

|  |  | Electrical ins  | tallation DR 600  |                       |  |                        |  |
|--|--|---|---|-----------------------|--|------------------------|--|
| Electrical installation  | L1 —   |   | Generator Type  | EDITOR HFe<br>501     | EDITOR HFe<br>601                      | EDITOR HFe<br>801      |  |
| provided by the customer   | L3 — — — N   |   | Generator nominal rating  | 50 kW                 | 65 kW                                  | 80 kW                  |  |
|  | PE   | <del></del>   | max KW  | 50                    | 65                                     | 80                     |  |
|  | Generator F  |   | max mA  | 650                   | 800                                    | 800                    |  |
|  | Generator F  | -use F1   | max kVp   | 150                   | 150                                    | 150                    |  |
|  | F3   |   | Line voltage  | 400 V                 | AC or 400V/480                         | VAC*                   |  |
|  | <br>⊨⊞=  |   | Line frequency  |                       | 50/60 ± 1Hz                            |                        |  |
|  | All-current sensitive ground fault interrupter (GFI) | 0,03A   | Max. line deviation   | +1                    | 10%, -10% @ 40                         | 00V                    |  |
| 300  | e.g. of Type B<br>ording to IEC 60755                | <i> &gt;  &gt;  &gt;</i>  | Line connector  |                       | 3PH/N/PE                               |                        | Insufficient safety distances  |
| acc  | ording to IEC 60755                                  |   | Nominal connected wattage   | 24 kVA                | 35 kVA                                 | 44 kVA                 | In accordance with the standard EN 349, actions must be taken to ensure safety in danger zones.  |
| Control F2   |  |   | Fault current sensitivity   |                       | 30mA                                   |                        | A danger zone is an area in which the possibility of injury exists because of the position or design of stationary or moving parts of a technical product.   |
| Emergency OFF switch Examination AT2   | K1   | N   | Fuse rating (slow blow)<br>400 input voltage  | 50A                   | 50A                                    | 50A                    | These danger zones can be made safe through the use of protective facilities (clothing, coverings, safety barriers such as light barriers, switching strips, switching mats, conspicuous warning signs hanging by cords).  Here, it must be ensured that the protective facilities are designed and positioned in such a way that the  |
| Emergency  |  | PE  | Input current at max. output power rating per phase for 0,2 seconds   | 113A@400V<br>97A@480V | 144A@400V<br>124A@480V                 | 180A@400V<br>154A@480V | safety distances are not changed.  The safety distances at crushing points must, for example, be > 50 cm for the body, > 18 cm for the le > 10 cm for the hands and > 12 cm for the feet and arms.   |
| OFF switch<br>Control room   |  |   | Max. line resistance at 400VAC per phase  | 0,3Ω                  | 0,2Ω                                   | 0,12Ω                  | Notice! When setting up pieces of equipment and making other installations which are not included in this plant to approve the approved that the perfect distances are registered.   |
| i  |  |   | Power factor Cos $\varphi$  |                       | 0.9                                    |                        | it must be ensured that the safety distances are maintained.   |
| EAT — off  |  |   | Max. connectable cross-section at mains feed-in at Transfer Point   |                       | mm² for flexible v<br>0mm² for solid w |                        | Room lighting  |
| E— on  | Control  | L1 L2 L3 N PE X8 Door  Generator  Sync Splitter Board in Storage Compartment P23** P21** LPB* | * Generator is available in two versi • 400 V input • With integrated pre-transforme                          |                       | umpered for 400                        | OV or 480V input       | <ul> <li>Ambient light in rooms where diagnosis take place on image display devices (monitors) must meet the following requirements:</li> <li>- Free of dazzle, controllable, reproducible setting of the lighting intensity (e.g.dimmer with scale)</li> <li>- No reflections from windows, lamps and viewing boxes in the usual operating position of the image display devices.</li> <li>This is a specification of DIN 6868-57 in Germany, which should also be complied within all other could regard to the lighting of rooms for diagnostic imaging and treatment procedures, the intensity of the</li> </ul> |
| Main contactor   |  | Ext. power power yellow (Exposure) (System ON)  | This diagram is an example only. Local regulations may require modification in the design of the power supply |                       |  |                        | lighting in general depends on the type of procedure.  If only X-ray exposures are produced, the requirements for lighting for diagnostic imaging with image intensifiers apply (50 lx).  When images are displayed on monitors, the possibility of reducing the general lighting intensity must provided (30 lx; if necessary, down to 1 lx).  Reflections and glare on the screen must be avoided (DIN 5035-3; EN 12464).  As a rule, therapy rooms require a general lighting with a nominal lighting intensity of 300 lx.  |
| *LPB= Light Push Button<br>Optional push button in the examination<br>room, to switch on the collimator light. | <ul><li>"Radiation</li><li>"System O</li></ul>       |   |   |                       |  |                        | This also applies to rooms where patients are treated with physical, radiological or electromedical procedures.  |

| Measurements DR600 - OTC V2    |                                 |  |  |  |
|--------------------------------|---------------------------------|--|--|--|
| Standard Ceilir                | ng Suspension                   |  |  |  |
| Length of<br>Longitudinal Rail | Length of<br>Transversal Bridge |  |  |  |
| 5500mm                         | 3000mm                          |  |  |  |
| Cableler                       | igth 20m                        |  |  |  |

# Insufficient safety distances

→ 10 cm for the hands and > 12 cm for the feet and arms.

When setting up pieces of equipment and making other installations which are not included in this planning, must be ensured that the safety distances are maintained.

# Room lighting

As a rule, therapy rooms require a general lighting with a nominal lighting intensity of 300 lx.

