Manufacture, Glazing, Automotive Glazing, Installation of Windows, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

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Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 7: Flat Glass Manufacture

Description of this pathway

Manufacture of flat glass

(Total Credit Value = 56)

Entry requirements for this pathway in addition to the framework entry requirements

None.

Job title(s)	Job role(s)
Batch Plant Operator/Melting Operator/Forming Operator/Glass Maker	This includes the receiving and batching of raw materials before they are processed, and the control of heating equipment to melt and form glass from the raw materials.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Certificate in Flat Glass Manufacture					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7770/3	GQA	28	147 - 212	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 3 mandatory units and 11 optional units. To achieve the qualification a minimum of **28 credits** must be achieved in total, 11 credits from the 3 mandatory units and a minimum 17 credits from the 11 optional units. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Know How To Operate Glass Manufacturing Equipment

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience

in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDE:

- Continuing to develop your technical skills and experience manufacturing Flat Glass and strive to "be the best" in your chosen occupational route and have pride in your work.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, other types of GlassManufacture e.g. Containers, Glazing, Automotive Glazing, Installation of Windows, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

Take a closer look at your career options and progression opportunities in the Glass industry by visiting: www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the

delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 8: Glass Container Manufacture - removed 23.09.14

Description of this pathway

Pathway removed due to qualification expiry.

Entry requirements for this pathway in addition to the framework entry requirements

(no information)

Job title(s)	Job role(s)
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(no information)

Qualifications

Competence qualifications available to this pathway

N/A

Knowledge qualifications available to this pathway

N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

(no information)

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	N/A	N/A
Application of numbers	N/A	N/A
IT	N/A	

Progression routes into and from this pathway

(no information)

Employee rights and responsibilities

(no information)

Level 2, Pathway 9: Glazing

Description of this pathway

Glazing

(Total Credit Value = 60)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Glazier	This includes transporting materials, preparing the site, and cutting glass and installing glazing systems.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 NVQ Certificate in Glazing					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/8802/6	GQA	32	204 - 227	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 - 106	N/A

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 6 mandatory units and 3 optional units. To achieve the qualification a minimum of **32 credits** must be achieved in total, 26 credits from the 6 mandatory units and a minimum 6 credits from the 3 optional units. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit/s in the Level 2 knowledge qualification are:

- Know How To Install Glass Into Glazing Installations
- Know How To Shape Glass For Glazing Installation

*NB: Apprentices can do **either OR both** of these optional units.*

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience

in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Glazing and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Flat or Container Glass Manufacture, Automotive Glazing, Installation of Windows, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

Take a closer look at your career options and progression opportunities in the Glass industry by visiting:

www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from: www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 10: Photovoltaics Installation

Description of this pathway

Installation of photovoltaic panels (often referred to as PV)

Solar power is the common term for this technology. PV cells/panels are used to harness energy from the sun.

(Total Credit Value = 77)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
PV Installer/Solar Panel Installer	Installing photovoltaic (PV) panels and systems into roofs, onto roofs or in non roof structures. This will primarily involve working on customer's premises.

Qualifications

Competence qualifications available to this pathway

C1 - NVQ Diploma for the Installation of Photovoltaic Panels					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	600/1373/4	GQA	49	265-305	N/A

C2 - Level 2 NVQ Diploma for the Installation of Photovoltaic Panels					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C2a	600/4429/9	IQ	49	265-305	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7768/5	GQA	13	86 -106	N/A

Knowledge qualifications available to this pathway (cont.)

K2 - Level 2 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	600/5087/1	IQ	13	86-106	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 or K2 provides the underpinning knowledge and understanding for C1- the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: To achieve the qualification a minimum of **49 credits** must be achieved in total. The qualification comprises 7 mandatory units with a total of 29 credits, minimum 3 credits from optional group 1, minimum 14 credits from optional group 2 and a minimum of 3 credits from optional group 3.

KNOWLEDGE: The qualification comprises 4 mandatory units and 9 optional units. To achieve the qualification a minimum of **13 credits** must be achieved in total, 10 from the 4 mandatory units and a minimum of 3 credits from the 9 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 2 knowledge qualification is:

- Knowledge of Photovoltaic Systems

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience in the Glass industry, or a related discipline, is also a valuable foundation for entry into this pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Photovoltaics and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Flat or Container Glass Manufacture, Glazing, Installation of Windows, Fascias, Bargeboards and Soffits or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Team Leader/Supervisor.

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Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 2 Certificate in Glass Related Operations 500/7768/5.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:
www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 2, Pathway 11: Glass Related Distribution and Warehousing

Description of this pathway

Glass Related Distribution and Warehousing

Total Credit Value = 46

Entry requirements for this pathway in addition to the framework entry requirements

There are no additional requirements other than the general entry conditions.

Job title(s)	Job role(s)
Stock Controller	The main purpose of this role is to make sure stock is kept at the correct level to meet demand and ensure replenishment is ordered on a just in time basis to avoid the cost of carrying excess.
Picker	Working in a warehousing environment you will be shown how to check dispatch documentation to identify stock and its location. You will also be shown how to up-date the stock control system. You will be trained in the types of packaging and labelling required for different stock and delivery routes.
Goods in Clerk	Working in a warehousing environment, usually in a control office you will be responsible for checking receipts documentation to ensure consignments are discrepancy free. You may be responsible for bring stock to account and allocating storage locations.
Goods Out Clerk	Working in a warehousing environment, usually in a control office you will be responsible for checking dispatch documentation to ensure consignments have the correct quantity, and destinations or routes are correct. You may be responsible for striking stock off account and reordering replacements
Loader/Unloader	Working in a warehousing environment you will be responsible for checking loads against loading lists/inventories in receipts areas/bays or checking loads against dispatch documentation in distribution areas/bays.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 Certificate in Glass and Glass Related Distribution and Warehousing (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	600/3900/0	GQA	24	90	N/A

Knowledge qualifications available to this pathway

K1 - l 2 Award in Knowledge of the Principles of the Glass Related Working Environment					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	600/5216/8	GQA	10	67	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 1	6
Application of numbers	Level 1	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY INCLUDE:

There are no pre-defined routes of entry into the Glass Occupations Apprenticeship however, work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

The Foundation/Higher Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Foundation/Higher Diploma also provides an excellent platform for individuals interested in progression into the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some entry level jobs in the Glass industry can be offered without qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances. Many skills can be developed while you are employed if you have the right attitude. Previous work experience in the Glass industry, or a related discipline, is also a valuable foundation for entry into this

pathway.

