



SVQ in Fabrication of Glass Supporting Systems at SCQF Level 6

Qualification Reference Number GT51 46

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PERSONAL COMPETENCE SUMMARY

Name		Company/Centre			
Job Title		GQA Registration Number			
Unit Number	Title	Level	Credit Value	Assessor Signature	Date
Mandatory Units					
Unit Number	Mandatory Units	Level	Credit Value		
GQAPGSF10	Promote and maintain health and safety within the fabrication of glass supporting systems working environment	6	4		
GQAPGSF11	Improve the work of the organisation in the fabrication of glass supporting systems	6	8		
Optional unit Group A - Candidates must take 3 units					
Optional unit Group B - Candidates must take 2 units					
Optional unit Group C - Candidates must take 1 unit					

RELIABLE EVIDENCE: The forms of evidence available include (☐) as appropriate)

Observation in the workplace		Simulation(s)	
Oral assessment of knowledge		Work records	
Written work/assignment		Photographs/Video	
Witness statement(s)		Audio	
Testimonial(s)		Products	
Other (please state)			

	Name and Signatures	Date	Candidate ID Photograph
Candidate			
Lead Assessor			
Internal Verifier			
EQA			

Introduction to the Qualification

Who is this Qualification for?

This qualification is aimed at those who undertake work to produce fabricated products such as door and window frames and units, conservatories, and glazing systems used in curtain walling etc. Units in this qualification cover the processing fabrication of frames by joining and assembly. It is not expected that candidates working in this area all do the same activities: the qualification is structured to endure that there is a high degree of flexibility in the qualification, although there are common units in the mandatory section of the qualification. The standard covers the most important aspects of the job.

Completion of this Level 6 qualification requires candidates to show they have the skills and knowledge to work unsupervised in completing their work and should also have the ability and experience to deal with problems that can occur.

Level 6 candidates are often expected to provide advice, support and guidance to colleagues, particularly those with less experience.

A further qualification that covers Production of Glass Supporting Fabrication at Level 5 is also available

Candidates for this qualification could be assessed in the context of fabricating Windows and Doors, Curtain Walling, Screen Walling or Conservatories.

Candidates for this qualification will primarily be:

- Working in frame fabrication factories
- Working with non glass materials or semi-finished products
- Candidates could have jobs entitled:
- Aluminium Fabricator
- PVCu Fabricator
- Conservatory Fabricator
- Screen Walling Fabricator
- Curtain Walling Fabricator
- Window and Door Maker
- Fabricator
- Window Fabricator
- Framemaker

What is required from candidates?

Candidates should achieve the 2 4 mandatory units listed below, plus the required number of units from each optional group as indicated below. Candidates should prove that they can achieve all the statements listed from each element. Guidance on the evidence that will be acceptable is contained in the introduction to each unit.

Unit Number	Mandatory Units	Level	Credit Value
GQAPGSF10	Promote and maintain health and safety within the fabrication of glass supporting systems working environment	6	4
GQAPGSF11	Improve the work of the organisation in the fabrication of glass supporting systems	6	8
Optional unit Group A - Candidates must take 3 units			

GQAPGSF3	Prepare and operate equipment/machinery/tools in the fabrication of glass supporting systems	5	9
GQAPGSF5	Process products and materials by applying coatings or treatments in the fabrication of glass supporting systems	5	6
GQAPGSF8	Fabricate glass framing systems by joining	5	7
GQAPGSF9	Fabricate glass framing systems by assembly	5	7
GQAPGSF17	Fabricate complex glass framing systems	6	9
GQAPGSF18	Control fabrication operations	6	8
GQAPGSF21	Fabricate glass framing systems by cutting	5	6
GQAPGSF22	Fabricate glass framing systems by preparing materials	5	6
Optional unit Group B-candidates must take 2 units			
PROGEN03	Develop new work procedures	6	6
GQAPGSF13	Diagnose and rectify technical problems in the fabrication of glass supporting systems	6	7
GQAPGSF14	Plan the use of resources to meet work requirements in the fabrication of glass supporting systems	6	6
GQAPGSF16	Set up equipment for operations in the fabrication of glass supporting systems	6	9
Optional unit Group C-candidates must take 1 unit			
GQAPGSF12	Assess the quality of glass and glass-related materials/components in the fabrication of glass supporting systems	6	7
GQAPGSF20	Check the quality of products used in the fabrication of glass supporting systems	5	5

Assessment Guidance

Evidence should show that the candidate can cover the scope of performance outlined for each relevant unit consistently over an appropriate period of time.

Types of evidence:

Evidence of performance and knowledge is required. Evidence of performance should be demonstrated by activities and outcomes, and should be generated in the workplace only, unless indicated under potential sources of evidence (see below). Evidence of knowledge can be demonstrated through performance or by responding to questions.

Potential sources of evidence:

The main source of evidence for each unit will be observation of performance. This can be supplemented by the following types of physical or documentary evidence:

- Accident book
- Correspondence/discussion with customer
- Customer feedback
- Damage and defect reports
- Delivery records
- Equipment used
- Inspection reports
- Notes and memos
- Audio/photographic/video
- Safety records
- Telephone logs
- Installation activity
- Witness testimony
- Simulation of accident or emergency
- Organisational reporting systems

Please Note that photocopied or downloaded documents such as manufacturers or industry guidance, H&S policies, Risk Assessments etc., are not normally acceptable evidence for GQA qualifications unless accompanied by a record of a professional discussion or assessor statement confirming candidate knowledge of the subject. If you are in any doubt about the validity of evidence, please contact your GQA EQA.

