



Siemens MAGNETOM Sola 1.5T

RELOCATABLE MRI BUILDING
PLANNING GUIDE
MR15



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Rental Solutions from Scandinavian Medical Solutions

At Scandinavian Medical offer solutions that differ from other rental solutions on the market, providing a flexible, cost-effective solution tailored to your requirements, timeline, and budget.

Our team has developed a unique and flexible rental concept, which provides you with a wide selection of customized alternatives to high-cost OEM equipment at a fixed monthly rate. There are no heavy investments, no risks, and no residual value.

We offer short – and long-term rental solutions - from fixed-site to trailers and modular rental solutions. Regardless of the challenges you face - be it replacement of equipment, breakdowns, bridging periods, or back-locks - we offer excellent solutions that ensure you can avoid downtime and optimize your scan capacity.

System Specifications

- **Brand:** Siemens
- **Model:** MAGNETOM Sola 1.5T BioMatrix system 70cm Open Bore Design
- **YOM:** 2023
- **Gradient Type:** XJ Gradients
- **Channels:** 48 channels
- **Coils:**
Ultra Flex Large 18ch, Ultra Flex Small 18ch, Body Flex 18ch, Head/Neck 20ch, TX/RX Knee 18ch, Hand/Wrist 16ch, Foot/Ankle 16ch, Shoulder shape 16ch, Breast 18ch
- **Software Version:** Syngo MR XA51A

➤ **Software Options:**

Advanced Diffusion, Advanced WARP, Anatomy Register, AutoAlign Head LS, AutoAlign Hip, AutoAlign Knee, AutoAlign Shoulder, AutoAlign Spine Labeling and Numbering, AutoAlign Spine LS, Beat Sensor, BLADE, CISS & DESS, Coil Shim, CS SEMAC, CS SPACE, CS TOF, Deep Resolve Gain, Deep Resolve Sharp, Deep resolve Pro, Expert-i, Extended Cardiac, Fast Dixon, FastView, Image Filter Software, Inline 3D Distortion Correction, Inline Composing, Inline Diffusion, MapIt, MDDW, MDME, Morpho Quality Control, Motion Correction NR, MR Basic Reading, MR Cardiac Reader, MR Composing, MR General Engine, MR Image Registration, MR Prostate Biopsy Support, MR Prostate Segmentation, MR Soft Tissue Motion Correction, MR Tools, myExam Assist, myExam Autopilot, myExam Brain Assist, myExam Hip Assist, myExam Knee Assist, myExam Shoulder Assist, myExam Spine Assist, Optimized Protocols for EC, PhoenixZIP, Region Growing, Respiratory Sensor, Rest of the World, Security, Slice Adjust, SMS, Spine Labeling, SWI, TGSE, TIM Application Suite (Angio Suite, Body Suite, Breast Suite, Cardiac Suite, Neuro Suite, Onco Suite, Ortho Suite, Quit Suite, Scientific Suite, TIM planning Suite), Tim Whole Body Suite, Turbo Suite Essentials, Turbo Suite Excelerate, WAVE CAIPI)



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Inventory

General

- Magnetic shielding - fringe field not exceeding 0,5 mT outside of building.
- Chiller incl. cooling water installation.
- Air-conditioning with temperature control
- Housing – sandwich panels with stone wool, color white

Operator Room

- 2 Doors in operator room with interior blinds
- Operator chair
- Changing Room
- Radio/Bluetooth Player
- Waveguide to MRI room (for contrast injector)

MRI Room

- MRI Siemens Sola
- RF room in accordance with the system requirements
- Shelf for local RF coils and accessories

Technical Room

- RF room in accordance with the system requirements
- 4 lifting eyes incl. Allen key
- 1 aluminum Fire Extinguisher (in technical room)
- 1 ladder (in technical room)
- Patch panel (Network)
- Patient bed transportation kit
- Shimplates
- Ramping cable
- Hydraulic system power cable (CEE 3P 32A) →

Chiller Area (outside)

