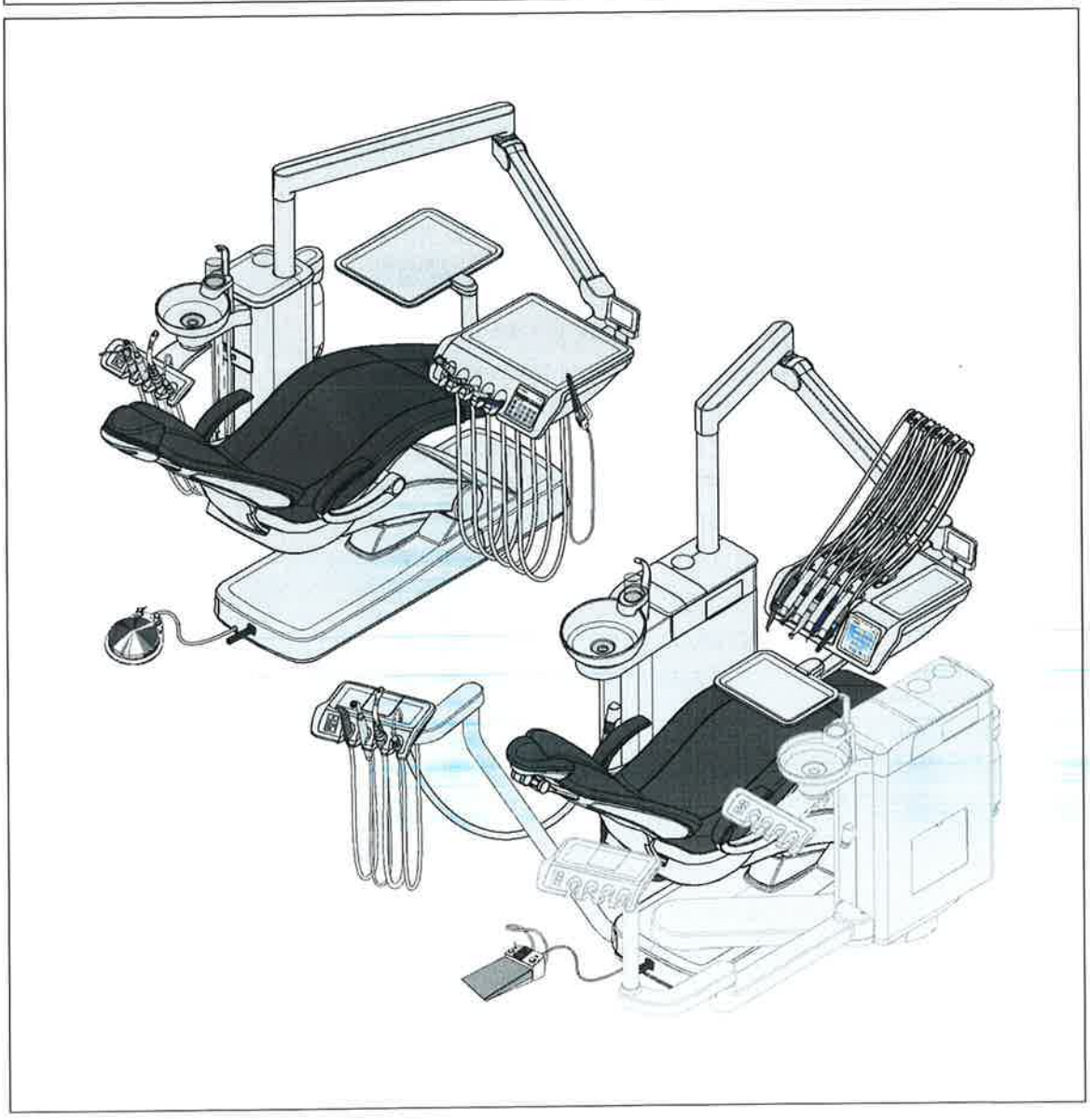
New as of: 12.2018

Dentsply Sirona

# Intego / Intego Pro
# Intego Ambidextrous / Intego Pro Ambidextrous

## Installation requirements

English



# Table of contents

# 1 General information

## 1.1 Notes on the installation prerequisites

This document describes the installation prerequisites for all versions of the Intego treatment center.

It contains the following information:

- Required information for practice planning.
- Information for the installer and operator regarding the necessary quality of the air and water supply media.
- Information for the installer, such as how to implement the connections for air, water, waste water, suction air and the power supply.
- Information on the cabling of the PCs to be connected.
- Information about electromagnetic compatibility and the prerequisites for setting up the treatment center.
- A checklist to ensure that all installation requirements have been fulfilled.

The subsequent installation of the treatment center is described in the installation instructions (REF 64 57 134).

You will also need the drilling template (REF 64 57 076) for the safe and secure attachment of the treatment center to the floor.

# 1.2 Structure of the document

## 1.2.1 Identification of the danger levels

To prevent personal injury and material damage, please observe the warning and safety information provided in these operating instructions. Such information is highlighted as follows:

| ⚠ DANGER |
| --- |
| An imminent danger that could result in serious bodily injury or death. |

| ⚠ WARNING |
| --- |
| A possibly dangerous situation that could result in serious bodily injury or death. |

| ⚠ CAUTION |
| --- |
| A possibly dangerous situation that could result in slight bodily injury. |

| NOTE |
| --- |
| A possibly harmful situation which could lead to damage of the product or an object in its environment. |

| IMPORTANT |
| --- |
| Application instructions and other important information. |

**Tip**: Information for simplifying work.

## 1.2.2 Formats and symbols used

The formats and symbols used in this document have the following meaning:

| | |
| --- | --- |
| ✓ Prerequisite<br>1. First action step<br>2. Second action step<br>or<br>➢ Alternative action<br>↳ Result<br>➢ Individual action step | Prompts you to do something. |
| See "Formats and symbols used [→ 6]" | Identifies a reference to another text passage and specifies its page number. |
| • List | Designates a list. |
| "Command / menu item" | Indicates commands / menu items or quotations. |

# 2 Safety information

## 2.1 Installation by qualified personnel

The installation of the supply connections must be carried out by qualified technicians only.

**⚠ WARNING**

**Professional installation**

Comply with the national regulations for electrical installation (e.g. IEC 60364-1, VDE 0100-100, IEC 60364-7-710, VDE 0100-710, National Electrical Code).

Comply with the national regulations for water supply installations (e.g. EN 1717) and sewage installations (e.g. EN 12056-1).

## 2.2 Radiotelephones

Mobile RF communication equipment, including accessories, should not be used at a low level to the unit. Non-compliance can lead to a reduction in the performance features of the unit.

## 2.3 Modifications and extensions of the system

For reasons of product safety, this product may be operated only with original Dentsply Sirona parts or third-party parts expressly approved by Dentsply Sirona. In the event of changes which were not foreseen, Dentsply Sirona is not liable for resulting damages.

All units connected to this product must comply with the applicable standards:

- IEC 60601-1, Medical electrical equipment
- IEC 60950-1, Information technology equipment
- IEC 62368-1, Audio/video, information and communication technology equipment

## 2.4 Power connection

**⚠ WARNING**

**Shock hazard**

It is essential that you switch off the power supply PRIOR to beginning the installation. There is a risk of electric shock. People can be injured or electrical components of the unit destroyed.

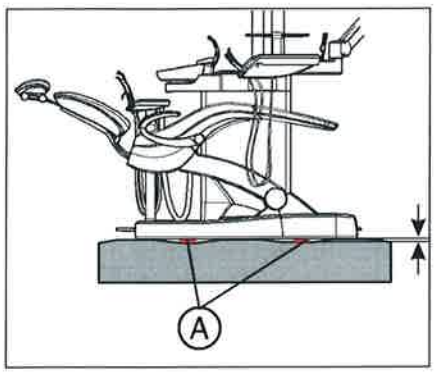
# 3 On-site installation

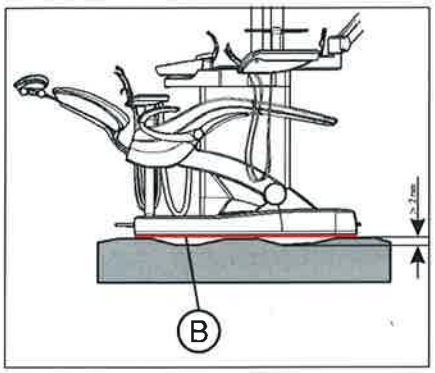
## 3.1 Substrate, floor

**Unevenness**

The floor must be level and horizontal in accordance with DIN 18 202.

The compensating plates (A) in the accessory pack can be used for slight unevenness in the floor.




If unevenness in the floor is too large, the steel adapter plate (B) can be used, see Mounting plates [→ 52].

### 3.1.1 Load-bearing capacity of the floor

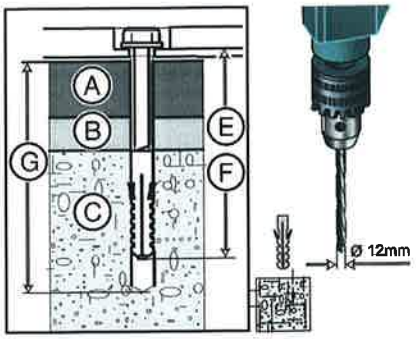
**Load capacity:**

The minimum load-bearing capacity of the floor must be 0.5 N/cm$^2$ (corresponds to around 500 kg/m$^2$).

## 3.1.2 Stability

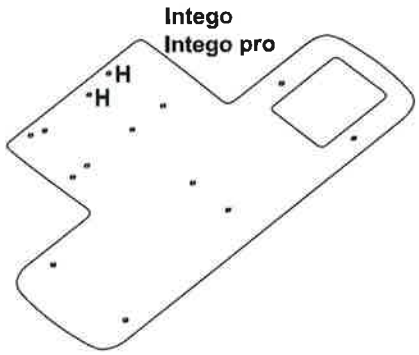
### 3.1.2.1 With Intego and Intego pro

**With a concrete floor**




- Use a 12mm dia. masonry drill to drill the holes.
- The depth of the holes depends on the condition of the floor.

| For concrete floor without screed (C): | For concrete floor with screed (A) and impact sound insulation (B) A+B max. **70 mm**: |
|---|---|
| Hole depth **120 mm** (G) | Hole depth **170 mm** (G) |
| 9 screws **110 mm** long (**E**) and one anchor bolt **H** (short) | 9 screws **160 mm** long (**E**) and one anchor bolt **H** (short) |



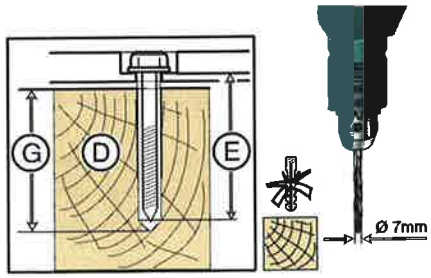

- Use 12mm dia. dowels for the screws but no dowel for the anchor bolt (**H**).

**⚠ WARNING**

Any existent screed (A) and/or impact sound insulation (B) must be penetrated!

➢ If the screed (A) and impact sound insulation (B) is deeper than 70mm,you must use longer screws and adjust the hole depth.

**With a wooden floor**



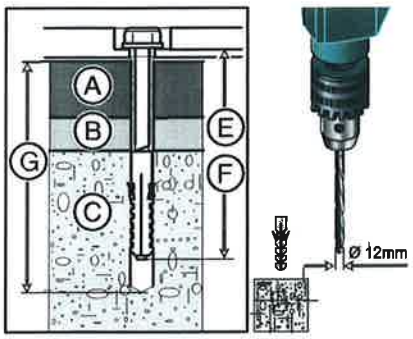

- Use a 7 mm dia. wood drill to drill the holes.
- Hole depth is:

| For wooden floor (**D**): |
|---|
| Hole depth **120 mm G** |
| 10 screws **110 mm** long (**E**) |

- Provide and prepare appropriate supporting beams if required.
- Do not use any dowels for the wood screws.

### 3.1.2.2 With Intego Ambidextrous and Intego pro Ambidextrous

**With a concrete floor**

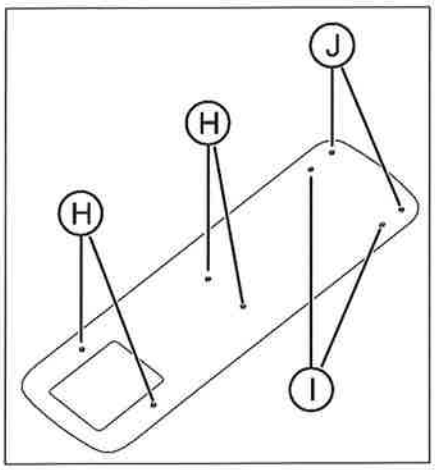



- Use a 12mm dia. masonry drill to drill the holes.
- The depth of the holes depends on the condition of the floor.

| For concrete floor without screed (**C**): | For concrete floor with screed (**A**) and impact sound insulation (**B**) A+B max. **70 mm**: |
|---|---|
| Hole depth **120 mm** (**G**) | Hole depth **170 mm** (**G**) |
| • 4 or 6 screws **110 mm** long (**E**)<br>• 2 heavy duty anchors (short) | • 4 or 6 screws **160 mm** long (**F**)<br>• 2 heavy duty anchors (long) |

**IMPORTANT**

Replace the washers at the heavy duty anchors with the washers 25 x 10.5 x 4 from the mounting material.




- For the holes (H), use screws with washers 30 x 10.5 x 2.5
- Use 12 mm dia. dowels for the screws but no dowel for the heavy duty anchors.
- If the attachment points (J) are used, place the heavy duty anchors into the attachment points (J). For the holes (I), insert screws with washers 25 x 10.5 x 4.
  - If the attachment points (J) are not used, place the heavy duty anchors into the attachment points (I).
  - If heavy load anchors cannot be used for attachment points (J) and (I), the 4 screws must be screwed to the ground through the attachment points (J) and (I) of the chair base. The unlocking force for each screw must be at least 1700 N.

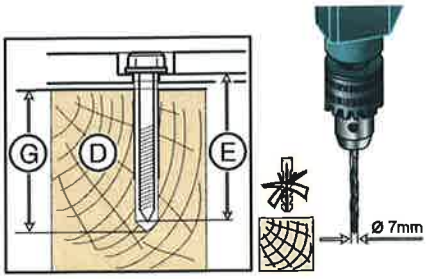
**⚠ WARNING**

Any existent screed (A) and/or impact sound insulation (B) must be penetrated!

➢ If the screed (A) and impact sound insulation (B) is deeper than 70 mm, you must use longer screws and adjust the hole depth.

**IMPORTANT**

Fastening the chair base to the attachment points (J) is recommended.

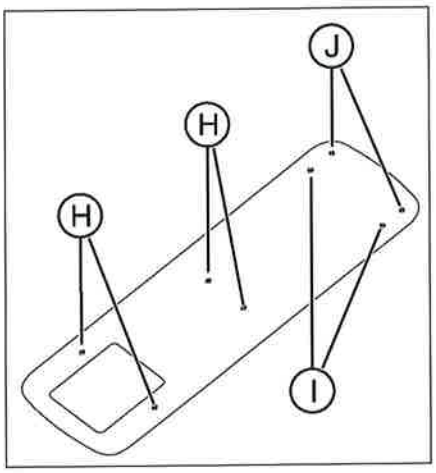



### With a wooden floor

- Use a 7 mm dia. wood drill to drill the holes.
- Hole depth is:

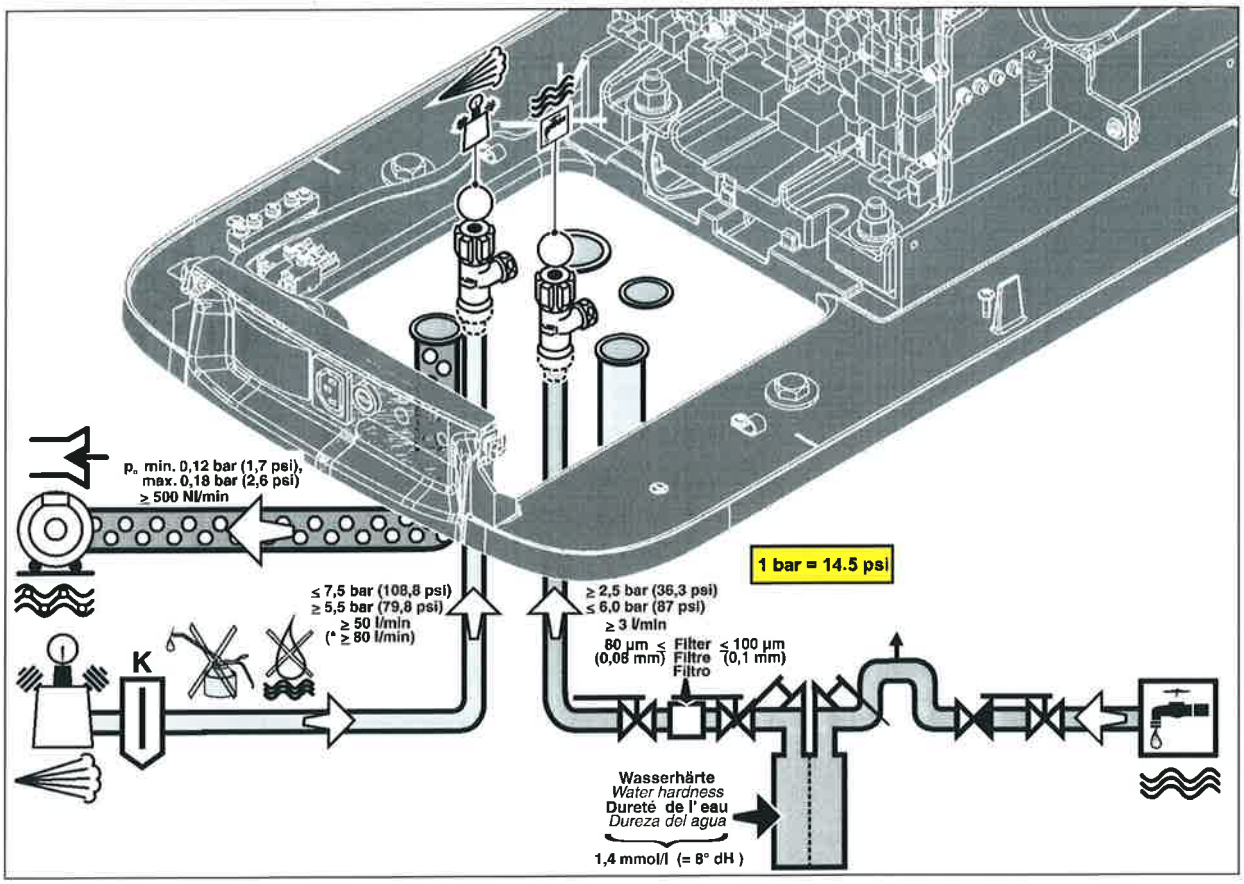
| For wooden floor (D): |
|---|
| Hole depth **120 mm** (G) |
| 6 or 8 screws **110 mm** long (E) |

- Provide and prepare appropriate supporting beams if required.
- Do not use any dowels for the wood screws.
- For the holes (H), use washers 30 x 10.5 x 2.5.
- For the holes (I) and (J), use washers 25 x 10.5 x 4.




| IMPORTANT |
|---|
| Fastening the chair base to the attachment points (J) is recommended. |

# 3.2 Requirements of the supply media




* = For use with an Air Venturi air jet pump

| | |
|---|---|
|  | Suction machine |
|  | Compressed air (free from oil)<br>The compressor must be able to draw in air in an efficient, hygienic manner. |
|  | Cold water (drinking water quality) |
| K | Steam trap |

## 3.2.1 Requirements of the water supply

### 3.2.1.1 Condition of the water

The water that supplies the treatment center must meet the following requirements to avoid operating faults.

| | |
|---|---|
| Water pressure: | 2.5 bar (36 psi) to 6 bar (87 psi) |
| Minimum flow rate: | 3 l/min |
| Water hardness (overall hardness): | at > 2.4 mmol/l (= 12° dH), install a water softener. Set dilution hardness to 1.43 mmol/l (= 8° dH). |
| pH value: | 6.5 to 8.5 (recommended) |
| Particle size: | ≤ 100 µm |
| Water quality: | The water quality must comply with the national requirements for drinking water. |
| Colony count: | The colony count must fulfill the national regulations for drinking water and must not exceed 500 CFU/ml under any circumstances (CFU: Colony forming units).<br>In the event of an increased colony count, the indoor installation must be checked and the cause of contamination eliminated. Alternatively, a standalone water supply can also be installed. With Intego, the optional fresh water bottle can be used as a water container, as can the empty disinfectant tank with Intego Pro.<br>Sampling and the colony count must be performed by a competent laboratory.<br>Before installation of the treatment center, an acceptable microbiological water quality for the domestic water supply must be ensured and documented in the form of a colony count. |

### 3.2.1.2 Connection to the public drinking water system

**Treatment center isolated from the public drinking water supply**

The Intego Pro treatment center, if it is equipped with a disinfection system, complies with the requirements of EN 1717 (free discharge with an isolation distance ≥ 20 mm) and the DVGW German Gas and Water Association). It is intrinsically safe according to the W540 worksheet and thus also complies with W270 and KTW (Guideline on the use of plastics in contact with drinking water). It can be connected directly to the public drinking water system.

The Intego treatment center, provided it is equipped with a fresh water bottle not connected to the public drinking water supply, also complies with the requirements of EN 1717 and the DVGW German Gas and Water Association).


In both cases, the treatment center has the "DVGW" label next to the rating plate.

**Treatment center not isolated from the public drinking water supply**

If compliance with EN 1717 is required in the country, the respective measures for the protection of public drinking water must be taken outside the treatment center.

This applies to the following unit versions:

- Intego Prowithout disinfection system
- Intego without fresh water bottle
- Intego with a fresh water bottle connected to the public drinking water supply.

The treatment center then does not have the "DVGW" label.

Please comply with the national requirements with regard to connecting treatment centers to the public drinking water system.

#### 3.2.1.3 Installation of the water supply on the building side

- Carry out the installation in accordance with the national installation requirements (e.g. EN 1717).
- Connect the treatment center to the cold water supply.
- Use fine filters with a mesh size between ≤ 80 µm (0.08 mm) and ≤100 µm (0.1 mm).
- In order to reduce the microorganisms in the water supply pipe, take account of the following when laying this pipe to the treatment center:
  - Avoid long stub lines to the treatment center.
  - Carry out the installation so that, where possible, other main consumers (such as the sink) are fed from the same line downstream of the treatment center connection.
  - Avoid laying the supply line parallel to hot water pipes.
- Recommendation: Install a corner valve in the water supply to the treatment center with 2 outlets and 2 stopcocks. The second outlet makes it easy to take a sample of the water for microbiological testing.

## 3.2.2 Requirements of the air supply

The air supply is required to drive the turbines, cool the drill drives, for the cooling spray and to control the treatment center.

