medifa
the medical factory

RooSy
room systems

Technical Product & Planning Information

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ISO 9001

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Part 1
Technical information

Medifa Room System (RooSy©):

The medifa room system is a modular room, door, wall and ceiling system that provides a smooth hygienic surface compared to conventional solutions (e.g. tiles) by reducing the number of joints - on request also with an additional antibacterial coating.

The system is designed for modularity, i.e. all elements can be dismantled or replaced in a short time. This makes it possible to access the installation without major modifications, contamination or long downtimes.

Flush installations such as windows, monitors, ... are also included in the scope of services.

Delivery and installation from one, single source minimizes interfaces, saves time and also costs.

1. General specifications

1.1   Standard grid dimensions

1.2   Standard room height

1.3   Wall design

1.4   Wall thicknesses (double-shell)

1.5   Statics

1.6   Materials

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1.8   Material resistance

1.9   Radiation protection

1.10 Sound insulation

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1.1. Standard grid dimensions

Wall elements (width x height)	1,200 mm up to max. 3,000 mm
Ceiling cassettes (length x width)	1,200 × 600 mm

1.2. Standard room height

OP rooms	3,000 mm
Ancillary rooms/pre-operative rooms	2,700 mm
Corridors	2,400 mm

1.3. Wall design

- Single shell: Planked on one side
- Double-shelled: Planked on both sides; also as a splayed wall

1.4. Wall thicknesses (double-shell)

Wall thickness	Installation space	Suitable for:
100 mm	60 mm	Sockets, switches
165 mm	125 mm	Installations ≤ DN 100, medical gasses, …
200 mm	160 mm	Installations ≤ DN 100, medical gases, X-ray film viewer, e.g. installation of control panel, ventilation ducts (depth 90mm), …
≥ 200 mm	≥ 160 mm	E.g. support cladding, built-in cupboards Ventilation ducts (depth 125 mm), …

1.5. Statics

- ➢ The system complies with the requirements of DIN 4103-1 Installation areas 1 and 2

- ➢ ETAG - Usage category according to Table II

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1.6. Materials

Element	Material	Thickness
Wall element V2A	Stainless ssteel, powder-coated Material no. 1.4301 acc DIN EN 10088-3	0.8 mm
Wall element, steel	Electrolytically galvanised sheet steel, powder-coated Material no. 1.0331 acc EN 10152	0.8 mm
Window element, flush (View window)	TSG-H 6 mm clear according to DIN EN 12150	6 mm
Glass wall element TSG (full-surface lacquered)	TSG-H 8 mm, full-surface lacquered	8 mm
Glass wall element LSG	LSG certified according to DIN EN 356 class P1A (impact resistant)	10 mm
Ceiling cassette	Electrolytically galvanized sheet steel Material no. 1.0347 acc EN 10152	0.8 mm
Profile support	Sendzimir galvanized profile tubes Material No. 1.0037 according to DIN EN 10025	2 mm
Joint profile between the wall elements	HTV silicone, SH 75° ± 5° Tolerances according to DIN 7715 E2	–
Joint profile between the ceiling cassettes	HTV silicone, SH 70° ± 5° Tolerances to DIN 7715 E2	–
Door leaf	Stainless steel; powder-coated Material no. 1.4301 acc DIN EN 10088-3 Sheet thickness of door leaves (inside/outside) 1 mm, Internal, circumferential aluminium frame, foam core filling XPS or tubular chipboard	40 mm
Door frame	Stainless steel Material no. 1.4301 acc DIN EN 10088-3	1.5 mm

1.7 Wall surfaces

Surface	Description
Sheet metal Powder-coated	Mixed powder coating on epoxy-polyester resin basis, according to DIN 67530, silk matt, gloss 60°, layer thickness 60 - 100 µm
V2A ground	Ground and brushed (grain 180)
Glass	Lacquered back
Printed sheet metal	Individual digital printing on powdered sheet metal
Printed glass	Individual digital print on the back of the glass element

Types of coating:

- Uncoated (stainless steel, ground)
- Mixed powder paint based on epoxy polyester resin, according to DIN 67530, silk matt, gloss 60°, layer thickness 60-100 µm, according to our colour selection,
- Antibacterial powder coating (analysis according to Japanese standard JIS Z 2801)

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1.8 Material resistance

Resistant to the following substances:

- Common hospital cleaning and disinfectants according to VAH- and RKI-listing
- Water and steam in usual quantities

1.9 Radiation protection

Radiation protection values without additional measures

Element	Lead equivalent at 100 kV tube voltage(mm)
Single-shell wall without cut-outs	0.2 mm
Double-shell wall without cut-outs	0.4 mm
Door leaf 2 × 1 mm steel	0.31 mm
Glass element	0.07 mm

With additional measures

Element	Lead equivalent at 100 kV tube voltage(mm)
Single and double shell wall element	Higher lead equivalents are achieved with lead inlays up to 3 mm thick.
Door leaf	Higher lead equivalents are achieved with lead inlays up to 3 mm thick. With 3mm thickness the grid dimension is max. 1,700mm
Glass element RD 30 (Optionally with blind)	0.5 mm
Glass element RD 50 (Optionally with blind)	1.5 mm
Glass element RD 50 (Optionally with blind)	2.1 mm

