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SECURITY TECHNICAL SCHEDULE

STS202

BURGLARY RESISTANCE REQUIREMENTS FOR CONSTRUCTION PRODUCTS INCLUDING DOORSETS, WINDOWS, CURTAIN WALLING, SECURITY GRILLES, GARAGE DOORS AND ROLLER SHUTTERS

Warringtonfire Testing and Certification Limited
Reg. Office: 10 Lower Grosvenor Place, London, United Kingdom, SW1W 0EN
Co. Reg. No. 11371436

CONTENTS

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) From here on in, references to Warringtonfire Testing and Certification Limited will be shown as Warringtonfire.

iii) 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.

iv) 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.

v) 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 Revised pages shall be inserted in place of existing pages or between existing pages and superseded pages shall be discarded.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.

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AMENDMENT PAGE

To ensure that each controlled copy of this Technical Schedule contains a complete record of amendments, the Amendment Page is updated and issued with each set of revised/new pages of the document. Details of the procedures for amending this document are given in section 1 of this document.

Amendment			**Discard**		**Insert**	
No	**Date**	***Sections Changed**	**Page(s)**	**Issue no**	**Page(s)**	**Issue no**
1	15/03/2011	All	1-24	2	1-25	3
2	24/02/2015	All	1-25	3	1-27	4
3	24/07/2015	Updated to new format, also to include references to BS EN ISO/IEC 17065. Management Council renamed to Impartiality Committee	1-25	4	1-30	5
4	04/09/15	Website details amended to warringtoncertification.com	30	5	30	6
5	22/04/16	Name change from WCL to Exova UK Limited trading as Warrington Certification	All	6	All	7
6	28.02.19	Name change to Warringtonfire Testing and Certification Limited	All	7	All	8

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SECURITY TECHNICAL SCHEDULE (STS 202)

BURGLARY RESISTANCE REQUIREMENTS FOR CONSTRUCTION PRODUCTS INCLUDING DOORSETS, WINDOWS, CURTAIN WALLING, SECURITY GRILLES, GARAGE DOORS AND ROLLER SHUTTERS

FOREWORD

This Security Technical Specification forms part of a series of controlled documents, which comprise the Warringtonfire Enhanced Security & General Performance product certification scheme. It has been prepared in accordance with the requirements of ISO EN 17065 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 & General Performance Products.
- Warringtonfire Enhanced Security & General Performance 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 specification WCL2 & all previous versions of STS202. The aim of the scheme is to provide independent certification of burglar resistance for construction products including doorsets, windows, curtain walling, security grilles, garage doors and roller shutters.

In order to achieve Warringtonfire Enhanced Security & General Performance 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 Security Technical Specification shall be classified according to the classes identified in Clause 5 of this document.

1. SCOPE

1.1. This Security Technical Specification defines the technical requirements for classification of burglary resistance and general performance.

1.2. This specification is intended to cover but is not limited to doorsets, windows, curtain walling, security grilles, garage doors, roller shutters, and also 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, prEN 16034 for doors & windows and EN 13241-1 for industrial and commercial doors & gates.

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2. REFERENCES

EN Standards are published by National Standards body and may include National Annexes. For Warringtonfire 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.