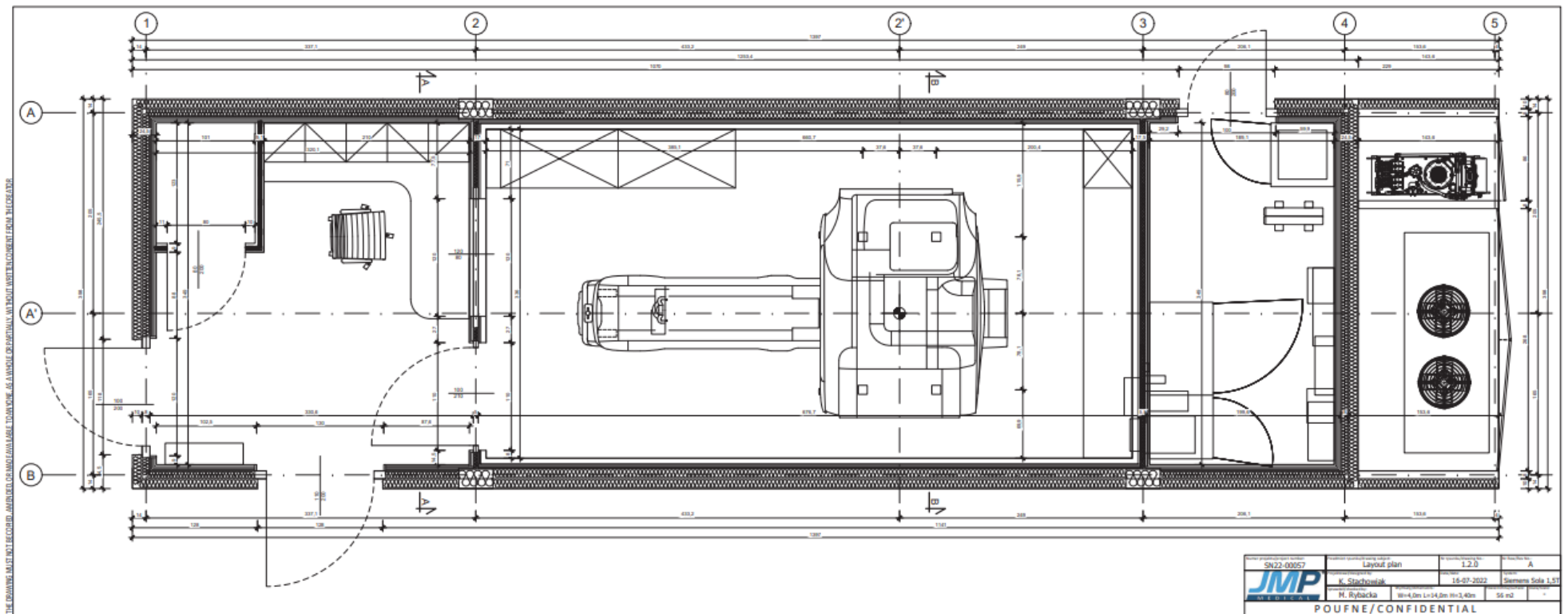
- Hydraulic system
- Chiller system
- Quench pipe
- Power cable 12m with 250A Marechal connector →