### Operation Storage -15 to 50 °C Temperature (ambient) 10 to 35 °C -15 to 50 °C Relative Humidity (non condensing) 30 to 75 % 15 to 90 % 15 to 90 % Atmospheric pressure 70 to 106 kPa 70 to 106 kPa 70 to 106 kPa

**Environment DR 600** 

| Transport DR 600  |                               |         |  |  |
|---|-------------------------------|---------|--|--|
| Package / Contents  | Size (width x depth x height) | Weight  |  |  |
| Box with table  | 95x180x110 cm                 | ± 420kg |  |  |
| Box with Wall Stand   | 80x245x130 cm*                | ± 410kg |  |  |
| Box with Ceiling Suspension                                 | 95x160x160 cm                 | ± 400kg |  |  |
| Box with Generator, NX, detectors and related accessories   | 85x173x140 cm                 | ± 370kg |  |  |
| Box with Table Top and floor templates (Wall Stand / Table) | 95x230x30 cm                  | ± 70kg  |  |  |
| *= tilting version without spacer                           | '                             |         |  |  |

|     | List of Documents                      |                                 |  |  |  |
|-----|--|---------------------------------|--|--|--|
| No. | Document No.                           | Document                        |  |  |  |
| 00  | Children's Hospital Agia Sofia - A1.00 | 3D System overview              |  |  |  |
| 01  | Children's Hospital Agia Sofia - A1.01 | Setup overview                  |  |  |  |
| 02  | Children's Hospital Agia Sofia - A1.02 | Site preparations - Floor       |  |  |  |
| 03  | Children's Hospital Agia Sofia - A1.03 | Site preparations - Ceiling     |  |  |  |
| 04  | Children's Hospital Agia Sofia - A1.04 | Site preparations - Side views  |  |  |  |
| 05  | Children's Hospital Agia Sofia - A1.05 | Site preparations - Workstation |  |  |  |

| AGFA DR 600 – Equipment Legend |                                      |             |  |
|--------------------------------|--------------------------------------|-------------|--|
| Pos.                           | Description                          | Weight (kg) |  |
| 1.01                           | X-Ray Table                          | 250         |  |
| 1.02                           | Wall Stand                           | 196*        |  |
| 1.03                           | Ceiling Suspension                   | 351         |  |
| 1.04                           | Generator HFe Serie                  | 120         |  |
| 1.05                           | Agfa Workstation                     |             |  |
| 1.06                           | Generator on/off and exposure switch |             |  |
| 1.07                           | Dead man switch/autopositioning      |             |  |
| 1.08                           | DX-D FLFS                            |             |  |
|                                |                                      |             |  |

\*= tilting version without spacer

# Unit arrangement and Site preparations

This was made in conformity with the constructional planning references and the project equipment. We reserve the right to make technical alterations. Before the construction work is completed it has to be ascertained that there are no changes in the original project.

The scope of delivery and services is described and determinded in the order confirmation.

All data serve for the on-site preparation for installation and cabling of the DR 600 system in order to ensure correct operation.

This plan is not a construction drawing and is not to be used for carrying out construction work.

# Room dimensioning

The indicated room dimensions have to be checked on site. The planning department has to be informed about possible deviations. Otherwise we cannot assume any guarantee for the accurate implementation of the dimensions indicated in the planning documents.

# Dimensioning

All installation measurements apply to finished wall or floors and are to be checked prior to assembling

• Orientation point = reference point of the unit for planning and installation

# Customer Release Acknowledgement

I agree to this preliminary as the basis for implementation planning.

We have been informed of the importance of heeding all notes and requirements. Agfa Healtcare does not check and monitor compliance with on-site requirements and planning specifications, such as structural engineering, climate control, preparations for installation and electrical installations. We will contract the implementation and monitoring of on-site preparations for installation to

Customer:

|                | Name   | Signature              |         |       | Date     |       |
|----------------|--------|------------------------|---------|-------|----------|-------|
| First creation |        | Qualitek<br>28-05-2024 |         |       | V1       |       |
| Editing progre | ession | Edited                 | Checked | Sign. | Released | Sign. |



qualified specialists.

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|               |                 |                  | _  |               |    |
|---------------|-----------------|------------------|--|---------------|----|
| etup Overview |                 |                  | Room height finished floor to<br>Concrete Ceiling<br>Suspended Ceiling |               |    |
| GFA DR 600    | 0               |                  | Scale 0m   | 1:50<br>1m 2m |    |
| omer number   | Project<br>AGFA | Plan index A1.01 | Filename   |               | A1 |

required between the patient and the operator. Consider the ceiling mounted devices and light barriers by arranging the lamps. Darkening of windows in X-ray and control rooms is recommended.

According to the German standard (DIN 6812:2021-06) an inter-visibility and a voice communication is

Statics DR 600

The system has to be installed on a solid surface with sufficient load carrying capacity, such as, e.g.

replaced by a concrete replenishment min. C20/25. If an appropriate substructure is provided on site,

the unit may also be mounted on installation floors.

concrete. If the underground, e.g. screed, doesn't have a sufficient bearing load, it must be removed and

