



## nVent ERICO IP900C System Above Building Instruction Manual

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### INSTRUCTION SHEET

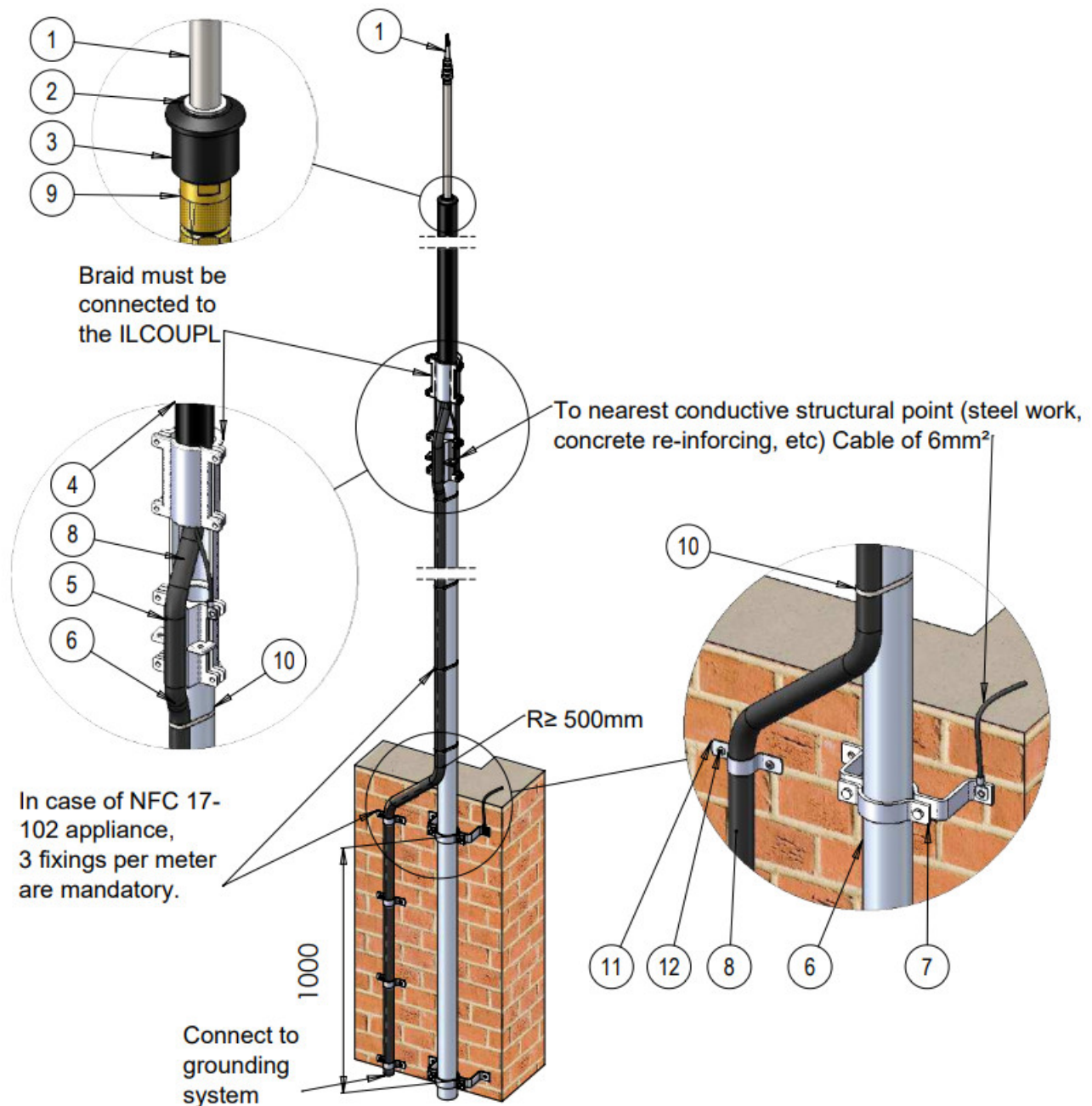
nVent ERICO System 1000 + nVent ERICO Ericore  
CANTILEVERED 4m above building, total mast 5m