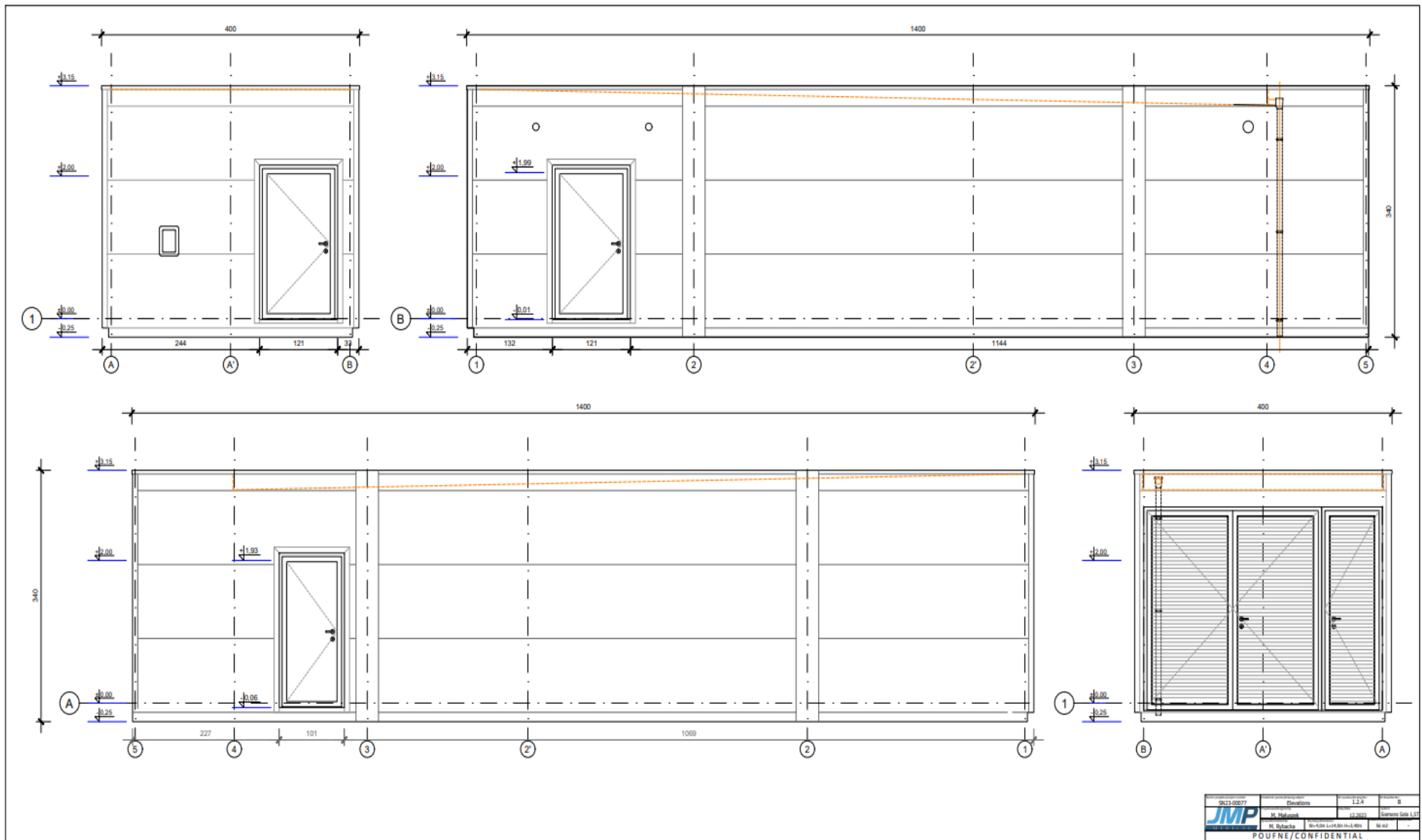


Dimensions & Weight

Dimensions **14,00m x 4,00m x 3,40m**

The total weight of a building including the MRI Siemens Sola 1.5T system is about **38 tons**.





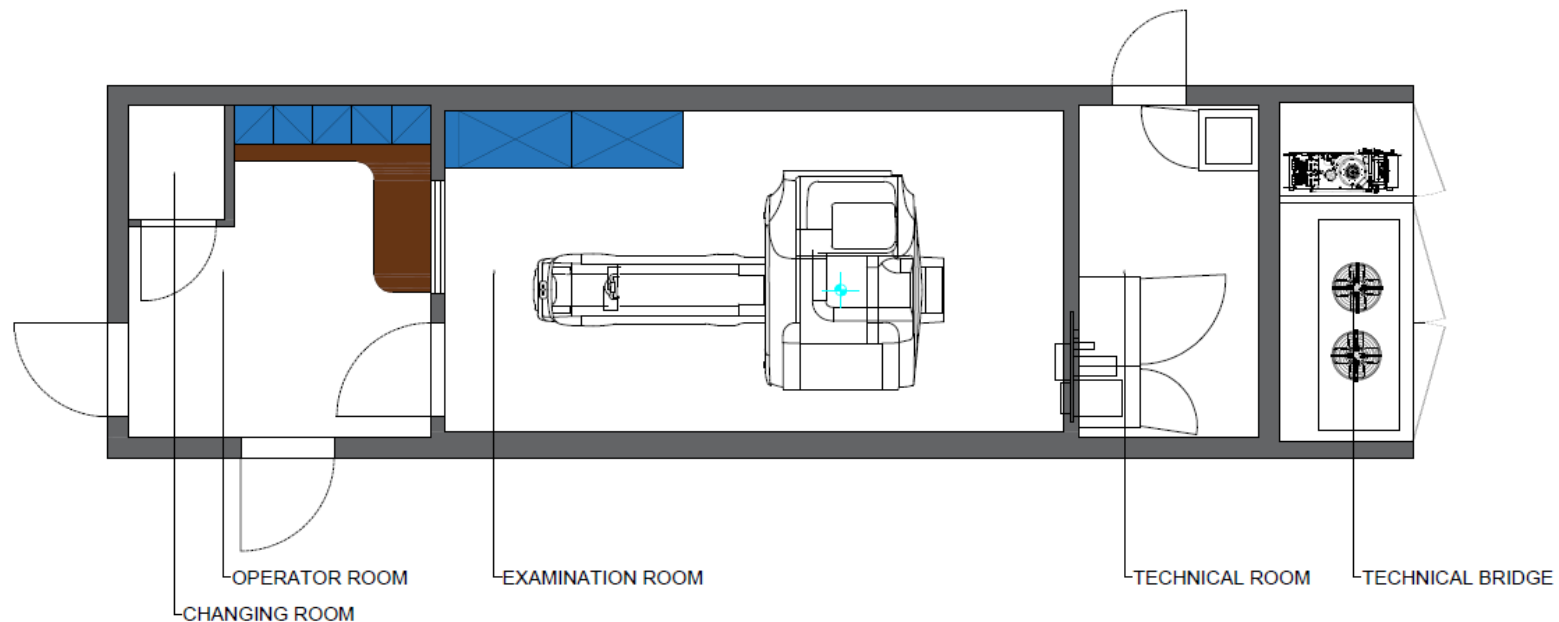
0423-00077	124'	B
M. Dabrowski	12/2010	Design Only - L10
M. Dabrowski	12/2010	10/02
POUFNE/CONFIDENTIAL		