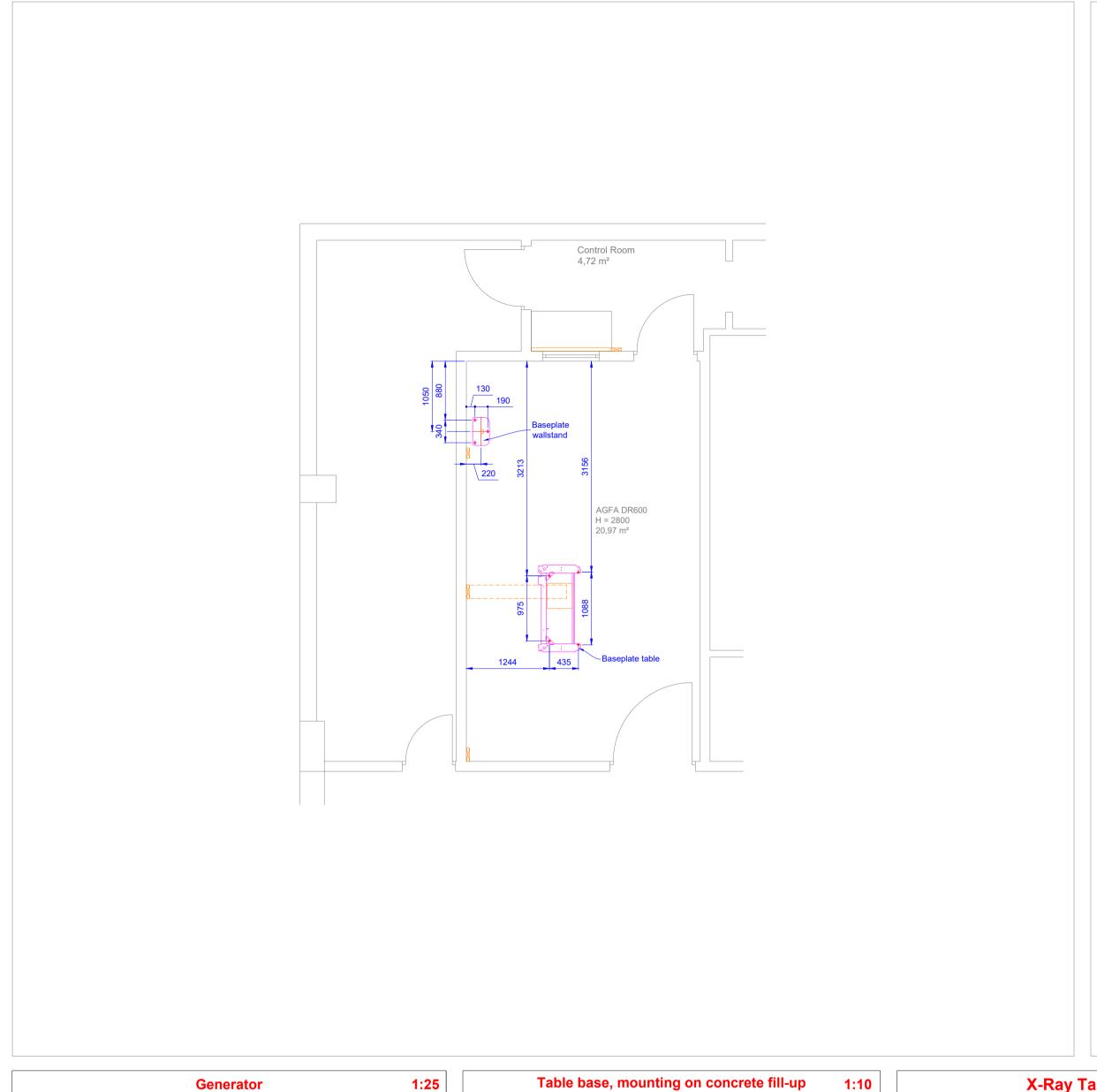
Planning recommendations

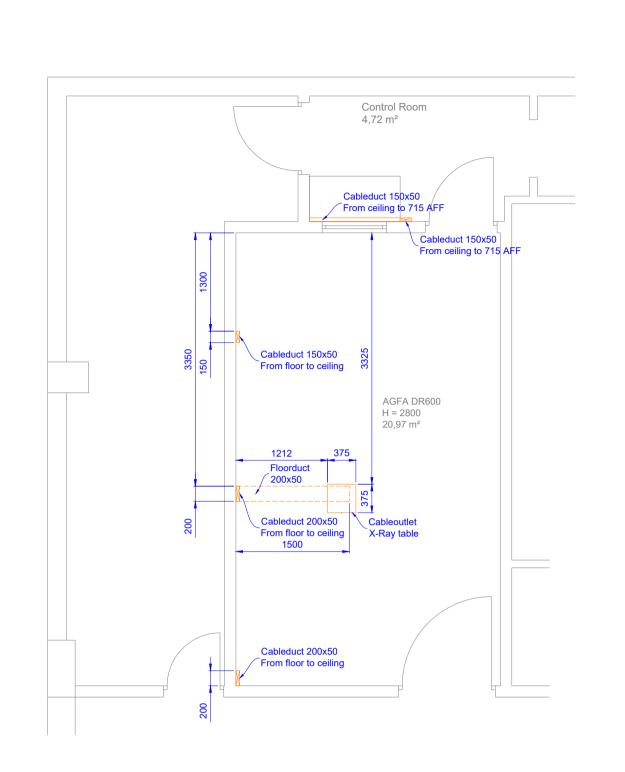
# Notes on Preparations for Installation

The preparations for installation include routing network lines as well as product-specific wiring and cables for transfer of digital information, pulling cables into present conduit, installing fuse boxes, switches (e.g. main, ground fault and emergency shut-off switches), illuminated signs, transformers with separate windings and insulation monitors, installation of cable ducts, installation floors and conduits according to plans completed by us; the same applies for completion and fastening of special constructions for mounting equipment on ceilings, intermediate ceilings, floors and walls as well as installation of heavy load anchors. Contracts for performing and supervising on-site installation preparations should be concluded with technically competent companies directly by the ordering party. The ordering party is responsible for timely and proper completion and supervision of all preparations for installation at the construction site in observance of all applicable legal regulations (e.g. X-ray regulations, radiation protection regulations) and all applicable general recognized rules of technology (e.g. VDE regulations, DIN standards). Execution and supervision of installation preparations at the construction site and later observance of the

