SVQ in FENESTRATION INSTALLATION AT SCQF LEVEL 5

Qualification Reference Number

GT83 45

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PERSONAL COMPETENCE SUMMARY

Name	Company/Centre
Job Title	GQA Registration Number

Unit Number	Qualification Mandatory Units	Level	Credit Value	Assessor signature	Date
GQAFSB1	Maintain health and safety in the workplace	5	4		
GQAFSB4	Transport and handle installation equipment and materials	5	6		
PROGEN02	Communicating and working with others	5	4		
GQAFSB3	Confirm installation instructions	5	6		
Optional Group A - All pathways: choose either GQAFEN18 or GQAFEN19					
GQAFEN18	Comply with building regulations/standards related to curtain walling in the fenestration industry	6	6		
GQAFEN19	Comply with building regulations/standards for installation in the fenestration industry	6	5		
Fenestration Installation (Pathway 1) Mandatory unit					
GQAFEN9	Install windows, doors, conservatories, or non-complex curtain walling	5	6		
Fenestration Installation (Pathway 1) Optional Group A (choose any 2 units)					
Fenestration Installation (Pathway 1) Optional Group B (choose any 1 unit)					
Fire-Resistant Glazing (Pathway 2) Mandatory units					
PROFEN24	Install fire-resistant glazing	5	6		
GQAFEN28	Select fire resistant glazing sealants	5	4		
Fire-Resistant Glazing (Pathway 2) Optional Units (choose any 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 Signature	Date
Candidate		
Lead Assessor		
Internal Verifier		
EQA		

Candidate ID Photograph

Introduction to the Qualification

Who is this Qualification for?

This qualification is aimed at those who work as installers of glass supporting systems, which include window and door units, and basic curtain walling systems etc., and a separate pathway for those installing Fire Resistant Glazing. The standard covers the most important aspects of the job. This qualification is at SCQF Level 5, and should be taken by those who are fully trained to deal with routine assignments. Candidates should require minimum supervision in undertaking the job.

A further qualification that covers Fenestration Installation and Surveying at SCQ Level 6 is also available.

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

- Working on customers' premises
- Installing glass supporting systems

Candidates could have jobs entitled:

- Conservatory Installer
- Curtain Wall Installer
- Double Glazier
- Installer
- Installer of Replacement Windows and Doors
- Screen Wall Installer
- Window Fitter

What is required from candidates?

Candidates should achieve all 4 mandatory units, and then the required units from their selected pathway.
NB. Candidates can complete both Pathways if this is appropriate"

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.

Mandatory Units (All must be completed)

Unit Number	Qualification Mandatory Units	Level	Credit Value
GQAFSB1	Maintain health and safety in the workplace	5	4
GQAFSB4	Transport and handle installation equipment and materials	5	6
PROGEN02	Communicating and working with others	5	4
GQAFSB3	Confirm installation instructions	5	6
Optional Group A - All pathways: choose either GQAFEN18 or GQAFEN19			
GQAFEN18	Comply with building regulations/standards related to curtain walling in the fenestration industry	6	6
GQAFEN19	Comply with building regulations/standards for installation in the fenestration industry	6	5
Fenestration Installation (Pathway 1) Mandatory unit			
GQAFEN9	Install windows, doors, conservatories, or non-complex curtain walling	5	6
Fenestration Installation (Pathway 1) Optional Group A (choose any 2 units)			
GQAFEN5	Shape products and ancillaries for installation	5	6
GQAFEN3	Remove existing windows, doors and panels and prepare apertures	5	5
GQAFEN6	Prepare and position windows and door sets ready for installation	5	5
GQAFEN11	Install glass and panels into supporting frames and structures	5	6
Fenestration Installation (Pathway 1) Optional Group B (choose any 1 unit)			

GQAFEN1	Prepare site, equipment and tools for fenestration installation	5	11
GQAFEN12	Carry out post fenestration installation activity	5	5
GQAFEN13	Maintain and repair windows/ doors/ conservatories	6	9
GQAFEN14	Maintain and repair Curtain Wall installations	6	9
Fire-Resistant Glazing (Pathway 2) Mandatory units			
PROFEN24	Install fire-resistant glazing	5	6
GQAFEN28	Select fire resistant glazing sealants	5	4
Fire-Resistant Glazing (Pathway 2) Optional Units (choose any 1 unit)			
GQAFEN25	Use of fire-resistant glazing in timber screens and doors	6	6
GQAFEN26	Install fire-resistant glazing in metal door and frame systems	6	6
GQAFEN27	Use of fire-resistant glass in individual systems	6	6

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
- Audio/photographic/video
- Safety records
- Telephone Logs
- Installation activity
- Witness testimony
- Notes and memos
- Organisational reporting systems

Examples of Evidence:

- Glazing activities (inc. Glass cutting, handling, transporting)
- Damage/Defect reports
- Glass types (e.g. flat, laminated, patterned, wires etc.)
- Protective materials (inc. Heavy duty safety film, laminated safety glass, self-adhesive heavy duty film, wooden boards)
- Materials (inc. Consumables, fixings, glass, infill panels)
- Information systems, manual or electronic
- Demonstration pieces
- Resources (inc. People, time, materials, equipment, energy)
- Equipment (inc. Personal protective equipment, manual and power tools)
- Emergency procedures (inc. Responding to alarms, using firefighting equipment, isolating power and/or fuel supplies)

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 EQA 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**

GQAFSB1	Maintain health and safety in the workplace (Level 5, Credits 4)

Overview

What is this standard about?

This standard covers the broad requirements of health and safety in workplaces. It covers the need to follow health and safety guidelines, and ensuring that workplaces are free from hazards and hazardous materials. In the event of emergencies, you are expected to ensure that medical assistance is summoned, and that the emergency services are called where necessary.

Who is this standard for?

This standard is for you if you carry out installation work in a construction related working environment.

