



Glass and Glazing Federation

Technical Report for Q2 2021



Last updated on 3rd July 2021

Technical Report for Q2 2021



Grenfell / Fire Safety Update

Laminated Glass still remains on the Approved Document B list of banned Combustible Materials. The use of laminated glass in balconies & balustrades is not permitted in buildings with a height of 18 metres and above. Scottish regulations have restricted this to 11 metres. The Document B Working Group are still meeting regularly to review and establish additional work required.

The GGF Document B Working Group (DBWG) has been engaging with Government and In Response to Ministry of Housing Communities and Local Government (MHCLG) Ban on Use of Laminated Safety Glasses: Regulation 7 / SI1230. The Glass and Glazing Federation has carried out extensive testing with the assistance of some GGF members who are experts in this area.

Testing concluded in Q4 of 2020 and the GGF has published the report titled: **Glass and Glazing Federation - Laminated Safety Glass Test Report - January 2021 - Response to SI1230 / Regulation 7**. The GGF's recommendations surrounding Laminated Safety Glass are contained within the report.

This report gives an accurate and impartial performance result to accurately represent the product. This aims to give the government the technical information they need to make appropriate decisions regarding the ban of combustible materials and the current inclusion of laminated glass. So far, the report has been very well received within Government and in March 2021 was submitted to Government in Wales, Scotland and Northern Ireland.

Government has also commissioned their own testing regime that is being undertaken in Northern Ireland. We are expecting an update on the current status of this testing late summer 2021.

The DBWG has attended the CPA Webinars on combustible material alternative testing based on BS8414. This has generated a document 'Critical Appraisal of the UK Regularity Regime for Combustible Facades'. This document highlights that there isn't a common approach to facades across Europe and a need to create a new European Standard testing for Facades. However, new test methods are not expected before 2022.

Fire Safety Bill

On the 19th March 2020, The Home Office introduced the new **Fire Safety Bill**, in an effort to improve fire safety in buildings in England and Wales. The Bill has passed through the parliamentary process to become law – **The Fire Safety Act 2021** This Act is to make provision about the application of the Regulatory Reform (Fire Safety) Order 2005 where a building contains two or more sets of domestic premises; and to confer power to amend that order in future for the purposes of changing the premises to which it applies. The Fire Safety Act 2021 can be viewed [here](#)

Set to amend the Fire Safety Order 2005, the Fire Safety Act 2021 (as it is now known) has been designed to “ensure that people feel safe in their homes, and a tragedy like the Grenfell Tower fire never happens again” in England.

The Home Office has set out clarification to who is accountable for reducing the risk of fires – the duty-holder/building owner for multi-occupied, residential buildings. They must manage the risk of fire for:

- The structure and external walls of the building (e.g. cladding, balconies and windows)
- Entrance doors to individual flats that open into communal areas

Technical Report for Q2 2021



Following several attempts by Peers in the House of Lords to amend the Fire Safety Bill with a clause prohibiting remediation costs, such as dangerous cladding, fire doors and insulation systems, from being passed on to residents, the Bill took some time to pass through the parliamentary process.

The amendments were rejected by the House of Commons five times in total.

The Bill has now received Royal Assent and is an Act of Parliament – The Fire Safety Act 2021.

Building Safety Bill

This bill aims to give residents and homeowners more rights, powers and protections – making homes across the country safer.

This will overhaul regulations, by setting out a clear pathway on how residential buildings should be constructed, maintained and made safe.

It also sets out the framework to improve compliance, with tougher penalties for those who break the rules and mandates developers to belong to a New Homes Ombudsman scheme.

Residents in high-rise buildings will have more say in the management of their building.

They will be able to raise building safety concerns directly to the owners and managers of buildings, who will have a duty to listen to them.

If residents feel concerns are being ignored, they can raise them with the Building Safety Regulator.

All homeowners will also have more than twice the amount of time, from 6 to 15 years, to claim compensation for sub-standard construction work.

This will apply retrospectively – meaning that, properties built up to 15 years prior to this change coming into effect will be able to bring a claim for compensation for defective work.