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## IP900C System Above Building

| ITEM | PART No.        | QTY.            | DESCRIPTION                      |
|------|-----------------|-----------------|----------------------------------|
| 1    | SIXXI           | 1               | ESE Terminal                     |
| 2    | INTCPTSIERICOR  | 1               | ESE TERMINAL ERICORE ADAPTOR     |
| 3    | INTCPTADBUTTSII | 1               | ESE TERMINAL MAST ADAPTOR        |
| 4    | FRP2MBLACK      | 1               | 2M ERICORE FIBERGLASS MAST       |
| 5    | ILCOUPL         | 1               | MAST COUPLER                     |
| 6    | ALUM3M 502000   | 1               | ALUMINUM MAST WITH BASE          |
| 7    | 7000250S4       | 2               | OFFSET PIPE CLAMP                |
| 8    | ERICORE         | 1               | ERICORE INSULATED DOWN CONDUCTOR |
| 9    | ERICORETRMOS    | 1               | ERICORE FACTORY TERMINATION      |
| 10   | CABTIESS        | 3 PER METER     | CABLE TIE FOR MAST               |
| 11   | CONSADE25       | 3 PER METER     | SADDLE FOR WALL OR ROOF          |
| 12   | CONSADFX        | 2 PER CONSADE25 | SCREWS FOR CONSADE25             |



#### WARNING:

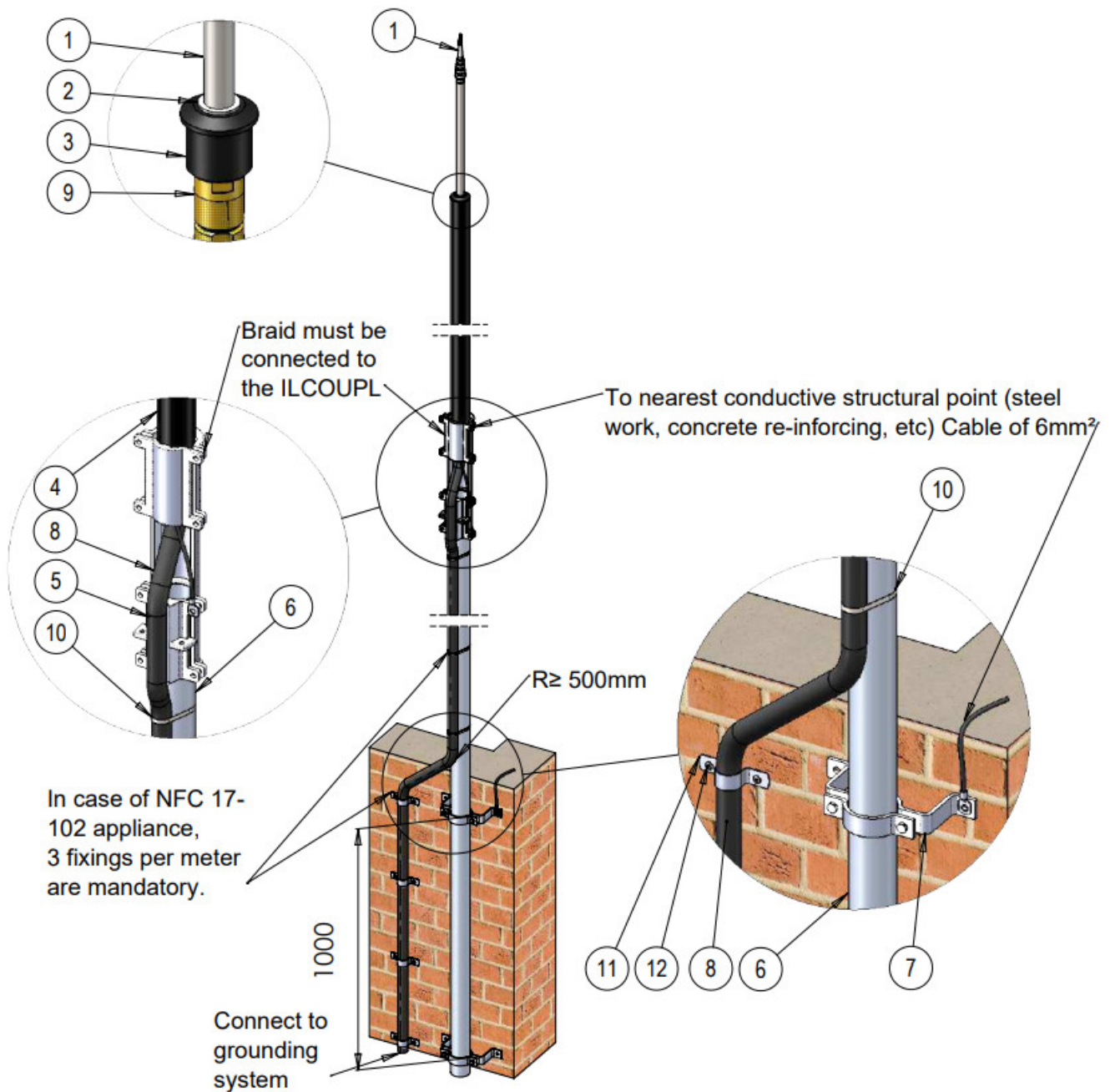
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2. nVent products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
3. All instructions must be completely followed to ensure proper and safe installation and performance.
4. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.

#### SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed. Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

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| 5    | ILCOUPL         | 1               | MAST COUPLER                     |
| 6    | ALUM4M 701370   | 1               | ALUMINUM MAST WITH BASE          |
| 7    | 7000250S4       | 2               | OFFSET PIPE CLAMP                |
| 8    | ERICORE         | 1               | ERICORE INSULATED DOWN CONDUCTOR |
| 9    | ERICORETRMOS    | 1               | ERICORE FACTORY TERMINATION      |
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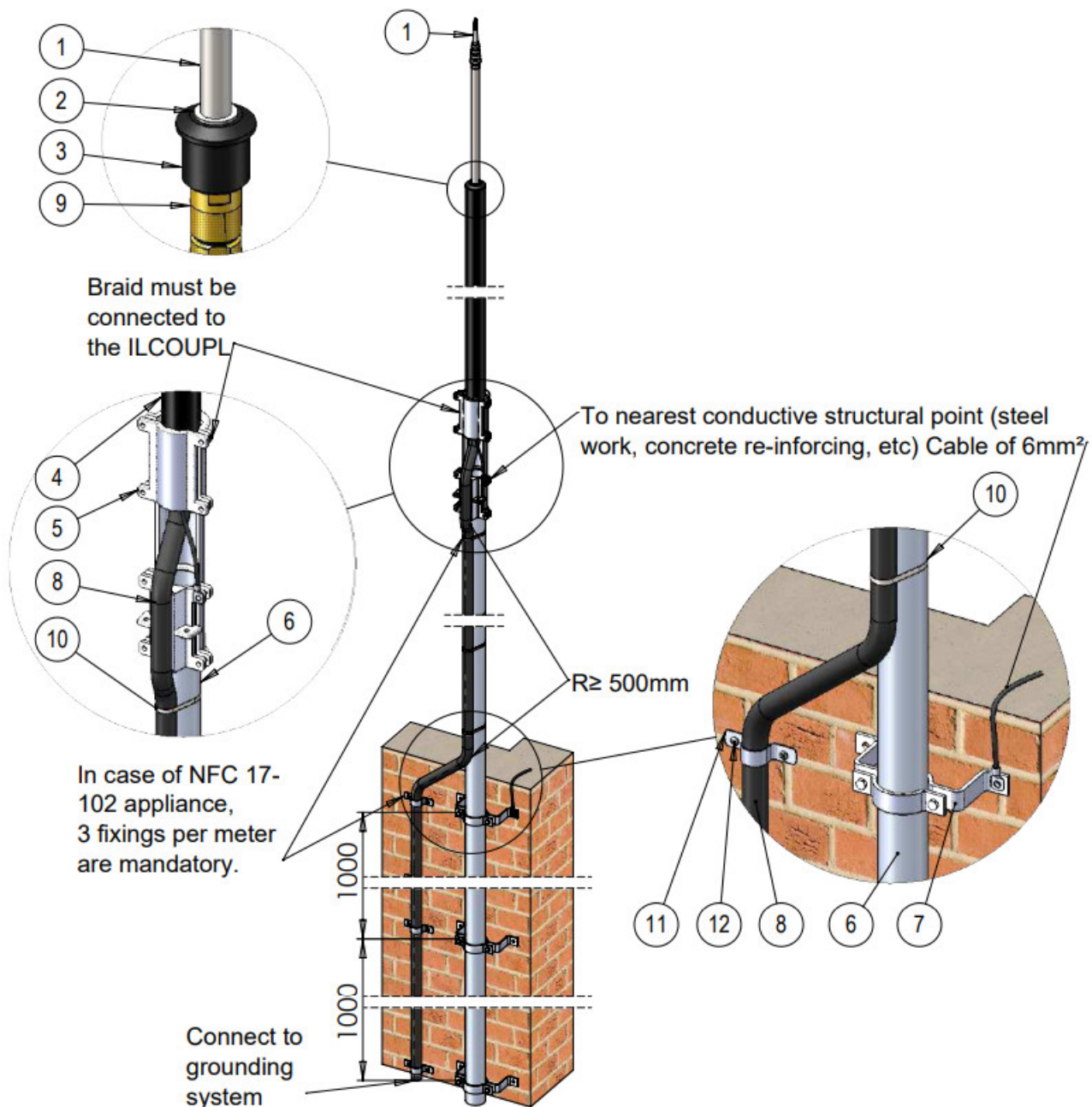
