BETTER A THOUSAND TIMES CAREFUL THAN ONE REGRET

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Executive Summary

EXECUTIVE SUMMARY

- Britain has just witnessed one of the most shocking failures in Building Safety and the likely cause is the UK's current building procedure – be that what was specified, what was installed or how it was installed.
- What happened isn't a random incident and, as subsequent product testing has revealed, it could happen again. Its repercussions are likely to be felt throughout the building product sector for years to come.
- For many years Britain's once thriving cable industry has fallen foul to substandard cable product – left to infiltrate the market and undercut the quality products that once made Britain great. Poor market surveillance has also taken its toll.
- Construction Products Regulation (CPR), an EU piece of legislation could be the UK cable industry's saviour and be a template for how building products should be categorised and market surveillance implemented. Yet a lack of desire to embrace the principle of the CPR, monitor the market, enforce the CPR and apprehend those who abuse it will be its downfall.

CABLES UNDER THE CONSTRUCTION PRODUCTS REGULATION

Chart 3: Proposal for minimum classes to be used for Low Fire-Hazard cables

Reaction to fire classes	Additional classifications*			Fire Safety requirements
Flame propagation/ requirements heat development	Smoke production/ density	Flaming droplets/par-ticles	Acidity development/ corrosivity	
$B2_{ca}$	s1	d2*	a1	very high
C_{ca}	s1	d2*	a1	high

*For high or very high fire risk applications Europacable recommends and supports the adoption at least of d1 droplets performance level. Each Member State can propose deviations from the values of Chart 3 depending on the local fire hazard scenario, and also taking into consideration construction techniques and installation methods.
The final decision about the minimum level of performance in each Member State is within the competence of local Authorities and needs to be checked with these local Authorities.

Source: EUROPACABLE – 2016 - For internal circulation only

C_{ca} s1 d1 a1

- For cables CPR came into force on 1st July, yet the EU hasn't been prescriptive in specifying or even recommending which classification of cable performance should be used for a building. Instead it is the responsibility of each Member State regulator – in the UK this is the Department of Communities and Local Government (DCLG). DCLG has decided not to specify which class of cable for which building and instead requires all electrical installations in buildings to comply with BS 7671 with a minimum performance requirement. Despite industry being fully aware that Euro Class E is almost the lowest classification for cable, by stipulating compliance with BS 7671, this is the recommendation of the regulator.

- Not only this but for some classes the system allows the manufacturer to self-test and classify or to supply its own selected samples for testing – a process that is open to abuse.

- The UK is destined to remain a key market for distributors of counterfeit and substandard electrical cable. This one lapse of judgement means the UK is no closer to having a safer building environment.

- Tratos, a cable manufacturer with production facilities in Merseyside, has announced that all of its CPR Reaction to Fire cables should meet at least Euro Class of Cca. The company does not see this action as the introduction of a gold-standard, rather, the introduction of a higher minimum standard; one everyone can be confident in.

- In addition, the company is calling for Regulator intervention to mandate for the same minimum class of performance (Cca) for all reaction to fire cable in the UK.

CPR is the greatest opportunity to bring about safer cable products. The cable supply chain and Regulator are failing to understand that adequate isn't enough. The UK Regulator must stipulate a minimum requirement of Euro Class for CPR – Cca; and a robust programme of market surveillance for CPR compliance must be established and adopted as best practice throughout the construction and building industry.

"Britain has the opportunity to be exemplary. To squander it will add insult to tragedy"

Root and branch fire safety failures in the UK's building stock are shocking. But a blinkered approach to remedial work now could prove just as dangerous. While cladding materials have been proven inadequate, we cannot and must not stop there.

If Britain's housing (and commercial) stock is to be guaranteed safe, we must go beyond buildings' exteriors.

Buildings' nervous systems (cabling) as well as their skins (cladding) can be either friend or foe to fire. Our task now is to ensure both play their part to create the safest environments.

Shelter, safety and freedom from fear are basic human rights. Britain has an opportunity, and an obligation: Industry HAS to help.

The forthcoming Construction Products Regulation (CPR) for cables exists to ensure cable manufacturers set aside competitive advantage, and, in the absence of any Government directive, unite under an industry safety recommendation. The recommendation is for a higher classification of cable to be installed in all permanent building installations; a procedure that should be adopted in each and every building product category.

Government can no longer distance itself from vital market surveillance – industry cannot and will not police itself subjectively – product failures happen because of inadequate surveillance.

British Standards, whether for cable or any other building product, need to be of the highest level. 'Adequate' is not sufficient. British Standards and installation practice must achieve the highest safety level – it is called 'best practice' for a reason.

Now, more than ever, people need to be confident that new build and refurbishment projects will only use the best possible materials, installed by those best qualified to do so.

Regaining its place as a proud, quality producer should be a countrywide goal for the UK. To those who weigh cost over consequences - as the saying goes "if you think safety is expensive, try having an accident".

Introduction

In a country that used to be **synonymous** with **the manufacture of quality products**, it is shocking to listen to the debate over the causes of the Grenfell Tower [1] fire. Whether the final outcome will rest heaviest on the quality of materials, how they were installed or a combination of both is yet to be seen.
Such stories sit uncomfortably with a nation that has a long history of manufacturing safe, reliable, quality products. 'The long list' of British-manufactured quality products doesn't really exist anymore. Quality and safety costs. Time for another saying: **Buy quality, buy once, buy safety!**
Britain's cable industry was once thriving, but there are now just a handful of UK cable companies left. The demise of the industry has been variously blamed on substandard cable product and an overall decline in UK manufacturing linked to the country joining the EU. Competitiveness, when safety matters, shouldn't be limited to price.

"EU rules were often such that UK cable industry was badly damaged by the shock of joining and the continued shock of staying in as the rules increased and tightened. When the UK joined the EU we had a 45 million tonnes a year steel industry. Today we are battling to save an 11 million tonnes industry. When we joined the EU we had a 400,000 tonnes a year aluminium industry. Today we have just 43,000 tonnes of capacity left . . . . . The October 2013 government "Future of Manufacturing" Report shows that between 1951 and 1973 metals output rose 3% a year. Since joining the EEC/EU it has declined by more than 6%" [2]

It is ironic that a piece of EU legislation could be the saviour for the remainder of the UK's cable industry. But only if, as a market sector, we follow, embrace and enforce the legislation rigorously and monitor and apprehend those who chose to flout the process.

[1] http://www.standard.co.uk/news/london/grenfell-tower-fire-faulty-fridge-sparked-blaze-police-confirm-a3571501.html
[2] http://johnredwoodsdiary.com/2016/06/16/how-joining-the-eu-led-to-a-big-decline-in-uk-industry/

Construction Products Regulation

Construction Products Regulation (CPR) for cables came into effect across the EU on 1st July and is the most significant step in decades for cable product safety.

The CPR is a system and framework of consistent rules for managing the marketing of construction products; a consistent technical language allows a construction product's performance to be measured and compared throughout the EU.

Many EU countries have their own national fire regulations, containing valuable product requirements but they are not consistent with each other. That means it prevents free movement of products in Europe. CPR changes all this allowing for clear interpretation of the regulation by each member state.

Under CPR all reaction to fire[3] cables supplying electricity, used for control and communication purposes and installed permanently in a construction works[4] must meet European Standard EN 50575. This standard specifies the expected performance requirements of the cable, as well as the test and assessment methods to be used. In time resistance to fire cables will also be included[5] - a date is yet to be announced.

Since 2016, UK cable manufacturers have been working to ensure their relevant cable products are tested and classified as, of 1st July, only products which have a European Classification under EN 50575 are acceptable for sale in the EU. **Cables which don't cannot be legally sold.**

A cable's `reaction to fire' performance is defined using a common seven-tier European Classification (Euro Classes) system from the highest performance (effectively non-flammable) to the lowest (easily flammable).

There are three further classification methods which deal with the amount of smoke produced when a cable burns (s1, s1a, s1b, s2, s3), the level of acidity of the smoke (a1, a2, a3) and flaming droplets (d0, d1, d2).

Some cables will deliver the best results in terms of their release of smoke, acid gasses and flaming droplets. Where there is a specific sector safety requirement – for instance in the rail sector - there will be a clear cable specification, from the customer, to meet the appropriate classification for the application.

[3] Reaction to fire describes a cable's behaviour during combustion, as well as its potential contribution to the development of a fire.
[4] Construction works are the buildings and other civil engineering works that are subject to regulation regarding safety in the event of a fire, including limiting the generation and spread of fire and smoke.
[5] Resistance to fire describes a cable's ability to continue operating as normal during a fire (circuit integrity).

Cables under the CPR

CHART 1: REACTION TO FIRE CLASSES FOR CABLES

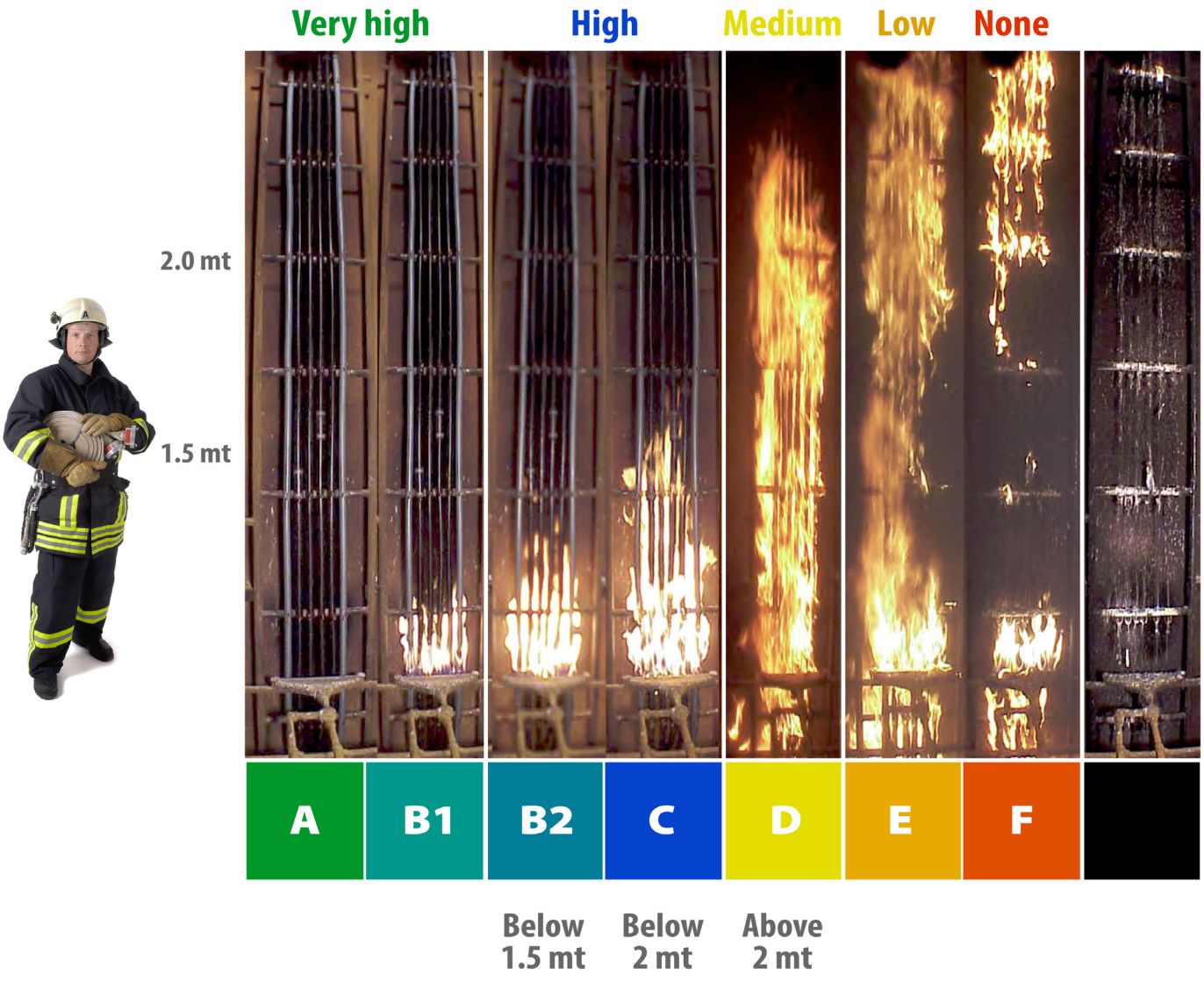
Class[3]	Classification criteria[4]	Test method(s)	Approximate performances of different classes according to EN13501-6	Additional classification [5]	Test method(s)
A_{ca}	Gross heat of combustion (PCS)	EN ISO 1716	Level of highest performance corresponding to products that practically cannot burn		
$B1_{ca}$	• Vertical flame spread (FS) • Total heat release (THR) • Maximum value of heat release (Peak HRR) • Fire growth rate index (FIGRA)	30 kW flame source (very high intensity)	Products that are combustible but show no or very little burning	Smoke production Flaming droplets/particles Acidity	EN 61034-2 EN 50399 EN 60754-2
	• Vertical flame spread (H) EN 60332-1-2	EN 60332-1-2			
$B2_{ca}$	• Vertical flame spread (FS) • Total heat release (THR) • Maximum value of heat release (Peak HRR) • Fire growth rate index (FIGRA)	20.5 kW flame source (high intensity)	Products that are combustible but show very little burning	Smoke production Flaming droplets/particles Acidity	EN 61034-2 EN 50399 EN 60754-2
	Vertical flame spread (H)	EN 60332-1-2			
C_{ca}	• Vertical flame spread (FS) • Total heat release (THR) • Maximum value of heat release (Peak HRR) • Fire growth rate index (FIGRA)	20.5 kW flame source (high intensity)	Products that do not give a continuous flame spread, show a limited fire growth rate and show a limited heat release rate	Smoke production Flaming droplets/particles Acidity	EN 61034-2 EN 50399 EN 60754-2
	Vertical flame spread (H)	EN 60332-1-2			
D_{ca}	• Total heat release (THR) • Maximum value of heat release (Peak HRR) • Fire growth rate index (FIGRA)	20.5 kW flame source (high intensity; NO flame spread measured)	Products that show a fire performance approximately like wood. Products show a continuous flame spread, a moderate fire growth rate, and a moderate heat release rate.	Smoke production Flaming droplets/particles Acidity	EN 61034-2 EN 50399 EN 60754-2
	Vertical flame spread (H)	EN 60332-1-2			
E_{ca}	Vertical flame spread (H)	EN 60332-1-2	Products where a small flame attack is not causing large flame spread		
F_{ca}	Vertical flame spread (H)	EN 60332-1-2	Flammable		

Source: EUROPACABLE – 2016 - For internal circulation only

[3] The level of reaction to fire performance decreases in going from Class Aca to Class Fca

[4] The full description of the classification criteria, the symbols used and the numerical values of reaction to fire performance are given in the Commission delegated regulation (EU) 2016/364 of 1 July 2015 (L 68/4 - 15 March 2016). These will eventually be taken into an updated version of EN 13501-6 Fire classification of construction products and building elements - Part 6: Classification using data from reaction to fire tests on electric cables

[5] The additional classifications apply only to Classes B1, B2, C and D. They are optional, but should be regarded as essential for use with cables described as "low smoke" and/or "halogen-free". Their full description can be found in the same documents as for footnote (15)



Source: Europa cable original picture, modified by Tratos

Regulation shortfall

While the CPR is comprehensive, the EU hasn't been prescriptive in which classification of cable performance should be used for a building.

Instead it is the responsibility of the Regulator of each Member State or equivalent; in the UK, this is the Department for Communities and Local Government (DCLG).

It is the Regulator's task to decide if a particular class of product is required to meet a specified class of performance when installed in a designated building or construction works.

In the UK, DCLG has decided not to make any such recommendations to define the minimum classification to be installed in a designated building or construction works for cables. Instead it requires all electrical installations in buildings to comply with BS 7671 with a minimum performance requirement.

The new rules also intend to introduce market surveillance by Trading Standards and penalties for putting product on to the market that is not CPR compliant.

CPR – The reality

What this means is that, despite industry being fully aware that Euro Class E is almost the lowest classification for cable, it is, by stipulating compliance with BS 7671, the recommendation of the Regulator.

For an industry already blighted by substandard cable product, CPR should be a welcome friend, yet by opting for the low level of Euro Class E, the regulator is leaving the door wide open for further abuse of the system.

We have to ask ourselves, do we have to accept this?

As far as Euro Class testing goes manufacturers have a choice when categorising their cable:

for Aca through to Cca - a Notified Body **must audit** Factory Production Control (FPC) system, **select** the samples for and carry out Type Testing

- for Dca and Eca a manufacturer can send **the selected samples** it chooses to a Notified Body or a Notified Testing Laboratory
- for Fca, a manufacturer can select its own samples, perform a Classification Eca and, if the cable fails, declare it as Classification Fca. The manufacturer should keep a report and record of all of these "Fails to meet Eca tests" and produce them on demand if a regulator asks.

CHART 2 – ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE SYSTEMS AND OBLIGATIONS

Reaction to fire class	Assessment and verification of constancy of performance (AVCP) system for cables	Duties of notified body	Security
A_{ca}, $B1_{ca}$, $B2_{ca}$	1+	• type testing • regular plant auditing • regular audit-testing of samples from ongoing production	Very high
C_{ca}	1+	• type testing • regular plant auditing • regular audit-testing of samples from ongoing production	High
D_{ca}	3	• type testing	Medium
E_{ca}	3	• type testing	Low
F_{ca}	4	• none	None

The UK is destined to remain a key market for distributors of counterfeit and substandard electrical cable; it is already seen as an easy target in that there is a lack of enforcement to stop rogue importers. This one lapse of judgement means the UK is no closer to having a safer building environment.

What we are left with is very little regulation over what manufacturers and importers will say about their cable; opportunities for falsification of a Declaration of Performance (DoP), fake CE Markings, use of Golden Samples for Euro Class testing and still no market surveillance.

Step across the channel and The German Cable Makers' Association has taken a different stance in its recommendations.

It has decided: *"in order to lift an entire building's fire safety level, the cable makers' industry recommends the use of low fire-hazard cable. Thus it is highly recommended to use class B2ca cables in buildings with very high safety requirements (e.g. in hospitals, nurseries) as well as in escape routes, and class Cca cables in buildings with high safety requirements (e.g. in administration and office buildings) "*

The White Paper `Low Fire-Hazard cables improve safety' also proposes that high rise buildings, construction works, buildings, sales outlets, office administration, buildings with single rooms, places of assembly and restaurants/hotels follow Euro Classes Cca, s1, d2, a1 for the main building and B2ca, s1, d1, a1 for escape routes.

Other countries' cable associations have made similar recommendations that are reassuringly robust. The table below details these (column 3). The known official regulatory requirements are shown in column 2 which also demonstrates the national differences that exist with variation based upon the type of construction and safety requirements.

Europacable, whose members include the largest cable makers in the world, has also said that "it is recommended to use at least class B2ca cables in buildings and civil works with very high safety requirements (tunnels, Metro, hospitals, nurseries) as well as in escape routes and at least class Cca cables in buildings with high safety requirements (e.g. in hotels and office buildings"

In France, Czech Republic, Italy, Finland and Sweden there is a Regulator-driven approach to safer cable specification and installations.

Any system which allows a manufacturer to self-test and classify or to supply its own selected samples is open to abuse

NATIONAL SURVEYS AND IMPLEMENTING REGULATIONS REGARDING CABLES UNDER THE CPR

COUNTRY	IMPLEMENTING REGULATIONS	NATIONAL SURVEY	COMMENTS
AUSTRIA	unknown	unknown	
BELGIUM	C_{ca}-s1, a1	C_{ca}-s1, d1, a1	OK with National Regulators; legal publication in progress; droplets level to be defined
	E_{ca}	E_{ca} (for bundle D_{ca}-s3, d2, a3)	
BULGARIA	unknown	unknown	
CROATIA	unknown	unknown	
CYPRUS	unknown	unknown	
CZECH REPUBLIC	$B2_{ca}$ s1, d1, -	$B2_{ca}$ s1, d1, a1	Expert recommendation still negotiated with National regulation
	$B2_{ca}$	$B2_{ca}$	
	D_{ca}	D_{ca}	
		E_{ca}	
DENMARK	unknown	unknown	
ESTONIA	unknown	unknown	
FINLAND	C_{ca}-s1, d1, a2	C_{ca}-s1, d1, a2	The national building code and the installation standard SFS 6000 are up for revision by 2018. Temporary solution SFS 7039
	D_{ca}-s2, d2, a2	D_{ca}-s2, d2, a2	
	E_{ca}	E_{ca}	
FRANCE	$B2_{ca}$-s1a, d0, a1**	$B2_{ca}$-s1a, d1, a1	Expert recommendation not yet approved by National Regulators ** for some specific applications
	Not decided	C_{ca}-s1, d1, a1	
	Not decided	D_{ca}-s2, d2, a2	
	Not decided	E_{ca}	
GERMANY	E_{ca}	$B2_{ca}$-s1, d1, a1	More detailed classification to be defined by Laenders
		C_{ca}-s1, d2, a1	
		E_{ca}	
GREECE	Not decided	Not decided	in 2013 National Authorities launched a survey on target performances. No reactions from Authorities so far.
HUNGARY	unknown	Unknown	
IRELAND	unknown	Unknown	
ITALY	$B2_{ca}$-s1a, d0, a1	$B2_{ca}$-s1a, a1, d1	Authorities agreed that CEI (Italian standardization body) issues an installation standard with performances reviewed in accordance with expert recommendation
	C_{ca}-s1b, d0, a1		
	E_{ca}	C_{ca}-s1b, d1 a1	
		C_{ca}-s3, d1, a3	
		E_{ca}	

COUNTRY	IMPLEMENTING REGULATIONS	NATIONAL SURVEY	COMMENTS
LATVIA	unknown	Unknown	
LITHUANIA	unknown	Unknown	
LUXEMBURG	unknown	Unknown	
MALTA	unknown	Unknown	
NETHER-LANDS	$B2_{ca}$-s1, d1, a1	B2ca-s1, d1, a1	Defined new NEN installation standard endorsed in the National Regulation
	C_{ca}-s1, d1, a1	Cca-s1, d1, a1	
	D_{ca}-s3, d2, a3	Dca-s3, d2, a3	
	E_{ca}	Eca	
POLAND	unknown	Unknown	
PORTUGAL	unknown	Unknown	
ROMANIA	unknown	Unknown	
SLOVAKIA	unknown	unknown yet	to be delivered soon
SLOVENIA	unknown	Unknown	
SPAIN	C_{ca}-s1b, d1, a1	C_{ca}-s1b, d1, a1	Decision of National Regulators
	E_{ca}	E_{ca}	
SWEDEN	C_{ca}-s1, d1 (D_{ca}-s2, d2*)	Included in Swedish building regulations, the same EU-classes used	Included in the Swedish building regulations, BFS 2014:3 BBR21 par. 5.527. * in case extinguish systems are installed
	D_{ca}-s2, d2 (E_{ca}*)		
UK	NO REGULATION	Not decided	
NORWAY	D_{ca} s2 d2 (E_{ca}*)	no recommendations	defined installation standard by an independent body (SINTEF) to be endorsed by National Regulators. * in case extinguish systems are installed
	E_{ca}		
SWITZERLAND	unknown	unknown	
TURKEY	Not decided	B_{ca} /C_{ca}	In progress, the definition of target performances by National Association of Specifiers
	Not decided	C_{ca}	
	Not decided	E_{ca}	

What is the solution?

Tratos, a cable manufacturer with production facilities in Knowsley, Merseyside and in Pieve Santo Stefano, Italy, doesn't believe such system failings should be accepted and today announced, that all its Reaction to Fire cables which are subject to CPR criteria, will meet at least the higher Euro class of:

$$C_{ca}\ s1\ d1\ a1$$

The company doesn't see its action as the introduction of a gold-standard, rather, the introduction of a higher minimum standard; one everyone can be confident in. The UK shouldn't accept less. There are confidences to be restored and the cable industry must play its part.

More than this the company is calling for Regulator intervention to mandate for the same class of performance for Reaction to Fire cable in the UK.

The UK cable industry already struggles to police instances of substandard and counterfeit cable[10]. Such important legislation needs to be introduced and policed thoroughly or it is destined to fail.

[10] http://www.aci.org.uk/technical-articles-and-updates/guidance-videos/aci-fake-britain-video

Market Surveillance The Approved Cables Initiative?

The UK's domestic cabling industry has long been a world-leading centre of high-quality, safe cabling product, yet the UK cable industry has shrunk to a handful of manufacturers – over 31 producers have been forced out of business over the years.

The UK cabling sector is already threatened by ineffective safety standards – voluntary not mandatory British Standards and the acceptance of non-compliant cable product as still safe.

The debate concerning substandard cable has been raised at the highest level of Government since 2010 by The Approved Cables Initiative (ACI): . . . . reports examples of sub-standard cable and failures in UK market surveillance. Using existing legislation, it works with the Health & Safety Executive and Trading Standards, yet primarily manages the problem itself"[11]

Funded and supported by UK cable manufacturers and electrical industry associations, the Initiative has received full industry and regulator support and took a proactive and hard-hitting approach to educate the electrical supply chain. Early success in 2011 led to many millions of metres of substandard cable being removed from the market place.

Other suspected importers, manufacturers and distributors were investigated and reported to Trading Standards and the Health & Safety Executive, but with Trading Standards enduring major budget cuts[12], investigations into cable complaints tended to take second place to more high-profile consumer issues.

Taking this up with Government in 2012, it was suggested that industry should police the matter itself.

And so it comes full circle to where we are today - the Approved Cables Initiative although ready to police and report issues of non-compliance has no intervention power. It can only report instances to an already over-stretched Trading Standards.

The ACI has taken part in numerous consultation processes for improved product recall and better market surveillance, yet nothing changes. A recent Radio 5 live interview with consumer safety campaigner Lynn Faulds Wood about alleged failings in the recall system for domestic appliances highlighted that the government is not doing enough to protect consumers from faulty products that can cause fires and that a review into product safety she carried out for the government had been ignored[13].

[11] http://www.aci.org.uk/about-us
[12] http://www.publicsectorexecutive.com/Public-Sector-News/councils-admit-deep-trading-standards-budget-cuts-placing-consumers-at-risk
[13] http://www.bbc.co.uk/programmes/b08v65zz

How is this relevant now?

CPR is perhaps the greatest opportunity to bring about best safe cable products. But the cable supply chain and the Regulator is failing to understand that adequate isn't enough. Promises of inspection and verification are shallow and we have yet to establish a mechanism by which the UK can carry out successful market surveillance.

We need:

- **UK Regulator to stipulate a minimum requirement of Euro Class for CPR – higher than where it currently stands**
- **A programme of market surveillance for CPR compliance - but other areas of cable compliance too**
- **This process to be seen as the template and to be adopted throughout our construction and building industry.**

In order to ensure an entire buildings' fire safety level, the cable makers' industry recommends to use Low Fire-Hazard cables which combine low flame/fire spread and heat release with low emission of smoke and dangerous gases. This is why it is recommended to use at least class $B2_{ca}$ cables in buildings and civil works with very high safety requirements6 as well as in escape routes, and at least class Cca cables in buildings with high safety requirements (e.g. in hotels and office buildings). Chart 3 below shows a proposal for classes to be used for Low Fire-Hazard cables in relation to the safety requirements.

Source: EUROPACABLE – 2016 - For internal circulation only

There is absolutely NO excuse not to tackle this issue, this time. Grenfell Tower sickened the nation. The post-mortem has brought it to its knees. Cable safety is a live issue and corners are being cut, with the cutters unchecked. Now is the time to act to avoid the avoidable – and the unthinkable.

Further information about Tratos is available at **www.tratosgroup.com**

The Authors

Dr Maurizio Bragagni KSJ, MBA
CEO, Tratos

Maurizio Bragagni was born on the 20th April 1975 in Arezzo, Italy. On the 22nd October 2000, Maurizio obtained a degree in Law at the University of Pisa. Maurizio recently acquired a MBA (Masters and Business Administration) degree at the Cass Business School of London on the 22nd June 2016.
Maurizio has been the CEO of Tratos Ltd since 2010.

Neil Ancell
Non Executive Director, Tratos

With more than 50 years' experience in the cabling industry, Neil Ancell is responsible for Tratos' company acquisitions, business development and human resources. In 2015, Mr Ancell worked to secure a multi-million-pound investment in the company's Knowsley factory, Merseyside. This included a Chrysalis Fund £3.5m loan, enabling the acquisition of an additional adjacent site to support the redevelopment and expansion of production facilities on site.
Mr Ancell is also Vice President of the British Cables Association.

Peter Waterworth - I.Eng. FIET
Technical & Development Director, Tratos

Peter Waterworth is an experienced Senior Technical Director with extensive knowledge of the cable industry including standards and regulations. Previously he was a member of several National and International Standards Bodies, including BSI, CLC and IEC.
A Fellow of the Institution of Engineering and Technology, prior to joining Tratos, Mr Waterworth worked and travelled throughout the world. He has a successful track record of achievement in the introduction of new products, approvals and qualification as well as widespread knowledge of cable applications and use.

Simon Blagden, CBE
Non Executive Chairman, Fujitsu

Mr Blagden, who is non-executive Chairman of Fujitsu UK and a member of its UK leadership team, has 30 years' business experience in the IT and Telecoms industry, initially at GEC where he was an International Commercial Manager.
Member of the Government's Apprenticeship Delivery Board. Member of the expert panel advising Government on Technical and Professional Education Industry Chairman of the Parliamentary Internet, Communications and Technology Group (an All-Party Parliamentary Group)
Chairman of HRH The Duke of York's charity, The Duke of York's Community Initiative.

Tratos is approved by

Tratos is member of

Tratos is certified by

Following some articles we have written since 2007 on the subject developed in this paper

If you are going to buy a parachute… Would you buy the cheapest?

Source: www.tratosgroup.com / news / 2009

Eastleigh MP Chris Huhne has warned that many lives could be lost in fires caused by sub-standard imports of electrical cable. "This shoddy cable is a threat to British lives and local jobs and we must fight it vigorously" said Mr Huhne. "Buying cheap sub-standard cable is a clear fire risk and could expose builders and wholesalers to actions for negligence or worse".

Mr Huhne has tabled parliamentary questions on behalf of Prysmian, a major local employer in Bishopstoke that produces EU-tested quality cable. More than a quarter of the electrical fires in England are due to problems with wires, cable and leads to appliances.

In answer to Mr Huhne, government ministers revealed that there were 4,093 fires across England in 2007 that were attributable to faulty wires and cables in homes and businesses. This is 27 per cent of all electrical fires.

"This is a terrible danger and a wholly avoidable problem if people take care to rewire with cable that is made to EU standards rather than buy cheap but dangerous cable from unscrupulous suppliers" said Mr Huhne.

Prysmian engineers have shown Mr Huhne examples of dangerous counterfeit cable which rapidly overheats as soon as current is put through it, presenting fire risk. The cable looks very similar to properly tested and manufactured cable.

Mr Huhne is backing a campaign by Michael Simms, the Director of Energy and Telecom Cables at Prysmian and the President of the British Cables Association, to clamp down on dangerous imports of counterfeit cable.

The Approved Cables Initiative

Source: www.tratosgroup.com / news / 2009

The ACI (Approved Cables Initiative) recently formed, led by the BCA (British Cables Association) is an initiative involving the whole cable systems supply chain from end to end – from manufacturer through installer to end user. To ensure that the cables systems and products purchased and installed throughout the UK are safe, fit for purpose and fully compliant with the requisite specifications, standards and approvals. It is estimated that 20% of cable products in the supply chain are non-approved, unsafe or counterfeit.

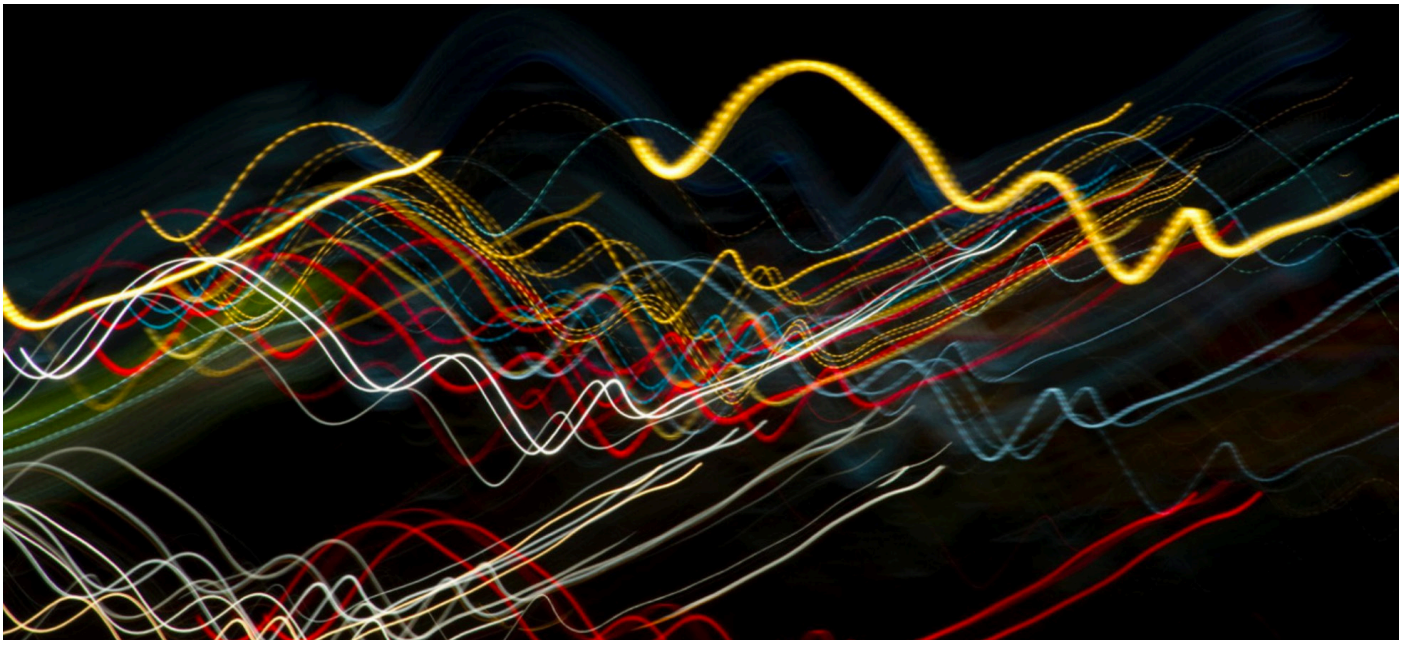
These products directly undermine UK and European Approval Standards and create major risks for the Industry and the UK community.

If you have a concern regarding a cable that you think may be not to standard or indeed may be counterfeit, you can send it to us here at TRATOS Limited and we will have the cable investigated.

Tratos Limited is pleased to be a part of this initiative as an active member of the BCA.

Agile methodology in the cable industry

Source: https://medium.com/@mauriziobragagni



Theres a new law being introduced to the construction industry in July 2017; CPR.

The Construction Products Regulation, or CPR, details rules for the marketing of construction products in the EU and from 1st July 2017, all electric cables used for the supply of electricity and for control and communication purposes, which are intended for use in construction works and subject to performance requirements on reaction to fire, must meet European Standard EN 50575 which specifies reaction to fire performance requirements, as well as the test and assessment methods to be used.

As a business, it's important to grow our culture of innovation and strive to be ahead of the curve. Our investment in research, machinery and people to create CPR ready cables has put us in a strong position and we can put this down to our ability in Tratos to work in an agile way. Our engineers are organised, plan well and continuously improve our products.

