Armorduct

Cable Tray Technical Specification

BRITISH MANUFACTURING FOR OUR FUTURE

interface ISO 9001 CERTIFICATION

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Surfaces of system components which are likely to come into contact with cables during installation are inspected to ensure they shall not cause damage to the cables when installed correctly. As with all metallic system components, care should be exercised that handling is in accordance with the relevant COSHH regulations and gloves should be worn.
Screwed connections have been designed to withstand the mechanical stresses during the installation and normal use and will not cause damage to cables when correctly inserted. Screwed connections are generally isometric threads fully compliant with tests in accordance of the standard. Armorduct cable tray systems are usually assembled using M6 roofing bolts particularly for couplers, fishplates and connection to supporting framework.
It should be noted that independent testing has been carried out to verify the structural performance of cable tray at the minimum and maximum temperature classifications for test conditions. They should be directly supported by a suitable mounting structure.

Title	Cable Tray Systems for Electrical Installations
British Standards Publication Date Replaces International Relationships	BS EN 61537:2007 UKCA / CE Low Voltage Directive 2014/35/EU The Electrical Equipment (Safety) Regulations 2016 Material: Pre Galvanised Steel BS EN 10346: 2015
Minimum Transport & Storage Temperature	-25˚C
Maximum Transport & Storage Temperature	+60˚C
Minimum Installation & Application Temperature	-25˚C
Fire	Non flame propagating
Electrical Continuity	Cable tray systems meet electrical continuity requirements
Electrical Insulation	Cable tray systems do **not** have electrical insulating properties
Separation	Cable tray systems do **not** have internal protective partition
Installation Positions	Cable tray products can be mounted on a wall or ceiling
Screw Tightening	Screws intended to be tightened should be done so with a screwdriver at a torque of 2Nm
Assembly	Components fit together using integral couplers
Maximum Voltage for Installations	1000v a.c & 1500v d.c

