



SECURITY TECHNICAL SPECIFICATION

Requirements for burglary resistance of construction products including hinged, pivoted, folding or sliding doorsets, windows, curtain walling, security grilles, garage doors and shutters.

Technical Specifications are operating documents for Warrington Certification Limited.

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Issue Status and Amendment

- i) If this is a controlled copy of the Technical Schedule, the organisation to which it has been issued will be provided with details of any changes in accordance with the amendment procedure below. The control status of the document is identified on page 1. Controlled copies are identified as such and are issued as working documents. Uncontrolled copies are issued for information only, will not be updated and should, therefore, not be treated as working documents.
- ii) Each page of the document is identified by a page number, issue number and date. Where an amendment is made, the revised page will bear a new issue number and date of amendment. Original, un-amended pages of the document will remain as Issue 1.
- iii) Where an amendment requires an extra page to be inserted, this is numbered with the number of the preceding page but with the addition of a letter suffix, e.g. 10A will be inserted between pages 10 and 11 and 10B will follow 10A. The new pages are dated in the normal way.
- iv) Any amendment to this document will be identified on the Amendment Page, which will be re-issued to holders of controlled copies with the amended sections/pages. Revised pages shall be inserted in place of existing pages or between existing pages and superseded pages shall be discarded. Where a significant number of amendments is made to this document the entire document will be re-issued under a new issue number. In such cases holders of the document shall destroy the previous issue.
- v) The Amendment Page and the relevant revised pages will be produced by Warrington Certification Limited (WCL), following agreement with the WCL Sector Liaison Group, and issued to the holders of each controlled copy of the document, together with an acknowledgment slip (document transmittal) which shall be signed and returned to WCL to confirm that the document has been amended. It shall be the responsibility of the nominated representative of the organisation holding a controlled copy of the document to ensure that the document is maintained in an up to date condition at all times.
- vi) To ensure that a permanent record is available of all amendments, WCL maintains a file of all superseded pages which are marked with the date of withdrawal. The record is held on file indefinitely in order to allow WCL to determine the past requirements of the scheme at any point in time.

SECURITY TECHNICAL SPECIFICATION

Requirements for burglary resistance of construction products including hinged, pivoted, folding or sliding doorsets, curtain walling, security grilles, garage doors and shutters

FOREWORD

This Technical Specification forms part of a series of controlled documents, which comprise The Warrington Certification Limited (WCL) "Enhanced Security" product certification scheme for products with enhanced security. It has been prepared in accordance with the requirements of EN 45011 for product certification bodies. In addition to this Specification the other controlled documents, which form part of the scheme, are:

- STS 200 -"General Requirements for Certification of Enhanced Security Products"-.
- WCL 'Enhanced Security' Scheme (Level 2) Quality Manual and related quality procedures
- Certificate(s) of Approval in the CS 000 series, together with any annexes
- Documentation required from the manufacturer in support of product certification

This Technical Specification replaces existing Specification WCL2. The aim of the scheme is to provide independent certification of burglar resistance for construction products including hinged, pivoted, folding or sliding door sets, curtain walling, security grilles, garage doors and shutters, including roller shutters.

In order to achieve WCL "Enhanced Security" Certification in accordance with STS 202, the manufacturers must also comply with the scheme requirements detailed in STS 200. This Technical Specification (STS 202) identifies test requirements only.

Each product conforming to the requirements of this Technical Specification shall be classified according to one of the classes identified in Clause 4 of this document.

1. SCOPE

- 1.1. This Technical Specification defines the technical requirements for classification of burglary resistance.
- 1.2. This specification is intended to cover hinged, pivoted, folding or sliding doorsets, curtain walling, security grilles, garage doors, roller shutters and other construction products where burglar resistance is a requirement.
- 1.3. This Technical Specification does not provide for certification against European standards EN 14351-1, prEN 14351-2 and prEN 14351-3.

2. REFERENCES

EN Standards are published by National Standards body and may include National Annexes. For WCL purposes the definitive version of any EN standard is that published by BSI and prefixed 'BS EN'.