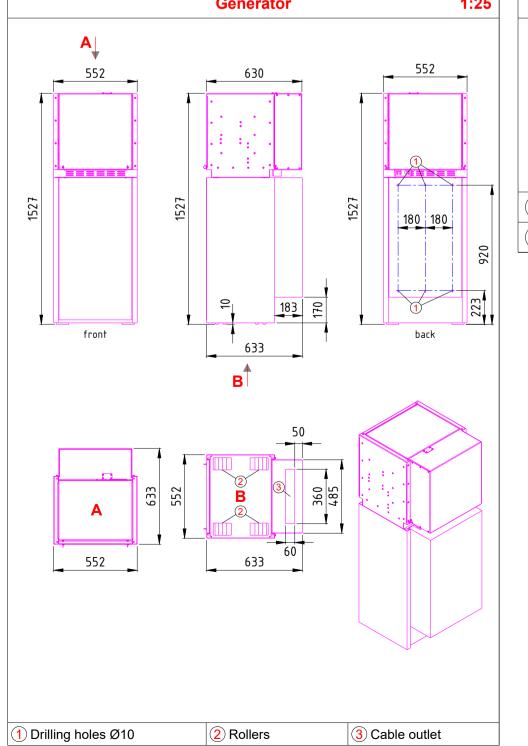
standard operating conditions are not included in our duties. The ordering party is responsible for checking the static calculations and, where applicable, the air conditioning in the building to be equipped.

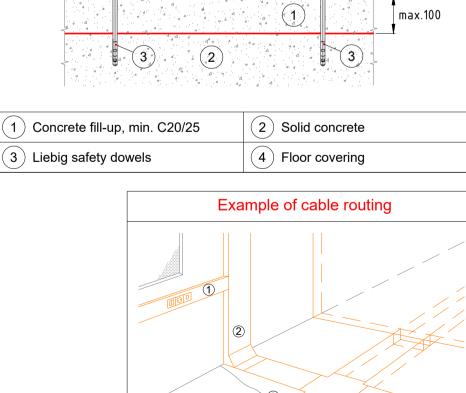
# Site preparations technical details - Floor



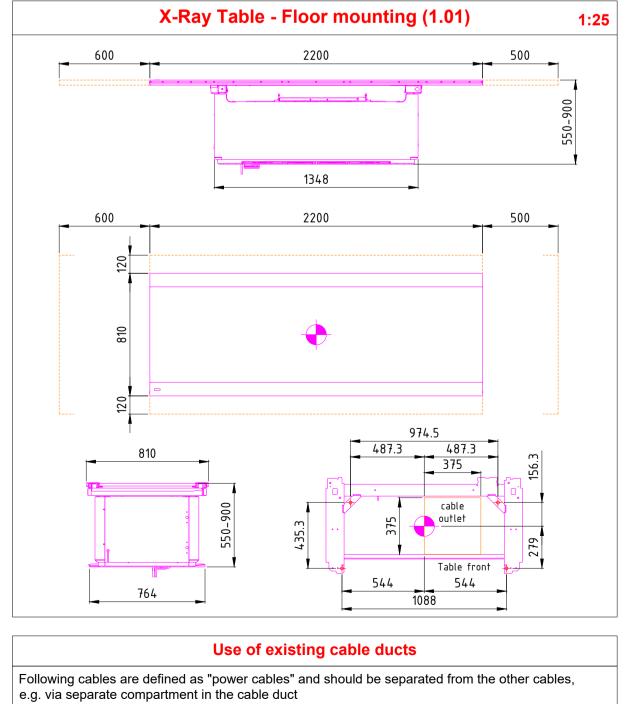


Cableducts need to be reserved for Agfa Cables only





| 2   | 3 6 7   |
|---|---|
| ,   | <u> </u>  |
|   | ce mounted trunking                                 |
|   | ce mounted trunking  4 Floor covering pasted on pla |
| 1 and 2 Surfac                                  |   |
| 1 and 2 Surface 3 Floor covering 5 Cable outlet | 4 Floor covering pasted on pla                      |



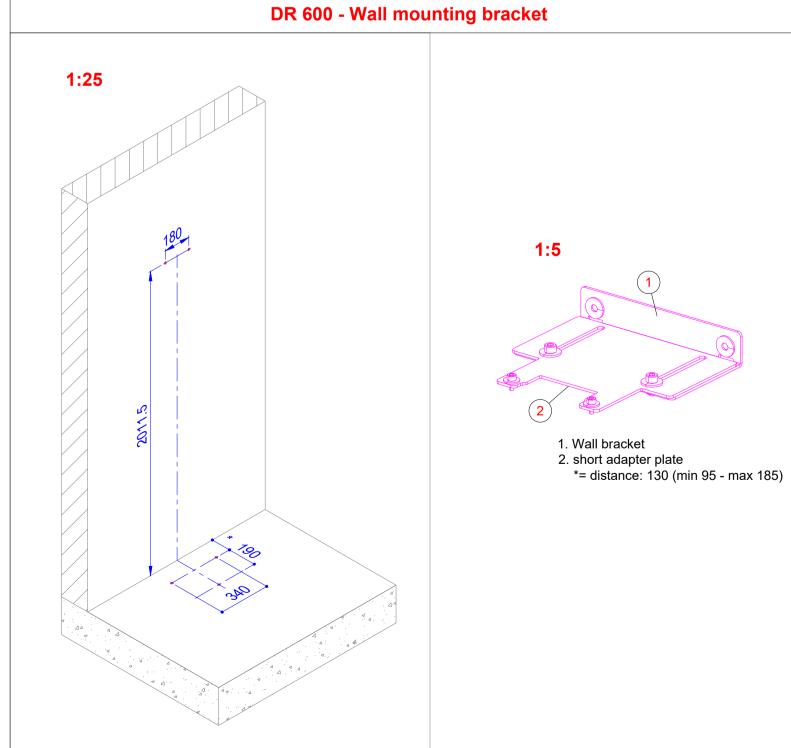
Power cable (230V) between Generator X4 and Transfer Point Table
 Power cable (230V) between Generator X5 and Transfer Point Wall Stand

