



PFPF and FTSG Agreed Assessment Rules for: FD60 Timber Based Doorsets

PFPF and FTSG Agreed Assessment Rules for: FD60 Timber Based Doorsets

Document dated: 03 February 2005

Introduction

The aim of the document is to give confidence to end-users that assessments which exist in the UK market and have been produced by organisations that subscribe to this document, are of a satisfactory standard to be used in lieu of fire tests for building control and other purposes.

Subscribing organisations are required to satisfy the corporate requirements of this document i.e. to employ individuals that subscribe to professional principles and to have a nationally recognised quality system accredited to EN ISO 9000 or EN 45000.

The document includes and extends upon the principles and procedures embodied in FTSG Resolution 82: 2001 and its predecessors Resolution 64 and 64a: 1993. These resolutions which have been widely circulated to regulatory authorities, consultants and manufacturers for many years are added to by this document.

This document relates to the production of assessments which are offered in the absence of specific fire resistance test results.

The PFPF and UK Fire Test Study Group (FTSG) an association of the major fire testing laboratories in the UK and the relevant UK Trade Associations have produced this document

In all cases, the resulting assessment will be carried out in accordance with the PFPF guide to undertaking assessments in lieu of fire tests and applies to tests conducted in accordance with BS 476: Part 22 or EN 1634-1.

Where an assessment is required which is not covered by the rules contained herein, the assessment will be the subject of expert judgement.

If an application for an assessment is considered within the scope of the rules contained herein but is rejected by the assessing body, the applicant has the right to request 'arbitration' by the other laboratories who are members of the FTSG and who have appropriate experience in the construction under consideration. In this case, the decision shall be unanimous or, in the case where an assessing body does not agree with the other bodies, the applicant may request that this body undertakes the assessment.

Note to users – Where it is been possible, to identify specific parameter failures, the assessment for all other construction parameter variations can be based on the performance achieved after isolating the premature failure(s).

Contents

INTRODUCTION	2
Definitions:	4
INTUMESCENT DOOR EDGE SEALS	5
GLAZING SYSTEMS	5
DOORSET CONFIGURATION	5
DOOR LEAF SIZE	7
BUILDING HARDWARE	7
SMALL SCALE TESTING FOR TIMBER DOORSETS	8

Definitions:

High, Medium & Low distortion –

- low <40% of effective rebate depth
- medium >40% and <85% of effective rebate depth
- high >85% of effective rebate depth

Where more than one test report is provided, the average distortion value of all reports shall be used.

The values shall be the maximum measured value at the leaf edges and throughout the classification period (including any required overrun period required to achieve Category B) but shall exclude the measurements at the centre of the bottom of the leaf edge

Where double-leaf and single-leaf doorsets are considered as part of a 'family' the distortion levels may be separated in determining the maximum allowable leaf sizes

Glazing system –

A complete system including any lining, beads, bead fixings, glass and glazing gasket. The edge cover, expansion allowance etc shall be maintained in all cases.

Isolating failures –

Where it is been possible, to identify specific parameter failures, the assessment for all other construction parameter variations can be based on the performance achieved after isolating the premature failure(s).

Intumescent Door Edge Seals

Interchangeability currently not possible. Rules to be devised.

Glazing Systems

Rule FD60 - 1. A glazing system previously tested in a timber door leaf may be substituted in another timber based door leaf assuming the door leaf into which it is proposed to be fitted has previously been tested having incorporated an aperture of the proposed dimensions (height/width and area) subject to the hierarchy below where 1 is the most onerous and 5 is the least onerous:

- 1 Flaxboard/Chipboard
- 2 Graduated Density Chipboard
- 3 Softwood Lamels
- 4 Hardwood Lamels
- 5 Leaf with non-combustible subfacings

Doorset configuration

Scope:

Timber door leaves hung within timber frames.

Agreed Rules:

Rebates at meeting edges of doorsets will have the following hierarchy (where 1 is the most onerous and 4 is the least onerous):

- 1 Equal Rebates
- 2 Unequal Rebates
- 3 Plain Meeting Edge
- 4 Clashing Strip (Astragal)



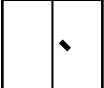





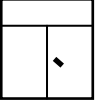
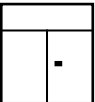
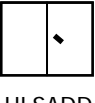
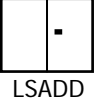
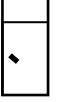
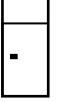


In all cases the tested intumescent detail shall remain the same.

