

sapa:

buildingsystem

ARCHITECTURAL ALUMINIUM SOLUTIONS



CE Marking of Sapa Window and External Door
Products for Thermal Performance That Fall Under
The Scope of EN14351-1:2006 + A1:2010



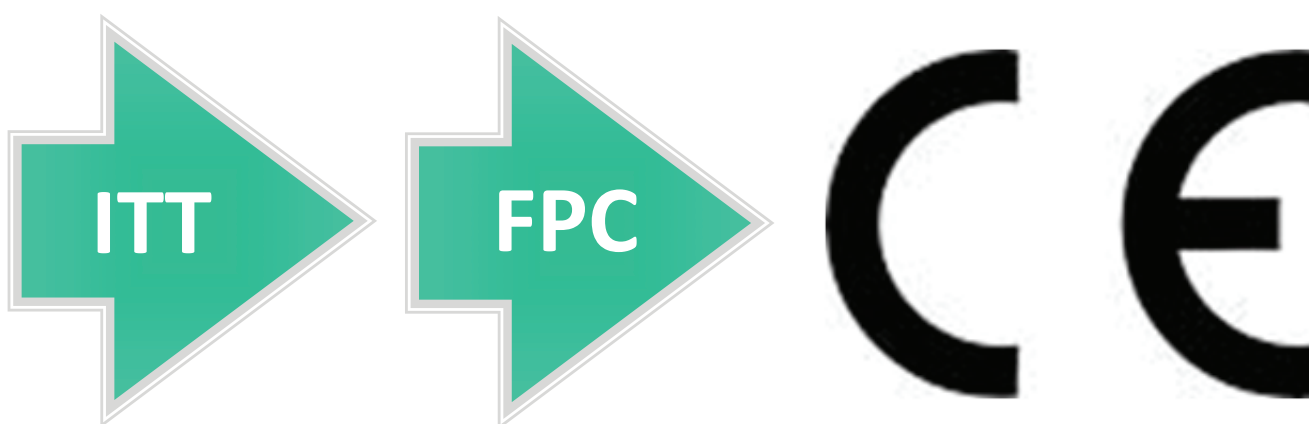
Sapa Building System

This document is intended to explain the requirements for Initial Type Testing, Factory Production Control and how to produce a Declaration of Performance and CE mark windows and external doorsets with thermal performance as the one mandatory characteristic being placed on the market in England and Wales. Further guidance should be sought from Sapa Building Systems Ltd for any other performance declaration or products.

Windows and external doorsets fall under the scope of the standard when they are fully fabricated and glazed at which point they must be CE marked. The '**manufacturer**' is the one that carries out the final assembly and glazing tasks and places the product on the market in its finished state for the first time.

From 1st July 2013 it will become mandatory for the 'manufacturer' to CE mark windows and doors that fall under the scope of the EN14351-1 windows and external doorsets without resistance to fire and/or smoke leakage product standard.

CE Marking requires:



ITT - Initial Type Testing by a Notified Body

FPC - Factory Production Control by the manufacturer

CE - The preparation and issue of the Declaration of Performance & the application of the CE mark by the manufacturer

Initial Type Testing and Cascading Initial Type Testing

Initial type testing is the testing that Sapa Building Systems carries out with a notified body and this is the evidence that can be cascaded down to the manufacturer for use in the declaration of performance.

Initially the evidence will be in the form of a report on each products thermal performance when calculated in accordance with the European standard EN10077-1:2006 and based upon the standard window and door sizes given in EN14351-1:2006+A1:2010. **These are not the same configurations and calculations as for Building Regulations compliance and you must still comply with Building Regulations.**

The thermal report WIL 328908.pdf can be found on the Sapa Webshop under the certifications tab and CE Marking.

You will also require authorisation from Sapa to be able to use the information provided for cascading ITT. Permission is granted automatically through your individual password access to the Sapa Building System Webshop and the information therein.



Factory Production Control

The manufacturer must have a Documented Quality Management System which includes Factory Production Control (FPC). The level of certification of the FPC system you require depends upon the safety critical nature of the products you manufacture.