### 3.2.2.1 Condition of the air

| | |
|---|---|
| Air pressure: | 5,5 bar (80 psi) to 7,5 bar (109 psi) |
| Minimum flow rate: | 50 l/min |
| Minimum flow rate with air jet pump: | 80 l/min |
| Air humidity: | Dew point ≤-20°C at atmospheric pressure |
| Oil content: | ≤ 0.5mg/$m^3$ |
| Particle content: | ≤ 100 particles of size 1 - 5 µm in one $m^3$ of air (larger particles are filtered by the treatment center.) |
| Hygiene: | Hygienically acceptable air **IMPORTANT!** The treatment center does not require medical air. |

### 3.2.2.2 Installation of air supply

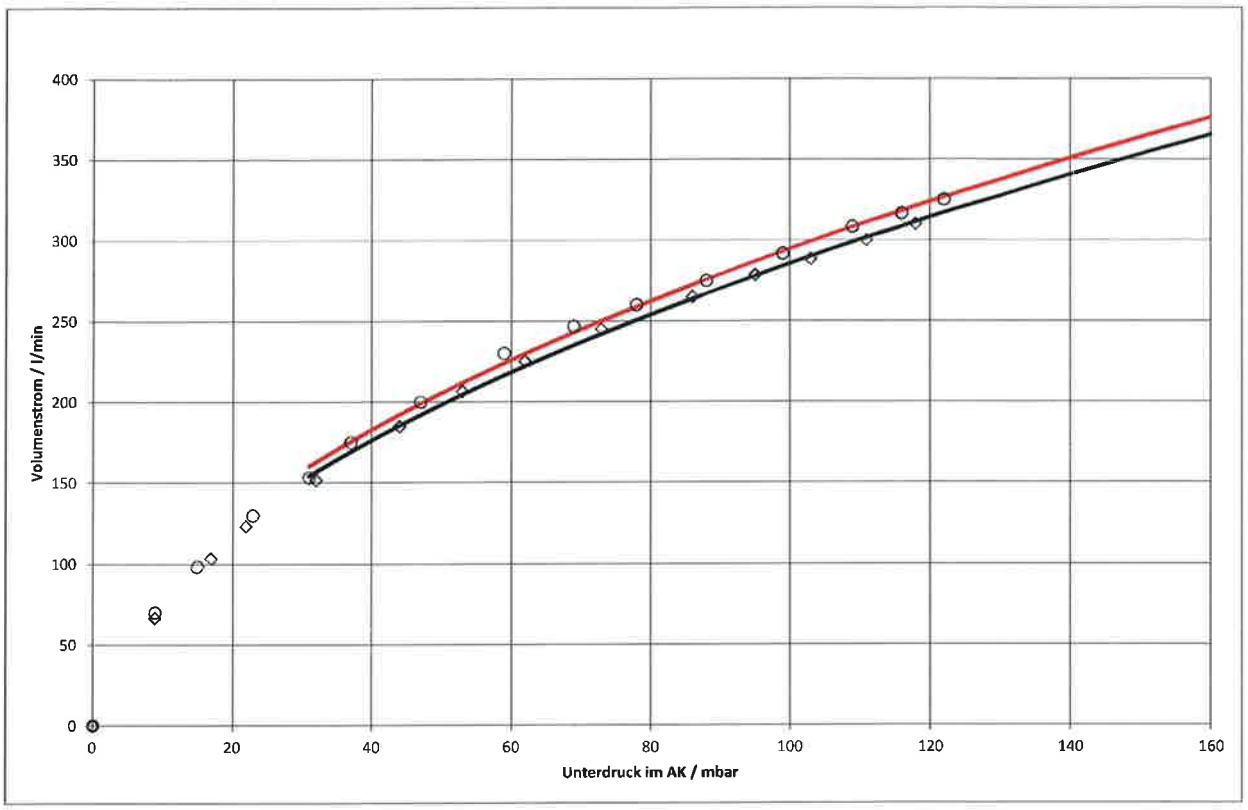
- Carry out the installation in accordance with the national requirements.
- Install a steam trap.

### 3.2.3 Requirements of the suction machine

- Vacuum in the suction machine at the connection point with the treatment center: min. 0.12 bar (1.7 psi), max. 0.18 bar (2.6 psi).
- With a vacuum of > 0.18 bar (2.6 psi) with no flow, the treatment center must be fitted with the "Vacuum limiter" retrofit kit (REF 59 68 826).
- Minimum suction power: 500 Nl/min
- For the suction line: adhere to the specifications in the installation instructions for "Suction machines".
- Suction system Type 1: High flow rate
- Wet or dry suction (depending on equipment)
- Suction handpiece diameter:
  - 6 mm: Saliva ejector and surgical suction
  - 11 mm: Spray aspirator
- INTEGO: Filter mesh size 1.5 x 3.0 mm
- INTEGO pro: Filter mesh size 1.3 x 1.3 mm
- Sirona recommends using cannulae with a bypass in order to prevent return flow in adhered cannulas.

#### 3.2.3.1 Typical pressure loss in the suction system

**Suction flow of large suction hose**




| | |
|---|---|
| red (○): | Only large suction device |
| black (◊): | Saliva ejector in parallel |

### 3.2.4 Requirements of the waste water installation

- The quantity of waste water from the treatment center is max. 3 l/min.
  - Carry out the waste water installation accordingly.
  - Fit the waste water pipe in accordance with the information in the table [→ 23].
    The gradient of the waste water pipe must be at least 1°.

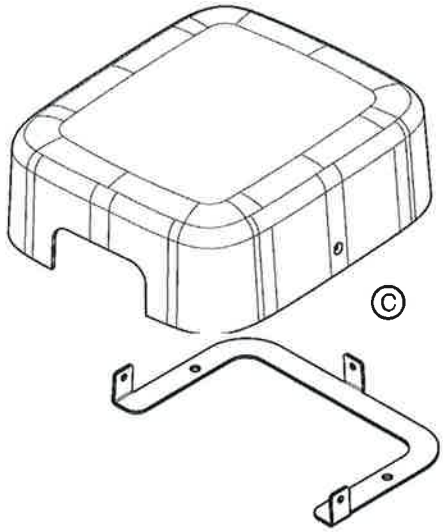
# 3.3 Above-floor installation of supply lines

The supply lines can be installed above the floor (above-floor installation) or through the floor (underfloor installation).

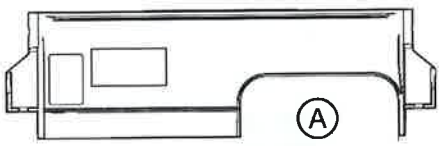
For the installation of the supply lines through the floor, see "Underfloor installation of supply lines" [→ 22].

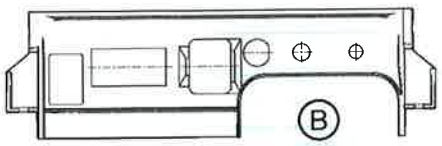
**In the case of above-floor installation, two connection versions are available**

- When connecting from the wall, the "above-floor mounting kit" is required.
- When connecting from the floor beyond the terminal box, the "Installation kit for separate terminal boxes" (C) is required.




In addition, a suitable diaphragm for above-floor installation must be located at the terminal box of the treatment center. The diaphragm is available with (B) and without (A) third-party unit connection.



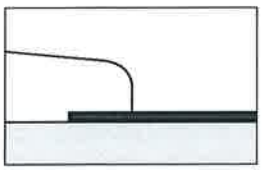

**Ex works ordering**

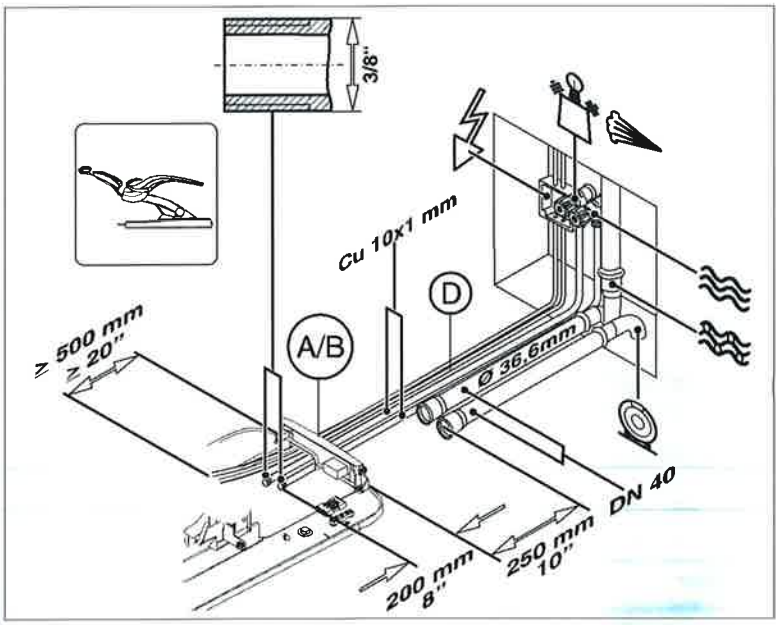
- In the case of ex works orders, the "over-floor installation kit" order No.: 64 43 746 must also be ordered. The appropriate diaphragm is automatically selected using further order information.
  If required, the "Installation kit for separate terminal boxes" order No.: 64 43 738 must also be ordered.

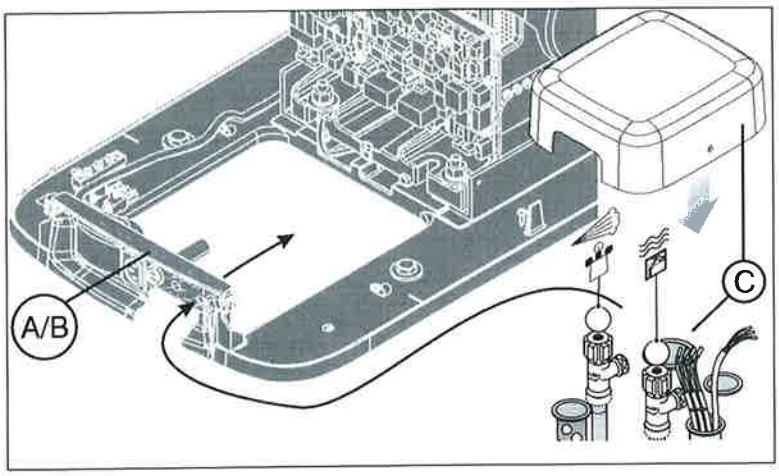
**In the case of re-ordering for a retrofit**

- For connection from the wall, the above-floor installation kit and a diaphragm are required:
  - Above-floor installation kit (D) Order No.: 64 43 746 and
  - Diaphragm main switch, above-floor without third-party unit connection (A) order No.: 64 73 636 or
  - Diaphragm retrofit kit, above-floor with third-party unit connection (B) order No.: 64 73 602
- For connection from the floor beyond the terminal box, the "Installation kit for separate terminal boxes" and a diaphragm are required:
  - Installation kit for separate terminal boxes (C) order No.: 64 43 738 and
  - Diaphragm main switch, above-floor without third-party unit connection (A) order No.: 64 73 636 or
  - Diaphragm retrofit kit, above-floor with third-party unit connection (B) order No.: 64 73 602

➢ Install the supply lines, which are routed from the wall or from a separate terminal box, into the connection field of the treatment center as shown in the figure.







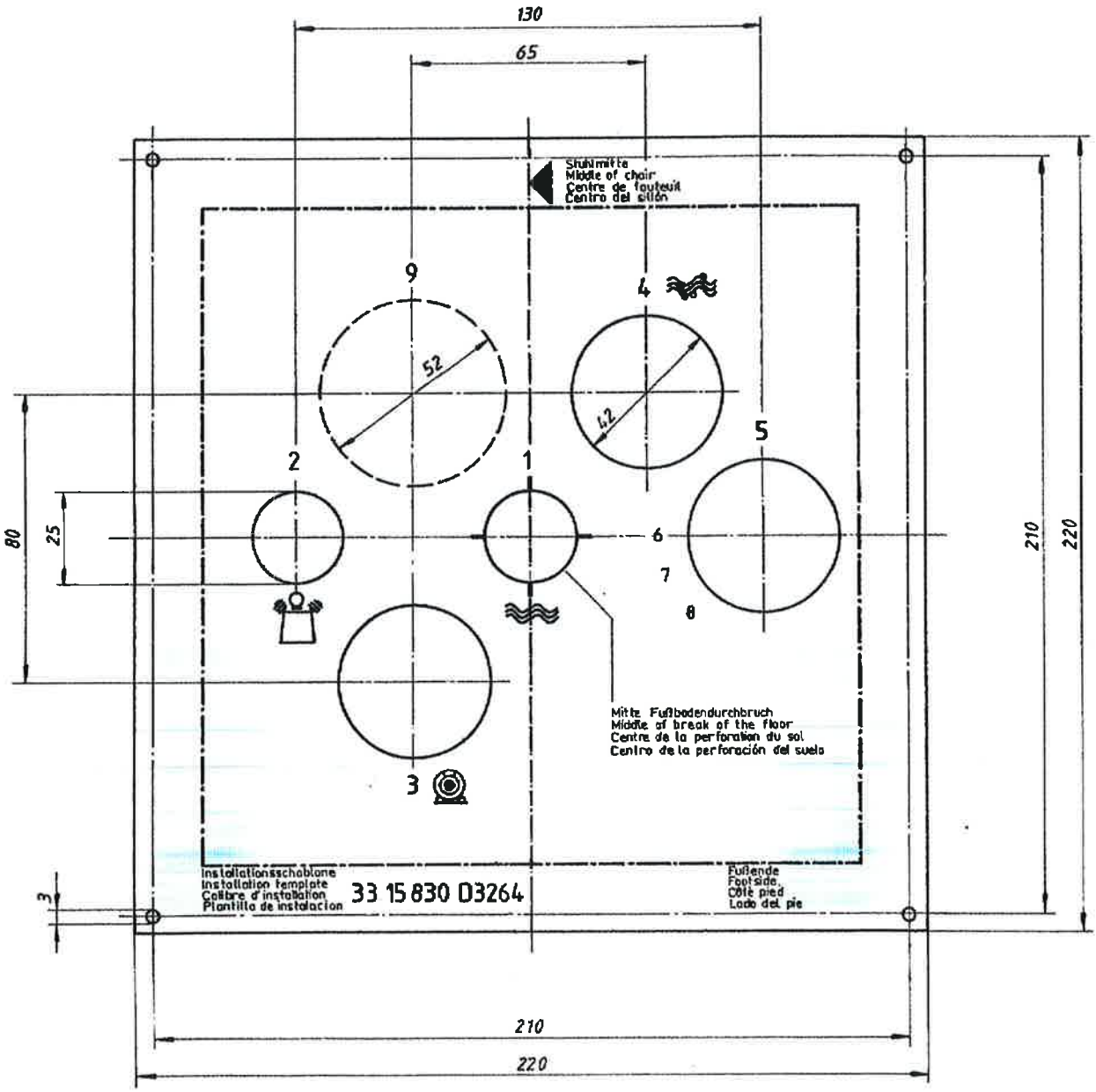

| | |
|---|---|
| | Suction line<br>DN40 HT-PP ISO 8283-3<br>(polypropylene, inner diameter approx. 36.5 mm) |
| | Compressed air supply<br>Pipe 10x1 mm, corner valve outlet 3/8" |
| | Water supply<br>Pipe 10x1 mm, corner valve outlet 3/8" |
| | Water drainage<br>DN40 HT-PP ISO 8283-3<br>(polypropylene, inner diameter approx. 36.5 mm) |
| | Power supply<br>3x1.5 $mm^2$ (AWG16)<br>Circuit breaker: for 230 V AC: 16 A medium-blow<br>for 100-115 V AC: 20 A medium-blow<br>Recommendation: Type B automatic circuit breaker |
| | Option: HELIODENT PLUS radiation cable (10 m)<br>(free end 300 ±50 mm)<br>**CAUTION**<br>The HELIODENT PLUS radiation cable cannot be laid together with USB or HDMI cables. If required, allow for a separate installation pipe. |

# 3.4 Underfloor installation of supply lines

## 3.4.1 Installation template

We recommend that you order the installation template (REF 33 15 830) from Sirona for laying the pipe ends in the installation field.

If necessary, you can also prepare the template yourself based on the diagram below.
The specified dimensions of the segments are the dimensions of the core boreholes.



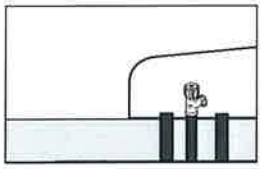
| Pipe no. | Cable | Symbol | Laying the installation template |
|---|---|---|---|
| 1 | |  | Water supply<br>Pipe 10x1 mm, corner valve outlet 3/8" |
| 2 | |  | Compressed air supply<br>Pipe 10x1 mm, corner valve outlet 3/8" |
| 3 | |  | Suction line<br>DN40 HT-PP ISO 8283-3<br>(polypropylene, inner diameter approx. 36.5 mm) |
| 4 | |  | Water drainage<br>DN40 HT-PP ISO 8283-3<br>(polypropylene, inner diameter approx. 36.5 mm) |
| 5 | | | Installation pipe (power supplies)<br>inner diameter approx. 40 mm) |
| | 6 | | Control line to the relay in the suction machine<br>  <br>3 x 1.5 $mm^2$ (AWG16) (quality as for mains cable) |
| | 7 |  | Power supply<br>3x1.5 $mm^2$ (AWG16)<br>Circuit breaker: at 220 - 240 V AC:<br>16 A medium-blow<br>for 100 - 127 V AC:<br>20 A medium-blow<br>Recommendation: Type B automatic circuit breaker |
| | 8 | | Option: HELIODENT PLUS radiation cable (10 m)<br>(free end 300 ±50 mm)<br>**CAUTION**<br>The HELIODENT PLUS radiation cable cannot be laid together with USB or HDMI cables. If required, allow for a separate installation pipe or above-floor installation, see Above-floor installation of supply lines [→ 19]. |
| 9 | | | Installation pipe (IT)<br>inner diameter min. 50 mm<br>(or corresponding flat conduit) for the PC connection |

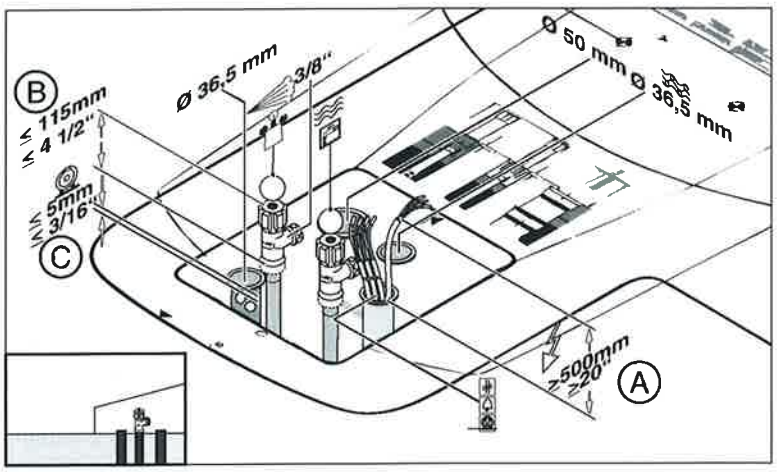
### 3.4.2 Installation of the supply lines in the termination panel

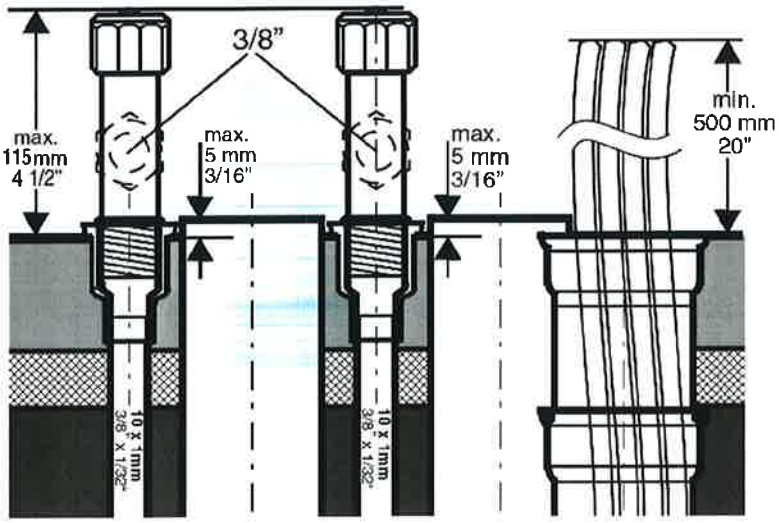
✓ An installation template is available or was prepared.

1. Check the position of the supply lines against the installation template as per the practice blueprint. Ensure that sufficient space is provided between the lines and the walls; see "Scale 1:20". The center of the hole in the floor must be 200 mm (7 7/8") from the foot of the treatment center.
2. Lay the ends of the supply pipes, corner valves and lines as shown in the illustrations.

- The top edge of the corner valves for air and water must not project more than 115 mm (4 1/2") (B) from the top edge of the floor.
- The suction and drainage pipes must be flush with the top edge of the floor (C) (a deviation of +5 mm (3/16") is permissible). The inner diameter of both pipes is 36.5 mm.
- The electric lines must project by at least 500 mm (20") (A).
- The supply lines are laid.





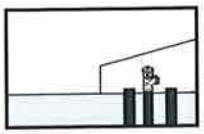
## 3.5 Cleaning the air and water pipes

**NOTE**

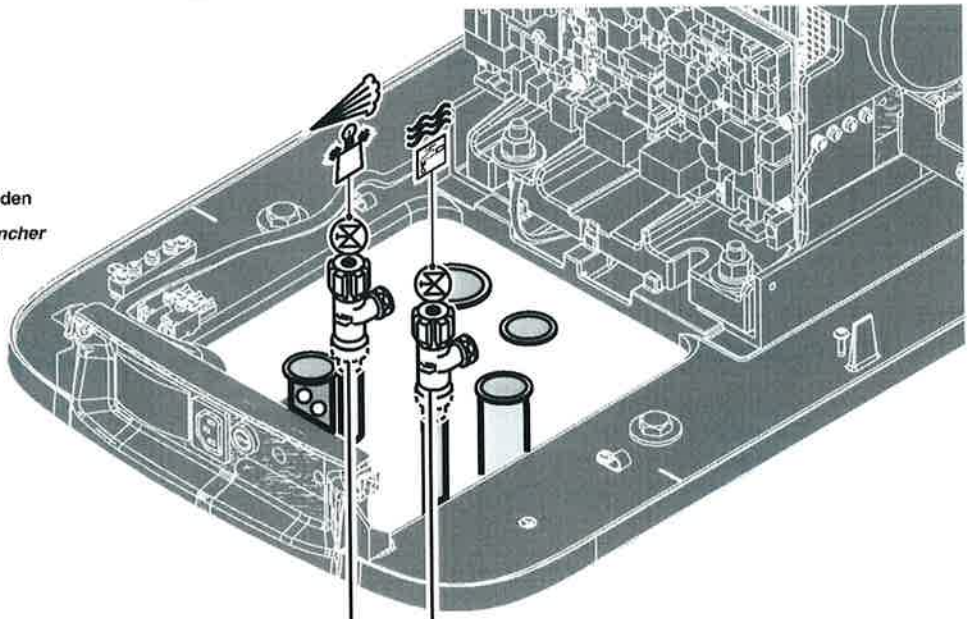
**Chips and other foreign materials could be flushed and/or blown into the treatment center.**

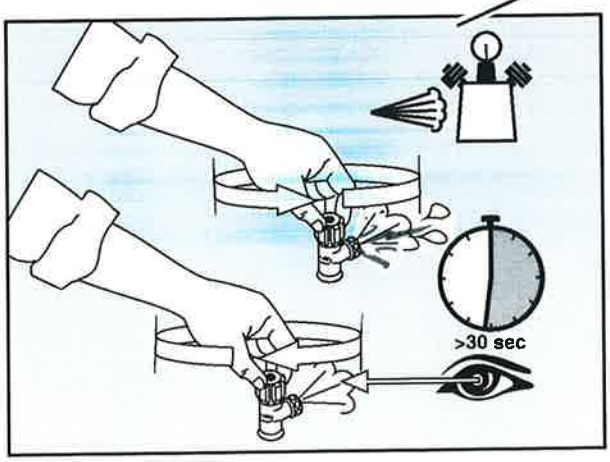
Metal chips can cause malfunctions of the pneumatic components. The filters become clogged with foreign materials.