GQA Qualification Implementation Requirements covering Centre Approval, Candidate Assessment and ongoing Quality Assurance

This document indicates the requirements of approved centres delivering GQA qualifications and/or units of credit. This document complements the appropriate SSC Assessment Strategy linked to this qualification.

1. Equality of Opportunity

Equality of access to fair and valid assessment is necessary for all candidates undergoing assessment. This may mean making reasonable adjustments to normal assessment methods for candidates with particular or special assessment requirements. Candidates work patterns should not become a barrier to assessment, the organisation of which may have to be flexible. In the same way, reasonable adjustment arrangements may be necessary for candidates with a disability. For example, a candidate who is unable, through disability, to produce oral or written evidence, may be allowed to use the method they normally use as a substitute for the required form of communication. Reasonable adjustments need to be approved by GQA.

2. Recognised/Approved Assessment Centres

2.1 Individual centres must be approved by GQA to offer specific qualifications and / or units of credit. A centre may be a single organisation or a partnership of two or more organisations. It may operate at a single location or have satellites. For further details see the GQA booklet "Guide to Centre Approval". The Centre Approval process is carried out by a GQA approved EQA. Each Centre must maintain a centre file. It is important to be clear what the steps in the assessment process are:

- plan evidence collection and opportunities for assessment
- collect evidence
- judge evidence
- determine whether sufficient evidence has been presented
- make an assessment decision and give feedback to the candidate

NB Any deviation from the norm must be approved by a GQA EQA

2.2 Assessors and Verifiers

All Assessors of candidate performance must be competent, to make qualitative judgements, both in the skills they are assessing and in the assessment of candidates and hold the appropriate Assessor national award. Assessor occupational knowledge related to the qualifications being assessed is essential and must be illustrated to GQA prior to approval.

Internal Verifiers are responsible for the quality assurance of the assessment process within a centre. They should have a relevant occupational background, be competent in internal verification and hold the Internal Verifier national award. It is recommended that Internal Verifiers work towards national recognition of assessor competence.

EQAs are responsible for ensuring accurate and consistent standards of assessment across centres, qualifications, units of credit and over time. They should have a relevant occupational background, be competent in External Quality Assurance and hold the EQA national award

GQA will approve and licence all individuals involved in the assessment and verification of its approved qualifications and / or units of credit. Individuals who are working towards the Assessor or Internal Verifier national awards can only be provisionally licensed. The judgement of provisional licence holders will need to be agreed/authorised by a fully qualified and GQA licensed individual who cannot carry out a dual role in relation to a specific candidate.

All GQA Assessors and Verifiers must undertake a minimum of 2 significant CPD activities in both occupational areas and assessment and verification. Reflective CPD records must be maintained and made available to GQA EQAs for review.

2.3 Centre Approval, Monitoring Reviews and Quality Assurance

The centre recognition/approval process is the start of a significant part of the awarding body's quality assurance system. The Approval process will begin with an EQA review of centre procedures to ascertain the potential centres ability to deliver GQA qualifications and / or units of credit. Centres will be expected to meet the relevant regulatory

authority criteria for delivery of qualifications prior to initial approval; continued compliance with the criteria will be monitored through regular EQA visits. It is recommended that centre reviews are conducted at minimum every six months by a GQA EQA.

New or multi-site centres may be required to undertake quarterly or more frequent EV reviews to ensure that different locations can be seen to satisfy the national requirements.

GQA will ensure that unacceptable barriers relating to the assessment and internal verification of candidates in small companies do not deny recognition of competence to competent young workers. In such circumstances, GQA will demonstrate that its quality assurance procedures remain sufficient and rigorous to ensure that the competence outcomes have standing and credibility in the occupational area.

Enhanced quality procedures to ensure consistency of assessment and verification will be necessary and will include:

- a high level of sampling of assessment decisions N.B. In some instances the EQA may visit each assessment location and qualification / unit of credit candidate (e.g. single candidates dispersed throughout different small companies on government funded programmes)
- an in-depth scrutiny of assessment plans, materials and records
- specific centre guidance aimed at the successful implementation of qualifications and / or units of credit in SMEs via approved centre partnerships. This can include guidance on the quantity and quality of valid, authentic, and transferable evidence expected to be attributed to individual candidates
- ensuring centres are following the requirements prescribed in any appropriate assessment strategies and applicable codes of practice
- the identification and publication of good practice in centres

As part of the Quality Assurance process Proskills require an Enhanced External Quality Assurance process. This will be in the form of 1 significant underpinning knowledge question answered by the candidate for each unit of the qualification. The questions will be decided by GQA, and guideline answers must be submitted for approval and once approved kept in the Centre File to allow independent assessment

3. Qualification / Unit of Credit Candidates

All candidates must register with a GQA recognised/approved centre. The centre must maintain appropriate candidate personal details for external audit purposes etc.

The centre will provide candidates with advice and guidance on how to prepare for assessment and allocate an Assessor who will assess candidate ability to meet the requirements of the relevant qualifications / unit of credit. It is the candidate's responsibility to demonstrate competence and to do this they must:

- prove they can consistently meet all the qualification and / or unit of credit criteria

- provide evidence from work, that they can perform competently in all the contexts specified in the qualification / unit of credit requirements
- prove that they have the knowledge and understanding required to perform competently, even where they have not provided evidence from the workplace

It is therefore critical that quality evidence is provided in a format to allow the Assessor to make a decision and for the Internal Verifier to audit/verify his/her decision.