Press notice available here:

<https://www.gov.uk/government/news/new-regulator-at-heart-of-building-safety-overhaul>

The Building Safety Bill and related documents can be found at:

<https://www.gov.uk/government/collections/building-safety-bill>

Draft regulations (higher-risk buildings, duty holders and competence) can be found at:

<https://www.gov.uk/government/publications/building-safety-bill-draft-regulations>

Government has also published its response to the pre-legislative scrutiny of the Building Safety Bill, which can be found here:

<https://www.gov.uk/government/publications/building-safety-bill-government-response-to-pre-legislative-scrutiny-by-the-select-committee>

Technical Report for Q2 2021



Building Regulations – England

Approved Document B

MHCLG commissioned BRE Global to manage one of the work streams assessing whether Approved Document B provides up to date guidance for modern design and construction methods as well as for existing buildings. In particular, the project “Fire Safety: Construction Technologies, Design and Usage”, will identify and review modern construction technologies, trends in design and building use and their application in the current provisions of AD-B. BRE sought responses about the issues routinely faced when using AD-B and applying it to modern construction technologies and or design and or building use. This took the form of a survey which closed on 31st March.

The consultation on Approved Document L, F & Overheating is now closed, although discussions between GGF and MHCLG continue. Following the review of responses received, the MHCLG have requested further information from the GGF prior to publication of the updated Approved Documents.

Building Regulations – Wales

The Welsh Government’s response to their Consultation document for AD L & F in New Dwellings has also been published. To view or download, click the link below

<https://gov.wales/building-regulations-part-l-review-0>

Building Regulations - Scotland

No updates since Technical Booklet updates (Dwellings and Commercial) in October 2019.

Building Regulations - Northern Ireland

The current pandemic has caused delay in the intended updating of the existing Technical Booklets which havenot been substantially updated since 2012. The GGF has offered to sit on the relevant Working Groups.

Building Regulations - Republic of Ireland

There have been no updates or changes to Irish Building Regulations since the last Technical Report.

English Planning System Changes

Significant changes are coming for the planning system.

- Major changes are described in the Planning for the Future white paper.
- New and proposed changes to existing regulations
- Aims to make it easier to redevelop buildings and land, and change use without planning permission.
- It will replace current guidelines in the Town and Country Planning Act
- Currently provides 187,000 new homes per year, way short of 300,000 which is Government target
- Concern that the new rules will allow Heritage buildings to suffer through uncontrolled development

Conformity Marking & CPR Compliance

Most if not all of our members will be aware that the exit from the EU has created major issues in the move from CE to UKCA for conformity marking. These are as follows: -

1. UK testing centres cannot certify products for the EU market

- a) *The EU will not accept test reports (existing or new) issued by UK testing bodies.*
- b) *In contradiction to this, under the NI Protocol UK Approved Bodies can act as UK Notified Bodies and enable CE marking for products destined for Northern Ireland (So CE testing by UK bodies is ok for NI market but not for EU)*
- c) *New UK products for both markets will require testing by an EU Notified Body and a UK Approved Body requiring the same test to be carried out twice (double the cost)*

2. Problem with AVCP System 3

- a) *Under AVCP 3, a manufacturer must have an Initial Type Test (ITT) in order to self certify.*
- b) *The ITT is historic data and should be accepted regardless of the change in status*
- c) *UK tests no longer recognised by the EU invalidating all existing AVCP 3 testing carried out in the UK*
- d) *For trading in the EU, the test must be repeated by an EU Notified Body*

It has been reported that UKAS is permitting UK Approved Bodies to undertake testing on behalf of an EU Notified Body and allowing sharing of results so each body can issue ITTs for AVCP3 type testing. No EU equivalent

3. UK Test Houses cannot carry out all tests for our Industry. Some can only be carried out in an EU lab.

- a) *UK manufacturers need to use a UK Approved Body with a functioning partner in the EU so that UKCA markings can be applied for the UK market*
- b) *Some tests cannot be undertaken by any UK Approved Body even those with a functioning partnership within the EU*
- c) *The lack of trained personnel in a UK testing body due to staff retirements means that testing cannot be undertaken*

4. Lack of capacity in UK testing houses for some products

- a) *There are insufficient Approved Bodies to test some products and some are fully booked testing EU manufacturers' products.*
- b) *The length of time for individual tests can be extensive and cause unacceptable delays*
- c) *Duration of a series of tests for a single product can be spread over months making certification impossible by end of December 2021.*
- d) *There is insufficient capacity for the testing of Fire safety products with insufficient time to have all products tested. This will affect the fire safety of 1000s of buildings because the majority of systems are only compatible with certain products. If unable to transition to UKCA marking then end users will need to replace their existing systems as they are non-compliant or they will have a system that is unsupported, unserviceable and unprotected.*
- e) *There is insufficient time to increase test capacity or train new personnel despite the commitment to invest accordingly.*
- f) *UK Testing Houses are also dealing with additional work for products manufactured outside the UK and the EU.*

5. Mismatch between UK Government Legislation and the list of UK Designated Standards

Some existing UK legislation references European standards which have not been cited in the OJEU. This means that the UK list of Designated Standards, while in agreement with the EU's list of harmonised standards, does not match the Standard being referenced in UK legislation. Thus manufacturers cannot apply the UKCA marking.