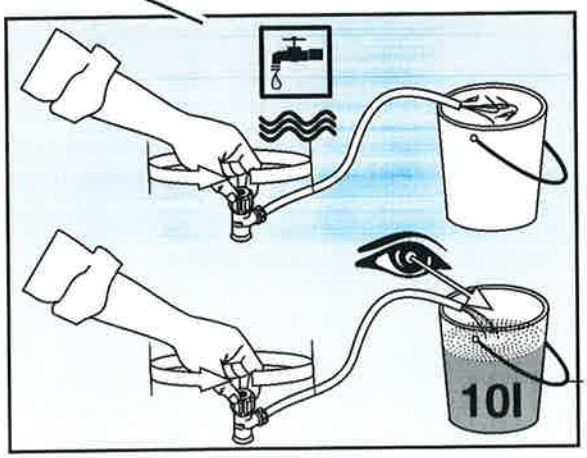
- ➢ During installation, ensure that no chips or other foreign materials enter the lines.
- ➢ Flush the water paths.
- ➢ Blow out the air lines.
- ➢ Ensure that no more foreign materials can enter the lines after they have been flushed or blown out.



**Versorgung durch den Fußboden**
Supply through the floor
***Alimentation à travers du plancher***
*Alimentación a través del suelo*





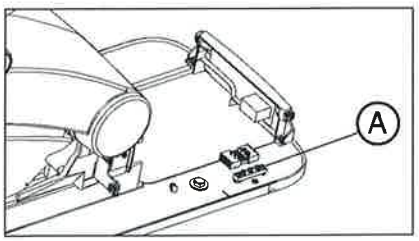
# 3.6 Potential equalization

The treatment center does not require potential equalization

The treatment center, monitor, PC and devices connected to the external device connection have the same potential as a result of the wiring of the treatment center.

When used in hospitals, where external conducting parts (e.g. metallic furniture), shields to protect against electrical interference fields or shielded floors are present, it may, however, be sensible to connect these parts and the treatment center to the potential equalization.

The decision about this should be made by the practice planning staff. The requirements of the standards IEC 60364-7-710 / VDE 0100-710 must be observed.




For the treatment center, the connection to the potential equalization is made on the terminal block of the protective ground wire in the connection box (**A**).

## 3.7 Underfloor installation of the PC connections

Depending on the prevailing local conditions, the existing cable set can be installed in the cable duct of an underfloor installation by an installer.

Cable channel No. 9 is used for this purpose, see Installation template [→ 22].

**IMPORTANT**

The cable set for the PC connection must not be routed in the same cable channel as any existing radiation cables for a HELIODENT Plus unit model!

Cable sets for PC connection with HDMI and USB cable for camera SiroCam are:

- 5 m: REF 64 46 111
- 10 m: REF 63 29 655

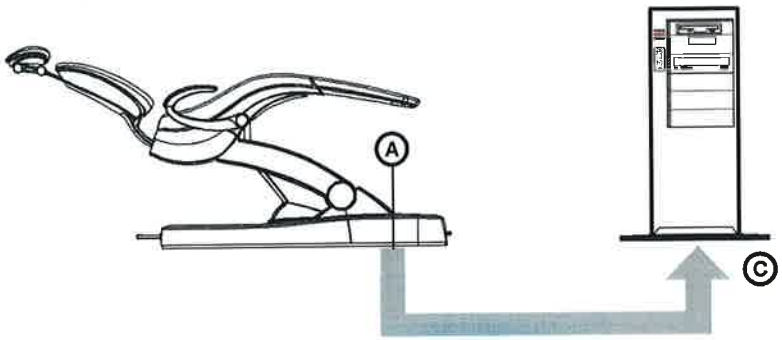
**NOTE**

**Electric lines are susceptible to breakages.**

Any kinks or twists in the cables could damage their wires. You must then replace such cables.

➢ Ensure that electrical lines do not become kinked or twisted.

**Running cables to the PC**




5 m cables: **L530** (USB), **L553** (Ethernet), **L552** (HDMI) and **protective ground wire.**

10 m cables: USB repeater cable, **L339** (Ethernet), **L406** (HDMI) and **protective ground wire**. For PCs with no HDMI output, the **audio** cable is required, which is part of the cable set.

To prevent transmission interference, ensure that the cables are not crossed.

✓ A cable duct is laid from the treatment center to the location of the PC.

✓ Free length A of cables at the treatment center end: Length A = 600 mm


➢ Pull the **USB** , **Ethernet**, **HDMI** cables and **protective ground wire** from the treatment center through the cable duct to the location of the PCs **C**.
For PCs with no HDMI output, also pull an **audio** cable through.

For the USB cable, the TYPE A connector must be on the PC side and the TYPE B connector on the chair side.

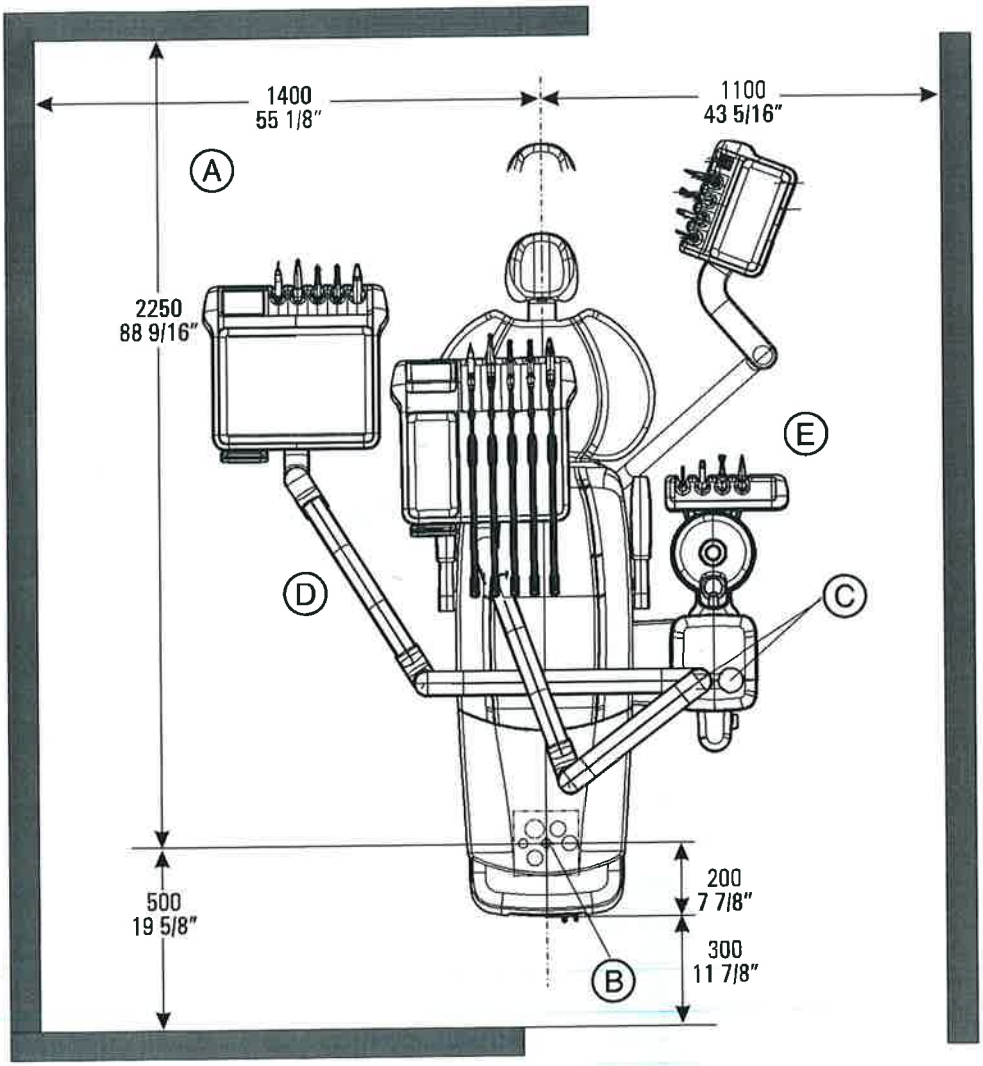
↳ The preparation of the connection for the underfloor installation of the PC is completed.

| IMPORTANT |
| --- |
| **Minimum requirements** for the PC<br>See document "Installation instructions and system requirements for PC configuration," (REF 61 94 075) Sivision Digital. |

# 4 Dimensions, technical data

## 4.1 Intego dimensions, scale 1:20

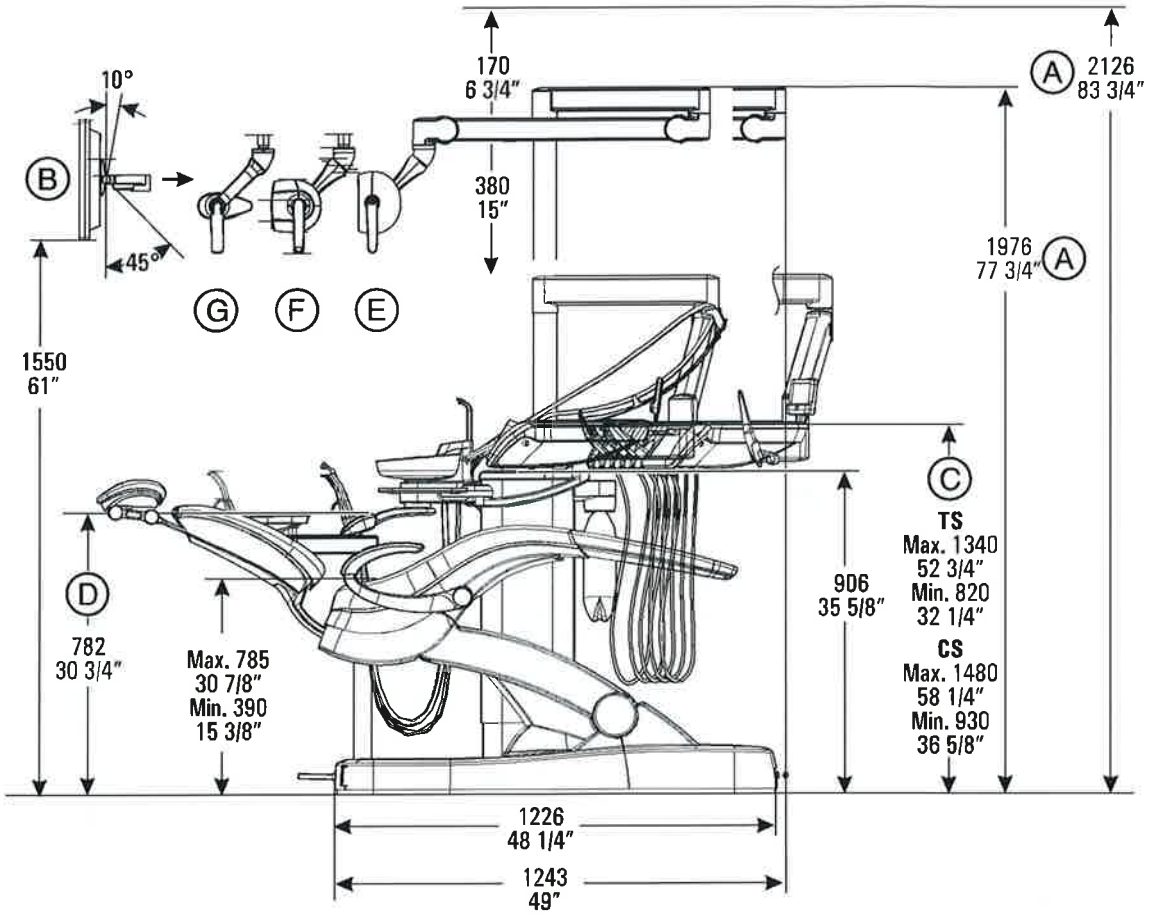
### 4.1.1 Distances in the Intego treatment room




| | |
|---|---|
| A | Recommended distances from cabinet or wall. |
| B | Center of the floor cut-out/installation area |
| C | IMPORTANT!<br>The lamp installed here and the dentist element with/without a tray have a swivel range which exceeds the specified distances. |
| D | Dentist element TS or CS |
| E | Assistant element Compact or Comfort |

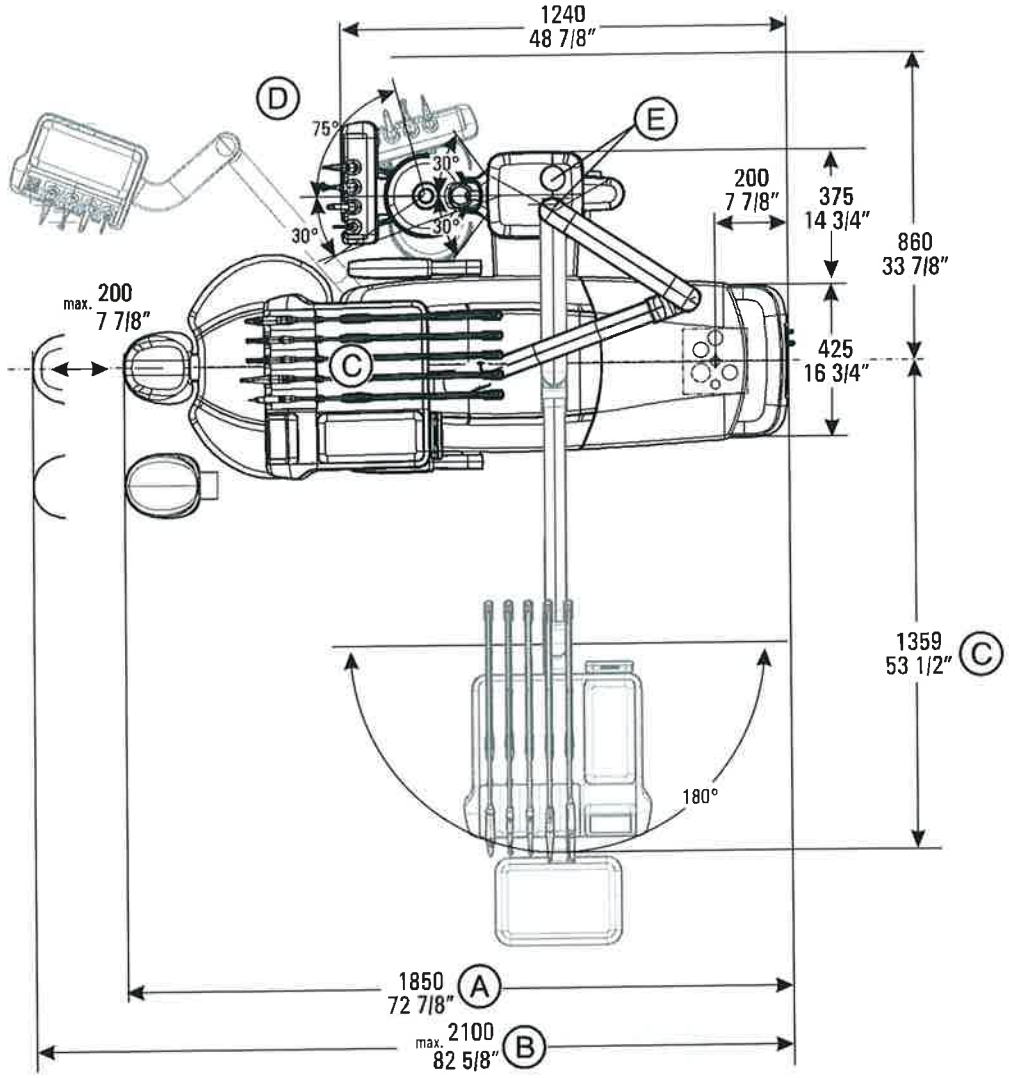
### 4.1.2 Intego side view

| IMPORTANT |
| --- |
| Recommended room height ≥ 2220 mm |



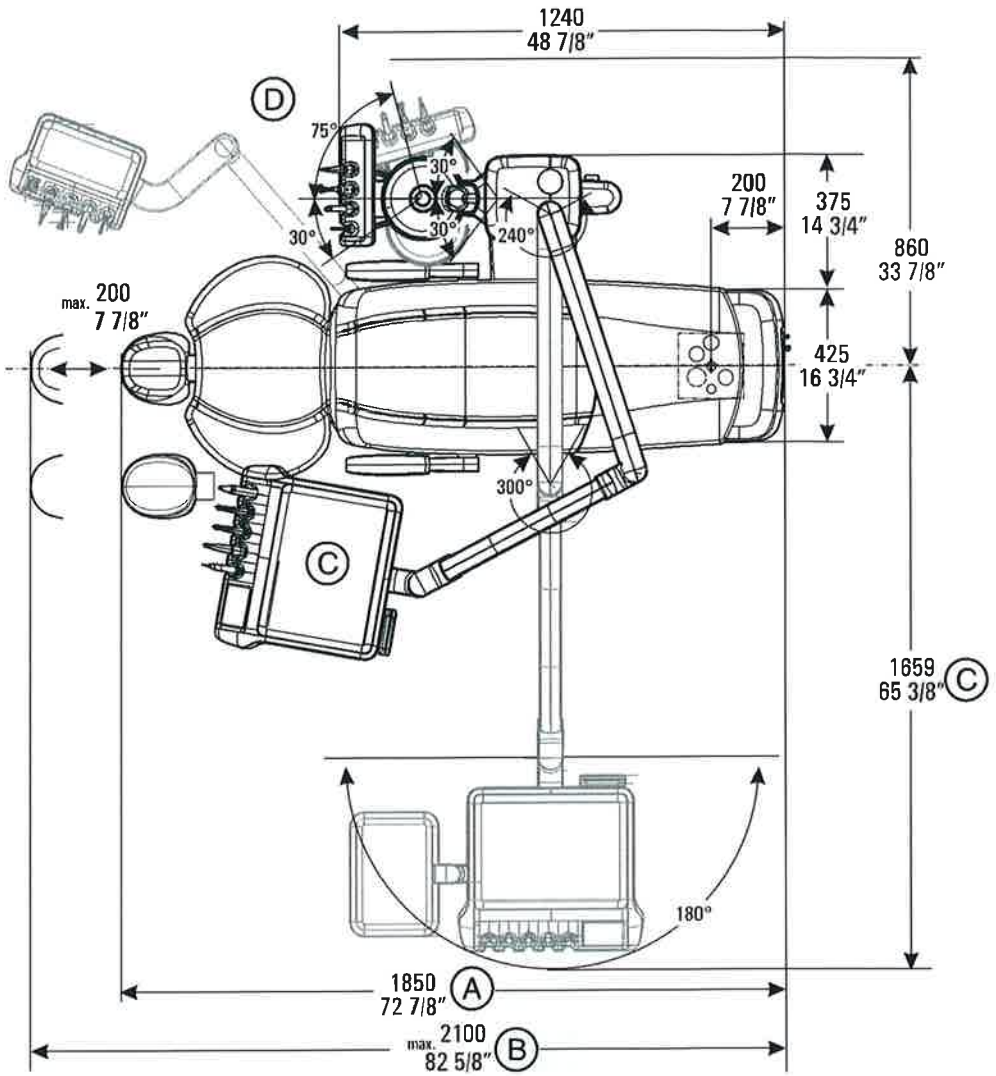

| | |
| --- | --- |
| A | Dimensions at the Compact water unit |
| B | Monitor on lamp support tube |
| C | Height of dentist element TS or CS |
| D | High upper edge on the Compact or Comfort assistant element |
| E | LEDlight Plus |
| F | LEDview Plus |
| G | LEDview |