References contained in STS 200 may also be relevant.

EN 1303	Cylinders for Locks
EN 1906	Lever handles and knob furniture
EN 12209	Mechanically operated locks, latches and locking plates.
EN 14351-1	Windows and Doors product standard, performance characteristics. (Windows and External pedestrian doorsets)
*prEN 14351-2	Windows and Doors product standard, performance characteristics. (Internal pedestrian doorsets)
*prEN 14351-3	Windows and Pedestrian Doorsets, product standard, performance characteristics,(Resistance to fire and smoke)
BS 3621	Thief resistance lock assemblies – Key egress.
BS 8621	Thief resistant lock assembly – Keyless egress
STS 200	General Requirements for Certification of Enhanced Security Products

* or successive documents

3. TERMS AND DEFINITIONS

Burglar resistance

To resist forced entry, using physical force and predefined tools.

Attack side

The exposed face of the test specimen detailed for attack (which may be the side internal or external to the building envelope).

Hinged

Products that have a solid or rigid leaf and the main movement is turning.

Pivoted

Products that have a solid or rigid leaf and the main movement is turning.

Sliding

Products that have a solid or rigid leaf and the main movement is sliding.

Roller shutter

Shutter that has movable interconnected elements that travels over a roller or barrel to open or close.

Security grille

Fixed or moveable bars with gaps greater than 25mm, which provide protection for openings.

Test specimen

Complete full working construction ready for test

Sub-frame

Surrounding frame in which the test specimen is mounted

Test rig

Steel framed construction with movable steel supports, into which the sub-frame containing the test specimen can be mounted.

Tool-set

Defined set of tools allocated for use in each resistance class

Pre-test

Testing carried out for exploratory purposes systematically employing a range of different test methods and techniques including those that may at first glance be deemed ineffective, with the purpose of identifying the most productive method for use in the main test. This test has no overall time limit other than those defined at each burglar resistance level, and can take the form of many separate attacks on different samples.

Main test

Testing carried out for certification purposes using the most productive attack method determined during the pre-test or by other methods. Testing time is strictly controlled and must not exceed the maximum test time.

Resistance (working) time

Test time taken by the test engineer to carry out the burglar resistance test, in which tools are used to manipulate or attack the specimen. Does not include rest time, tool change time and inspection time.

Rest time

Time taken by the test engineer when performing the burglar resistance test to recover for well-being and safety reasons

Tool change time

Time taken by the engineer to exchange or replace a tool during testing.

Inspection time

Time taken by the test team to examine the test specimen and to decide on the attack point / method.

Maximum (total) test time

The combination and accrued sum of the

- Resistance time
- Rest time
- Tool change time
- Inspection time.

4. GENERAL REQUIREMENTS

- 4.1. Before the commencement of any testing, the client (Applicant) shall supply detailed information about the product to be tested including the following.
- a) Name and address of the manufacturer if different from the applicant.
 - b) Detailed drawings of the test specimen.
 - i) Cross sectional details.
 - ii) Position of any special protection.
 - iii) Assembly of the product, detailing weld points, fasteners etc.
 - iv) Location details of all hardware and any protection or reinforcements used.
 - v) The materials and thicknesses used in construction of the product.
 - vi) List of hardware items and their reference numbers for products fitted to the test specimen and/or to be considered for assessment.
 - c) Manufacturer's installation instructions.
 - d) A detailed list of any dangerous substances.
 - e) Evidence shall be supplied to attest that any cylinders are third party approved for general vulnerability i.e. Kite marking or equivalent.
- 4.2. The size and range of the products to be covered shall be agreed in advance of any testing and selection of samples.
- 4.3. The test samples supplied for testing shall be fully functioning products complete with sub-frame, hardware and accessories. The test samples shall be secured into the sub-frames in accordance with the manufacturers installation instructions.
- 4.4. The attack face shall be agreed with the client (applicant) and the required level of security rating(s).
- 4.5. An agreed number of test specimens will be supplied.
- 4.6. The separate test information needed for the third party approval for the cylinder, general vulnerability, shall be checked prior to the testing.
- 4.7. All tests shall be conducted fully in accordance with the appropriate grades of resistance detailed in STS 202.

