

thunderbolt Test & Maintenance Ltd

Lightning Protection & Earthing Specialists

Unit 2, The Glade Business Centre, Forum Road, Nottingham, NG5 9RW

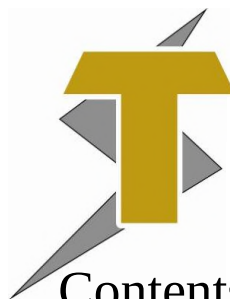
Telephone: 01159 754808 E: info@thunderbolttm.com

RYLANDS MANCHESTER

LIGHTNING PROTECTION SYSTEMS

TECHNICAL SUBMITTAL

Reference	M-011652-MH
Produced by	Christopher Stevenson
Reviewed by	Mick Heffernan
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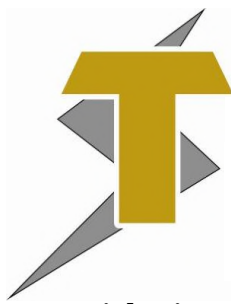
1.1 Air Termination Network (ATN)

1.2 Down Conductor (DC)

1.3 Earth Electrode

2.Materials and Equipment: 3, 4 and 5

2.1 Component Part Numbers



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1. Lightning Protection Specification

1.1 Air termination network

SafeStrike ESE Unit S65 Surmounted on a 3mt stainless steel mast fixed with purpose made Stainless steel brackets and fixing bolts &/Or with a free standing base. It will protrude 1mts above the highest point. Actual Site to be confirmed at a later date



1.2 Down Conductors

The steel portal frame is to be utilised as the route for the down Conductors with “B” type bonds made in Gun Metal at base level and Aluminium at upper most point

1.3 Earthing

Utilising the deep driven piles with 25x3mm PVC covered copper conductor with connections being made to the steel reinforcing of the piles with “U” type bolts (will then be wrapped in DENSO tape), the conductor will then be bonded to the base of dedicated steel columns using GM “B” Bonds.

At the upper most point of the dedicated columns 25x3mm PVC covered Aluminium will be bonded to them, using Aluminium “B” Bonds with tails left for bonding to the mast of the ESE unit at a later date

2. Materials and Equipment

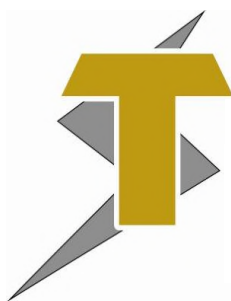
Thunderbolt Test and Maintenance Ltd procure all material where applicable to comply with the current BS EN 62305

Consumables are procured from major retailers and though compliance with a material standard is not strictly required, all fixings/bracketry is chosen to minimise the risk of corrosion via both galvanic and weathering processes

2.1 Materials, Component and Part Numbers

Down Conductors

Supplier	Part No	Description	Image
Wallis	BBG 253 SS – Page 94	“B” Bond Gun Metal	
Wallis	BBA 253 – Page 94	“B” Bond Aluminium	



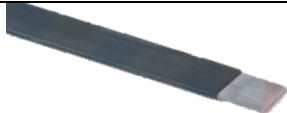
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Earthing

Wallis	TP253B - Page 134	25x3mm PVC Copper	
Wallis	TAP253G - 142	25x3mm PVC Aluminium	
Wallis	ADC 140 - Page 88	25x3mm Fixings	
Wallis	ERU216 - Page 36	Double Plate Type "U" Bolt Clamps	
Wallis	BBG 253 SS - Page 94	"B" Bond Gun Metal	
Wallis	BBA 253 - Page 94	"B" Bond Aluminium	
Wallis	DTS510 - Page 118	Denso	

All material from :

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