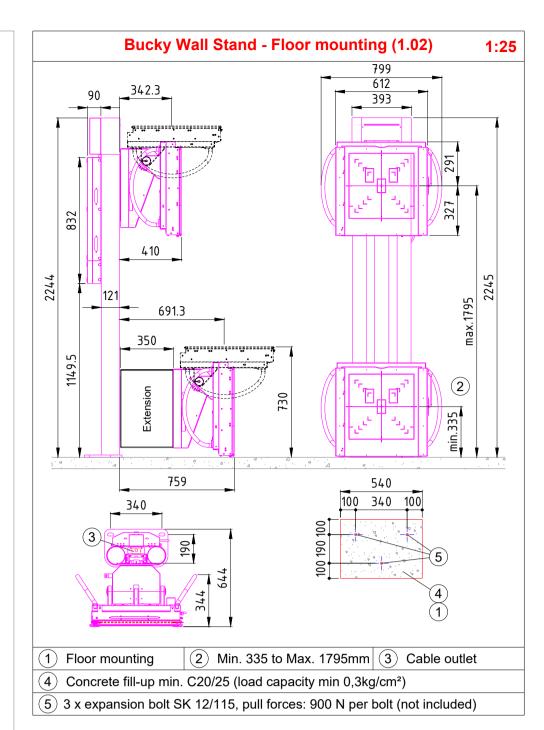
Separated cableducts but placing power cables in parallel to the data cables with just a few

Power cables should be separeted from the other cables, e.g. by using a cable duct with 3 separated compartments.

There should be a few centimeters distance.

millimeters distance may result in image artifacts.





| AGFA DR 600 – Equipment Legend |                                      |             |  |  |
|--------------------------------|--------------------------------------|-------------|--|--|
| Pos.                           | Description                          | Weight (kg) |  |  |
| 1.01                           | X-Ray Table                          | 250         |  |  |
| 1.02                           | Wall Stand                           | 196*        |  |  |
| 1.03                           | Ceiling Suspension                   | 351         |  |  |
| 1.04                           | Generator HFe Serie                  | 120         |  |  |
| 1.05                           | Agfa Workstation                     |             |  |  |
| 1.06                           | Generator on/off and exposure switch |             |  |  |
| 1.07                           | Dead man switch/autopositioning      |             |  |  |
| 1.08                           | DX-D FLFS                            |             |  |  |
| *= tiltir                      | g version without spacer             |             |  |  |

# Site preparations Technical details - Floor

We reserve the right to make technical alterations.

All information provided is for the on-site preparation of the installation and cabling of the

Agfa DR 600 system in order to ensure correct operation.

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# Room dimensioning

The indicated room dimensions have to be checked on site. The planning department has to be informed about possible deviations. Otherwise we cannot assume any guarantee for the accurate implementation of the dimensions indicated in the planning documents.

# Dimensioning

All installation measurements apply to finished wall or floors and are to be checked prior to assembling

• Orientation point = reference point of the unit for planning and installation

# Customer Release Acknowledgement

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# AGFA 4960

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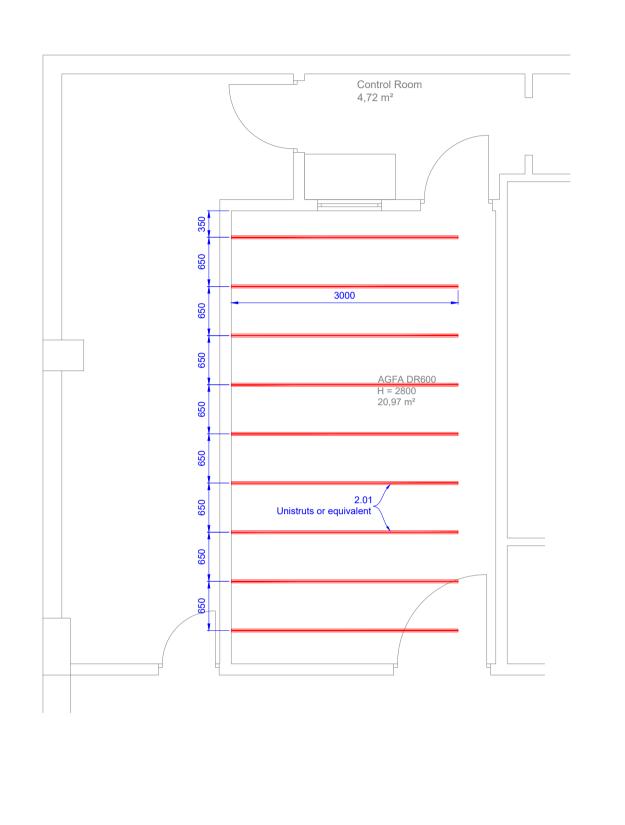
Athens