CABLE TRAY WEIGHTS

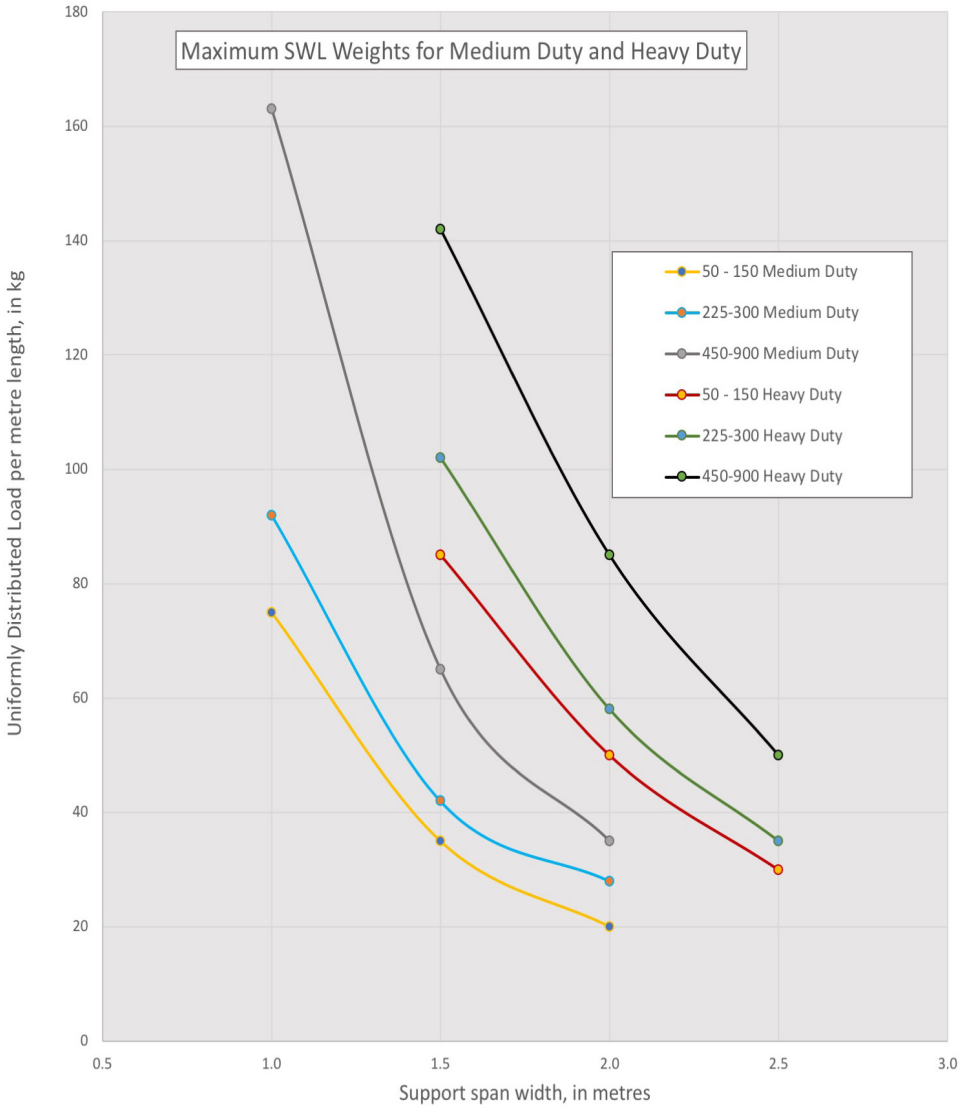
size	50	75	100	150	225	300	450	600	750	900
Light Duty	AD-LD2 1.2kg	AD-LD3 1.52kg	AD-LD4 1.92kg	AD-LD6 4.09kg	AD-LD9 5.75kg	AD-LD12 7.42kg	AD-LD18 10.77kg	AD-LD24 14.09kg	x	x
Medium Duty	AD-MD2 1.76kg	AD-MD3 2.09kg	AD-MD4 2.48kg	AD-MD6 3.19kg	AD-MD9 4.25kg	AD-MD12 5.31kg	AD-MD18 11.59kg	AD-MD24 14.92kg	AD-MD30 20.72kg	AD-MD36 24.51kg
Heavy Duty	AD-HD2 3.2kg	AD-HD3 3.59kg	AD-HD4 4.08kg	AD-HD6 4.94kg	AD-HD9 6.22kg	AD-HD12 7.51kg	AD-HD18 12.99kg	AD-HD24 16.33kg	AD-HD30 22.31kg	AD-HD36 29.62kg

M&E QUALITY STANDARDS

Armorduct

Our Cable Tray systems are manufactured and tested to meet the quality standards demanded by IEC 61537.
In accordance with IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE), our cable tray system fulfils the requirements of IEC 61537:2006 (300mm standard length on test).
Full details are available on request, and summarised in the table shown.
Maximum SWL information is provided in the graph below.

Category of Test	IEC 61537	Category of Test	IEC 61537
Mechanical Properties:			
Mechanical Strength	PASS	Marking and Documentation	PASS
50kg/m Safe Working Load (SWL) 1500mm span	PASS	Dimensions	PASS
Impact Resistance	PASS	Construction	PASS
External Influences:		Electrical Properties	PASS
Corrosion Resistance to ISO 10289	PASS		



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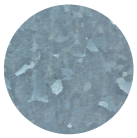
CABLE TRAY FINISHES

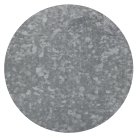
Please state your required finish using the suffix on the partcode e.g **AD-MD6/XXX** where 'XXX' is the finish

/PG PRE-GALVANISED



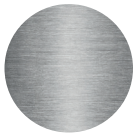
PRE-GALVANISED or PG. In accordance with BS EN 10346 : 2015 & DX51DZ-275MAC. This mild steel is pre-coated by the steel manufacturer. The finished product has a smooth and glossy appearance. Suitable for an indoor environment but not recommended for an external installation.