BS 644	Timber windows and doorsets. Fully finished factory-assembled windows and doorsets of various types. Specification
BS 3621	Thief resistant lock assembly. Key egress
BS 4873	Aluminium alloy windows and doorsets. Specification
BS 6375-1	Performance of windows and doors. Classification for weather tightness and guidance on selection and specification
BS 6375-2	Performance of windows and doors. Classification for operation and strength characteristics and guidance on selection and specification
BS 6375-3	Performance of windows and doors. Classification for additional performance characteristics and guidance on selection and specification
BS 6510	Steel-framed windows and glazed doors. Specification
BS 7412	Specification for windows and doorsets made from unplasticized polyvinyl chloride (PVC-U) extruded hollow profiles
BS 8529	Composite doorsets. Domestic external doorsets. Specification
BS 8621	Thief resistant lock assembly. Keyless egress
BS EN 1303	Building hardware. Cylinders for locks. Requirements and test methods
EN 1906	Building hardware. Lever handles and knob furniture. Requirements and test methods
BS EN 12209	Building hardware. Locks and latches. Mechanically operated locks, latches and locking plates. Requirements and test methods
EN 13241-1	Industrial, commercial and garage doors and gates. Product standard. Products without fire resistance or smoke control characteristics
EN 14351-1	Windows and doors - Product standard, performance characteristics. Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics)
*prEN 14351-2	Windows and doors - Product standard, performance characteristics. Part 2: Internal pedestrian doorsets without resistance to fire and/or smoke leakage)
*prEN 16034	Pedestrian doorsets, industrial, commercial, garage doors and windows - Product standard, performance characteristics - Fire resistance and/or smoke control characteristics
ISO EN 17065	Conformity assessment. Requirements for bodies certifying products, processes and services
STS 200	General Requirements for Certification of Enhanced Security and General Performance Products
STS 201	Enhanced Security Requirements for Doorsets to Satisfy the Requirements of PAS 24
STS 204	Enhanced Security Performance for Windows to Satisfy the Requirements of PAS 24

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) that is ultimately specified by the client.

Hinged or 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 (horizontal, vertical or parallel).

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

Security grill
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 prior to the main test, including all burglar resistance levels up to and including the level specified by the client.

Main test
Testing carried out for certification purposes following the pre-test, at the maximum burglar resistance level identified during the pre-test using the most productive attack method determined during the pre-test or by other methods.

Maximum test time
The combination and accrued sum of:

- Resistance (working) time
- Rest time, tool change time & inspection 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.

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. Kitemarking 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 as per the manufacturers installation instructions including any installation gaps (gaps should be packed or filled with mastic as appropriate as per the installation instruction).

4.4. The attack face shall be agreed with the client (applicant) and the required level of security rating.

4.5. An agreed number of test specimens will be supplied.

4.6. 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.

Note: 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.

4.7. Test evidence shall be generated by a laboratory recognised by Warringtonfire as defined in STS 200.

4.8. 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.

4.9. If testing is recorded with a video recorder for the purposes of laboratory use, the recording shall not be released to the client, published or publicly shown and will be kept for future reference in case of any subsequent changes to the specimen.

4.10. The sub-frame supporting the test specimen fitted in accordance with clause 4.3 shall be metal tube 120mm x 120mm x 5mm or timber construction 100mm x 75mm. Any sizes other than this to be agreed with the test laboratory prior to testing. This information will form part of the final report.

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 requirements. Other security requirements for UK domestic applications are defined in STS 201 for doorsets & STS 204 for windows.

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.

5.4. The classification shall be as follows:

Example

Security	**Weather**	**Strength**	**Material Specific**
STS202 BR2	BS6375-1 800	BS6375-2 Medium Duty	BS 4873
Mandatory	If applicable	If applicable	If applicable

5.5. Category 1 – Security (mandatory performance)
Shall be in accordance with STS202. The classification levels are as follows: (NPD is not an option)

STS202 BR1	Passed STS202 at burglar resistance level BR1
STS202 BR2	Passed STS202 at burglar resistance level BR2
STS202 BR3	Passed STS202 at burglar resistance level BR3
STS202 BR4	Passed STS202 at burglar resistance level BR4
STS202 BR5	Passed STS202 at burglar resistance level BR5
STS202 BR6	Passed STS202 at burglar resistance level BR6

5.6. Category 2 – Weather performance (if applicable)

The classification for weather performance of windows & doorsets shall be in accordance with BS6375-1. The classification levels are as follows: (NPD is only an option for products other than windows or doorsets)

NPD	No performance determined
800U	UK exposure category 800U (doorsets only)
800X	UK exposure category 800X (doorsets only)
800	UK exposure category 800, with air class 2, water class 3A, wind class A2
1200	UK exposure category 1200, with air class 2, water class 3A, wind class A3
2000	UK exposure category 2000
2000+	UK exposure category 2000+