This pathway, like many glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Warehousing and Distribution and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This might require undertaking other Glass related qualifications at Level 2 or 3. For example, Glass Processing, Flat or Container Glass Manufacture, Glazing, Installation of Windows, Fascias, Bargeboards and Soffits, Automotive Glazing or Fenestration Surveying.
- Progressing to a Level 3 Apprenticeship in the Glass Industry.
- Progressing to a related Engineering Apprenticeship.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative and Media.
- Undertaking Assessor and Verifier qualifications.
- Progressing into higher level jobs within the Glass industry such as Senior Windscreen Repair Technician/Windscreen Installer, Engineering roles or Team Leader/Supervisor.

Take a closer look at your career options and progression opportunities in the Glass industry by visiting: www.proskills.co.uk/apprenticeships-careers/

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.

Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.

Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.

Knows and understands the role played by their occupation within their organisation and industry.

Has an informed view of the types of career pathways that are open to them.

Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.

Knows where and how to get information and advice on their industry, occupation, training and career.

Can describe and work within their organisation's principles and codes of practice.

Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within either of the Knowledge Qualifications for this pathway - The Level 2 Certificate in Glass Related Operations 500/7768/5 (GQA) or 600/2434/3 (IMIAL)

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries
Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of either Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3

Title for this framework at level 3

Apprenticeship in Glass Industry Occupations

Pathways for this framework at level 3

Pathway 1:	Automotive Glazing
Pathway 2:	Fabrication of Glass Supporting Structures
Pathway 3:	Glazing
Pathway 4:	Fenestration Installation
Pathway 5:	Fenestration Surveyor
Pathway 6:	Glass Processing
Pathway 7:	Glass Related Distribution and Warehousing

Level 3, Pathway 1: Automotive Glazing

Description of this pathway

Automotive Glazing

(Total Credit Value Automotive Glazing = 71)

(Total Credit Value Bodyshop Automotive Glazing = 64)

(Total Credit Value Automotive Glazing Supervision= 61)

Entry requirements for this pathway in addition to the framework entry requirements

None.

Job title(s)	Job role(s)
Automotive Glazing Technician/ Windscreen Fitter	Removing, replacing and repairing automotive glazing components. Able to use initiative to identify and suggest improvements to work.
Senior Fitter	Those who work in the replacement automotive glazing industry and have supervisory duties. It covers the most important aspects of supervising those who repair and replace glazing components in motor vehicles.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 NVQ Certificate in Automotive Glazing					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7846/X	GQA	34	124-149	
C1b	500/8345/4	IMIAL	34	124-149	
C2 - Level 3 NVQ Certificate in Bodyshop Automotive Glazing					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C2a	502/1689/7	GQA	34	124	
C3 - Level 3 NVQ Certificate in Automotive Glazing Supervision					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C3a	500/8391/0	IMIAL	24	101	UCASValue

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7769/7	GQA	23	95 - 133	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1a **OR** C1b **OR** C2a **OR** C3a

The appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

The decision on which competence qualification the Apprentice will undertake will be made by the training provider and employer.

COMPETENCE:

C1a: The qualification comprises of 4 mandatory units. and 6 optional units split into 2 groups. To achieve the qualification a minimum of **34 credits** must be achieved, 19 from the mandatory units, 4 credits from optional units group 1 and 11 credits from optional units group 2. Achievement of any additional optional units will be recognised and recorded on the certificate.

C1b: This qualification comprises of 4 mandatory units and 6 optional units, split into 2 groups. Candidates must achieve a minimum of **34 credits** to achieve this qualification, including: - 19 credits from the 4 mandatory units in group A - a minimum of 4 credits from optional group B - minimum of 11 credits from optional group C

C2a: The qualification comprises of 5 mandatory units. To achieve the qualification a minimum of **27 credits** must be achieved from the mandatory units.

C3a: The qualification comprises of 6 mandatory units. To achieve the qualification a minimum of **24 credits** must be achieved from the mandatory units.

KNOWLEDGE: A minimum of **22 credits** must be achieved in total, 19 credits from the 4 mandatory units and a minimum 3 credits from the 7 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 3 knowledge qualification is:

- Understanding Automotive Glazing Products

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3.

A Foundation / Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills,

providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

However, this pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Automotive Glazing and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glass Processing, Glazing, Installation of Windows, Fabrication of Glass Supporting Structures or Fenestration Surveying.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or Creative and Media.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Progressing to a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. **Entry may require additional training/learning.**

Take a closer look at your career options and progression opportunities in the Glass Industry by visiting:

... Glass Industry - Non-Statutory (Wales)
..... level 3
..... Pathway 1

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the

delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3, Pathway 2: Fabrication of Glass Supporting Structures

Description of this pathway

Production of glass supporting structures.

(Total Credit Value = 70)

Entry requirements for this pathway in addition to the framework entry requirements

None.

Job title(s)	Job role(s)
Aluminium Fabricator	Produce aluminium fabricated products such as door and window frames. This covers the processing and fabricating of frames by joining and assembly.
Conservatory Fabricator	Produce fabricated products for conservatories. This covers the processing and fabricating of frames by joining and assembly.
Curtain Walling Fabricator	Produce fabricated products used in curtain walling systems. This covers the processing and fabricating of frames by joining and assembly.
Window and Door Fabricator	Produce fabricated products such as door and window frames and units. This covers the processing and fabricating of frames by joining and assembly.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 NVQ Certificate in Fabrication of Glass Supporting Structures					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/7821/5	GQA	33	159 - 182	

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7769/7	GQA	23	95 - 133	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 3 mandatory units and 12 optional units split into 3 groups. To achieve the qualification a minimum of **33 credits** must be achieved in total, 12 credits from the 3 mandatory units, a minimum 11 credits from optional unit group 1, a minimum 8 credits from optional unit group 2 and a minimum 2 credits for optional unit group 3. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: A minimum of **22 credits** must be achieved in total, 19 credits from the 4 mandatory units and a minimum 3 credits from the 7 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 3 knowledge qualification is:

- Know How to Set-Up and Monitor Equipment in a Glass or Glass Related Environment

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3. A Foundation/Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

However, this pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in the Fabrication of Glass Supporting Structures and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glass Processing, Glazing, Installation of Windows, Automotive Glazing or Fenestration Surveying.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or Creative and Media.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Progressing to a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. **Entry may require additional training/learning.**

Take a closer look at your career options and progression opportunities in the Glass Industry by visiting:

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3, Pathway 3: Glazing

Description of this pathway

Glazing - this includes installation of Architectural Stain Glass

(Total Credit Value = 69)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Glazier/ Supervisor	This includes leading teams, installing glazing systems, investigating and resolving technical problems. This can also involve installation of architectural stain glass.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 NVQ Certificate in Glazing					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	500/8803/8	GQA	32	130 - 136	

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7769/7	GQA	23	95 - 133	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 3 mandatory units and 15 optional units split into 2 groups. To achieve the qualification a minimum of **32 credits** must be achieved in total, 19 credits from the 3 mandatory units, a minimum 7 credits from the Optional Unit Group 1 and a minimum 6 credits from optional Unit Group 2. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE: A minimum of **22 credits** must be achieved in total, 19 credits from the 4 mandatory units and a minimum 3 credits from the 7 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 3 knowledge qualification is:

- Knowledge of Glass Cutting in a Range of Glass Types

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3. A Foundation, Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

This pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Glazing and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glass Processing, Automotive Glazing, Installation of Windows, Fabrication of Glass Supporting Structures or Fenestration Surveying.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher/ Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or Creative and Media.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Undertaking a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. **Entry may require additional training/learning.**

Take a closer look at your career options and progression opportunities in the Glass Industry

by visiting:

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3, Pathway 4: Fenestration Installation

Description of this pathway

Fenestration Installation

(Total Credit Value = 75)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Conservatory Installer	Installing of glass supporting systems for conservatories.
Window and Door Fittter	Installing of glass supporting systems, which includes window and door units.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 NVQ Diploma in Fenestration Installation					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	501/1688/5	GQA	38	176 - 246	

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7769/7	GQA	23	95 - 133	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 5 mandatory units and 17 optional units split into 3 groups. To achieve the qualification a minimum of **38 credits** must be achieved in total, 21 credits from the 3 mandatory units, a minimum 9 credits from optional unit group 1, a minimum 4 credits from optional unit group 2 and a minimum 4 credits for optional unit group 3. Achievement of any additional credit will be recognised and recorded on the certificate.

KNOWLEDGE: A minimum of **22 credits** must be achieved in total, 19 credits from the 4 mandatory units and a minimum 3 credits from the 7 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit/s in the Level 3 knowledge qualification are:

- Understanding the Building Regulations in the Fenestration Industry **(for Window Installers)**

OR

- Knowledge of Curtain Walling Systems **(for Curtain Wall Installers)**

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3. A Foundation, Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

This pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience within the Fenestration market and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glass Processing, Glazing, Fabrication of Glass Supporting Structures, Automotive Glazing or Fenestration Surveying.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher/Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or Creative and Media.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Undertaking a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Conservatory Installer, Installation Manager, Surveyor, Service Manager, Branch Manager, Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. **Entry may require additional training/learning.**

Take a closer look at your career options and progression opportunities in the Glass Industry by visiting:

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7.

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3, Pathway 5: Fenestration Surveyor

Description of this pathway

Fenestration Surveying

(Total Credit Value = 64)

Entry requirements for this pathway in addition to the framework entry requirements

For this pathway, Apprentices should be comfortable working outdoors and at heights.

Job title(s)	Job role(s)
Fenestration Surveyor	Surveying work associated with glass supporting systems, including conservatories, other external glazed structures and advanced walling systems. Surveying for doors and windows will also be undertaken.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 NVQ Certificate in Fenestration Surveying					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	501/2109/1	GQA	27	110 - 123	

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate in Glass Related Operations					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7769/7	GQA	23	95 - 133	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 5 mandatory units and 6 optional units. To achieve the qualification a minimum of **27 credits** must be achieved in total, 24 credits from the mandatory units and a minimum 3 credits from the optional units. Achievement of any additional credit will be recognised and recorded on the certificate.

KNOWLEDGE: A minimum of **22 credits** must be achieved in total, 19 credits from the 4 mandatory units and a minimum 3 credits from the 7 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in the Level 3 knowledge qualification is:

- Know How to Produce Specifications for Windows and Doors, or Conservatories and Evaluate their Effectiveness

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3. A Foundation, Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

This pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. Working outdoors, in all weathers, and at heights will also be part of this role. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Fenestration Surveying and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glass Processing, Glazing, Installation of Windows, Fabrication of Glass Supporting Structures or Automotive Glazing.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher or Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative industries.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Undertaking a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Senior Surveyor, Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. **Entry may require additional training/learning.**

Take a closer look at your career options and progression opportunities in the Glass Industry by visiting:

... Glass Industry - Non-Statutory (Wales)
..... level 3
..... Pathway 5

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.proskills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3, Pathway 6: Glass Processing

Description of this pathway

Glass Processing

(Total Credit Value if undertaking knowledge component - GQA Level 3 Certificate in Glass Related Operations = 74)

(Total Credit Value if undertaking knowledge component - BTEC National Diploma in Operations and Maintenance Engineering = 158)

Entry requirements for this pathway in addition to the framework entry requirements

None.

Job title(s)	Job role(s)
Craft Glass Worker	Craft glass workers may be involved in glass painting, staining, enamelling, leading or cutting. They may have to measure sizes and templates, sometimes on site, setting out basic cut lines.
Glass Cutter	Cut flat glass and mirrors to specified size and shape, using patterns, straightedge, tape measure and glass cutting tools: Positions pattern on glass or measures dimensions and marks cutting lines, using glass cutting tool.
Glass Processor	Handle products throughout the process. This involves cutting, shaping, assembling and finishing the products.
Leaded Light Maker	Uses all the traditional processes involved in making a leaded light - including cutting, leading, soldering, cementing and polishing glass pieces.

Qualifications

Competence qualifications available to this pathway

C1 - GQA Level 3 NVQ Diploma in Glass Processing					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	501/2393/2	GQA	37	161 - 202	

Knowledge qualifications available to this pathway

K1 - GQA Level 3 Certificate in Glass Related Operations (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	500/7769/7	GQA	23	95 - 133	

K2 - BTEC Level 3 National Diploma in Operations and Maintenance Engineering					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K2a	500/7315/1	Edexcel	120	720	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 OR K2 provide underpinning knowledge and understanding for C1 - the appropriate optional unit/s from the knowledge qualification should be selected so that they directly related to, and underpin, the competency requirements for this pathway.

COMPETENCE: The qualification comprises of 4 mandatory units and 11 optional units in 2 groups. To achieve the qualification a minimum of **37 credits** must be achieved in total, 20 credits from the 5 mandatory units, a minimum 10 credits from Optional Units Group 1 and a minimum 7 credits from Optional Units Group 2. Achievement of any additional optional units will be recognised and recorded on the certificate.

KNOWLEDGE:

K1: A minimum of **22 credits** must be achieved in total, 19 credits from the 4 mandatory units and a minimum 3 credits from the 7 optional units. Apprentices also need to complete an additional unit on Employee Rights and Responsibilities (in Group C). Achievement of any additional optional credits will be recognised and recorded on the certificate.

The relevant optional unit in K1 Level 3 Certificate in Glass Related Operations qualification is:

- Know How to Set-up and Monitor Equipment in a Glass or Glass Related Environment

K2: The qualification comprises 4 mandatory units and 1 mandatory unit choice, plus optional units. To achieve the qualification a minimum of **120 credits** must be achieved in total, . A minimum of 50 credits must be chosen from optional units group A, which must include a minimum of one unit from the mandatory choice group. The remaining optional units can be minimum of one unit from the mandatory choice group. The remaining optional units can be taken from group A or group B. This structure allows the flexibility to import standard BTEC units (QCF) at Levels 2, 3 or 4 to meet local needs. This is limited to a total of 15 credits and cannot be at the expense of the mandatory units in this qualification.