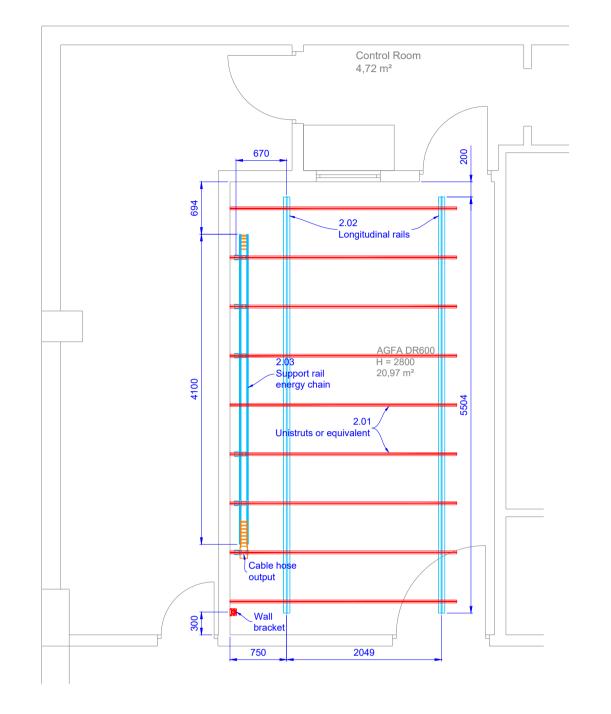
Greece

Room height finished floor to Site preparations - Floor Concrete Ceiling Suspended Ceiling AGFA DR 600

A1.02

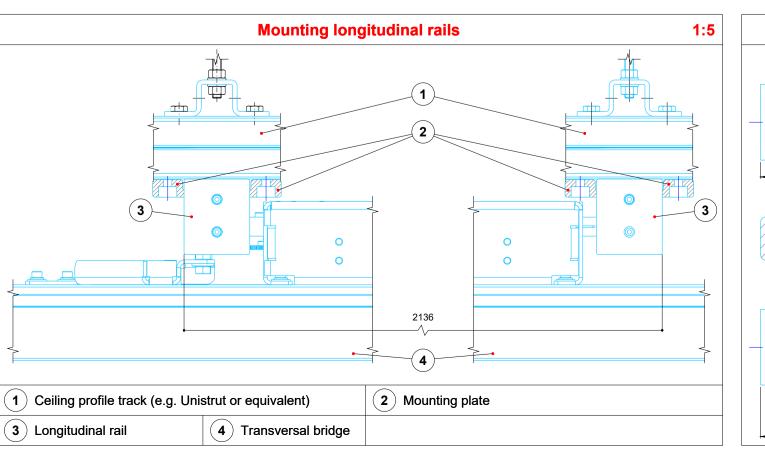
# Site preparations Technical details - Ceiling

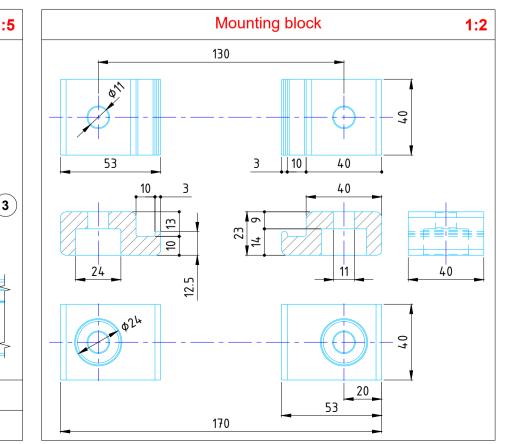




# Energy-chain 300 650 650 650 650 650 650 650 650 350 Wall bracket Cable hose output 4100 Cableduct 150x50 Cableduct 200x50 Cableduct 200x50 Floorduct 200x50 150 1300 3350

| Pos. | Description                          | Weight (kg) |
|------|--------------------------------------|-------------|
| 1.01 | X-Ray Table                          | 250         |
| 1.02 | Wall Stand                           | 196*        |
| 1.03 | Ceiling Suspension                   | 351         |
| 1.04 | Generator HFe Serie                  | 120         |
| 1.05 | Agfa Workstation                     |             |
| 1.06 | Generator on/off and exposure switch |             |
| 1.07 | Dead man switch/autopositioning      |             |
| 1.08 | DX-D FLFS                            |             |





Equipment suspension

Load per ceiling mounting point

Fz max = 4,0 kN

Fz max = 4,5 kN

Fz max = 5.0 kN

Fz max = 5,5 kN

Fx max = 2.0 kN

Fy max = 2.0 kN

Single Channel 41x62x3000mm with groove M12

9 Unistruts or equivalent

2.02 Longitudinal rail (60x75x5504mm)

Vertical single load at Y-bridge length 3,0m

Vertical single load at Y-bridge length 3,5m

Lateral load in X-direction

Lateral load in Y-direction

2.03 Support rail energy chain (120x77x4100mm)

Vertical single load at Y-bridge length 2,5m (min. length)

Vertical single load at Y-bridge length 4,0m (max. length)

# Ceiling Ceiling Construction Distance D between mounting block upper edge and ceiling can be less than 10 cm in following cases. In case of a "false ceiling" which can be removed for a service intervention. In case ceiling suspension can be shifted to a "service location" with the specified min. distance D. In this service location it must be possible to reach the lowest possible Tube Head position. No obstacles may be present. Otherwise Balancer replacement is not possible. Examples of service activities which require min. 10 cm for distance D:

Checking Balancer ropes during preventive maintenance; replacing Z1-Encoder

# Site Preparations Technical Details - Ceiling

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∠ cm → mm →

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Site preparations - Ceiling

Room height finished floor to Concrete Ceiling
Suspended Ceiling
Scale 1:50

A1.03

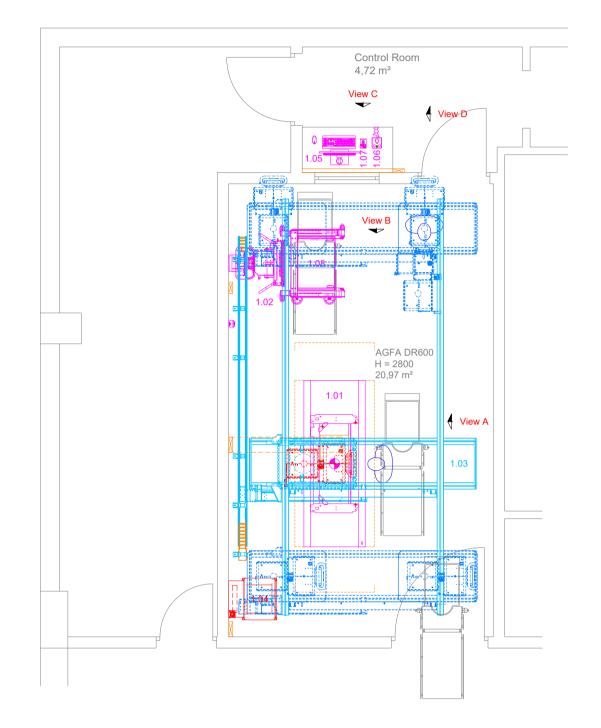
AGFA DR 600

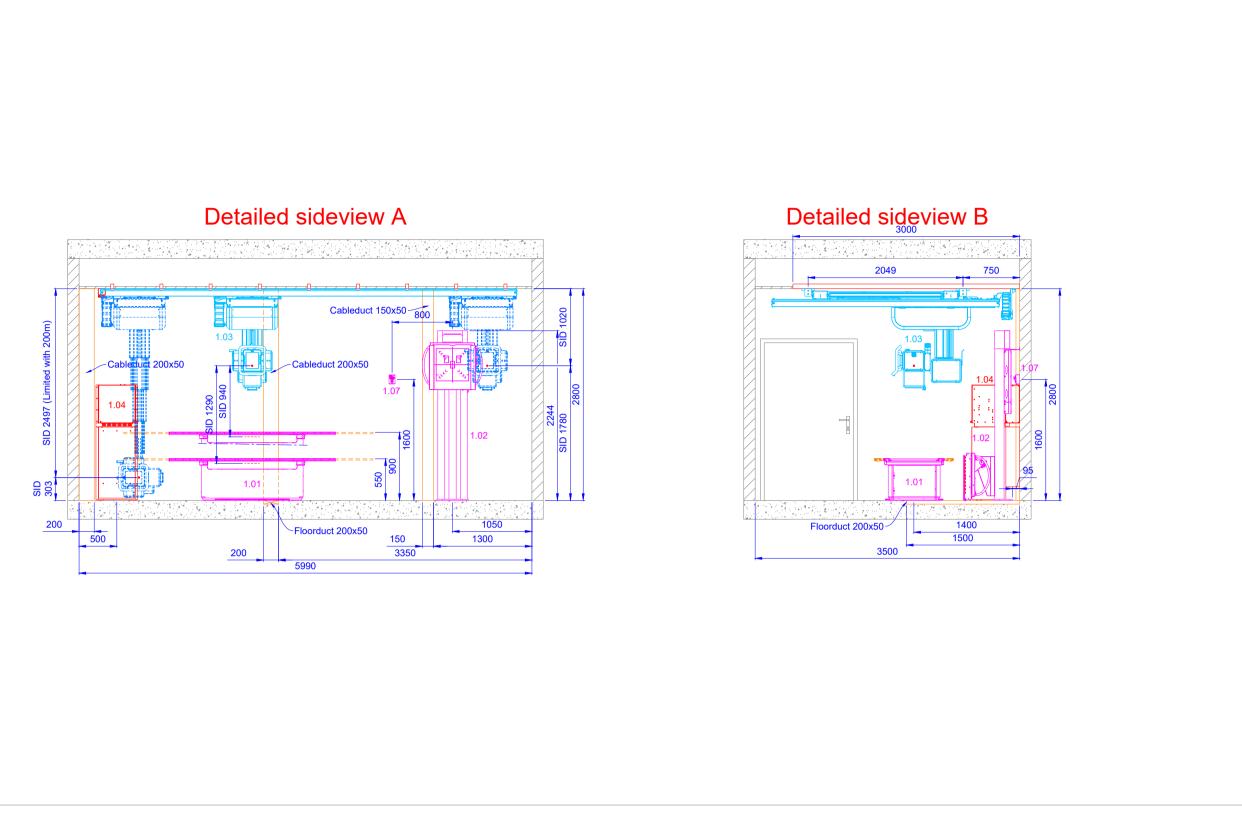
Scale 1:50

Om 1m 2

Filename

# Site preparations Technical details - Side views





| Pos. | Description                          | Weight (k |
|------|--------------------------------------|-----------|
| 1.01 | X-Ray Table                          | 250       |
| 1.02 | Wall Stand                           | 196*      |
| 1.03 | Ceiling Suspension                   | 351       |
| 1.04 | Generator HFe Serie                  | 120       |
| 1.05 | Agfa Workstation                     |           |
| 1.06 | Generator on/off and exposure switch |           |
| 1.07 | Dead man switch/autopositioning      |           |
| 1.08 | DX-D FLFS                            |           |

