

ATMOSPHERIC CORROSION & LIVE WIRE DISTANCE GUIDELINES

This table is only applicable to tried and tested Nemtek quality wire, please refer to www.nemtek.com for more details.



Wire description:		Recommended live and earth wire distance in a series fence for security purposes, (longer distances can be achieved).							Expected lifespan:											
		Druid	Wiz4	Mer4	M15S	M18S	M25S	M28S	M113S	Inland - dry favorable conditions (+50km from coast) C5:	Inland - light industrial corrosive environment (25-50km from coast) C4:	Coastal areas - inland (3-25km from coast) C3:	Marine / Industrial (500m-3km from coast) C2:	Coastal / Severe Industrial (0-500m from coast) C1:	Type of installations recommended:	Resistance	Packing	Comments:	Connection & tensioning systems which are OK to use with this wire:	Caution: Connection & tensioning systems with galvanic reactions with this wire:
Galvanised wire range	Stranded Galvanised Wire - 1.2mm	up to 2 km	up to 3 km	up to 3 km	up to 8 km	up to 10 km	up to 2 x 4 km	up to 2 x 5 km	up to 20 km	3 to 7 years	Not recommended	Not recommended	Not recommended	Not recommended	Wall top and piggy back systems.	175 ohms/km	5 kg (700m) and 22kg(3000m) rolls	Cost effective, low resistance, easy to work with, med/high breaking force.	Std. ferrules (with some reaction where zinc coating is damaged by crimping), Mini Titan, Donald, Combo, Nylon compression tensioner	S/Steel products in general i.e.: S/Steel springs, H.T. cable fastened with std. Ferrules (slight reaction)
	Heavy Galvanised High Strain Wire - 1.3mm	up to 2.5 km	up to 3.5 km	up to 3.5 km	up to 12 km	up to 15 km	up to 2 x 6 km	up to 2 x 7.5 km	up to 30 km	15 years	10 years	7 years	Not recommended	Not recommended	Wall top and piggy back systems.	150 ohms/km	25 kg - 2000m rolls	Cost effective, low resistance, very good corrosion protection, med/high breaking force.	Std. ferrules (slight reaction), Donald, Combo, Nylon compression tensioner, galvanised earth loops	S/Steel products in general i.e.: S/Steel springs, H.T. cable fastened with std. Ferrules (slight reaction)
	Light Galvanised High Strain Wire - 2.24mm	up to 3 km	up to 4 km	up to 4 km	up to 16 km	up to 20 km	up to 2 x 8 km	up to 2 x 10 km	up to 40 km	10 years	7 years	Not recommended	Not recommended	Not recommended	Free standing and Game fencing	120 ohms/km	50 kg 1650m rolls	Cost effective, low resistance, high breaking force.	Donald, Combo, Line clamps, galvanised earth loops	H.T. cable fastened with std. ferrules
	Heavy Galvanised High Strain Wire - 2.24mm	up to 3 km	up to 4 km	up to 4 km	up to 16 km	up to 20 km	up to 2 x 8 km	up to 2 x 10 km	up to 40 km	20 years	15 years	10 years	4 years	Not recommended	Free standing and Game fencing	120 ohms/km	50 kg 1650m rolls	Cost effective, low resistance, good corrosion protection, high breaking force.	Donald, Combo, Line clamps, galvanised earth loops	H.T. cable fastened with line clamps (slow reaction)
Stainless steel 304 grade or equivalent	Solid Stainless Steel Wire - 1.0mm 304 grade	up to 0.5 km	up to 0.6 km	up to 0.6 km	up to 0.7 km	up to 0.8 km	up to 2 x 0.7 km	up to 2 x 0.8 km	up to 1.6 km	15+ years	10 to 15 years.	Not recommended	Not recommended	Not recommended	Wall top and piggy back systems.	1000 ohms/ km	7-15kg rolls various (135m per kg)	Good corrosion protection, easy to work with, high breaking force.	S/Steel Spring, Nylon compression tensioner, S/Steel ferrules, S/Steel Mini Titan, S/steel earth loops	Std. Ferrules (slight reaction), H.T cable (slight reaction), All galvanised products i.e.: donald, combo, galvanised earth loops, mini titan
