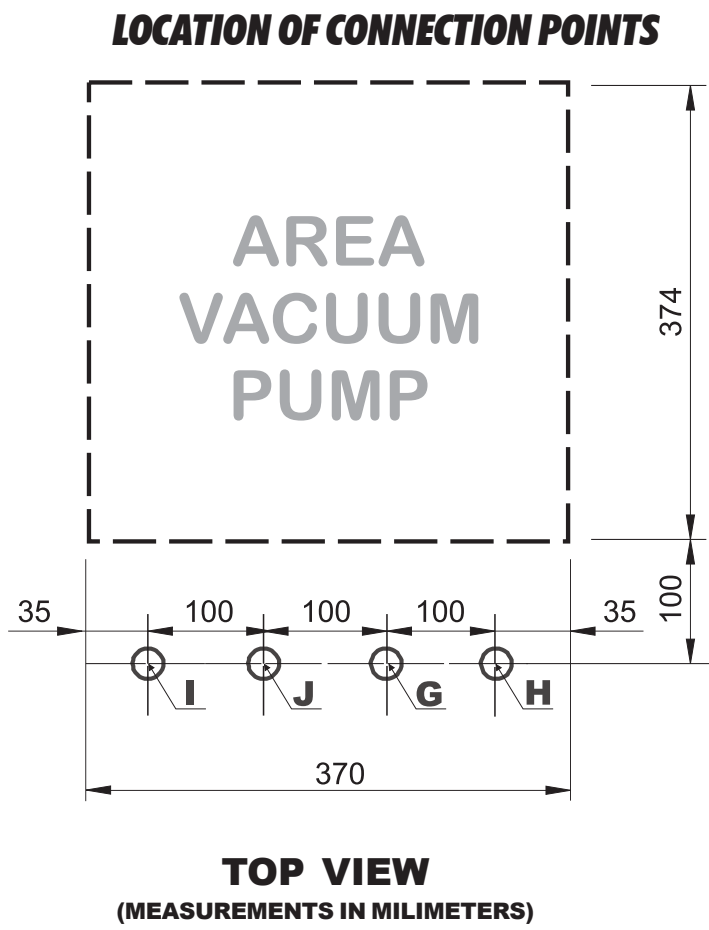


LOCATION PLANT_Vacuum Pump Bio Vac II / IV - “External Connection”

ELECTRICAL INSTALLATION_Vacuum Pump Bio Vac II / IV / Timex 70 C X-Rays

The vacuum pump can be installed inside the dental office in a room aside of the main working or in a room proper for the installation of machinery. It's important that the room to be protected from humidity, direct exposure to the sun rays and with good ventilation.



It's highly recommended that the Gnatius Authorized Technician supervises the hydraulic, electric, air and drainage installation (lower part, according to pre installation manual).

Access our web site
www.gnatus.com.br
Look for the nearest technical service office's address.

Specialized Technical Service
Promptness, safety and efficiency
guarantee the best after-sale customer service.

GNATUS
EQUIPAMENTOS MÉDICO-ODONTOLÓGICOS LTDA.
Rod. Abílio Assed, Km 53+450m
CEP 14097-500 - Ribeirão Preto - S.P. - Brasil
Fone (16) 2102-5000 - Fax (16) 2102-5001
C.N.P.J. 48.015.119/0001-64 - Insc. Est. 582.329.957/115
www.gnatus.com.br - e-mail: gnatus@gnatus.com.br

PRE-INSTALLATION MANUAL

The well functioning and durability of the gnatus dental set are directly influenced by the pre-installation, which should done according to instructions in this plant.

Directions to preparing the pre-installation of the dentist's office

In order to ensure the correct operation of the dentist's office, we recommend that a qualified technician perform the pre-installation. Any damage to the equipment caused by a failure (electrical, hydraulic or pneumatic) in the pre-installation will not be covered by the warranty.

Dear customer

Congratulations. You have made a good choice when you decided to buy a GNATUS QUALITY product comparable to the best products available in the World. This manual is a general presentation of your product and it will give you important details. We must also point out to you our chain of authorized dealers. Only dealers that make part of this chain will be able to keep your equipment constantly new for they count on technical assistants who have been trained and on specific tools for the correct maintenance of your equipment.

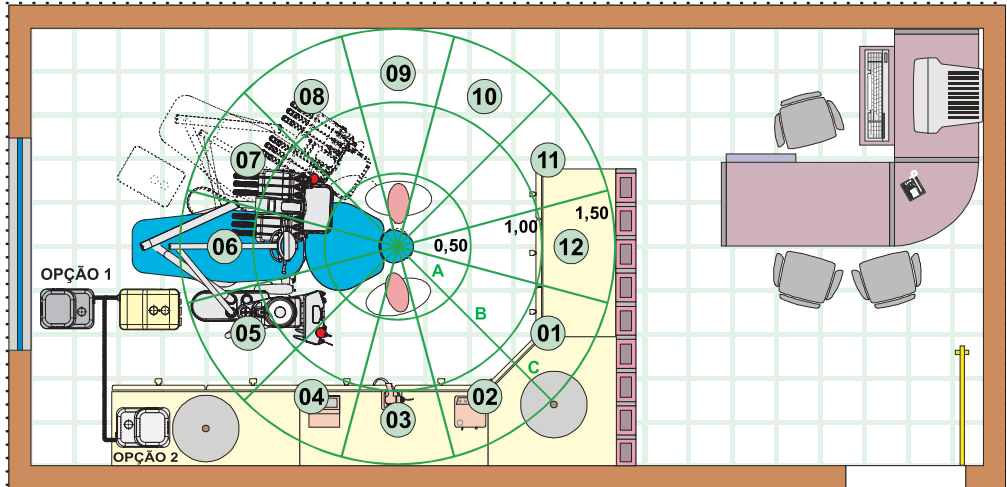
Doubts and information: GNATUS Call center (55-16) 2102-5000.

Dental set ergonomic installation

To obtain the best office space distribution, the place must be chosen to provide comfort to the operator in order to obtain good productivity.

For this reason the equipment installation must be done under the strict recommendations by the I.S.O.(International Standards Organization) and the I.D.F. (International Dental Federation).

To asses the equipment installation the I.S.O./I.D.F. made as a standard to divide the room in areas (see illustration). To perform



ROOM AREA DIVISION

6-12 HOURS AXEL

Divide the room in two areas: to the right and to the left of the dental chair. These areas are reserved to the dentist and his/her assistant respectively.

AREA LIMITED BY THE CIRCLE (A):

It's where everything is transferred to the patient's mouth (the instruments and the tip of the hand pieces). This room should also have two stools.

AREA LIMITED BETWEEN CIRCLES (A) AND (B):

It's the useful area that can be reached by the movements of a stretched arm.

AREA LIMITED BETWEEN CIRCLES (B) AND (C):

Sinks and cabinets are inside this area and once the drawers are open these should reach the area within circle (B).