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1.10 <u>Sound insulation</u>

<u>Wall system</u>

Product name - Wall (width)	Test report	Sound insulation value Rw (dB)
Wall; CNS, three-part, planked on both sides, 100 mm, **without** cavity insulation, Mounting wall with steel profile uprights	# 122 002 14T – 329 Hochschule für Technik Stuttgart (Stuttgart University of Applied Sciences)	44
Wall; CNS, three-part, planked on both sides, 100 mm, **with** cavity insulation, Mounting wall with steel profile uprights	# 122 002 14T – 329 Hochschule für Technik Stuttgart (Stuttgart University of Applied Sciences)	52
Wall; CNS, three-part, planked on both sides, 200 mm, **without** cavity insulation, Mounting wall with steel profile uprights	# 122 002 14T – 329 Hochschule für Technik Stuttgart (Stuttgart University of Applied Sciences)	44
Wall; CNS, three-part, planked on both sides, 200 mm, **with** cavity insulation, Mounting wall with steel profile uprights	# 122 002 14T – 329 Hochschule für Technik Stuttgart (Stuttgart University of Applied Sciences)	66
Wall; glass element, one-piece, planked on both sides, 200 mm, **with** cavity insulation, Mounting wall with steel profile uprights	# 122 002 14T – 329 Hochschule für Technik Stuttgart (Stuttgart University of Applied Sciences)	46
Wall; CNS, one-part, planked on both sides, 100 mm, **without** cavity insulation, Mounting wall with steel profile uprights	# 122 002 14T – 329 Hochschule für Technik Stuttgart	44

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2. Substruture

2.1 Floor rail
2.2 Profiled girder with connection to the pipe ceiling
2.3 Ceiling rail
2.4 Reinforcing cross bar
2.5 Wall system substructure

2.1 Floor rail

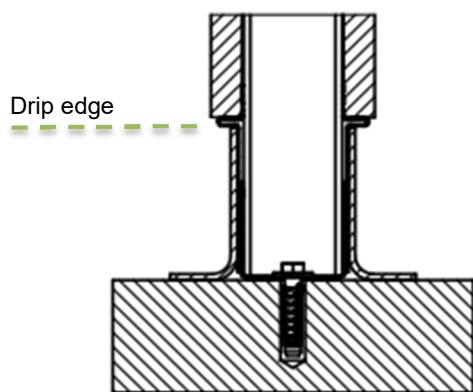The floor rails are made of profiled, 1.5 mm Sendzimir galvanised sheet steel.

The system is installed directly on the bare floor / screed using dowels, screws and washers.

Fixing depth for dowel/screw min. 30 mm.

When used on the bare floor, additional threaded rods are required. When mounting on the bare floor, the sealing to the threaded rods must be provided by the customer.

Note: If an underfloor heating system is installed on site, this must be stated in the enquiry for an offer.

medifa hygienic rooms reserves the right to carry out a separate offer review for underfloor heating.
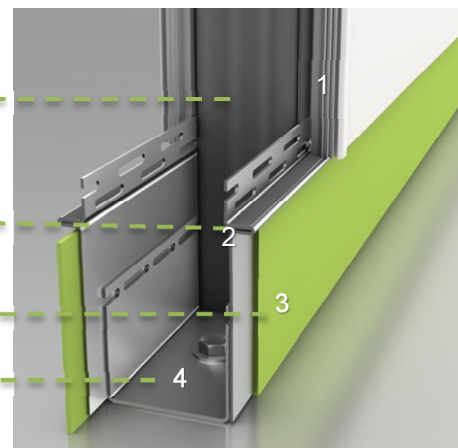
Drip edge