Performance Criteria

You must be able to:

1. follow the regulations and guidelines for health and safety protection fully at all times
2. review any relevant risk assessments, and identify any health and safety hazards found in the workplace promptly and accurately
3. determine whether it is safe to proceed with the work promptly
4. adopt a safe system of work, and use safety equipment, access equipment, and personal protective equipment correct- ly
5. follow manufacturers' and other relevant instructions relating to the safe use of equipment and materials fully
6. inform visitors to the installation site of health and safety procedures promptly and clearly, and prevent unauthorised access to working areas at all times
7. take suitable action to prevent harm to individuals promptly, and give priority to the prevention of injury to people over damage to property
8. respond to accidents and emergencies promptly and correctly by carrying out the procedures specified by the organisation
9. record accidents and emergencies clearly and promptly in the appropriate record systems

Knowledge and understanding

You need to know and understand:

1. the relevant health and safety regulations and guidelines
2. how to identify health and safety hazards
3. what should be included in risk assessments
4. what type of health and safety hazards can be found in different workplaces
5. what is meant by safe systems of work
6. what type of safety equipment, access equipment, and personal protective equipment should be used in different situations
7. who is authorised to enter work areas
8. what type of accidents and emergencies could occur
9. the organisational procedures for responding to accidents and emergencies
10. how to summon medical assistance and alert the emergency services, and what type of information will need to be provided
11. the evacuation procedures for workers and visitors, and where should people gather
12. the incident reporting procedures which may be present in your workplace and/or in your own job
13. who to contact to discuss Health and Safety issues or seek advice

Assessor Comments/Feedback

GQAFSB4	Transport and handle installation equipment and materials (Level 5, Credits 6)

Overview

What is this standard about?

This standard covers the safe transportation and handling of installation equipment and materials. The correct type and quantity of installation equipment and materials have to be located and then transported so that they arrive at the location of the installation in good order. They have to be stored at the installation site, handled and then positioned for use.

Who is this standard for?

This standard is for you if you carry out on site installation work.

Performance Criteria

You must be able to:

1. comply with health and safety requirements, relevant statutory regulations and industry standards/codes of practice at all times
2. select the correct equipment and materials carefully according to the requirements of the installation
3. load the equipment and materials carefully and in a way that safely balances their weight, doesn't exceed the safe working load of the vehicle and ensures their protection during transit
4. transport the equipment and materials using suitable transportation methods to deliver them to the correct location according to the agreed schedule
5. handle the equipment and materials carefully, using suitable handling methods to prevent damage to them, individuals, product and the surrounding environment
6. position the equipment and materials accurately according to standard operating procedures
7. use suitable storage methods to ensure that the equipment and materials are adequately protected
8. identify any problems relating to the transportation and handling of the equipment and materials promptly and deal with them according to standard operating procedures

Knowledge and understanding

You need to know and understand:

1. the relevant health and safety requirements, relevant statutory regulations and industry standards/codes of practice that have to be complied with
2. the different types of equipment and materials that need to be transported and handled
3. what and where are the identification markings for the materials
4. how to load different types of equipment and materials ensuring safe distribution of weight
5. which transportation methods should be used for different types of equipment and materials
6. how to identify and comply with the safe working load of the vehicle used for transporting materials
7. which handling methods should be used for different types of equipment and materials
8. safe storage method for materials and equipment on site taking into account people, property and surrounding environment
9. the type of damage that can occur as a result of handling equipment and materials incorrectly
10. how different types of equipment and materials should be positioned for handling and installation
11. what type of problems can occur during the transportation and handling of equipment and materials and the standard operating procedures for dealing with them

Assessor Comments/Feedback

PROGEN02	Communicating and Working with Others (Level 5, Credits 4)

Overview

This standard covers the need to go beyond the immediate requirements of the job, and to view work as more than just utilising technical skills. It is about maintaining good working relationships with all colleagues in the working environment by using effective communication and support skills.

Performance Criteria

You must be able to:

1. treat people in a way that maintains good working relationships
2. bring to the attention of colleagues information that might have an immediate effect on their work
3. carry out requests from other people promptly without holding up the course of the work
4. refer requests that cannot be met to an appropriate person
5. make available to others the resources that are required to achieve work activities
6. share information internally and externally using a range of different products
7. treat people's property with care and respect and comply with security procedures wherever necessary
8. restrict any adverse impact of your own work on other people
9. provide information to other people as soon as possible after they have requested it
10. ensure information provided to other people is accurate and contains sufficient detail to meet their requirements
11. provide information in a way that is appropriate to the person requesting it

Knowledge and understanding

You need to know and understand:

1. why it is important to develop good working relationships with colleagues and customers
2. the security procedures for dealing with property
3. who should be informed of problems in working relationships
4. the grievance and disciplinary procedures that are available
5. how to report problems in working relationships that cannot be resolved to an appropriate authority as soon possible
6. what information systems should be used
7. who needs information, and for what purpose
8. the most appropriate sources for different types of information
9. the procedures for exchanging different types of information
10. why sharing information with colleagues is important
11. the consequences of exchanging inaccurate or incomplete information
12. the types of problems that could occur
13. how different types of problems can be resolved

Assessor Comments/Feedback

GQAFSB03	Confirm installation instructions (Level 5, Credits 6)

Overview

What is this standard about?

This standard covers the need to confirm installation instructions before commencing a job. All the requirements of the work have to be confirmed and all relevant specifications will have to be obtained.

The type of access equipment used during the work has to be agreed and its availability confirmed. Every detail relevant to the commencement and completion of the work has to be obtained. All information has to be recorded accurately and all relevant documents completed.

Who is this standard for?

This standard is for you if you carry out on site installation work.