5.7. Category 3 – Mechanical Strength (if applicable)

The classification for operating forces of windows & doorsets shall be in accordance with BS6375-2. The classification levels are as follows: (NPD is only an option for products other than windows or doorsets)

NPD	No performance determined
BS6375-2	Performance in accordance with BS6375-2 for windows
Medium	UK category of use Medium in accordance with BS6375-2
Heavy	UK category of use Heavy in accordance with BS6375-2
Severe	UK category of use Severe in accordance with BS6375-2

5.8. Category 4 – Material Specific (if applicable)

The classification for material specific properties of windows & doorsets shall be in accordance with BS 6375-3. The classification levels are as follows: (NPD is only an option when no material specific standard exists)

NPD	No performance determined
BS644	Performance in accordance with BS644 for Timber windows & doorsets
BS4873	Performance in accordance with BS4873 for Aluminium windows & doorsets
BS7412	Performance in accordance with BS7412 for PVC windows & doorsets
BS6510	Performance in accordance with BS6510 for Steel windows & glazed doorsets
BS8529	Performance in accordance with BS8529 for Composite doorsets

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6. TEST REQUIREMENTS AND PROCEDURES

6.1. The main purpose of the test is to evaluate the burglar resistance class of the product when it is in its closed & locked (fully secure) condition unless otherwise specified by the client. If the test is carried out and the product classified in any other condition this shall be noted in the test report.

6.2. The test team shall be a minimum of 2 test engineers. There will be a team leader who will be in overall charge and additional test engineers who will perform the test work on the specimen as directed to do so by the team leader.

The team leader will keep a record of the test progress on the test record sheet and keep track of the timings. The team leader may choose to swap roles with a test engineer at any time during the test. The team leader is responsible for the test and for determining the final classification of the product.

Only one member of the test team can attack the specimen at any one time.

6.3. The test specimen shall be mounted in the sub-frame, in accordance with the clause 4.3 and the manufacturer's installation instructions prior to testing.

The adequacy of the installation/fixing method into the sub frame 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.

6.4. Testing is carried out with full constructional knowledge of the specimen, 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 carried out by the test team to establish weak and vulnerable areas.

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.

6.6. 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 toolkit or toolkits appropriate to the BR grade required.

6.7. The test-team may utilise steps, platforms or scaffold towers to attack the product above floor level. The time taken to erect platforms or scaffold towers shall not form part of the maximum test time.

6.8. Resistance to electrical manipulation is not tested, other than by attack methods possible using the tools defined within this technical specification, including but not limited to exposing and damaging/shorting out of circuitry, cutting of wires in an attempt to cut the power to electronic or magnetic locks (It is recommended that electronic components are also tested and approved to relevant standards).

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6.9. Pre test

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 specimen, at the same time attempting to disregard any methods deemed to be futile by the team leader.

Pre-tests are used to prove the conformance of the product to lower resistance classes in a progressive manner, and are applied progressively starting at BR1 and working up to the grade of security requested by the client or until failure occurs.

The test team systematically employ a range of different attacks (a combination of test methods and techniques) including those that may at first glance be deemed ineffective, with the purpose of identifying the most productive attack for use in the main test. This test has no overall time limit although each attack is carried out with regard to the resistance time appropriate for the resistance class tested.

Although cumulative damage effects between different attacks are to be avoided, in some cases this will be inevitable, and the test team may require additional samples to continue pre-testing.

6.10. Main test

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, using the toolkit or toolkits allowed for the grade of security requested by the client or the maximum resistance class identified during the pre-test.

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.

If no productive attack method is identified in the pre-test, then it is not always necessary to carry out a main test.

Testing time is strictly controlled and must not exceed the resistance (working) time or the maximum test time.

6.11. The test procedure, the tools used and the time taken for each attack during the pre-test and main test shall be recorded to form part of the final report.

6.12. Failure criteria

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 a 500mm long cylindroid with an elliptical shape of 380mm x 225mm to pass through freely.