6. UKAS

Despite UKAS' continued membership of European Accreditation (EA), the International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC), the EU no longer recognises the UK's National Accreditation Body with regard to accreditation directly related to European legislation.

While European Accreditation states

"As signatory to the EA Multilateral Agreement (MLA) the accreditation system operated by UKAS continues to be accepted by the other signatories as equivalent to their own accreditation system and declare, when requested, conformity assessment results (e.g. reports & certificates) issued by the conformity bodies accredited by UKAS for the relevant scope to the EA MLA, to the ILAC Multilateral Recognition Arrangement and to the IAF Multilateral Recognition Agreement as reliable as those issued by conformity assessment bodies accredited by themselves"

This contrasts to the EU's statement that

"UKAS certificates will no longer be considered as proof of accreditation within the meaning of Regulation (EC) No. 765/2008 and certificates and reports issued by conformity assessment bodies accredited by UKAS are no longer recognised with respect to the EU Regulatory system as of 1st January 2021 e.g. regarding Notified Bodies for the purpose of CE marking, EU Emission Trading System, EU Food and Feed regulations, EU Cybersecurity act and other EU legislation."

UK Government have stated that CPR System 3 test reports from EU Notified Bodies cannot be accepted as stand-alone reports for UKCA marking. However, it may be possible for a UKCA Approved Body to include a validated EU test report as part of the evidence under a System 1+, System 1 or System 2+ approach. In this case the Approved Body would need to validate and take ownership of the report as part of its processes. UK Government are currently considering a final approach to this issue.

This issue will be compounded from 1st January 2022 when the UK ceases to recognise CE marking in Great Britain and EU products will have to switch to applying the UKCA marking. At this stage it is not clear whether EU test reports can be used to support UKCA marking.

MHCLG is investigating this situation to determine whether this is a legal position or a policy choice.

7. Unlevel Playing Field (during 2021)

For the GB market in 2021 we are accepting both UKCA and CE marking while on the EU market (with the exception of the market in Northern Ireland) manufacturers who have a UK Notified Body test report do not conform and cannot apply CE marking. Thus they have to either retest with an EU Notified Body or transfer the test report to an EU Notified Body (rebadging) which is by no means certain to be accepted.

The EU has stated that this is an issue they do not want to deal with and that it is up to local enforcement. Also, conformity assessment bodies have said it is nothing to do with them. In particular, in AVCP System 3, a Notified Body is only involved in the determination of the product type with the manufacturer carrying out the factory production control - see item 2.

What happens where no UK test body can undertake some of the tests and those tests will have to be carried out by an EU notified Body which has a relationship with a UK Approved Body? - see item 3.

8. Overseas exporters abandoning the UK market

Many items of plant and equipment for inclusion in building projects are imported and Safety Assessment Federation Ltd is reporting that many overseas exporters are not seeking to adopt UKCA marking from 1st January 2022 when CE marking ceases to be recognized in the Great Britain.

Projects which have not yet procured items of plant are at serious risk of delay as are projects in the early planning phase due to the potential lack of availability of both plant and equipment and /or capacity for conformity assessment bodies to provide their services in support of UKCA marking

The refurbishment and overhaul sector is similarly at risk. If overseas exporters do not UKCA mark their products from 1st January 2022 then shortages of plant and equipment used in buildings will quickly become apparent.