Performance Criteria

You must be able to:

1. comply with health and safety requirements, and relevant statutory regulations and industry standards/codes of practice fully at all times
2. obtain installation instructions in a timely manner that are clear and accurate from the appropriate people in the organisation, including the schedule and location of the installation 3. obtain all important specifications for the installation promptly
3. confirm that all relevant permits to work have been obtained promptly
4. agree the access equipment needed to work safely and efficiently and confirm its availability
5. identify what equipment and materials will be required to complete the installation work to comply with all relevant legislation
6. agree with colleagues in a clear and cohesive manner how the installation work will be completed
7. record information on the specifications and the installation work needed to deliver them accurately and in the appropriate information systems

Knowledge and understanding

You need to know and understand:

1. the relevant health and safety requirements, and relevant statutory regulations and industry standards/codes of practice that have to be complied with
2. who is authorised to provide installation instructions
3. how to obtain and confirm the specifications of the installation
4. 4.what permits to work are required for different types of installations
5. 5.what type of access equipment should be used for different types of installation and who is competent to erect these
6. 6.what type of problems could occur with the installation and the standard operating procedures for dealing with them
7. 7.what type of environmental problems could occur with the installation and the standard operating procedures for dealing with them
8. the correct equipment and materials for the different types of installation
9. what information systems should be used and why it is important to record information

Assessor Comments/Feedback

GQAFEN18	Comply with building regulations/standards related to curtain walling in the fenestration industry (Level 6, Credits 6)

Overview

This standard covers the broad requirements of the Building Regulations in England, Wales and Northern Ireland, and Building Standards in Scotland that are applicable to the fenestration curtain walling environment. You should ensure that installations do not endanger life and comply with the statutory requirements, keep your knowledge current and communicate with others when required.

This standard is for you if you work in the Curtain Wall installation industry and are involved in on site installation work.

Performance Criteria

You must be able to:

1. carry out all work following current Building Regulations/Building Standards which apply to locations you are working in
2. communicate with others about regulations/standards following standard operating procedures
3. seek and obtain information on updates and changes to regulations/standards from reliable sources
4. update knowledge of regulations/standards at intervals which fit with changes in legislation and specified periods of time

Knowledge and understanding

You need to know and understand:

1. curtain walling projects and what they mean in practice
2. why building regulations or building standards exist and when they apply to the type of works being undertaken
3. Building Regulations/Standards complied with, in full, and the ones that must be considered to secure reasonable standard of health and safety for persons in and about buildings, affected by the works
4. which parts of the installation are covered by Building Regulations/Standards and how work carried out complies to these
5. who carries out inspections or approves products installed to ensure requirements of the Building Regulations/Standards are met
6. consequences of failed inspections on installers, building owners and main contractors
7. types of loads that can affect structures
8. how to support loadings on structures
9. how wind load can impact on structures and the choice of system used
10. how to ensure loads are transferred onto structural supports
11. main criteria of fire-resistant glazing so that a safe structure is kept in the event of a fire
12. how buildings with multiple floors can conform to requirements for emergency access in the event of fires
13. how curtain wall structures can restrict the internal spread of flames and smoke
14. advantages of installing thermally efficient curtain walling systems
15. methods of demonstrating compliance with fuel conservation requirements
16. what is meant by safety glazing and where it must be fitted
17. types of glass classified as safety glass
18. how to identify safety glass, the standards applicable and what marking indicates
19. whether un-marked glass can be classified as safety glazing
20. the term ‘finished floor level’

	21. why it is necessary to make special provision for access to, and use of, buildings 22. safety requirements relating to door size, window operation and positioning of operating hardware 23. when to provide protection from falling 24. how protection from falling can be achieved using glazing 25. types of glazing required to provide protection from falling 26. .how to prevent impact on glazing

Assessor Comments/Feedback

GQAFEN19	Comply with building regulations/standards for installation in the fenestration industry (Level 6, Credits 5)

Overview

This standard covers the broad requirements of the Building Regulations in England, Wales and Northern Ireland, and Building Standards in Scotland that are applicable to installers in the fenestration environment. You should ensure that installations do not endanger life and comply with the statutory requirements, keep your knowledge current and communicate with others when required. This standard is for you if you work in the Fenestration Industry and are involved in on site installation work

Performance Criteria

You must be able to:

1. carry out all work following current Building Regulations/Building Standards which apply to locations you are working in
2. communicate with others about regulations/standards following standard operating procedures
3. seek and confirm information on updates and changes to regulations/standards from reliable sources
4. update knowledge of regulations/standards at intervals which fit with changes in legislation and specified periods of time

Knowledge and understanding

You need to know and understand:

1. Building Regulations that apply to the fenestration industry and which are mandatory
2. why Building Regulations or Building Standards exist and when they apply to the type of works being undertaken
3. consequences of failed inspections on installers/installation companies and homeowners
4. how to support loadings above standard openings
5. when structural supports should be present or installed
6. why defects should be remedied prior to installing windows or doorsets
7. where egress windows are required
8. the requirements of egress windows
9. position of lower edge of openings relative to finished floor level
10. advantages of installing thermally efficient windows and doorsets
11. maximum U-value for windows and doorsets installed
12. the terms WER or DSER
13. what is meant by safety glazing
14. where safety glazing must be fitted
15. types of glass classified as safety glass
16. how to identify safety glass, the standards applicable and what marking indicates
17. whether un-marked glass can be classified as safety glazing
18. the term 'finished floor level'
19. how safety glazing relates to windows fitted in bathrooms
20. when marked safety glazing may be omitted
21. requirements for background (trickle) ventilation and how this can be provided
22. the meaning of the term 'the replacement windows should not make the existing capability worse'
23. alternatives available to ventilation through windows
24. why it is necessary to make special provision for access to, and use of buildings
25. access requirements relating to door sizing
26. requirements to ensure moisture does not ingress between windows/doorsets and building fabric

27. limitations when installing low-threshold sills to doorsets
28. requirements of positioning window/door openings in relation to combustion appliance flue outlets
29. when to provide protection from falling and containment
30. type of glazing required to provide protection from falling and containment and how to identify it
31. function and purpose of sash restrictors and when they are required

Assessor Comments/Feedback

GQAFEN9	Install windows, doors, conservatories, or non-complex curtain walling (Level 5, Credits 6)

Overview

This standard covers the securing and completion of fenestration systems. Fenestration systems could be windows (including rooflight, oriel, bay and box sash), doors, conservatories or curtain walling systems. These consist of frame components for holding doors, windows, or panels. Systems will either provide the external surfaces of a building or be positioned within large apertures. You will need to use appropriate tools, equipment and materials to secure systems, checking your work against job specifications.