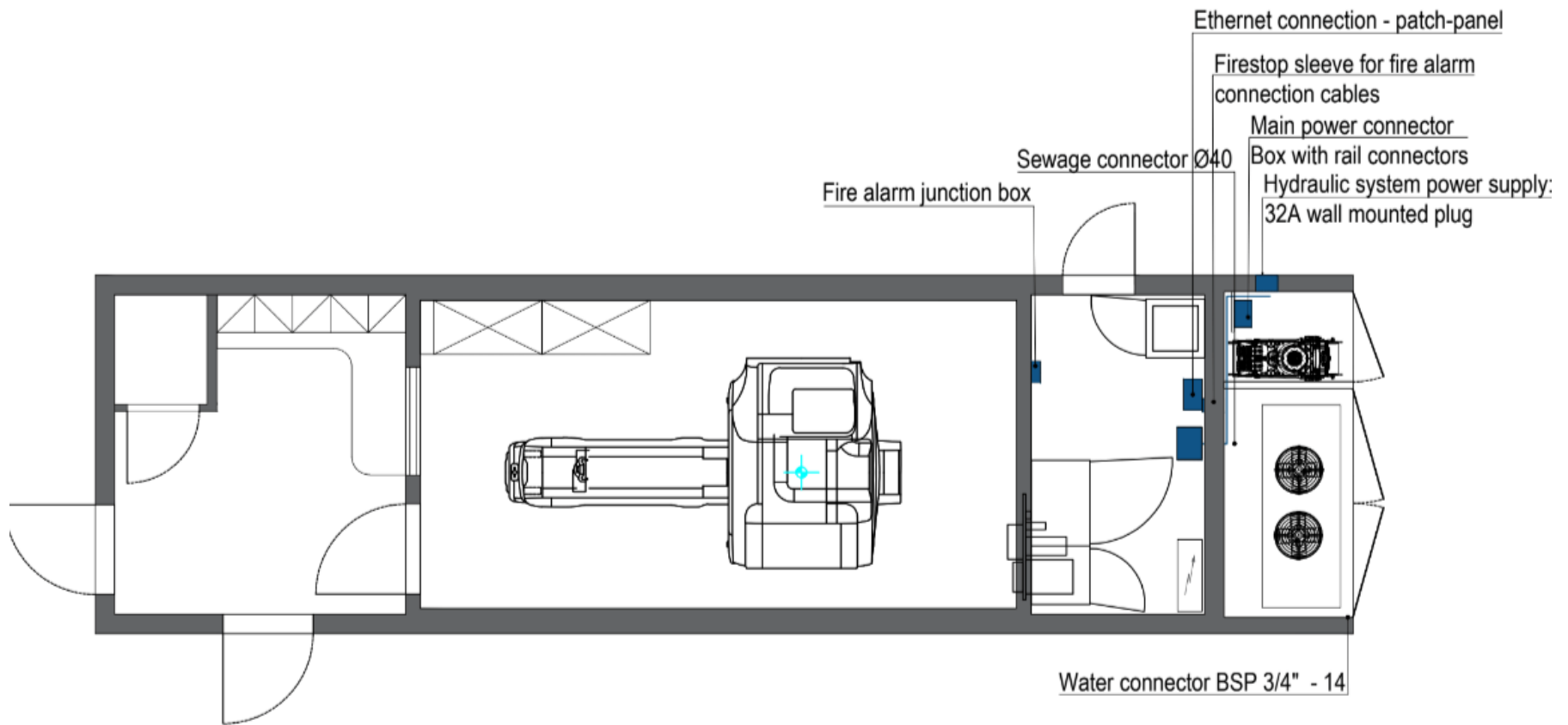
Access to The Building

The relocatable MRI building can be accessed via three doors:

- Two doors leading to the operator room (patient and staff access)
- One door leading to the technical room (service access).

On the rear wall there are service doors to the technical bridge. On the left wall you can find handle for ladder, that gives access to the roof. Service access can be found in Figure 3. Mentioned doors you can find in Figure 2. Connection points you can find in Figure 3 and 4. Drainage you can find in Figure 5.