The definition of “**manufacturer**” is somewhat different than we would normally understand it to be within our industry, and only the manufacturer can apply the CE mark. The chart below should help identify who the manufacturer is and who is responsible for CE Marking, it should be read with the understanding that a single order is placed with the manufacturer for the fully fabricated supply and installation including glazing of the products.

Makes Frames	Glazes frames	Who is the manufacturer?
Fabricator/Installer purchases materials from Sapa and glazing from another	Fabricator/Installer with his own teams or sub contracts the glazing and installation	Fabricator/Installer
Installer who purchases fully fabricated frames from a Sapa trade fabricator and glazing from another	Installer glazes frames on site	Installer
Management Contractor purchases Sapa materials and arranges manufacture with another or purchases fully fabricated frames from a Sapa trade fabricator and glazing from another	Management Contractor sub contracts the glazing and installation	Management Contractor

Once we have established who the manufacturer is we need to define the FPC requirements for the products which varies according to safety critical nature of the product in use.

This is defined in EN14351-1:2006+A1:2010, product standard annexe ZA which details the system of Assessment and Verification of Constancy of Performance (AVCP) that is to be applied to each product. The lower the assessment system number the more safety critical the product.

	Assessment & Verification of Constancy & Performance (AVCP) System
For windows (other than fire or smoke)	3
For doors (other than fire or smoke)	3
For fire resistant windows and doors	1
For doors on escape routes	1
Assessment System 3 Standard Windows and Doors requires:	Manufacturer FPC and Notified Body ITT
Assessment System 1 Doors on Escape Routes or Fire/Smoke Windows and Doors requires:	Manufacturer certified FPC + testing in house, and Notified Body ITT + surveillance.

For System 3 products the FPC system can be an in house documented quality management system and requires no other external certification.

Sapa Building Systems have provided documents that you can tailor to meet your requirements for both a Fabricator/Installer and an Installer only system. These can be downloaded from the Sapa Webshop from the CE Marking area under FPC. EN14351-1:2006+A1:2010 identifies the requirements for a FPC system for windows and doors within the scope of the standard, and should be used to check your FPC system is sufficient for your needs.

For system 1 products then the FPC system must be detailed to cover the system 1 products intended to be produced and certified by a Notified Body authorised for that product scope. The products referred to are Doors on Escape Routes which require system 1 FPC.

The Technical File

The manufacturer must keep a 'Technical File'; the technical file can be your project file in which you store all project specific documents from quotation, survey, orders manufacture and delivery information etc.

You may also wish to have a product technical file in which you keep all of the information you will use to keep performance documentation for each product family.

Your technical file along with the FPC system is required to be able to show compliance with the Declaration of Performance (DOP) you provide and any other project requirements.

You must keep your files for a period of 10 years.

The preparation of the combined Declaration of Performance (DoP) and CE marking document

Sapa Building Systems have prepared examples of single family and multi-product Declarations of Performance in a combined DoP and CE marking document. It is the manufacturers choice as to the CE marking and DoP documents that they use, further examples are shown in the product standard.

In the example documents you will see a number of items in red which should be considered and changed to reflect the details of the company and performances being declared:

The diagram shows a sample Declaration of Performance (DoP) and CE marking document. The CE marking is shown with the number 13. The document is titled 'Declaration of Performance' and includes a 'Unique Number' (No. 777777) and a 'Company Name' (Any Company Ltd.). A 'Year' field is also present. A 'Company Web Site QR Code Where Document Can be Found' is indicated. The 'Issue No. & Date' field is also shown. The 'Company Details' section includes the 'Company Name' and 'Address'. The 'Performance' section includes a table with columns for 'Characteristic', 'Performance', 'AVCP', and 'SEN'. The 'Performance' table has rows for 'Dangerous substances', 'Thermal transmittance', and 'Load bearing capacity of safety devices'. The 'Performance' table also includes a section for 'Performance of Safety Devices Where Fitted'. The 'AVCP' section includes a table with columns for 'Characteristic', 'Performance', 'AVCP', and 'SEN'. The 'SEN' section includes a table with columns for 'Characteristic', 'Performance', 'AVCP', and 'SEN'. The 'Details & Signature of Responsible Person Making the Declaration' section includes a table with columns for 'Name and Function', 'Name and Title of Issuer', and 'Signature'.