4. Evidence

A qualification and / or credit is awarded when a person has achieved the necessary outcomes of the qualification and / or unit of credit.

The specific combination of units necessary to achieve a qualification is detailed in the qualification structure.

Certificates of Unit Credit can be awarded when candidates achieve any one, or more, units from the qualification.

The evidence the candidate brings forward is primarily evidence of performance of what he/she can do, not just what he/she knows. The assessment criteria / qualification requirements are described within the qualification and / or unit of credit itself and can incorporate practical skills and knowledge.

The assessor's role is to judge each relevant item of evidence. Each must be judged against the qualification and / or unit of credit requirements. It is not sensible to collect evidence against individual criteria. Nor is it effective. If items of evidence were collected for each of the criteria, the candidate may have to produce many items of evidence, well above the number actually required. GQA recommend holistic assessment.

When judging each item of evidence, the assessor is deciding whether the evidence:

- is authentic – i.e. actually produced by the candidate

- meets the criteria
- relates as appropriate to a context defined within the qualification and / or unit of credit
- confirms that the candidate has the required underpinning knowledge

When the assessor makes a decision about the candidate's competence, he or she examines all the evidence available to determine:

- if the evidence, as a whole, covers all the evidence of achievement
- whether the evidence indicates consistency in competent performance
- whether there is enough evidence on which to base an inference of competence

The answer can only be:

- yes (the candidate is competent)
- no (the candidate is not yet competent)
- there is insufficient evidence to make a decision

Consistency means that the individual is likely to achieve the standard in their work role, in the different activities defined

Performance evidence

Performance evidence can be what the individual actually produces, or the way the individual achieves the standard. One is called product evidence and the other process evidence.

Product evidence is tangible – you can look at it and feel it. Products can be inspected and the candidate can be asked questions about them.

In order to make a fair and objective assessment, the assessor must be able to answer the question: Is there sufficient evidence that the candidate can consistently meet the requirements of the qualification and / or unit of credit? Process evidence describes the way the candidate has achieved an outcome – how they went about it. This may be, for example, the way the quality of products is checked or the way customer complaints are handled. This usually means observing the candidate in action.

Performance evidence may cover a number of outcomes. It makes sense to plan evidence collection so that what the candidate does, in the normal course of their job, can be related to different outcomes and units. The activities that clearly link to the qualification and / or unit of credit requirements are the things to concentrate on when planning evidence collection and assessment and when monitoring the candidate's progress. Look for opportunities in the candidate's job when evidence can be collected against a number of units at the same time.

Performance evidence can be:

- Naturally occurring – evidence produced in the normal course of work. Evidence of this sort is usually of high quality and reliable. It is also cost effective to collect naturally occurring evidence
- Taken from previous achievements – the candidate may be able to bring forward evidence from previous work experience to show that they are still competent to the standard.
- Evidence of prior achievement can be used when it can be shown to support a judgment that the candidate can still achieve the standard. So, the assessor must be satisfied that the evidence of prior achievement is sufficiently reliable to justify saying that the candidate is currently competent.
- Simulated – from circumstances specially designed to enable the candidate's performance to be assessed. Simulation is generally not acceptable.

The exceptions to this are:

- Dealing with emergencies
- Dealing with accidents
- Certain pre-approved real time simulators
- Limited other procedures that cannot be practically performed in the workplace, and for which sufficient evidence can be collected through other means.

NB: It is not always possible or feasible to collect naturally occurring evidence. It is likely that some simulation may be needed, when it may take too long to wait for the evidence to arise e.g. it may be an aspect of performance which occurs infrequently. An example of this may be evidence of how to deal with emergencies i.e. it makes sense to look for evidence from sources other than naturally occurring ones, rather than for, say, waiting for the building to burn down. Centres must obtain GQA EV approval prior to the use of simulation.

Knowledge evidence

Being able to achieve a standard requires the ability to put knowledge to work. The qualification and / or unit of credit indicates the knowledge each person should use if they are to perform competently.

It should not be necessary to test all of the candidate's knowledge separately; however, any exception to this would be detailed in the relevant Assessment Strategy. Performance evidence could show that the candidate knows what he or she is doing. When this is not the case, or if the assessor is not convinced from the performance evidence, it may be necessary to check the individual's knowledge separately.

Oral or written assessments must clearly provide a suitable means of checking the breadth and depth of an individual's knowledge. Assessors will need to judge the best mix of knowledge evidence according to individual circumstances. Knowledge evidence is useful when deciding the quality of performance evidence, but must not be used in isolation to judge competence or as an alternative to performance evidence. Care must be taken that candidate evidence is auditable and verifiable.

NB: These Qualification implementation guidelines are generic across the full range of GQA qualifications. Further guidance on acceptable evidence on each qualification will be found in the Introduction to the Qualification section of the candidate booklet.

SVQ Candidate Declaration

Candidate Name.....

Centre/Company Name.....

Assessor(s) Name(s)

I acknowledge receipt of this copy of the GQA qualification booklet. The unit structure provides information on which units must be achieved to be awarded the NVQ/SVQ. The individual units detail the necessary requirements etc. that I must achieve. I understand that I will have an important role in preparing for and planning assessments and with guidance from the assessor I will collect and record relevant evidence.

I understand that all evidence should be produced by me or be directly attributable to me.

I have been informed of the appeals system and have been issued with a copy of the appeals procedure, should I want to appeal against any part of the assessment process.

I understand the assessments will be carried out with regard to the company/centre Equal Opportunities Policy.