Apprentices taking this knowledge qualification also need to complete an additional unit on Employee Rights and Responsibilities.

NOTE: *The decision on which knowledge qualification an Apprentice will undertake will be made by the employer and training provider.*

It is satisfactory to achieve this Apprenticeship pathway by undertaking the L3 Certificate in Glass Related Operations with a credit value of 22.

The BTEC Diploma in Operations and Maintenance Engineering with a credit value of 120 will give more in-depth technical, operations and engineering knowledge, if appropriate.

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not Required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3. A Foundation/Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

However, this pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Glass Processing and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glazing, Installation of Windows, Fabrication of Glass Supporting Structures, Automotive Glazing or Fenestration Surveying.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher or Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative industries.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Undertaking a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. **Entry may require additional training/learning.**

Take a closer look at your career options and progression opportunities in the Glass Industry by visiting:

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries

Unit Ref: F/602/3940

Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

Level 3, Pathway 7: Glass Related Distribution and Warehousing

Description of this pathway

Glass Related Distribution and Warehousing

Total Credit Value = 55 Credits

Entry requirements for this pathway in addition to the framework entry requirements

There are no additional requirements other than the general entry conditions.

Job title(s)	Job role(s)
Warehouse Manager	You will be responsible for ensuring all warehouse tasks and duties are completed in line with company policy. You will have responsibility for checking the work of those below you, allocating tasks and communicating with other agencies.
Warehouse Team Leader	You will be responsible to either your supervisor or Manager for the smooth running of your team. You will be responsible for ensuring dispatch and receipt documentation for consignments are checked correctly, stock is struck off account or brought to account and replacement stock is ordered.
Stock Supervisor	Supervises and coordinates activities of workers concerned with ordering, receiving, storing, inventorying, issuing, and shipping materials, supplies, tools, equipment, and parts, in stockroom or warehouse.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 Certificate In Glass and Glass Related Distribution and Warehousing (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	600/3899/8	GQA	24	104	

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate In Knowledge of the Principles of the Glass Related Working Environment (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	600/5217/X	GQA	19	74	

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1

Transferable skills (Wales)

Essential skills (Wales)

	Minimum level	Credit value
Communication	Level 2	6
Application of numbers	Level 2	6
IT	Not required	

Progression routes into and from this pathway

PROGRESSION INTO THIS PATHWAY:

Work based qualifications such as NVQs / SVQs / AVCEs (Vocational A' Levels) and BTEC Diplomas related to Glass sector careers are widely available and all provide a good basis for entry to this pathway. The Welsh Baccalaureate, any learning undertaken as part of the Welsh 14-19 Pathways programme or any other relevant programmes, that combine academic and vocational training, are recognised routes into an Apprenticeship framework. GCSEs and A Levels (or their equivalent) also provide a solid base to build on, with subjects such as Art, Science and Design and Technology all seen as useful by Glass sector employers, along with English, Mathematics, IT and Business Studies.

There is a possibility that many of these may be considered as counting towards completion of an Apprenticeship programme as acceptable forms of Accredited Prior Learning (APL) or via Credit Transfer, where this is possible.

Applicants who have successfully completed a Level 2 Foundation Apprenticeship in Glass Industry Occupations would be considered suitable for progression to an Apprenticeship at Level 3. A Foundation/Higher or Advanced Diploma in Manufacturing and Product Design will provide an excellent route into the Glass manufacturing sector. In addition, the Construction and Built Environment Diploma also provides an excellent start for individuals interested in a career in the Glass industry. The principal learning from these qualifications has been incorporated into the Welsh Baccalaureate and could form a suitable route.

Some career pathways within the Glass industry can be offered without formal qualifications, if a good impression is created at interview. Showing enthusiasm, good communication skills, providing proof of a mature attitude and problem solving skills can all help your chances – as many skills can be developed if you have the right attitude while you are employed. Previous work experience is also a valuable foundation for entry into this pathway.

However, this pathway, like many other glass/glazing jobs, requires manual skills and involves working with your hands, handling heavy equipment, and spending long periods standing; so physical fitness is important. The work also relies heavily on teamwork and good communication skills. These are valued very highly by Glass employers.

PROGRESSION FROM THIS PATHWAY INCLUDES:

- Continuing to develop your technical skills and experience in Warehousing and Distribution and strive to "be the best" in your chosen occupational route.
- Participating in relevant in-house company training or external learning, where available and/or offered.
- Broadening and developing your skill base by progression into other job roles within the Glass industry - "horizontal progression" This may require undertaking other Glass related qualifications at Level 3. For example, Glazing, Installation of Windows, Fabrication of Glass Supporting Structures, Automotive Glazing or Fenestration Surveying.
- Undertaking a Level 3 or Level 4 Higher Apprenticeship in a related sector. For example, Engineering or Construction.
- Undertaking a Higher or Advanced Diploma in Manufacturing and Product Design, Construction and the Built Environment or the Creative industries.
- Undertaking a Certificate/Diploma in Design (Glass Techniques and Technology)
- Undertaking a Foundation Degree in Glass Manufacturing or Management.
- Progressing into higher level jobs within the Glass industry such as Senior Technician/Installer, Engineering roles or Shift Manager/Department Manager.
- Undertaking Assessor and Verifier qualifications.
- Undertaking further training in Management & Leadership, Lean Manufacturing or Business Improvement Techniques.
- Progressing to an industry related undergraduate programme e.g. Engineering, Science or Business Studies. Entry may require additional training/learning.

Take a closer look at your career options and progression opportunities in the Glass Industry by visiting:

www.proskills.co.uk/apprenticeships-careers/

UCAS points for this pathway:

(no information)

Employee rights and responsibilities

It is important that all employees understand and can demonstrate an understanding of their rights and responsibilities as an employee.

The 9 required national outcomes/standards for ERR are that an Apprentice:

- Knows and understands the range of employer and employee statutory rights and responsibilities under Employment Law and that employment rights can be affected by other legislation as well.
- Knows and understands the procedures and documentation in their organisation which recognise and protect their relationship with their employer.
- Knows and understands the range of sources of information and advice available to them on their employment rights and responsibilities.
- Knows and understands the role played by their occupation within their organisation and industry.
- Has an informed view of the types of career pathways that are open to them.
- Knows the types of representative bodies relevant to their industry and organisation, and their main roles and responsibilities.
- Knows where and how to get information and advice on their industry, occupation, training and career.
- Can describe and work within their organisation's principles and codes of practice.
- Recognises and can form a view on issues of public concern that affect their organisation and industry.

