

# Hygienic doors for medical areas

Customised door systems of the highest class - directly from the manufacturer.

we care.



# One company, one contact person, your advantage.

### Competence

At medifa you will find committed people who master their field. As a globally active, medium-sized company we offer you reliable products, short ways and a permanent partnership. medifa stands for competent advice and support all from one source — one company, one contact person, one solution.

#### Service

We see ourselves as a component of your quality assurance. Rapid reaction times and a nationwide customer service sustainably and economically secure your investment.

#### In best hands

Together in the medifa healthcare group, we offer you specific know-how on the various investment products in operating theatres. As a full-service provider, medifa offers you a turnkey operating theatre from a single source.

Thanks to 80% added value in our own production in the group of companies, we can implement your requirements quickly and flexibly.

we care.

# Integrated, seamless, perfect match: RooSy, the modular room system by medifa.



medifa hygienic rooms offers you the possibility to create hygienic rooms on the basis of a well-conceived modular system wherever these are needed – the solution is flexible, economical and boasts an individual design.

The modular hygienic room system RooSy guarantees perfectly aligned walls, doors and ceilings.

Thereby, the RooSy room system offers you maximum flexibility. On the basis of modularity, it can adapt perfectly to your requirements. Renovations, expansion or extensions can be implemented easily and on time.

A robust construction, easy-care surfaces and first-class materials ensure optimal hygiene and extreme longevity.

WALLS

DOORS

CEILINGS

WINDOWS

DESIGN

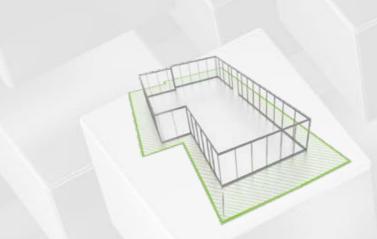
INTEGRATED COMPONENTS



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## Complete solutions for modern medical environments





#### 3D planning und conception

Already during the planning phase, we support you as a competent partner with the knowledge of our specialist engineers in the various areas of hospital planning. The planning is realised with modern methods in Autodesk Revit (BIM) and visualises the building project in 3D. Take a virtual tour of your rooms before the project begins.

### Engineering

Our specialists develop individual special solutions or constructions for your hospital area. CAD design with SolidWorks for customer- and project-specific solutions.

### **Project management**

Concept and realisation from a single source: Appointment planning, technical clarification, coordination of production steps, building site-related and assembly-friendly logistics.

### **Assembling and servicing**

Assembling of modular rooms worldwide, from one source or as a supervisor model supporting and training your assemblers.

### Quality

We will assist you all the way to the successful implementation of your project and see ourselves as a reliable component of your quality assurance.

### Door systems for the highest hygiene requirements





### **Antibacterial / antimicrobial coating (optional)**

The coating of the doors contains silver ions that are harmless to humans and reduce germs on the surface by 99.99 %. The antibacterial / antimicrobial effect according to ISO 22196 ensures that bacteria die and disappear. In addition, this coating also has an antimycotic effect against fungal growth in accordance with ISO 846.

### **Hygienic materials**

RooSy doors are made of very hygienic materials such as stainless steel, acrylic stone, HPL or glass with smooth surfaces that do not allow bacteria to settle. There are no visible screw connections on the doors. Even if the powder coating is damaged, there is no risk of corrosion.

### **Good disinfectability**

RooSy doors are easy to disinfect. Disinfectants according to DIN EN 12353 / DIN EN 16615 have a bactericidal, mycobactericidal, sporicidal and fungicidal effect on them, so that these organisms do not remain on the surface after disinfection and exposure time.



#### **Flush installation**

The doors have a closed frame. Based on the flush-mounted installation of the frame and the door panel and a surrounding seal on 3 sides, our doors are resistant to the deposition of dirt and dust – the optimal solution for maximum hygiene. More-over, the smooth joins without rough edges can be cleaned very easily.

### Air pressure tightness of the modular room

RooSy doors are air pressure-tight in combination with the RooSy room system. Due to the overpressure of the room, no impure air can flow in and only purified air penetrates to the outside when the door is opened.

#### **Contactless operation**



### Door systems - individually produced





medifa door systems are manufactured individually for your requirements with the highest quality in our factory in Ötigheim, Germany.

The doors for the hygienically sensitive areas in the operating theatre or intensive care unit are made of powder-coated stainless steel, HPL or glass.

