

## Precautions

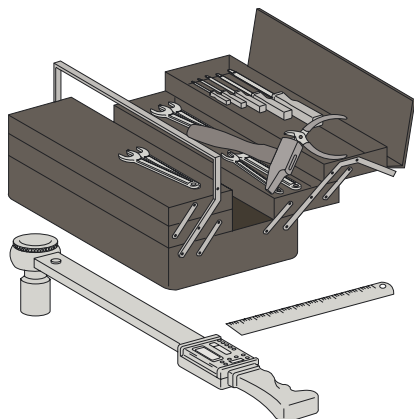
### G System

If a crane or bridge crane is to be used, use slings of appropriate resistance and which are in a good state of repair:

- for a single enclosure or panel, the lifting rings or a lifting beam must be used
- for combined units, lifting beams must be used. These are fixed to the rear of the combination to provide rigidity, particularly during transport, and allow it to be lifted.

### Precautions to be taken during the storage of Prisma Plus "P System" columns

- The columns must be stored in the upright position in a dry and ventilated place, sheltered from rain, bad weather, streaming water, dust and chemical agents.
- Apart from IP55 columns, never store columns outdoors, even under an awning or tarp.
- The columns must preferably remain packed until they are installed. So they are protected against all harmful effect (projections, shocks).
- Acceptable storage temperature is  $-25^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$  (until  $+70^{\circ}\text{C}$  for short periods not upper than 24 h)
- To ensure easy, risk-free handling, the columns, in view of their great weight, must be stored on a stable, rigid and flat floor.



## Tools required

- Torque wrench with sockets and ring bits to tighten the electrical connections to the correct torque (max. torque 50 N.m).
- Ratchet wrench with sockets.
- Extension.
- 7, 8, 10, 13, 16, 17 and 19 mm sockets.
- Bit holder socket.
- Screwdriver.
- Bit holder for screwdriver.
- 4, 5, 6, 8 and 10 mm hexagonal-head bits.
- Pozidriv no. 1, 2 and 3 bits.
- 3, 5, 4, 5.5 and 8 mm flat screwdrivers.
- Jig saw.
- 15 and 27 mm open-ended spanners.
- Adjustable clamp to align cubicles.
- Spirit level.
- Rubber mallet.
- Hydraulic jacks able to operate in the horizontal position to allow the cubicles to be lifted and moved sideways if necessary.
- Drill.
- Electric saw.
- Vacuum cleaner to clean the switchboards.
- Coloured, indelible and temperature resistant acrylic varnish.
- Electrician's knife.
- Flat-nosed pliers.
- Wire strippers.
- Wire cutters.
- Crimping tool.
- Diagonal cutters.
- Semi-circle nosed pliers.
- Buzzer or tester.
- Measurement and inspection tools and instruments.

## Specific tools

### Torque wrench

- Torque wrench characteristics:

- power: 75 Nm.
- thin profile for certain tightening operations on busbars.

- FACOM torque wrench.

One torque wrench model (FACOM brand) has the power and characteristics suited to tightening under difficult access conditions (busbar joints, etc).

- Tool references:

- SP3723 = wrench handle, essential
- SP3721 = extra-flat ratchet adapter, essential
- SP3722 = ratchet for ordinary sockets, optional (fits handle SP3723).

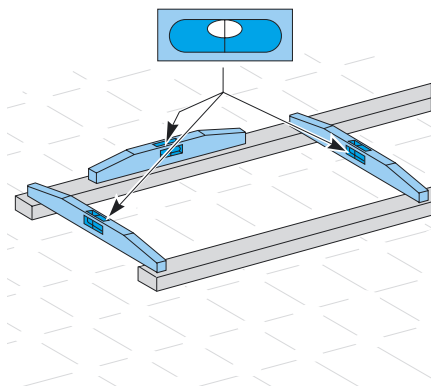
- **Reference numbers of extra-flat sockets for pawl SP3721 + handle SP3723:**

- SP2709 = extra-flat 13 mm short socket
- SP2709A = extra-flat 13 mm long socket
- SP4369 = extra-flat 16 mm short socket
- SP4370 = extra-flat 16 mm long socket
- SP2710 = extra-flat 17 mm short socket
- SP4371 = extra-flat 19 mm short socket
- SP4372 = extra-flat 19 mm long socket.

## Tools application

- Removable cross-member: Allen key, no. 5.
- Busbar jointing: socket no. 13 for M8 torque nut.
- Cubicle assembly: socket no. 10 for M6 screw.
- Floor fixing:
  - sockets 16 and 17 for fixing screws
  - end-wrench 15 and 27 for the leveling kit.
- Fitting of roof, side panels and base: 8 mm flat screwdriver.
- Gland plate: Pozidriv n°2 screwdriver.