Resistance class (BR)	Tool set	Resistance time (min)	Maximum test time (min)
BR1	TK1	1	10
BR2	TK2	3	15
BR3	TK3	5	20
BR4	TK4	10	30
BR5	TK5	10	30
BR6	TK6	10	30

Resistance classes BR1 & BR2

Classes BR1 and BR2 address the level of attack normally associated with casual or opportunist burglars. These attacks result from an opportunity presenting itself with no regard to the reward it may bring. Burglaries covered by these classes are likely to avoid noise and unnecessary risk and tools used are common hand tools and levers as well as physical force, and are loosely based on low risk, domestic properties.

Resistance classes BR3 & BR4

Classes BR3 and BR4 address the level of attack associated with the more practiced burglar, who has some knowledge of the likely reward, and as a result is prepared to make noise and take risks, and is equipped with heavier duty tools more suited to a prolonged attack. Burglaries covered by these classes are based on medium risk, commercial properties

Resistance classes BR5 & BR6

Classes BR5 and BR6 are associated with the more experienced and professional type of burglar, who are more focused and have knowledge of the likely reward it will bring. The attack is usually planned with knowledge of the construction products with noise not being an issue. The tools used are often power tools. Burglaries covered by these classes are high risk, high security properties.

- 4.8. Test evidence shall be generated at a laboratory recognised by WCL as defined in STS 200.
- 4.9. 'No performance determined' (NPD) is not an option.
- 4.10. The test apparatus shall consist of a rigid steel frame with moveable steel supports in which test specimens of various dimensions can be mounted. The frame shall not deflect more than 5mm in any normal plane under test conditions.
- 4.11. If testing conducted on each specimen is recorded with a video recorder for the purposes of the laboratory, the recording shall not be published or publicly shown and will be kept for future reference in case of any subsequent changes to the specimen.
- 4.12. The sub-frame supporting the test specimen shall be metal tube of 120mm x 120mm x 5mm, alternatively the sub frame may be of timber construction (100mm x 75mm).

5. CLASSIFICATION

- 5.1. Certification of hinged, pivoted, folding or sliding door sets, curtain walling, security grilles, garage doors and shutters in accordance with the requirements of this specification is designed to satisfy current UK and European requirements. Other security requirements for UK domestic applications are defined in STS 201 & STS 204.
- 5.2. This technical specification does not cover the classification of individual components such as glass, infill materials, locks or other security hardware in their own right.
- 5.3. Products tested in accordance with standards and procedures other than those specified in STS 202 will not be considered for certification against this Technical Specification.

6. TEST REQUIREMENTS & PROCEDURES

- 6.1. The main purpose of the test is to evaluate the burglar resistance grading of the product when it is in its locked condition.
- 6.2. Testing is carried out with full constructional knowledge of the specimen and its fixings and security devices. The test specimen shall be visually examined for conformity with the details supplied by the client. Some non-destructive pre-testing may be required by the test team to establish weak and vulnerable areas.