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| 5    | ILCOUPL         | 1               | MAST COUPLER                         |
| 6    | ALUM6M 701390   | 1               | ALUMINUM MAST WITH BASE              |
| 7    | 7000250S4       | 3               | OFFSET PIPE CLAMP                    |
| 8    | ERICORE         | 1               | ERICORE INSULATED DOWN CONDUCTO<br>R |
| 9    | ERICORETRMOS    | 1               | ERICORE FACTORY TERMINATION          |
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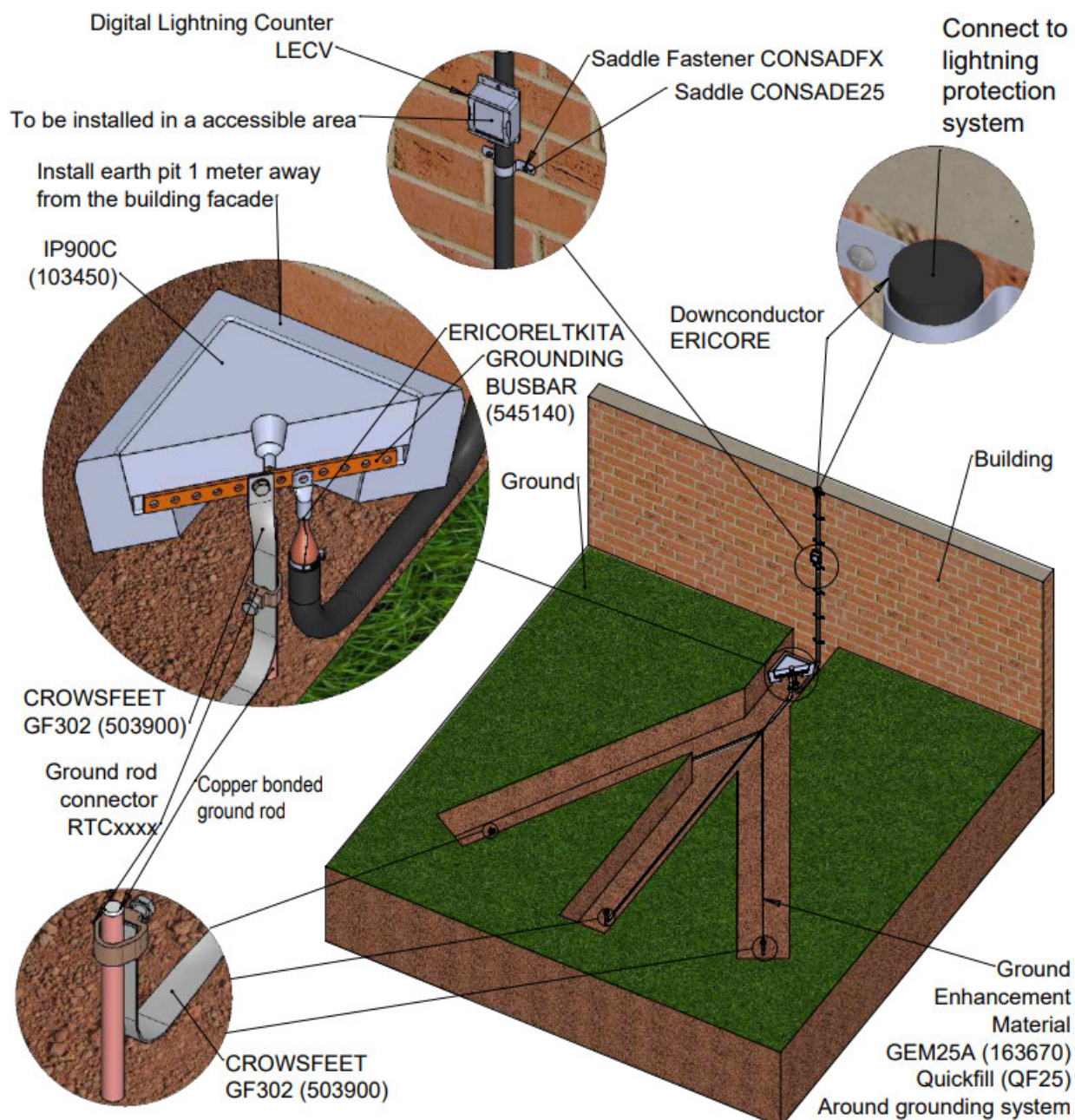
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## GROUNDING SYSTEM