Candidate Signature

Date

Production/Process Activity Guideline

To aid new or established workers, a centre may wish to describe a normal holistic production/process activity relevant to the achievement of the national vocational qualification and identify which units it will contribute to, e.g. the act of preparation for work, implementation and completion will contribute to a number of units of competence.

Production/Process Activity Relevant to the Achievement of this Qualification	Contributory to: Units/Elements

GQAPGSF10	Promote and maintain health and safety within the fabrication of glass supporting systems working environment (Level 6, 4 Credits)
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Overview

This standard covers the skills and knowledge needed to not only meet the broad requirements of health and safety, but also ensure that other people also meet them. The first element deals with mainly preventative activities. It covers the need to follow health and safety guidelines and ensuring the work area is free from hazards. The second element deals with coping in an emergency. The candidate is expected to ensure that medical assistance is summoned, and that the emergency services are called where necessary. The third element is concerned with promoting health and safety in the workplace to other colleagues and visitors, trying to ensure they also comply with all relevant requirements. It is also important that developments in health and safety regulations are monitored and promoted. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. follow the regulations and guidelines for health and safety protection at all times
2. check the immediate work area is free from health and safety hazards
3. identify any health and safety hazards and report them to an appropriate authority
4. take suitable action to prevent harm to individuals
5. adopt safe working practices
6. use safety equipment and personal protective equipment following manufacturers' instructions
7. use equipment and materials following manufacturers' and other relevant instructions
8. inform visitors to the work area of health and safety procedures
9. prevent unauthorised access to hazardous areas
10. summon medical assistance in the event of any injury or potential injury to others
11. give priority to the prevention of injury to people over damage to property
12. carry out emergency procedures following standard operating procedures
13. alert the appropriate emergency services and provide them with the information they require
14. confirm emergency equipment is applied by trained personnel wherever possible
15. report accidents and emergencies in the appropriate information systems
16. monitor organisational changes in health and safety regulations and guidelines and implement their requirements as soon as possible

Knowledge & Understanding

You need to know and understand:

1. relevant health and safety regulations and guidelines
2. health and safety hazards found in the workplace
3. who should be informed of health and safety hazards
4. safe and unsafe working practices
5. type of safety equipment and personal protective equipment used in different situations
6. type of injuries that could occur
7. how to summon medical assistance
8. who are the qualified first-aiders available
9. standard operating procedures for different types of emergency
10. how to alert the emergency services, and what type of information will need to be provided
11. evacuation procedures for workers and visitors, and where should people gather
12. who is authorised to enter dangerous areas
13. accident reporting procedures
14. how to obtain information on changes to relevant health and safety regulations and guidelines
15. how to monitor colleagues complying with health and safety requirements
16. duties of employers and employees in relation to health and safety
17. how to identify different types of health and safety hazards
18. actions taken to minimise risks when health and safety hazards are identified

Overview

This standard covers the skills and knowledge needed to get beyond the immediate requirements of the job, and to view work as more than just utilising technical skills. You should not only try to improve the work of the organisation but should also encourage others to do so. The first element covers the need to keep costs down by using resources effectively, and this means ensuring all those that undertake the work also try to do this. It is important that equipment is used economically, that components are not damaged, and that materials are used in the correct quantities. Surplus materials are retained wherever possible. The second element is concerned with obtaining and providing information to ensure that all the information required to undertake the work correctly is available. It also covers the need to provide information to colleagues to ensure they are fully informed of the work that is being undertaken. Finally, the third element concerns the need to develop and maintain good working relationships within the organisation, especially with colleagues, but also importantly with customers. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. confirm health and safety procedures are complied with at all times
2. check products and materials are transported to avoid unnecessary damage
3. check suitable quantities of materials are used during work activities
4. confirm surplus materials are salvaged for further processing wherever possible
5. check equipment is used following standard operating procedures and manufacturers' instructions
6. check equipment is maintained following standard operating procedures
7. minimise expenditure on non-essential items wherever this does not affect quality
8. assess if people undertaking work activities are competent to do so as far as is reasonably possible
9. identify and pass on potential improvements to work activities to the appropriate people
10. identify the most appropriate sources of information
11. record information in the appropriate information systems
12. provide information to colleagues as soon as possible after they have requested it
13. ensure information provided to colleagues is accurate and contains sufficient detail to meet their requirements
14. provide information in a way that is appropriate to the person requesting it
15. identify any problems relating to the exchange of information and deal with them following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. quantity of materials used for different work activities
4. materials that can be salvaged and how are they salvaged
5. equipment to use for different work activities
6. how to operate different types of equipment
7. how to avoid damaging equipment through incorrect use
8. maintenance requirements of different types of equipment
9. standard operating procedures for different activities
10. how to obtain information on the standard operating procedures
11. information systems used
12. appropriate sources for different types of information
13. procedures for exchanging different types of information
14. consequences of exchanging inaccurate or incomplete information
15. problems that could occur
16. how can different types of problem be resolved
17. why it is important to develop good working relationships with colleagues and customers
18. security procedures for dealing with property
19. who should be informed of problems in working relationships
20. grievance and disciplinary procedures available

16. exchange information following standard operating procedures
17. treat people in a way that maintains good working relationships
18. bring to the attention of colleagues information that might have an immediate effect on their work
19. carry out requests from colleagues without holding up the course of the work
20. refer requests that cannot be met to an appropriate person
21. make resources that are required to achieve work activities available to others
22. treat people's property with care and respect, and comply with security procedures wherever necessary
23. restrict any adverse impact of own work on other people
24. monitor and resolve problems in working relationships and report those that cannot be resolved to an appropriate authority as soon as possible