### 4.1.3 Top view of Intego with dentist element CS



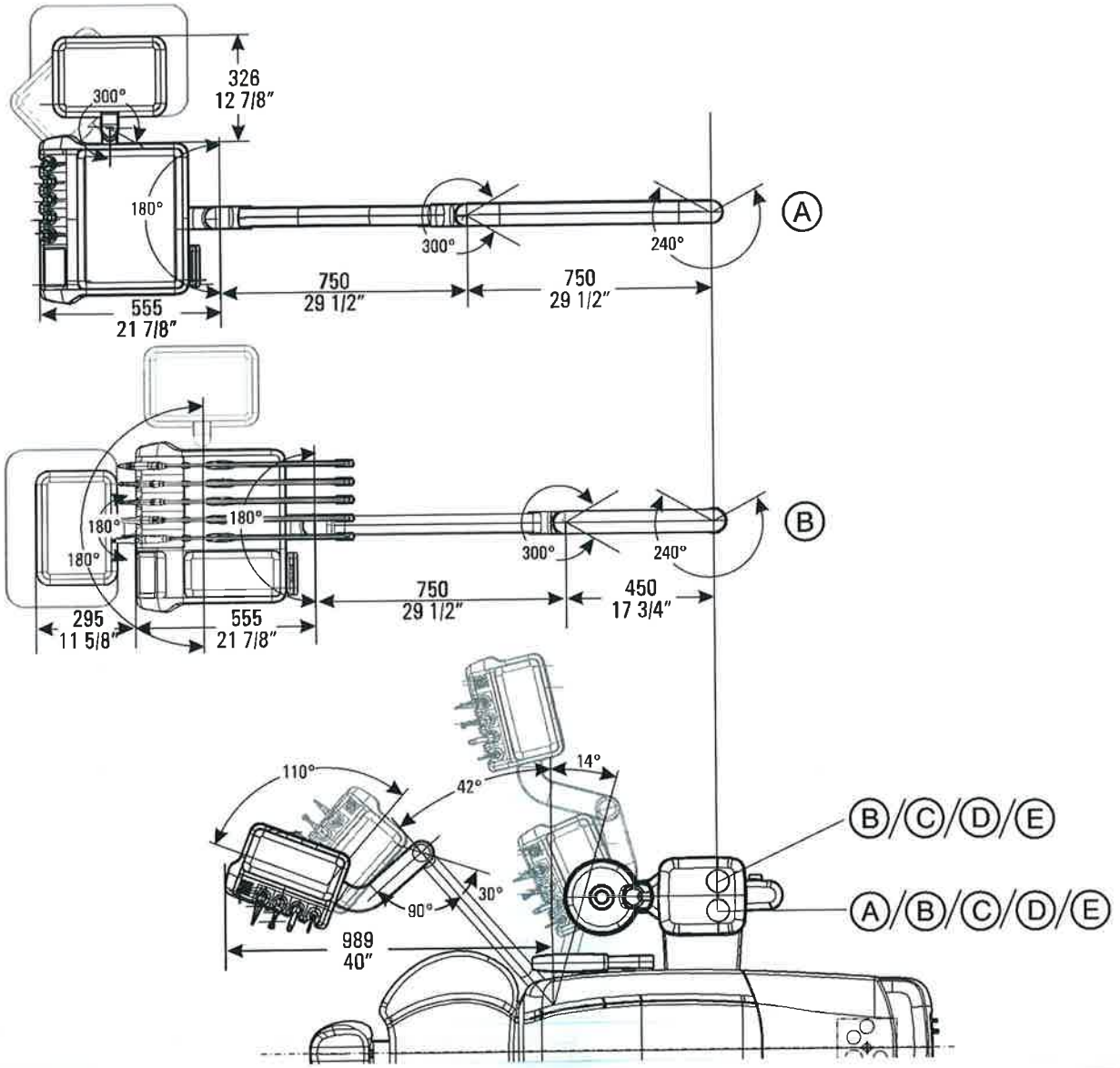

| | |
|---|---|
| A | Head support: Length of treatment center with patient height of 176 cm and default program 2 |
| B | Head support: Maximum length of the treatment center |
| C | Dimensions of dentist element CS with different fitting positions (E) |
| D | Assistant element Compact or Comfort |
| E | Possible fitting positions of dentist element CS and lamp |

### 4.1.4 Top view of Intego with dentist element TS

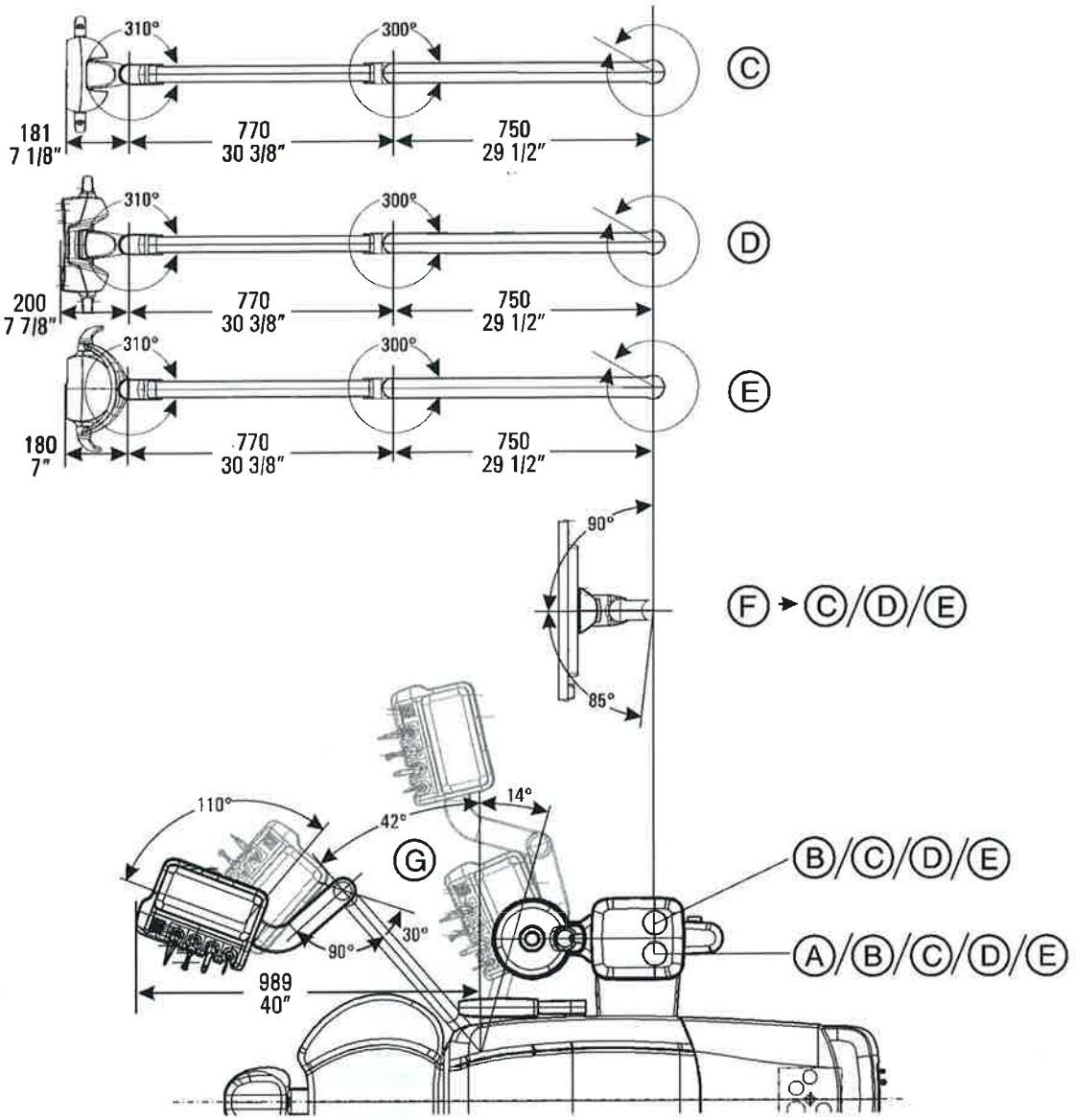



| | |
|---|---|
| A | Head support: Length of treatment center with patient height of 176 cm and default program 2 |
| B | Head support: Maximum length of the treatment center |
| C | Dimension of dentist element TS |
| D | Assistant element Compact **or** Comfort |

## 4.1.5 Top view of Intego with options

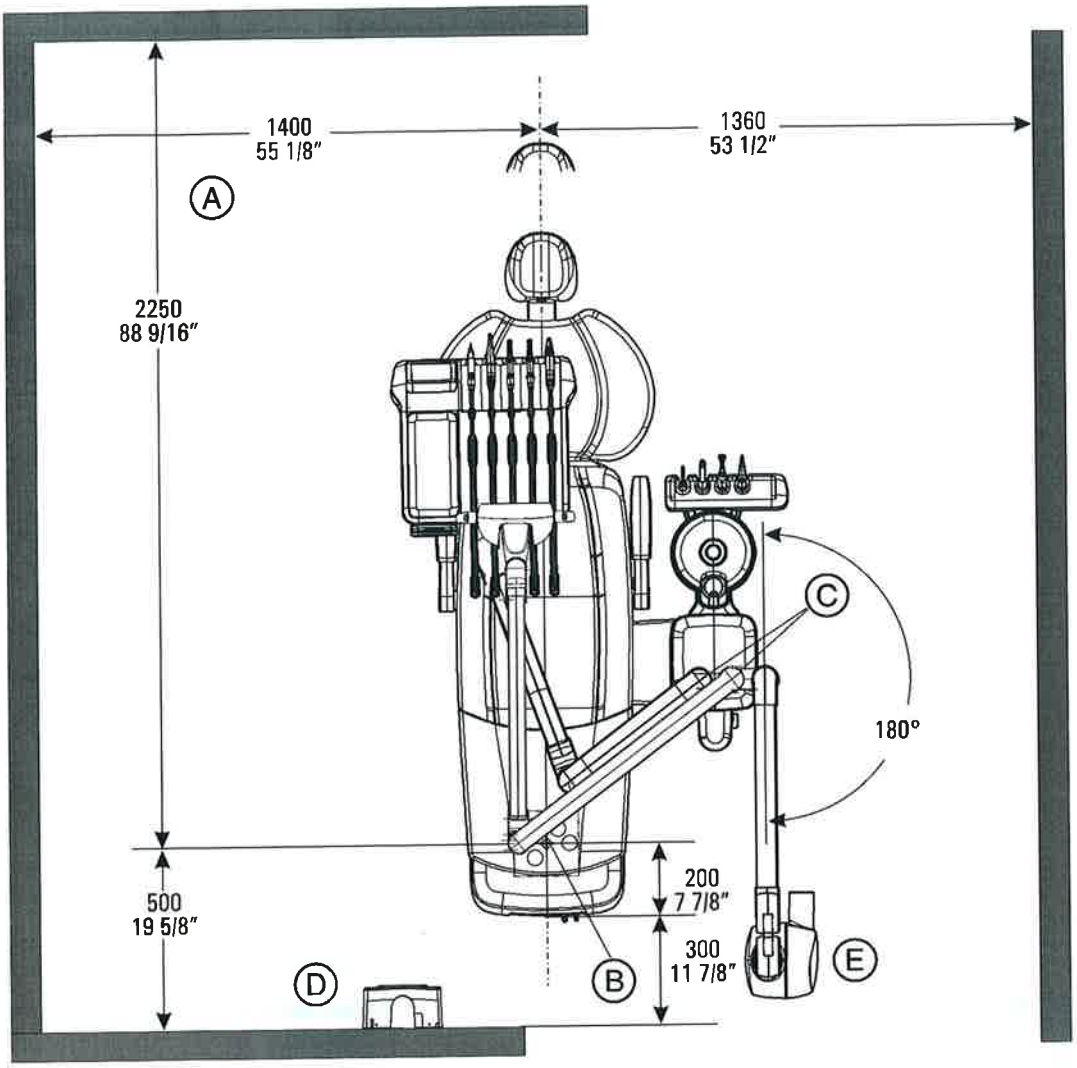



| | |
|---|---|
| A | TS dentist element |
| B | CS dentist element |



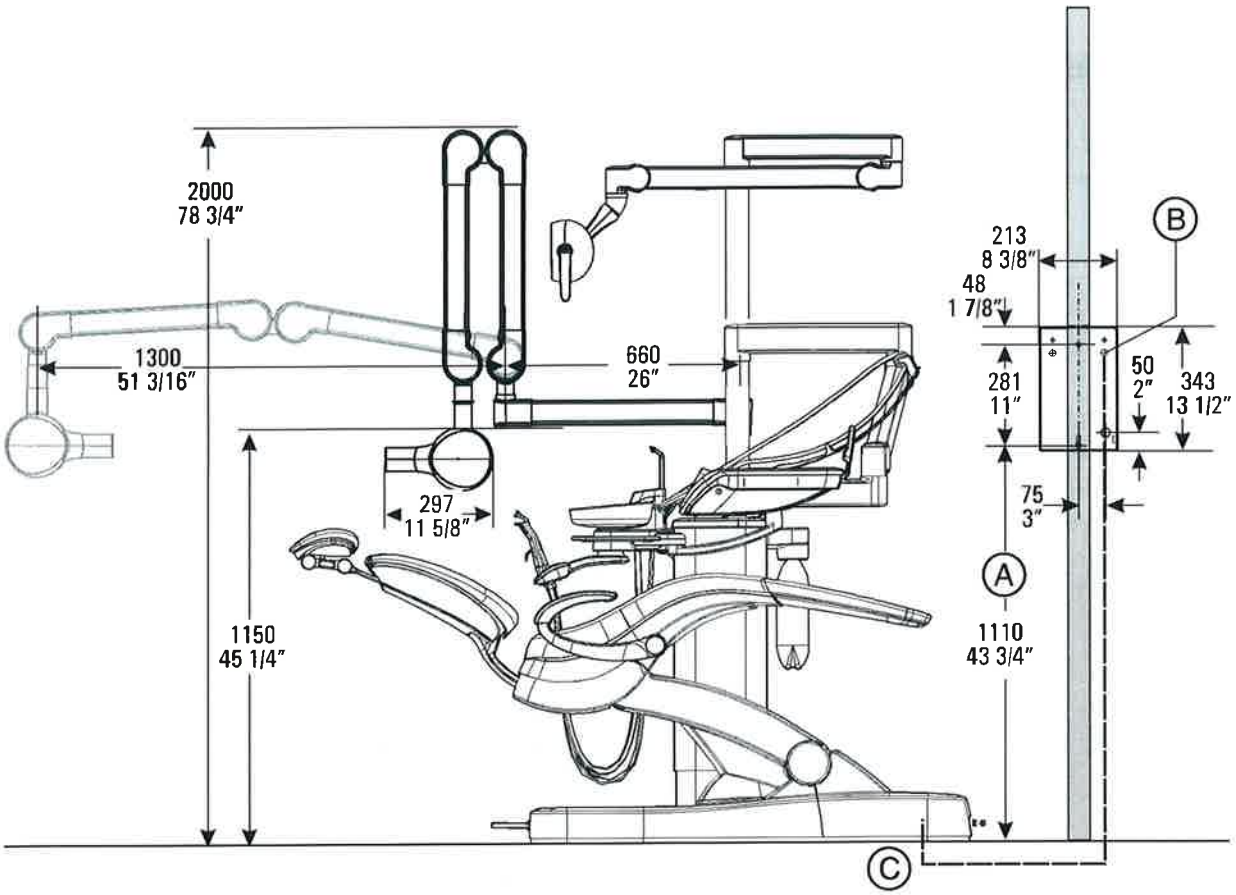

| | |
|---|---|
| C | LEDlight Plus |
| D | LEDview Plus |
| E | LEDview |
| F | Monitor |
| G | Comfort assistant element |

### 4.1.6 Distances in the Intego treatment room with Heliodent Plus unit model




| | |
|---|---|
| A | Recommended distances from cabinet or wall. |
| B | Center of the floor cut-out/installation area |
| C | IMPORTANT!<br>The lamp installed here and the dentist element with/without a tray and the Heliodent Plus have a swivel range which exceeds the specified distances. |
| D | Heliodent Plus wall adapter<br>Observe radiation protection regulations! |
| E | Support arm with Heliodent Plus tube assembly |

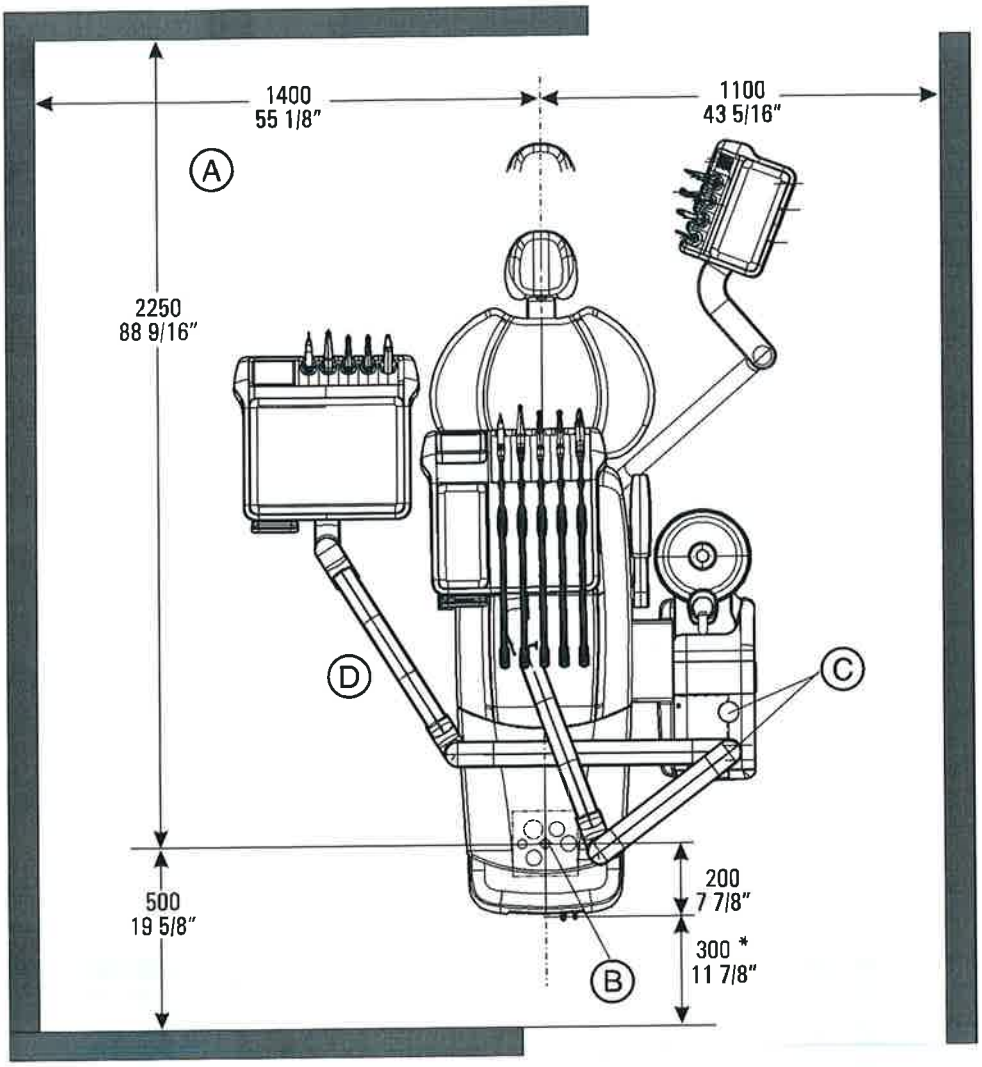
### 4.1.7 Side view of Intego with Heliodent Plus unit model




| | |
|---|---|
| A | Recommended installation height for wall adapter: 1110 mm (43 3/4") |
| B | Cable bushing for radiation cable |
| C | The radiation cable between Intego and the wall adapter is supplied (12.5 mm outer diameter, max. cable length 10 meters (393").<br>**CAUTION**<br>The Heliodent Plus radiation cable must not be laid together with USB or HDMI cables. If required, allow for a separate installation pipe or above-floor installation, see Above-floor installation of supply lines [→ 19]. |

# 4.2 Intego pro dimensions, scale 1:20

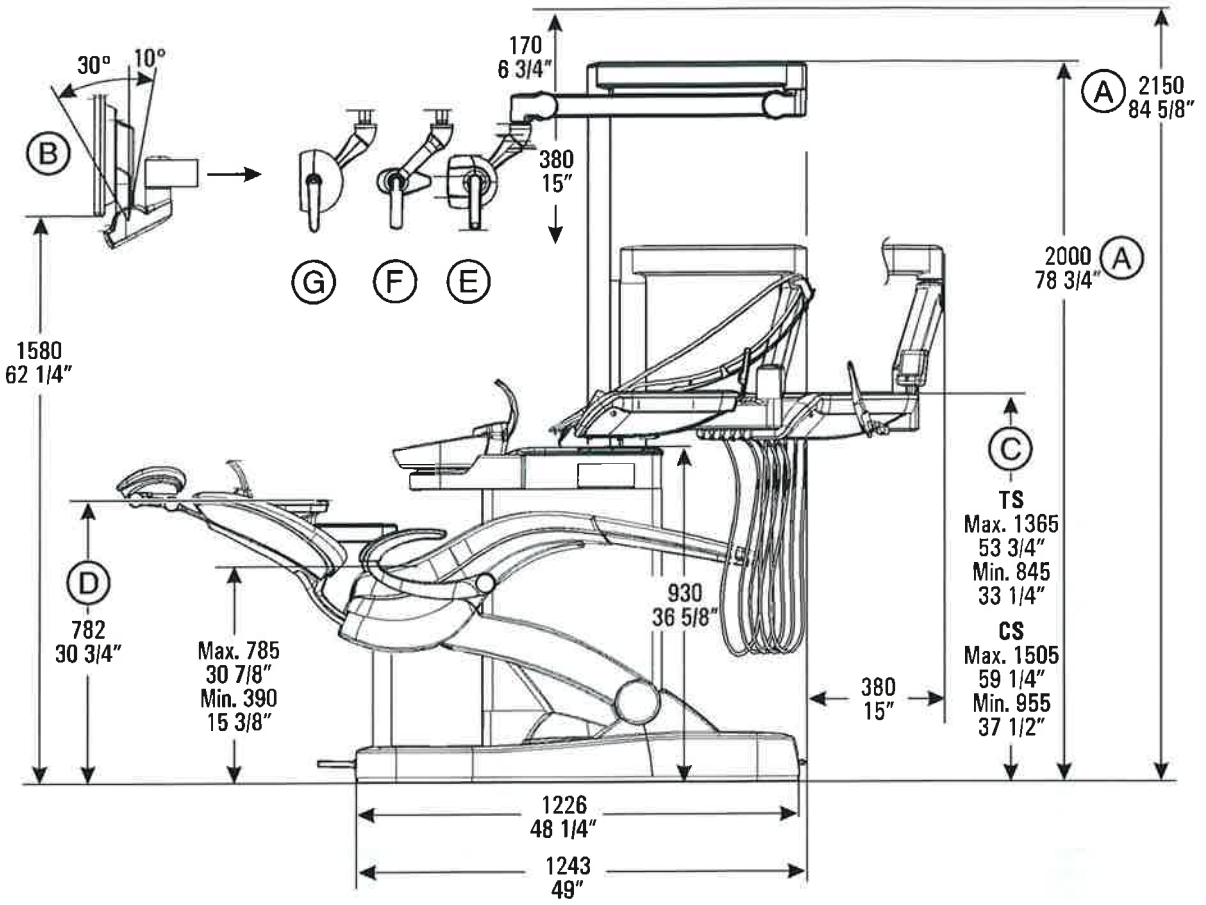
## 4.2.1 Distances in the Intego pro treatment room




| | |
|---|---|
| A | Recommended distances from cabinet or wall. |
| B | Center of the floor cut-out/installation area |
| C | **IMPORTANT!**<br>The lamp installed here and the dentist element with/without a tray have a swivel range which exceeds the specified distances.<br>* The dentist element TS has a swivel range of 380 mm (15 ") |
| D | Dentist element TS or CS |