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## Parts and accessories

|   |  |  |
|---|--|--|
| <div><div>LIGHTNING SYSTEM</div><div>EARLY STREAMER EMISSION TERMINAL</div><div>-SI25I</div><div>-SI40I</div><div>-SI60I or SI60I316</div><div>ALUMINUM MAST</div><div>-ALUM3M (502000)</div><div>-ALUM4M (701370)</div><div>-ALUM5M (701380)</div><div>-ALUM6M (701390)</div><div>ERICORE FIBERGLASS MAST</div><div>-FRP2MBLACK (702030)</div><div>-FRP2MWHITE (702040)</div><div>MAST COUPLER</div><div>-ILCOUPL (701320)</div><div>OFFSET PIPE CLAMP</div><div>-7000250S4 (702065)</div></div> <div></div> | <div><div>GROUNDING SYSTEM</div><div>GROUND ROD</div><div>nVent ERICO Ground Rod</div><div>GROUND ROD TO CONDUCTOR</div><div>INSPECTION HOUSINGS</div><div>GROUNDING BUSBAR</div><div>PREFABRICATED CROWSFEET</div><div>-GF302 (503900)</div><div>QUICKFILL (QF25)</div><div>GEM25A (163670)</div><div>nVent ERICO GEM</div><div>LIGHTNING EVENT COUNTER</div><div>-LECV</div><div>-LECIV (702050)</div></div> <div></div> |  |
| <div><div>CONDUCTOR</div><div>-ERICORE (701875)</div></div> <div></div>  | <div><div>ERICORE FACTORY TERMINATION</div><div>-ERICORETRMIS (701895)</div><div>-ERICORETRMOS (701915)</div></div> <div></div>   | <div><div>ERICORE TERMINATION KIT</div><div>-ERICORE/UTKIT/B</div><div>-ERICORE/LTKIT/A</div></div> <div></div> |

## FASTENERS

### CABLE TIE

-CABTISS (701420)



-CONSADE25 (701990)