	Solid Stainless Steel Wire - 1.2mm - 304 grade	up to 0.6 km	up to 0.7 km	up to 0.7 km	up to 0.8 km	up to 1 km	up to 2 x 0.8 km	up to 2 x 1 km	up to 2 km	15+ years	10 to 15 years.	Not recommended	Not recommended	Not recommended	Wall top and piggy back systems.	700 ohms/ km	7-15kg rolls various (95m per kg)	Good corrosion protection, easy to work with, high breaking force.	S/Steel Spring, Nylon compression tensioner, S/Steel ferrules, S/Steel Mini Titan, S/steel earth loops	Std. Ferrules (slight reaction), H.T cable (slight reaction), All galvanised products i.e.: donald, combo, galvanised earth loops, mini titan
	Stranded Stainless Steel Wire - 1.2mm - 304 grade	up to 0.6 km	up to 0.7 km	up to 0.7 km	up to 0.8 km	up to 1 km	up to 2 x 0.8 km	up to 2 x 1 km	up to 2 km	15+ years	10 to 15 years.	Not recommended	Not recommended	Not recommended	Wall top and piggy back systems.	700 ohms/ km	800m and 1500 m rolls	Good corrosion protection, easy to work with, high breaking force.	S/Steel Spring, Nylon compression tensioner, S/Steel ferrules, S/Steel Mini Titan, S/steel earth loops	Std. Ferrules (slight reaction), H.T cable (slight reaction), All galvanised products i.e.: donald, combo, galvanised earth loops, mini titan
Stainless steel 316 grade or equivalent	Solid Stainless Steel Wire - 1.0mm - 316 grade	up to 0.5 km	up to 0.6 km	up to 0.6 km	up to 0.7 km	up to 0.8 km	up to 2 x 0.7 km	up to 2 x 0.8 km	up to 1.6 km	15+ years	15+ years	15+ years	10+ years	5+ years	Wall top and piggy back systems.	1000 ohms/ km	7-15kg rolls various (135m per kg)	Excellent corrosion protection, easy to work with, high breaking force.	S/Steel Spring, Nylon compression tensioner, S/Steel ferrules, S/Steel Mini Titan, S/steel earth loops	Std. Ferrules (slight reaction), H.T cable (slight reaction), All galvanised products i.e.: donald, combo, galvanised earth loops, mini titan
	Stranded stainless Steel Wire - 1.2mm - 316 grade	up to 0.6 km	up to 0.7 km	up to 0.7 km	up to 0.8 km	up to 1 km	up to 2 x 0.8 km	up to 2 x 1 km	up to 2 km	15+ years	15+ years	15+ years	10+ years	5+ years	Wall top and piggy back systems.	700 ohms/ km	800m and 1500 m rolls	Excellent corrosion protection, easy to work with, high breaking force.	S/Steel Spring, Nylon compression tensioner, S/Steel ferrules, S/Steel Mini Titan, S/steel earth loops	Std. Ferrules (slight reaction), H.T cable (slight reaction), All galvanised products i.e.: donald, combo, galvanised earth loops, mini titan
Aluminium	Aluminium Alloy 1,6mm solid	up to 6 km	up to 8 km	up to 8 km	up to 32 km	up to 40 km	up to 2 x 16 km	up to 2 x 20 km	up to 80 km	15+ years	15+ years	15+ years	10+ years	5+ years	Wall top and piggy back systems.	27 ohms /Km	1000 m rolls	Excellent corrosion protection, easy to work with, Very low resistance	Nylon compression spring tensioners, use aluminium HT, twist wire onto itself to make joints.	Std. Ferrules (reaction), H.T cable (reaction), All galvanised products i.e.: donald, combo, galvanised earth loops, mini titan

* This table serves as a guideline only. For more accurate information, please seek professional advice on the corrosion environment and localised conditions. Distances quoted are based on a series circuits and if earth monitoring is used then the length of the earth series circuit must be taken into account. These specification can change without pror notice.