# Site Preparations

# Technical Details - Side views

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cm → mm →

Orientation point = reference point of the unit for planning and installation

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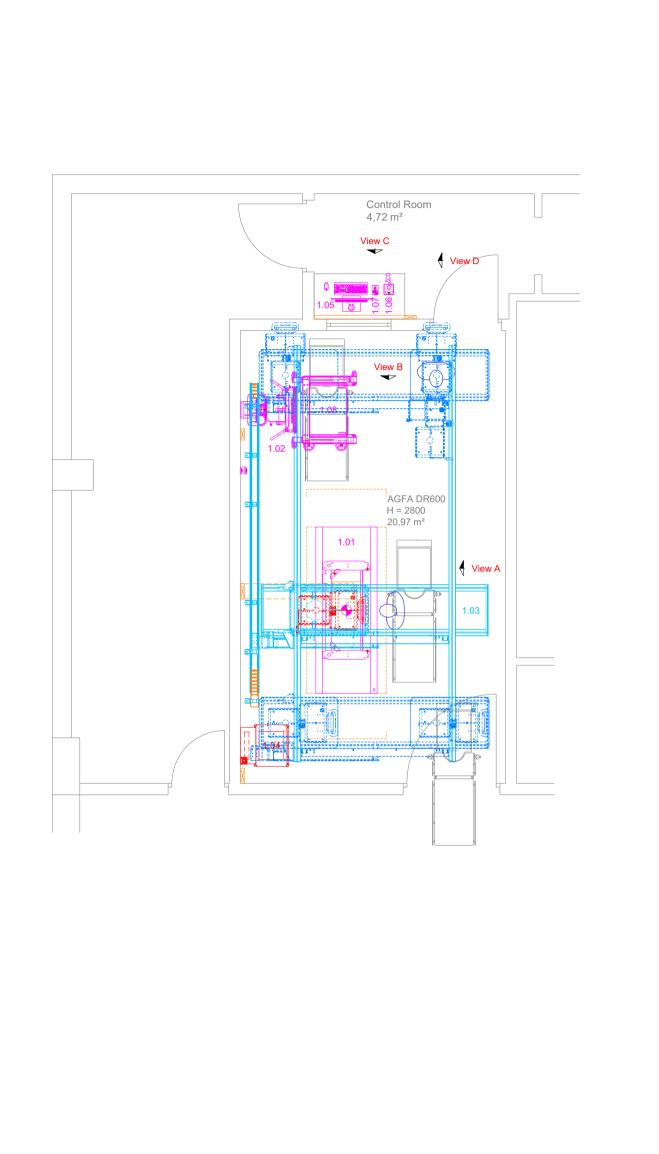
Athens

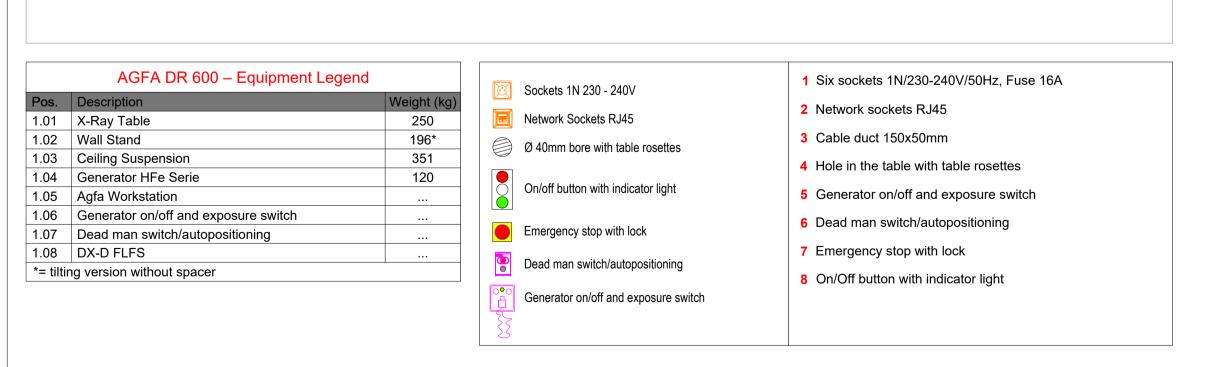
Greece

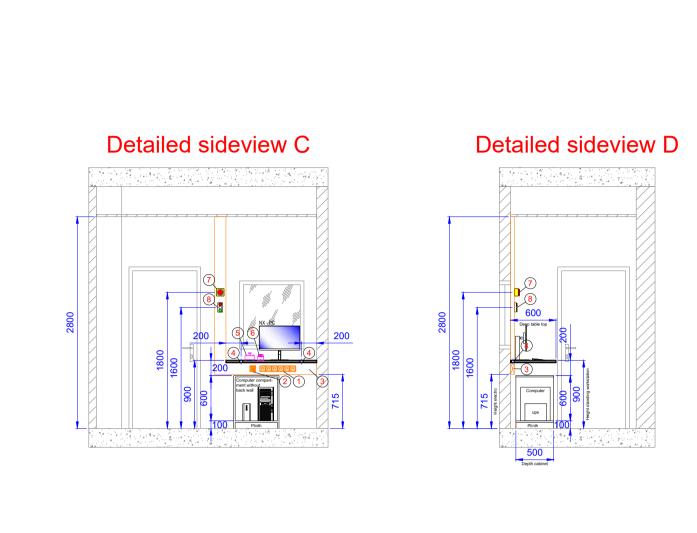
| 0.1                            | Room height finished floor to |           |    |  |
|--------------------------------|-------------------------------|-----------|----|--|
| Site preparations - Side views | Concrete Ceiling              |           |    |  |
|                                | Suspended                     | d Ceiling |    |  |
|                                | Scale                         | 1:5       | 0  |  |
| AGFA DR 600                    | 0m                            | 1m        | 2m |  |
|                                |                               |           |    |  |

A1.04

# Site preparations Technical details - Workstation







# Site Preparations Technical Details - Workstation

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# Dimensioning

All installation measurements apply to finished wall or floors and are to be checked prior to assembling the unit.

cm mm

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qualified specialists.

Customer:

Customer:

Name
Signature
Date

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installations. We will contract the implementation and monitoring of on-site preparations for installation to



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| \A/1111111111111             | Room height finished floor to |      |    |
|------------------------------|-------------------------------|------|----|
| e preparations - Workstation | Concrete Ceiling              |      |    |
|                              | Suspended Ceiling             |      |    |
|                              | Scale                         | 1:50 |    |
| GFA DR 600                   | 0m                            | 1m   | 2m |

A1.05