POWER RATING

SYNCRUS DENTAL CHAIR 200 VA

SYNCRUS GL DENTAL CHAIR 200 VA

SYNCRUS GLX DENTAL CHAIR 530 VA

LED DENTAL LIGHT - 5 LEDs 60 VA

LED DENTAL LIGHT - 3 LEDs 40 VA

PERSUS L DENTAL LIGHT 55 VA

PERSUS GL DENTAL LIGHT 55 VA

STORUS GLX DENTAL LIGHT 60 VA

X-RAY TIMEX 70 1540 VA

OPTILIGHT LD MAX 17 VA

OPTILIGHT CL ALCANCE 45 VA

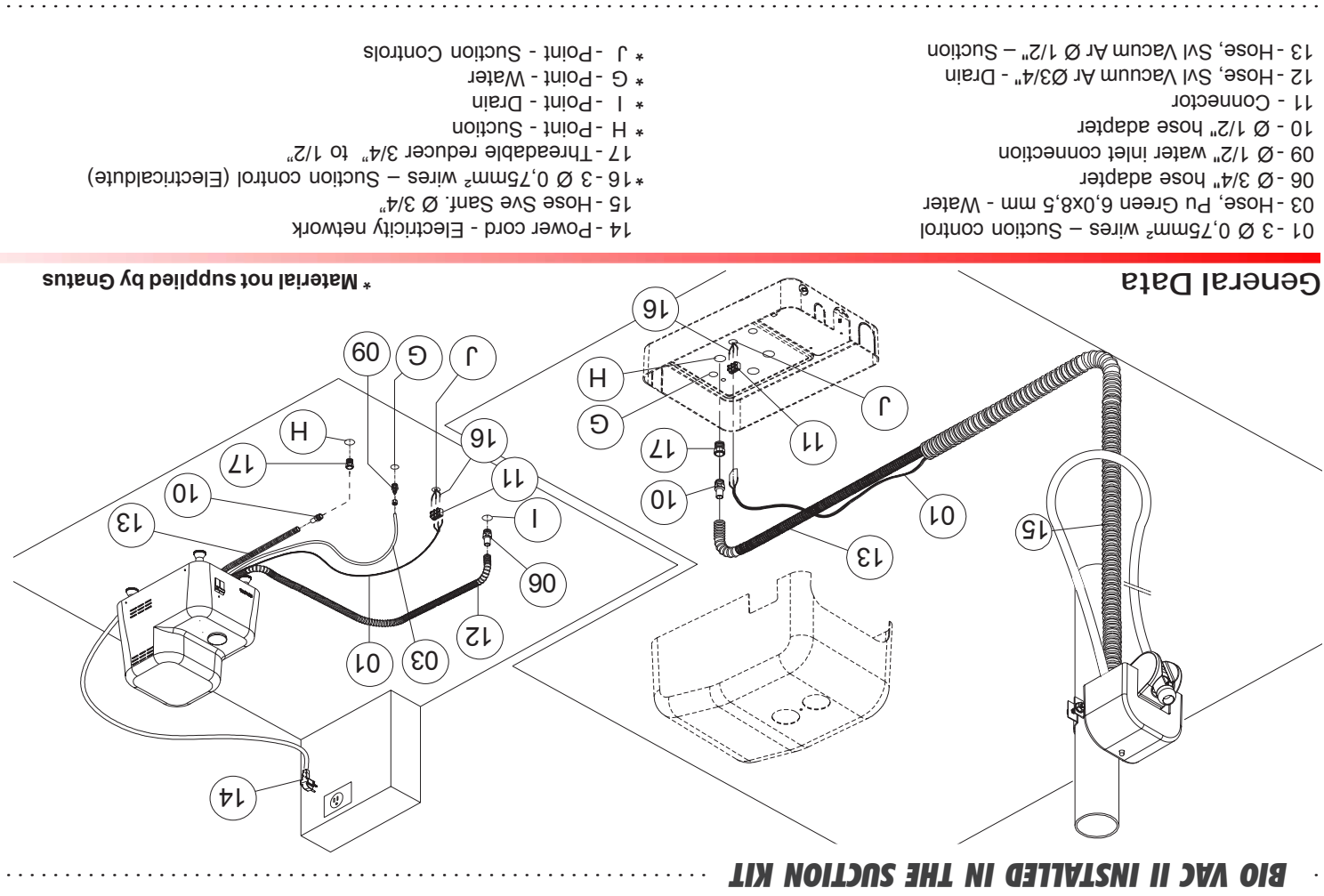
JET-SONIC 60 VA

AMALGAMIX II 110 VA

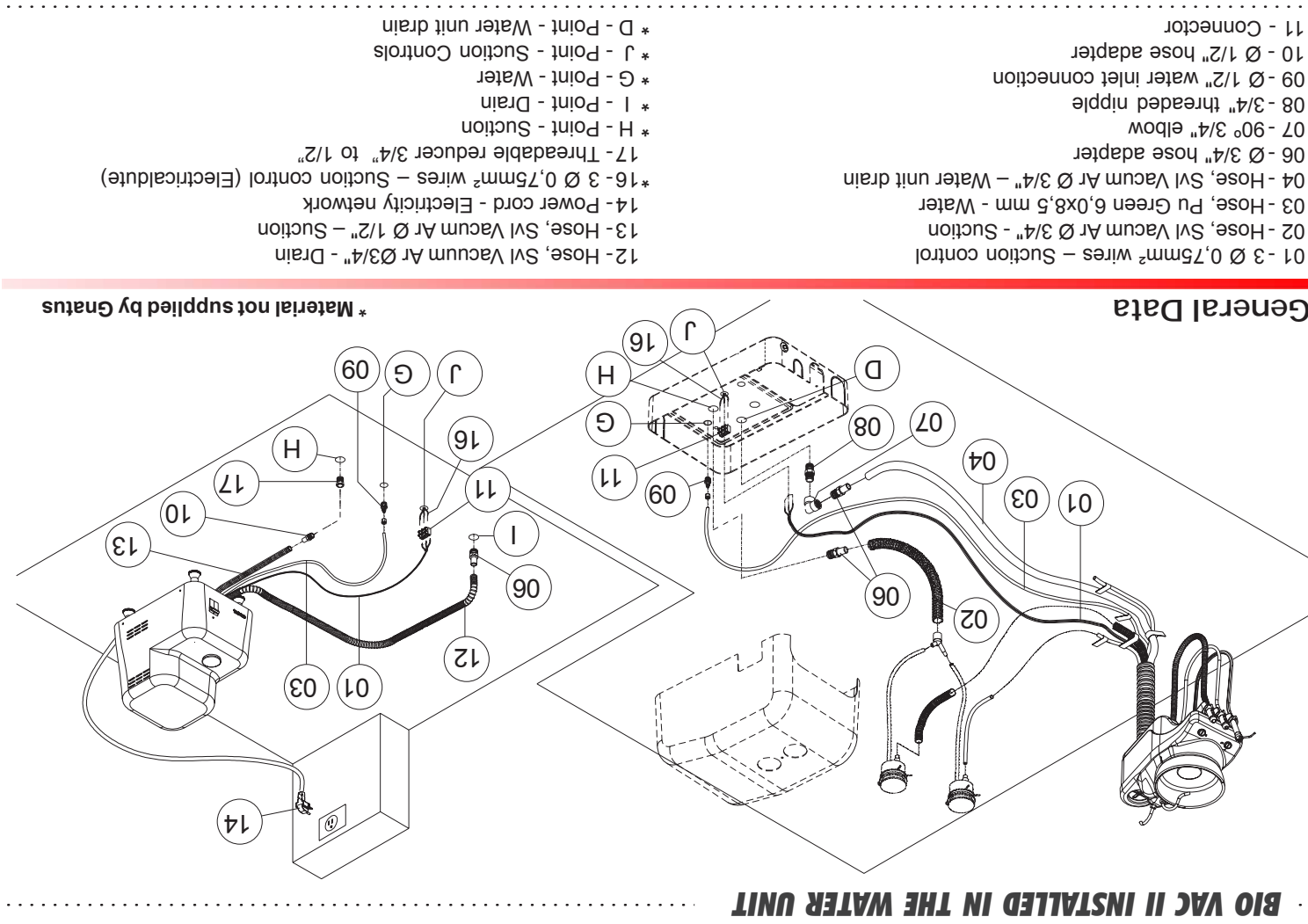
BIO-VAC IV 1650 VA

BIO-VAC II 1100VA

AUTOClave BIOCLAVE 12L 1600VA

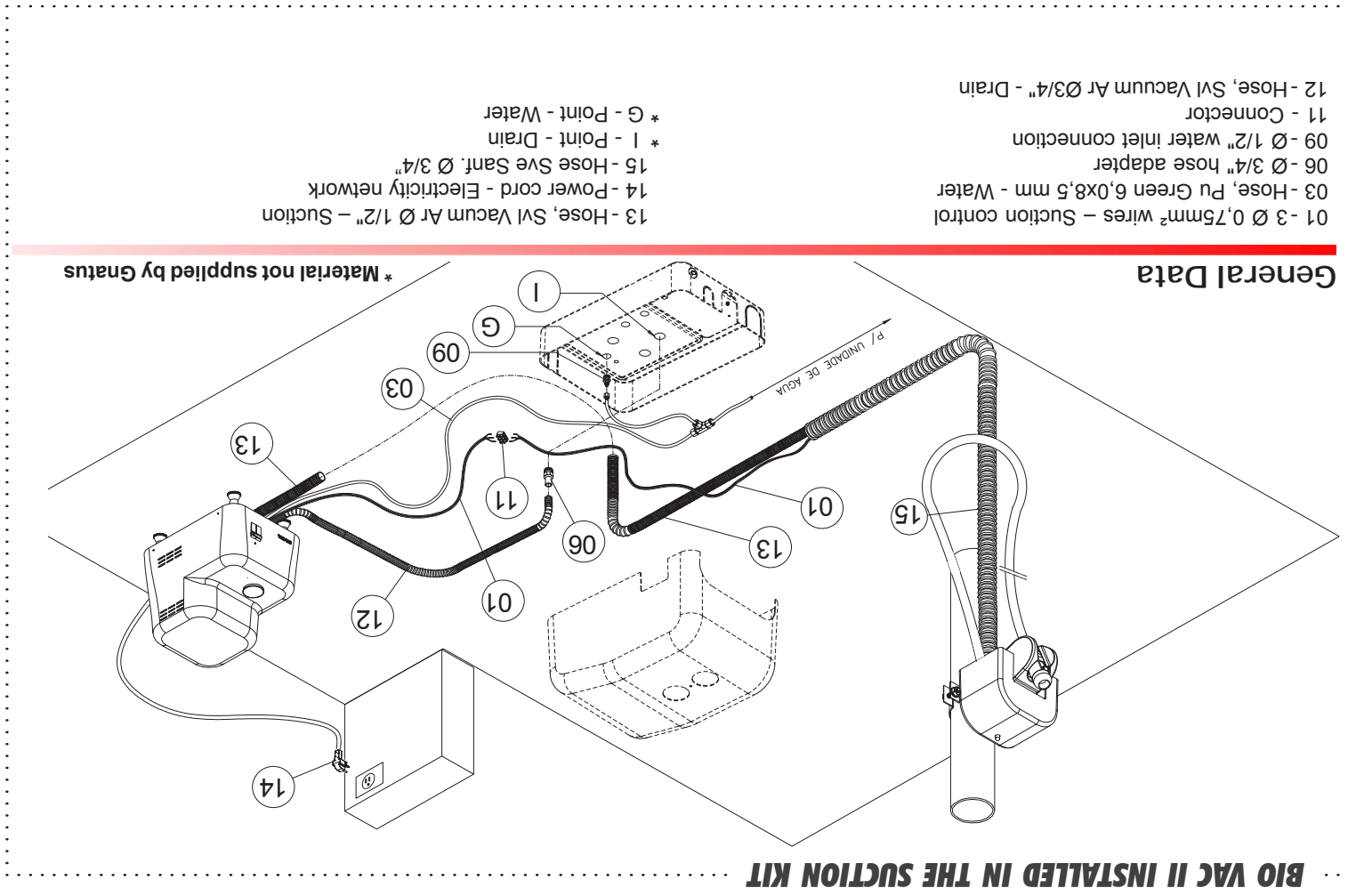


BIO VAC II INSTALLED IN THE SUCTION KIT

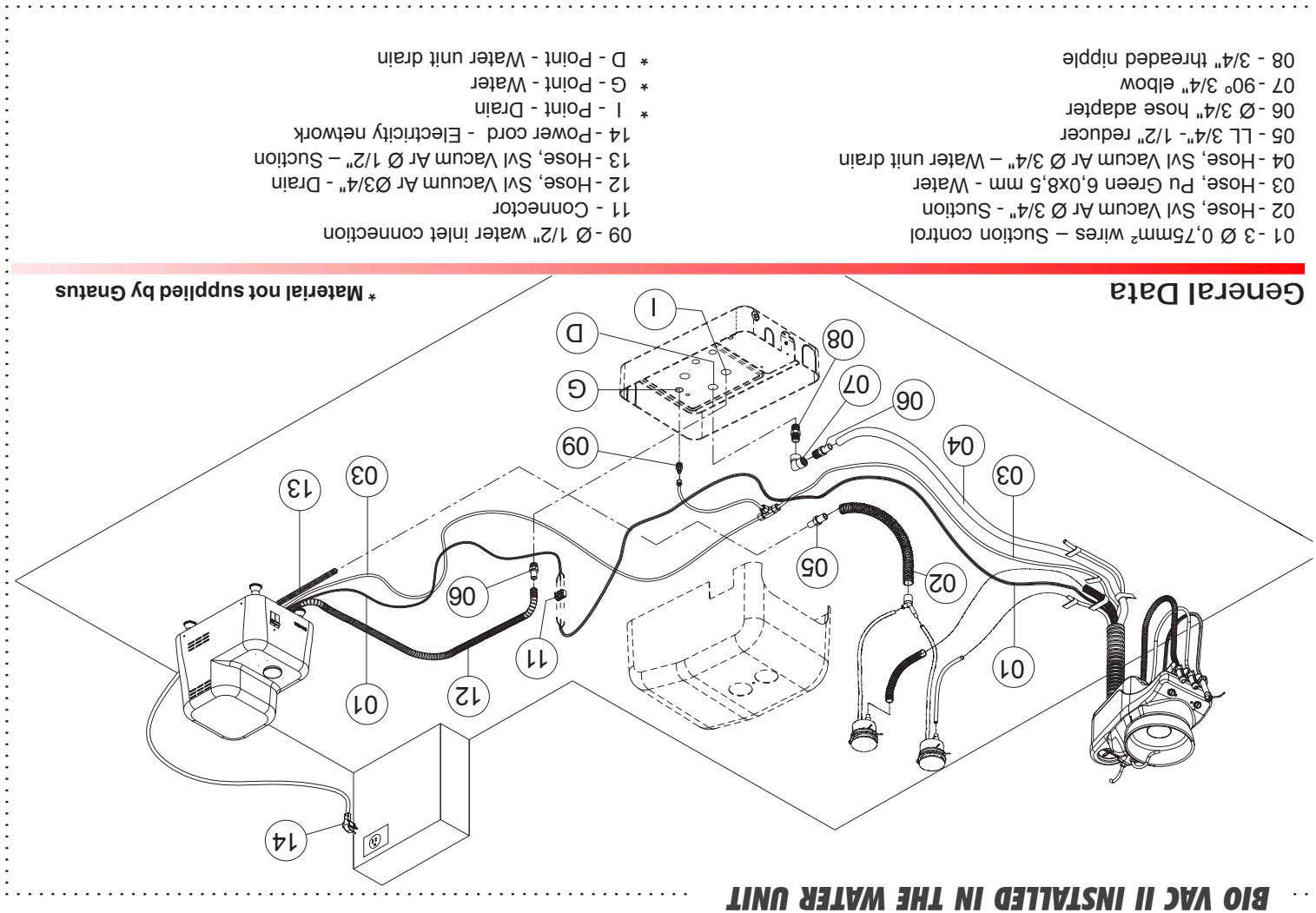


BIO VAC II INSTALLED IN THE WATER UNIT

BIO VAC II INSTALLATION OUTSIDE THE DENTIST'S OFFICE



BIO VAC II INSTALLED IN THE SUCTION KIT

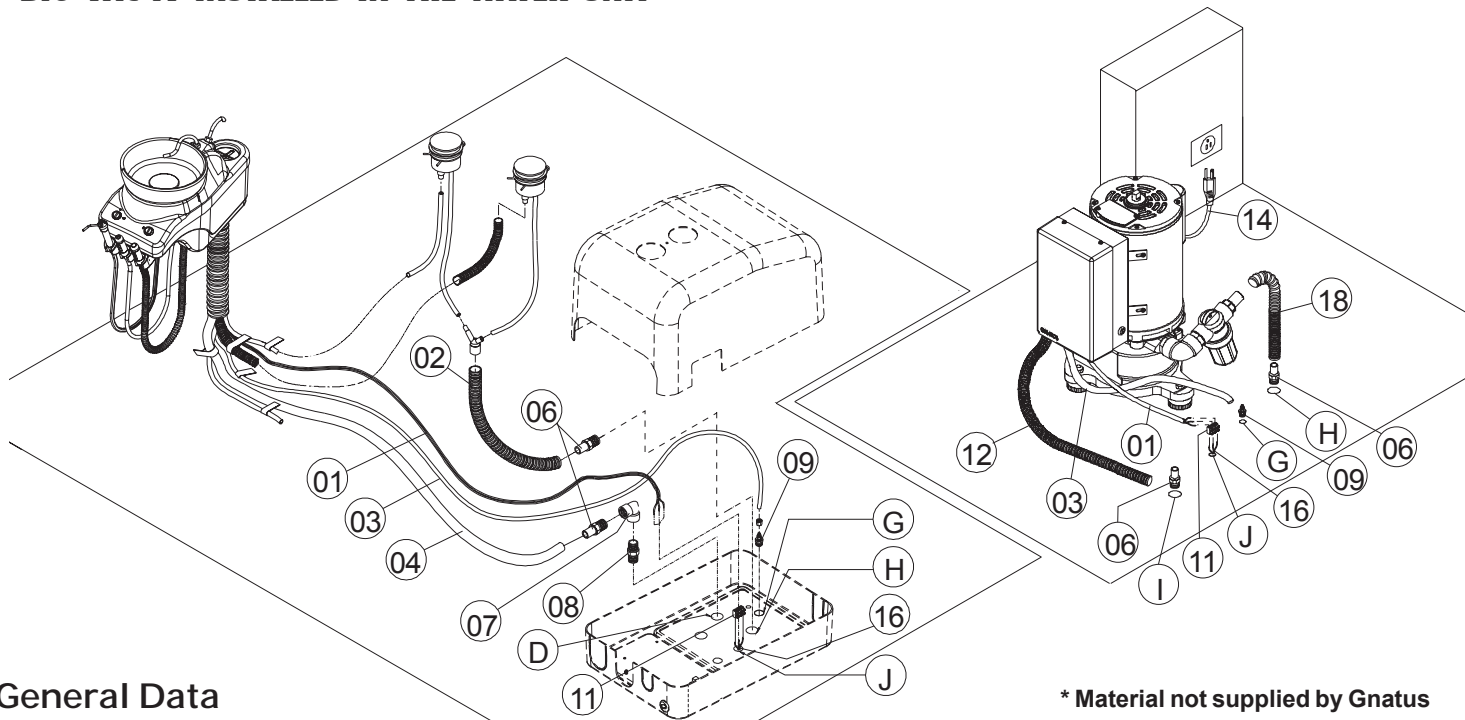


BIO VAC II INSTALLED IN THE WATER UNIT

BIO VAC II INSTALLATION INSIDE THE DENTIST'S OFFICE