As part of this framework, ERR is required to be formally delivered and assessed. This will be demonstrated by the successful completion of a mandatory QCF unit , included within the Knowledge Qualification of this framework - The Level 3 Certificate in Glass Related Operations 500/7769/7

Unit Title: Employment Rights and Responsibilities in the Process and Manufacturing Industries
Unit Ref: F/602/3940
Credit Value: 3

GLH: 18

It should be noted that existing Employer Induction processes will play a central role in the delivery of ERR and this can be supported, and evidenced by, the use of an ERR workbook. Completed workbooks will be formally signed off by the Apprentice, their employer and Provider and can be used as a mode of assessment.

The completed workbook can be used as supporting evidence at the certification stage. A copy of a suitable ERR workbook for Glass Industry Occupations is available to download from:

www.pros.kills.co.uk/apprenticeship-frameworks/mandatory-forms/

Successful achievement of ERR will automatically be demonstrated evidenced at certification by the Apprentice's achievement of the Knowledge qualification.

Time spent on ERR contributes towards meeting the minimum on and off the job learning hours required for completion of this pathway.

The remaining sections apply to all levels and pathways within this framework.

How equality and diversity will be met

OVERVIEW

As the Glass sector continues to adopt more advanced technologies and product designs, and process controls continue to improve, the need for raising skill levels across the sector will prove necessary to maintain and improve competitiveness. Although there is likely to be a drop in the overall size of the workforce in the process manufacturing sector in the coming decade, industries in the Proskills footprint in Wales will still require over 2,500 extra people in the years up to 2017. There will be a greater demand for individuals with higher level skills.

This Glass Apprenticeship aims to promote diversity, opportunity and inclusion by offering high-quality learning opportunities. The delivery of the Apprenticeship framework must be in environments that are free from prejudice and discrimination where all learners can contribute fully and feel that their contribution to the industry is valued. There must be no discriminatory practices in the selection and recruitment of Apprentices to this programme. It is available to all people, regardless of age, gender, ethnic origin, religion/belief, sexual orientation or disability, who meet the stated selection criteria.

ISSUES

The Glass industry in Wales is currently not attracting females, applicants from black and minority ethnic groups or those with a difficulty or disability in sufficient numbers. The industry recognises that it is not making the most of this pool of untapped talent, which could help the Glass industry to meet their skills gaps and shortages. Another key challenge for the Glass industry in Wales is that its current workforce is ageing, with a particular shortfall of employees aged 16-24.

The “**Skills That Work For Wales**” strategy identifies that there is further work to be done to address the needs of young people not in education, employment or training, people with complex needs (such as offenders and ex-offenders) and adults who are unemployed or economically inactive. Modern Apprenticeships continue to be the Welsh Assembly Government’s preferred work based learning route and employers who do not appreciate the business benefits of diversity are missing out on a large pool of talented recruits.

BARRIERS

The reasons for the imbalances in the current make up of the Glass industry workforce are largely down to its historical poor image and a misconception that jobs in the process industry

are dirty and dangerous. The wide range of challenging and varied career opportunities within the Glass industry are not widely known. It is not currently a career of choice for many first time job seekers or for those considering a career change. This is especially so in the case of females and young people.

ACTIONS

Entry to a career in the Glass industry is non-exclusive and there are no significant barriers to entry and progression in any of the occupational pathways within this Modern Apprenticeship framework..

As a way of addressing the issue of attracting young people into the industry, Proskills has developed a number of Schools Into Industry Programmes. These are industry-backed programmes designed to educate and engage young people in the world of process manufacturing and to raise awareness of the exciting and challenging career opportunities available within these industries.

MakeIT! Glass is one of the industry-based project and competition for schools, which is mapped to content in the national curriculum and Diplomas. It familiarises students with the Glass industry through researching and designing of products and investigating different aspects of the industry, from the manufacture of different types of glass to their many industrial, domestic and leisure uses. For more information on MakeIT! Glass please visit: www.proskills.co.uk/schools-competitions The schools into industry programmes are currently running very successfully in England and, following a number of pilot schemes, there are plans to make them available to schools in Wales.

Many smaller Glass employers are making the most of their ageing workforce by developing "buddy systems" whereby older, more experienced members of staff are directly linked with a younger member of staff. This is helping the industry to build and develop a new level of expertise which will help them to address future skills shortages and help employers retain younger staff members by offering them a challenging career with clear progression opportunities.

The Proskills career website www.prospect4u.co.uk has been developed to help raise the profile and set the skills standards and qualifications for the process and manufacturing sector and ensures that the skills system delivers against the current and future needs of the industries it represents.

The process and manufacturing sector, which includes Glass Industry Occupations, is full of exciting and rewarding career opportunities and this website helps individuals to find all the information they need about getting started in any of these innovative industries.

Proskills regularly attend regional and national careers fairs and skills events to promote Apprenticeships. This provides an ideal opportunity to actively address equality and diversity issues within all of their industries.

Glass Industry Apprenticeships, at both Level 2 and 3, seen as a vital route to encourage and facilitate a greater diversity of individuals into the industry and a current marketing plan is in place to widely promote Glass Occupations Apprenticeships and to increase take-up figures by raising awareness of the opportunities available within this exciting and developing industry.

This Apprenticeship programme is also suitable for those already working in the industry and offers an opportunity for individuals to develop and expand their skills and knowledge, facilitate and encourage their progression within the industry and to contribute to workforce retention and succession planning.

On and off the job training (Wales)

Summary of on- and off-the-job training

LEGAL REQUIREMENT

The Specification of Apprenticeship Standards for Wales (SASW) states that an Apprenticeship framework must specify the minimum number of on-the-job training hours and the minimum number of off-the-job training hours an Apprentice must receive to complete the framework and how these are to be evidenced.

An Apprenticeship framework must specify that on-and off-the-job training must either have been received:

a. Whilst working under an Apprenticeship Agreement;

or

b. During a qualifying period ending on the date of application for an Apprenticeship Certificate. A qualifying period of five years is recommended, but to meet the needs of their sector, frameworks may set a shorter or longer timescale than five years as the qualifying period.

Within Wales no distinction is made between whether the on-the-job or off-the-job training hours relate to the competencies qualification or the technical knowledge qualification: what is important is that a framework gives both the prospective apprentice and the employer an accurate indication of the nature of the learning commitment required to complete the framework and become competent.

All On and Off The Job training should:

- Be planned, reviewed and evaluated jointly between the Apprentice and a tutor, teacher, workplace supervisor or manager and, where relevant, the Apprentice's coach or mentor.
- Allow the Apprentice access to support from a tutor, teacher, mentor or manager, as and when required by the Apprentice.
- Be completed while working under an Apprenticeship Agreement and delivered during contracted working hours.
- Be delivered through one or more of the following methods: individual and group teaching, distance learning, e-learning, coaching, mentoring, feedback and assessment,

collaborative/networked learning with peers and guided study.

- Be systematically and formally recorded. For example, in a log book or diary, completed attendance records or on an electronic/online recording system, witness testimonies or video recordings.