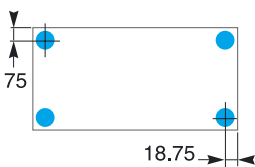
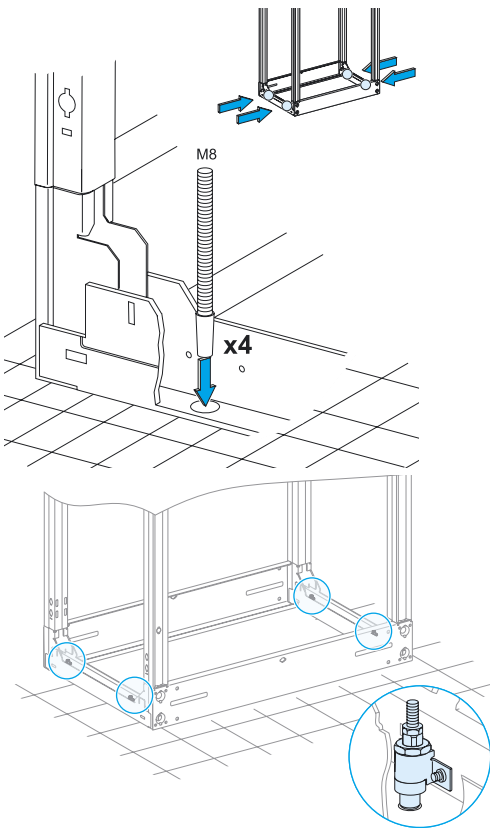


## General information specific to the P system

- The place of installation of the switchboard must be clean.
- It is necessary to have an even floor: + or - 2 mm/m (in this case the cubicles can be fixed using screws + expansion rawlplug or bolts).
- For floors with evenness > 2 mm/m, it's necessary to provide either U or I sectioned supports, whose straightness and level must be checked in both directions, or to install the leveling kit (ref. 08702).

### Systematic use of sectioned supports is recommended to simplify mechanical assembly between cubicles and fishplating of busbars

- If possible, apply a dust-proof paint on the floor to limit pollution inside the switchboard.
- Also leave extra space if future extensions are planned.



Center to center distance between cubicle floor fixing points for standard fixing (bolt or screw + rawlplug) or using the leveling kit (+ rawlplug)

Several switchboard fixing possibilities exist, according to the type of connection:

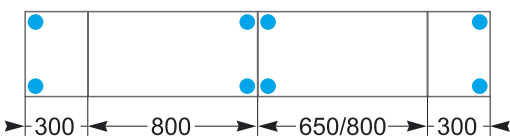
#### ■ floor/wall fixing (kit ref. 08704):

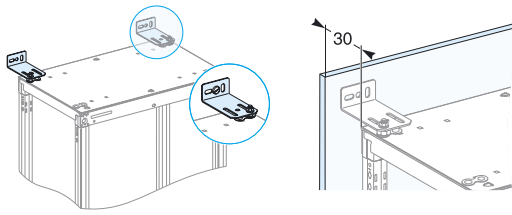
- wall brackets used to secure the top of the cubicle to the wall
- offset floor clamps used to secure the cubicle to offset anchor bolts for easy access

#### ■ floor fixing:

- standard using bolt or screw + rawlplug
- using the leveling kit (ref. 08702) + rawlplug
- using clamps for raised flooring (ref. 08703). These are attached to U or I profile sections.

- It is recommended to use adjusting devices when combining cubicles.

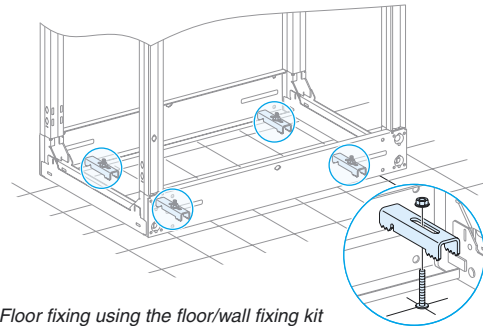




Wall fixing

### Front connection

Contains a lot of switchgear, it is recommended to provide a minimum gap of 100 mm at the back of the switchboard to allow good ventilation.

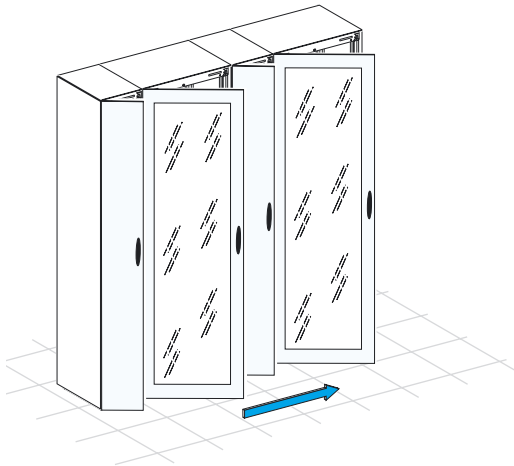


Floor fixing using the floor/wall fixing kit

The switchboard can be fixed both on the wall and the floor using the floor/wall fixing kit (ref. 08704):

- the wall brackets allow cubicles to be fixed to the wall with a 30 mm space between the cubicle and the wall
- the floor clamps allow the switchboard fixing points to be offset on the floor for better accessibility.

A minimum space of 1200 mm must be arranged at the front of the switchboard to allow complete opening of doors and handling of a device using a fork-lift truck. Fit the doors according to the direction in which the device is to be removed.



Direction of removal