Implementation example: Base profile with drip edge

1. Profiled girder
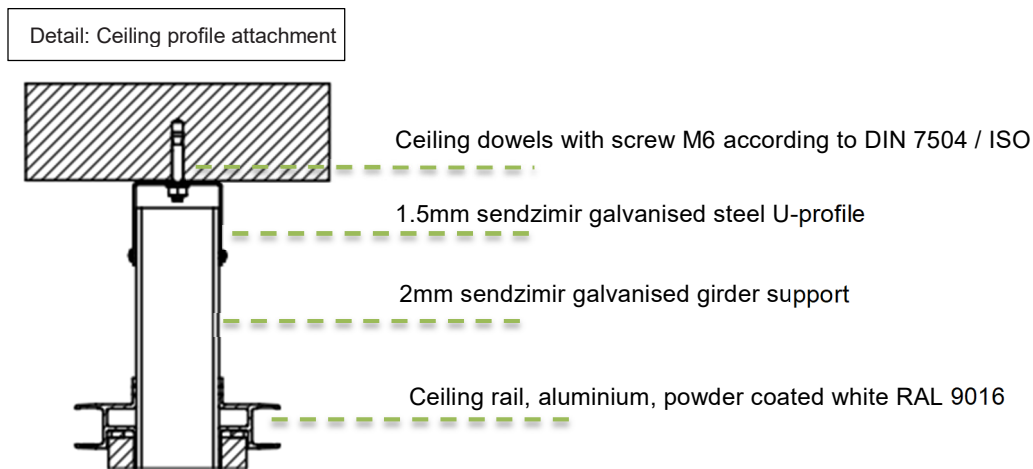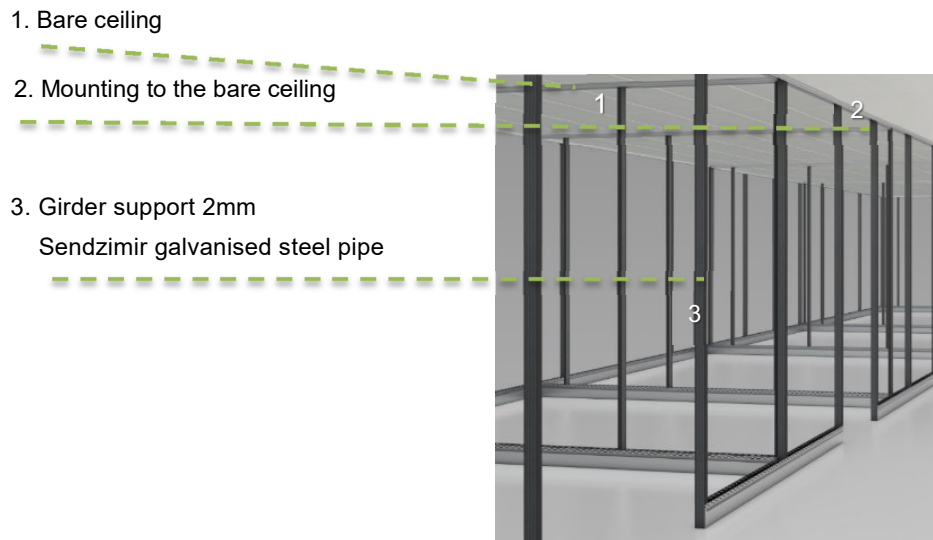
2. Base profile

3. Floor covering

4. Floor rail

Structure of the floor rail

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2.2 Girder supports with connection to the bare ceiling

The girders are made of sendzimir galvanized steel pipe with 2 mm material thickness. The supports are screwed into the floor rail (see point 2.1). The girder supports are adapted to the room height and can be installed on a bare ceiling height of up to 6,000 mm.

1. Bare ceiling

2. Mounting to the bare ceiling

3. Girder support 2mm
   Sendzimir galvanised steel pipe

Detail: Ceiling profile attachment

Ceiling dowels with screw M6 according to DIN 7504 / ISO

1.5mm sendzimir galvanised steel U-profile

2mm sendzimir galvanised girder support

Ceiling rail, aluminium, powder coated white RAL 9016

Attachment to the bare ceiling is made with a 1.5mm sendzimir calvanised steel U-profile.
The U-profile is attached using screws and dowels which are screwed into the bare ceiling.

The entire substructure is self-supporting (for complete rooms).
Individual, free-standing wall elements must be braced to form load-bearing elements onsite.
Before and after the installation of the wall elements, the onsite supply and disposal pipes can be installed in the pre-fabricated substructure.
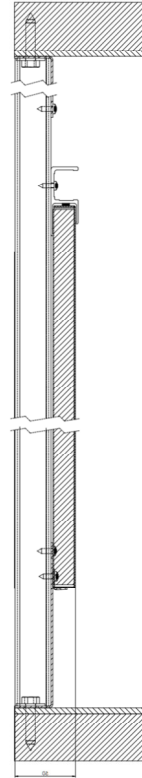
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2.3 Wall system substructure

Self-supported substructure

Substructure as spandrel wall
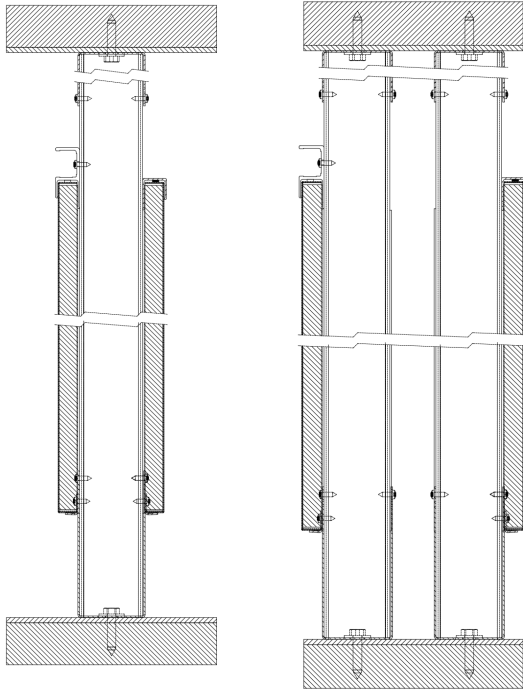
Wall thicknesses from 100 / 200 / >
200 pipe room ceiling height up to 6
metres!