This standard is for you if you work in the Fenestration Industry and are involved in on site installation work of any or all of windows, doors, conservatories and basic curtain walling

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. check installation sites and all relevant surfaces are prepared to meet specifications
3. obtain and use specified installation materials following safe working practices
4. select and use appropriate tools and equipment for fixing following working practices and manufacturer's instructions
5. fix installation materials to structures so that they are secure, following safe working practices and current relevant legislation
6. apply specified materials following manufacturer's instructions and safe working practices to provide weatherproof installations
7. finish work to meet specifications and following safe working practices
8. check installation work is level and plumb to meet specifications
9. remove tools and equipment from work areas and store them following standard operating procedures
10. remove surplus materials and debris from work areas and dispose of them following standard operating procedures and current legislation
11. record information in appropriate information systems

Knowledge and understanding

You need to know and understand:

1. health and safety responsibilities, obligations and procedures that need to be followed
2. how to ensure installation sites are prepared
3. different types of material used for installations and weatherproofing of internal and external finishes
4. factors that could determine whether sections are assembled prior to positioning or assembled in situ
5. how to handle different types of installation materials
6. methods for securing installation materials to different types of structures following industry recognised best practice
7. how different installation materials fit together
8. types of damage that can affect installation materials and how to minimise the risk of damage
9. how to deal with surplus materials including disposal, recycling and reuse
10. types of materials that need to be restocked and how to obtain these
11. how to undertake final inspection of installation work, including whether drainage holes are clear and functioning
12. types of problem that can occur with installation work and the standard operating procedures for dealing with them
13. information systems used and why it is important to use them
14. information and instructions to provide to customers relating to operation, cleaning and warranties

Assessor Comments/Feedback

GQAFEN5	Shape products and ancillaries for installation (Level 5, Credits 6)

Overview

This standard covers the preparing of products and components, by shaping in fenestration installation. This applies to windows and doors, conservatories and curtain walling. You will need to ensure the correct type and quality of products and ancillaries are available, prepare them and use appropriate equipment to shape them so that they meet specification. You will also need to identify any problems with the process and take appropriate action.

This standard is for you if you work in the Fenestration Industry and are involved in the shaping and preparation of ancillary items for use with on-site installation work

Performance Criteria

You must be able to:

12. check availability of specified products and ancillaries from reliable sources
13. identify and select type, quantity and quality of products and ancillaries to meet specifications
14. prepare and position products and ancillaries for shaping following safe working practices
15. shape products and components to meet specifications following safe working practices using appropriate methods and minimising waste
16. check products and components meet specifications
17. remove unwanted materials from the worksite for safe disposal or reuse/recycling

Knowledge and understanding

You need to know and understand:

15. different types of products and ancillaries including components, consumables, substances and their uses
16. different preparation processes applied to different products and ancillaries including external bay or windowsills, internal window boards, internal and external architraves and scribing
17. types of problems that can occur and how these problems might be overcome
18. how to shape products or ancillaries to ensure they fit in required locations
19. how to utilise products and ancillaries to minimise waste

Assessor Comments/Feedback

GQAFEN3	Remove existing windows, doors and panels and prepare apertures (Level 5, Credits 5)

Overview

This standard involves preparing apertures during the refurbishment of a property. This standard would not be appropriate for a new building or new installation. This can be carried out in relation to replacement of windows (including rooflight, oriel and box sash), doors and panels either as part of a window or door system or which form part of a conservatory or curtain walling. You will need to remove any existing windows and doors from apertures and restructure apertures or create new openings as required. You will need to check apertures against specifications, and remove all debris. Finally, you will need to provide new surface finishes ready for installation

This standard is for you if you work in the Fenestration Industry and are involved in on site removal of existing windows and doors and preparation of apertures for installation work

Performance Criteria

You must be able to:

1. check and confirm suitability of materials and other resources
2. identify products for removal and agree schedules of work with appropriate person(s)
3. identify fixtures and fittings that will prevent or restrict installations following standard operating procedures
4. remove and store fixtures and fittings to allow effective refitting following safe working practices
5. remove components, materials and outer frames from apertures following safe working practices and in ways that cause minimum damage to structures and surrounding areas
6. inspect, fit or replace any existing damp proof barriers required to meet specifications
7. handle materials to minimise damage following safe working practices
8. cut, shape and assemble materials to meet specifications
9. minimise waste following safe working practices
10. check materials fit plumb and square to prepared apertures following standard operating procedures
11. check new or restructured apertures meet specifications

Knowledge and understanding

You need to know and understand:

1. how to identify effective work schedules
2. how to identify dangerous materials and infestations that might be present
3. types of structural supports available and when they are needed
4. why it is important to remove fixtures and fittings in a way that allows effective refitting where required
5. how to remove existing frames and components of different materials to avoid damage to surrounding areas and why this is important
6. different types of materials used for internal and external finishes
7. how to prepare apertures for installation
8. consequences of not preparing apertures correctly
9. typical problems that can occur in the preparation of apertures and how to deal with these
10. when and where damp-proof barriers are needed and the materials used for this purpose

Assessor Comments/Feedback

GQAFEN6	Prepare and position windows and door sets ready for installation (Level 5, Credits 5)

Overview

This standard covers the preparation and positioning of windows and door sets prior to installation. You will need to check dimension and condition of apertures, position windows and door sets in prepared apertures and ensure window and door components will fit correctly