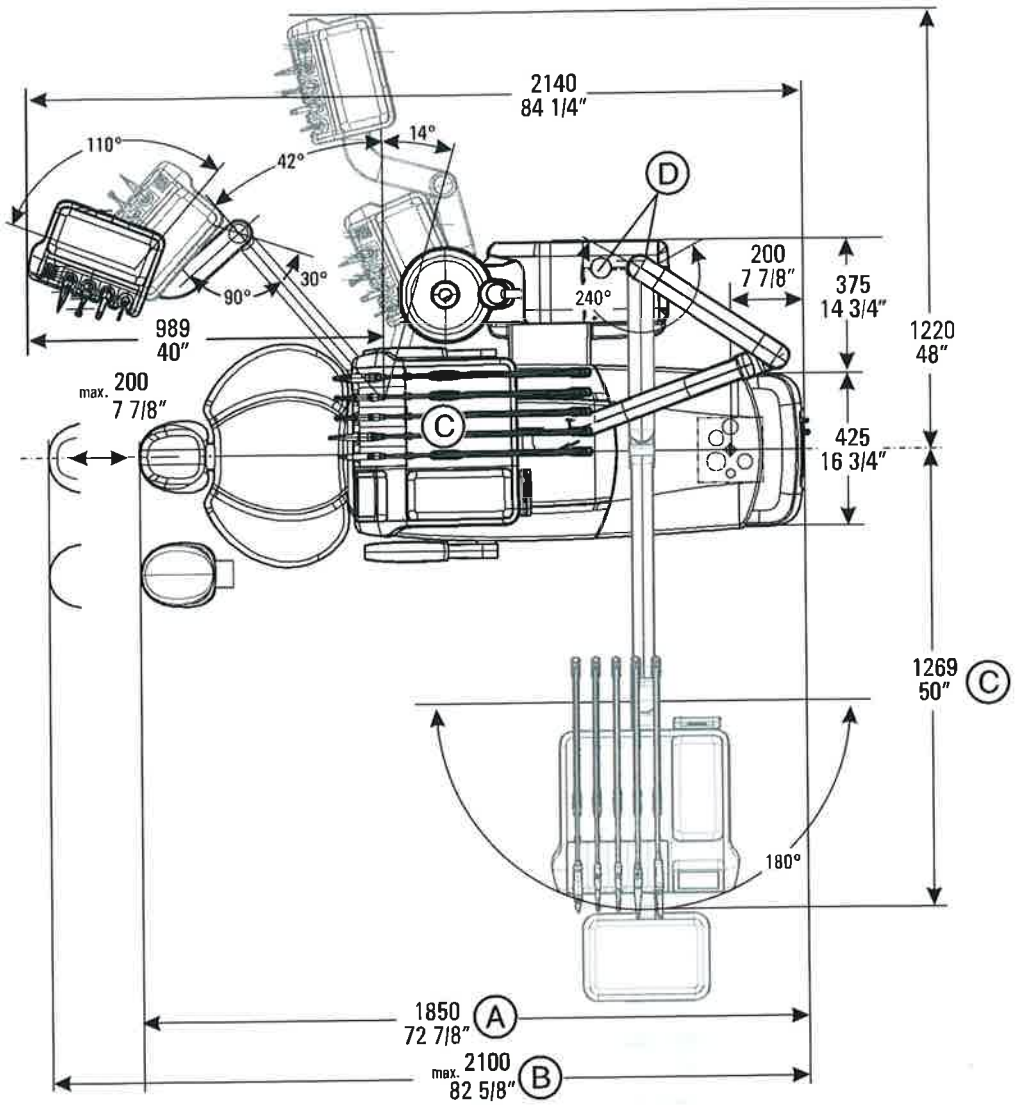
### 4.2.2 Intego pro side view

| IMPORTANT |
| --- |
| Recommended room height ≥ 2220 mm |



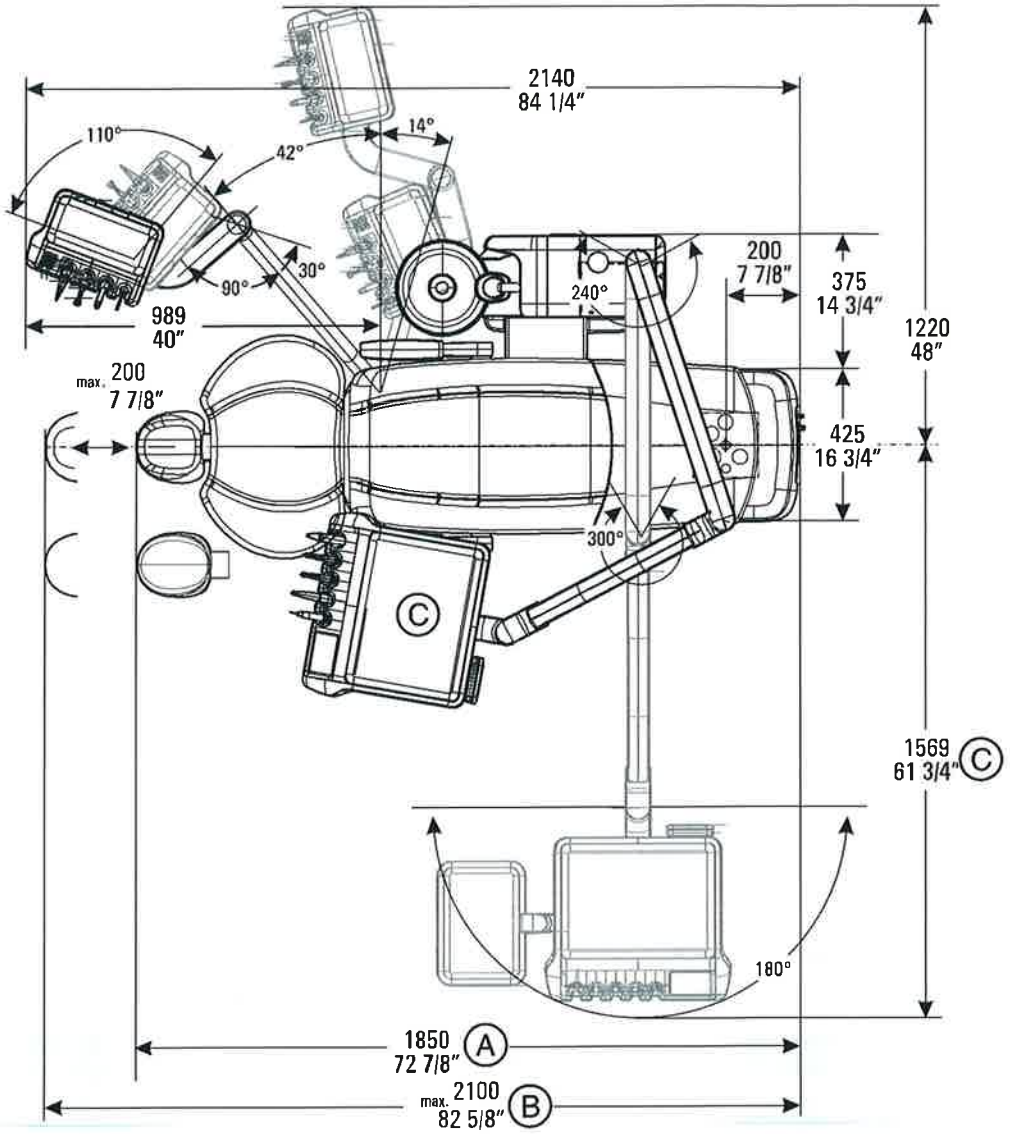

| | |
| --- | --- |
| A | Dimensions at the Comfort water unit (height and swivel range) |
| B | Monitor on lamp support tube |
| C | Height of dentist element TS or CS |
| D | High upper edge on the Comfort assistant element |
| E | LEDview Plus |
| F | LEDview |
| G | LEDlight Plus |

### 4.2.3 Top view of Intego pro with dentist element CS



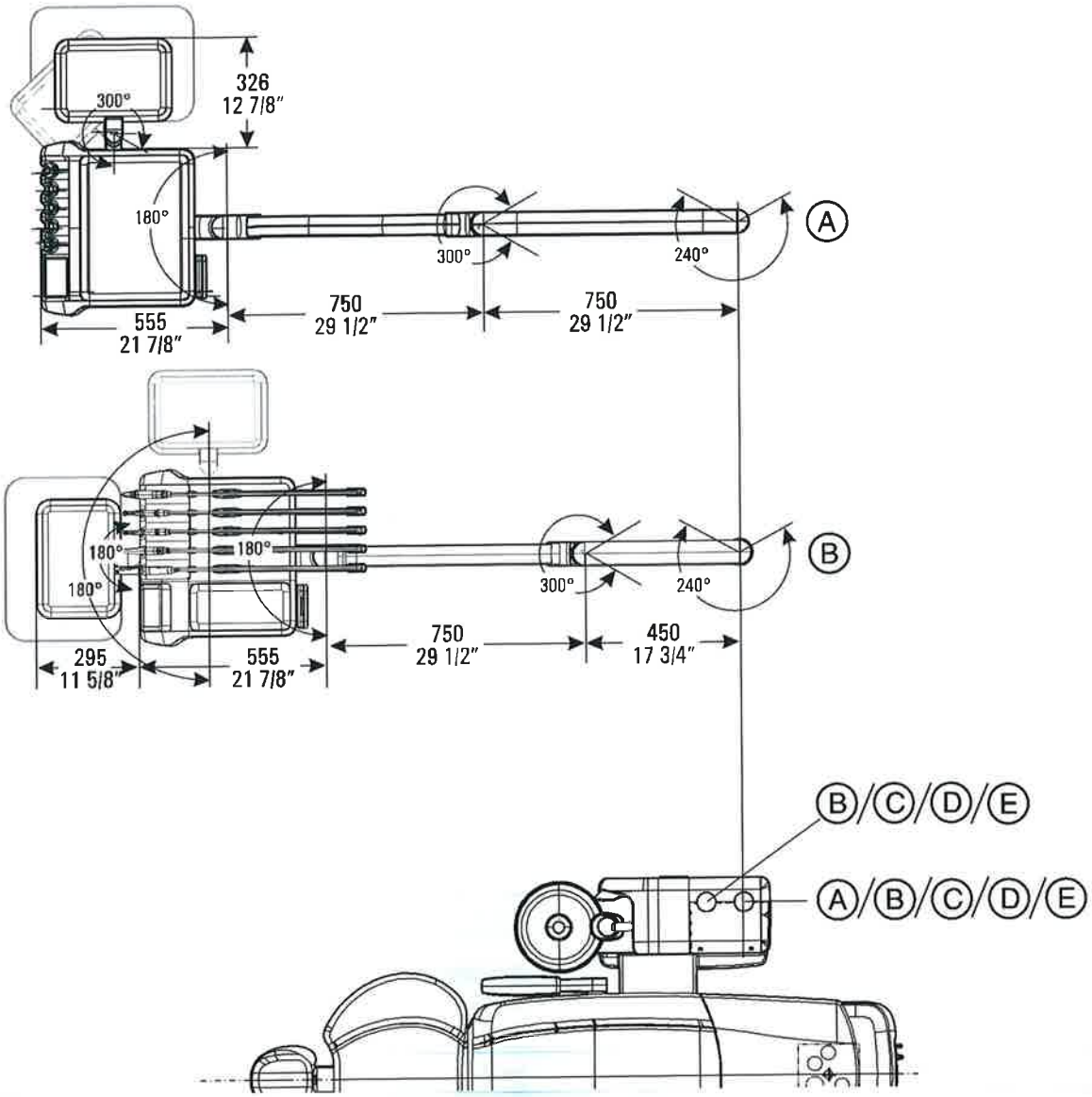

| | |
|---|---|
| A | Head support: Length of treatment center with patient height of 176 cm and default program 2 |
| B | Head support: Maximum length of the treatment center |
| C | Dimension of dentist element CS |
| D | Potential fitting positions of CS dentist element and light (Not possible with Heliodent Plus on the lamp support tube) |

### 4.2.4 Top view of Intego pro with dentist element TS

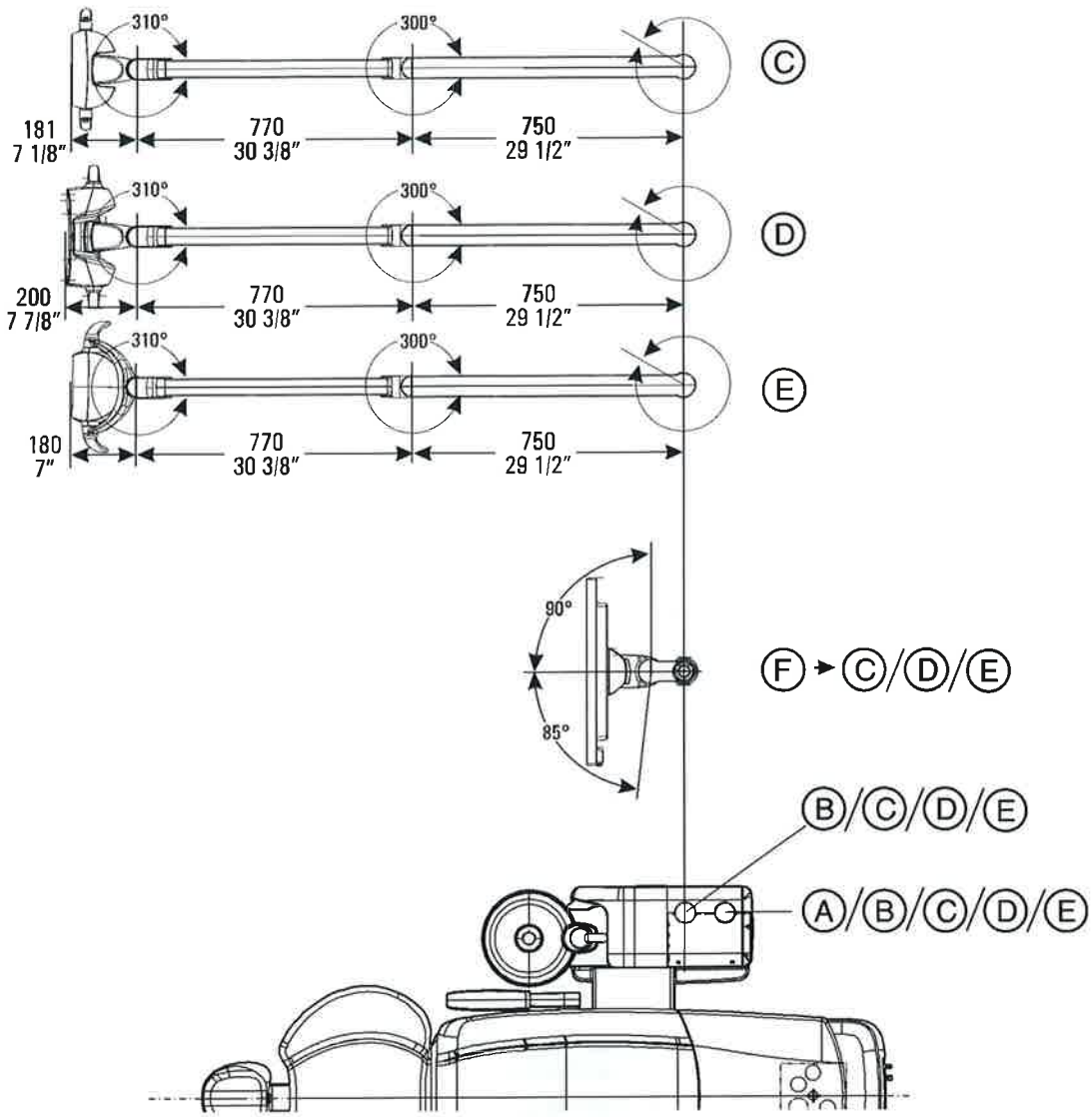



| | |
|---|---|
| A | Head support: Length of treatment center with patient height of 176 cm and default program 2 |
| B | Head support: Maximum length of the treatment center |
| C | Dimension of dentist element TS |

## 4.2.5 Top view of Intego pro with options

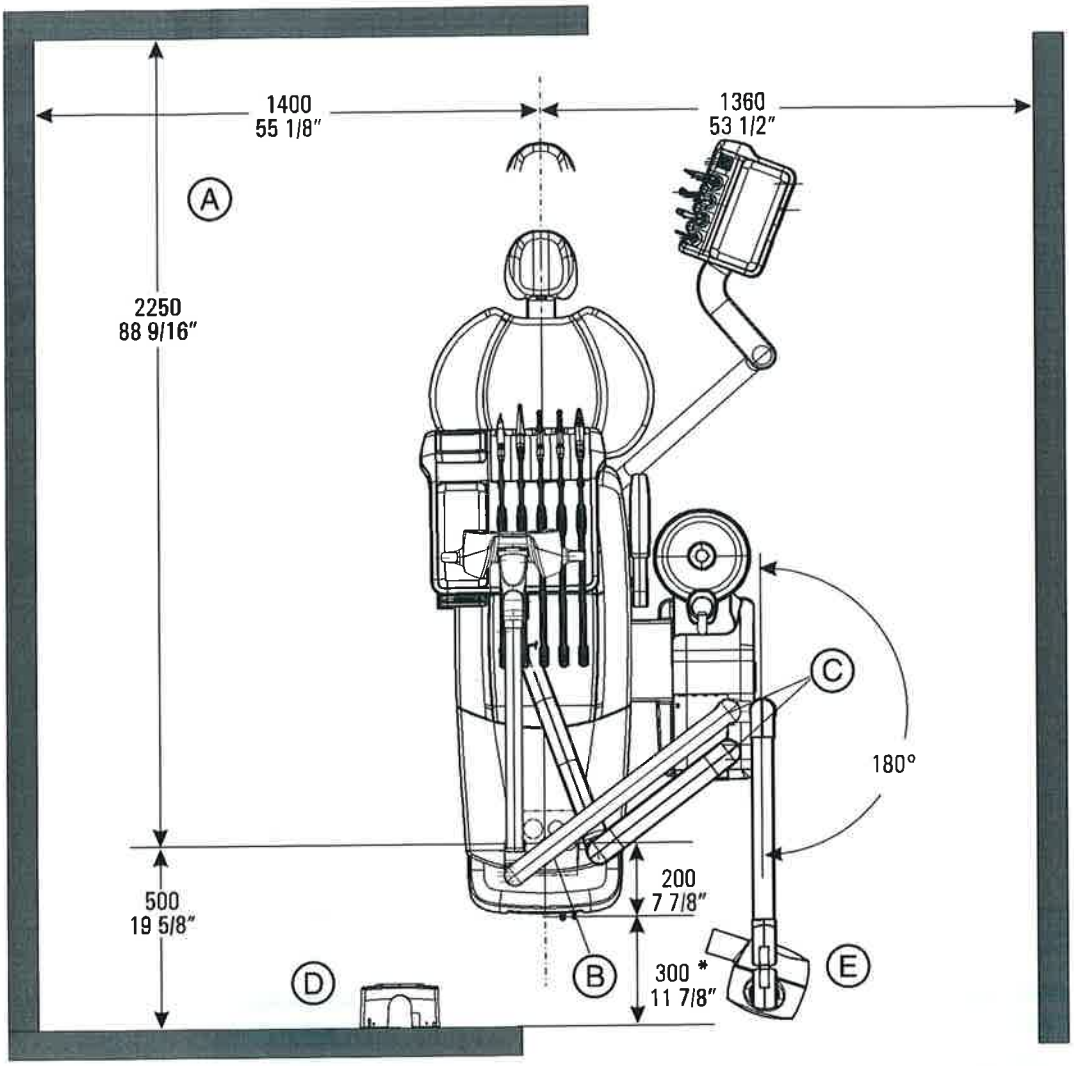



| | |
|---|---|
| A | TS dentist element |
| B | CS dentist element |



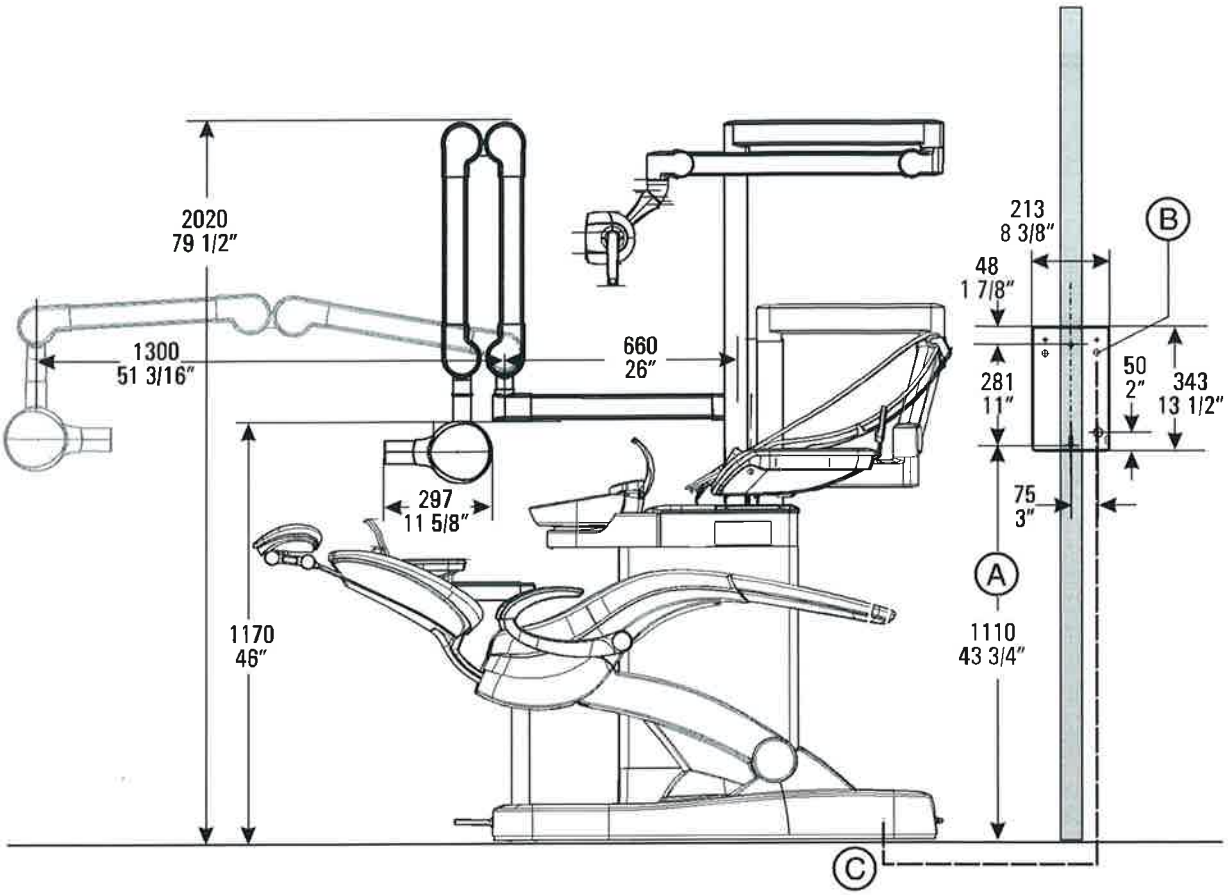

| | |
|---|---|
| C | LEDlight Plus |
| D | LEDview Plus |
| E | LEDview |
| F | Monitor |

## 4.2.6 Distances in the Intego pro treatment room with Heliodent Plus unit model




| | |
|---|---|
| A | Recommended distances from cabinet or wall. |
| B | Center of the floor cut-out/installation area |
| C | **IMPORTANT!**<br>The lamp installed here and the dentist element with/without a tray and the Heliodent Plus have a swivel range which exceeds the specified distances. |
| D | Heliodent Plus wall adapter<br>Observe radiation protection regulations! |
| E | Support arm with Heliodent Plus tube assembly |