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Co. Reg. No. 11371436

6.13. Test report

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 any damage to the specimen prior to testing and whilst under testing conditions
d) Details of the test specimen, construction drawings, material details, thickness, infill etc.
e) Hardware details and classification against the EN product standards (If applicable)
f) Overall sizes of the test specimen
g) All relevant sizes to be covered
h) Additional test report numbers to cover the general vulnerability will be added to the final report.
i) Date of manufacture
j) Locking condition
k) Attack face of the door
l) List of tools used (as given below)
m) The BR resistance class achieved
n) Resistance time recorded

7. TOOL KITS

7.1. TK1 - Tool kit 1

Qty	Item	Spec
-	Adhesive tape	
1	Cable cutter	140±20mm long
1	Credit card	85±5mm long 55±5mm wide
-	Fishing line	125±25mm long
1	Glass cutter	
-	Hexagon Allen keys (set of)	120mm max length
-	Hooks (selection)	
1	Knife	120mm max blade length 3mm max thickness
1	Lever	300±10mm long
-	Nylon webbing straps	1000±25mm long 25±10mm wide
-	Pin punches (set of)	120mm max length
1	Pliers (engineers)	200±10mm long
1	Pliers (long nose)	200±10mm long
2	Pliers (self-gripping)	IRWIN 10R straight jaw & curved jaw
-	Rope	
-	Small screw drivers (set of)	6±2mm shaft diameter
-	Spanners (selection of)	180mm max length
-	Steel wire	
-	Traction screws (selection, self-cutting)	
	Tweezers	120±25mm long
2	Wedges (plastic)	200±25mm long 80±10mm wide 40±5mm high
2	Wedges (wooden)	200±25mm long 80±10mm wide 40±5mm high

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7.2. TK2 – Tool kit 2

Qty	Item	Spec
1	Bolt cutter	350mm max length
1	Claw hammer	325±25mm long
3	Drill bits (selection)	6mm max HSS
1	Drill (rotary, cordless)	3.6 V with spare battery pack
1	Junior hacksaw	330±10mm long
2	Junior hacksaw blades	
1	Pipe wrench	240±10mm long
1	Pliers (multiple slip joint)	250mm max length
-	Pliers (selection including self-gripping)	250mm max length
1	Plate shears	200±20mm long
1	Screwdriver	365±25mm long 16±2mm blade width
1	Screwdriver	7mm diameter 250±50mm long
1	Steel tube	500±10mm long 35±5mm diameter 3mm max thickness

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

7.3. TK3 - Tool kit 3

Qty	Item	Spec
1	Axe (hand held)	350±50mm long
1	Brick bolster chisel	220±20mm long
1	Car scissor jack	1.5 Tonne
2	Chisels (cold)	250±25mm long 25±5mm blade width
2	Chisels (wood)	250±25mm long 25±5mm blade width
1	Crow bar	710±10mm long
1	Drill (rotary, cordless)	12 V with spare battery pack
6	Drill bits (selection)	max 10mm HSS. HSCO / TC
1	Gas torch	
1	Hammer	400mm max length 1.5 kg
1	Hacksaw	400±50mm long
2	Hacksaw blades	HSS
1	Pad saw	100±50mm long
2	Pad saw blades	HSS

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

7.4. TK4 - Tool kit 4

Qty	Item	Spec
1	A tool lock puller	
1	Bolt cutters	460±50mm long
1	Disc grinder (cordless)	12 V with spare battery pack
1	Drill (rotary, cordless)	12 V with spare battery pack
6	Drill bits (selection of)	Carbide 13mm max
1	Felling axe	650±50mm long
1	Halligan bar	760±50mm long
1	Jigsaw (cordless)	12v
2	Jigsaw blades	HSS/carbide
1	K tool lock remover	
2	Plate shears (left and right hand cutting)	260±25mm long
1	Saw (general purpose)	650±50mm long
1	Saw (50mm hole saw)	HSS
1	Sledge hammer	3kg
-	Steel wedges	200±25mm long 80±10mm wide 40±5mm high
1	Steel tube	500±10mm long 75±5mm diameter

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

7.5. TK5 - Tool kit 5

Qty	Item	Spec
1	Circular saw (cordless)	18v
3	Circular saw blades	HSS/HSCO/TC
1	Disc grinder (cordless)	18v cordless
3	Disc blades	125mm diameter 2.5mm thick for steel or stone cutting
1	Drill (rotary, cordless)	18v with spare battery pack
6	Drill bits	13mm max diameter HSS/HSCO/TC
1	Electric jig saw (cordless)	18v
3	Electric jig saw blades	HSS/HSCO/TC
1	Reciprocating saw	18v
3	Reciprocating saw blades	HSS/HSCO/TC

In addition the tools from tool kits 1, 2, 3 and 4 can also be used.