9. Formation of the UK Group of Technical Assessment Bodies (Replacement for EOTA)

- a) This is now in train, however, numerous questions are arising which require answering.
- b) The Group of UK TABs are in discussions with EOTA over a future relationship. The initial 'observer' status offer would allow some limited engagement with EOTA activities but would not permit involvement in drafting EADs.
- c) MHCLG has put in a formal request for EOTA to share EADs with both UK TABs and MHCLG. The intention is to publish or 'designate' existing EADs so that UK TABs can issue UK Assessment Documents but there is no formal path yet in place for this to happen.
- d) Since making this request, EOTA have now agreed for permission to be granted for the use of EADs that had been published before the UK left the EU. This now requires a cross licencing agreement to be drawn up between EOTA and the specific UK TABs who will make use of these documents.
- e) Although progress has been made on this issue what this means in practice and how it will function still needs to be established.
- f) How these EADs could be used for the GB market will need to be ironed out in the UK TABs Working Group and with MHCLG. While UK regulations allow for UK Assessment Documents to be used in support of a fresh UK Technical Assessment to be issued but the purpose and benefit of going down this route which exists in the EU no longer exists in GB now that we have left the EU.
- g) Also, this leaves the issue of using future EOTA EADs still unresolved.
- h) There appears to be little appetite among UK TABs for a direct equivalent to EOTA being established in the UK.

10. Formation of the Group of UK Approved Bodies

The formation of the UK Group of Approved Bodies (UKGAB) is well underway with MHCLG having produced a document that will allow the UKGAB to start work on the required position paper etc. A meeting was held on the 4th May so that a new Chair can be elected and the organisation can move forward. Once a mandate has been received from MHCLG this will overcome any issues with the Competition Act and the potential for a manufacturer to challenge the UKGAB's legitimacy.

11. Mutual Recognition

- a) Of product testing carried out by EU Notified Bodies & UK Approved Bodies.

Technical Report for Q2 2021



- b) UK/EU agreement on mutual recognition would overcome most of these issue immediately for the UK and from 1st January 2022 for the EU.
- c) If mutual recognition is not agreed then EU manufacturers will be forced to use UK Approved Bodies to enable them to comply with mandatory UKCA marking as from 1st January 2022.
- d) The UK does not have the test capacity to meet this demand so disruption to EU exports to the UK will ensue.
- e) EU recognition of existing European Technical Assessments issued by UK bodies and new UK Technical Assessment Certificates is required now.

12. Other Areas of Concern

- a) Divergence of standards.
- b) Status on use of sub-contractors.
- c) UKAS limitation on acting as an accreditation body recognized by the EU for activities directly related to EU legislation.
- d) Review of the CPR - any changes to legislation.

Consultations

Building Bulletin 100 (BB100) is non-statutory guidance on fire safety for schools. The guidance covers designing a school building so that pupils and staff will have early warning if a fire breaks out and can evacuate quickly and safely. BB100 advises how to minimise the spread of fire and how to ensure the building structure is adequately resistant to fire. It also includes requirements for access and facilities for the Fire and Rescue Services.

<https://consult.education.gov.uk/technical-standards/building-bulletin-100/>

Consultation closes on 18th August 2021

Co-operation with other Associations & Organisations

The Construction Leadership Council (CLC)

The Construction Leadership Council (CLC) Standards and Alignment Group continues to meet every two weeks to look at issues in the construction industry arising from exit of the EU focussing on product standards and conformity. The Group comprises CPA, Trade Associations from across the construction sector, Conformity Assessment Bodies and representatives from MHCLG.

The group are particularly interested in trying to identify products that are most affected by UKCA marking changes, the extent of any issues and what constraints this will put on industry at the end of the year. Information from this group is reported into the full CLC task group and with collaboration of MHCLG and BEIS. Work is progressing on the analysis of testing availability and capacity in UK Approved test laboratories. To that end they are interested in receiving any feedback from industry on the current status of the transition from CE marking to UKCA marking plus any information concerning testing and certification issues. Any members wishing to contribute their experiences of these matters can send them to schappell@ggf.org.uk

Construction Products Association (CPA)

Building safety – Planning gateway One

Details have been published by MHCLG on the government's plans to introduce planning gateway one. A number of new requirements will be introduced into the planning system with the purpose of ensuring fire safety matters are incorporated at the planning stage for schemes involving relevant high-rise residential buildings. Changes will come into effect subject to parliamentary scrutiny from the 1st August 2021. The new legislative requirements, when introduced, will establish HSE as a statutory consultee to provide specialist fire safety advice to local planning authorities. The new Building Safety Regulator is expected to fulfil that role.

Details and draft guidance are available [here](#)

Independent review of construction products testing regime

An independent review of construction products testing has been commissioned by government to identify any potential weaknesses in the system and make recommendations for improvement.

The review will be led by Paul Morrell OBE (Chair of the review) and Anneliese Day QC with support from officials within MHCLG and the OPSS.

The independent review will focus on making recommendations relating to weaknesses in the system which, if left unresolved, could expose citizens to unnecessary safety risks. It will consider the respective roles of government, regulators, UKAS, conformity assessment bodies, test houses and also manufacturers. It will seek evidence from these parties and any other stakeholders and experts it sees fit to engage with and will submit a report to the Secretary of State for Housing, Communities and local Government later this year.

Further details are available [here](#) and contact can be made with the review team via productstestingreview@communities.gov.uk

Construction Products Europe (CPE)

Construction Products Europe (CPE) held a second online webinar event in April for their members to look at issues concerning CPR and Brexit. CPA members in the UK were invited to participate through membership of the CPA. This was a follow up to the previous webinar primarily to raise awareness of the UK CPR post Brexit to EU manufacturers and organisations particularly with respect to lack of a mutual recognition agreement. Going forward the proposal is for companies and associations based in the EU to make representations to European Parliament to try to put pressure on the European Commission to have discussions on a mutual recognition agreement.

Technical Report for Q2 2021



Glass for Europe (GfE)

The GGF attended the Glass for Europe Standardisation committee on 23rd June. Glass for Europe has released a draft position paper on the review of the CPR Explaining its importance but acknowledging its need for review to make a clearer and more concise system in relation to construction products within our industry. This consultation closed at the end of 2020 and to date there has been no response. The document is called 'Strengthening the Construction Products Regulation for greater efficiency and sustainability'.

GfE have been focusing on UKCA Marking and have now published their guidance 'Preliminary Guidance on UKCA Mark' <https://glassforeurope.com/preliminary-guidance-on-ukca-mark/>

GfE are looking to update this guidance once the current mutual recognition situation is resolved.

GfE webinar on reaction to fire -

Participants concluded that there is no imminent problem for the use of laminated glass across Europe but that questions on reaction to fire could arise again in the future. The Standardisation committee will prepare a test program and start discussion with potential test institutes. This is underway and a full schedule of testing is expected Q3 2021.

Guild of Architectural Ironmongery (GAI) Business Information Modelling (BIM) Template Working Group

Along with the Guild of Architectural Ironmongers, the British Woodworking Federation and other interested bodies, the GGF have been involved in a project for the production of BIM or product data templates

The group have been working toward producing product data templates which will in turn produce product data sheets for use in projects that require digital information such as BIM.

The first template has been created and is for door sets. It has been distributed to a selection of GAI members for feedback. The final version is due for publication soon.

On the back of this work the GGF have started to produce a library of BIM PDTs for members to access and use. A working party has been identified and first met in June, a template for window handles has been created. The next templates will also be for window hardware eventually leading to full product templates such as VS windows and casement windows/doors. If you wish to be involved in future meeting please contact kjones@ggf.org.uk.

British Plastics Federation (BPF)

No meeting since last Technical Report

CEN

As most members are aware, progress on European Standards has been severely hampered due to the HAS Consultants deeming them to be non-compliant. This is a legal rather than technical issue. In response, CEN-CENELEC have developed two guidance documents to assist Technical Committees to develop harmonised standards.

1. CEN-CENELEC Guide 36 'Guidance on the rules for drafting and presentation of candidate harmonized product standards'
2. CEN-CENELEC guidance 'Core rules for drafting harmonised standards for construction products'

By following this document, it does not guarantee that the standard will be cited, but only that its chances of achieving a HAS assessment of being 'Compliant' and consequently a citation entry on the OJEU are higher.

Based on a paper being circulated by CEN TC33 on how we may proceed with standardisation in light of the future of CPR and due to no standards being notified in the OJEU. It may be that some standards may be removed and if so, CE marking of the products covered would no longer be possible. There is also a possibility that there will be 2 standards for products. One covering the EUs legal requirements and one for manufacturers and purchasers which cover the technical aspects. It is expected that without significant change, no hENs will be cited within the next 2 to 5 years. Due to these extensive delays with harmonised European Standards, the Technical Department does not intend to continue listing the delayed hEN standards within this report. We will keep members up-to-date with any changes as they happen.

The work on taking account of the HAS consultants' comments has been side lined. The commission has stopped all 'communication' between TCs and the consultants.

CEN TC129

Since the last report there have been no meetings.

Whilst virtual meetings of some working groups have been held there is nothing significant to report.