Characteristic	Performance	AVCP	SEN
Dangerous substances	None	System 3	EN14353-1:2010
Thermal transmittance	U _g 2.0 W/m ² K (1) Or better than (This figure is based upon centre pane 1g of 1.2 and warm edge spacer, a higher figure would be achieved with a warm performance unit or edge spacer)	Notified bodies performed the determination of the product type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product, and issuing of test/calculation reports under system 3	
Load bearing capacity of safety devices	None		

Notified Bodies: (1) Sapa Warrington Ltd. No. 1104 (Report No. WLS20044 11-00 10)

The Declaration of Performance is issued under the sole responsibility of ANY COMPANY Ltd. Any Town, Post Code, Country

Signature: _____

Name and Title of Issuer: _____



Dangerous Substances

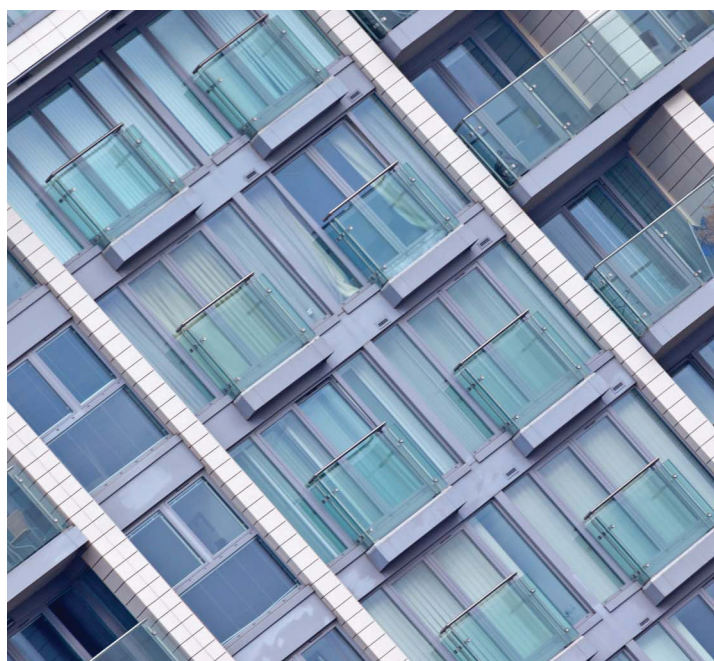
The manufacturer must make a declaration relating to materials in the product which are liable to emissions during its use. The declaration of content is in accordance with the legal requirements of the country of destination. The declaration of Dangerous Substances can be made as 'NONE' provided you have confirmed all products you have used in manufacture are indeed none. The declaration available from Sapa Building Systems can be used to help with Sapa supplied items only. For any items you have purchased from another source you must obtain their confirmation. You must then prepare your own statement for the finished product to which your DoP refers. The Sapa statement cannot solely be used for your declaration as at the very least glazing will be added to the finished product. The Sapa statement can be found under the CE marking tab on the webshop.

Safety Devices

Not all restrictors or restriction devices are, or are required to be safety devices and where none are fitted 'NONE' should be entered on the DoP, however if there is a requirement to have a safety device (for example retaining and reversing catches, restrictors, and fixing devices for cleaning procedures), - In accordance with BS EN14351-1:2006+A1:2010 clause 4.8 then these should be tested and performance declared on the DoP. We are currently awaiting the official definition of a safety device from CEN TC33 and will publish the information as soon as it is available.

Where safety devices are provided, fitted and engaged in accordance with Sapa Building Systems and the manufacturers' instructions, the level of performance should be confirmed in the relevant box on the DoP. The tested Sapa safety devices for casement windows are the Dualframe DFP576 & DFP577 for Standard Duty vent and DFP578 & DFP579 for Heavy Duty vent. The devices must be fitted in pairs and the Chiltern Dynamics test report Chilt/P08136 is again available from the Webshop. The achieved value is 350N when tested to EN14609:2004 and provided all instructions are followed this figure or the word 'Threshold' can be entered in the box and also add a second (2) notified body registration details 'Chiltern Dynamics EC NB No. 1762' below the table.