BIO VAC IV INSTALLATION OUTSIDE THE DENTIST’S OFFICE

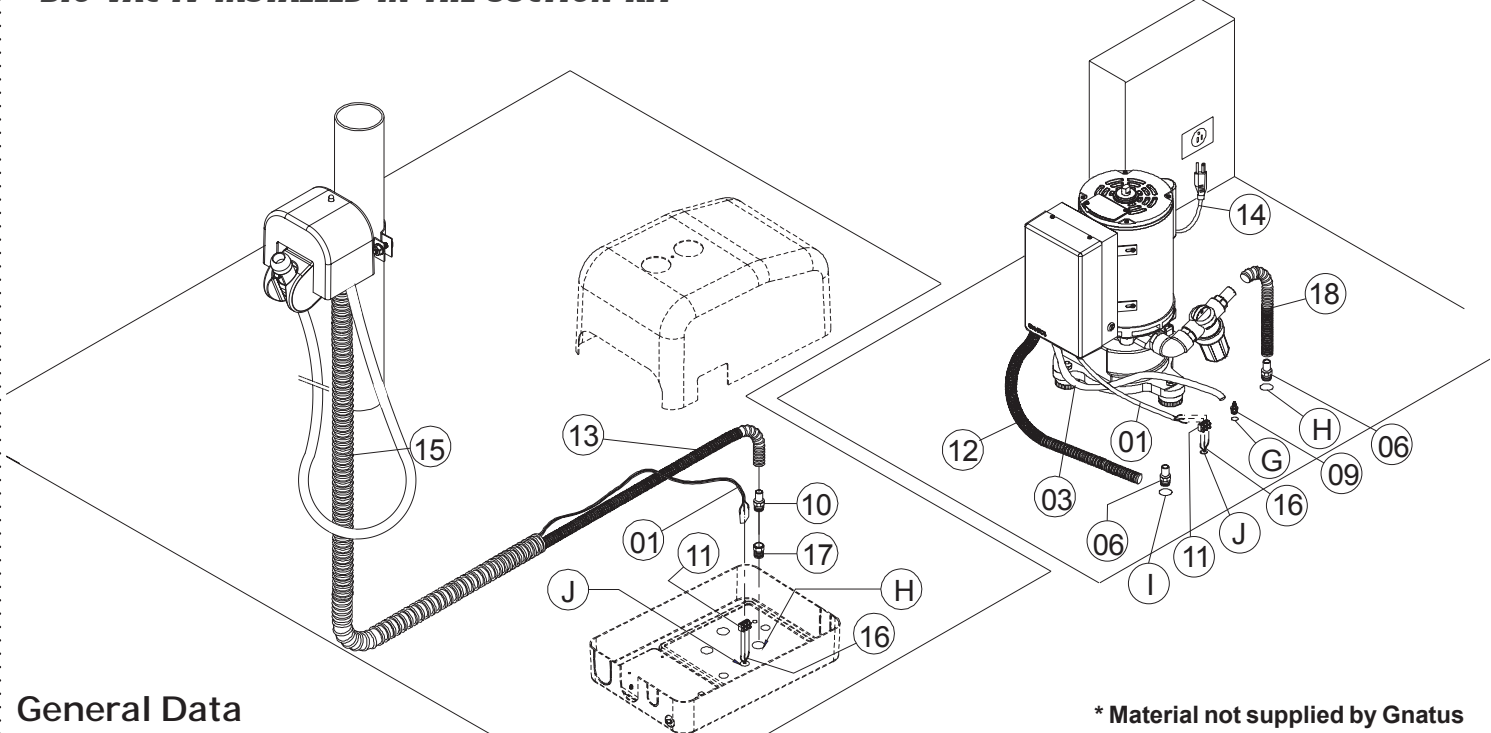
BIO VAC IV INSTALLED IN THE WATER UNIT



General Data

- 01 - 3 Ø 0,75mm² wires – Suction control
- 02 - Hose, Svl Vacuum Ar Ø 3/4" - Suction
- 03 - Hose, Pu Green 6,0x8,5 mm - Water
- 04 - Hose, Svl Vacuum Ar Ø 3/4" – Water unit drain
- 06 - Ø 3/4" hose adapter
- 07 - 90° 3/4" elbow
- 08 - 3/4" threaded nipple
- 09 - Ø 1/2" water inlet connection
- 11 - Connector
- 12 - Hose, Svl Vacuum Ar Ø3/4" - Drain
- 14 - Power cord - Electricity network
- * 16 - 3 Ø 0,75mm² wires – Suction control (Electricaldute)
- 18 - Hose, Svl Vacuum Ar Ø3/4" - Suction
- * H - Point - Suction
- * I - Point - Drain
- * G - Point - Water
- * J - Point - Suction Controls
- * D - Point - Water unit drain

BIO VAC IV INSTALLED IN THE SUCTION KIT

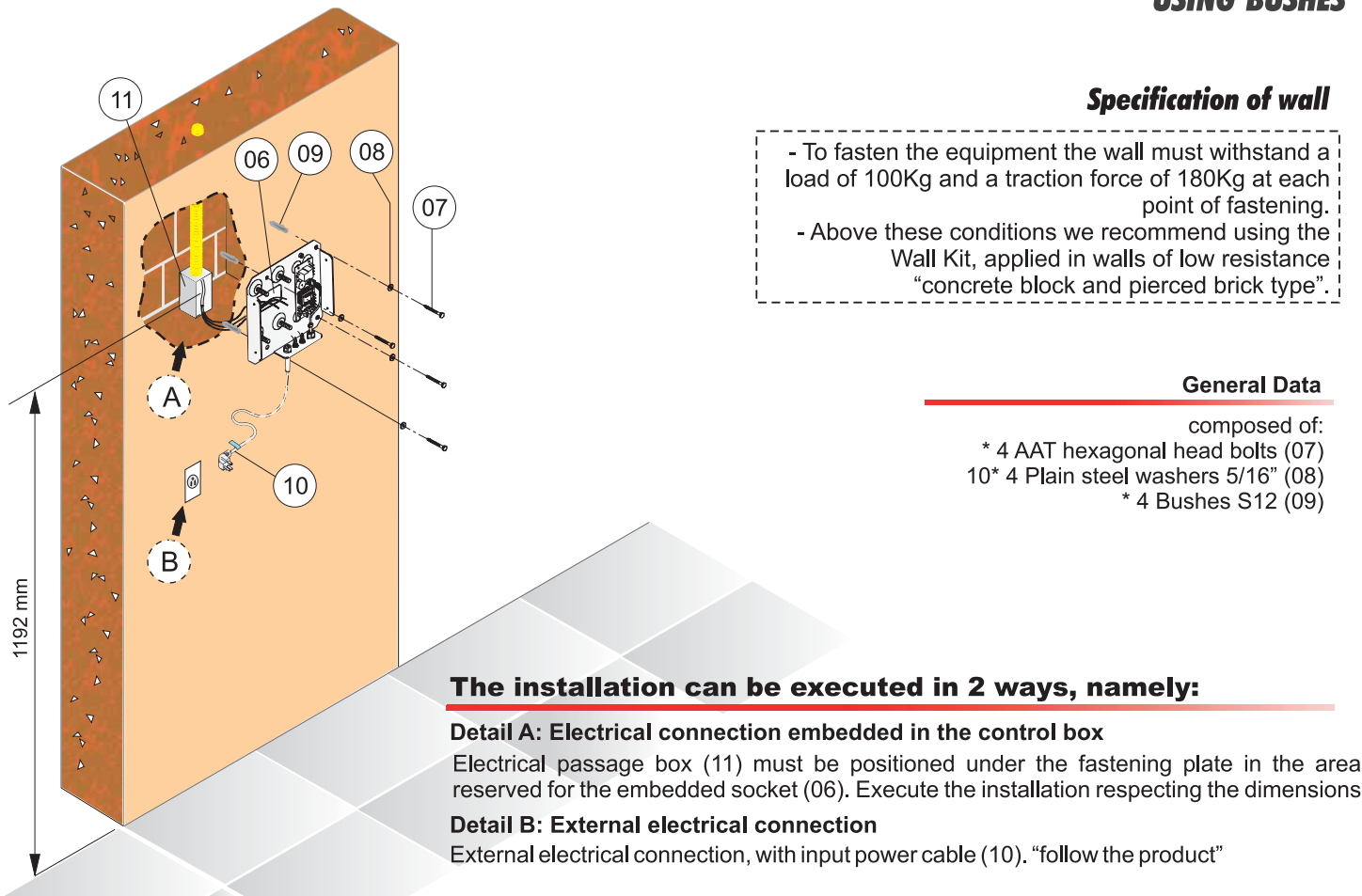


General Data

- 01- 3 Ø 0,75mm² wires – Suction control
- 03- Hose, Pu Green 6,0x8,5 mm - Water
- 06- Ø 3/4" hose adapter
- 09- Ø 1/2" water inlet connection
- 10- Ø 1/2" hose adapter
- 11 - Connector
- 12- Hose, Svl Vacuum Ar Ø3/4" - Drain
- 13- Hose, Svl Vacuum Ar Ø 1/2" – Suction
- 14 - Power cord - Electricity network
- 15 - Hose Sve Sanf. Ø 3/4"
- * 16 - 3 Ø 0,75mm² wires – Suction control (Electricaldute)
- 17 - Threadable reducer 3/4" to 1/2"
- 18 - Hose, Svl Vacuum Ar Ø3/4" - Suction
- * H - Point - Suction
- * I - Point - Drain
- * G - Point - Water
- * J - Point - Suction Controls

CONDITIONS FOR PRE-INSTALLATION X-RAYS WALL MOUNTED / OPTILIGHT CL ALCANCE WALL MOUNTED

INSTALLATION ON A WALL OF HIGH RESISTANCE - CONCRETE / STONE / DENSE BRICK
"USING BUSHES"



Specification of wall

- To fasten the equipment the wall must withstand a load of 100Kg and a traction force of 180Kg at each point of fastening.
- Above these conditions we recommend using the Wall Kit, applied in walls of low resistance "concrete block and pierced brick type".