- 6.3. The test team shall be a minimum of 2 engineers. There will be a team leader who will be in overall charge and a test engineer who will perform the test work on the specimen as directed to do so by the team leader. The team leader may choose to swap roles with the test engineer at any time during the test.
- 6.4. Regardless of type of attack the test is attempting to replicate, every possible attack method identified shall be employed. The term opportunist, casual, experienced and professional burglar relates to the tool kit carried, and is not intended to limit the decision making ability and approach to testing of the test team.
- 6.5. The test specimen shall be checked for any damage prior to testing and any damage discovered shall be recorded. The test specimen shall be closed and locked. The direction of opening for each locking option (points) shall be noted. The specimen shall be tested in the most secure positions.
- 6.6. The test specimen shall be mounted in the sub-frame, in accordance with the manufacturer's installation instructions prior to being mounted into the test rig. The adequacy of the installation/fixing method into the subframe is assessed in this technical specification. It is assumed that the substrate onto which the specimen is fitted provides a resistance to attack at least equivalent to that afforded by the specimen itself.
- 6.7. Pre-testing is carried out prior to the main test, and consists of the test team utilising every conceivable combination of tool and attack method in an attempt to identify the most productive method of attacking the window, at the same time attempting to disregard any futile methods. Although cumulative damage effects between different attack methods are to be avoided, in some cases this will be inevitable, and the test team may require additional samples to continue pre-testing. These pre-tests can be used to prove the conformance of the product to lower burglar resistance levels in a progressive manner.
- 6.8. The burglar resistance attack method used by the test team during the main test shall be the one most likely to gain entry in their opinion, as determined during the pre-test, with the grade of tools allowable in the grade of security requested by the client.. This method is repeated as a means of eliminating the effect of any cumulative damage caused during the pre-test, and is ultimately used to determine the final classification of the product.
- 6.9. Attempts shall be made to force open the specimen or to create an accessible opening by targeting a weak or vulnerable area. This shall be done within the resistance time allowed with the tool kit appropriate to the BR grade required.
- 6.10. The attack procedure and the tools used shall be recorded to form part of the final report
- 6.11. Resistance to electrical manipulation is not tested, other than by attack methods possible using the tools defined within this technical specification. It is recommended that electronic components are also tested and approved to relevant standards.
- 6.12. The specimen is deemed to have failed if the specimen opens whilst under test, or an accessible gap is created in the test specimen to allow the following to pass through freely:
 - a) Where releasing the locking hardware from the inside requires the use of a removable key. A 500mm long cylindroid with an elliptical shape of 380mm x 225mm

- b) Where releasing the locking hardware from the inside does not require the use of a removable key. A 500mm long cylindroid with a diameter of 25mm. Or,

6.13. The test report shall include the following information.

- a) The name and address of the applicant
- b) The name and address of the manufacturer if different from the applicant
- c) Details of the test specimen, construction drawings, material details, thickness, infill etc.
- d) Overall sizes of the test specimen
- e) Date of manufacture
- f) Any glazing details
- g) Hardware details and classification against the EN product standards (If applicable)
- h) Attack face of the door
- i) Locking details
- j) List of tools used (as given below)
- k) Copy of the installation instructions
- l) The BR resistance grade achieved
- m) All relevant sizes to be covered
- n) Details of any damage to the specimen prior to testing and whilst under testing conditions
- o) Resistance time recorded
- p) Reference of the general vulnerability approval for any cylinders used.
- q) Dated signatures of the test team.
- r) Additional test report numbers to cover the general vulnerability will be added to the final report.

7. TOOL KITS

7.1. Tool kit 1

- Adhesive tape
- Engineers pliers (200mm long +/- 10mm)
- Long nose pliers (200mm)
- Mole Grips (Self gripping)
- Set of small screw drivers (shaft diameter 6 +/- 2mm)
- Spanners(max length 180mm)
- Cable cutter
- Steel wire
- Glass cutter
- Hexagon Allen keys (120mm Max)
- Knife (120mm max 3mm thick)
- Lever (300mm long +/-10mm)
- Engineers pliers (200mm long +/- 10mm)
- Hooks
- Tweezers
- Fishing line
- Credit card
- Set of Pin Punches
- 2 plastic wedges (200mm long +/-25mm, 80mm wide +/-10mm and a height +/-5mm)
- 2 wooden wedges (200mm long +/-25mm, 80mm wide +/-10mm and a height +/- 5mm)
- Rope

7.2. Tool kit 2

- Screwdriver (365mm long +/- 25mm, blade width 16mm +/- 2mm)
- Pipe wrench (240mm long +/- 20mm)
- Junior Hacksaw (330mm long + / - 10mm with 2 HSS blades)
- Steel tube (500mm long +/- 10mm with a diameter of 35mm +/- 5mm, max thickness 3mm)
- Bolt cutter(350mm long)
- Claw hammer
- Selection of drill bits (max 6mm HSS)
- Hand drill
- Plate shears
- Screwdriver 7mm diameter / 250 +/- 50mm
- 1 Multiple slip joint pliers - 250 mm long
- Pliers (including self gripping) - selection 250 mm long