This standard is for you if you work in the Fenestration Industry and are involved in on site installation work

Performance Criteria
You must be able to:

1. identify and establish requirements and position for windows and door sets to meet specifications
2. select materials, tools and equipment for the task and the environment
3. prepare windows and door sets for installation to meet specifications following safe working practices
4. position windows and door sets into apertures to meet specifications
5. check and confirm windows and door sets are plumb, level and square ready for securing

Knowledge and understanding
You need to know and understand:

1. different types of windows and door sets and how to prepare them including frame add-ons, external bay or window sill, internal window boards, internal and external architraves and scribing
2. types of damage that can affect installation materials and how to minimise this
3. sealing/bonding/weatherproofing materials used for internal and external installations
4. how to identify and confirm positions for windows and door sets to be installed
5. how to take accurate measurements and what measurements to take
6. how to select and apply sealing/bonding/weatherproofing materials so that a weatherproof installation is achieved
7. types of problems that can occur when preparing for installation work and how to overcome these

Assessor Comments/Feedback

GQAFEN11	Install glass and panels into supporting frames and structures (Level 5, Credits 6)

Overview

This standard covers the installation of glazing and panels into supporting frames and structures. This relates primarily to installing replacement components and could apply to windows and doors, conservatories, or curtain walling systems. You will need to position and secure glass or panels and seal them to ensure a weather-tight fit. You will also need to check that your work meets all specifications and ensure that customer's requirements have been met. Customers could be inside or outside the organisation.

This standard is for you if you work in the Fenestration Industry and are involved in on site installation work of glass panels

Performance Criteria

You must be able to:

1. check that drainage is clear of blockage and functions to meet specifications
2. obtain glass and panels and confirm these meet specifications and current legislation
3. position glass and panels into apertures and secure them to meet specifications following safe working practices
4. check glass and panels align with frames and are plumb after being secured
5. select weatherproofing materials to meet specifications
6. apply specified weatherproofing materials to provide a weatherproof installation following safe working practices and recognised best practice
7. finish work to meet specifications
8. conduct final inspections checking glass and panels function to meet specifications

Knowledge and understanding

You need to know and understand:

1. how to obtain specifications for the work and how to interpret them
2. why it is important for drainage to be clear and functioning
3. different approaches to be taken for different types of glazing products including single glazing, insulated glass units and PVC or polycarbonate panels
4. different methods used to install glass into different types of installation
5. different consumables and substances used for securing, weatherproofing and finishing, how to use them and when it is appropriate to use them
6. problems related to the glazing work and how these might be overcome
7. who to report problems to that you cannot resolve yourself and why this is important
8. reason for using packers and glazing bridges when installing glass or panels
9. locations for packers and glazing bridges and the reason for placing them in these locations
10. how to check glass and panels are functioning correctly after installation
11. how to conduct final inspections of the work undertaken

Assessor Comments/Feedback

GQAFEN1	Prepare site, equipment and tools for fenestration installation (Level 5 – Credits 11)

Overview

This standard covers the preparation of the site, equipment, and tools for the installation of fenestration products. These products include windows and doors, conservatories, or curtain walling systems. You will need to make sure the work site is prepared, the schedule of work is checked with all relevant people, and working areas are clearly identified so that work can begin. You will also need to check that equipment and tools are suitable for the installation and are available. It is especially important to check on the safety of the equipment, and to ensure access to it is restricted. You will also need to check the tools and identify any defects or outdated tools as well as storing them safely.

This standard is for you if you work in the Fenestration Industry and are involved in on site pre installation preparation work.

Performance Criteria

You must be able to:

1. check and confirm specifications and survey requirements can be met
2. identify and isolate work areas from the rest of the site following safe working practices
3. protect all areas exposed to debris following standard operating procedures
4. prepare work areas and surrounding environments ready to receive installation equipment and materials and access equipment following standard operating procedures and manufacturers' instructions
5. remove and protect any vulnerable objects following standard operating procedure
6. identify and select suitable access equipment to meet specifications
7. .prepare and position access equipment for use in line with safe working practices
8. .identify and select installation equipment and tools to meet specifications
9. .check installation equipment and tools are safe and fit for use
10. .prepare and set up equipment and tools following safe working practices
11. store equipment and tools to allow safe and effective working practices

Knowledge and understanding

You need to know and understand:

1. types of access equipment used in installation work and any restrictions on use
2. .examples of when access equipment is used
3. how to set up and position access equipment
4. how and why access equipment should be checked regularly
5. different types of installation equipment and their use including battery powered equipment, mains powered equipment, manual tools and lifting equipment
6. how to prepare work areas
7. how to set up installation equipment
8. how to check the tools and equipment are fit for purpose
9. how to deal with any tools or equipment that are unfit for use
10. .how to store equipment and tools to allow safe and effective working practices

Assessor Comments/Feedback

GQAFEN12	Carry out post fenestration installation activity (Level 5, Credits 5)

Overview

This standard covers the need to ensure the installation of the fenestration products has been completed to specification, and the quality of finish is to a required standard. This could apply to windows and doors, conservatories, or curtain walling systems. Customers can be internal or external to the organisation. You must be able to explain and demonstrate the operation of the fenestration product installed to the customer, in a professional manner and answer any questions. You will need to complete all handover documentation and ensure that all relevant records are retained.

