# Test Report



**BASEC Client National Cables Industry** 

P.O. Box 27472

Al Dhaid Road, Al Sajja Ind. Area

Sharjah

**United Arab Emirates** 

Report No. NAC088C

Number of pages in this Report: 5

14 September 2015 **Issue Date** 

1 sample of Electric Cable **Items Tested** 

Specification(s) BS EN 50525-2-31:2011

**BASEC PCR Issue 7** 

**Test Results** The sample submitted complied with the requirements of the

specification for the tests which were requested.

Authorised by: **I McGuinness** 

**Laboratory Manager** 

Issue Date: 14 September 2015

> The results presented in this Test Report relate only to the items tested and to the specific tests carried out. This Test Report does not represent any Approval or Certification by BASEC of the product or of the associated manufacturer. This test Report shall not be reproduced

except in full, without written approval of the laboratory.

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Sample 1 sheet 1

#### **TESTING OF CABLE MANUFACTURED TO BS EN 50525-2-31:2011 Clause 4.1**

Circular cable 1 core Conductor size: 4.0 sqmm
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F100 TESTS ASSESSMENT

## **Indication of origin**

Marking printed on insulation:-

1 X 4mm<sup>2</sup> CU/PVC 450/750V H07V-R BS EN 50525-2-31 (BS 6004). National Cables Industry, UAE

\*Indication of origin assumed as no information available

Legible:- PASS Repeat interval:- 248 mm PASS Durable:- PASS PASS

#### Construction

Outer Covering: GREEN/YELLOW INSULATION

Type of conductor: PLAIN ANNEALED Cu

Application of insulation PASS

Overall assessment of construction PASS

#### NOTE: Where appropriate, values shown in italics indicate specification requirements

			<u> </u>
	Date samples received: 14/08/15	Date testing commenced: 27/08/15	Tested by: C Clarke
	Date job raised: 25/08/15	Date testing completed: 14/09/15	Checked by: I McGuinness
	N/A = Not Applicable	N/R = Not Requested	N/T = Not Tested
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Sample 1 sheet 2

## **TESTING OF CABLE MANUFACTURED TO BS EN 50525-2-31:2011 Clause 4.1**

Circular cable	1 core	Conductor size: 4.0 sqmm
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F100 TESTS ASSESSMENT

## **Tests on individual cores**

Core I.D. and sequence Green/Yellow Proportion	G/Y 39/61	PASS PASS
Core colour indelibility	P	PASS
Conductors		
Number of wires	7	PASS
Class of conductor	2	PASS
Resistance (ohms/km)	4.53	PASS
Insulation Thickness		
Mean (mm)	0.85	PASS
Min (mm)	0.77	PASS

Overall as	ssessment of F100 tests:	PASS

F50 TESTS ASSESSMENT

Heat shock test

Cores PASS PASS

Overall assessment of F50 tests: PASS

#### NOTE: Where appropriate, values shown in italics indicate specification requirements

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Sample 1 sheet 3

## **TESTING OF CABLE MANUFACTURED TO BS EN 50525-2-31:2011 Clause 4.1**

Circular cable	1 core	Conductor size: 4.0 sqmm
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F25 TESTS ASSESSMENT

# Tests on complete cable

Voltage test on non sheathed cable @ 2500 V ac	PASS
Mean Overall Diameter Circular Cable:- 4.1(mm)	PASS
Ovality (Max. difference between diameters 0.0(mm)	PASS
Flame propagation single cable	PASS

## **Tensile tests on Cores**

Compound	TI1
Core I.D. and sequence	G/Y
Tensile strength unaged (N/mm²)	19.6
Elongation at Break-unaged (%)	230
Tensile strength, aged 80 °C (N/mm²)	19.4
% Var Tensile strength, aged 80 °C	-1
Elongation @ break after ageing 80 °C (%)	234
% Var.Elongation @ break after ageing 80 °C	2

Assessment of tensile tests on cores PASS

Overall assessment of F25 tests: PASS

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Sample 1 sheet 4

# **TESTING OF CABLE MANUFACTURED TO BS EN 50525-2-31:2011 Clause 4.1**

Circular cable 1 core Conductor size: 4.0 sqmm
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F5 TESTS		ASSESSMENT
Compound	TI1	
Core I.D. and sequence	G/Y	
Cold Bend @ -15 °C	P	PASS
Cold Impact @ -5 °C	P	PASS
Loss of mass mg/cm <sup>2</sup>	0.24	PASS
Hot pressure %	13	PASS
Insulation resistance @ 70°C (Mohms.km)	0.202	PASS
Resistance of insulation to D.C	P	PASS

Overall assessment of F5 tests:	PASS
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--- END OF REPORT ---

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