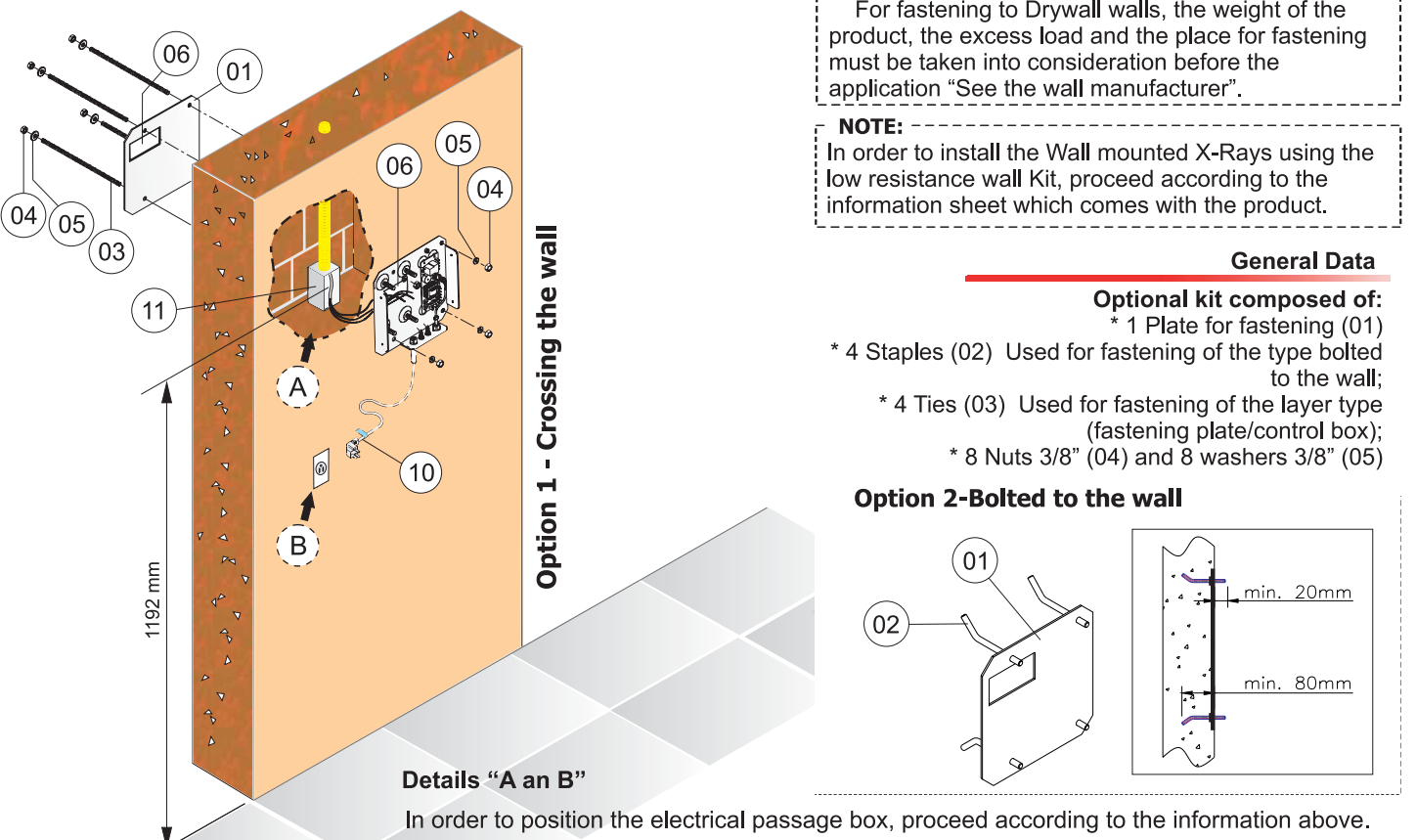
General Data

- composed of:
- * 4 AAT hexagonal head bolts (07)
- 10* 4 Plain steel washers 5/16" (08)
- * 4 Bushes S12 (09)

The installation can be executed in 2 ways, namely:

- Detail A: Electrical connection embedded in the control box**
Electrical passage box (11) must be positioned under the fastening plate in the area reserved for the embedded socket (06). Execute the installation respecting the dimensions
- Detail B: External electrical connection**
External electrical connection, with input power cable (10). "follow the product"

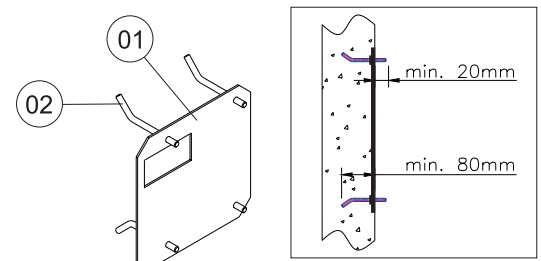
INSTALLATION ON LOW RESISTANCE WALL - CONCRETE BLOCK / PIERCED BRICK
"USING WALL KIT (OPTIONAL)"



General Data

- Optional kit composed of:**
- * 1 Plate for fastening (01)
- * 4 Staples (02) Used for fastening of the type bolted to the wall;
- * 4 Ties (03) Used for fastening of the layer type (fastening plate/control box);
- * 8 Nuts 3/8" (04) and 8 washers 3/8" (05)

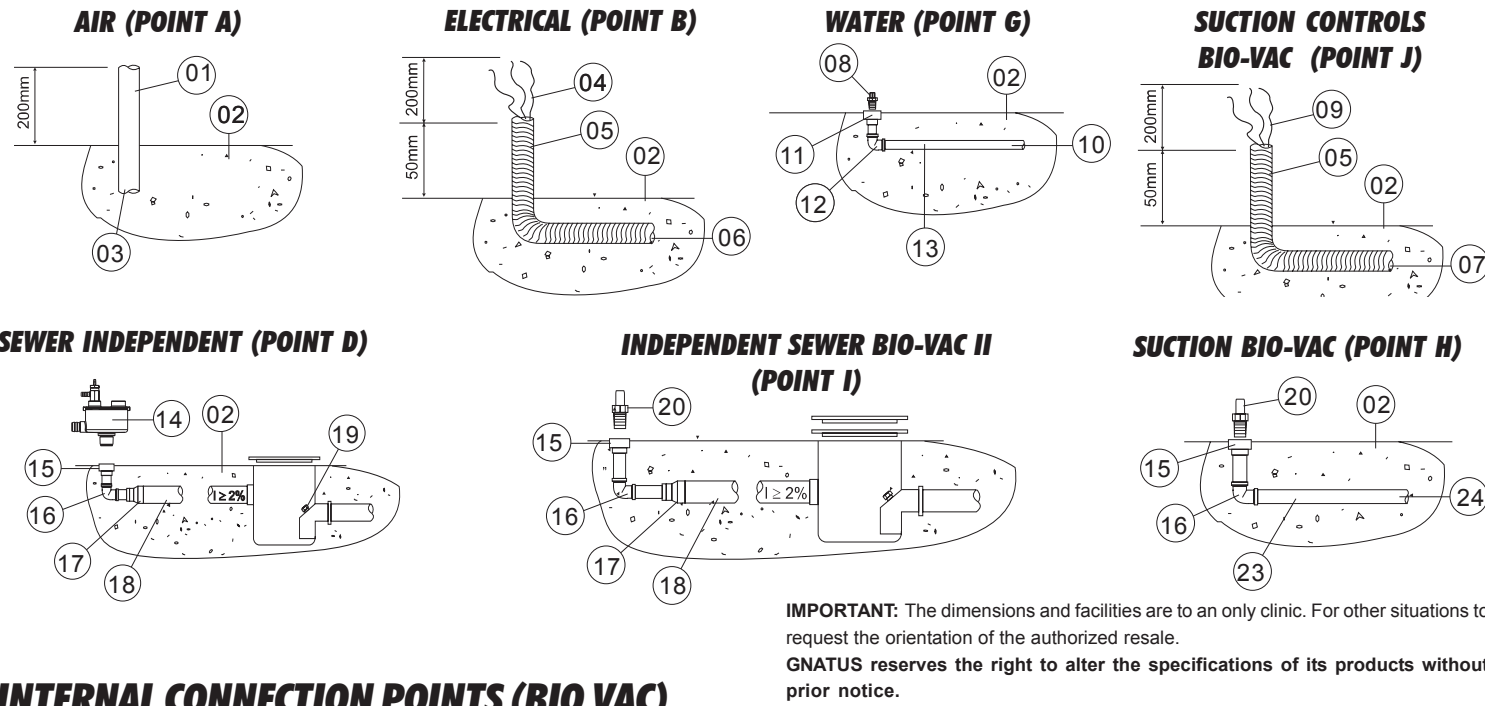
Option 2-Bolted to the wall



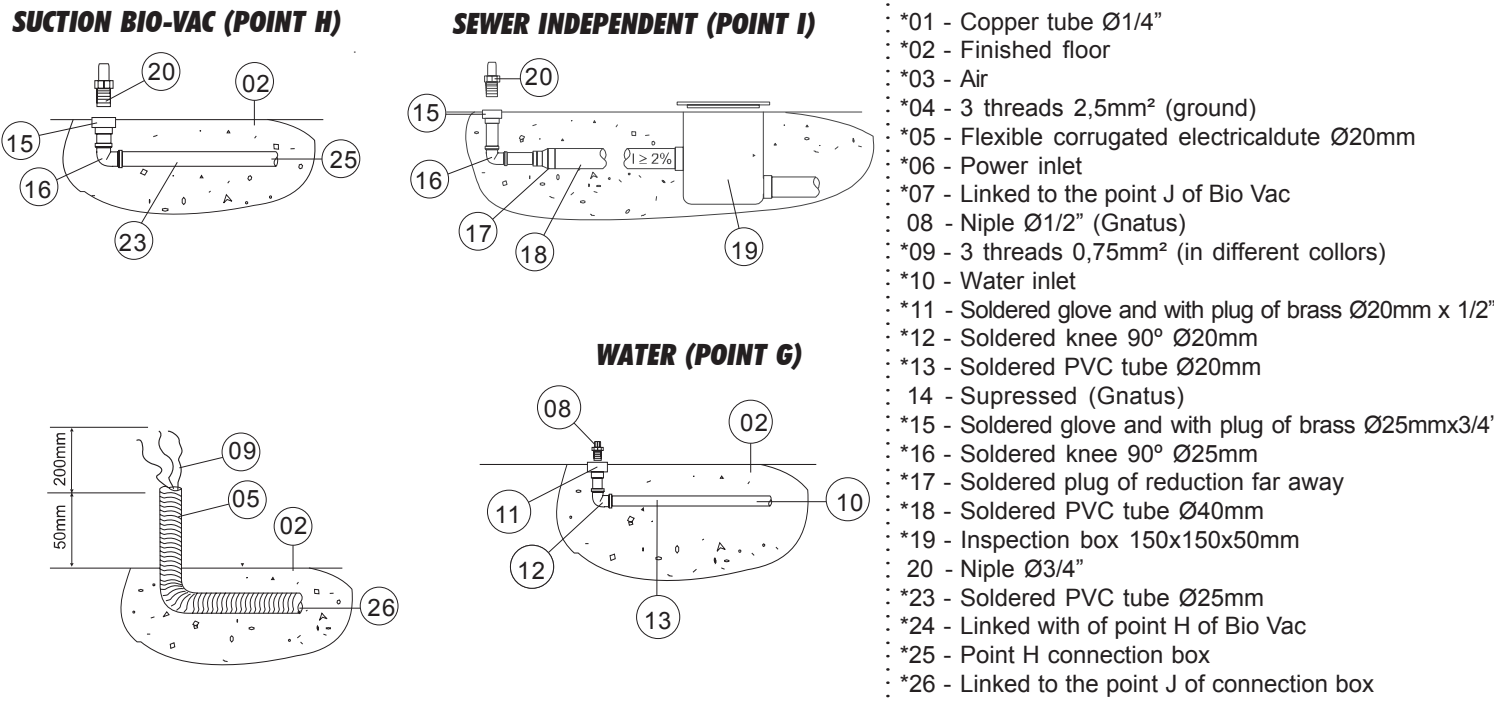
Details "A an B"

In order to position the electrical passage box, proceed according to the information above.