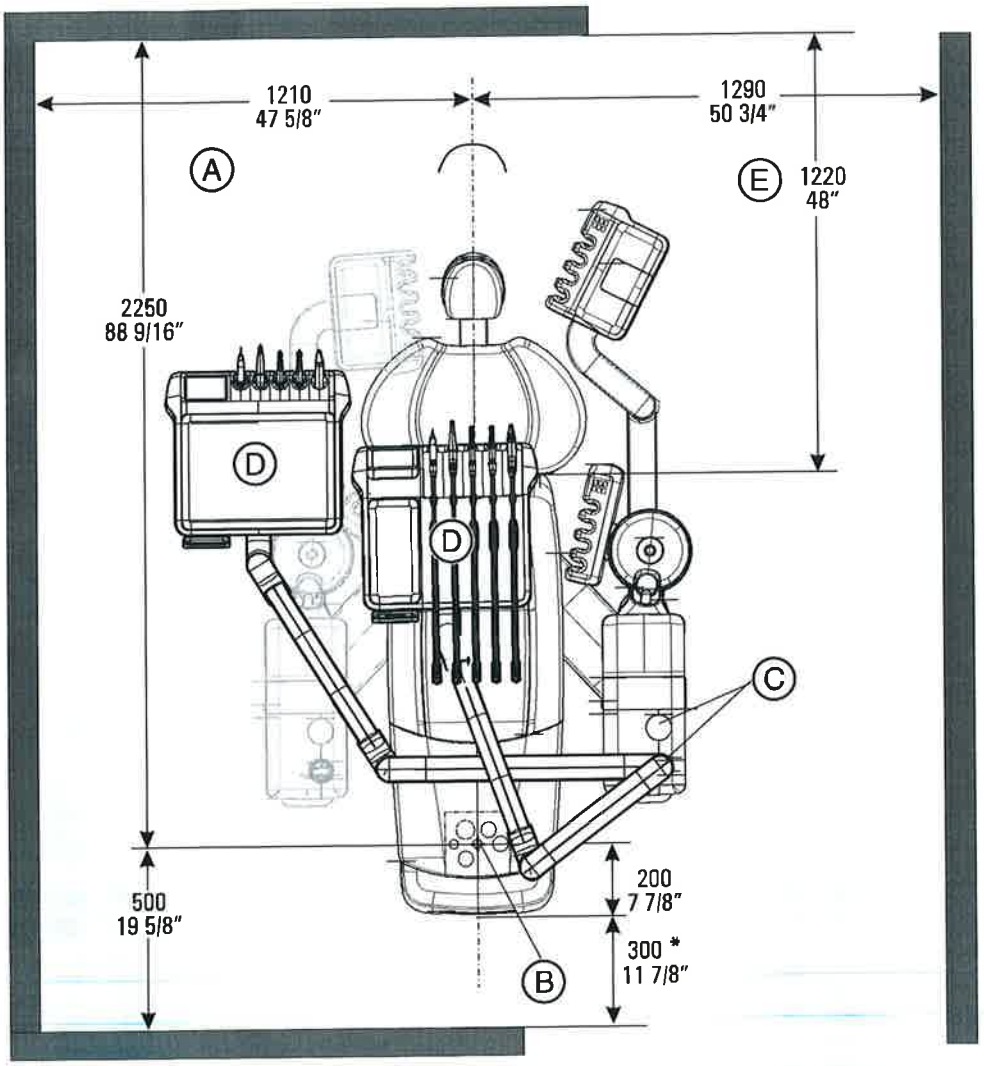
### 4.2.7 Side view of Intego pro with Heliodent Plus unit model




| | |
|---|---|
| A | Recommended installation height for wall adapter: 1110 mm (43 3/4") |
| B | Cable bushing for radiation cable |
| C | The radiation cable between Intego and the wall adapter is supplied (12.5 mm outer diameter, max. cable length 10 meters (393").<br>**CAUTION**<br>The Heliodent Plus radiation cable must not be laid together with USB or HDMI cables. If required, allow for a separate installation pipe or above-floor installation, see Above-floor installation of supply lines [→ 19]. |

# 4.3 Dimensions for Intego Ambidextrous, Intego pro Ambidextrous, scale 1:20

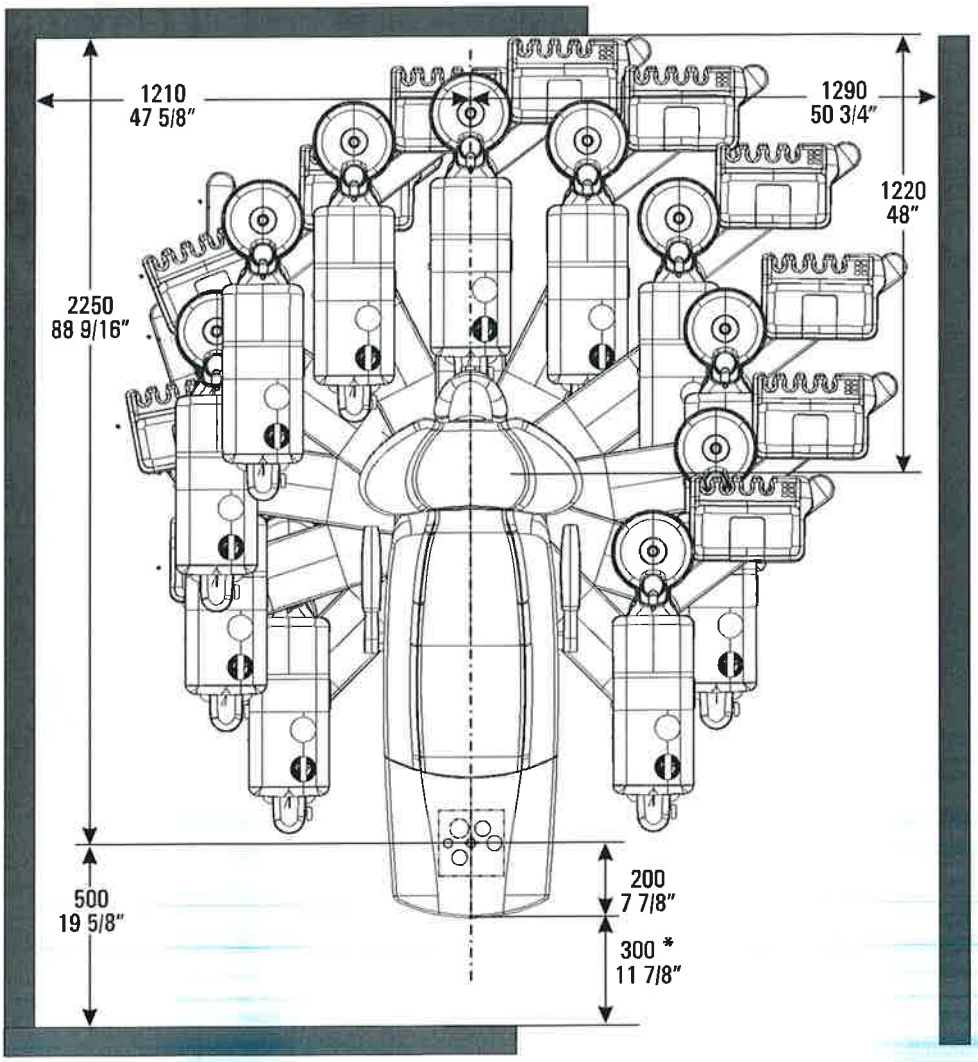
## 4.3.1 Distances in the Intego Ambidextrous, Intego pro Ambidextrous treatment room




| | |
|---|---|
| A | Recommended distances from cabinet or wall. |
| B | Center of the floor cut-out/installation area |
| C | IMPORTANT!<br>The lamp installed here and the dentist element with/without a tray have a swivel range which exceeds the specified distances.<br>* The TS dentist element has a swivel range of 422 mm (16 5/8") |

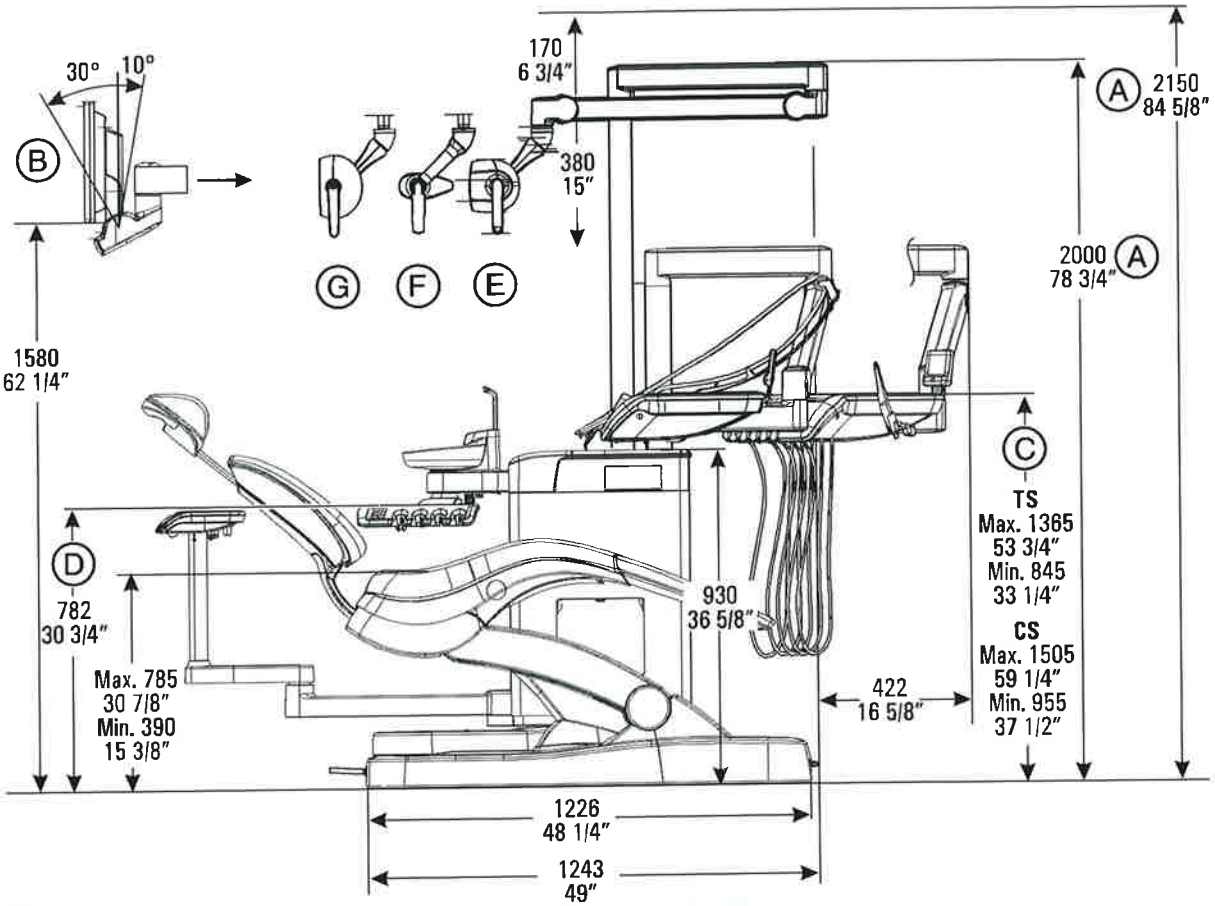
| | |
|---|---|
| D | Dentist element TS or CS |
| E | **IMPORTANT!**<br>The minimum distance of the rear edge of the chair (**with** cladding) to the wall or cabinets must be complied with, otherwise the water unit cannot be fully swiveled round. |

**Minimum distances for conversion from right-handed to left-handed treatment area and vice versa 2750 x 2500 mm**



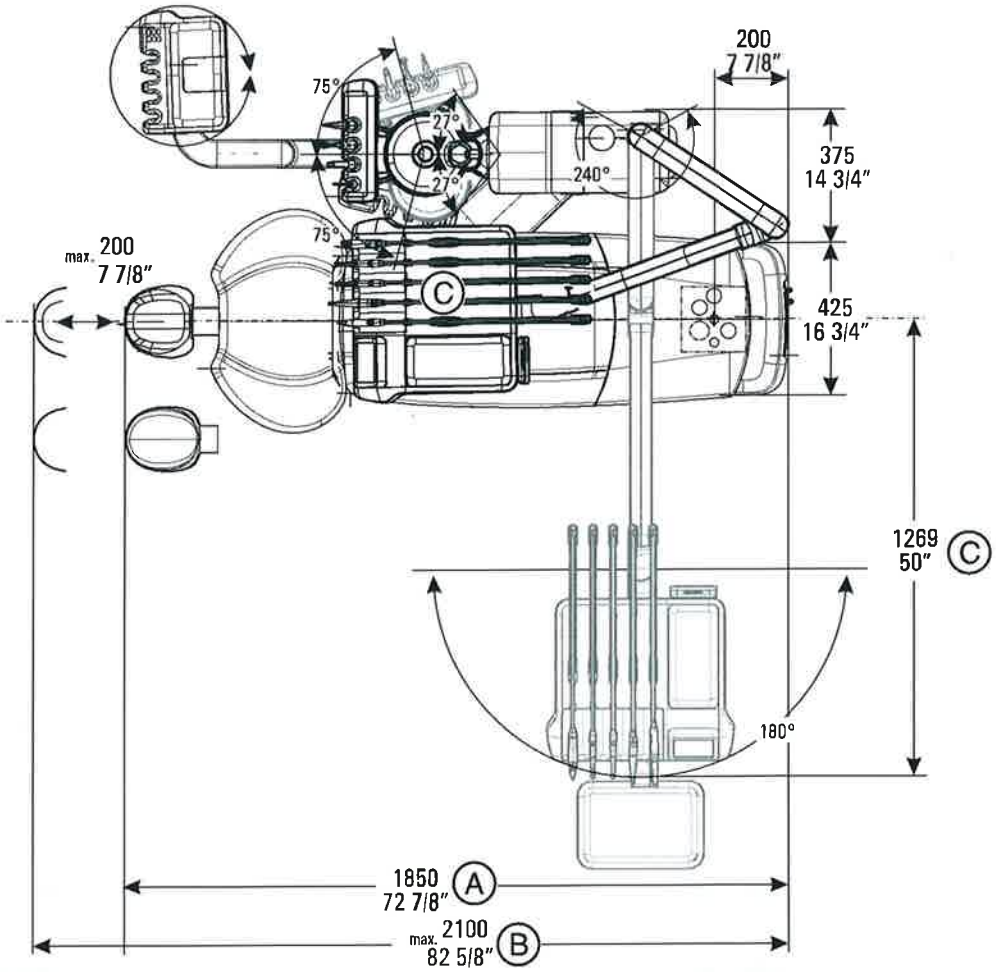
## 4.3.2 Side view of Intego Ambidextrous, Intego pro Ambidextrous

| IMPORTANT |
| --- |
| Recommended room height ≥ 2220 mm |



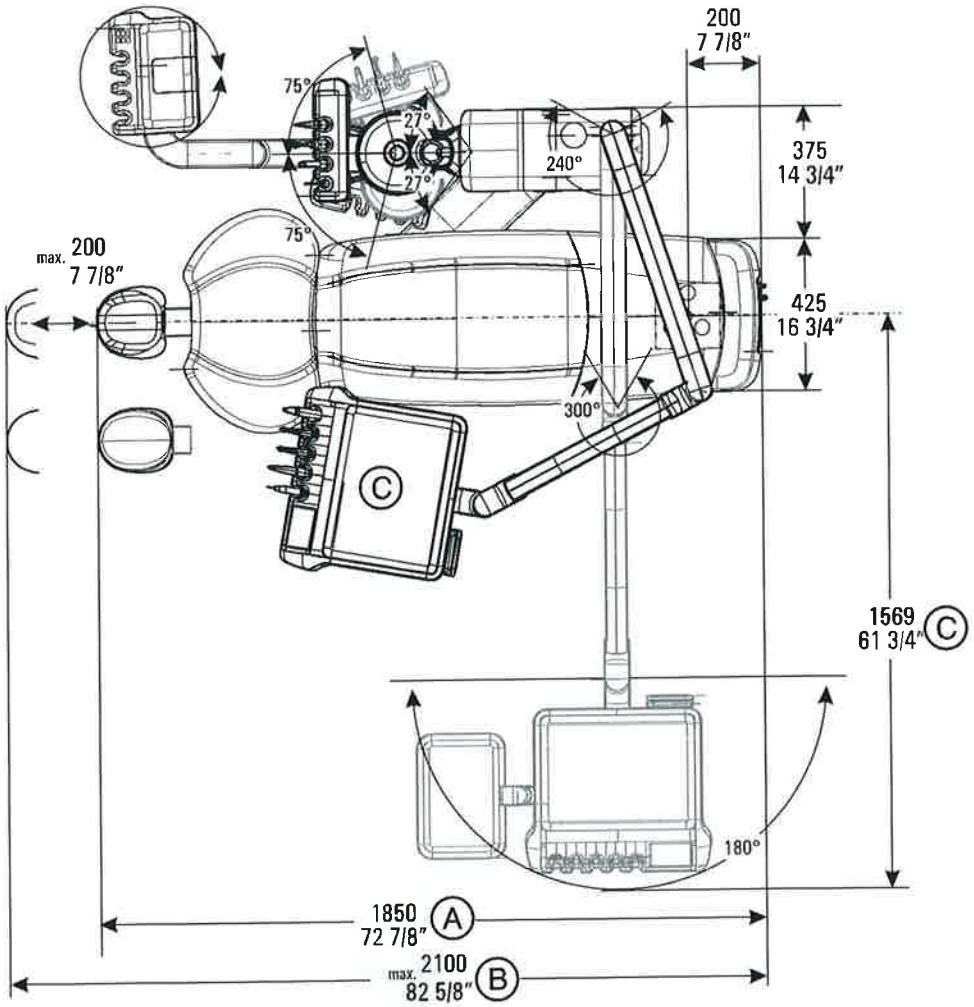

| | |
| --- | --- |
| A | Dimensions at the Compact water unit |
| B | Monitor on lamp support tube |
| C | Height of dentist element TS **or** CS |
| D | High upper edge on the Compact **or** Comfort assistant element |
| E | LEDview Plus |
| F | LEDview |
| G | LEDlight Plus |

### 4.3.3 Top view of Intego Ambidextrous, Intego pro Ambidextrous with dentist element CS



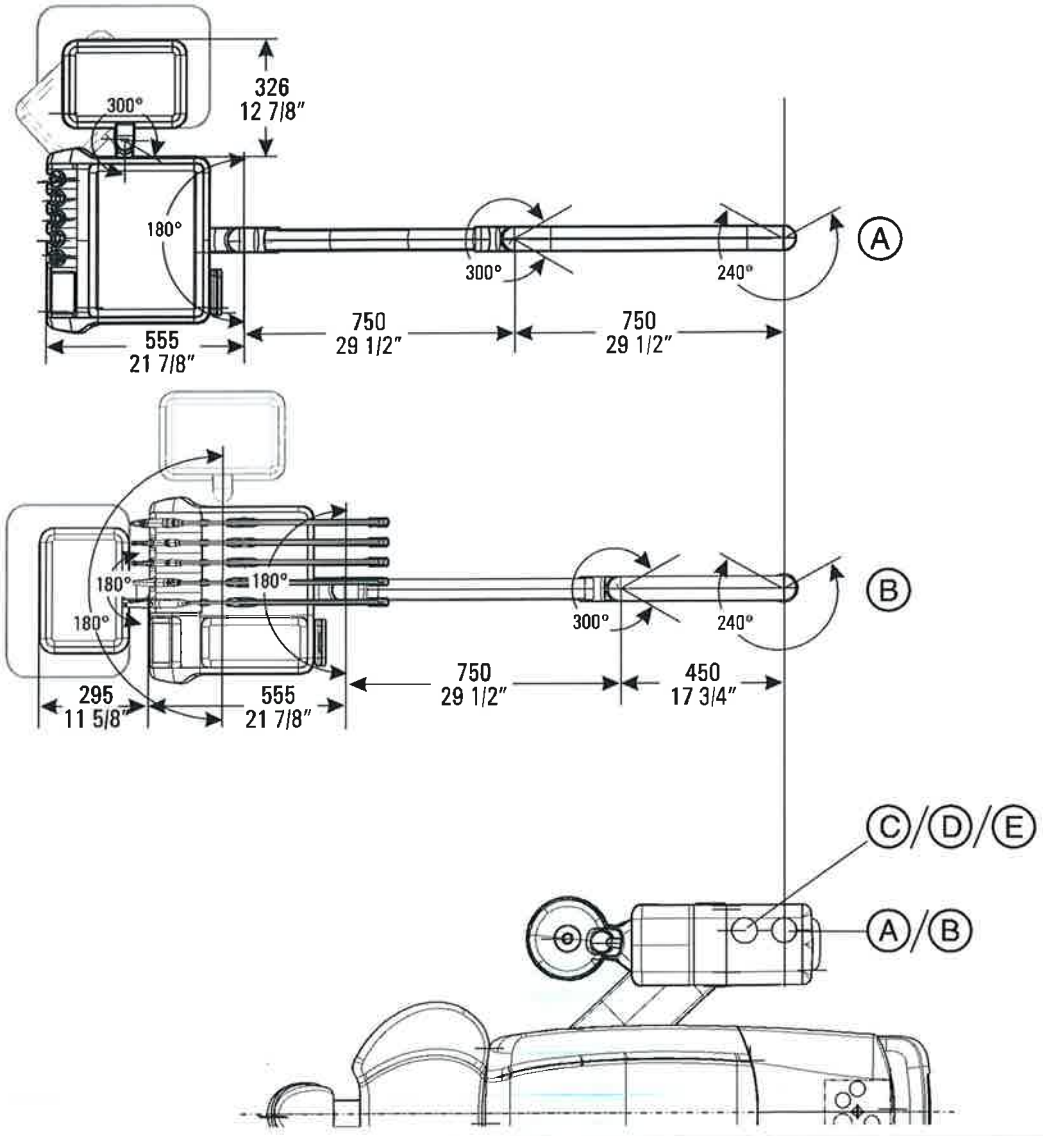

| | |
|---|---|
| A | Head support: Length of treatment center with patient height of 176 cm and default program 2 |
| B | Head support: Maximum length of the treatment center |
| C | Dimension of dentist element CS |