In addition the tools from tool kit 1 can also be used

7.3. Tool kit 3

- Crow bar (710mm long +/- 10mm)
- Cold chisels (250mm long +/- 25mm with a blade width of 25mm +/- 5mm)
- Cordless drill (7.2 V, with spare battery pack)
- Hammer (400mm long 1.5 kg)
- Wood chisels (250mm long x 25mm wide blade)
- Axe (hand held, max 350mm long)
- Brick bolster chisel
- 1 drill bits (max 10mm HSS. HSCO / TC)
- Gas torch
- Car scissor jack
- 1 Pad saw plus 2 HSS blades
- 1 Hacksaw plus 2 HSS blades

In addition the tools from tool kits 1 and 2 can also be used

7.4. Tool kit 4

- Plate shears (left and right hand cutting, 260mm long +/- 25mm)
- Bolt cutters (460mm long +/-
- Cordless drill (12 V with spare battery pack)
- General purpose saw
- Cordless jigsaw (12v with 2 HSS/carbide blades)
- 1 K tool lock remover
- Felling axe
- 50mm hole saw (HSS)
- Sledge hammer (3kg)
- Steel wedges (200mm long +/-25mm, 80mm wide +/-10mm and a height +/- 5mm)
- "A" tool lock puller
- Cordless disc grinder 12 v
- Selection of carbide drill bits (max 13mm)
- Tube (500mm long +/- 10mm with a diameter of 75mm +/- 5mm)
- Hooligan bar 760mm long

In addition the tools from tool kits 1, 2 and 3 can also be used

7.5. Tool kit 5

- 5 drill bits (13mm max diameter, HSS / HSCO / TC)
 - Electric jig saw (18 v cordless, With 3 blades HSS / HSCO / TC)
 - Angle grinder (18 v cordless)
 - 3 discs (125mm diameter, 2.5mm thick for steel or stone cutting)
 - Cordless drill (18 v with spare battery pack)
 - Cordless circular saw 18 v (With 3 blades HSS / HSCO / TC)
 - Reciprocating saw 18 v (With 3 blades HSS / HSCO / TC)
- In addition the tools from tool kits 1, 2, 3 and 4 can also be used.*

7.6. Tool kit 6

- Angle grinder (2300w +/- 10%)
 - 3 discs (230mm diameter 3mm thick for steel or stone cutting)
 - Electric circular saw
 - Glass master saw
 - Pinch bar (1.5m long)
 - Reciprocating saw 750W (With 3 blades HSS / HSCO / TC)
 - Tube (1000mm long +/- 10mm with a diameter of 75mm +/- 5mm)
 - 1 Sledgehammer - 750 mm long/6 kg
 - Hooligan bar 910mm long
 - 2 Wood boring spade bits
 - 1 Drill (with rotary / hammer action) - 750 W
 - 5 Drill bits (13 mm diameter jobber and long series - HSS / HSCO / Carbide)
 - 1 Hole saw - >50 mm diameter
- In addition the tools from tool kits 1, 2, 3, 4 and 5 can also be used*

8. ASSESSMENT OF PRODUCTS

Hinged, pivoted, folding or sliding doorsets, windows, curtain walling, security grilles, garage doors and shutters tested shall include the most adverse and vulnerable in design, size and configuration as determined by the test laboratory. No assessment or extrapolation of the door specification is permitted beyond that tested as prescribed in Section 4.1.

