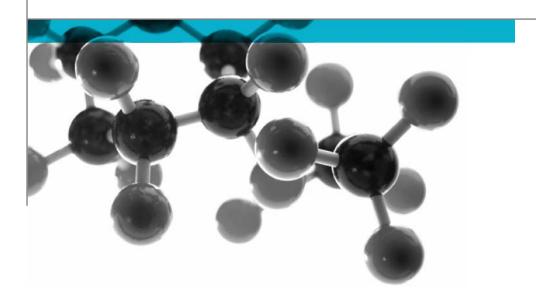
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# **Review of Fire Test Report**



A Report To: Berica Cavi S.p.A.

Document Reference: 371406

Date: 4<sup>th</sup> October 2016

Issue No.: 1

Page 1







### **Executive Summary**

**Objective** 

To review and extend the validity period of Exova Warringtonfire Test Report No: 177607 incorporating Supplement No. 1 which details the fire performance of the following product when tested in accordance with BS EN 50200: 2006.

| <b>Generic Description</b>  | Product reference                         | Thickness /         | Weight per unit      |  |
|---|---|---------------------|----------------------|--|
|   |   | c.s.a.              | length               |  |
| Cable   | "Eurosafe E 30/60"                        | 8.2mm               | 77.52kg/km           |  |
| Individual components used to manufacture composite:                                      |   |                     |                      |  |
| Conductors  | "Solid Plain Annealed Copper Wire"        | 0.5mm <sup>2</sup>  | 4.2kg/km             |  |
| Insulation  | "Special Silicone Rubber"                 | 0.6mm               | 8.6kg/km             |  |
| Drain wire  | "Solid Tinned Copper Wire"                | 0.28mm <sup>2</sup> | 2.5kg/km             |  |
| Glass fibre tape  | "Glass Fibre"                             | 0.12mm              | Unwilling to provide |  |
| Foil tape   | "Aluminium / Polyester Laminate Tape"     | 25µm                | Unwilling to provide |  |
| Outer sheath  | "Special Halogen Free LSZH" 1mm 39.6kg/km |                     | 39.6kg/km            |  |
| Please see pages 4 & 5 of this test report for the full description of the product tested |   |                     |                      |  |

Test Sponsor Berica Cavi S.p.A., Via della Meccanica, 2, 36040 Meledo di Sarego (VI), Italy.

Conclusion With respect to test report WF No. 177606, its contents shall remain valid until 4<sup>th</sup>

November 2018.

This review should be read in conjunction with test report WF No. 177607

incorporating Supplement No. 1.

Date of Test 5<sup>th</sup> & 6<sup>th</sup> November 2008

### **Signatories**

Responsible Officer

C. Meachin \*

**Technical Officer** 

Authorised

S. Deeming \*

**Business Unit Head** 

C. Men.

Report Issued: 4th October 2016

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Client: Berica Cavi S.p.A. Issue No.:



<sup>\*</sup> For and on behalf of Exova Warringtonfire.

### **Review of Fire Test Report**



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### **Test Details**

#### Introduction

Test report WF No. 177607 incorporating Supplement No. 1 relates to a test performed in accordance with the procedures defined in BS EN 50200: 2006, "Method of test for determining the resistance to fire of unprotected small cables for use in emergency circuits".

| Product reference |                           | "Eurosafe E 30/60"                                    |
|-------------------|---------------------------|---|
| Cable marking     |                           | "EUROSAFE E 30/60 JE-H(ST)H 2x2x0.8 MM SCR.           |
| _                 |                           | FIRE RESISTANT VDE 0815, DIN 4102, EN 50200 PH        |
|                   |                           | 120, EN 60332-1-2, EN 61034-2, FIPEC(EN)50339-2-1     |
|                   |                           | CE 09/08"   |
| Cable function    |                           | Fire systems data connections                         |
| Number of core    | s x core size             | 4 x 0.5mm <sup>2</sup>                                |
| Voltage rating    |                           | 300/500V  |
| Overall diamete   | er                        | 8.2mm (stated by sponsor)                             |
|                   |                           | 8.3mm (determined by <b>Bodycote warringtonfire</b> ) |
| Overall weight p  | per unit length           | 77.52kg/km (stated by sponsor)                        |
|                   | Product reference         | "Solid Plain Annealed Copper Wire"                    |
|                   | Generic type              | Solid copper wire                                     |
| Conductors        | Name of manufacturer      | See Note 1 below                                      |
|                   | Cross sectional area      | 0.5mm <sup>2</sup>                                    |
|                   | Weight per unit length    | 4.2kg/km  |
|                   | Product reference         | "Special Silicone Rubber"                             |
|                   | Generic type              | Silicone rubber                                       |
|                   | Name of manufacturer      | FTC – Fabbrica Trentina Conduttori Srl                |
| Insulation        | Colour                    | "Yellow", "Grey", "Blue" and "Red"                    |
|                   | Thickness                 | 0.6mm   |
|                   | Weight per unit length    | 8.6kg/km  |
|                   | Flame retardant details   | See Note 1 below                                      |
|                   | Product reference         | "Solid Tinned Copper Wire"                            |
|                   | Generic type              | Solid tinned copper wire                              |
| Drain wire        | Name of manufacturer      | See Note 1 below                                      |
|                   | Cross sectional area      | 0.28mm <sup>2</sup>                                   |
|                   | Weight per unit length    | 2.5kg/km  |
|                   | Product reference         | "Glass Fibre"   |
|                   | Generic type              | Glass fibre tape                                      |
| Glass fibre       | Name of manufacturer      | See Note 1 below                                      |
| tape              | Colour                    | "White"   |
| (surrounding      | Thickness                 | 0.12mm  |
| conductors        | Density / weight per unit | See Note 1 below                                      |
|                   | length                    |   |
|                   | Flame retardant details   | See Note 1 below                                      |