The **minimum** recommended **total learning hours** (includes both on and off the job) per year for **Level 2** pathways in the Foundation Level Glass Industry Occupations framework are:

Pathway 1 Curtain Wall Installation: **554**

Pathway 2 Domestic Fascia, Soffitt & Bargeboard Installation: **546**

Pathway 3 Glass Processing: **478**

Pathway 5 Fenestration Installation: **572**

Pathway 6 Fabrication of Glass Supporting Structures: **502**

Pathway 7 Flat Glass Manufacture: **487**

Pathway 9 Glazing: **544**

Pathway 10 Photovoltaics: **605**

Pathway 11 Glass Warehousing and Distribution: **411**

The **minimum** recommended **total learning hours** (includes both on and off the job) per year for **Level 3** pathways in the Glass Industry Occupations framework are:

Pathway 1 Automotive Glazing: **508-531** (*depending on which competency qualification is taken*)

Pathway 2 Fabrication of Glass Supporting Structures: **566**

Pathway 3 Glazing: **537**

Pathway 4 Fenestration Installation: **583**

Pathway 5 Fenestration Surveying: **517**

Pathway 6 Glass Processing: **568- 1193** (*depending on which knowledge qualification is taken*)

Pathway 7 Glass Warehousing and Distribution: 490

Off-the-job training

OFF THE JOB TRAINING HOURS

OFF THE JOB training is defined as time for learning activities which take place outside of normal work duties. Off-the-job training may include any activity where an Apprentice receives any form of instruction, tuition, assessment or progress reviews. For example, (but not exclusively) private study, coaching, mentoring, e-learning, distance learning or classroom training may count as off-the-job training.

An Apprenticeship framework may specify that off-the-job training undertaken before the Apprentice started their Apprenticeship may count towards the off-the-job training required for the Apprenticeship if it was undertaken in relation to an accredited qualification contained in the framework for which an Apprenticeship Certificate is to be applied for.

For this Glass Occupations Framework the **annual minimum** required amount of off the job training hours for each pathway is as follows:

OFF THE JOB TRAINING HOURS FOR LEVEL 2 PATHWAYS - Average completion time is 12 - 18 months

Pathway 1 Automotive Glazing: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**.

Pathway 2 Fabrication of Glass Supporting Structures: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**.

Pathway 3 Glass Processing: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**.

Pathway 5 Fenestration Installation: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**.

Pathway 6 Fabrication of Glass Supporting Structures: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**.

Pathway 7 Flat Glass Manufacture: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**.

Pathway 9 Glazing: For this pathway, the annual **minimum** required amount of off the job

training hours is: **300 hours**.

Pathway 10 Installation of Photovoltaics: For this pathway, the annual **minimum** required amount of off the job training hours is: **300 hours**

Pathway 11 Glass Warehousing and Distribution: For this pathway, the annual minimum required amount of off the job training hours is: 281 hours.

OFF THE JOB TRAINING HOURS FOR LEVEL 3 PATHWAYS - Average completion time is 24 - 36 months

Pathway 1 Automotive Glazing: For this pathway, the annual **minimum** required amount of off the job training hours is: **347 hours**.

Pathway 2 Fabrication of Glass Supporting Structures: For this pathway, the annual **minimum** required amount of off the job training hours is: **347 hours**.

Pathway 3 Glazing: For this pathway, the annual **minimum** required amount of off the job training hours is: **347 hours**.

Pathway 4 Fenestration Installation: For this pathway, the annual **minimum** required amount of off the job training hours is: **347 hours**.

Pathway 5 Fenestration Surveying: For this pathway, the annual **minimum** required amount of off the job training hours is: **347 hours**.

Pathway 6 Glass Processing: For this pathway, the annual **minimum** required amount of off the job training hours is: **347- 972 hours, depending on which knowledge qualification is taken**.

Pathway 7 Glass Warehousing and Distribution: For this pathway, the annual minimum required amount of off the job training hours is: 326 hours.

How this requirement will be met

OFF THE JOB training hours delivered under an Apprenticeship Agreement may vary depending on the previous experience and attainment of the individual Apprentice. As such, the stated minimum requirement of hours for off the job learning may be reduced accordingly.

However, the minimum hours required in total for off the job training for this framework must still be able to be verified as part of the certification process.

PREVIOUS ATTAINMENT

If a learner enters an Apprenticeship Agreement having previously attained part, or all, of the relevant qualifications contained therein, then this prior learning need can be recognised using either a QCF Credit transfer (where appropriate) or through recording of exemptions for certificated learning that is outside of the QCF. For example, Principal Learning qualifications.

For learners that have previously achieved the relevant qualifications, they must have attained these within 3 years of applying for either the Foundation or Apprenticeship Certificate. This is to ensure the currency of their previous attainment.

PREVIOUS EXPERIENCE

If a learner enters an Apprenticeship Agreement with previous work-related experience, this prior learning needs to be recognised but, in order to count towards an Apprenticeship certification, it does need to be recorded using the correct procedures. Please contact the appropriate Awarding Body for details of their "Recognition of Prior Learning" procedures.

For more information on QCF Guidance on Claiming Credit please visit :

www.qcda.gov.uk/resources/4374.aspx

For learners with prior uncertificated learning experience, the off the job learning must have been attained within 3 years of applying for either the Foundation or Apprenticeship Certificate. Alternatively, they should have been continuously employed in the relevant job role in the industry for 3 years duration.

The **OFF THE JOB** learning for all the pathways in the Level 2 framework will consist of the following:

The recommended minimum Off The Job learning hours (LH) for each component is shown in brackets. However, please note that all Apprentices will be assessed on their own abilities and previous experience and some of the learning hours requirements may need to be altered in order to accommodate prior learning, qualifications and experience.

- Level 2 Certificate in Glass Related Operations (86 or 93 LH)
- ERR - QCF unit included in the knowledge qualification (18 LH)
- Level 1 or Level 2 Essential Skill Wales in Communication (alternatively Key Skill Level 1 or Level 2 Communication)* (60 LH)
- Level 1 or Level 2 Essential Skill Wales in Application of Number (alternatively Key Skill Level 1 or Level 2 Application of Number)* (60 LH)

- Company training - this will include induction, ERR, Health & Safety and any relevant practical and technical training. Attendance on any training or instructional learning sessions away from the Apprentice's workstation - this could be on or off site (30 LH)
- Mentoring (approx 1 hour per week for the duration of the framework). (40 LH)
- Appraisal/Assessment relating to the Apprentice's participation and progress in the framework (approx 2 hrs quarterly, dependent on individual support needs) (6 LH)

**** NB: Key Skills qualifications can be accepted as alternatives to Essential Skills Wales qualifications, where they have been achieved before 31st August 2011.***

EVIDENCE FOR OFF THE JOB LEARNING - LEVEL 2

- Copy of Level 2 Certificate in Glass Related Operations
- Copies of certificates for Essential Skills Wales Communication and Application of Number (or qualifying Key Skills certification)
- Copy of completed and signed ERR booklet (if used). Alternatively, verified evidence that all 9 national ERR outcomes have been achieved. ***(Mandatory QCF unit included in the knowledge qualification)***
- Log book, diary, portfolio evidence recorded by the Apprentice documenting off the job coaching, mentoring and support received. This can include evidence of where off the job learning opportunities and/or activities have been met.
- Course attendance records for both on-site and off site training/learning interventions (records may be held electronically)
- Witness testimonies, video footage or any other authorised and valid mode of supporting evidence that required off the job training hours have been carried out.
- Verification from Providers that they are satisfied that the recommended minimum requirements for off the job learning hours for company training, mentoring, review and appraisal have been fulfilled and details of how any additional types of off the job training has been achieved (e.g. mentoring, appraisal, assessment , off workstation instruction etc).