7.6. TK6 - Tool kit 6

Qty	Item	Spec
1	Disc grinder	2300w ±10%
3	Disc blades	230mm diameter 3mm thick for steel or stone cutting
1	Drill (with rotary/hammer action) -	750 W
6	Drill bits	13mm diameter jobber and long series - HSS / HSCO / Carbide
1	Electric circular saw	
1	Glass master saw	
1	Hole saw	50mm min diameter
1	Halligan bar	910mm long
	Pinch bar	1.5m long
1	Reciprocating saw	750W
3	Reciprocating saw blades	HSS/HSCO/TC
1	Steel tube	1000±10mm long 75±5mm diameter
1	Sledgehammer	750mm max length 6 kg
2	Wood boring spade bits	

In addition the tools from tool kits 1, 2, 3, 4 and 5 can also be used

8. ASSESSMENT OF PRODUCTS

Product tested shall represent the most adverse and vulnerable in design, size and configuration as determined by the test laboratory prior to testing. No extrapolation of the door specification in terms such as size, width, infill panel size & hardware is permitted beyond that tested and assessed as prescribed in Section 4.1.

9. REQUIREMENTS FOR HARDWARE

Locking cylinders shall meet the requirements of a one star rating to TS007, including the general vulnerability assessment BS 3621 Annex A clauses A.5 and A.6.

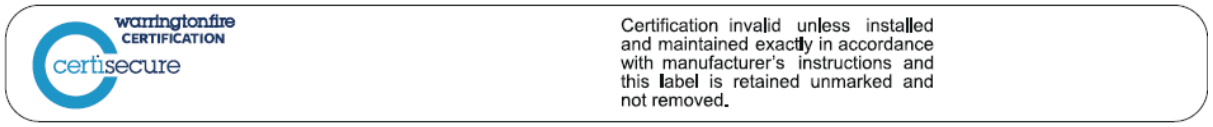
10. CERTIFICATE CONTENTS

10.1. The certificate shall identify the product and any variations in the design. It shall also specify the classification as prescribed in clause 5. An annex to the certificate, not in the public domain will describe in detail the product certificated.

11. LABELLING AND CONFORMITY

11.1. The certificated product shall be provided with a tamper evident label fixed to the product in the prescribed position.

Example of label:



11.2. 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.

11.3. 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.

11.4. Labels are available from Warringtonfire.

11.5. 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 Warringtonfire mark or the CERTISECURE logo
- The certificate number
- A unique serial number
- Optionally the manufacturer's or certificate holder's name and contact details. 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.
- The technical specification number (STS 202)
- The security classification in accordance with 5.5 (eg BR1)

11.6. The scope of the certification of the product assembly shall be clearly identified in the issued certificate and be recorded in the Warringtonfire Technical Directory.

12. INSTALLATION INSTRUCTIONS

12.1. Each product shall be supplied with full installation instructions.

13. FACTORY PRODUCTION CONTROL (FPC)

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

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14. AUDIT TEST REQUIREMENTS

14.1. Audit testing to STS202 shall be carried out annually on the anniversary of the first issue of the certificate, and as per the requirements of Secured by Design.

14.2. Audit testing to BS 6375-1 should be carried out every three years on the anniversary of the first issue of the certificate, and as per the requirements of Secured by Design should include a minimum of clause 6 air permeability testing and clause 7 water tightness testing.

See STS 200 for any additional audit test requirements.