### 4.3.4 Top view of Intego Ambidextrous, Intego pro Ambidextrous with dentist element TS

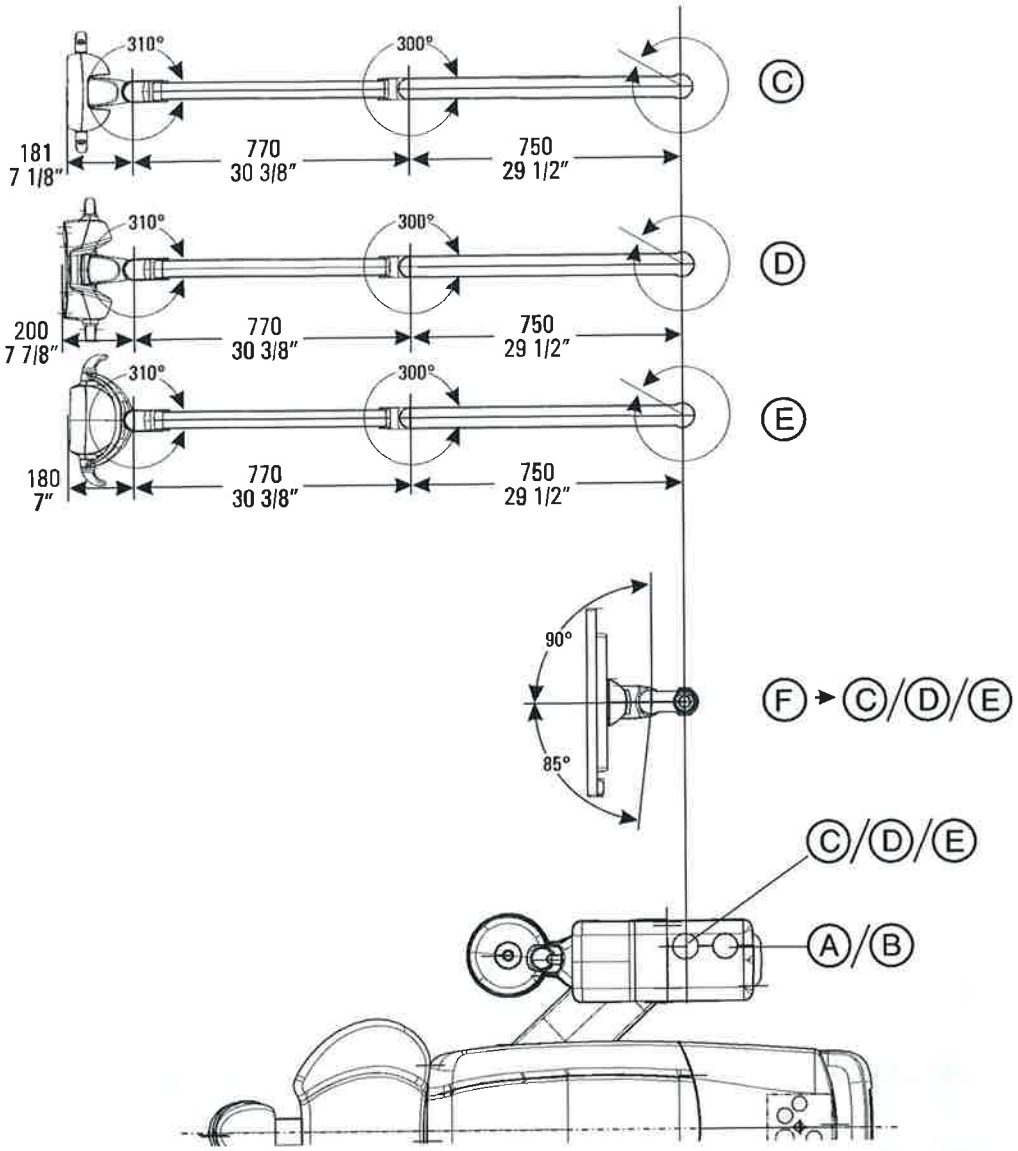



| | |
|---|---|
| A | Head support: Length of treatment center with patient height of 176 cm and default program 2 |
| B | Head support: Maximum length of the treatment center |
| C | Dimension of dentist element TS |

### 4.3.5 Top view of Intego Ambidextrous, Intego pro Ambidextrous with options




| | |
|---|---|
| A | TS dentist element |
| B | CS dentist element |




| | |
|---|---|
| C | LEDlight Plus |
| D | LEDview Plus |
| E | LEDview |
| F | Monitor |

# 4.4 Mounting plates

### Adapter plate

Adapter plates are available for replacement of one of the following dental treatment centers for a right-handed person with a Intego / Intego Pro treatment center:

- C2, C3, C4, C6, C8 (in the case of C4, year of manufacture 1999-2001, a new drill hole must be drilled in the area of the water unit (C) .)
- C3+, C4+, C5+ and C8+ with standard mouth rinse basin (non-swiveling or no lengthening adaptation)

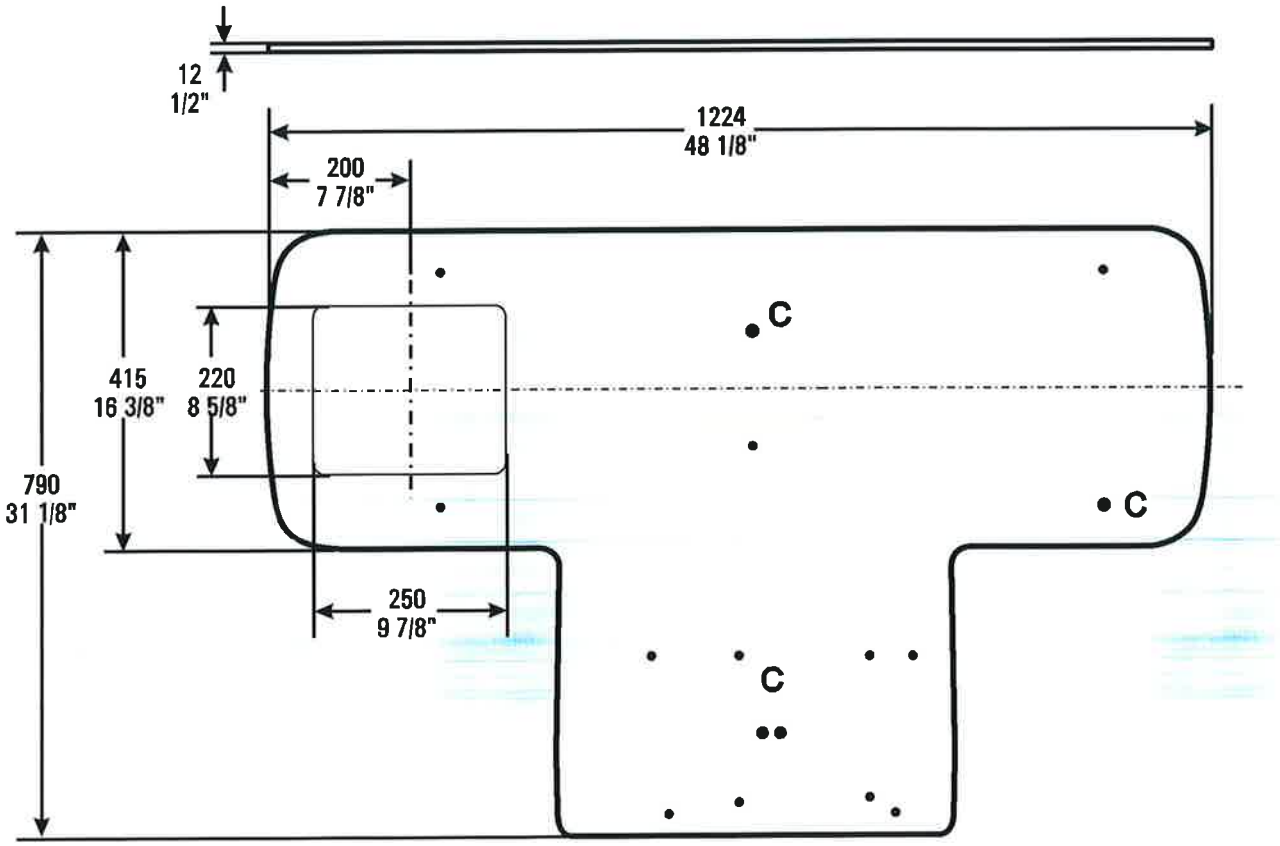
The existing drill holes can be used for fastening. The treatment center is screwed onto the steel plate using M10 screws.
The adapter plate can also be used if the floor is very uneven.

For treatment centers with the Ambidextrous option, an in-house adapter plate is available.

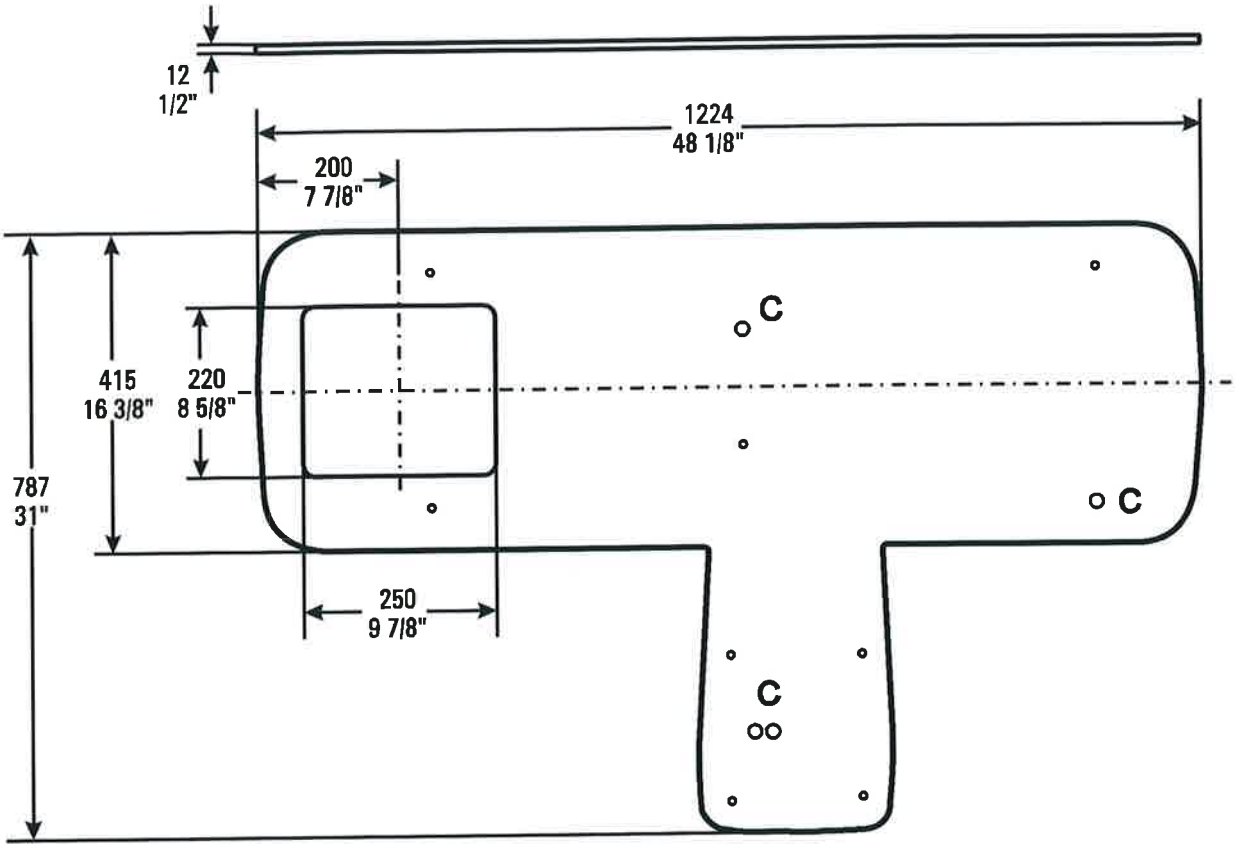
Adapter plate thickness: 12 mm

Drilling with floor (3x) C

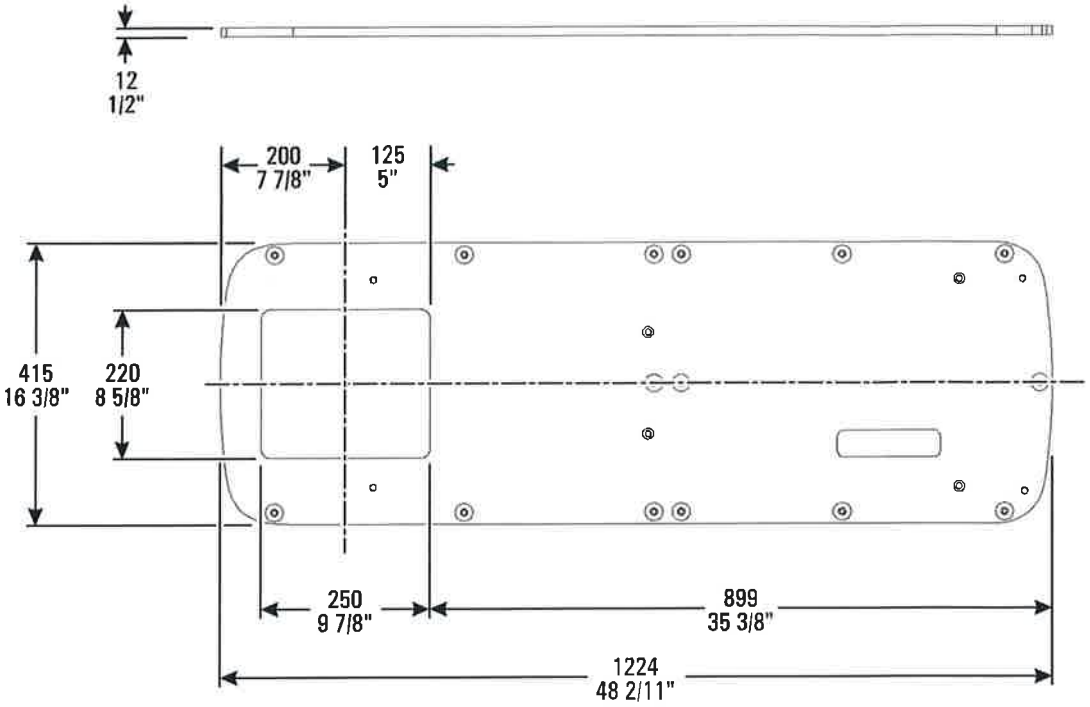
REF 64 32 061 adapter plate Intego Pro:




REF 65 42 018 adapter plate Intego:




REF 65 93 433 adapter plate IntegoAmbidextrous cpl.:


12
1/2"
200
7 7/8"
125
5"
415
16 3/8"
220
8 5/8"
250
9 7/8"
899
35 3/8"
1224
48 2/11"

### Demo chair plate

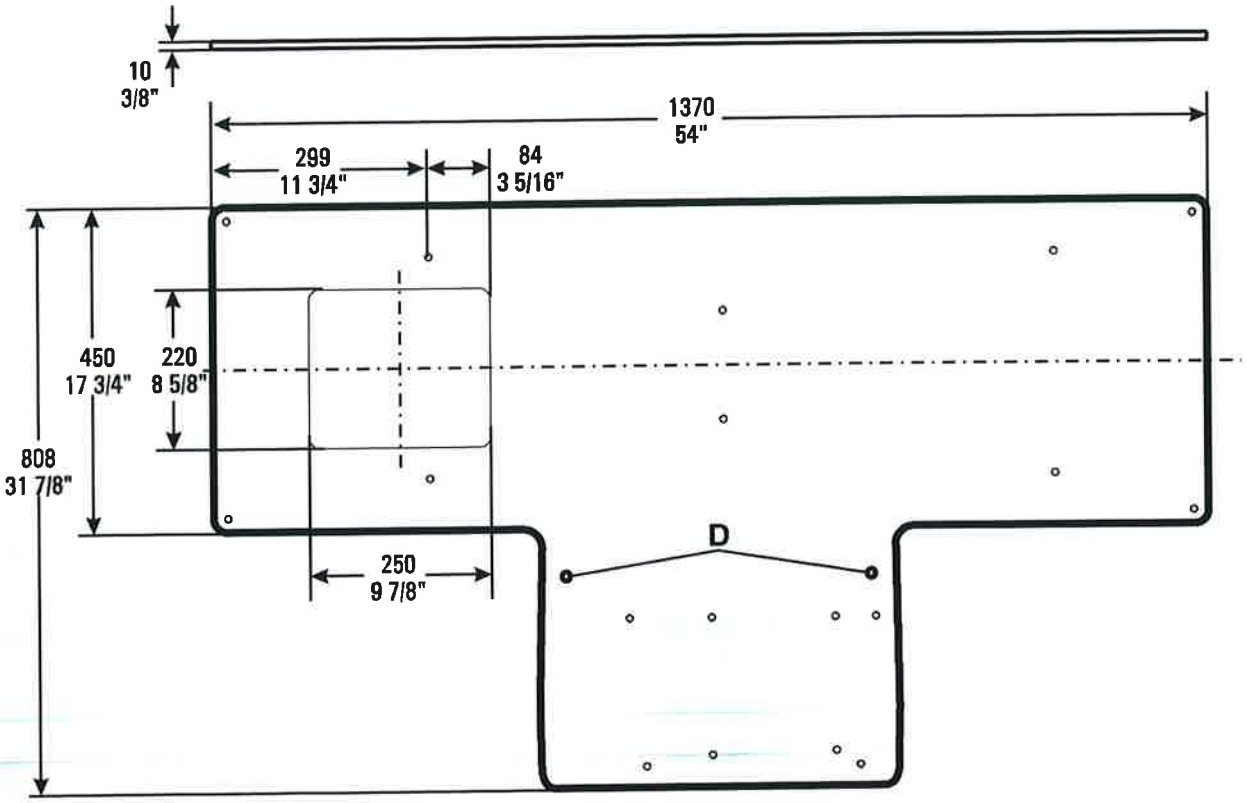
For floors which do not permit permanent connection of the unit (e.g. demo operation at a trade show, floor heating), installation on a steel demo chair plate is possible.

The treatment center is screwed onto the steel plate using M10 screws.

If the demo chair plate is **permanently installed** and whenever it is used for **medical purposes**, it must be screwed firmly to points **D** on the floor using two screws.

Demo chair plate thickness: 10 mm

REF 64 46 061 Intego / Intego Pro demo chair plate




### INTEGO Ambidextrous / INTEGO pro Ambidextrous demo chair plate

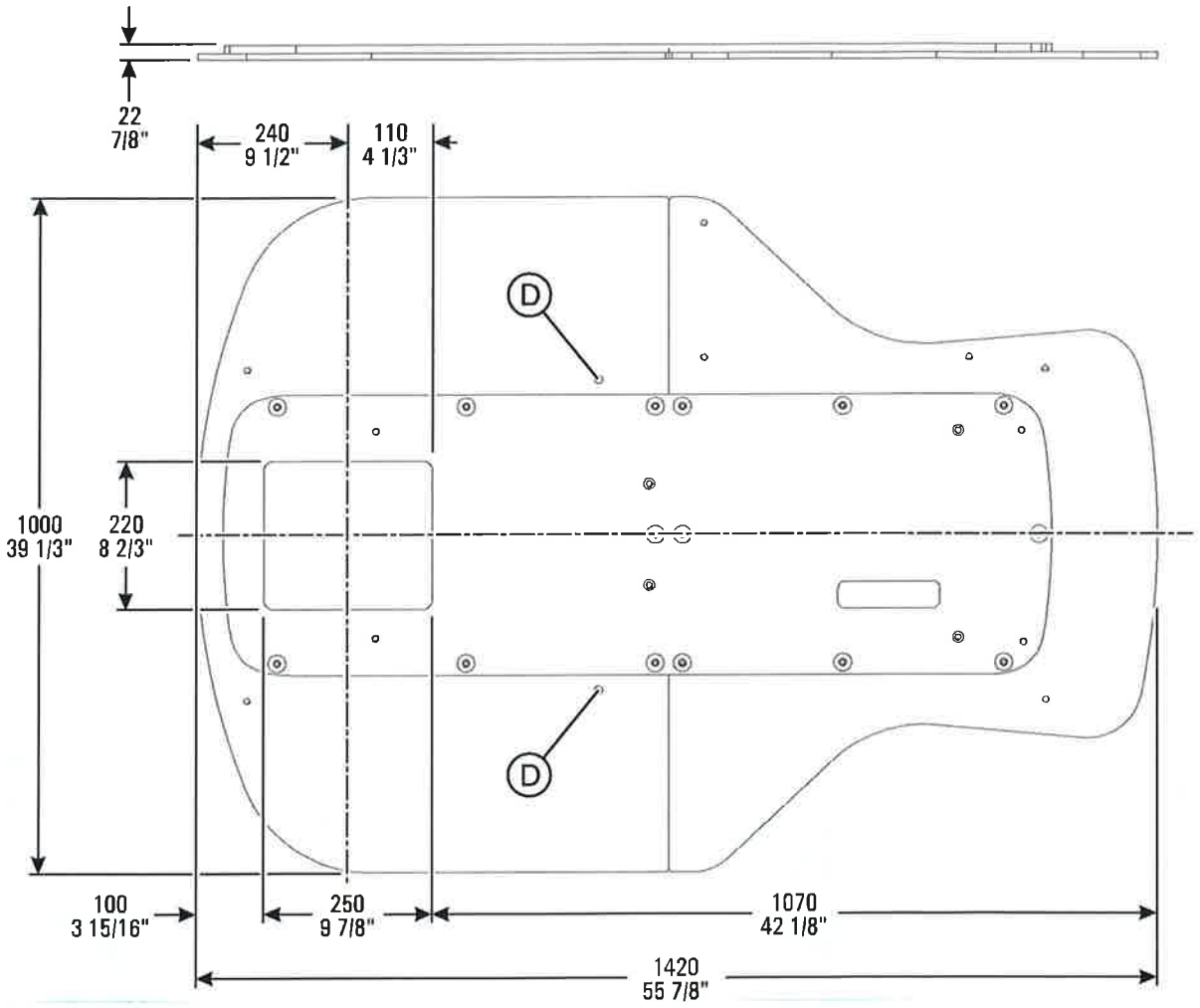
For floors which do not permit permanent connection of the unit (e.g. demo operation at a trade show, floor heating), installation on a three-piece steel demo chair plate is possible.

The treatment center is screwed onto the steel plate using M10 screws.

If the demo chair plate is **permanently installed** and whenever it is used for **medical purposes**, it must be screwed firmly to points **D** on the floor using two screws.

Overall thickness of demo chair plate: 22 mm

REF 65 93 383 demo chair plate IntegoAmbidextrous (2-piece) and
REF 65 93 433 adapter plate IntegoAmbidextrous cpl.