There are different door systems to choose from:

- Sliding or hinged doors
- Single or double-leaf doors
- Manual or automatic
- Flush integrated view-through windows
- Radiation or laser protection

Our production and the doors are certified according to:

- DIN 18650-1/-2:2010
- DIN EN 6005:2013
- DIN EN ISO 13849-1:2008 in combination with
- DIN EN 160005:2013
- Blower door test according to DIN EN 13829 procedure B and DIN 4108-7:2011

Stainless steel

Glas





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## RooSy hinged doors



#### **Robust and durable**

The aluminium frame in the door panel ensures high rigidity of the door panel. The 40 mm door panel strength offers an optimal relation between function, quality and user-friendliness.

### Hygienic and easy to clean

The hinged doors of the RooSy room system have a closed frame. Based on the flush-mounted installation of the frame and the door panel, our hinged doors are resistant to the deposition of dirt and dust – the optimal solution for maximum hygiene. More-over, the smooth joins without rough edges can be cleaned very easily.





| Design       | single-leaf                               | double-leaf                               |
|--------------|---|---|
| Grid width   | 800 – 1,300 mm                            | 1,500 – 2,000 mm                          |
| Frame height | 2,150 mm                                  | 2,150 mm                                  |
| Frame depth  | 100 – 600 mm, also individually adaptable | 100 – 600 mm, also individually adaptable |

| Possible material and surfaces |                        |   |  |
|--------------------------------|------------------------|---|--|
| Frame                          | Stainless steel sanded | Stainless steel powder-coated                     |  |
| Door panel                     | Stainless steel sanded | Stainless steel powder-coated                     |  |
|                                | HPL                    | Stainless steel powder-coated + individual design |  |
| Door filling                   | Foam core XPS          | Tubular chip board                                |  |

| Features (optional)  |                                   |
|----------------------|-----------------------------------|
| Automatic operation  | According to DIN 18650 / EN 16005 |
| Security sensors     | According to DIN 18650 / EN 16005 |
| Floor seal           | Retractable floor seal            |
| Radiation protection | 0,5 – 3,5 mm PB                   |

| Optional windows and related equipment |              |              |              |                |
|--|--------------|--------------|--------------|----------------|
| Measures                               | 450 x 600 mm | 600 x 600 mm | 800 x 600 mm | 450 x 1,500 mm |
| Blinds                                 | Χ            | Χ            | Χ            | Χ              |
| Laser protection blinds                | Χ            | Χ            | Χ            | Χ              |
| Radiation protection                   | Up to 3,5 mm | Up to 3,5 mm | Up to 3,5 mm | Up to 2 mm     |

## RooSy sliding doors



### Easy to assemble

Sliding doors from the RooSy room system are entirely pre-assembled in the plant. This even includes the complete fitting of the box rail which guarantees particularly quick and easy assembly.

#### **Robust and durable**

The aluminium frame in the door panel ensures the high rigidity of the door panel. The 40 mm door panel strength offers an optimal relation between function, quality and user-friendliness.

### **Hygienic conditions**

The sliding door has a half-opening, which means that less purified air escapes from the operating room when staff change.





| Design       | single-leaf                               | double-leaf                               |
|--------------|---|---|
| Grid width   | 900 – 1,800 mm                            | 1,200 – 2,000 mm                          |
| Frame height | 2,150 mm                                  | 2,150 mm                                  |
| Frame depth  | 100 – 600 mm, also individually adaptable | 100 – 600 mm, also individually adaptable |

| Possible material and surfaces |                        |   |  |
|--------------------------------|------------------------|---|--|
| Frame                          | Stainless steel sanded | Stainless steel powder-coated                     |  |
| Door panel                     | Stainless steel sanded | Stainless steel powder-coated                     |  |
|                                | HPL                    | Stainless steel powder-coated + individual design |  |
|                                | Glas                   |   |  |
| Door filling                   | Foam core XPS          | Tubular chip board                                |  |

| Features (optional)  |                                   |
|----------------------|-----------------------------------|
| Automatic operation  | According to DIN 18650 / EN 16005 |
| Security sensors     | According to DIN 18650 / EN 16005 |
| Floor seal           | Retractable floor seal            |
| Radiation protection | 0,5 – 3,5 mm PB                   |

| Optional windows and related equipment |              |              |              |                |
|--|--------------|--------------|--------------|----------------|
| Measures                               | 450 x 600 mm | 600 x 600 mm | 800 x 600 mm | 450 x 1,500 mm |
| Blinds                                 | Χ            | X            | Χ            | Χ              |
| Laser protection blinds                | Χ            | Χ            | Χ            | Χ              |
| Radiation protection                   | Up to 3,5 mm | Up to 3,5 mm | Up to 3,5 mm | Up to 2 mm     |