This standard is for you if you work in the Fenestration Industry and are involved in finishing off on site installation work

Performance Criteria

You must be able to:

1. check any existing fixtures and fittings are undamaged and in position to meet specifications
2. apply finishing materials so they are comparable with existing surfaces following standard operating procedures
3. remove surplus materials and debris from site and dispose of them following standard operating procedures
4. remove tools and equipment from work area and store them following standard operating procedures
5. clean and finish the installation to meet specifications
6. conduct final inspections of work carried out, checking components function to meet specifications
7. pass relevant documentation relating to installation to customers
8. give relevant information to customers about warranties, operation and cleaning of installations, giving them the opportunity to ask questions and seek clarification
9. record information on installation activity following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. how to ensure installation is well presented and completed to meet specifications
2. types of further work required and how to deal with this
3. how to dispose of surplus materials including disposal, recycling and reuse
4. why it is important to remove all materials and debris from the site, and return areas to original state
5. documentation that comes with different products and installations and why this is important
6. types of information recorded on installation activity
7. standard operating procedures for dealing with payments
8. information and instructions given to customers on completion of work
9. typical questions asked by customers and how to respond appropriately
10. how to check customers understand information provided and why this is important
11. problems that might occur during post installation activity and handover and how they might be overcome
12. information systems used and why it is important to record information

Assessor Comments/Feedback

GQAFEN13	Maintain and repair windows / doors / conservatories (Level 6, Credits 9)

Overview

This standard is concerned with maintenance work on windows, doors, and/or conservatories. You will need to dismantle windows and doors, or conservatories, before undertaking maintenance. You will need to undertake maintenance using the correct materials and then reinstate and restore the system to full operation.

This standard is for you if you work in the Fenestration Industry and are involved in on site maintenance and repair work

Performance Criteria

You must be able to:

1. identify maintenance and repair work required and possible solutions
2. confirm maintenance and repair work is within own level of expertise
3. identify and remove fixtures and fittings which prohibit maintenance and repair work following safe working practices
4. store removed fixtures and fittings following standard operating procedures
5. remove material from installation using methods and equipment that cause minimum damage to surrounding structure
6. identify, select and use materials for maintenance and repair that are fit for purpose and meet customer requirements
7. identify, select and use tools and equipment that complete maintenance and repairs to meet specifications
8. carry out maintenance and repairs within timescales acceptable to all parties
9. insert and remove any structural supports/temporary measures required to support/protect installations during maintenance or repair
10. apply finishing materials so they are solid, level and comparable with existing surfaces
11. replace and secure fixtures and fittings removed during maintenance and repair to meet specifications
12. check glazing components function to meet specifications
13. remove surplus materials and debris from site, and dispose of them following standard operating procedures and current legislation
14. give relevant information to customers about maintenance and repairs carried out, giving them the opportunity to ask questions and seek clarification
15. complete necessary records following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. differences between maintenance and repair
2. how to assess requirements and decide on actions needed
3. actions taken if hazardous materials are exposed during dismantling to minimise periods during which installations cannot be used
4. how to inform customers of further actions required if repairs are only temporary to include timescales and restriction of use
5. why it is important to remove materials and debris from sites after completing work
6. problems that can occur with maintenance work and how these might be overcome
7. different types of maintenance/repair work carried out on products
8. how to identify replacement parts or components needed for maintenance/repair work
9. how to remove defective parts to avoid damaging installations
10. systems for recording work undertaken and information included
11. how to select finishing materials to be used to match existing finishes

Assessor Comments/Feedback

GQAFEN14	Maintain and repair Curtain Wall installations (Level 6, 9 Credit*)*

Overview

This standard is concerned with maintaining curtain walling. Curtain walling systems can have unique requirements relating to their production; have features that are difficult to achieve, or require a mixture of materials and processes that are particularly unusual. You will need to dismantle glass supporting systems before undertaking maintenance. You will need to undertake maintenance, minimising the period during which installations cannot be used, liaising with the customer about progress. When maintenance is complete you will need to reinstate and restore curtain walling to full

This standard is for you if you work in the Fenestration Industry and are involved in on site maintenance and repair work to Curtain Wall systems.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. identify maintenance/repair work required and confirm it is within your level of expertise
3. identify any problems relating to maintenance/rep air work and deal with them following standard operating procedures
4. identify and remove fixtures and fittings which prohibit maintenance/repair work following safe working practices
5. store removed fixtures and fittings following standard operating procedures
6. remove material from installation using methods and equipment that cause minimum damage to surrounding structures
7. select and use materials for maintenance/repair work that are fit for purpose and meet customer requirements
8. select and use tools and equipment to complete maintenance/repair to specifications
9. carry out maintenance/repair work within timescales acceptable to all parties and in a way that minimises period installations cannot be used
10. undertake maintenance/repair work following standard operating procedures and safe working practices
11. insert and remove structural supports required to support installations during maintenance/repair work
12. apply finishing materials so that they are solid, level and comparable with existing surfaces
13. replace and secure fixtures and fittings removed during maintenance or repair to meet specifications
14. check glazing components function to meet specifications
15. remove surplus materials and debris from sites, and dispose of them following standard operating procedures and current legislation

Knowledge and understanding

You need to know and understand:

1. health and safety responsibilities and obligations relevant to the work
2. health and safety procedures that need to be followed
3. type of complex requirements that could arise
4. special methods and equipment necessary to deal with maintenance /repair work
5. actions taken if dangerous materials are exposed/suspected during dismantling
6. structural supports used for different installations
7. how to remove and store fixtures and fittings
8. why it is important to label removed fixtures and fittings
9. how to remove different materials from installations
10. how different types of components are maintained
11. alternative solutions that could be offered to customers
12. how to ensure maintenance meets customer requirements
13. types of action required when repairs are temporary
14. information to provide to customers if repairs are temporary to include timescales and restriction of use
15. types of finishing materials used in different circumstances
16. why it is important to remove materials and debris from sites
17. how to deal with surplus materials to include disposal, recycling and reuse
18. how different types of installation material are handled
19. types of materials to be restocked and how to obtain these
20. information systems used
21. why it is important to use the information systems

16. give relevant information to customers about maintenance/repair work giving them the opportunity to ask questions and seek clarification
17. record information on maintenance/repair work in appropriate information systems

Assessor Comments/Feedback

PROFEN24	Install fire resistant glazing (Level 5, Credits 6)

