



Emtelle uPVC Power Duct is designed, manufactured and supplied within an Integrated Management System, incorporating internationally recognised Standards including ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.

### **APPLICATION**

The duct is designed to comply with ENATS 12-24 (Class 1 & 2) Industry Standard.

uPVC Power duct is available with 2 socket types; Standard interference Socket (IP4X), and also Emtelle's innovative new Interference Ring Seal (IRS) Socket (IP-68). Additional information on this new socket can be found in specification EF450-019.

Duct systems are printed with standard markings, including any additional information required by the customer, to give durability and traceability after installation. Standard length of a duct is 3m or 6m.

### **COLOURS**

Colour fastness and UV stability for UK and Ireland only, for 12 months external storage unless otherwise agreed by customer specification.

Standard colours are Black & Red. Other colours available upon request.





## **MATERIAL & TECHNICAL DATA**

Raw Materials are uPVC resin and other additives suitable for the required properties of the finished product.

Test	Method	Requirement	
Print Marking (Type Test)	ENATS 12-24 Section 7.6  Compliance is checked by rubbing the marking by hand for 15s with a piece of cloth soaked in water.  Test is repeated with cloth soaked in petroleum spirit.	Pass	
Dimensional Checks (Routine Test)	ENATS 12-24 Section 8 Compliance is checked via Calibrated ring gauges, socket go, no-go gauges.	Pass	
Construction (Routine Test)	ENATS 12-24 Section 9 Compliance is checked via visual inspection – there shall be no sharp edges, burrs, or surface protrusions with are likely to damage installed cables.	Pass	
Compression Test (Sample Test)	ENATS 12-24 Section 10.2 Compliance is checked by compressing 200mm sample between 2 steel plates. Record force required to compress by 5%	Class 2: 450N @ 50degC Class1: 450N @ 75degC	
Impact Test (Sample Test)	ENATS 12-24 Section 10.3  Compliance is checked by striking x12 samples measuring 200mm in length which are conditioned to - 5deg C for 2hrs. Impact 5kg at height of 570mm	91-140mm OD: 28J @ -5degC >140mm OD: 40J @ -5degC	
Ingress Protection (Type Test)	ENATS 12-24 Section 14 Compliance is checked in accordance with BS EN 60529	IF Socket: IP4X IRS Socket: IP68	
Vicat Softening Temperature (Type Test)	ENATS 12-24 Section 16.2 BS EN ISO 2507-1:2017, Thermoplastics pipes and fittings. Vicat softening temperature. 47 General test method	>75degC	
Static Friction Coefficient (Type Test)	ENATS 12-24 Section 16.3 Compliance is checked via test method described in ENATS 12-24 section 16.3.3	<0.27	
Heat Reversion (Sample Test)	ENATS 12-24 Section 16.5 Compliance is checked via air circulating over. 300mm uPVC duct sample is heated to 150deg C for 1hr.	<5mm change	

### **PACKAGING AND LABELLING**

All products suitably packaged in recyclable materials and clearly labelled with Emtelle Product Code and Description where possible.

The duct is supplied on non-returnable wooden U-frames which are designed to be stored on even, stable ground; they must not be stored more than 3 high. Packaging should be recycled locally.



# **STANDARD DIMENSIONS & PRODUCT CODES**

Nominal OD / ID	Class	Length	Colour	Interference Fit Socket	Interference Ring Seal Socket	Lengths per pallet
75 / 68	1	6m	Black	20459	21120	168
			Red	<b>√</b>	<b>√</b>	1
75 / 69	2	6m	Black	✓	<b>√</b>	1
			Red		<b>√</b>	1
88.9 / 82	1	6m	Black	5079T		139
			Red	21203	-	1
88.9 / 83	2	6m	Black	5079		7
			Red	<b>√</b>	N-3	1
96.5 / 89	1	6m	Black	20159	F-2	115
	68	***************************************	Red	21215		
96.5 / 90	2	6m	Black	3772S	-	
			Red	1	-	
110 / 102	1	6m	Black	3769S	5331	90
	681	200000	Red	5302	20423	
110 / 103	2	6m	Black	4748S	20281	1
200000000000000000000000000000000000000	6000	10.000	Red	1	1	1
125 / 117	1	6m	Black	5080T	21225	68
		10.77	Red	5333NP	21231	
125 / 118	2	6m	Black	5080	✓	
	6000	10.000	Red	<b>√</b>	<b>√</b>	1
140 / 131	1	6m	Black	<b>√</b>	(2)	53
			Red	1	15-11	
140 / 132	2	6m	Black	<b>√</b>	(2)	1
	6000	1000000	Red	1	0.50	1
160 / 150	1	6m	Black	3769S	5338	39
			Red	5750	20211	
160 / 151	2	6m	Black	4749	20747	1
	6650	0.0000	Red	<b>√</b>	<b>√</b>	1
180 / 169	1	6m	Black	20300	20958	28
	100	10.00	Red	<b>√</b>	21220	10-00-0
200 / 188	1	6m	Black	5888	5030T	25
			Red	5893	20339	1
225 / 213	1	6m	Black	20305	21274	18
			Red	20405	<b>√</b>	1
250 / 237	1	6m	Black	20284	20394	16
	•		Red	21211	20338	+