### Radiation or laser protection

### Sensor-supported opening monitoring



### Radiation protection

Our certified radiation protection doors protect against harmful X-rays. This protection is realised by integrated lead inserts in the door and frame. Insulating glass elements used for the windows of the doors can also be realised as radiation shielding glass. With a lead equivalent of 0.5-3.5 mm, the radiation protection door is suitable for all types of operating theatres, e.g. also for hybrid operating theatres. This protects the vital body parts of external persons and people passing by against X-ray radiation. The required thickness of the radiation shield determines the required thickness of the door leaf:

| Laser protection |
|------------------|
|------------------|

The insulating glass elements of the windows in the doors can be optionally equipped with a laser protection glass and/or a laser protection blind. The required configuration or combination is individually adapted to the laser type. As passive shielding, the entire door thus offers protection against dangerous direct or scattered laser radiation. The laser protection effect is provided by a closed blind/louvre system without break-throughs.

Possible radiation protectio

1,0 Pb 2,0 Pb 3,0 Pb without 41 mm 42 mm 43 mm 40 mm

Lead equivalent values at 100kv







# Design



Different materials and designs can be used for your individual doors, so that the doors fit into the hospital environment in the best possible way. In addition to the door leaf, the box rail of sliding doors can also be personalised in the design of your choice. Lettering or images can also be applied to the doors with a digital print.

| Wall surfaces and design options |   |  |
|----------------------------------|---|--|
| Surface                          | Description   |  |
| Stainless steel sanded           | Grinded and brushed   |  |
| Powder-coated                    | Mixed powder coating on the basis of epoxy polyester resins according to DIN 67530, silk matte, gloss level 60° |  |
| Powder-coated, antibacterial     | Mixed powder coating with antibacterial effect (according to Japanese norm JIS Z 2801)                          |  |
| Glass lacquered                  | Lacquered on the reverse side   |  |
| Digital printing on steel        | Individual printing on powdered metal   |  |
| Digital printing on glass        | Individual printing on the reverse side of the glass element  |  |
| HPL Classic                      | In plain colours  |  |
| HPL Premium                      | With premium or wooden decor  |  |

Each door leaf can be optionally equipped with a window to allow a view into the room behind even when the door is closed. As a result, less purified air escapes and there is less turbulence in the air.













## Door systems - made in Germany directly from the manufacturer









# medifa



### The medifa healthcare group unites competence concerning operating rooms under one roof.

medifa is an owner-run and internationally active complete solution provider in the medical technology.

The product and service portfolio covers all operating room requirements from modular wall, door, ceiling and cabinet systems (RooSy® Room Systems) for the turnkey operating room, as well as mobile operating tables, operating table accessories and operating lights, right up to examination chairs and medical

furniture. In addition, one of the largest German OEM suppliers in the medical technology sector also belongs to medifa.

medifa GmbH & Co. KG (Finnentrop), medifa hygienic rooms GmbH (Ötigheim) and medifa metall und medizintechnik GmbH in Rastatt are all part of this group of companies. The medifa healthcare group employs approximately 350 employees at three locations within Germany. The planning, engineering and production

take place exclusively in Germany, and with over 80 % added value in the group of companies, the group guarantees fast reaction times.

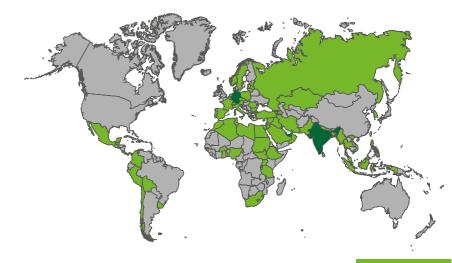
The slogan "we care" means for us that we consistently orientate ourselves according to the requirements of our customers.

Customers all over the world can rely on top-class consultation, processing and quality from a single source, made in Germany according to certified national and international quality standards.

#### **Products**

- Modular operating room systems (RooSy)
- Operating lights (medifa H!Light)
- Mobile operating tables and accessories
- Examination and treatment chairs
- Medical furniture and trolleys
- Customized medical solutions

#### medifa worldwide



we care.







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we care.