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to prepare and operate equipment /machinery/tools in the fabrication of glass supporting systems. The equipment is used to undertake work activities, and you are expected to be able to prepare it for operation. You have to monitor the equipment during operation and identify any indications of a malfunction or poor performance. In addition, you have to ensure the equipment is clean and clear from obstructions, although you will not undertake routine or emergency maintenance of the kind carried out by maintenance engineers. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify and confirm specifications for the work being undertaken
3. select equipment that is suitable and confirm it is available and safe for use
4. prepare the equipment following standard operating procedures
5. start up and shut down the equipment following standard operating procedures
6. operate equipment/machinery/tools following standard operating procedures and manufacturers' instructions
7. check monitoring and control systems are fully functional following standard operating procedures
8. remove any items liable to damage the equipment/machinery/tools following standard operating procedures
9. clear equipment/machinery/tools of debris, dirt, and other materials that affect its ability to operate following standard operating procedures
10. identify any problems relating to the equipment/machinery/tools and deal with them following standard operating procedures
11. record information on the operation of the equipment in appropriate information systems

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. how to confirm the correct specifications for the work being undertaken
4. level of detail required in a specification
5. equipment, materials, and work procedures used for different tasks
6. where to obtain information on the safe use of equipment/machinery/tools
7. equipment to use for different work activities
8. how to avoid damaging equipment through incorrect use
9. how different types of equipment/machinery/tools can be prepared for different requirements
10. how to operate different types of equipment/machinery/tools
11. maintenance requirements of different types of equipment/machinery/tools
12. different monitoring methods for different types of equipment/machinery/tools
13. type of items that could damage the equipment/machinery/tools
14. type of problems that can occur with the equipment/machinery/tools, and the standard operating procedures for dealing with them
15. information systems used
16. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to process products and materials by applying coatings or treatments in the fabrication of glass supporting systems. This involves preparing the products and materials for the application of the coating or treatment, and ensuring the correct type and quality are available. The candidate then uses the appropriate equipment to coat or treat the products and materials in a way that enables the product to meet the specification. The candidate also has to identify any problems with the process and take the appropriate action. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify and confirm specifications for the preparation of the products and materials
3. check products and materials are available for processing
4. select the type, quantity, and quality of products and materials to be used during the preparation to meet specifications
5. prepare products and materials to meet specifications following standard operating procedures
6. store prepared products and materials in an appropriate place
7. confirm methods for coating or treating the products and materials
8. apply coatings or treatments to meet specifications
9. check application of the coatings or treatments to meet specifications
10. confirm products are removed after the coating or treatment process following standard operating procedures
11. finish coating or treatment of products and materials using the appropriate methods and materials
12. prepare products and materials for further activities to meet specifications
13. store products and materials in appropriate locations following standard operating procedures
14. identify any problems and deal with them following standard operating procedures
15. record information on the coating or treatment of products and materials in the appropriate information systems

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. type of processing undertaken
4. preparation equipment used
5. preparation processes applied to different products and materials
6. type, quantity, and quality of products and materials used in different processes
7. appropriate storage areas for products and materials before and after processing
8. type of problems that can occur and the standard operating procedures for dealing with them
9. methods for coating or treating different products and materials
10. type, quantity, and quality of materials used in different coating or treatment processes
11. how to check the application of coatings or treatments
12. how to remove coated or treated products and materials
13. how to finish different types of products and materials after coating or treatment
14. activities that could follow the coating or treatment of products and materials
15. recommended schedules for controlling the condition of coated or treated products and materials
16. information systems used
17. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to fabricate glass framing systems by joining. This involves preparing the materials for the joining process, and ensuring the correct type and quality are available. You will use the appropriate equipment to join the materials in a way that meets the specification. You will also have to identify any problems with the process and take the appropriate action. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify and confirm specifications for the preparation of materials
3. check materials are available for joining
4. select the type, quantity, and quality of materials to be used during the joining to meet specifications
5. prepare materials following standard operating procedures
6. store prepared materials following standard operating procedures
7. identify suitable joining materials to meet specifications
8. position the materials for joining following standard operating procedures
9. join materials to meet specifications
10. check joins are square and true
11. remove any excess materials without decreasing the effectiveness of the join following standard operating procedures
12. identify any problems and deal with them following standard operating procedures
13. record information on the joining of materials in the appropriate information system

Knowledge & Understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. type of joining undertaken
4. preparation equipment used
5. preparation processes applied to different materials
6. type, quantity, and quality of materials used in different joining processes
7. appropriate storage areas for materials before and after joining
8. problems that can occur and the standard operating procedures for dealing with them
9. methods for joining different types of material
10. methods for joining sections
11. how to position materials
12. how to ensure joins are square and true
13. how to remove excess materials
14. how to utilise materials to minimise wastage
15. information systems used
16. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to fabricate glass framing systems by assembly. This involves preparing the materials for the assembly process, and ensuring the correct type and quality are available. You will then use the appropriate equipment to assemble the materials in a way that meets the specification. You will also identify any problems with the process and take the appropriate action. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify and confirm specifications for the preparation of the materials
3. check materials are available for assembly to meet specifications
4. select type, quantity, and quality of materials to be used to meet specifications
5. prepare the materials to meet specifications
6. store prepared materials following standard operating procedures
7. identify suitable methods for assembling glass framing systems to meet specifications
8. position the materials for assembly to meet specifications
9. assemble materials to meet specifications
10. clean finished glass framing systems and remove all excess materials following standard operating procedures
11. store finished glass framing systems and label them following standard operating procedures
12. identify any problems and deal with them following standard operating procedures
13. record information on the assembly of glass framing systems in the appropriate information systems