-CONSADFX (01410)



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#### **Installation Guidelines**

This manual is a guide to the installation, operation and maintenance of the nVent ERICO SYSTEM 1000 Lightning Protection System. It assumes that the system to be installed has been designed by an authorized nVent representative. The system design will include:

- Grounding systems design – a configuration should be designed as a result of soil resistivity analysis.
- Downconductor routes – chosen to avoid other services maintain minimum bending radius of 20 cm (8 inches) or greater and minimize downconductor run length.
- Downconductor securing requirements.
- LPSD – CAD analysis design software which determines terminal placement, mast & height requirements as well as protection level calculation.

All of the above are recommended for a successful installation. If there is any doubt about any of the points mentioned, please contact nVent or its nearest representative for clarification.

For additional details on installing your nVent ERICO SYSTEM 1000, please refer to nVent's technical notes and the French standard NFC17-102. It is also recommended to adhere to local standards for relevant local downconductor and grounding requirements.



**Warning** – Do not attempt to install the nVent ERICO SYSTEM 1000 during periods of lightning activity.

#### **Installation**

The recommended order of installation is as follows:

1. Full installation of the grounding system.
2. Full installation of the downconductor(s).
3. Termination of the downconductor(s) to the grounding system.
4. Terminate the top of the downconductor(s) to the nVent ERICO SYSTEM 1000 mast.
5. Attach the terminal to the top of the mast.
6. Raise the mast into position and secure.
7. The nVent ERICO SYSTEM 1000 must be at least two meters higher than any point on the structure it is intended to protect.

8. The resistance of the lightning protection grounding system must be less than 10 ohms. This should be measured without downconductor(s) connected and without interconnection to other grounding systems.

### **Operation**

The nVent ERICO SYSTEM 1000 lightning protection system requires no user operation: it is completely automatic in operation.

1. The nVent ERICO SYSTEM 1000 becomes active only during storm activity.
2. The system does not require any external power requirements or replacement components for normal operation.

### **Maintenance**

It is essential that the nVent ERICO SYSTEM 1000 Lightning Protection System be regularly maintained. Maintenance should be undertaken after each known strike to the nVent ERICO SYSTEM 1000 or at least once per year or if any changes or additions have been made to the structure.



Do not attempt maintenance during potential lightning activity.

### **Maintenance should be undertaken as follows:**

1. Check that the building is the same physical shape and that no additional structures such as antennae, advertising signs, satellite dishes, building maintenance units or similar have been installed within 2 m (80 in.) height of the nVent ERICO SYSTEM 1000.
2. Inspect the nVent ERICO SYSTEM 1000 terminal to ensure that it is not dented or physically damaged in any way.
3. Inspect the finial tip on top of the nVent ERICO SYSTEM 1000 to ensure that it is not excessively burnt, deformed or missing.
4. Check that the mast is securely attached to the structure. Check that the guys are secure and undamaged. Replace if necessary. Check that all fastenings are secure and tight.
5. Look for signs of damage to the downconductor (whether by lightning, careless handling, vandalism or other causes).
6. Check that the Lightning Event Counter is secured and if the display is registering a reading, then record the reading and date.
7. Ensure the grounding resistance is less than 10 ohms.
8. Check the continuity of all bonding conductors.

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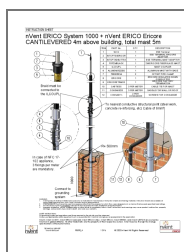
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## Documents / Resources



[nVent ERICO IP900C System Above Building](#) [pdf] Instruction Manual  
IP900C System Above Building, IP900C, System Above Building, Above Building, Building