Spandrel wall: Distance to the customer's wall freely
definable.
Bare room ceiling up to 6 meters!

2.4 Reinforcing cross bar

Reinforcing crossbar(s) are mounted between the profile supports and are made of Sendzimir galvanised sheet steel.
The crossbars are required for permanent and secure attachment (e.g. washbasins, monitor arms, etc.). The
crossbars can also be retrofitted.

- Standard grid 900 mm and 1,200 mm
- Other sizes available on request
- Material thickness 3 mm (light to medium load) 5 mm (heavy load)
- Scope of delivery: 1x Crossbar 2x Mounting brackets + screws

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3 Wall elements

3.1 Wall elements
3.2 Wall element fastening
3.3. Joint profile
3.4 Window glass wall element

3.1 <u>Wall elements</u>

The wall elements are made of 0.8 mm thick, 4-fold folded stainless steel (X5 CrNi1810, 1.4301 according to DIN|EN 10088) cassettes.
Optional wall elements could also manufactured with 0,8 steel sheet.
The standard surface is powder-coated with a mixed powder coating based on epoxy-polyester paint according to DIN 67530, semi-gloss, 60°, 60-100 µm coating thickness.
As an option, the wall elements can also be powder-coated with antibacterial agents (according to Japanese standard JIS Z 2801).
A gypsum plasterboard (DIN|EN 18180), 18 mm thick, is glued to the inside of the cassettes.
All wall elements can also be equipped for radiation protection (0.5/1.0/1.5/2.0/3.0 mm Pb).
All wall elements can be digitally printed. The print is applied to the powder-coated surface and additionally sealed with clear lacquer.
The powder coating and digital prints are resistant to commercially available cleaning agents and disinfectants.

1. Ceiling rail
2. Support profile
3. Top wall element
4. Installation level
5. Bottom wall element
6. Fastening brackets
7. Floor rail

Example: Three-part wall system

The two-part and three-part wall elements are manufactured in widths of up to 1,200 mm.
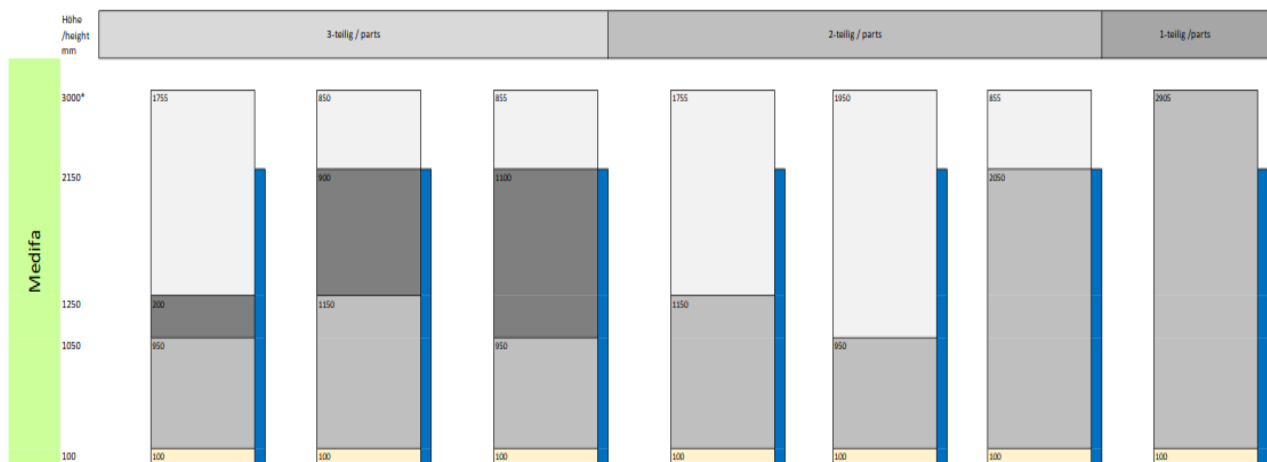One-piece wall elements (up to max. 3,000 mm room height) are manufactured up to a max. width of 900 mm!

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Höhe /height mm	3-teilig / parts			2-teilig / parts		1-teilig /parts

Illustration of the possible division of the wall elements

medifa hygienic rooms color fan

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Basic Colors

	RAL 9016	Snow		NCS S0515-B	Caribic
	NCS S1000-N	Perl		NCS S1515-B	Frozen
	NCS S1500-N	Cashmere		NCS S0510-G30Y	Fresh
	NCS S0505-Y	Savanne		NCS S0520-G30Y	Avocado
	NCS S0515-Y	Sahara		RAL 6018	medifa green

Premium Colors

	RAL 5013	Navy		NCS S2020-G30Y	Olive
	NCS S3020-B	Azur		NCS S4030-G	Bamboo
	NCS S5020-B	Lake		NCS S3500-N	Stone
	NCS S0540-Y10R	Honey		NCS S4500-N	Moon

Trend Colors

	NCS S0560-Y20R	Papaya		NCS S1070-G50Y	Kiwi
	NCS S2570-R	Amareno		NCS S4550-B30G	Pacific
	NCS S4050-R30B	Berry		NCS S2555-B30G	Lagoon

Standard **RooSy** colours - other colours available at extra charge

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3.2 Attachment of the wall, window elements and door frames

The wall elements are attached using specially developed, burnished clamps.
All wall elements, window elements and door frames are provided with slots on the bevelled sides for hooking in the clamps. The clamps are hooked into the elements and bolted to the substructure (support). Only a 7 mm-wide space is required for this.
In addition, sealing tape is installed between the elements and the substructure, making the room pressure-tight.
All elements can be quickly and easily dismantled or replaced. This means that the rear wall area remains accessible.

