

Exova Warringtonfire
Holmesfield Road
Warrington
WA1 2DS
United Kingdom

T : +44 (0) 1925 655 116
F : +44 (0) 1925 655 419
E : warrington@exova.com
W: www.exova.com



Testing. Advising. Assuring.

Title:

CLASSIFICATION OF
REACTION TO FIRE
PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1:2007+A1: 2009.

Notified Body No:

0833

Product Name:

"Contra Vision®
Performance™ / White on
Black"

Report No:

304744

Issue No:

1

Prepared for:

Contra Vision
Victoria House
19-21 Ack Lane
East Bramhall
Stockport
Cheshire
SK7 2BE

Date: 19th August 2011



1. Introduction

This classification report defines the classification assigned to “Contra Vision® Performance™ / White on Black”, a self-adhesive perforated window film bonded to toughened glass sheet, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, “Contra Vision® Performance™ / White on Black”, a self-adhesive perforated window film bonded to toughened glass sheet, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, “Contra Vision® Performance™ / White on Black”, a self-adhesive perforated window film bonded to toughened glass sheet, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

| | | | |
|------------------------------|----------------------|--|----------------------------|
| General description | | Self-adhesive perforated window film bonded to toughened glass sheet | |
| Product reference | | “Contra Vision® Performance™ / White on Black” | |
| Overall thickness | | 6.11mm (determined by Exova Warringtonfire) | |
| Overall weight per unit area | | 14.76 kg/m ² (determined by Exova Warringtonfire) | |
| Name of manufacturer | | Contra Vision Supplies Ltd | |
| Product configuration | | <ul style="list-style-type: none"> • Ply No. 1 (Test face) • Ply No. 2 • Adhesive • Substrate (Reverse face) | |
| Ply No. 1 (Test face) | Generic type | | Polyvinyl chloride (PVC) |
| | Product reference | | “Polymeric calendered pvc” |
| | Name of manufacturer | | Renolit |
| | Colour | | “White” |
| | Thickness | | 90 microns |
| | Weight per unit area | | 75g/m ² |
| | Perforations | Diameter of holes | 1.60mm |
| | | Spacing between hole centres | 2.40mm |
| Flame retardant details | | See Note 1 below | |

Continued on next page

| | | | |
|---|------------------------------|--|--|
| Ply No. 2 | Generic type | | Polyvinyl chloride (PVC) |
| | Product reference | | "Polymeric calendered pvc" |
| | Name of manufacturer | | Renolit |
| | Colour | | "Black" |
| | Thickness | | 90 microns |
| | Weight per unit area | | 75g/m ² |
| | Perforations | Diameter of holes | 1.60mm |
| | | Spacing between hole centres | 2.40mm |
| Flame retardant details | | See Note 1 below | |
| Adhesive | Generic type | | Solvent acrylic |
| | Product reference | | See Note 1 below |
| | Name of manufacturer | | See Note 1 below |
| | Application rate / thickness | | 28g/m ² |
| | Application method | | Transferred from coated release liner |
| | Flame retardant details | | See Note 1 below |
| Substrate | Generic type | | Toughened glass |
| | Product reference | | "6mm toughened" |
| | Name of supplier | | KLG Glass (Chilwell) Ltd |
| | Colour reference | | "Clear" |
| | Thickness | | 6mm |
| | Weight per unit area | | 14.73 kg/m ² (determined by Exova Warringtonfire) |
| | Flame retardant details | | The substrate is inherently flame retardant |
| Mounting and fixing details | | A 180mm ventilated cavity was situated between the reverse face of the specimen and the backing board | |
| Details of how the plies are laminated together | | Heat & pressure. | |
| Brief description of manufacturing process | | White and black layers are calendered PVC, laminated together with heat & pressure, adhesive coated and then perforated. | |

Note 1. The sponsor was unwilling to provide this information.

3. Test reports & test results in support of classification

3.1 Test reports

| Name of Laboratory | Name of sponsor | Test reports/extended application report Nos. | Test method / extended application rules & date |
|-----------------------------|----------------------|---|---|
| Exova warringtonfire | Contra Vision | WF 304592 | EN ISO 11925-2 |
| Exova warringtonfire | Contra Vision | WF 304595 | EN 13823 |

3.2 Test results

| Test method & test number | Parameter | No. tests | Results | |
|--|-----------------------------|-----------|---------------------------------|-----------------------|
| | | | Continuous parameter - mean (m) | Compliance parameters |
| EN ISO 11925-2 (30s exposure - surface) | F _s | 6 | Nil | Compliant |
| | Flaming droplets/ particles | | None | Compliant |
| EN ISO 11925-2 (30s exposure - edge) | F _s | 6 | 10 | Compliant |
| | Flaming droplets/ particles | | None | Compliant |
| EN 13823 | FIGRA _{0.2MJ} | 3 | 0.00 | Compliant |
| | FIGRA _{0.4MJ} | | 0.00 | Compliant |
| | THR _{600s} | | 0.36 | Compliant |
| | LFS | | None | Compliant |
| | SMOGRA | | 0.00 | Compliant |
| | TSP _{600s} | | 8.94 | Compliant |

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1:2009.

4.2 Classification

The product, "Contra Vision® Performance™ / White on Black", a self-adhesive perforated window film bonded to toughened glass sheet, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1



The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

| Fire Behaviour | | Smoke Production | | | Flaming Droplets | |
|----------------|---|------------------|----------|---|------------------|----------|
| B | - | s | 1 | , | d | 0 |

i.e. **B – s1 , d0**

Reaction to fire classification: B – s1 , d0

4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications mechanically installed without the presence of a substrate and with a minimum air gap of 180mm.

This classification is also valid for the following product parameters:

| | |
|------------------------------|----------------------|
| Product thickness | No variation allowed |
| Product weight per unit area | No variation allowed |
| Product colour/pattern | No variation allowed |
| Product composition | No variation allowed |
| Product construction | No variation allowed |

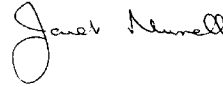
SIGNED



.....

Matthew Dale
Certification Engineer
Technical Department

APPROVED



.....

Janet Murrell
Technical Manager
Technical Department
on behalf of **Exova warringtonfire**

This copy has been produced from a .pdf format electronic file that has been provided by Exova Warringtonfire to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of Exova Warringtonfire. The original signed paper version of this report is the sole authentic version. Only original paper versions of this report bear authentic signatures of the responsible Exova Warringtonfire staff.