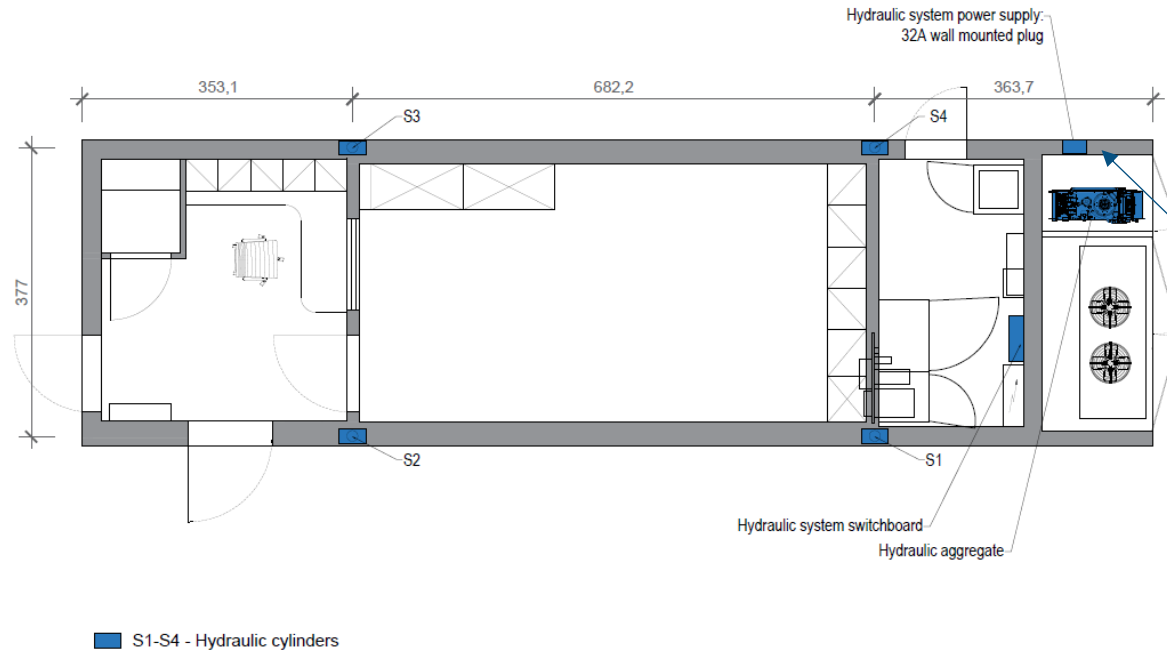




Hydraulic Lifting System

For unloading with the hydraulic system, a separate power supply for CEE 3P 32A connection is needed. (Customer side)

Hydraulic system power cable (CEE 3P 32A) is included.



Environmental Requirements

All necessary administrative consents needed for the unit installation in the indicated area and for entry and unloading should be provided. Also, permission to enter and work the crane from 6am to 6pm must be provided.

It is necessary to prepare and secure the access road to the entry of heavy equipment and the foundation of the unit. Moreover, maximum 1 % terrain deferral. If more, site preparation with ground levelling is to be handled prior to installation.

Minimum Required Area

To enable access to all parts of the MRI building you need to provide suitable area.

Required area for the unit is: 16,70 m x 5,70 m and is shown in Figure 6. The height of container is 3,40m.

Contact our technical department for the detailed minimum required area.