INTERNAL CONNECTION POINTS (CONNECTION BOX)



INTERNAL CONNECTION POINTS (BIO VAC)



General Data

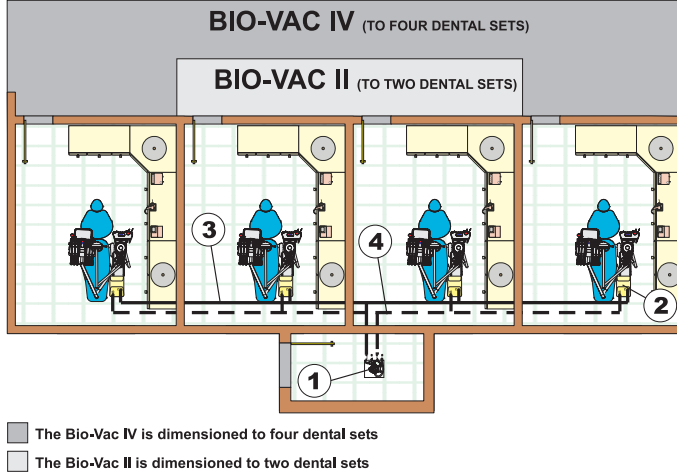
- *01 - Copper tube Ø1/4"
- *02 - Finished floor
- *03 - Air
- *04 - 3 threads 2,5mm² (ground)
- *05 - Flexible corrugated electricaldute Ø20mm
- *06 - Power inlet
- *07 - Linked to the point J of Bio Vac
- *08 - Niple Ø1/2" (Gnatius)
- *09 - 3 threads 0,75mm² (in different collors)
- *10 - Water inlet
- *11 - Soldered glove and with plug of brass Ø20mm x 1/2"
- *12 - Soldered knee 90° Ø20mm
- *13 - Soldered PVC tube Ø20mm
- *14 - Supressed (Gnatius)
- *15 - Soldered glove and with plug of brass Ø25mmx3/4"
- *16 - Soldered knee 90° Ø25mm
- *17 - Soldered plug of reduction far away
- *18 - Soldered PVC tube Ø40mm
- *19 - Inspection box 150x150x50mm
- *20 - Niple Ø3/4"
- *23 - Soldered PVC tube Ø25mm
- *24 - Linked with of point H of Bio Vac
- *25 - Point H connection box
- *26 - Linked to the point J of connection box

*Material not supplied by Gnatius

CONNECTIONS FOR MORE THAN ONE DENTAL SET

BIO-VAC IV

The maximum distance allowed between a Bio-Vac IV and only one dental set is 15m. Installing the equipment within a distance above the recommended one could affect the equipment's performance. Whenever installed between 04 dental sets the equipment should be placed in the middle. The dental set furthest away shouldn't be over 5m.



BIO-VAC II

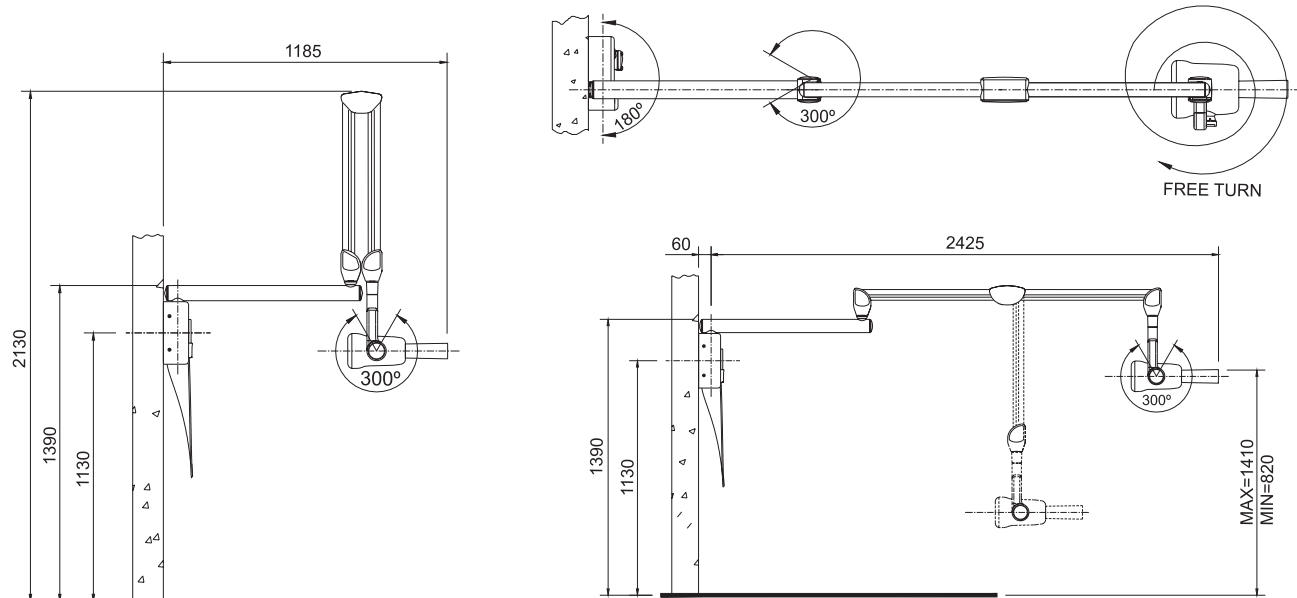
The maximum distance allowed between a Bio-Vac II and only one dental set is 5m. Installing the equipment within a distance above the recommended one could affect the equipment's performance. Whenever installed between 02 dental sets the equipment should be placed in the middle.

General Data

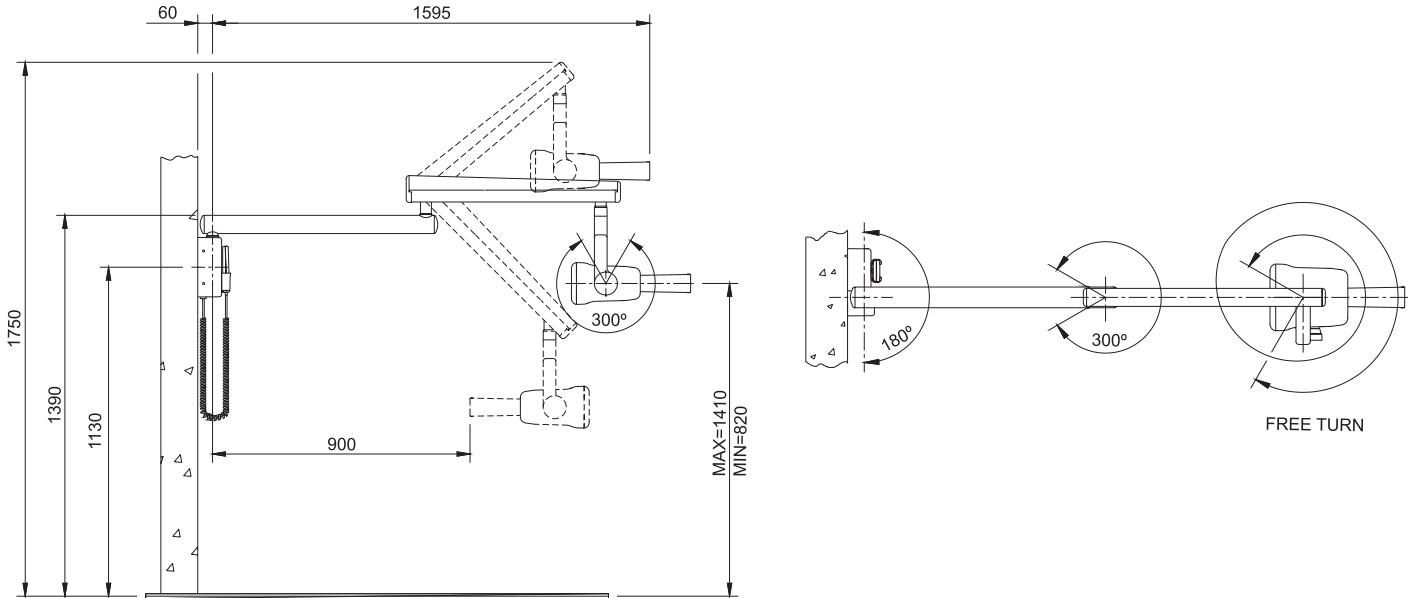
- 1 - Bio Vac
- 2 - Conection Box
- 3 - Pvc Tube (Suction)
- 4 - Three Ducting Wire (Suction Controls)