The **OFF THE JOB** learning for all the pathways in the Level 3 framework will consist of the following:

The recommended minimum Off The Job learning hours (LH) for each component is shown in brackets. However, please note that all Apprentices will be assessed on their own abilities and previous experience and some of the learning hours requirements may need to be altered in order to accommodate prior learning, qualifications and experience.

- Level 3 Certificate in Glass Related Operations (95 LH) or BTEC National Diploma in Operations and Maintenance Engineering (720 LH)
- ERR - QCF unit included in the knowledge qualification - Certificate in Glass Related Operations (18 LH)
- Level 2 Essential Skill Wales in Communication (alternatively Key Skill Level 2 Communication)* (60 LH)
- Level 2 Essential Skill Wales in Application of Number (alternatively Key Skill Level 2 Application of Number)* (60 LH)
- Company training - this will include induction, ERR, Health & Safety and any relevant practical and technical training. Attendance on any training or instructional learning sessions away from the Apprentice's workstation - this could be on or off site (45 LH)
- Mentoring (approx 1 hour per week for the duration of the framework) (60 LH)
- Appraisal/Assessment relating to the Apprentice's participation and progress in the framework (approx 2hrs quarterly, dependent on individual support needs) (9 LH)

*** NB: Key Skills qualifications can be accepted as alternatives to Essential Skills Wales qualifications, where they have been achieved before 31st August 2011.**

EVIDENCE FOR OFF THE JOB LEARNING - LEVEL 3

- Copy of Level 3 Certificate in Glass Related Operations or BTEC National Diploma in Operations and Maintenance Engineering.
- Copies of certificates for Essential Skills Wales Communication and Application of Number (or qualifying Key Skills certification)
- Copy of completed and signed ERR booklet (if used). Alternatively, verified evidence that all 9 national ERR outcomes have been achieved. ***(Mandatory QCF unit included in the knowledge qualification)***
- Log book, diary, portfolio evidence recorded by the Apprentice documenting off the job

coaching, mentoring and support received. This can include evidence of where off the job learning opportunities and/or activities have been met.

- Course attendance records for both on-site and off site training/learning interventions (records may be held electronically).
- Witness testimonies, video footage or any other authorised and valid mode of supporting evidence that required off the job training hours have been carried out.
- Verification from Providers that they are satisfied that the recommended minimum requirements for off the job learning hours for company training, mentoring, review and appraisal have been fulfilled and details of how any additional types of off the job training has been achieved (e.g. mentoring, appraisal, assessment, off workstation instruction etc).

All **Off the Job learning** must be formally recorded in either a diary, workbook, portfolio, course attendance records or by an electronic recording system. This evidence needs to be checked, verified and signed off as valid by all relevant parties. For example, the Apprentice, their Employer, the Provider and Assessor. It can also be checked by the External Verifier.

Evidence of the off the job learning hours **may** be requested when applying for an Apprenticeship Completion Certificate.

On-the-job training

ON THE JOB training includes workplace activity where skills, knowledge and competencies are being gained and applied in the course of an Apprentice's normal work duties.

For this Glass Occupations framework the annual **minimum** required amount of on the job learning hours is:

LEVEL 2 Foundation Apprenticeship Pathways

Pathway 1 Curtain Wall Installation: For this, an Apprentice will need to complete an annual **minimum** of **254 on the job** learning hours made up of the Certificate in Curtain Wall Installation (214 - 225 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 2 Domestic Fascia, Soffitt & Bargeboard Installation: For this, an Apprentice will need to complete an annual **minimum** of **246 on the job** learning hours made up of the Certificate in Domestic Fascia, Soffitt and Bargeboard Installation (206 - 225 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 3 Glass Processing: For this, an Apprentice will need to complete an annual **minimum of 178 on the job** learning hours made up of the Certificate in Glass Processing (138-178 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 5 Fenestration Installation: For this, an Apprentice will need to complete an annual **minimum of 272 on the job** learning hours made up of the Certificate in Fenestration Installation (232 - 261 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 6 Fabrication of Glass Supporting Structures: For this, an Apprentice will need to complete an annual **minimum of 202 on the job** learning hours made up of the Certificate in Fabrication of Glass Supporting structures (162 - 171 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 7 Flat Glass Manufacture: For this, an Apprentice will need to complete an annual **minimum of 187 on the job** learning hours made up of the Certificate in Flat Glass Manufacture (147 - 212 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 9 Glazing: For this, an Apprentice will need to complete an annual **minimum of 244 on the job** learning hours made up of the Certificate in Glazing (204 - 227 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 10 Installation of Photovoltaics: For this, an Apprentice will need to complete an annual **minimum of 305 on the job** learning hours made up of the Diploma in Installation of Photovoltaic Panels (265-305 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

Pathway 11 Glass Warehousing and Distribution: For this, an Apprentice will need to complete an annual minimum of 130 on the job learning hours made up of the Certificate in Glass and Glass Related Distribution and Warehousing (90 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (40 LH).

LEVEL 3 Apprenticeship Pathways

Pathway 1 Automotive Glazing: For this, an Apprentice will need to complete an annual **minimum of 161 - 184 on the job** learning hours made up of either the Certificate in Automotive Glazing (124 LH) or Certificate in Bodyshop Automotive Glazing (124 LH) or Certificate in Automotive Glazing Supervision (101 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

Pathway 2 Fabrication of Glass Supporting Structures: For this, an Apprentice will need to complete an annual **minimum of 219 on the job** learning hours made up of the Certificate in Fabrication of Glass Supporting Structures (159 - 182 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

Pathway 3 Glazing: For this, an Apprentice will need to complete an annual **minimum of 190 on the job** learning hours made up of the Certificate in Glazing (130 - 136 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

Pathway 4 Fenestration Installation: For this, an Apprentice will need to complete an annual **minimum of 236 on the job** learning hours made up of the Diploma in Fenestration Installation (176 - 246 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

Pathway 5 Fenestration Surveying: For this, an Apprentice will need to complete an annual **minimum of 170 on the job** learning hours made up of the Certificate in Fenestration Surveying (110 - 123 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

Pathway 6 Glass Processing: For this, an Apprentice will need to complete an annual **minimum of 221 on the job** learning hours made up of the Diploma in Glass Processing (161- 202 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

Pathway 7 Glass Warehousing and Distribution: For this, an Apprentice will need to complete an annual minimum of 130 on the job learning hours made up of the Certificate In Glass and Glass Related Distribution and Warehousing (90 LH) and receiving regular on the job support, feedback, reviews, mentoring etc (60 LH).