9. CERTIFICATE CONTENTS

The certificate shall identify the product and any variations in the design. It shall also specify the classification as prescribed

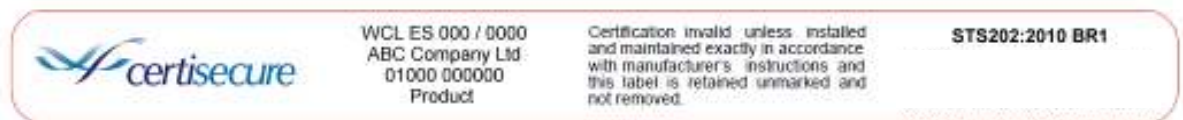
Resistance class	1	2	3	4	5	6
EN 1303						
Cylinders (digit 7)	4	4	4	6	6	6
Cylinders (digit 8)	0	1	1	2	2	2
EN 1906						
Lever furniture (Digit 7)	1	1	3	4	4	4
EN 12209						
Mechanical locks (Digit 7)	3	3	5	7	7	7

An annex to the certificate, not in the public domain will describe in detail the product certificated.

10. LABELLING AND CONFORMITY

- 10.1. The certificated product shall be provided with a tamper evident label fixed to the product in the prescribed position.
- 10.2. The label should be fitted so it is visible when the specimen is open but not necessarily when closed. In the case of non-opening specimens, the label can be concealed by an easily removable trim.
- 10.3. A factory supplied product requires a label on only one part. Items supplied separately or items supplied in knock down form as part of an assembly shall each be labelled.
- 10.4. Labels are available from WCL.
- 10.5. The label shall be clearly marked so that the scope of certification can be easily established. The labels shall be sequentially numbered. The marking shall include:
 - The WCL Mark
 - The technical specification number (STS 202)
 - The performance classification achieved (eg BR1)
 - A unique serial number
 - Optionally the manufacturer's or certificate holder's name. Note if the manufacturer's or certificate holder's name is not applied, no other name or reference shall be identified on the label or door.
- 10.6. The scope of the certification of the product assembly shall be clearly identified in the issued certificate and be recorded in the WCL "Technical Directory"

Example of label



11. INSTALLATION INSTRUCTIONS

Each door assembly shall be supplied with full installation instructions

12. FACTORY PRODUCTION CONTROL

Factory production control and the independent inspection thereof shall be in accordance with the requirements given in STS 200. The checklist used for FPC inspection visits is given in Annex B.

13. AUDIT TEST REQUIREMENTS

Burglar resistance testing to the claimed burglar resistance level should be repeated annually.

See STS 200 for any additional audit test requirements.

ANNEX A

RESISTANCE CLASSES

Resistance Class (BR)	Method to attempt to gain entry
BR1	<p>The casual burglar attempts to gain entry using small simple tools and using physical violence, e.g. kicking, shoulder charging, lifting or tearing. The burglar attempts to take advantage of opportunities, and has no knowledge of the resistance of the construction or likely reward. (LOW RISK)</p>
BR2	<p>The casual burglar attempts to gain entry using small simple tools such as screwdriver, pliers, wedges and with grilles and exposed hardware a small handsaw. Power tools are not associated with this level of burglary. The burglar attempts to take advantage of opportunities, and has no knowledge of the resistance of the construction or likely reward and is concerned with both time and noise and is willing to take only low risk. (LOW RISK)</p>
BR3	<p>The burglar attempts to gain entry using a crow bar, an additional screwdriver and hand tools such as a hammer, punches and mechanical drilling tools. At this level the burglar attempts to increase the force applied to gain entry and with the drilling tool the burglar can attempt to attack vulnerable locking devices. The burglar has some knowledge of the likely resistance, but is still concerned with both the time and noise (MEDIUM RISK)</p>
BR4	<p>The practised burglar uses in addition, a heavy hammer, axe, chisels and a portable battery powered drill. The tools used at this level allows the burglar to increase the number of attack methods The burglar has knowledge of the likely reward, and will be resolute in his effort to gain entry, he is less concerned with either the time and noise and is prepared to take a medium level of risk. (MEDIUM RISK)</p>
BR5	<p>The experienced burglar uses in addition, electric tools, drills, jig and sabre blades and angle grinder. The tools used at this level again allows the burglar to further increase the attack methods The burglar anticipates a reasonable reward, and is resolute in his effort to gain entry and is well organised, he has little concern with either the time or noise level and is prepared to take a high level of risk. (HIGH RISK)</p>
BR6	<p>The experienced burglar uses in addition, spalling hammers, power electric tools e.g. drills, jig and sabre blades and angle grinder. The tools are used by a single person, and have a high level of performance and are very effective. The burglar anticipates a good level of reward, and is resolute in his effort to gain entry and is well organised, he has no concern with either the time or noise level and is prepared to take a high level of risk. (HIGH RISK)</p>