## 4.5 Information on planning for the practice

The following file(s) for practice planning are available for download in the dealer area of the Sirona website under DOWNLOADS => CAAD files:

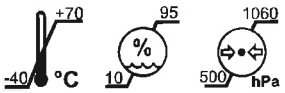
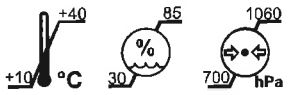
- PDF file with print symbol - for to-scale printing on paper or adhesive film
- CAAD file(s) - for professional implementation planning with 2D/3D CAAD systems

# 4.6 Technical data

| | |
|---|---|
| Model designation: | Intego / Intego Pro |
| Power connection: | 100 – 240 V AC ± 10%<br>50/60 Hz |
| Rated current: | 3.3 A – 1.5 A at 100 – 240 V<br>also max. 6 A for external devices |
| Type of ground connection: | TN-C-S system or TN-S system<br>(acc. to IEC 60364-1) |
| Overvoltage category: | 2 acc. to IEC 60664-1 |
| Average power consumption (for dimensioning an air conditioning system): | 100 W |
| Power consumption when switched off: | 0 W (power switch present) |
| Main building fuse: | Type B automatic circuit breaker<br>100 - 115 VAC: 20 A medium-blow<br>220 – 240 V AC: 16 A medium-blow |
| Protection class: | Class Idevice |
| Device class in accordance with Directive 93/42/EEC: | Class **IIa** equipment |
| Degree of protection against electrical shock: |  Type **B** applied parts<br>External intraoral camera SiroCam F / AF. These are:<br>  Applied part type **BF** |
| Degree of protection against ingress of water: | Ordinary equipment (without protection against ingress of water)<br>The foot switch has an IPX1 degree of protection against liquids (drip-proof). |
| Tests/Approvals: | See "Standards/Approvals" [→ 61]. |
| Date of manufacture: |  <br>**20yy-mm-dd**<br>(on the rating plate) |
| USB port: | corresponds to USB 2.0 standard |

| IMPORTANT |
|---|
| **Minimum requirements for the PC**<br>See document "Installation instructions and system requirements for PC configuration," (REF 61 94 075) Sivision Digital. |

## 4.6.1 Operating, transport and storage conditions

| | |
|---|---|
| Mode of operation | Continuous operation with intermittent loading corresponding to the dental mode of working.<br>Drive motors for chair operation: intermittent use, max. 2 minutes on and 18 minutes off<br>Permanently connected unit. Operation is not permitted in mobile vehicles. |
|  Transport and storage conditions: | Temperature: -40°C – +70°C (-40°F – 158°F)<br>Relative humidity: 10% – 95%<br>Air pressure: 500 hPa – 1060 hPa |
|  Operating conditions: | Ambient temperature: 10°C – 40°C (50°F – 104°F)<br>Relative humidity: 30% – 85% without condensation<br>Air pressure: 700 hPa – 1060 hPa |
| Installation location: | ≤ 3000 m above sea level<br>This treatment center is not suitable for operation in areas subject to explosion hazards. |
| Pollution degree: | 2 acc. to IEC 60664-1 |
| Load capacity of the patient chair: | 140 kg (308.6 lbs) or 185 kg (407.9 lbs), depending on the model<br>The max. load capacity is indicated on a sticker next to the rating plate of the treatment center. |
| Local pressure (min./max):<br>For details see page Requirements of the supply media [→ 12] | Air: 5.5 / 7.5 bar<br>Water 2.5 / 6 bar<br>Suction air: $p_u$ min. 0.12 bar (1.7 psi), max. 0.18 bar (2.6 psi)<br>≥ 500 l/min |
| Water flow:<br>For details see page Requirements of the supply media [→ 12] | Water absorption max. 3 l/min<br>Residual water max. 3 l/min |

### 4.6.2 Weight and packaging

| | **Dimensions of the packaging** | **Weight** (with packaging and accessories/without packaging): |
|---|---|---|
| Intego CS dentist element: | 120 cm x 80 cm x 92 cm | 37 kg / 24.5 kg |
| Intego TS dentist element: | 120 cm x 80 cm x 71 cm | 36 kg / 24 kg |
| Comfort assistant element: | 87 cm x 31 cm x 82 cm | 10.4 kg / 6 kg |
| Compact water unit: | 82 cm x 56 cm x 120 cm | 52.2 kg / 42 kg |
| Comfort water unit: | 82 cm x 56 cm x 120 cm | 56.8 kg / 43 kg |
| Ambidextrous: | 82 cm x 56 cm x 120 cm | 54 kg / 41 kg |
| Ambidextrous support arm: | 106 cm x 50 cm x 49 cm | 41 kg / 32 kg |
| Chair: | 165 cm x 63 cm x 66 cm | 77.2 kg / 59 kg |
| Upholstery: | 80 cm x 60 cm x 36 cm | 8.5 kg / 5.5 kg |
| LEDview Plus: | 40 cm x 40 cm x 19 cm | 3 kg / 2 kg |
| LEDview Plus support arm: | 93 x 40 x 20 cm | 8 kg / 6.5 kg |
| LEDview: | 98 cm x 60 cm x 42 cm | 12 kg / 8 kg |
| Support tube for lamp without monitor adapter: | 128 cm x 20 cm x 20 cm | 4.9 kg / 3.9 kg |
| Support tube with monitor adapter: | 128 cm x 38 cm x 20 cm | 6.4 kg / 5.6 kg |
| LEDlight Plus: | 35,5 cm x 27,5 cm x 19,5 cm | 3 kg / 2 kg |
| Support tube for lamp without monitor adapter: | 128 cm x 20 cm x 20 cm | 2.4 kg / 1.9 kg |
| Support tube with monitor adapter: | 128 cm x 38 cm x 20 cm | 5.6 kg / 4.6 kg |
| There are 2 types of accessory boxes: | 120 cm x 80 cm x 54/78 cm | 62.6 kg |

# 4.7 Standards/Approvals

The Intego / Intego Pro treatment centers comply with the following standards:

- IEC 60601-1 (electrical, mechanical, and software safety)
- IEC 60601-1-2 (electromagnetic compatibility)
- IEC 60601-1-6 / IEC 62366 (usability)
- IEC 62304 (Software Process)
- ISO 6875 (patient chair)
- ISO 7494-1 (dental treatment units)
- ISO 7494-2 (dental treatment units, water and air supply)
- ISO 9680 (operating light)
- ISO 11143 (amalgam separator), see also below (provided amalgam separator option is available)
- EN 1717 (connection to the drinking water system), see also below and chapter "Connection to the public drinking water supply" [→ 14]

Original language of this document: German

ANVISA registration number: 80745400024

CE 0123

Intego / Intego Pro bear the CE marking in accordance with the provisions of Council Directive 93/42/EEC of June 14, 1993 concerning medical devices.

Intego / Intego Pro comply with the requirements of the RoHS Directive 2011/65/EU.

MET c us

The treatment center meets the requirements of CAN/CSA-C22.2 No. 60601-1 And AAMI/ANSI ES 60601-1.

GOST certification

SIRONA Dental Systems GmbH 64625 Bensheim Fabrikstraße 31 Z-64.1-14

NF DENTAL

The amalgam separator achieves a separation efficiency of >95%. The unit thus fulfills the requirements of ISO 11143.
Separating procedure type 1: Centrifuge system
The amalgam separator is approved by the German institute for building technology (DIBt) and AFNOR (France).


When equipped with a disinfection system or fresh water bottle without switchover to the public drinking water supply, the treatment center complies with the technical rules and requirements on safety and hygiene for connection to the public drinking water supply. The unit is certified according to the requirements of the German Technical and Scientific Association for Gas and Water (DVGW). It is intrinsically safe in accordance with worksheet W540. The unit thus also meets the requirements of standard EN 1717; see also the chapter entitled "Connection to the public drinking water system" [→ 14].

# 5 Electromagnetic compatibility

Observance of the following information is necessary to ensure safe operation regarding EMC aspects.

Intego complies with the requirements for electromagnetic compatibility (EMC) according to IEC 60601-1-2:2014

Intego is hereinafter referred to as "UNIT".

## 5.1 Accessories

### Connecting the PC

The required interface cables can be ordered from Sirona.

**Sivision digital HDMI 10 m cable set (REF 63 29 655)**

| Designation of the interface cables | Vendor |
|---|---|
| HDMI cable, 10 m (L406) | SIRONA |
| USB repeater cable, 10 m, connectors: type A, type B | SIRONA |
| Ethernet cable, 10 m (L339) | SIRONA |
| Audio cable, 10 m | SIRONA |
| 2nd protective ground wire, 2.5 $mm^2$, 5 m | SIRONA |

**Sivision digital HDMI 5 m cable set (REF 64 46 111)**

| Designation of the interface cables | Vendor |
|---|---|
| HDMI cable, 5 m (L552) | SIRONA |
| AE USB cable, 5m (L530), connectors: type A, type B | SIRONA |
| Ethernet cable, 5 m (L553) | SIRONA |
| 2nd protective ground wire, 2.5 $mm^2$, 5 m | SIRONA |

**Heliodent Plus cable set**

| Designation of the interface cables | Supplier |
|---|---|
| Radiator cable, 10 m (L7) | Sirona |

The **UNIT** may only be operated with accessories and spare parts approved by Sirona. Unapproved accessories and spare parts may lead to an increased emission or to a reduced immunity to interference.

The **UNIT** should not be operated in the immediate vicinity of other devices. If this proves to be unavoidable, the UNIT should be monitored to ensure that it is operating properly.

**Accessories for EMC measurement**

The EMC measurements were performed with the following PC:

| | |
|---|---|
| PC as peripheral device for checking the interfaces with: | Fujitsu<br>ESPRIMO P710 E90+ |
| PC equipment: | |
| Processor | Intel Core i5 3470; 3.6 GHz |
| RAM | 2 GB DDR 3 (DIMM) |
| Graphics card | ASUS V1106, HDMI Output |
| Hard disk drive | 500 GB, SATA 7200 U/min |
| Main Board | P3161 (µATX) |
| LAN | Gigabit Ethernet PCIe x1 |
| Software: | SIUCOM plus 1.4.92.0 |
| Operating system | Microsoft Windows 7 Pro64 |

## 5.2 Electromagnetic emission

The **UNIT** is intended for operation in the electromagnetic environment specified below.

The customer or user of the **UNIT** should make sure that it is used in such an environment.

| Emission measurement | Conformity | Electromagnetic environment – guidelines |
|---|---|---|
| RF emissions according to **CISPR 11** | Group 1[a] | The **UNIT** uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. |
| RF emissions according to **CISPR 11** | Class B | The **UNIT** is intended for use in all facilities, including residential areas and those directly connected to a public power supply, which also provides electricity to buildings used for residential purposes. |
| Harmonics<br>according to **IEC 61000-3-2** | Class A | |
| Voltage fluctuations/flicker according to **IEC 61000-3-3** | Complies | |

If an HF surgical unit is integrated, it must emit electromagnetic energy in order to function properly. When in operation, the HF surgical unit may cause interference in nearby electrical equipment. According to IEC 60 601-2-2, no limit values have been defined for active HF surgical units. They are therefore classified as Group 1 devices according to CISPR 11.

## 5.3 Immunity to interference

The **UNIT** is intended for operation in the electromagnetic environment specified below.

The customer or user of the **UNIT** should make sure that it is used in such an environment.

| Interference immunity tests | IEC 60601-1-2 test level | Compliance level | Electromagnetic environment - guidelines |
|---|---|---|---|
| Electrostatic discharge (ESD) according to **IEC 61000-4-2** | ± 8 KV contact discharge<br>± 15 kV air discharge | ± 8 KV contact discharge<br>± 15 kV air discharge | Floors should be made of wood or concrete or finished with ceramic tiling. If the floor is covered with synthetic material, the relative humidity should be at least 30%. |
| Electrical fast transient/ burst according to **IEC 61000-4-4** | ± 1 kV for input and output lines<br>± 2 kV for power supply lines | ± 1 kV for input and output lines<br>± 2 kV for power supply lines | The quality of the line power supply should be that of a typical commercial or hospital environment. |
| Surge voltages according to **IEC 61000-4-5** | ± 1 kV differential mode<br>± 2 kV common mode voltage | ± 1 kV differential mode<br>± 2 kV common mode voltage | The quality of the line power supply should be that of a typical commercial or hospital environment. |
| Voltage dips, short interruptions and variations of the power supply according to **IEC 61000-4-11** | 0% UT; 1/2 period at 0 °, 45 °, 90 °, 135 °, 180 °, 225 °, 270 ° and 315 °<br>0% UT; 1 period<br>70% UT; 25/30 periods (50/60Hz)<br>0% UT; 250/300 periods (50/60Hz) period | 0% UT; 1/2 period at 0 °, 45 °, 90 °, 135 °, 180 °, 225 °, 270 ° and 315 °<br>0% UT; 1 period<br>70% UT; 25/30 periods (50/60Hz)<br>0% UT; 250/300 periods (50/60Hz) period | The quality of the line power supply should be that of a typical commercial or hospital environment.<br>If the user of the **UNIT** requires it to continue functioning following interruptions of the power supply, it is recommended to have the **UNIT** powered by an uninterruptible power supply or a battery. |
| Magnetic field of power frequencies (50/60 Hz) according to **IEC 61000-4-8** | 30 A/m | 30 A/m | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment. |
| Note: $U_T$ is the AC supply voltage prior to application of the test level. | | | |
| | | | Portable and mobile radio equipment must not be used within the recommended working clearance from the **UNIT** and its cables, which is calculated based on the equation suitable for the relevant transmission frequency.<br>Recommended working clearance: |

| Interference immunity tests | IEC 60601-1-2 test level | Compliance level | Electromagnetic environment - guidelines |
|---|---|---|---|
| Conducted RF interference<br>**IEC 61000-4-6** | 3 $V_{eff}$<br>150 kHz to 80 MHz[1]<br>6 $V_{eff}$ in the ISM band between 0.15 MHz and 80 MHz<br>80% AM at 1 kHz | 3 $V_{eff}$<br>6 $V_{eff}$ (ISM band) | d= [1.2] √P |
| Radiated HF interference<br>**IEC 61000-4-3** [4] | 6 V/m<br>80 MHz to 800 MHz[1]<br>6 V/m<br>800 MHz to 2.7 GHz[1] | 3 $V_{eff}$<br>3 $V_{eff}$ | d= [1.2] √P<br>at 80 MHz to 800 MHz<br>d= [2.3] √P<br>at 800 MHz to 2.7 GHz<br>with P as the power rating of the transmitter in watts (W) according to the transmitter manufacturer's specifications and d as recommended safety distance in meters (m).<br>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey[2] should be less than the compliance level[3] in each frequency range.<br>Interference is possible in the vicinity of equipment bearing the following graphic symbol.  |

1. The higher frequency range applies at 80 MHz and 800 MHz.
2. The field strengths of fixed transmitters, such as base stations of radiotelephones and mobile agricultural radio broadcast services, amateur radio stations, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. A site survey is recommended to assess the electromagnetic environment due to fixed RF transmitters. If the measured field strength in the location in which the **UNIT** is used exceeds the applicable RF compliance level above, the **UNIT** should be observed to verify normal operation. If unusual performance characteristics are observed, it may be necessary to take additional measures such as reorientation or repositioning of the **UNIT**.
3. Over the frequency range 150kHz to 80 MHz, field strengths should be less than 3 V/m.
4. Test specification for radiated HF interference IEC 61000-4-3:

| Test frequency (MHz) | Volume (MHz) | Service | Modulation | Power max. (W) | Distance (m) | Immunity test level (V/m) |
|---|---|---|---|---|---|---|
| 385 | 380 - 390 | TETRA 400 | Pulse modulation 18 Hz | 1.8 | 0.3 | 27 |
| 450 | 430 - 470 | GMRS 460, FRS 460 | FM ± 5 kHz variation 1 kHz sinus | 2 | 0.3 | 28 |
| 710 745 780 | 704 - 787 | LTE volume 13, 17 | Pulse modulation 217 Hz | 0.2 | 0.3 | 9 |
| 810 870 930 | 800 - 960 | GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE band 5 | Pulse modulation 18 Hz | 2 | 0.3 | 28 |
| 1720 1845 1970 | 1700 - 1990 | GSM 1800; CDMA 1900; GSM 1900; DECT; LTE band 1, 3, 4, 25; UMTS | Pulse modulation 217 Hz | 2 | 0.3 | 28 |
| 2450 | 2400 - 2570 | Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE band 7 | Pulse modulation 217 Hz | 2 | 0.3 | 28 |
| 5240 5500 5785 | 5100 - 5800 | WLAN 802.11 a/n | Pulse modulation 217 Hz | 0.2 | 0.3 | 9 |

## 5.4 Working clearances

The UNIT is intended for operation in an electromagnetic environment, where radiated RF interference is checked. The customer or the user of the UNIT can help prevent electromagnetic interference by maintaining a minimum distance between mobile RF communications equipment (transmitters) and the UNIT - depending on the maximum output power of the communication device, as shown below.

| Power rating of the transmitter [W] | Working clearance according to transmission frequency [m] | | |
|---|---|---|---|
| | 150 kHz to 80 MHz | 80 MHz to 800 MHz | 800 MHz to 2.5 GHz |
| | $d = [1.2] \sqrt{P}$ | $d = [1.2] \sqrt{P}$ | $d = [2.3] \sqrt{P}$ |
| 0.01 | 0.12 | 0.12 | 0.23 |
| 0.1 | 0.38 | 0.38 | 0.73 |
| 1 | 1.2 | 1.2 | 2.3 |
| 10 | 3.8 | 3.8 | 7.3 |
| 100 | 12 | 12 | 23 |

The recommended safety distance $d$ in meters (m) can be determined for transmitters, whose maximum power rating is not specified in the above table, using the equation that belongs to the corresponding column, wherein $P$ is the maximum power rating of the transmitter in watts (W) according to the transmitter manufacturer.

REMARK The higher frequency range applies at 80 MHz and 800 MHz.

REMARK These guidelines may not be applicable in all cases. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

# 6 Checklist

## 6.1 Installation site

| We recommend performing an inspection of the circumstances on location at least 4 weeks prior to installation. The checklist should help you when doing this.<br>This can help ensure a smooth procedure on the day that the Intego / Intego Pro is actually installed. |
|---|
| |

| Installation location: | |
|---|---|
| • Installation location: | |
| • Unit location: | |
| • Building number: | |
| • Room name/number: | |

# 6.2 Construction requirements

| Connections: Media (see On-site installation [→ 8]) | ☑ |
|---|---|
| • Water supply<br>Pipe 10x1 mm, corner valve outlet 3/8" | ☐ |
| • Compressed air supply line<br>Pipe 10x1 mm, corner valve outlet 3/8" | ☐ |
| • Suction line<br>DN 40 HT-PP ISO 8283-3, inner diameter approx. 36.5 mm | ☐ |
| • Water drainage<br>DN 40 HT-PP ISO 8283-3, inner diameter approx. 36.5 mm | ☐ |
| • Installation pipe (power supplies)<br>inner diameter approx. 40 mm) | ☐ |
| • Installation pipe (IT), inner diameter min. 50 mm<br>(or corresponding flat conduit) | ☐ |

| Connections: Electrical (see On-site installation [→ 8]) | | ☑ |
|---|---|---|
| • Power cable: 3 x 1.5 mm² (AWG16) | | ☐ |
| • Type B automatic circuit breaker<br>220 - 240 V AC, 16 A medium-blow or<br>• Type B automatic circuit breaker<br>100-115 V AC, 20 A medium-blow | | ☐<br>☐ |
| • Suction machine control line: 3 x 1.5 mm² (AWG16) | | ☐ |
| • Wireless systems in 2.4 GHz frequency range available?<br>(e.g. room monitoring systems, video transmitters, etc.) | ☐ Yes | ☐ No |

| Floor condition: Mounting plates (see Mounting plates [→ 52]) | ☑ |
|---|---|
| • Compensating plates can be used for slight unevenness, no mounting plates required. | ☐ |
| • Adapter plates: Intego Pro REF 64 32 061, Intego REF 65 42 018: Can be used to replace certain C-line dental treatment centers, for details see Mounting plates [→ 52] | ☐ |
| • INTEGO, INTEGO pro demo chair plate, REF 64 46 061: Can be used for demo operation at a trade fair | ☐ |
| • INTEGO Ambidextrous / INTEGO pro Ambidextrous demo chair plate, REF 65 43 941: Can be used for demo operation at a trade fair | ☐ |
| • Load-bearing capacity of the floor [→ 8] is ensured. | ☐ |
| • The treatment center can be safely anchored in the load-bearing structure (concrete/wood; NOT screed). | ☐ |

# 6.3 IT hardware

| Mode of operation | ☑ |
|---|---|
| • PC in treatment room | ☐ |

| PC system requirements: | ☑ |
|---|---|
| IT hardware and software requirements are described in the document "Installation notes and system requirements for PC configuration", (REF 61 94 075) Sivision digital | ☐ |

| |
|---|
| **IMPORTANT!**<br>Please be aware that any deviations may cause malfunctions in camera mode. For further details, see document "Installation instructions and system requirements for PC configuration", (REF 61 94 075) Sivision digital. |

# 6.4 Network

| Network: | ☑ |
|---|---|
| • The entire network should be equipped with 100 MBit Ethernet.<br><br>- Cat 5<br><br>- Cat 6 | <br><br>☐<br><br>☐<br>☐ 10 Mbps<br>☐ 100 Mbps |
| • Network connection for Intego / Intego Pro available. | ☐ |
| • Network connection for external PC available. | ☐ |
| **IMPORTANT!**<br>The use of routers between Intego / Intego Pro and the treatment center PC must be avoided. | |
| • Network configuration plan available. | ☐ |
| • Network jacks have been certified. | ☐ |
| • Network certificate present. | ☐ |
| • Network installation company. | ☐ |
| • Remarks/Tasks: | |

# 6.5 Data processing

| IP addresses/firewall: | | |
|---|---|---|
| • TCP/IP address range: | ____ . ____ . ____ . ____ - ____ . ____ . ____ . ____ | |
| • Subnet mask: | ____ . ____ . ____ . ____ | |
| • Are addresses already defined/present? | ☐ Yes | ☐ No |
| • Is there a DHCP server (dynamic TCP/IP address assignment)? | ☐ Yes | ☐ No |
| **IMPORTANT!**<br>A static address should be assigned to Intego / Intego Pro!<br>It must not lie in the dynamic address range! | | |
| • Intego / Intego Pro: | ____ . ____ . ____ . ____ | |
| • External PC: | ____ . ____ . ____ . ____ - ____ . ____ . ____ . ____ | |
| • Standard gateway: | ____ . ____ . ____ . ____ | |
| • Antivirus software available? | ☐ Yes<br>Name: | ☐ No |
| • Is a firewall installed?<br>Software or hardware firewall? | ☐ Yes<br>☐ SW<br>☐ HW | ☐ No |
| • Remarks/Tasks: | | |

| Practice administration programs: | | |
|---|---|---|
| • Are connections to the practice administration programs, etc. installed or planned? | ☐ Yes | ☐ No |
| • If so, which system (manufacturer + name)? | | |
| • Remarks/Tasks: | | |

We reserve the right to make any alterations which may be required due to technical improvements.


D3543.021.01.09.02 12.2018

Sprache: englisch
Ä.-Nr.: 126 478

Printed in Germany

Sirona Dental Systems GmbH

Fabrikstr. 31
64625 Bensheim
Germany
www.dentsplysirona.com

Order No 64 57 092 D3543