## References

- [!\[\]\(83eb2aa26b610eb6a9dca7cf4702d681\_img.jpg\) nVent CADDY, ERICO, ERIFLEX, LENTON New Website | nVent](#)
- [!\[\]\(94dfacbf937cdd7da4837a6fcd8fc785\_img.jpg\) Building a more Sustainable and Electrified World | nVent](#)
- [!\[\]\(dae8c3c5fa7c80febd6526a5e8a853bf\_img.jpg\) nVent ERICO Ericore Fiberglass Mast | nVent ERICO](#)
- [!\[\]\(8f38ab9775d1331a4e1fd6648d0a83f1\_img.jpg\) Ground Rods | nVent ERICO](#)
- [!\[\]\(5e48b3241d711ef916255d822ab3415f\_img.jpg\) Aluminum Mast | nVent ERICO](#)
- [!\[\]\(c4c3604751fde0df44855086d7798e30\_img.jpg\) Early Streamer Emission Terminal | nVent ERICO](#)
- [!\[\]\(a16ee0329f478adb49fd7876490e96fe\_img.jpg\) Ground Rod to Conductor | nVent ERICO](#)
- [!\[\]\(a8a494e883c31c6f4a74584cc935a790\_img.jpg\) Inspection Housings | nVent ERICO](#)
- [!\[\]\(8a50a875cd94cd57f6a7348a4d34b45f\_img.jpg\) Mast Coupler | nVent ERICO](#)
- [!\[\]\(7ddc0498d10972f0f157498fccf65370\_img.jpg\) Mast Bracket, Offset | nVent ERICO](#)
- [!\[\]\(1481f3a2b8d8d64dbbf1eb2242b57620\_img.jpg\) 700 Offset Pipe Clamp, S304, 2 1/2" Pipe, 2.875" OD | nVent ERICO](#)
- [!\[\]\(1d12b5523dd7503f9f6b056602d4b0bb\_img.jpg\) Aluminum Mast, 9.843' | nVent ERICO](#)
- [!\[\]\(a3cf9896eece75d50b7dee194989c9bc\_img.jpg\) Aluminum Mast, 19.685' | nVent ERICO](#)
- [!\[\]\(26147612c3694ee09d020cac0faae7d9\_img.jpg\) Cable Tie | nVent ERICO](#)
- [!\[\]\(46af714d66844046465576855b12c56a\_img.jpg\) nVent ERICO Ericore Conductor Saddle, Stainless Steel, 1.456" OD | nVent ERICO](#)
- [!\[\]\(e123f1fe9eaf288ea9a688d32daa4ea4\_img.jpg\) nVent ERICO Ericore Conductor Saddle Fastener | nVent ERICO](#)
- [!\[\]\(780c9e9bdcf3e80b97a0a12adfab01dc\_img.jpg\) GEM Ground Enhancement Material, 25 lb, bag with handles | nVent ERICO](#)
- [!\[\]\(dd4f403c0f3886141896591186a0332a\_img.jpg\) Mast Coupler, Aluminum, 18.7" x 5.39" x 4.49" | nVent ERICO](#)
- [!\[\]\(eba5717f9532900568c94b25862a3240\_img.jpg\) Mechanical Lightning Event Counter \(2 kA 8/20  \$\mu\$ s\) Trip Threshold | nVent ERICO](#)
- [!\[\]\(8787ffe874068f6bc6ac6dfc8c73a8ea\_img.jpg\) Digital Lightning Event Counter | nVent ERICO](#)
- [!\[\]\(4bf65409525017dedd6ddb75688acc31\_img.jpg\) Quickfill No-Mix Ground Enhancing Backfill | nVent ERICO](#)
- [!\[\]\(83155363cfc680b4fdc84409779c43c2\_img.jpg\) Early Streamer Emission Terminal, Stainless Steel 304L \(EN 1.4306\), 25  \$\mu\$ s Triggered Advance,  \$\Delta T\$  | nVent ERICO](#)
- [!\[\]\(7df4dc75718f5564bb085b99af0d0d10\_img.jpg\) Early Streamer Emission Terminal, Stainless Steel 304L \(EN 1.4306\), 40  \$\mu\$ s Triggered Advance,  \$\Delta T\$  | nVent ERICO](#)
- [!\[\]\(61d1cd78c9c864118ea1680747722675\_img.jpg\) Early Streamer Emission Terminal, Stainless Steel 304L \(EN 1.4306\), 60  \$\mu\$ s Triggered Advance,  \$\Delta T\$  | nVent ERICO](#)
- [User Manual](#)