DIMENSIONS (mm)

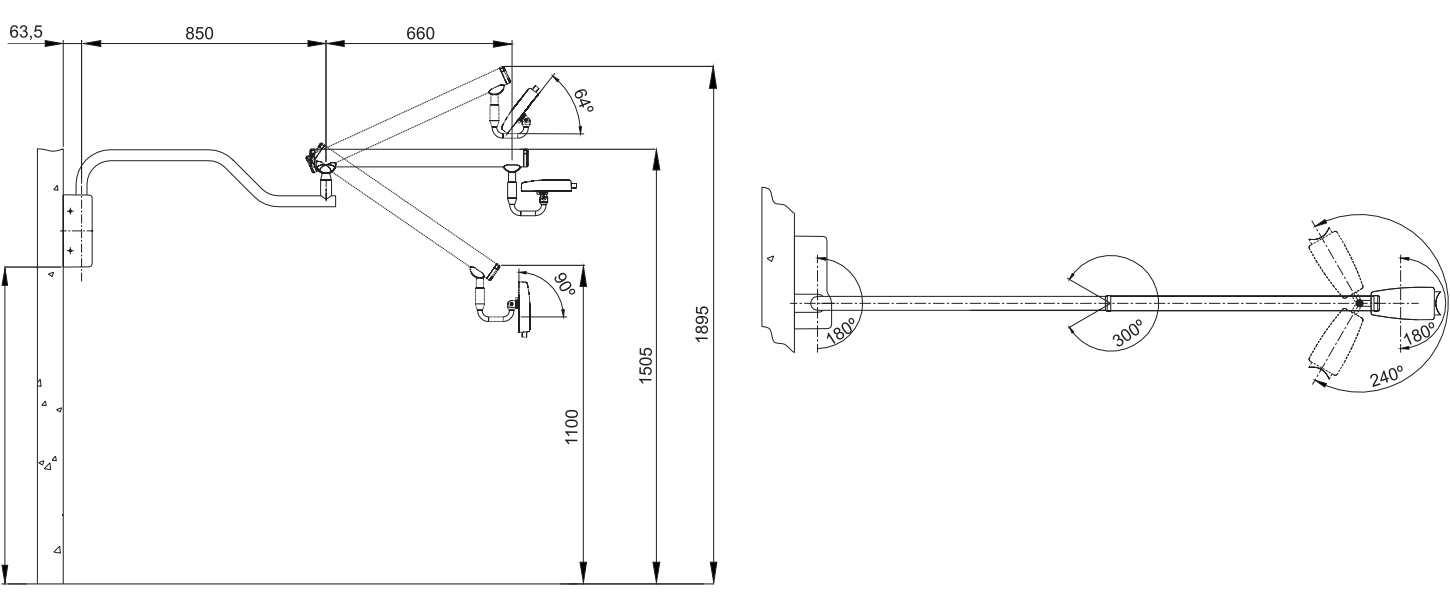
"WALL MODEL" SCISSORS ARMS X-RAYS



"WALL MODEL" X-RAYS



"WALL MODEL" OPTILIGHT CL ALCANCE



INOVA NEW SPACE DENTAL SET

LOCATION PLANT - SCALE 1:1

IMPORTANT:
Before installing any model of GNATUS connection box, follow the recommendations above.

NOTE:
In order to define the choice of plan, verify the model of your equipment.

IT'S COMPULSORY *Material not supplied by GNATUS*

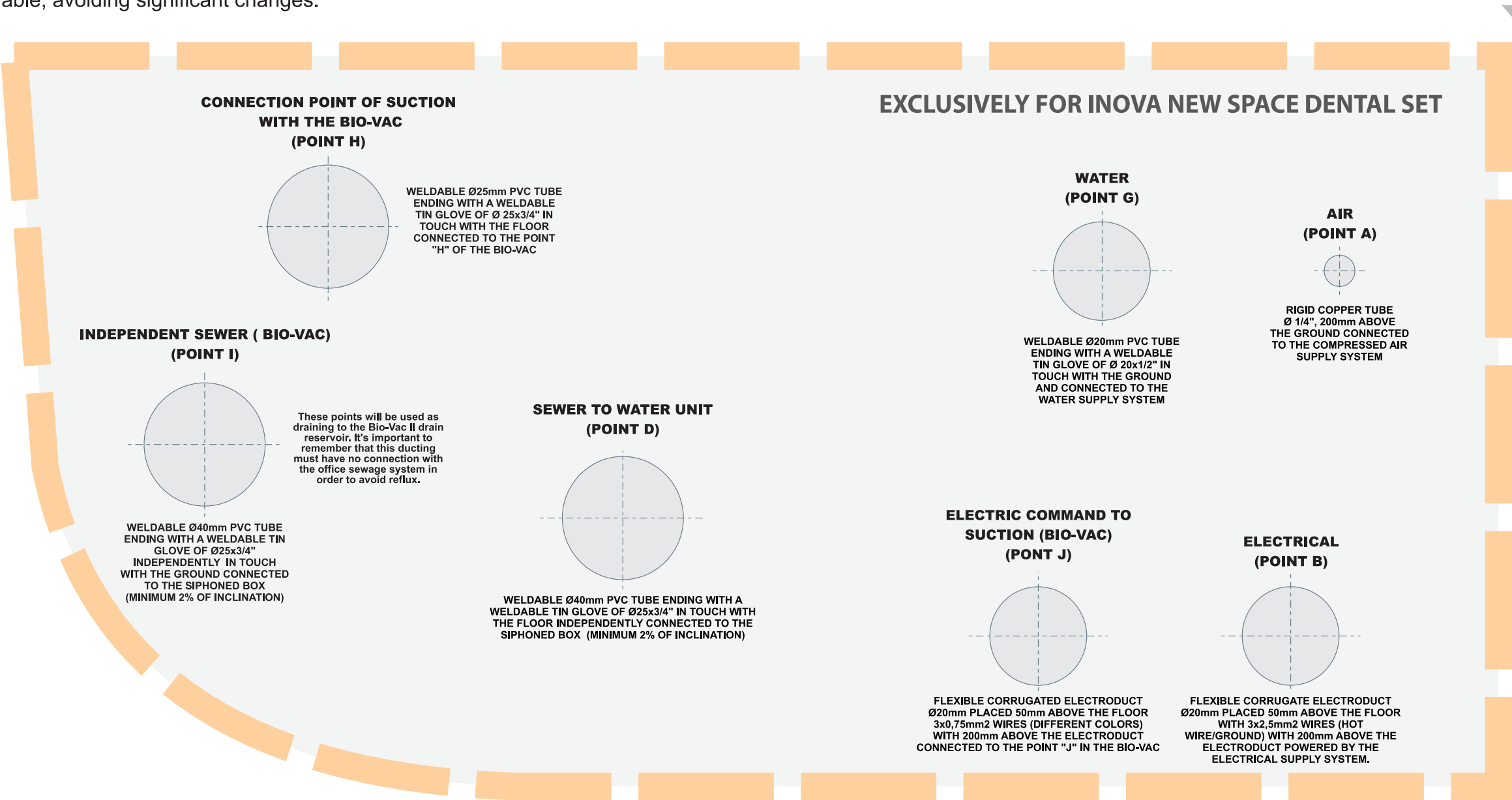
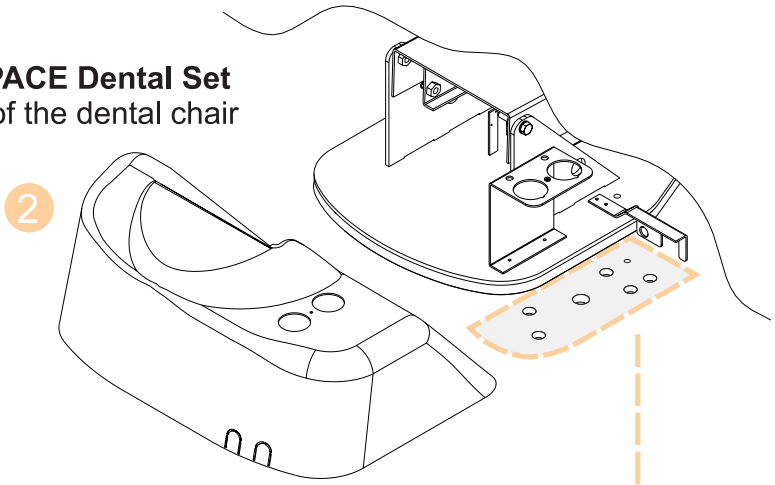
- * A master water system shut down valve in the office;
 - * A Bio-Vac water system shut down valve;
 - * Air filter with adjustable pressure supply for the office.
- * A master electrical system shut down switch for the office;
 - * Electrical system shut down switch for the compressor;
 - * Electrical shut down switch for the Bio-Vac.
 - * Proper grounding.

ATTENTION
To make the installation of peripherals easier it's recommended to place a Ø 3/4" PVC hose 3mm thick connecting the connection box to the cabinet so the water, compressed air, and electrical ramification can be done later. The technician is authorized not to perform the installation of the GNATUS equipment if the pre-installation, hydraulic, electrical, air and sewage systems are not in accordance with the recommendations.

IMPORTANT:
It's absolutely necessary do Install electrical grounding.

Points J and H are connected to points J and H of the Bio-Vac installation location. It's important to have these connection points ready even if you haven't acquired a Bio-Vac system. In the future they will be available, avoiding significant changes.