Knowledge & Understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. assembly processes undertaken
4. preparation equipment used
5. preparation processes applied to different materials
6. type, quantity, and quality of materials used in different assembly processes
7. appropriate storage areas for materials before and after assembly
8. methods for assembling different types of material
9. how to position materials how to clean different types of assembly, and where to dispose of excess materials
10. problems that can occur during assembly and standard operating procedures for dealing with them
11. information systems used
12. why it is important to use information systems

Assessor comments/feedback

Overview

This standard covers the skills and knowledge needed to fabricate complex glass framing systems. The complexity could be because the products have special requirements relating to their production, have features that are difficult to achieve, or require a mixture of materials and processes that are particularly unusual. The fabrication involves preparing the materials for the fabrication, and ensuring the correct type and quality are available. You will then use the appropriate equipment and processes to fabricate the materials in a way that meets the specification. You will also have to identify any problems with the process and take the appropriate action.

Complex systems include products such as raked, arched or irregular shaped frames.

This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify and confirm specifications for preparation of materials
3. identify complex requirements of the fabrication to meet specifications
4. check materials are available for fabrication following standard operating procedures
5. select the type, quantity, and quality of materials to meet specifications
6. prepare materials to meet specifications
7. store prepared materials following standard operating procedures
8. identify suitable methods for fabricating complex glass framing systems to meet specifications
9. position materials for fabrication following standard operating procedures
10. fabricate materials to meet specifications
11. clean finished glass framing systems and remove all excess materials following standard operating procedures
12. store finished glass framing systems and label them following standard operating procedures
13. identify any problems relating to the fabrication and deal with them according to standard operating procedures
14. record information on the fabrication of complex glass framing systems in the appropriate information systems

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. type of complex requirements could arise
4. special methods and equipment necessary to deal with complex requirements
5. type of fabrication undertaken
6. preparation equipment used
7. preparation processes applied to different materials
8. type, quantity, and quality of materials used in different fabrication processes
9. appropriate storage areas for materials before and after fabrication
10. methods for fabricating different types of complex glass framing system
11. how to position materials correctly
12. how to clean different types of fabrication, and where to dispose of excess materials
13. problems that can occur during fabrication and standard operating procedures for dealing with them
14. information systems used
15. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to control fabrication operations. While not necessarily being a supervisor, you will monitor what is happening during fabrication and ensure that any problems are identified with the equipment or with working practices. You, being experienced in the fabrication operations, should be able to provide advice and guidance to other workers on what to do in a variety of routine and non-routine situations. You will be able to demonstrate the correct use of equipment and identify where work practices could be improved. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. monitor the use of materials in the fabrication equipment and identify any variations from specifications
3. monitor operating conditions of fabrication equipment and identify any variations from specifications
4. inspect fabrication equipment and identify any malfunctions and obstructions
5. confirm fabrication equipment is operated following standard operating procedures
6. identify any problems relating to the fabrication operations and deal with them following standard operating procedures
7. record information on fabrication operations in the appropriate information systems
8. monitor actions of colleagues to determine whether they need assistance
9. provide clear instructions on the use of fabrication equipment
10. instruct on the use of fabrication equipment following standard operating procedures
11. assist colleagues with information on fabrication operations following standard operating procedures
12. identify good practice in fabrication operations
13. provide realistic recommendations on potential improvements for fabrication operations

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. fabrication operations that occur
4. different types of material used
5. equipment to use for different work activities
6. typical specifications for fabrication operations monitored
7. procedures for monitoring fabrication operations
8. problems that can occur with fabrication operations and standard operating procedures for dealing with them
9. fabrication equipment used for different work activities
10. information systems used
11. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to fabricate of glass framing systems by cutting. This involves preparing the materials for the process, and ensuring the correct type and quality are available. You will use the appropriate equipment to apply the process in a way that meets the specification. You will identify any problems with the process and take the appropriate action. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures during the cutting process
2. identify and confirm specifications for the preparation of the materials
3. check materials are available for cutting
4. select the type, quantity, and quality of materials to be used during the cutting process
5. prepare materials to meet specifications
6. store cut profiles following standard operating procedures
7. identify types of cutting to meet specifications
8. position materials for cutting following standard operating procedures
9. cut materials to meet specifications
10. monitor the cutting of materials to meet specifications
11. use materials to minimise wastage
12. identify any problems and deal with them following standard operating procedures
13. record information on the cutting of materials in the appropriate information systems

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. type of cutting of materials undertaken
4. cutting equipment used in glass fabrication
5. cutting processes applied to different materials
6. appropriate storage areas for materials before and after they have been cut
7. methods for cutting different types of material
8. how to position materials correctly
9. how to utilise and optimise materials to minimise wastage
10. problems that can occur and standard operating procedures for dealing with them
11. information systems used
12. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the fabrication of glass framing systems by processing materials, which could include bending and drilling. This involves preparing the materials for the process, and ensuring the correct type and quality are available. The learner then uses the appropriate equipment to apply the process in a way that meets the specification. The learner also has to identify any problems with the process and take the appropriate action. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify and confirm the specification for the preparation of the materials
3. confirm work activities required to be undertaken are within one's own competence
4. select the correct type, quantity and quality of materials to be used during the processing
5. identify suitable methods and equipment to carry out the processing activity
6. position the materials correctly for preparation
7. use equipment following standard operating procedures and manufacturers' instructions to carry out the processing activity in line with the specification
8. prepare the materials according to the specification, minimising waste
9. monitor the preparation activities to confirm they meet the specification
10. salvage any surplus materials for further processing where appropriate
11. minimise expenditure on non-essential items wherever this does not affect quality
12. store the prepared materials in an appropriate location
13. record information in the appropriate information systems