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ANNEX A

RESISTANCE CLASSES

Resistance Class (BR)	Method to attempt to gain entry
BR1	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)
BR2	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)
BR3	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)
BR4	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 or noise and is prepared to take a medium level of risk. (MEDIUM RISK)
BR5	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)
BR6	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)

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ANNEX B

FACTORY PRODUCTION CONTROL CHECKLIST

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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:
1	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 on-going requirement for an annual surveillance audit to take place that will take place every 12 months.		
2	Are there "controlled" factory production control procedures / work instructions issued to shop floor? – Identify those applicable:		
3	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?		
4	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?		Contact name Phone No.
5	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?		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
6	For the products to be certified, what are the procedures / routines covering the purchasing of raw materials / constituent materials: Do purchase orders detail specific requirements for raw materials such as grade of steel or type of glass? Are any certificates of analysis / conformance requested from suppliers as part of procedures? Are specifications in place with certain suppliers (which are referred to by P/Os) to ensure consistency of materials?		
7	For the products to be certified, what are the procedures / routines covering the Inspection of the incoming raw materials / constituent materials; - 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?		
8	How are batches / items of raw material traceable through the production process and in finished products? Are raw materials stored in suitable conditions to prevent deterioration? What evidence was reviewed to confirm this traceability is effective?		
9	Are the personnel involved in the production sufficiently qualified and trained to operate and maintain the production equipment and carry out production line duties? What records / evidence confirm this?		
10	Are job sheets/works orders raised for each batch / day / week of production?		
11	If applicable how are customer supplied drawings received and recorded into the system? How are changes to drawings controlled? How do operators know drawing in use is the current one?		

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

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

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	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
17	Is manufacturer aware that each product must be fitted with a uniquely numbered label containing the Warringtonfire mark and certificate number? How does manufacturer intend to any apply labels? What records does he intend to keep of labels used?		
18	What installation instructions are going to be supplied with the product? Have copies been supplied to WAPT for Approval?		
19	If samples are selected please give details here and complete Sample Form. Is client aware that frequency of audit testing is yearly?		
20	Review test records for recent (and current production). 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? Identify any anomalies found.		
21	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? Are records maintained to enable the accuracy of the items of inspection equipment to be confirmed?		

	Questions to be considered	Q/M or Procedure Ref	Inspector Comments:
22	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? What % of product is inspected? How are these non-conforming products stored/identified and dealt with after investigation into the problem? What records are produced?		
23	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? Does the system include appropriate measures to avoid or correct these deficiencies? How are customer complaints addressed?		
24	Are finished products packaged as part of production line activities or in separate area of factory?		
25	How are products handled when transferring them to storage to ensure no damage is caused to them? Are there any special considerations taken into account with storage of the products?		
26	What records are maintained of where the finished products are shipped too? How is production batch number traceability maintained once the products have been dispatched to assist in traceability should any complaints be made? How long are records maintained (min 5 years)?		

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

Signed by Inspector:		**Date:**	
Signed for client by:		**Date:**	
Reviewed by: (Office use only)		**Date:**	

ANNEX C

PARTICIPATING ORGANISATIONS

BODIES AUTHORISED TO OPERATE CERTIFICATION TO THE PROVISIONS OF THIS SCHEDULE

Warringtonfire Testing and Certification Limited

THIS SCHEDULE IS RATIFIED BY MEMBERS OF THE WARRINGTONFIRE IMPARTIALITY COMMITTEE

Association for Specialist Fire Protection (ASFP)
British Automatic Fire Sprinkler Association (BAFSA)
British Retail Consortium (BRC)
British Woodworking Federation (BWF)
Chief Fire Officers Association (CFOA)
Construction Products Association (CPA)
Department of Communities and Local Government (DCLG)
Door and Hardware Federation (DHF)
Fire Protection Association (FPA)
Glass and Glazing Federation (GGF)
Guild of Architectural Ironmongers (GAI)
Institute of Fire Prevention Officers (IFPO)
Institute of Fire Safety Manager (IFSM)
London Underground Limited (LUL)
Royal Institute of Chartered Surveyors (RICS)
RISC Authority
Secured By Design (SBD)
Local Authority Building Control (LABC)
Warringtonfire (WF)

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