For doorsets which include flush over and/or sidepanels, the table showing doorset configurations shows the hierarchy for testing and assessing alternative configurations of flush panels.

For over and/or sidepanels which are to be used with a separating frame member may be used freely.

It is a requirement to achieve 3 additional minutes over the required classification period where only one test is submitted. In the cases where more than one test report is submitted the results shall be more than the classification period.

Door Configuration table (timber doors)

Assess Test	 ULSADD+OP	 LSADD+OP	 ULSADD	 LSADD	 ULSASD+OP	 LSASD+OP	 ULSASD	 LSASD
 ULSADD+OP	✓	✓	✓	✓	✓	✓	✓	✓
 LSADD+OP	✗	✓	✗	✓	✗	✓	✗	✓
 ULSADD	✗	✗	✓	✓	✗	✗	✓	✓
 LSADD	✗	✗	✗	✓	✗	✗	✗	✓
 ULSASD+OP	✗	✗	✗	✗	✓	✓	✓	✓
 LSASD+OP	✗	✗	✗	✗	✗	✓	✗	✓
 ULSASD	✗	✗	✗	✗	✗	✗	✓	✓
 LSASD	✗	✗	✗	✗	✗	✗	✗	✓

Door leaf size

<p>Rule FD60 - 2. Possible to increase the size of leaves and/or side/overpanels by the same % as achieved overrun when factored by 0.5 for low distortion doorsets, by 0.33 for medium distortion doorsets and when factored by 0.25 for high distortion doorsets where:</p> <ul style="list-style-type: none">- low <40% of effective rebate depth- medium $\geq 40\%$ and $\leq 85\%$ of effective rebate depth- high >85% of effective rebate depth
<p>Rule FD60 - 3. A successful test on unequal width double leaf doorset will cover single and double leaf doorsets and other unequal width double leaf doorsets where the smaller leaf can be larger but not smaller than tested and the ratio of leaf widths does not increase (i.e. 4:1 can go to 3:1 but not to 5:1)</p>

Building Hardware

<p>Rule FD60 - 4. Surface mounted door closers can be changed providing the alternative closer has been tested as an active door closer on the exposed face of an unlatched door leaf where the leaf opens away from the furnace and in parallel arm or slide arm (as relevant) configuration.</p>
<p>Rule FD60 - 5. Hinges must be tested in a similar construction and fixing and preparation of the door should be similar to that tested.</p>
<p>Rule FD60 - 6. All critical components in any hardware must have a melting point >800°C.</p>
<p>Rule FD60 - 7. Any doorset which is having a latch assessed into it must have been tested with a latch.</p>
<p>Rule FD60 - 8. Roller bolts are an unlatched detail</p>

Small scale testing for Timber doorsets

Rule FD60 - 9. It is acceptable to test the following components on a small scale furnace (minimum 1000mm by 1000mm) to obtain evidence for use in an assessment. The specimen shall be a normally hung section of a door leaf within a door frame and latch to represent the appropriate distance between the top edge of the leaf and the latching mechanism (where fitted). The pressure conditions shall be chosen to represent those typically found in a full scale test at the anticipated position of the item under evaluation.

- Glazing systems (where margins of ≥ 200 mm of doorset are provided on all sides of the glazing system) in order to provide test evidence of the complete glazing system but not the door leaf (see earlier rules)
- Non-intumescent seals
- Locks/latches
- Electrical components
- Door viewers
- Door furniture
- Protective plates e.g. kick/finger plates
- Decorative elements e.g. panels, mouldings
- Letter plates
- **Alternative** flushbolts providing the door leaf has full scale evidence including a flushbolt of a similar type, size and fitted in a similar position
- **Alternative** air transfer grilles where margins of ≥ 200 mm of door leaf are provided on all sides. The door leaf must have full scale evidence including apertures of the required size and at the required height
- **Alternative** concealed door closers. The door leaf must have full scale evidence including a concealed door closer of a similar type, size and configuration

If the component is not listed above, they shall not be evaluated in a small scale test unless covered by EN 1634-2

In all cases the fixing details for the item shall be appropriate to the door leaf type and material.