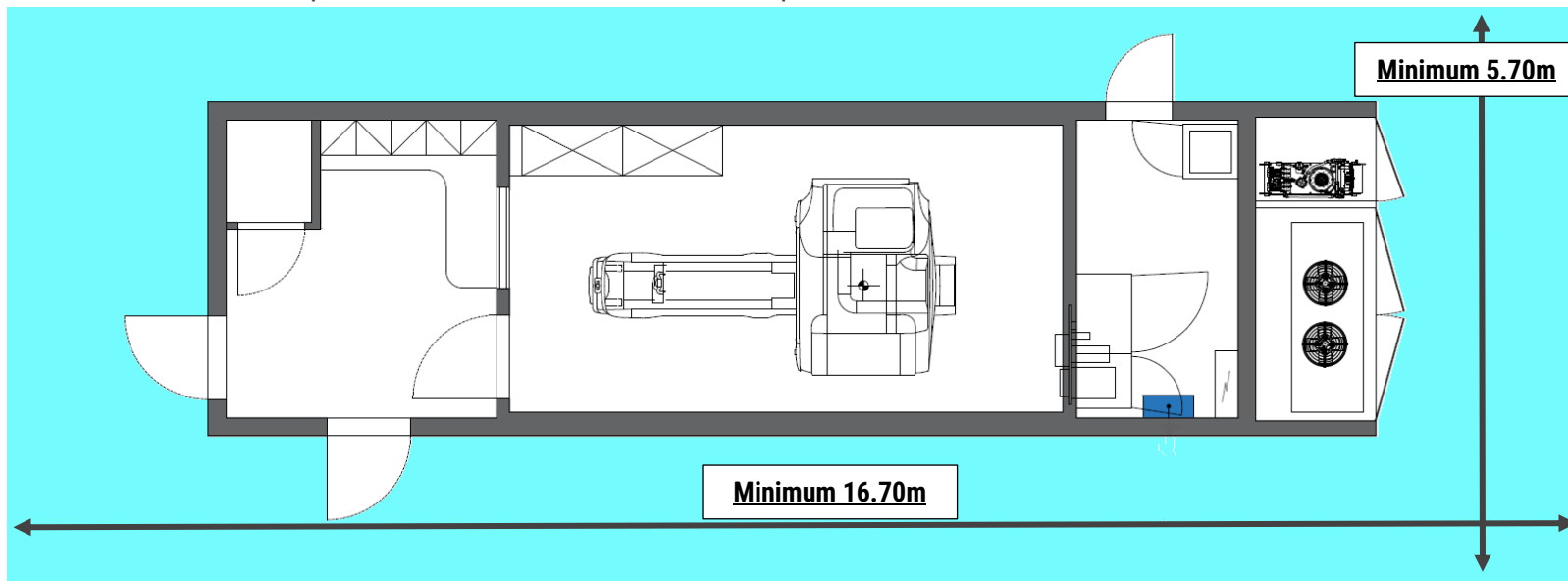


Figure 6 Minimum required area

Minimum Container Sitting Conditions

A level ground should be prepared for unit installation with an accuracy of 10mm. For long term rental the typical foundation is shown in Figure 7. Detailed information about preparing the ground can be found in the technical documentation. Figure 8 shows example of building foundation.

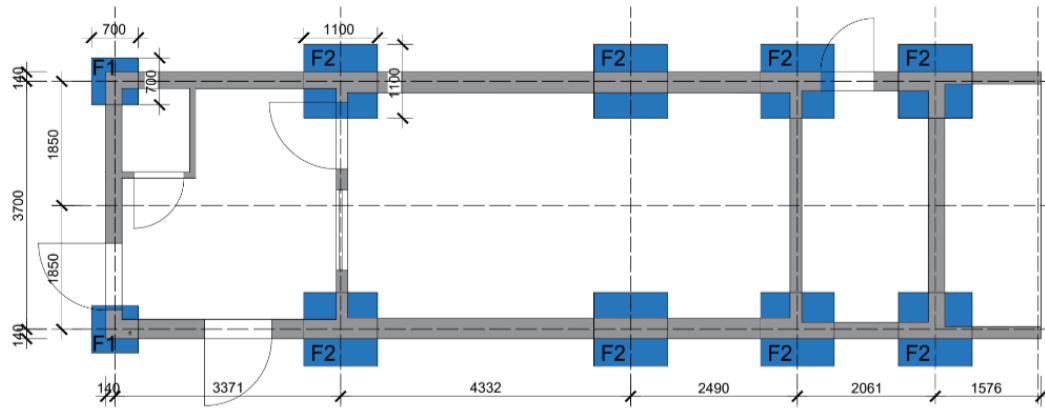


Figure 7 Block foundation

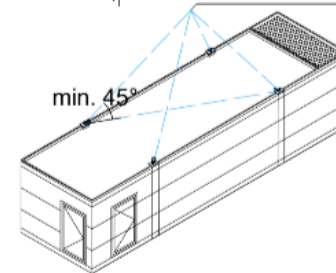
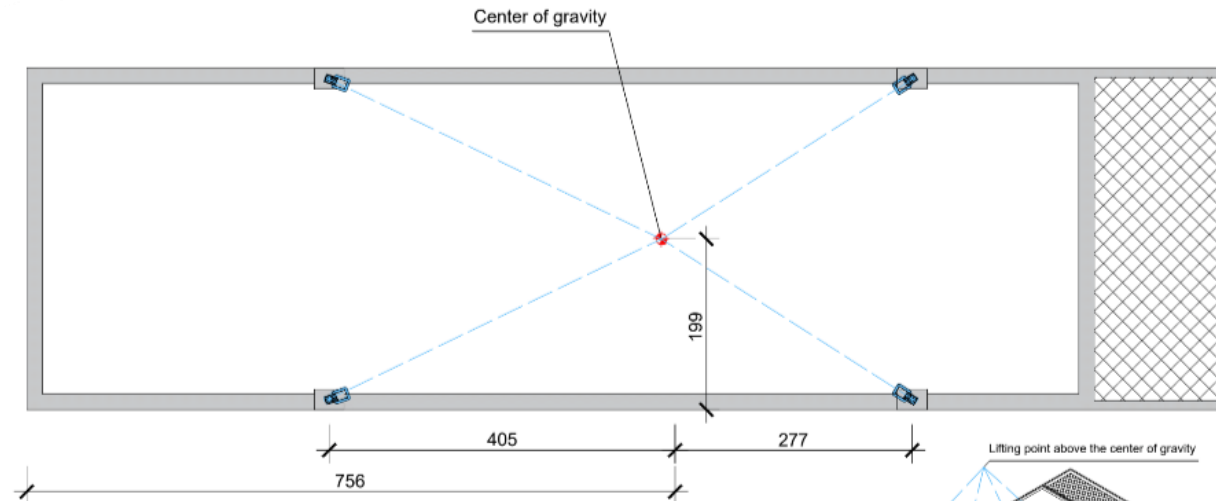
F1	F2
$F_z = 42 \text{ kN}$	$F_z = 140 \text{ kN}$
$F_x = \pm 2,5 \text{ kN}$	$F_x = \pm 2,5 \text{ kN}$
$F_y = \pm 5 \text{ kN}$	$F_y = \pm 15 \text{ kN}$



Figure 8 Example of block foundation

Conditions of Container Lifting Guidelines

The unit should be lifted by 4 lifting brackets mounted on the upper frame. The lifting scheme you can see in the Figure 10. The crane selection is considered individually for each project.