/HDG HOT DIPPED GALVANISED



HOT DIPPED GALVANISED or HDG. In accordance with EN ISO 1461. Products are manufactured from a mild steel then put through the galvanising process. This achieves a thick zinc coating that results in a product with a high level of corrosion resistance making it ideal for an external installation.

/SS STAINLESS STEEL



STAINLESS STEEL or SS. Complies to BS EN 10088-2: 2014. Products are mainly used in harsh environments such as clean rooms, food processing, wash down areas, oil and gas. Armorduct offer two grades of stainless steel material:

304 GRADE is the most widely used type of stainless because it has a high resistance to rust. It endures corrosion from most oxidizing acids and is often used for factory, food and kitchen installations. Although it is highly resistant to rust it can be liable to corrosion from chloride solutions that can create localised areas of corrosion called pitting. This can spread beneath the protective layers and compromise the sub-structure of the material.

316 GRADE also known as marine grade stainless has almost the same physical and mechanical properties as 304 grade, the difference being that 316 stainless steel comprises of around 2 to 3 percent molybdenum, which increases corrosion resistance especially against chlorides and other industrial solvents. 316 stainless steel is frequently used in many industrial installations including processing chemicals, as well as high saline environments such as coastal regions or where the use of de-icing salts are a regular occurrence.

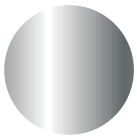
When ordering a stainless finish please add the grade to your part code i.e

AD-MD6/SS304

/MAG MAGNELIS

MAGNELIS or MAG. Complies to BS EN 10346:2015 (DX51D+ZM175). This is an innovative metallic coating that offers self-healing properties through a cathodic process that emilinates the need for galv spraying any cuts on site. Magnelis is generally used as a greener alternative to HDG – please contact our sales team for the **results of our 1000 hrs salt test.** Product has a shiny finish similar to stainless steel.

/ALI ALUMINIUM

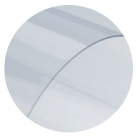


ALUMINIUM or ALI. Graded in accordance to customer request. Has a blue/silver appearance and is ideal for general containment products where moderate strength is required but weight is an issue. It's around the third of the weight of mild steel. Generally used in laboratories.

/PC POWDER COATED

POWDER COATED or PC. In accordance with BS EN 13438: 2013. Recommended for interior use although the extra coating in conjunction with the galvanising process does make it non corrosive to a higher standard than the basic PG. A great solution when you have aesthetic or unique identifier considerations, select your finish in any RAL colour number. Armorduct's standard RAL colours are 9003, 9010 and 9005 in a matt finish, other colours may incur a paint set up charge.

/CPC CLEAR POLYESTER COATED



CLEAR POLYESTER COATED or CPC. Meets the full requirements of BS6496/7. Recommended for use in both interior and exterior applications. It is established as an alternative to the traditional post-galvanising process. Uses of CPC finish include installation in corrosive atmospheres such as chemical plants, battery rooms, marine environments or general outside use where post galvanised or stainless steel systems have been commonly specified in the past. In such installations, CPC offers a more cost effective solution when combining the factors of mechanical performance, ease of installation and endurance.

/LSF LOW SMOKE FUME

LOW SMOKE & FUME OR LSF. Only available in PC or CPC finishes. With increased demand for safety in public areas and buildings, contractors are being advised to install materials that are less hazardous to members of the public in the case of a fire. Low smoke and fume protection houses fewer plastics, reducing risk by releasing less smoke and poisonous gases. Generally used in tunnels, basements and underground stations.

MANUFACTURING the difference

The information contained in this technical specification has been carefully compiled but we do not accept any responsibility for loss caused by any error contained herein.

We reserve the right to alter technical details without prior notice.

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