ANNEX B

Factory Production Control Checklist

Warrington Certification Limited

Checklist for Initial Inspection of Factory and Factory Production Control For STS 202 Scheme

In the course of this initial inspection the following criteria should be considered:

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
	<p>Does the factory production control system established address the needs of manufacture for the product referenced? Is manufacturer aware that as well as the requirement for this initial FPC audit, there is also an ongoing requirement for an annual surveillance audit to take place that will take place every 12 months.</p>		
	<p>Are there "controlled" factory production control procedures / work instructions issued to shop floor? – Identify those applicable:</p>		
	<p>Does the producer have direct control of the appropriate machinery and for the production of the products to be certified, or are key elements of the production with respect to the essential characteristics subcontracted to others on or off the site? If sub-contractors produce any parts what controls are in place?</p>		
	<p>Who is the management representative with responsibility / authority for FPC and for ensuring that its requirements are applied? What is the individual's position / job title?</p>		Contact name Phone No.
	<p>Is the maintenance of the process machinery carried out to written procedures at regular intervals? Is this being carried out properly, regularly, and is this recorded / documented?</p>		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
	<p>For the products to be certified, what are the procedures / routines covering the purchasing of raw materials / constituent materials:</p> <p>Do purchase orders detail specific requirements for raw materials such as grade of steel or type of glass?</p> <p>Are any certificates of analysis / conformance requested from suppliers as part of procedures?</p> <p>Are specifications in place with certain suppliers (which are referred to by P/Os) to ensure consistency of materials?</p>		
	<p>For the products to be certified, what are the procedures / routines covering the Inspection of the incoming raw materials / constituent materials;</p> <ul style="list-style-type: none"> - Who carries this out? - Are certificates of analysis / conformity received – who reviews and where filed? - At what frequency / intervals? (100%, sampled etc.) - What records are maintained? 		
	<p>How are batches / items of raw material traceable through the production process and in finished products?</p> <p>Are raw materials stored in suitable conditions to prevent deterioration?</p> <p>What evidence was reviewed to confirm this traceability is effective?</p>		
	<p>Are the personnel involved in the production sufficiently qualified and trained to operate and maintain the production equipment and carry out production line duties?</p> <p>What records / evidence confirm this?</p>		
	<p>Are job sheets/works orders raised for each batch / day / week of production?</p>		
	<p>If applicable how are customer supplied drawings received and recorded into the system?</p> <p>How are changes to drawings controlled?</p> <p>How do operators know drawing in use is the current one?</p>		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
	<p>Are all production processes and procedures recorded at regular intervals?</p> <p>Who records the processes? (if applicable)</p> <p>Are these continuously (automatically) recorded?</p> <p>How is the documentation organized?</p>		
	<p>Have the following already been supplied to WAPT for review? Controlled details of test specimen showing :-</p> <p>a) Cross sectional details.</p> <p>b) Position of any special protection.</p> <p>c) Assembly of the product, detailing weld points, fasteners etc.</p> <p>d) Location details of all hardware and any protection or reinforcements used.</p> <p>e) The materials and thicknesses used in construction of the product.</p> <p>f) List of hardware items and their reference numbers for products fitted to the test specimen and or to be considered for assessment.</p> <p>g) Where applicable evidence to attest that any cylinders are third party approved for general vulnerability i.e. Kite marking or equivalent.</p>		<p>Complete based on information received.</p>
	<p>Have the attack face and level of security rating(s) required been agreed?</p> <p>i.e. BR1 to BR6</p>		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