CONDITIONS OF MODULAR LIFTING

GUIDELINES:

- the modular must be lifted by 4 lifting brackets 20T mounted on the upper frame
- Acceleration value while modular lifting should be insignificant
- four-lifting slings of modular lifting should be adjusted according to the center of gravity of construction location
- countersink angle between slings must not be bigger than 90°
- Before lifting, the modular's roof should be cleared of snow.
- Modular lifting should be carried out freely - the construction must not be covered with ground, frozen or jammed.
- Modular should not be lifted when wind exceeds 10m/s

IT IS PROHIBITED TO:

- Be inside or on the upper layers of modular for people
- lift the modular under the high-voltage lines
- be under the job while lifting and moving the construction hanging on the hooks
- carry the construction above people and driver's compartment
- leave the hanging modular without supervision after work finishing or during the breaks
- lift the modular with the equipment unprotected inside

Main Power Connection

Applying power to the main power connection, connecting the building to electricity, and performing protective measurements after connecting the power supply are the responsibility of the user. These activities must be performed by a person with appropriate qualifications.

Connecting the building should take place within 2 hours from setting up the building.

Power connection details:

Building with MRI system: 250A

Mains supply: 400V

Frequency: 50/60Hz

There are 2 Options of the main power connection.

Option1 : Connecting the main power cable directly to the connection box. (max. 95mm")
(Cable provided by the customer)

Option 2 : Connection the system main power with the included 12m long main power cable with the MARACHEL 3P N PE 250A connector.
(Cable is included with the unit)

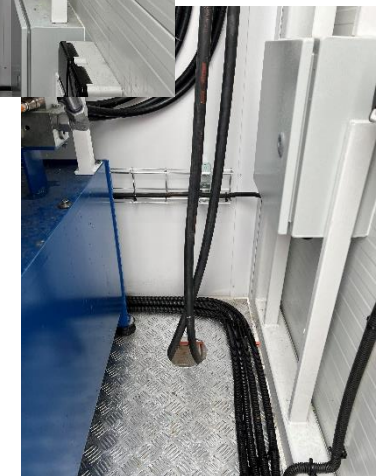
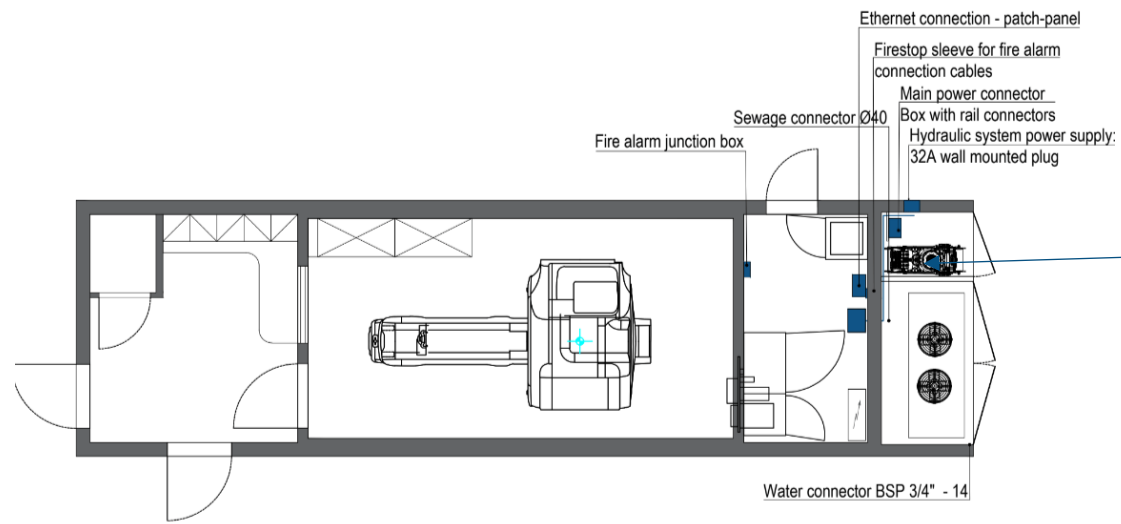
After delivery and setting up, the unit must be immediately connected to the power supply. The main power connection is box on the technical bridge with rail connectors 5x70mm², see *Figure 4*

