

Basic installation guidelines for GC Trays cable trays and rules for safe operation

Installation and safety instructions – official version

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1. General installation rules

- Use only the bolts and mounting kits recommended by the manufacturer (details in the relevant sections of the documentation)
- The number of bolt sets must not be lower than specified for the given connection (details in the individual sections)
- Tighten bolts and threaded rods in accordance with the tightening torque table (Table 1)
- Walking or standing on cable trays is strictly prohibited
- Do not lean scaffolding or building elements against the cable routes and do not load the structure with other installations
- Do not place heavy objects on the cable routes
- Select materials and coatings of the components according to the corrosivity category of the environment
- Protect edges against corrosion after cutting/drilling (details in the warranty)
- Insert bolts from the inside of the tray/ladder – nuts on the outside of the side wall

2. Cable trays, ladders, ducts and profiles (summary guidelines)

This version summarises the most important installation rules for the individual systems. Detailed information, including the arrangement and number of bolt sets and the types of connectors, can be found in the relevant sections of the GC Trays documentation.

- Cable trays can be joined longitudinally or at an angle using the various connectors and fittings of the cable tray system, with the number of bolts and nuts intended for this purpose. Tighten all bolted joints to the torque given in Table 1.
- C-profiles: use connectors such as LOK40, LOKK40, LPKP2... for joining; install them with the number of bolts and nuts intended for this purpose – see the catalogue data sheets for details. Tighten all bolted joints to the torque given in Table 1.
- Cable ladders: can be joined longitudinally or at an angle using the various connectors and fittings of the cable ladder system, with the number of bolts and nuts intended for this purpose – see the catalogue data sheets for details. Tighten all bolted joints to the torque given in Table 1.
- Self-supporting trays and ladders: use the dedicated connectors and fittings of the self-supporting system for joining, with the number of bolts and nuts intended for this purpose – see the catalogue data sheets for details. Tighten all bolted joints to the torque given in Table 1.
- Wire mesh trays: use the dedicated connectors and fittings of the wire mesh tray system for joining, with the number of bolts and nuts intended for this purpose – see the catalogue data sheets for details. Tighten all bolted joints to the torque given in Table 1.
- Lighting system: use the dedicated connectors and fittings of the lighting system for joining, with the number of bolts and nuts intended for this purpose – see the catalogue data sheets for details. Tighten all bolted joints to the torque given in Table 1.
- Machine power supply system: use the dedicated connectors and fittings of the machine power supply system for joining, with the number of bolts and nuts intended for this purpose – see the catalogue data sheets for details. Tighten all bolted joints to the torque given in Table 1.

3. Support structures

- Select structures according to the expected loads on the cable route
- Choose the support spacing so that the permissible loads and deflections of both the support

structures and the cable routes are not exceeded

- Fix trays and ladders securely using dedicated clamps
- Do not exceed the limit parameters (loads, spacing, lengths)

4. Safety rules

- The cable route must be designed and selected by qualified persons (with licences where required), taking into account the intended use, dimensions, loads, material and corrosive environment
- Installation and earthing must be carried out by qualified electrical installation specialists.
- Inspections, servicing and cleaning – at least once every 12 months
- Cable routes must not be used as walkways – walking, climbing and suspending from them is prohibited
- It is prohibited to use the cable routes for storing/suspending other elements and installations

Additional information

Complaints will not be considered if the above installation guidelines have not been followed. Further installation examples can be found in the GC Trays catalogue (with the products and at the end of each section). For technical matters, please contact the GC Trays Technical Department.

Tightening torques for bolts and threaded rods [Nm]

Thread size	Property class 5.8	Property class 8.8
M6	6.2	9.6
M8	15.2	23.0
M10	30.0	46.0
M12	52.0	79.0

Table 1