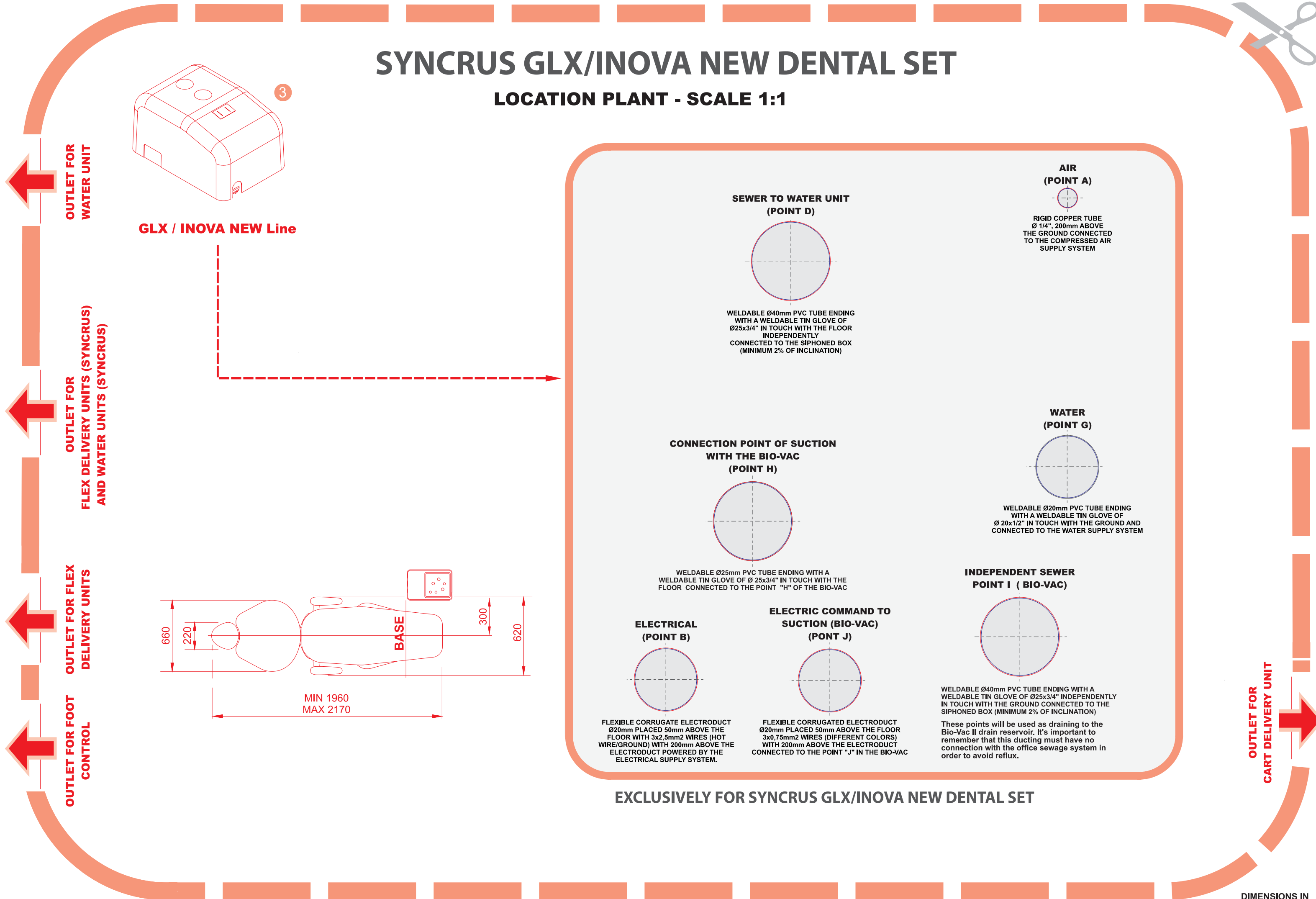
Option INOVA NEW SPACE Dental Set
connection in the base of the dental chair



DIMENSIONS IN MILLIMETERS

SYNCRUS GLX/INOVA NEW DENTAL SET

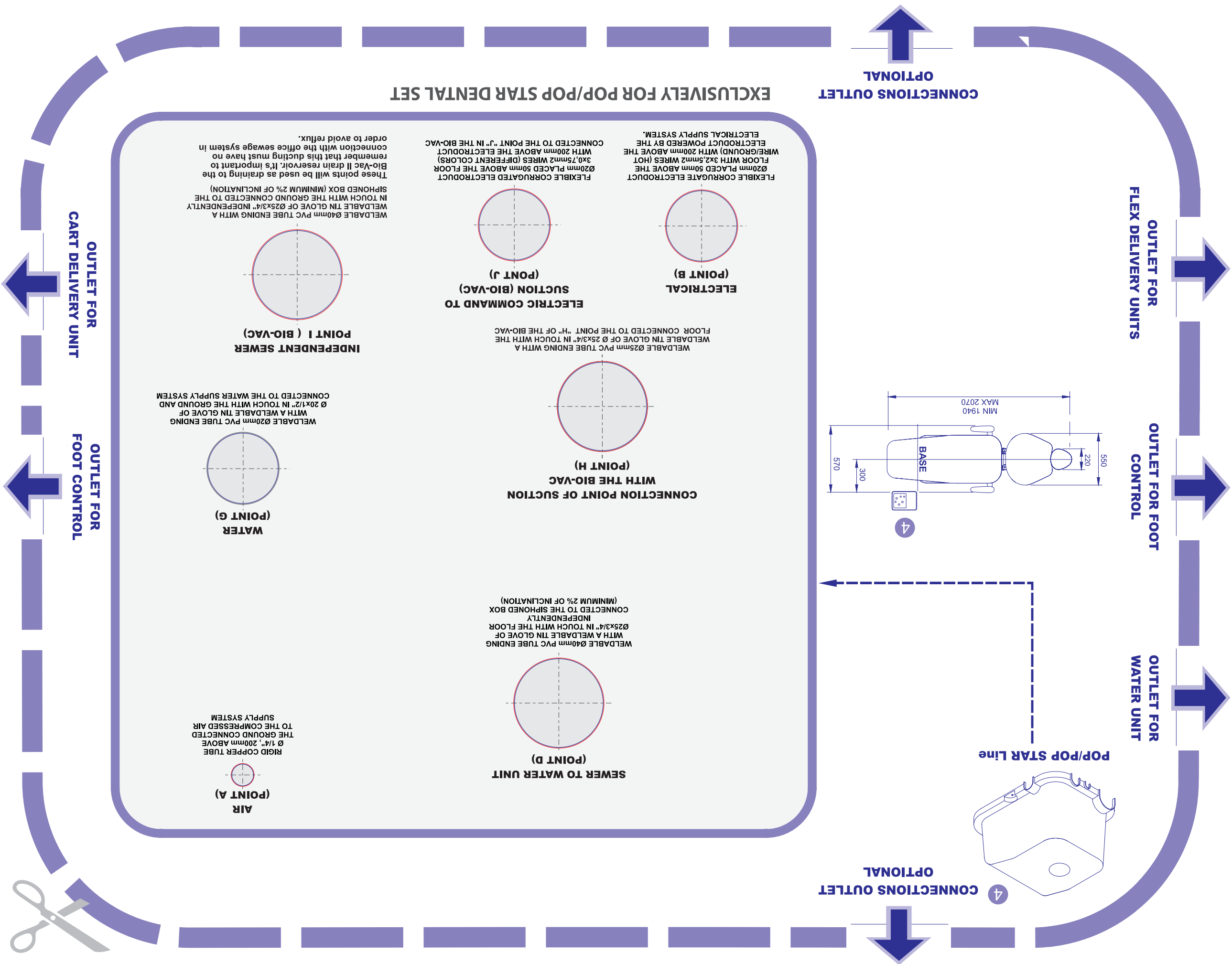
LOCATION PLANT - SCALE 1:1



DIMENSIONS IN MILLIMETERS

LOCATION PLANT - SCALE 1:1

POP/POP STAR DENTAL SET



LOCATION PLANT - SCALE 1:1

POP DENTAL SET

PRE-INSTALLATION MANUAL

IMPORTANT:

Before installing any model of GNATUS connection box, follow the recommendations above.

NOTE:

In order to define the choice of plan, verify the model of your equipment.

CONNECTIONS

- 01 - Option for connection in the base of the dental chair without using the connection box "Pop Dental Set".
- 02 - Option for connection in the base of the dental chair without using the connection box "Inova New Space Dental Set".
- 03 - Option with the connection box "Syncrus GLX / Inova New Dental Set".
- 04 - Option with the connection box "Pop / Pop Star Dental Set".

IT'S COMPULSORY *Material not supplied by GNATUS*

- * A master water system shut down valve in the office;
- * A Bio-Vac water system shut down valve;
- * Air filter with adjustable pressure supply for the office. (ideal working pressure = 80 PSI)
- * Electrical shut down switch for the Bio-Vac.
- * Proper grounding.

ATTENTION

To make the installation of peripherals easier it's recommended to place a Ø 3/4" PVC hose 3mm thick connecting the connection box to the cabinet so the water, compressed air, and electrical ramification can be done later. The technician is authorized not to perform the installation of the GNATUS equipment if the pre-installation, hydraulic, electrical, air and sewage systems are not in accordance with the recommendations.

IMPORTANT:

It's absolutely necessary do install electrical grounding.

Points J and H are connected to points J and H of the Bio-Vac installation location. It's important to have these connection points ready even if you haven't acquired a Bio-Vac system. In the future they will be available, avoiding significant changes.

EXCLUSIVELY FOR POP DENTAL SET