For Sapa Dualframe fully reversible windows with hinges supplied by Sapa, and fitted and engaged in accordance with Sapa and the manufacturers' instructions, the level of performance should be confirmed in the relevant box on the DoP, and the test report from Warrington 181947 should be used. You should add either the test loading of 350N in the DoP or the word 'Threshold' and add a second (2) notified body - registration details 'Bodycoat Warrington APT EC NB No. 1104' below the table.



Notes:

CE Marking is a self declaration of a product performance by the manufacturer and **Only** the manufacturer can CE mark a product.

The 'manufacturer' is the first legal entity to place the product on the market in its fully fabricated and glazed condition.

It is the manufacturers responsibility to ensure that the supplied product achieves the declared performance. You cannot make claims for a performance characteristic that are not covered in your DoP and CE mark.

You must keep your declarations for a period of 10 years from its use as a product.

You should not solely rely on the information supplied by Sapa for your Dangerous Substances declaration as you will need to be sure any other items you supply as part of the window or door are compliant.

The use of Cascading ITT from Sapa requires the manufacture, correct operation and fitting of hardware and components strictly in accordance with the Sapa product manual and the manufacturers' instructions and only applies only to Sapa items supplied as a complete system. Any deviation will render the use of Cascading ITT null and void.

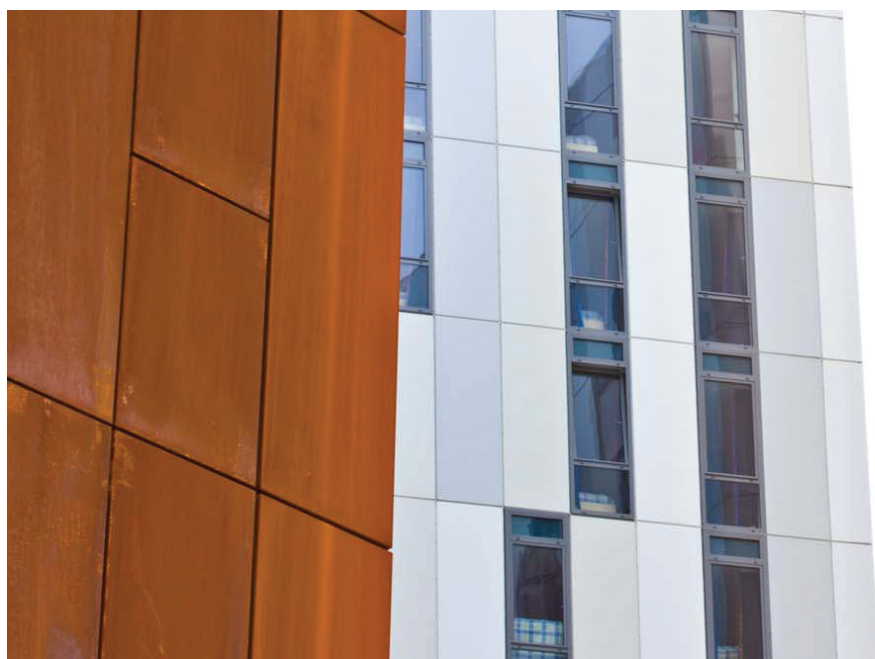
From 1st July 2013 it will be an offence to place a construction product on the market without a CE mark.

Falsely applying the CE mark may leave the manufacturer exposed to potential prosecution from Trading Standards.

Should you have any further questions or require explanations please email tech.support@sapa.co.uk. We will collate relevant questions and publish as a Questions and Answers paper.

There are many documents available on the subject if you would like further information and background we would suggest those from FAECF and CAB which are available on the Webshop.

Notified bodies are those identified in the European Commission Enterprise & Industry website: http://ec.europa.eu/enterprise/index_en.htm



Continuous improvement: better performance

Our policy is one of continuous development and consequently we reserve the right to vary any of the information shown in this literature without notice. The images shown in this brochure are for illustration purposes only and must not be relied upon for specification. All products and systems which Sapa supply are supplied subject to Sapa's standard Terms and Conditions of Sale.

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