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. type of processing undertaken
4. preparation equipment used
5. preparation processes applied to different materials
6. type, quantity, and quality of materials used in different processes
7. appropriate storage areas for materials before and after preparation
8. how to position materials
9. how to utilise materials to minimise wastage
10. problems that can occur within the preparation process and standard operating procedures for dealing with them
11. information systems used
12. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard is concerned with developing new work procedures or modifying existing work procedures, for achieving new work requirements. You have to assess the requirements of the work. When all the factors have been assessed, you should specify a procedure that can be successfully used. This will involve testing the procedure to make sure it works, and then providing sufficient details to others so that they can replicate the procedure later.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify clearly the purpose of the work
3. select the resources that have to be used in the work
4. identify any features and characteristics of the work that could affect the work procedures that might be used
5. identify any potential problems and their solutions
6. obtain information on previous examples of similar work
7. identify potential work procedures for undertaking the work and assess their advantages and disadvantages
8. specify clearly the work procedures that are most suitable
9. produce a work procedure that is clear and specific
10. identify the resources required to implement the work and incorporate them into the work procedures
11. highlight any special requirements for undertaking the work and confirm them with the appropriate people
12. inform all relevant parties of the work procedures and provide them with an appropriate rationale for their introduction
13. record information on the new work procedures in the appropriate information systems
14. obtain information on the effectiveness of the new work procedures wherever possible

Knowledge and understanding

You need to know and understand:

1. the relevant health and safety responsibilities and obligations
2. the relevant health and safety procedures that need to be followed
3. the work has to be done to meet different requirements
4. the methods or procedures that are available for doing the work
5. how similar work has turned out previously
6. how to assess the different work methods or procedures
7. the type of special requirements that might be needed for implementing the work
8. how to identify features and characteristics of work that could affect procedures
9. why written procedures are important
10. how to assess advantages and disadvantages of potential work procedures
11. who needs to know about the work procedure and rationale
12. how to inform people of the work procedure
13. how to provide a rationale for the work procedure
14. how to test and assess the work procedure
15. the resources that are required for different types of work and what resources are available
16. the standard operating procedures for different activities
17. how to obtain information on the standard operating procedures
18. the types of problems that could occur
19. how different types of problems can be resolved
20. what information systems should be used
21. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to diagnose and rectify technical problems in the fabrication of glass supporting systems, i.e. those problems that require a high degree of problem solving. Often the location of a technical problem is not immediately apparent, and you will have to investigate the location of the problem and identify its nature. Once the location and nature of the fault is identified, it is necessary to identify what is actually causing it: this might be a component, or faulty materials, or even faulty design. You will then have to work through a number of solutions before determining the right one. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling..

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. select appropriate actions to identify technical problems following standard operating procedures
3. investigate indications of technical problems and identify possible locations
4. isolate technical problems to determine actual locations following standard operating procedures
5. seek alternative solutions where technical problems have not been located, and suggest them to the appropriate people
6. inform the relevant people of the consequences of technical problems being located in difficult locations following standard operating procedures
7. record information in the appropriate information systems
8. investigate technical problems and identify possible causes using diagnostic methods following standard operating procedures
9. evaluate the likelihood of each possible cause being responsible for technical problems and prioritise work following standard operating procedures
10. diagnose causes of technical problems following standard operating procedures
11. refer technical problems to expert assistance when the cause cannot be identified
12. obtain all relevant information on technical problems following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. types of technical problem that could occur
4. actions required to identify different types of technical problem
5. likely locations of different technical problems
6. locations that are difficult or non-accessible
7. when is it advisable to escalate attempts to find a technical problem, and other actions pursued
8. most appropriate diagnostic methods for identifying the causes of technical problems
9. diagnostic methods used for different types of technical problems
10. possible causes of technical problems
11. when is it advisable to escalate attempts to find a technical problem, and other actions pursued
12. problems that can occur with the diagnostic process and rectification work and standard operating procedures for dealing with them
13. work done to meet different requirements
14. equipment, materials and work procedures used for different jobs
15. information systems used
16. why it is important to use the information systems

13. arrange for rectification of technical problems using personnel, equipment, materials, and work procedures
14. check rectification meets all specifications and requirements
15. verify technical problems have been rectified and monitor over a suitable period following standard operating procedures
16. identify any problems and deal with them following standard operating procedures
17. inform relevant people that technical problems have been rectified following standard operating procedures

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to plan the use of resources to meet work requirements in the fabrication of glass supporting systems. You have to identify exactly what is required, and what resources should be used to achieve it. You then have to make sure that all the resources, including people, are used effectively to deliver the work requirements. It is important to monitor how the resources are used, and how the progress of the work is being maintained. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. collect all relevant details relating to work requirements
3. select the most appropriate option for achieving work requirements
4. determine resources used to undertake work following standard operating procedures
5. obtain information on which resources are available for achieving the work
6. inform the relevant people that resources will be required following standard operating procedures
7. identify any problems deal with them following standard operating procedures
8. identify work tasks that need to be completed to meet specifications
9. select appropriate resources for completing tasks to meet specifications
10. devise schedules of work that are achievable within the constraints of the organisation
11. provide information on work schedules to all relevant people following standard operating procedures
12. monitor progress against work schedules
13. monitor the use of materials and ensure they meet specifications
14. monitor the use of resources in achieving the work requirements
15. record information on the progress of the work in the appropriate information system