3.3. Joint profile

The 7 mm wide joint between the elements is closed with a silicone profile.
The joint profile is installed between the elements without tools.
The silicone raw material used complies with FDA-CFR 21 - Part 177.2600 and is food safe. The profile is resistant to commercially available cleaning agents and disinfectants.

3.4 Window glass wall element

The half-height or room-height glass elements are made of thermally toughened tempered safety glass (TSG), 6 or 8 mm thick. The window elements are installed flush with the wall elements. One window element comprises two TSG panes, which are flush mounted on both sides of the wall. A stainless steel frame is installed inside. The glass panes are provided with a surrounding, painted frame so that the attachment of the window elements and the blind is not visible from the outside. Blinds can be installed between the panes. The window glass can also be supplied as electrochromic glass (at an extra charge). The glass can then be switched from clear to milky.

The following options are available:

- Automatic blinds
- Laser protection
- Radiation protection RD 30 and RD 50

Radiation shielding glass	Glass thickness	Lead equivalent at 100 kV tube voltage (mm)	Maximum dimension
RD 30	Approx. 6 mm	0.5 mm	1200 × 1600mm
RD 50	Approx. 5 - 6.5 mm	1.5 mm	1100 × 1800mm
RD 50	Approx. 7-8.5 mm.	2.1 mm	1100 x 400mm
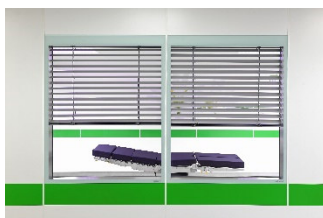
Design example: Flush window. Fully open - blind partially open - blind closed (from left to right)

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4 Hinged doors

4.1 Hinged door
4.2 Door frame
4.3 Door leaf
4.4 Door switch
4.5 Door sizes of hinged doors

4.1 <u>Hinged door</u>

The following versions are available for hinged doors:

- 1-leaf or 2-leaf
- Manual drive (optional with mechanical door closer)
- Automatic drive (according to DIN 18650 / EN 16005)

4.2 <u>Door frame</u>

The door frames are made of 1.5 mm thick stainless steel sheet.
The door frame for the RooSy wall system is supplied as standard. As an option, frames for masonry or masonry/system wall combinations are also available.
The frame is supplied in three parts and fits precisely. The connection to the room system is made by means of clips and silicone profile (see point 3.2) and is therefore modular. The frame has no sharp edges which makes it particularly hygienic and easy to clean.
If radiation protection is required, additional lead (in the corresponding thickness of 0.5 to 3 mm) is glued inside the door frame.

4.3 <u>Door leaf</u>

The door leaf has a total thickness of 40 mm and is additionally reinforced with an internal aluminium frame. The door leaf can be filled either with tubular chipboard or with a foam core.
The 1 mm thick stainless steel door leaf is powder-coated. You can select the colour of your choice (different coatings are also possible on the inside and outside). Optionally, the door leaf can also be supplied in brushed stainless steel.
The visible sides/edges of the doors are enclosed by an aluminium profile.
The door handle set (stainless steel) for manual door opening is included as standard.
A lowering floor seal is optionally available.
If radiation protection is required, lead (in the corresponding thickness of 0.5 to 3 mm) is bonded to the inside of the door leaf(s).

The following options are available for door windows:

- Blinds in insulating glass
- Reversible blind in insulating glass
- Radiation protection from RD30 to RD50
- Printing

Window type	Width × height	Radiation protection	Blinds	Laser protection
SSG	450 × 600 mm	0.5 – 3 mm Pb	X	x
SSG	600 × 600 mm	0.5 – 3 mm Pb	X	X
SSG	800 x 600 mm	0.5 – 3 mm Pb	X	X
SSG	450 × 1500 mm	0.5 – 3 mm Pb	X	

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4.4 Door switch

Automatically operated doors can be controlled with various switches and sensors.