	<p>To be completed as appropriate based on product data submitted if available or production witnessed during initial audit.</p> <p>Product Construction Material – Thickness (mm) –</p> <p>Size Details</p> <p>Finishes</p> <p>Lippings Material – Thickness (mm) –</p> <p>Leaf/Framing Material – Thickness (mm) – Dimensions –</p> <p>Adhesives Type - Application method – Applied weight –</p> <p>Configuration</p> <p>If known are these as specified in submittal?</p>		<p>Record evidence of production item compliance with specification:</p> <p>NB. This section will vary depending on product and information received from client.</p>
	<p>Glass (if applicable)</p> <p>Are the doors going to be apertured? If yes</p> <p>Height of aperture</p> <p>Width of aperture</p> <p>Area covered (m2)</p> <p>Margins between apertures</p> <p>What type/thickness of glass is being used?</p>		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
	<p>Is manufacturer aware that each product must be fitted with a uniquely numbered label containing the WCL mark and certificate number?</p> <p>How does manufacturer intend to any apply labels?</p> <p>What records does he intend to keep of labels used?</p>		
	<p>What installation instructions are going to be supplied with the windows?</p> <p>Have copies been supplied to WAPT for Approval?</p>		
	<p>If samples are selected please give details here and complete Sample Form.</p> <p>Is client aware that frequency of audit testing for wooden products is yearly and for metal products is every 5 years.</p>		
	<p>Review test records for recent (and current production).</p> <p>Do the findings of this review of records correlate with the requirements laid down in the company's technical specification for the product for type testing, and for testing for surveillance purposes of the FPC?</p> <p>Identify any anomalies found.</p>		
	<p>Is the inspection equipment correctly maintained and calibrated on a continuous basis to ensure constant accuracy of the tests performed during factory production control and surveillance?</p> <p>Are records maintained to enable the accuracy of the items of inspection equipment to be confirmed?</p>		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
	<p>Does the producer apply an adequate documented system that allows the detection of defects, faults and poor workmanship quickly enough to ensure that they are removed prior to delivery?</p> <p>What % of product is inspected?</p> <p>How are these non-conforming products stored/identified and dealt with after investigation into the problem?</p> <p>What records are produced?</p>		
	<p>For the products to be certified, does the producer apply an adequate documented system concerning product complaints received, and that is integrated into the factory production control?</p> <p>Does the system include appropriate measures to avoid or correct these deficiencies?</p> <p>How are customer complaints addressed?</p>		
	<p>Are finished products packaged as part of production line activities or in separate area of factory?</p>		
	<p>How are products handled when transferring them to storage to ensure no damage is caused to them?</p> <p>Are there any special considerations taken into account with storage of the products?</p>		
	<p>What records are maintained of where the finished products are shipped too?</p> <p>How is production batch number traceability maintained once the products have been dispatched to assist in traceability should any complaints be made?</p> <p>How long are records maintained (min 5 years)?</p>		

Summary of Inspection Findings:	
Observations / Recommendations:	
List of Attachments:	Non Conformances Raised:

Inspection Report signed / dated by:	
Signed for client by:	
Reviewed by: (Office use only)	

ANNEX C

PARTICIPATING ORGANISATIONS

D1. BODIES AUTHORISED TO OPERATE CERTIFICATION TO THE PROVISIONS OF THIS SCHEDULE

Warrington Certification

D2. THIS SCHEDULE IS RATIFIED BY MEMBERS OF WCL MANAGEMENT COUNCIL

Association for Specialist Fire Protection (ASFP)
British Retail Consortium (BRC)
British Woodworking Federation (BWF)
Chief Fire Officers Association (CFOA)
Communities and Local Government (CLG)¹
Construction Products Association (CPA)
Door and Hardware Federation (DHF)
Guild of Architectural Ironmongers (GAI)
Institute of Fire Prevention Officers (IFPO)
InFiReS
London Underground Limited (LUL)
Passive Fire Protection Federation (PFPF)
Royal Institute of Chartered Surveyors (RICS)
Exova Warringtonfire (EW)

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¹ CLG is an Observer Member of WCL Management Council