Connection box with rail connectors



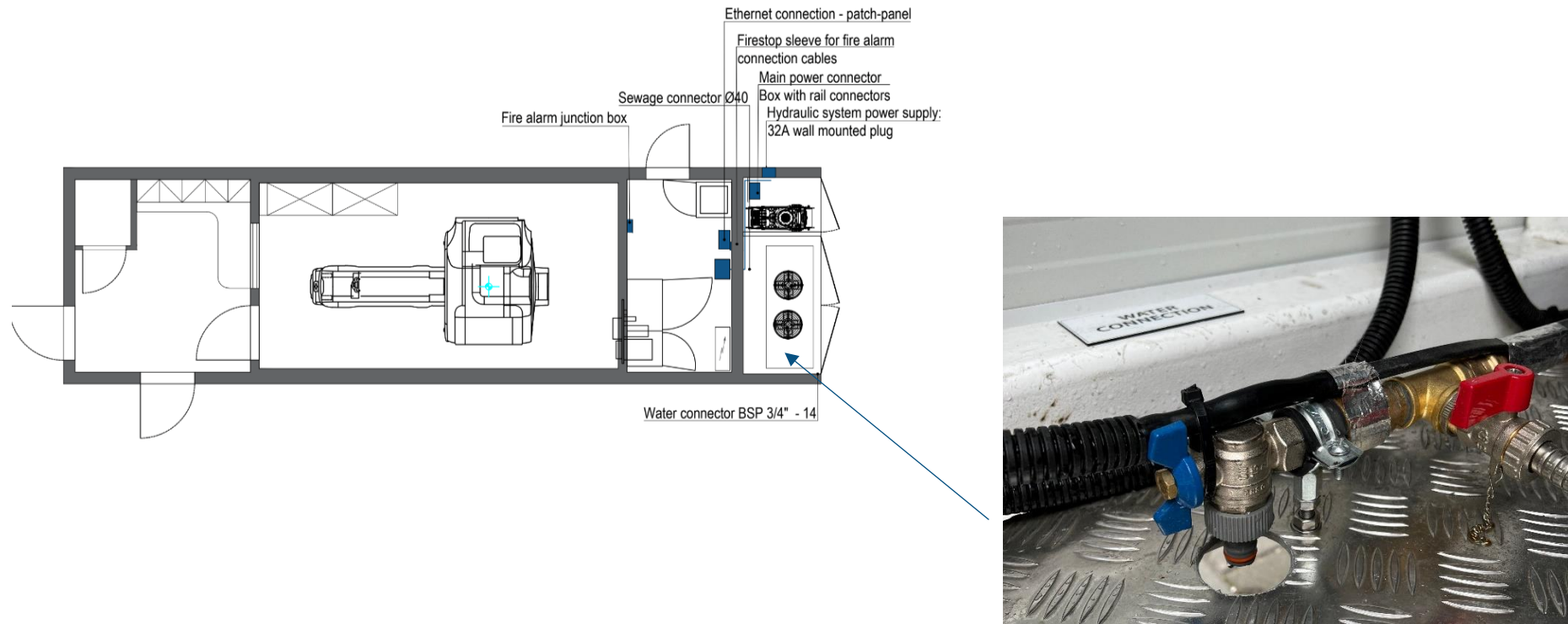
MARECHAL-DS2 3P N PE - 250A Connector





Water connection

As the unit is equipped with a humidifier, running water should be brought into the building. The water connector is 1/2". The pipe is equipped with a water heating system in case of low temperatures. To connect the heater, you must insert the plug into the socket located on technical bridge.



Ethernet Connection

To connect the unit with the local LAN network, there are patch panels figure 8 (8xRJ45,6cat.) in the building. The location of the patch panel is shown in Figure 9.

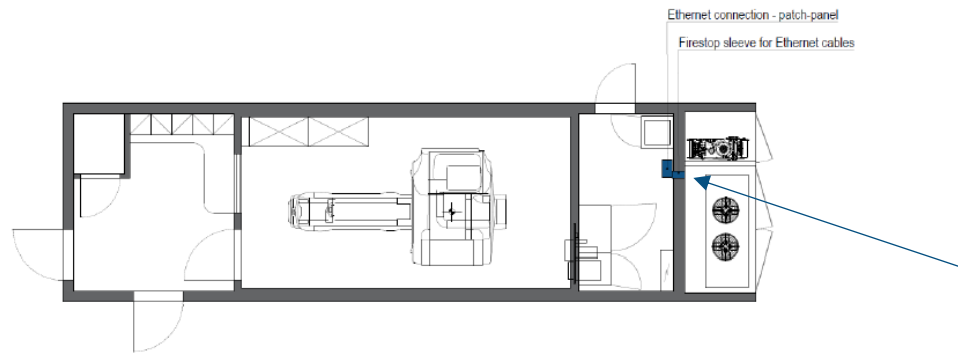


Figure 9 External patch-panel location



Figure 8 Patch-panel box

Contact

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