The following options are available (on request):

- Standard switch range e.g. Jung / Berker
- Contactless switch (CleanSwitch)
- Elbow switch
- Triggering via sensor

4.5 Hinged door sizes

Width	Grid in mm	Internal dimensions of frame in mm	Outer dimension of frame
1-leaf door panel	800	666	793
	900	766	893
	1,000	866	993
	1,100	966	1,093
	1,200	1,066	1,193
	1,300	1,166	1,293
2-leaf door panel	1,500	1,366	1,493
	1,600	1,466	1,593
	1,700	1,566	1,693
	1,800	1,666	1,793
	1,900	1,766	1,893
	2,000	1,866	1,993

Height	Clear height inside door frame in mm	External dimensions of door frame in mm
Both heights for 1- and 2-leaf door leaf possible	2,088	2,150
	2,188	2,250

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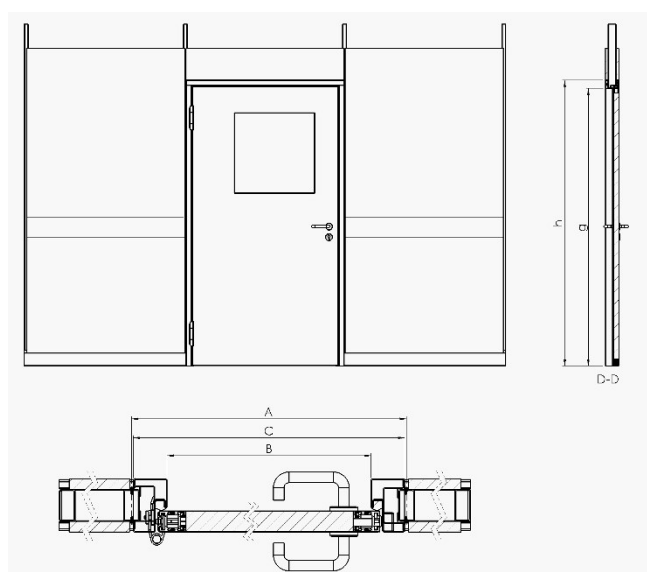
5 Sliding doors

5.1 Sliding doors

5.2 Door frame

5.3 Door leaf

5.4 Drive (manual / automatic)

5.5 Door switch

5.6 Door sizes of sliding doors

5.7 Lead protection

5.1 Sliding door

The following versions are available for sliding doors:

- 1-leaf or 2-leaf
- Manual drive
- Automatic drive (according to DIN 18650 / EN 16005)

5.2 Door frame

The door frames are made of 1.5 mm thick stainless steel sheet.
The door frame for the RooSy wall system is supplied as standard. As an option, frames for masonry or masonry/system wall combinations are also available.
The frame is supplied in three parts and fits precisely. The connection to the room system is made by means of clips and silicone profile (see point 3.2). The frame has no sharp edges which makes it particularly hygienic and easy to clean.
If radiation protection is required, additional lead (in the corresponding thickness of 0.5 to 3 mm) is glued inside the door frame.

5.3 Door leaf

The door leaf has a total thickness of 40 mm and is additionally reinforced with an internal aluminium frame. The door leaf can be filled either with tubular chipboard or with a foam core.
The 1 mm thick stainless steel door leaf is powder-coated. You can select the colour of your choice (different coatings are also possible on the inside and outside). Optionally, the door leaf can also be supplied in brushed stainless steel. The visible sides/edges of the doors are enclosed by an aluminium profile.
A handle (stainless steel/ round tube) for manual door opening is included as standard.
A lowering floor seal is optionally available.
If radiation protection is required, lead (in the corresponding thickness of 0.5 to 3 mm) is bonded to the inside of the door leaf(s).

The following options are available windows:

- Blinds in insulating glass
- Reversible blind in insulating glass
- Radiation protection from RD30 to RD50
- Printing

Window type	Width × height	Radiation protection	Blinds	Laser protection
Insulating glass	450 × 600 mm	0.5 – 3 mm Pb	X	x
Insulating glass	600 × 600 mm	0.5 – 3 mm Pb	X	X
Insulating glass	800 x 600 mm	0.5 – 3 mm Pb	X	X
Insulating glass	450 × 1500 mm	0.5 – 3 mm Pb	X	

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5.4 Drive (manual / automatic)

The drive consists of a track rail, which is installed in the drive box above the door. The drive box is made of stainless steel and comes powder-coated as standard.

If the door is designed as automatic, an electric drive (Record) is additionally installed in the drive box.
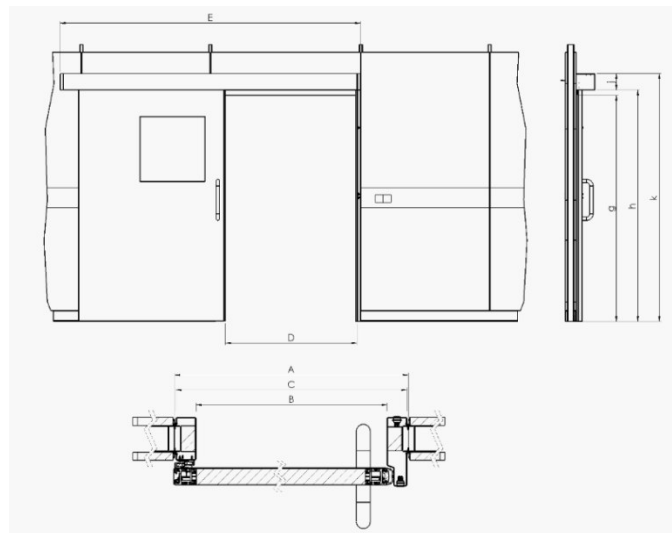
A sensor unit for monitoring the closing edge is installed in or on the drive cover.