How this requirement will be met

ON THE JOB training may include any activity where an Apprentice receives any form of instruction, tuition, guidance, support or feedback whilst carrying out their day-to-day job role.

Typically, it consists of an Apprentice successfully meeting and demonstrating all of the skills and competencies contained in the competency qualification relevant to their chosen pathway and any time spent receiving regular, constructive on the job support, feedback and review on their job related performance.

On the job training hours delivered under an Apprenticeship Agreement may vary depending on the previous experience and attainment of the individual Apprentice. As such, the stated minimum requirement of hours for on the job learning may be reduced accordingly.

However, the minimum hours required in total for on the job training for this framework must still be able to be verified as part of the certification process and an Apprentice's occupational competence demonstrated and evidenced.

PREVIOUS ATTAINMENT

If a learner enters an Apprenticeship Agreement having previously attained part, or all, of the relevant qualifications contained therein, then this prior learning need can be recognised using either a QCF Credit transfer (where appropriate) or through recording of exemptions for certificated learning that is outside of the QCF. (Same as above for off the job) For learners that have previously achieved the relevant qualifications, they must have been certified within 3 years of applying for either the Foundation or Apprenticeship Certificate.

PREVIOUS EXPERIENCE

Apprentices who commence training under an Apprenticeship Agreement with an employer may bring a range of prior experience with them. When an Apprentice can claim 30% (or more) of the total on the job training hours required for their chosen pathway then their learning programme should be tailored accordingly. Prior learning could have been acquired from previous education, employment or other vocational programmes. Training Providers are encouraged to identify specific on the job training opportunities that customise and contextualise the Apprentice's prior learning to their new workplace and job role. This may include selecting appropriate additional units from QCF qualifications relevant to the workplace or Essential Skills at a higher level than that specified in the framework.

All of the job roles within the various pathways of the the Level 2 and 3 Glass Occupations Apprenticeship framework require a thorough level of technical skills, competence and knowledge and this will be gained through on the job, work based training, practice and experience and reinforced by regular feedback, review and support from an Apprentice's work based mentor or identified support network.

The **ON THE JOB** learning for the Level 2 Foundation framework could consist of the following:

- Level 2 competency qualification that relates to the Apprentice's chosen pathway.
- Regular on the job support, feedback, reviews, mentoring etc

EVIDENCE FOR ON THE JOB LEARNING - Level 2

- Copy of Certificate for the relevant Level 2 competency qualification that relates to the Apprentice's chosen pathway.
- Log book, diary, portfolio evidence recorded by the Apprentice documenting on the job

coaching, mentoring and support received. This can include evidence of where on the job learning opportunities and/or activities have been met.

- Course attendance records for any "at workstation" training/learning interventions (records may be held electronically).
- Witness testimonies, video footage or any other authorised and valid mode of supporting evidence that required on the job training hours have been carried out.
- Verification from Assessors that they are satisfied that the recommended minimum requirements for on the job learning hours for company training, mentoring, review and appraisal have been fulfilled and details of how any additional types of on the job training has been achieved (e.g. mentoring, appraisal, assessment , at workstation instruction etc)

The **ON THE JOB** learning for the Level 3 framework could consist of the following:

- Level 3 competency qualification that relates to the Apprentice's chosen pathway.
- Regular on the job support, feedback, reviews, mentoring etc

EVIDENCE FOR ON THE JOB LEARNING - Level 3

- Copy of Certificate for the relevant Level 3 competency qualification that relates to the Apprentice's chosen pathway.
- Log book, diary, portfolio evidence recorded by the Apprentice documenting on the job coaching, mentoring and support received. This can include evidence of where on the job learning opportunities and/or activities have been met.
- Course attendance records for any "at workstation" training/learning interventions (records may be held electronically).
- Witness testimonies, video footage or any other authorised and valid mode of supporting evidence that required on the job training hours have been carried out.
- Verification from Assessors that they are satisfied that the recommended minimum requirements for on the job learning hours for company training, mentoring, review and appraisal have been fulfilled and details of how any additional types of on the job training has been achieved (e.g. mentoring, appraisal, assessment , at workstation instruction etc)

All On the Job learning hours must be formally recorded in either a diary, workbook, portfolio, course attendance records or by an online system. This evidence needs to be checked, verified and signed off as valid by all relevant parties. For example, the Apprentice, their Employer, Provider and Assessor. It can also be checked by the External Verifier.

Evidence of the on the job learning hours **may** be requested when applying for an Apprenticeship Completion Certificate.

In order to facilitate the recording and evidencing of On The Job learning hours an organisation may choose to nominate an “Accountable Manager” (such as the company Training Manager, or someone who is part of the company management team) to take responsibility for regularly checking that an Apprentice has completed at least the recommended minimum number of On The Job learning hours.

Wider key skills assessment and recognition (Wales)

Improving own learning and performance

There is currently no requirement for the Wider Key Skill of **"Improving own Learning and Performance"** as it is felt that this is adequately covered by an Apprentice's completion of the other component parts of this Level 2 Foundation and Level 3 Apprenticeship framework.

For example, the achievement of the relevant competency and knowledge qualifications (including ERR) and participation in employer specific induction programmes and all on and off the job learning experiences should all provide opportunities for Apprentices to improve their own learning and performance.

Working with others

There is currently no requirement for the Wider Key Skill of **"Working with Others"** as it is felt that this is adequately covered by an Apprentice's completion of the other component parts of this Level 2 Foundation and Level 3 Apprenticeship framework.

For example, the achievement of the relevant competency and knowledge qualifications (including ERR) and participation in employer specific induction programmes and all on and off the job learning experiences should all provide opportunities for Apprentices to work with others.

Problem solving

There is currently no requirement for the Wider Key Skill of **"Problem Solving"** as it is felt that this is adequately covered by an Apprentice's completion of the other component parts of this Level 2 Foundation and Level 3 Apprenticeship framework.

For example, the achievement of the relevant competency and knowledge qualifications (including ERR) and participation in employer specific induction programmes and all on and off the job learning experiences should all provide opportunities for Apprentices to problem solve.

Additional employer requirements

There are no additional employer requirements for this framework.

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For more information visit
www.afo.sscalliance.org