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| Foil tape<br>(surrounding<br>conductors<br>and plastic<br>tape) | Product reference                | "Aluminium / Polyester Laminate Tape"  |  |
|---|----------------------------------|--|--|
|   | Generic type                     | Aluminium / polyester  |  |
|   | Name of manufacturer             | See Note 1 below   |  |
|   | Colour                           | "Blue / Silver"  |  |
|   | Thickness                        | 25µm   |  |
|   | Density / weight per unit length | See Note 1 below   |  |
|   | Flame retardant details          | See Note 1 below   |  |
| Outer sheath  | Product reference                | "Special Halogen Free LSZH"  |  |
|   | Generic type                     | Low smoke zero halogen   |  |
|   |                                  | See Note 1 below   |  |
|   | Name of manufacturer             | See Note 1 below   |  |
| Outer Sheath  | Colour                           | "Red"  |  |
|   | Thickness                        | 1mm  |  |
|   | Weight per unit length           | 39.6kg/km  |  |
|   | Flame retardant details          | See Note 1 below   |  |
| Brief description of manufacturing process                      |                                  | The conductor wires are insulated by extrusion of a continuous silicone rubber layer, which has been high temperature cross-linked. The cores are then separated into pairs, twisted together and shielded. Finally, the sheathing is applied by a semi-compression extrusion process. |  |

Note 1. The sponsor of the test was unwilling to provide this or further information.

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#### **Test Results**

Test report WF No. 177607 incorporating Supplement No. 1 contains the following results:

When tested in accordance with BS EN 50200: 2006 in relation to the requirements for PH120 classification, the cable meets the criteria for resistance to fire with mechanical shock.

# Confirmation Specification

Subsequent to the issue of the original test report, a representative of the sponsor of the test has stated that the sponsor has changed the name of the company. The correct name of the company is now Berica Cavi S.p.A. The new company name is referred to in this review report.

It has been confirmed in writing by Berica Cavi S.p.A. that there have been no changes to the product description contained within test report WF No. 177607 incorporating Supplement No. 1 and that the product which is currently being manufactured is identical in every respect to the specimens which were tested.

It has also been confirmed in writing that no further fire testing of the previously fire tested specification has been performed since the issue of the test report, and no other individual or organisation has been asked to provide a technical review of the reports.

#### Conclusions

The procedures adopted for the original test (BS EN 50200: 2006) have been re-examined and are identical in all respects to those currently in use (BS EN 50200: 2015), therefore, with respect to test report WF No. 177607 incorporating Supplement No. 1, its contents shall remain valid until 4<sup>th</sup> November 2018.

This review should be read in conjunction with test report WF No. 177607 incorporating Supplement No. 1.

#### **Validity**

This review is based on information used in the original test report. No other information or data has been submitted by Berica Cavi S.p.A., which could affect this review.

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## **Revision History**

| Issue No :           | Issue Date:  |  |
|----------------------|--------------|--|
| Revised By:          | Approved By: |  |
| Reason for Revision: |              |  |

| Issue No :           | Issue Date:  |  |
|----------------------|--------------|--|
| Revised By:          | Approved By: |  |
| Reason for Revision: |              |  |

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4<sup>th</sup> October 2016 Author: C. Meachin Issue Date:

Client: Berica Cavi S.p.A. Issue No.:

