

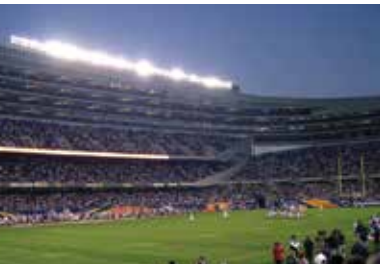


# IDH

**Cables Limited**

MADE IN IRELAND SINCE 1934

QUALITY  
APPROVED  
CABLES



IDH CABLES LIMITED

# FUMEGUARD™

LOW SMOKE HALOGEN FREE CABLES



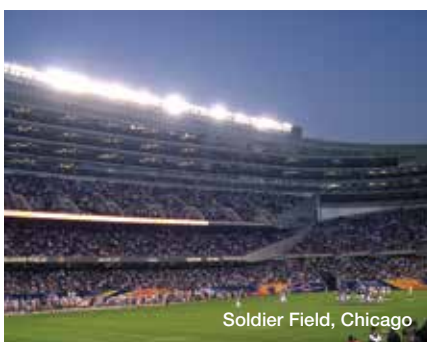
The longest-running original range of low voltage, low smoke, halogen free cables in the industry

## ABOUT IDH

IDH CABLES LIMITED IS IRELAND'S ONLY ELECTRICAL CABLE MANUFACTURER. ALL OUR CABLES ARE STRINGENTLY TESTED AND APPROVED TO THE HIGHEST STANDARDS. QUALITY IS IN OUR CULTURE.

IDH Cables Limited (formerly Irish Driver-Harris) was the first manufacturer in Ireland to receive BS 5750 Approval which forms the basis for the longest running manufacturing ISO approval in the country.

We have been the cable manufacturer and supplier of choice for many of the world's most prestigious building and renovation projects. These include Canary Wharf in London; the Dubai Metro; the Burj Al Arab, Dubai; the Titanic Quarter in Belfast; Hong Kong's Science Park; the world famous Wembley Stadium and Ascot Racecourse in the UK; Croke Park in Dublin; Soldier Field; the McCormick Convention Centre in Chicago; London's Millennium Dome; and the Grand Lisboa Hotel in Macau.



## OVERVIEW

Fumeguard™ is a complete range of low voltage cables made to the highest standards in low smoke halogen free (LSHF) materials. Cables include single for conduit and panel wiring; flat multicores for fixed wiring and flexible cables for appliances, for ordinary duty, heat resisting and low temperature (Arctic) use.

### Fumeguard™ cables are fire safety tested to:

SMOKE EMISSION:	BS EN 61034 IEC 61034-2
FLAME RETARDANT:	BS EN 60332-1-2
ACID GAS EMISSION:	BS EN 50267-2-1 IEC 60754-1
DEGREE OF ACIDITY EMISSIONS:	BS EN 50267-2-3 IEC 60754-2

Fumeguard™ cables are manufactured to meet the latest versions of cable standards.

BS 7211: 2012

BS EN 50525-3-41

BS EN 50525-3-11

Specifiers can rely on the Fumeguard™ name as it complies fully with International (IEC) and British Standards (BS). Not all cables are 'fire safety' compliant to these standards despite being promoted as so. Modified PVCs and LSF materials do not comply with the highest standards. Created as a result of the King's Cross tube fire in London, the low smoke halogen free polymer technology reduces smoke when burning to improve visibility in a fire and does not emit the poisonous HCL fumes that are generated by PVC and modified PVC cables. All public buildings, stadia, railway stations and enclosed construction spaces should call for LSHF cables.



## NO7ZZ1-R,U & NO5ZZ1-R,U

6181B; 6241B; 6242B; and 6243B INSULATED & SHEATHED CABLES

Used for surface wiring in power and lighting applications. Sheath has UV protection against direct sunlight.

<b>STANDARDS:</b>	BS7211
<b>OPERATING TEMP:</b>	90°C
<b>COLOURS:</b>	White as standard. Other colours available on request, including red
<b>PACKAGING:</b>	50 and 100 metre lengths. Other lengths available on request
<b>APPROVALS:</b>	BASEC



Conductor mm <sup>2</sup>	Conductor Construction	Mean Overall Diameter (mm)			Conductor Resistance ohm/km @20°C
		1 Core / 6181B	2 Core / 6242B	3 Core / 6243B	
1.0	1 / 1.30	4.10	4.10 x 8.65	4.60 x 9.70	18.10
1.5	1 / 1.37	4.45	4.55 x 8.80	4.75 x 11.45	12.10
2.5	1 / 1.77	5.05	5.40 x 10.50	5.46 x 13.40	7.41
4.0	7 / 0.85	6.05	6.10 x 12.00		4.61
6.0	7 / 1.04	6.60	6.90 x 13.80		3.08
10.0	7 / 1.35	7.90	8.40 x 18.50		1.83
16.0	7 / 1.70	9.10	9.70 x 20.60		1.15

ALSO AVAILABLE IN TRADITIONAL FLAT STYLE

## HO5Z-R,U & HO7Z-R,U

6491B SINGLE CORE INSULATED CABLES

General purpose power and lighting cables, often used within protective conduit or trunking installations.  
Can also be used within light fittings, appliance wiring and control gear.

<b>STANDARDS:</b>	BS EN 50525-3-41; BS7211
<b>OPERATING TEMP:</b>	90°C
<b>COLOURS:</b>	Blue, Brown, Black, Grey; Green/Yellow. Other colours available on request
<b>CORES:</b>	Single
<b>PACKAGING:</b>	50 and 100 metre lengths. Other lengths available on request
<b>APPROVALS:</b>	BASEC



Conductor mm <sup>2</sup>	Conductor Construction	Mean Overall Diameter (mm)	Conductor Resistance ohm/km @20°C
1.0	1 / 1.30	2.35	18.10
1.5 x 7	7 / 0.53	3.00	12.10
2.5 x 7	7 / 0.67	3.60	7.41
4.0	7 / 0.85	4.10	4.61
6.0	7 / 1.04	4.70	3.08
10.0	7 / 1.35	6.00	1.83
16.0	7 / 1.70	7.00	1.50
25.0	7 / 2.14	8.70	0.727

### TECHNICAL DATA

INSULATION RESISTANCE K VALUE	0.037M ohms/km at 90°C
TENSILE STRENGTH (MIN)	10.0 N/mm <sup>2</sup>
% ELONGATION (MIN)	125%
HOT SET ELONGATION	100%

LOW TEMPERATURE BEND
VOLTAGE TEST (200C)
TEST UNDER FIRE CONDITIONS
CORROSIVE ACID GAS EMISSIONS
SMOKE EMISSION

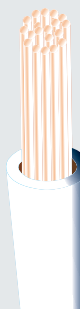
-15°C
Pass 2.5 KV
BS EN 60332
<0.5% to BS EN 50267
Pass BS EN 61034

## HO5Z-K & HO7Z-K

### 2491B SINGLE CORE INSULATED WIRES

Flexible single core wires used typically in control panels.

<b>STANDARDS:</b>	BS EN 50525-3-41
<b>OPERATING TEMP:</b>	90°C
<b>COLOURS:</b>	Blue, Brown, Black, Grey, Green/Yellow. Other colours available on request
<b>CORES:</b>	Single
<b>PACKAGING:</b>	50 and 100 metre lengths. Other lengths available on request
<b>APPROVALS:</b>	BASEC



Conductor mm <sup>2</sup>	Conductor Construction	Mean Overall Diameter (mm)	Conductor Resistance ohm/km @20°C
0.5	16 / 0.20	2.12	39.00
0.75	24 / 0.20	2.33	26.00
1.0	1/1.13	2.48	19.50
1.5	30 / 0.25	2.98	13.30
2.5	50 / 0.25	3.63	7.98
4.0	56 / 0.25	4.23	4.95
6.0	84 / 0.30	4.83	3.30
10.0	80 / 0.40	5.85	1.91

#### TECHNICAL DATA

INSULATION RESISTANCE K VALUE	0.037M ohms/km at 90°C	LOW TEMPERATURE BEND	-15°C
TENSILE STRENGTH (MIN)	10.0 N/mm <sup>2</sup>	VOLTAGE TEST (200C)	Pass 2.5 KV
% ELONGATION (MIN)	125%	TEST UNDER FIRE CONDITIONS	BS EN 60332
HOT SET ELONGATION	(200°C MAX) 100%	CORROSIVE ACID GAS EMISSIONS	<0.5% to BS EN 50267
		SMOKE EMISSION	Pass BS EN 61034

## ARCTIC -40°C

### LOW SMOKE HALOGEN FREE FLEXIBLE CABLES

Insulated and flexible cords used for extension leads and temporary wiring.

<b>OPERATING TEMP:</b>	90°C
<b>COLOURS:</b>	Yellow and Blue sheath. Other colours available on request
<b>CORES:</b>	2 Core – Brown and Blue; 3 Core – Blue, Brown and Green/Yellow
<b>PACKAGING:</b>	50 and 100 metre lengths. Other lengths available on request



Conductor mm <sup>2</sup>	Conductor Construction	Mean Overall Diameter (mm)				Conductor Resistance ohm/km @20°C
		2 Core	3 Core	4 Core	5 Core	
0.75	24 / 0.20	6.50	6.70	7.60	8.60	26.00
1.0	1/1.13	6.80	7.05	8.15	9.40	19.50
1.25	40 / 0.20	7.50	8.05	–	–	15.60
1.5	30 / 0.25	7.80	8.25	9.60	10.60	13.30
2.5	50 / 0.25	9.25	10.20	11.30	–	7.98
4.0	56 / 0.30	–	11.50	12.50	–	4.95

ALSO AVAILABLE IN TWIN FLAT FOR FESTOON LIGHTING

#### INSULATION MADE WITH LOW SMOKE ZERO HALOGEN

##### THERMOPLASTIC MATERIAL (TYPE T16)

CONDUCTOR RESISTANCE:	As per BS60228
INSULATION THICKNESS:	As per BS6004 Table 6
INSULATION RESISTANCE (MIN):	0.02M ohms/km at 70°C
TENSILE STRENGTH (MIN):	7.5 N/mm <sup>2</sup>
% ELONGATION (MIN):	150%
FLAME TEST:	BS EN 60332
SMOKE EMISSION:	As per BS7211
CORROSIVE ACID GAS EMISSIONS:	<0.5% to BS EN 50267
VOLTAGE TEST:	Pass 2.5 KV at 20°C

#### SHEATHING

##### MADE WITH LOW SMOKE ZERO HALOGEN THERMOPLASTIC MATERIAL (TYPE TM7 TO HD21.14S1)

SHEATH THICKNESS:	As per BS6004 Table 6
CABLE OD:	As per BS6004 Table 6
TENSILE STRENGTH (MIN):	7.5 N/mm <sup>2</sup>
% ELONGATION (MIN):	150%
RESISTANCE TEST:	0.02M ohms/km at 70°C
CORROSIVE ACID GAS EMISSIONS:	<0.5% to BS EN 50267
TEST UNDER FIRE CONDITIONS:	BS EN 60332

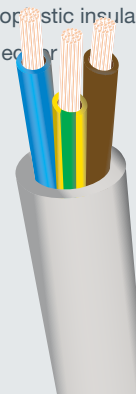
# H05Z1Z1-F 3182B; 3183B; 3184B AND 3185B

## INSULATED & SHEATHED FLEXIBLE CORDS

General purpose 70°C rated flexible cable. Manufactured to BS EN 50525-3-11. Flexible cables with halogen free thermoplastic insulation and low smoke emissions. Includes circular and flat cables with voltage rating up to and including 300/500V. Intended for connecting domestic appliances to a fixed supply.

90°C version also available.

<b>STANDARDS:</b>	BS EN 50525-3-11
<b>OPERATING TEMP:</b>	70°C
<b>COLOURS:</b>	White as standard. Other colours available on request
<b>CORES:</b>	2 Core- Blue and Brown. 3 Core - Blue, Brown, Green/Yellow
<b>PACKAGING:</b>	50 and 100 metre lengths. Other lengths available on request



No. of nominal cross-sectional areas of conductor mm²	Thickness of insulations Specified value mm	Thickness of insulations Specified value mm	Mean Overall Diameter (mm)		Min. insulation resistance at 70°C
			Lower Limit	Upper Limit	
2x0.75	0.6	0.8	5.7 or 3.7x6.0	7.2 or 4.5x7.2	0.011
2x1	0.6	0.8	5.9 or 3.9x6.2	7.5 or 4.7x7.5	0.010
2x1.5	0.7	0.8	6.8	8.6	0.010
2x2.5	0.8	1.0	8.4	10.6	0.0095
2x4	0.8	1.1	9.7	12.1	0.0078
3x0.75	0.6	0.8	6.0	7.6	0.011
3x1	0.6	0.8	6.3	8.0	0.010
3x1.5	0.7	0.9	7.4	9.4	0.010
3x2.5	0.8	1.1	9.2	11.4	0.0095
3x4	0.8	1.2	10.5	13.1	0.0078
4x0.75	0.6	0.8	6.6	8.3	0.011
4x1	0.6	0.9	7.1	9.0	0.010
4x1.5	0.7	1.0	8.4	10.5	0.010
4x2.5	0.8	1.1	10.1	12.5	0.0095
5x0.75	0.6	0.9	7.4	9.3	0.011
5x1	0.6	0.9	7.8	9.8	0.010
5 x1.5	0.7	1.1	9.3	11.6	0.010
5x2.5	0.8	1.2	11.2	13.9	0.0095

### INSULATION

MADE WITH LOW SMOKE ZERO HALOGEN  
THERMOPLASTIC MATERIAL (TYPE T16)

CONDUCTOR RESISTANCE:	As per BS60228
INSULATION THICKNESS:	As per BS EN 50525-3-11
INSULATION RESISTANCE (MIN):	0.02M ohms/km at 70°C
TENSILE STRENGTH (MIN):	7.5 N/mm²
% ELONGATION (MIN):	150%
FLAME TEST:	BS EN 60332
SMOKE EMISSION:	As per BS61034
CORROSIVE ACID GAS EMISSIONS:	<0.5% to BS EN 50267
VOLTAGE TEST:	Pass 2.5 KV at 20°C

### SHEATHING

MADE WITH LOW SMOKE ZERO HALOGEN THERMOPLASTIC  
MATERIAL (TYPE TM7)

SHEATH THICKNESS:	As per BS EN 50525-3-11
CABLE OD:	As per BS EN 50525-3-11
TENSILE STRENGTH (MIN):	10.0 N/mm²
% ELONGATION (MIN):	150%
RESISTANCE TEST:	0.02M ohms/km at 70°C
OXYGEN INDEX:	35% at 270°C
CORROSIVE ACID GAS EMISSIONS:	<0.5% to BS EN 50267
TEST UNDER FIRE CONDITIONS:	BS EN 60332



## OTHER IDH PRODUCTS



**KILFLAM™**  
FIRE RESISTANT CABLES

KILFLAM HIGH PERFORMANCE FIRE RESISTANT CABLES

Single core conduit wire and multi-core cables available in standard and enhanced grades.



**GUARDIAN™**  
MECHANICALLY PROTECTED CABLES

GUARDIAN

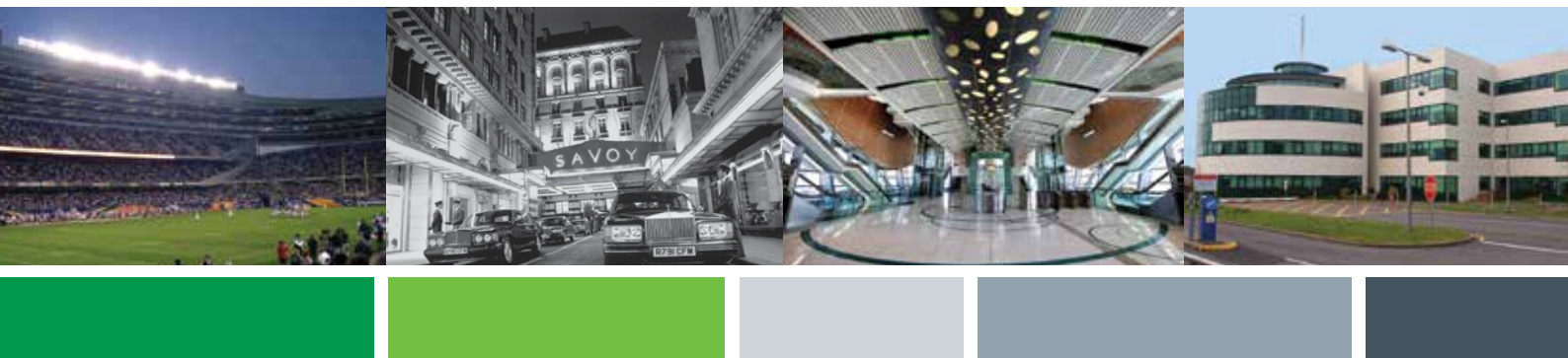
The lightweight, easy to install, 'connect and protect' cable system



**PVC CABLES™**  
INSULATED PVC CABLES

PVC CABLES

Standard, heat resisting and low temperature types



*Soldier Field Stadium in Chicago, the Savoy Hotel London, the Dubai Metro and the Galway Clinic in Ireland – just some of the projects that have chosen IDH Cables.*

**All our cables are manufactured with materials which are compliant with RoHS and WEEE directives.**

**IDH Cables Limited**

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**RoHS** 