There has been one standard from TC 129 published recently:

EN 17416: 2021: *Glass in building. Assessment of release of dangerous substances. Determination of emissions into indoor air from glass products*

This will become important for the declaration of 'dangerous substances' for a limited number of glass products. CEN TC129 WG3 has a group working, as reported previously, on a draft standard for folio interlayers for the production of laminated glass and laminated safety glass. It is expected that the draft will be available for the next virtual working group meeting on 10/06/2021. *The draft will be circulated, to anybody interested, when available.*

ISO TC160

Dr N Wruk of NSG is now chairman of TC160 and RC160 SC1. Dr Wruk is convenor of CEN TC129 WG3 and ISO TC160 SC1 WG3 laminated glass and laminated safety glass. The revision of EN ISO 12543 Parts 1 to 6: *Laminated glass and laminated safety glass* is complete and formal vote and publication is expected this year.

Work is ongoing on the following topics:

- a) Active glazing,
- b) Building integrated photovoltaics,
- c) Revision of the spectrophotometric standards to align the ISO and EN versions; when possible.

British Standards Institution

BSI Working Group – B/520

Since the last report there has been no meeting. The date of the next virtual meeting is September 2021. The results of the systematic review, of the standards below, are not yet available.

BS 5051-1:1988 *Bullet-resistant glazing -- Specification for glazing for interior use*. Still required for plastics glazing sheet materials.

BS 5544: 1978 *Specification for anti-bandit glazing (glazing resistant to manual attack)*. Still required for plastics glazing sheet materials

BS 6262: 1982 *Code of practice for glazing for buildings*. Required until BS 6262 - 5 is finalised.

BSI Working Group B/538 – Windows & Doors

Standards under review as notified

BS EN 13561:2015

External blinds and awnings. Performance requirements including safety

Update type: Current, Under review

BS EN ISO 12567-1:2010

Thermal performance of windows and doors. Determination of thermal transmittance by the hot-box method. Complete windows and doors

Update type: Current, Under review

BS 4787-1:1980

Internal and external wood doorsets, door leaves and frames. Specification for dimensional requirements

Update type: Confirmed, Current

BS 459:1988

Specification for matchboarded wooden door leaves for external use

Update type: Current, Under review

BS 4873:2016

Aluminium alloy windows and doorsets. Specification

Update type: Current, Under review

BS 6375-1:2015+A1:2016

Performance of windows and doors. Classification for weathertightness and guidance on selection and specification

Update type: Current, Under review

BS 8214:2016

Timber-based fire door assemblies. Code of practice

Update type: Current, Under review

PAS 24:2016

Enhanced security performance requirements for doorsets and windows in the UK. Doorsets and windows intended to offer a level of security suitable for dwellings and other buildings exposed to comparable risk

Update type: Current, Under review

BS EN 14608:2004

Windows. Determination of resistance to racking

Update type: Current, Under review

Technical Report for Q2 2021



BSI Working Group B/208

- BS 6180:2011 Barriers in and about buildings. Code of practice – *Working Group being formed. GGF already included*

BSI Working Group CB/401 Retrofitting Energy Efficiency Measures (DB)

- Newly formed group
- *Scope – Under the direction of the CB/-, is responsible for the UK creation and input to standards in the field of retrofitting existing buildings with energy efficiency measures. This committee will address quality issues in relation to the assessment, design, installation and commissioning of energy efficiency measures in buildings*

BSI PAS & Flex Documents

- PAS 9980: was issued by BSI as a Draft for Public Comment in April. This is Fire risk appraisal and assessment of external wall construction and cladding of existing blocks of flats – Code of practice. The public consultation lasted for a month and closed on 20th May. The GGF responded with comments from representatives of the Safety and Security Group and the Fire-Resistant Glazing Group. The GGF is directly referred to in PAS 9980 which is an extremely positive step for GGF and its Members.
- Flex 8670: This is intended to produce a framework for the oversight of competence of individuals working on higher-risk buildings.

GGF Publications

Datasheets currently being worked on

- 6.6 Windows & Doorsets - Light Transmittance
- 6.7 Windows & Doorsets - Thermal performance
- 6.8 Windows & Doorsets - Durability
- 6.9 Windows & Doorsets - Ease of operation
- 6.10 Windows & Doorsets - Categories of use
- 6.11 Visual Quality of uPVC windows
- 6.12 Visual Quality of Aluminium windows
- 4.2.4 Visual Quality of Georgian Bars and Leaded lights within Insulating Glass Units
- 4.8 Recommendations for fitting mirrors

END OF REPORT