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. work done to meet different requirements
4. equipment, materials, and work procedures used for different jobs
5. how to devise a schedule of work
6. how to monitor the progress of work
7. resources required for different types of work
8. resources available for the fabrication of glass supporting systems
9. how to monitor the resources being used
10. standard operating procedures for different activities
11. how to obtain information on the standard operating procedures
12. problems that could occur
13. how can different types of problem be resolved

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to set up equipment in the fabrication of glass supporting systems. The equipment is used to undertake work activities, and you are expected to be able to set it up to meet a range of requirements. This will involve obtaining the specifications for the products or materials that are being worked on and determining the correct settings for the equipment. You then have to monitor the equipment during operation and identify any indications of malfunction or poor performance. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications for the work being undertaken
3. select suitable equipment and confirm it is available and safe for use
4. determine appropriate settings for the equipment to meet specifications
5. check settings are adjusted on equipment to meet specifications
6. operate equipment following standard operating procedures and manufacturers' instructions
7. check monitoring and control systems are fully functional and meet specifications
8. check monitoring and control systems are accessible, clear of obstructions and debris, and clean following standard operating procedures
9. confirm items liable to damage equipment are removed following standard operating procedures
10. check equipment is cleared of debris, dirt, and other materials that affects its ability to operate following standard operating procedures
11. identify any problems deal with them following standard operating procedures
12. record information in the appropriate information systems

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. how to confirm specifications for the work being undertaken
4. level of detail required in a specification
5. equipment to use for different work activities
6. how different types of equipment can be set up for different requirements
7. how to operate different types of equipment
8. maintenance requirements of different types of equipment
9. different monitoring methods for different types of equipment
10. items that could damage equipment
11. problems that can occur with the equipment and standard operating procedures for dealing with them
12. information systems used
13. why it is important to use the information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to make assessments of the quality of glass and glass-related materials/components in the fabrication of glass supporting systems, i.e. those materials that are either glass or are associated with their use, e.g. raw materials, frames and ancillaries. You will need to be able to identify the main characteristics of the glass and glass-related materials/components that they work with, and to ensure that the materials/components match the specifications required by the work being undertaken. You need to be able to detect any obvious variations, e.g. defects in the manufacture of the materials that could adversely affect the work. You also need to be able to identify the most likely causes of these variations, and make recommendations to correct them to the appropriate people. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. check equipment used to assess quality is functioning following standard operating procedures
3. assess glass and glass-related materials/components using appropriate equipment and methods
4. identify the main characteristics and features of the glass and glass-related materials/components following standard operating procedures
5. check glass and glass-related materials/components meet the information on them following standard operating procedures
6. report any discrepancies to the appropriate people following standard operating procedures
7. obtain specifications for the glass and glass-related materials/components following standard operating procedures
8. examine glass and glass-related materials/components for variations in quality following standard operating procedures
9. check equipment used in the examination process meets company standards
10. identify any variation between the quality of the glass and glass-related materials/components and specifications
11. access all relevant information on the causes of the variation in glass and glass-related materials/components following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. relevant health and safety procedures that need to be followed
3. quantity of glass and glass-related materials/components used for different work activities
4. type of glass and glass-related materials/components required for different jobs
5. how to confirm the specification of glass and glass-related materials/components
6. problems that can occur and standard operating procedures for dealing with them
7. quality standards products should meet
8. types of variations in quality that could occur
9. indications of quality variations
10. most appropriate types of information for identifying causes of a variation
11. likelihood of a variation occurring in different glass and glass-related materials/components
12. methods used for identifying causes of variations
13. when it is appropriate to bring in additional expertise and the consequences on the organisation and customers
14. types of solution possible for different quality assurance problems
15. equipment to use for different work activities
16. how to operate different types of equipment
17. how different types of equipment can be set up for different requirements
18. information systems used
19. why it is important to use the information systems

12. identify likely causes of variations and prioritise investigations following standard operating procedures
13. identify the causes of the variation following standard operating procedures
14. obtain expert assistance when the causes of variations cannot be identified following standard operating procedures
15. identify suitable solutions for rectifying the causes of variations
16. check quality assurance results are recorded in the appropriate information systems

Assessor Comments/Feedback

Overview

This standard covers the skills and knowledge needed to carry out quality checks on products before, during and after processing. It includes the need to understand the equipment, types and frequency of the quality checks, and record and report the findings. Knowledge of the problems that can occur and how to deal with these is also required. This unit applies to operatives who fabricate windows, doors, conservatories and curtain walling.

Performance Criteria

You must be able to:

1. obtain product specifications following standard operating procedures
2. confirm product specifications following standard operating procedures
3. select appropriate method and equipment to meet specifications
4. confirm equipment is suitable for use
5. carry out the required type and level of quality checks following standard operating procedures
6. record the results of inspections following standard operating procedures
7. report the results to the appropriate persons following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. how to obtain product specifications
2. how to confirm product specifications
3. ways to check product quality
4. use and purpose of equipment required in the checks used
5. how to check the equipment is suitable for use
6. the types of variations/defects that can occur
7. actions to take when variations are detected

Assessor Comments/Feedback

Notes

Notes



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