Overview

This standard covers the learner's responsibility to plan the work, inspect and prepare the work site and provide appropriate documentation for the installed fire-resistant glazed system on completion of the work. The learner should demonstrate an understanding of the special requirements of fire-resistant glazing in view of the function that it has to carry out in the event of fire and the differences that this means compared with standard glazing. The learner will also have to show awareness of the fire safety legislation governing the assignment of responsibility for fire safety measures, including new and refurbished fire-resistant glazed systems.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. follow manufacturers' and others' relevant instructions that relate to the safe use of glazing equipment and glazing materials
3. inform visitors to work areas of any restrictions or possible hazards in line with organisational procedures
4. install glazing in line with defined installation instructions and guidelines
5. follow handling and storage guidelines in line with organisational procedures
6. inspect and approve the robustness of surrounding and supporting structures in line with manufacturers' and others' relevant instructions
7. obtain material listings, drawings and assembly guidance from applicable test or assessment approvals
8. interpret system drawings for fire-resistant glazed systems and apply them as per specification
9. provide all required components as specified in test reports
10. provide method statements for work on acceptance of orders in line with organisational procedures
11. provide drawings and material listings for glazed systems installed and its component parts in appropriate formats
12. provide fire performance classifications of installed fire-resistant glazed systems that are supported by recognised evidence from responsible sources
13. hand over certification or CE marking documentation or references that were provided with installed fireresistant glazed systems in line with organisational requirements

Knowledge and understanding

You need to know and understand:

1. how to undertake work risk assessments
2. how and why to identify promptly any health and safety hazards
3. who to report hazards and risks to
4. safe and unsafe working practices
5. what equipment to use and the required protective work wear
6. how to call medical assistance and alert emergency services
7. what type of information will need to be provided in case of accidents
8. requirements for lifting and moving heavy glazed units

Applicable regulations and legislation

9. requirements concerning standards of workmanship
10. what personal responsibility means
11. what personal competency means
12. best practice expectations

Installing glazing

13. the core requirements of fire-resistant glazed systems to be part of complete fire-resistant built elements
14. why it is important to follow manufacturer's specifications and other associated guidelines
15. the importance of not damaging glazing
16. what to do if the glazing is damaged
17. the importance of special glazing requirements where specified
18. the importance of not replacing specified materials with materials which are not approved
19. why glazing pockets should be cleaned and free from debris before re-glazing
20. the importance of avoiding frame to glass direct contact
21. the purpose of identifying stamps on the glass
22. why stamps should be visible and readable after glazing
23. the importance of providing rated fire stopping between installed frames and surrounding structures

Post installation

24. what is appropriate fire safety information
25. the importance of providing documents describing what has been installed to those responsible for the building

Assessor Comments/Feedback

GQAFEN28	Select fire resistant glazing sealants (Level 5, Credits 4)

Overview

This standard covers the selection and application of glazing sealant for use within a fire-resistant glazed system. You will need to appreciate that glazing sealants are an essential part of the overall glazed system and the correct selection and application is critical in ensuring that the performance capability of the full assembly is achieved.

This standard is for you if you work in the Fenestration Industry and are involved in the selection of Fire Resistant Glazing sealants for on site installation work.

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. contact suppliers using appropriate communication methods when you need additional information about sealants
3. obtain current versions of manufacturers' documentation about fire resistant glazing sealants from appropriate sources
4. use visual references to identify fire-resistant glazing sealants following manufacturers' documentation
5. confirm selected glazing sealants fit performance specifications and are compatible with glazed systems being installed
6. apply sealants following manufacturers and suppliers' instructions and information provided

Knowledge and understanding

You need to know and understand:

1. purpose and function of glazing sealants
2. how fire-resistant glazing sealants function in fire
3. why ordinary glazing sealants are not suitable
4. what an intumescent sealant is
5. what a non-intumescent sealant is
6. different generic categories of fire-resistant sealant types by function
7. manufacturers and suppliers for each named glazing sealant material by name
8. how to contact suppliers
9. importance of avoiding glass to frame contact
10. methods for fitting sealants into glazing pockets with glass
11. when and how to apply capping materials
12. when to use capping sealants
13. which capping materials can and cannot be used
14. particular procedures and details that apply for external systems
15. meaning and importance of compatibility of glazing sealants with other components
16. when and why extra care should be taken in using some sealants with some glasses
17. how to ensure that correct sealant to glass combination is followed
18. processes to follow if substituting one glazing sealant for another, including approvals and evidence of performance
19. important considerations when replacing old glazing sealants with new sealant

Assessor Comments/Feedback

GQAFEN25	Use of fire resistant glazing in timber screens and doors (Level 6, Credits 6)

Overview

This standard is concerned with the use of fire-resistant glazing in timber screens and doors. You will understand the factors that influence the behaviour of timber on exposure to fire and how each of the component parts of a fire resistant timber system interact to provide the required levels of fire-resistance of a timber system.

This standard is for you if you work in the Fenestration Industry and are involved in on site installation of Fire Resistant Glazing into timber screens and doors

Performance Criteria

You must be able to:

1. comply with health and safety requirements and procedures at all times
2. follow assembly and installation guidelines and instructions to meet specifications
3. install systems that take account of bead types following standard operating procedures
4. apply timber treatments to meet specifications following standard operating procedures
5. obtain and refer to test, assessment and approval reports relevant to systems being installed
6. provide components to meet specifications
7. check completed installations meet specifications

Knowledge and understanding

You need to know and understand:

1. how timber behaves in fire
2. special requirements that apply for framed systems and doors
3. why type and species of timber is important
4. the importance of timber section thicknesses
5. the importance of installing systems of matched named components, including doors, all hardware and edge and frame smoke seals
6. function of timber beads and bead fixings
7. which bead fixings to use and how to fit them
8. glazing guidelines for fire-resistant glass, especially seal type and edge cover
9. requirements for glazing setting blocks and their function
10. attention to glass edge cover specification
11. requirements for impact rating of glass according to application
12. importance of not extending glazing apertures beyond approved sizes
13. importance of following glazing configurations and layouts provided
14. main factors that determine fire-resistance performance of fire resistant glazing in timber systems
15. special requirement of proprietary systems that achieve fire resistance classifications longer than 30 minutes
16. why provision for glazing expansion is important
17. importance of bead profile and types of timber for beads
18. types of treatments used on beads
19. risks of using surface treatments that are not approved
20. importance of not exchanging named components for non specified components without manufacturer's approval
21. why minimum edge cover limits are important
22. handling and glazing of double glazed units

	23. checks made on systems following installations and how to make them 24. implications of making any changes to components within systems 25. how to confirm certified glass, seals and framing systems 26. requirements for sealing around installed systems and surrounding structures with approved fire stopping materials 27. importance of not modifying a factory-delivered door on site 28. importance of not damaging provided smoke and fire seals 29. importance of not cutting glazing openings in doors that are not designed for glazing 30. .how to recognise certified door sets and interpret certification labelling 31. additional requirements for glazed systems in 60 minute rated doors compared with 30 minute doors

Assessor Comments/Feedback

GQAFEN26	Install fire-resistant glazing in metal door and frame systems (Level 6, Credits 6)

Overview

This standard is concerned with the installation of fire-resistant glazed systems in metal door and framing systems, and the installation of those elements. You will understand the important factors determining the fire behaviour of fire resistant glazing in metal systems and the important requirements concerning the installation of such systems.

This standard is for you if you work in the Fenestration Industry and are involved in on site installation work of Fire Resistant Glazing into metal door and frame systems.

Performance Criteria

You must be able to:

1. comply with health and safety procedures at all times
2. obtain and check specifications and assembly guidance from system providers appropriate for systems being installed
3. follow assembly and installation guidelines and instructions to meet specifications
4. interpret technical drawings and other installation details provided to meet specification
5. install systems that take account of bead type and fixing arrangements
6. obtain further information from the approval report for systems being installed
7. use handling and installation equipment following standard operating procedures
8. check and confirm completed installations are operating to meet specifications
9. contact manufacturers or suppliers using accepted methods to clarify requirements or confirm information

Knowledge and understanding

You need to know and understand:

1. what happens to steel and aluminium when exposed to fire
2. expansion of metal framing members
3. consequences of restrained expansion in fire
4. importance of installing systems of matched, specified components
5. glazing guidelines for fire-resistant glass
6. bead fixings to use and how to fit them
7. requirements for glazing setting blocks
8. differences between pressure glazing and other systems
9. approved and named glazing seals and how to use them
10. how to follow assembly and installation guidelines including information labels on glass when delivered
11. special requirements for systems classified for times longer than 60 minutes and up to 240 minutes
12. the importance of ensuring no metal to glass contact when glazed
13. the importance of not exchanging named components without manufacturer's approval
14. allowed edge cover requirements for glazing systems and their application
15. special requirements for external glazed systems
16. how to handle and install double glazed units
17. risks of applying excessive edge pressure in framing
18. how to install glazing without causing edge or face damage to glass
19. requirements for sealing joints between fire-resistant systems and surrounding structures using approved fire stop-ping materials
20. how to contact framing system suppliers to clarify technical issues and why this is important
21. checks to make on systems following installation and how to make them
22. what to do if any aspect of installation is not functioning correctly

Assessor Comments/Feedback

GQAFEN27	Use of fire resistant glass in individual systems (Level 6, Credits 6)

Overview

This standard covers the use of fire-resistant glass in individual systems or applications that require special considerations in addition to those required for more conventional door or screen applications. Such systems and applications could include butt jointed vertical screen systems, overhead horizontal or inclined glazed areas, fire-resistant glazed rooflights set into a roof, or fire-resistant glazed floors (which may well involve large panes, multiple laminated elements and heavy glazed units). You will need to be aware of the special requirements of such applications and systems, and why special considerations have to be taken in each case, to ensure fitness for purpose in the event of fire.

This standard is for you if you work in the Fenestration Industry and are involved in on site installation work involving Fire Resistant Glass.

Performance Criteria

You must be able to:

1. identify need for special test evidence to suit applications and obtain it from relevant sources
2. identify the need for special performance requirements for applications and obtain information on them from relevant sources
3. provide authorisation from manufacturers to support installation of systems
4. follow defined installation and handling instructions and detailed system installation drawings
5. obtain existing test reports from reliable sources applicable to systems being installed
6. provide system drawings and system specifications following standard operating procedures
7. provide test evidence for systems and applications that are relevant and complies with applicable test standards
8. provide named components to meet specifications
9. install systems following relevant manufacturer's guidelines and instructions
10. obtain separate and specific authorisation for changes to glass, named components and glazing arrangements from glass or system suppliers
11. handle and manipulate heavy glazing units and framing members for floor and overhead systems following standard operating procedures

Knowledge and understanding

You need to know and understand:

1. relevant health and safety responsibilities and obligations
2. requirements that apply in working at height or overhead
3. procedures and requirements for the safe handling of heavy and large glass panes or units
4. regulations and codes of practice that apply
5. special standards for applications
6. requirements for specific test evidence for applications
7. glazing systems used, test reports available, and how to obtain them
8. why test evidence for use in vertical door and screen applications is not applicable to horizontal or inclined overhead use
9. the need for special test evidence that fits applications
10. why it is important to follow specific system designs and installation instructions.
11. special systems that require special considerations in use, handling, testing and installation
12. floors requiring specific test information for application
13. loading requirements for glass floors and the implications of heat transfer from fire into and through structures
14. methods used to support glass and how these vary according to applied loads for applications
15. butt jointed systems proprietary systems installed following responsible manufacturer's instructions
16. overhead applications that cannot be satisfied by evidence for vertical glazed systems
17. other safety requirements that apply to overhead glazing

Assessor Comments/Feedback

Notes

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