I always ask of them to be flexible and adaptable, to find new ways of working with our customers, which means that they get high quality cables and our bespoke approach. If you wish to find out more about the regulation or how we work at Tratos, please do get in touch at cpr@tratosgroup.com

Britain's counterfeit cable: The ticking time bomb

Source: https://medium.com/@mauriziobragagni

Substandard and counterfeit cable, labelled with fake official standards and accreditations, is one of the biggest kicks to the UK economy, and, worse, a potential killer, say cable industry leaders.

After a six-year campaign to clean up cable, industry White Knights are taking the crusade to Westminster and calling for better market surveillance and for all cable sold in the UK to be independently third party approved.
While cable failure can cost £millions when re-fitting large and complex projects, more importantly it can cost lives. Installers and suppliers are victims too. Buying as specified in good faith and carefully matching specifications to labels and cable markings often means nothing. Despite their best efforts, installers and suppliers' livelihoods and reputations are at stake.
The Approved Cables Initiative (ACI), which launched in 2010, investigates all kinds of suspect cable—be it armoured, house wiring flex, fire-performance cables and more. While house fire causes are often recorded as a 'faulty appliance'—there is every chance a fault could lie with the fake or under-specified cable fitted.

So where does the problem lie:

- Standards aren't wholly adhered to in the UK
- There are too few checks on imported cables
- About 70% of cable sold in the UK is imported and, of that, ACI believes half doesn't meet a recognised Standard
- Some distributors encourage the under specification of cable by manufacturers

Contractors have little interest in Standards and while many in the supply chain operate legitimately, some distributors and wholesalers resell cable products that don't meet UK safety standards.
And in a post Brexit Britain, buying British may not avoid all the pitfalls. While the majority of suspect cable has been manufactured outside of the UK this is not always the case. The UK has its fair share of fakers with some distributors actively encouraging the manufacture of undersized and inferior cable (often unmarked and untraceable) in return for better margins and keener prices.

WHEN CABLES GO BAD

More recently the UK, France, China, South Korea, India, Australia and the Middle East all reported issues with substandard cable. While there are directives in place to help keep the British public safe and British manufacturers maintain a healthy reputation, their success lies in every link in the supply chain abandoning complacency and agreeing to greater accountability.
Probably one of the biggest ACI substandard cable product finds saw BASEC, The British Approvals Service for Cables, cancelling its product certification licences for Turkey's cable manufacturer Atlas Kablo when it came under scrutiny for `a serious decline in quality across a range of cables.' Atlas Kablo's HAR certification—from the Turkish cable accreditation body TSE—was also terminated.

IMPACT OF CPR

Getting across the importance of traceability is critical and all Economic Operators must fulfil their obligations. It is hoped that the introduction of EU Construction Products Regulation (CPR)* in 2017 will mean tighter control. CPR which becomes mandatory for cables next July (2017) will have a significant impact on all construction cable manufacturers, importers and distributors supplying any type of cable that is intended to fit permanently into the structure of a building within the European market.
The new regulation demands new cable testing and certification as well as CE marking requirements for those supplying cables. It also lays down harmonised rules for the marketing of construction products in the EU.
But understanding of the requirements is not universal and, with no formal market surveillance in place, and Trading Standards services stretched to their limits, many in the industry believe the future is less than rosy. It is up to all parties to take some responsibility and remain mindful of their purchases and imports.

MAKING CABLING A GREAT BRITISH COMMODITY AGAIN

Opportunities to purchase smarter are widespread. This is despite the UK manufacturing base shrinking and no one yet sure exactly how Brexit will impact foreign investment here and sales to export markets as the exact shape of the changes reveal themselves.
Buying British does, however, present some real benefits. Those include approved products, better after sales service, known traceability and a secure supply chain that should not be overlooked. Although this is not yet a 'needle in a haystack' exercise for purchasers, it's getting harder to identify the authentic from the fakes. And this situation will only get worse.
Under existing legislation, the ACI reports concerns to the Health & Safety Executive and Trading Standards. However, Government cut backs have largely left the onus on industry to self-regulate-but this alone cannot work.
By calling for all cable bought/sold into the UK to be third party approved, the message is clear. Without independent approval a product will not be deemed fit for purpose and will not then be fitted and installed in any UK products or buildings. Better market surveillance will ensure substandard cable, one of the biggest economic tripwires in Britain, can be defused and made safe.
A simple solution with lifetime benefit for an important manufacturing industry and the country.

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*The EU Construction Products Regulation 305/2011 (PDF 1MB) ('the CPR') seeks to remove technical barriers to the trade of construction products in the European single market. It places obligations on manufacturers, distributors and importers of construction products when these products are placed on the market.
The CPR aims to ensure the reliability of information on the performance of construction products, information which is of interest to designers, constructors, public authorities and consumers. This is achieved through harmonised European product standards and European Technical Assessments using a common technical language and uniform assessment methods.
The CPR regulation demands that cable manufacturers supplying any type of cable that is intended to fit permanently into the structure of a building (including power distribution, final circuit wiring, control and instrumentation and data communications cables) to European markets, meets the new cable testing, certification and CE marking requirements of CPR by 1st July 2017. Cable wholesalers and distributors supplying into the EU also have a responsibility to ensure the cable manufacturers they work with have done this, or if necessary to undertake the CE marking requirements themselves.
About 4 million tons of low voltage cable is used in Europe each year, much of this in construction, amounting to a value of about 12 billion Euros.

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