5.5 Door switch

Automatically-operated doors can be opened with various switches and sensors.

The following options are available (on request):

- Standard switch range e.g. Jung / Berker
- Contactless switch (CleanSwitch)
- Elbow switch
- Triggering via sensor

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5.4 Door sizes

	Grid dimension in mm	Width of frame; inside in mm	Width of frame; outside in mm	Passage width in mm	Length of drive box
1-leaf door panel	900	800	893	680	1,793
	1,000	900	933	780	1,993
	1,100	1,000	1,093	889	2,193
	1,200	1,100	1,193	980	2,393
	1,300	1,200	1,293	1,080	2,593
	1,400	1,300	1,393	1,180	2,793
	1,500	1,400	1,493	1,280	2,993
	1,600	1,500	1,593	1,380	3,193
	1,700	1,600	1,693	1,480	3,393
	1,800	1,700	1,793	1,580	3,593
	Grid dimension in mm	**Internal dimensions of frame in mm**	**Exterior dimension of frame in mm**	**Opening width of door leaf in mm**	**Length of drive box**
2-leaf door panel	1,200	1,100	1,193	980	2,393
	1,300	1,200	1,293	1,080	2,593
	1,400	1,300	1,393	1,180	2,793
	1,500	1,400	1,493	1,280	2,993
	1,600	1,500	1,593	1,380	3,193
	1,700	1,600	1,693	1,480	3,393
	1,800	1,700	1,793	1,580	3,593
	1,900	1,800	1,893	1,680	3,793
	2,000	1,900	1,993	1,780	3,993

5.7 Lead protection

	Passage height frame inside, in mm	External height of the frame, in mm	Total external height with drive box	Height of the drive box
Dimensions from 0 - 2 mm PB (radiation protection)	2,100	2,150	2,300	150
	2,200	2,250	2,400	150
Dimensions from 2 - 3 mm PB (radiation protection)	2,100	2,150	2,350	200
	2,200	2,250	2,450	200

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6. Ceiling system

6.1 Ceiling cassettes
6.2 Installation of the ceiling system
6.3 Ceiling details
6.4 Ceiling lamp

6.1 Ceiling cassettes

The ceiling system comprises a 0.8 mm thick, bevelled ceiling cassette made of electrolytic galvanised sheet steel. The visible side is provided with a white polyurethane powder coating (RAL 9016).
The standard size of the cassettes is 1,200x600 mm. The ceiling cassettes are also optionally available in 600x600 mm.

6.2 Installation of the ceiling system

The substructure of the ceiling system is installed on the bare ceiling on site and can be levelled in height. The maximum distance between suspended ceiling and bare ceiling is 2,000 mm. The substructure is secured in the bare ceiling with dowels and screws.
If the max. mounting height dimension is exceeded or no mounting is possible onsite, a suspension system can be optionally installed.
The ceiling cassettes are installed in the clamping rails of the substructure without tools. "Noses" are provided on the ceiling cassettes, which secure the cassettes in the clamping rail. A ceiling rail is installed in the wall area. This is where the outer ceiling cassettes rest and are secured by means of a sealing profile. The ceiling system is equipped with sealing tapes and is pressure-tight.

6.3 Ceiling details

1.	Bare ceiling
2.	Dowel
3.	Hanger
4.	Suspension wire
5.	Tensioning spring
6.	Crossways clamping profile
7.	Cross connector
8.	Tensioning profile
9.	Ceiling cassette
10.	Sealing tape
11.	Ceiling rail
12.	Sealing profile
13.	Wall element

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6.4 Ceiling lights

The clean room recessed lamps are integrated flush into the **RooSy** ceiling system.

The lamps are available as LED, RGB and T16 lamps in various protection classes and wattages. "Sky Panels" can also be ordered as special lighting elements with pictures.

"Sky Panels" are supplied exclusively as LED lighting elements and are available in sizes 600x600 mm and 1,200x600 mm. The décor of the "Sky Panel" elements can be freely selected.

Type 600/600 Modular ceiling system RooSy

Installation	Flush
Size (LxWxH)	600x600x100
Weight	9.4kg
Light distribution	Uniformly diffused
Construction	Sheet steel body, end frame made of an aluminium profile, Microprismatic PMMA diffuser and laminated safety glass
Coating	Epoxy polyester powder coating, white RAL 9016 matt
Protection class	I
Protection rating	IP55 or IP65
Light source	LED / RGB modules or T16
Accessories included	Protective openings
Optional accessories	Adjustable side holders, DALI dimmer

Type 1,200x600 RooSy modular ceiling system

Installation	Flush
Size (LxWxH)	1200x600x100
Weight	Approx. 22 kg (depending on the version)
Light distribution	Uniformly diffused
Construction	Sheet steel body, end frame made of an aluminium profile, microprismatic PMMA diffuser and laminated safety glass
Coating	Epoxy polyester powder coating, white RAL 9016 matt
Protection class	I
Protection rating	IP55 or IP65
Light source	LED / RGB modules or T16
Operating voltage	220/240 VAC
Accessories included	Protective openings
Optional accessories	Adjustable side holders, DALI dimmer

Special lighting element "Sky Panel" - motif: Clouds ceiling

Special lighting element "Sky Panel" - motif: Leaf

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![medifa the medical factory logo]

7. Accessories

7.1 Accessories wall system
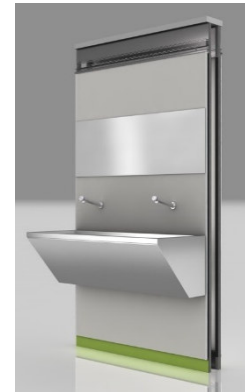**7.2 Accessories ceiling system**

7.1 Accessories wall system

The integration of additional accessories into the wall system is also possible:

- Electrical installations (onsite)
- Gas connections (onsite)
- Washbasins and wash-troughs
- Revision elements (also in wall paint)
- Exhaust air wall elements
- Overflow elements
- Noise insulation
- Cabinets / Serving cabinets
- X-ray film viewer
- Imaging system
- Control panel
- Monitors & anti-glare windows
-
  Suture boxes
           Wash-trough
- Clocks
- Illuminated LED elements, signs / warning lights
- Mirror elements
- And much more on customer request

7.2 Accessories ceiling system

The integration of additional accessories into the ceiling system is also possible:

- LED ceiling lights
- T16 ceiling lights
- Sky Panel
- Supply air ceilings
- Air outlets
- Loudspeaker
- And much more on customer request

Electrical installation

Wash-trough

Exhaust air duct integrated in wall

Clock

20

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Part 2

Information on project handling

Note:

This information familiarizes you with the prerequisites for planning a system.

The information describes standard situations and may vary in detail.

All room situations are planned in advance by medifa hygienic rooms and have to be released accordingly by the building owners.

Special solutions can be requested and will be processed separately.

1 General scope of services

1.1 Product description

1.2 Goal of the project

1.3 Design basis

1.1 Product description

The modular **RooSy** room system from medifa hygienic rooms provides you with flexible and economical room solutions. The substructure can be installed quickly and easily, which saves time and therefore investment costs. The wall elements as well as the doors and ceilings are planned and manufactured to customer specifications. The material and design are adapted to the customer's requirements.

The modular design ensures that the system is perfectly adapted to the customer's needs. New buildings, refurbishments and renovations as well as any extension and adaptation of rooms can be implemented simply, quickly and cost-effectively.

1.2 Goal of the project

Creation of a robust, fast and modular construction with easy-care surfaces and high-quality materials for optimum hygiene, maximum durability and a high level of ease of maintenance / accessibility.

1.3 Design basis

The modular RooSy room system is planned individually for each room / each situation.

The system is adapted to the available space in detail.

Walls, doors and ceilings can be ordered as a whole room or individually.

The basis for planning for all enquiries is on-site CAD plans or measurements.

medifa hygienic rooms GmbH uses "Revit" as its planning program.

This program prepares the assembly plans which are used on the construction site.

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2 Contractual bases

2.1 Agreement for the installation of medifa hygienic rooms
2.2 Planning documents
2.3 Access to the construction site
2.4 Delivery - storage location

2.1 <u>Agreement for the installation of medifa hygienic rooms</u>

This part of the preliminary remarks describes the on-site requirements and the constructional preliminary work to be provided by the customer prior to the installation of the modular room system.

2.2 <u>Planning documents</u>

For the detailed planning of the **RooSy** room system, the following documents are required in the case of an order.

- Spatial plan in digital form (CAD plan) or detailed measurement
- Ceiling plan showing where and how on-site pipelines (ventilation, gases, ...) are routed in the ceiling area - also in digital form (CAD plan) or detailed measurement
  …

If further planning documents are required, they will be requested separately in writing by medifa hygienic rooms.

The plant and assembly plans are drawn up on the basis of these planning documents.

The plans must be approved in writing by the customer or its legal representative before production begins - only then can production commence.

2.3 <u>Access to the construction site</u>

During the entire construction phase, free access to the construction site must be ensured onsite.

A load-bearing, level surface must be ensured for the inward transport.

If the site is not on the ground floor, an elevator must be provided.

If there is no lift, or a lift of insufficient size, helpers must be provided free of charge.

If the goods are to be transported in from the outside (e.g. via windows), appropriate equipment such as forklifts and lifting platforms must be provided free of charge by the customer.

Transport routes and lifts must be protected by the customer (covered floor, etc.).

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2.4 <u>Delivery - storage location</u>

The material is usually shipped in two phases.

Phase I: Substructure wall / ceiling and door frames
Phase II: Wall elements, ceiling cassettes, lights, door leaves and drive boxes

A dry room protected from the weather must be provided for the material.
An outdoor storage area without sufficient weather protection is harmful to the material and cannot be accepted!

In addition, a lockable storage room for small parts (switches, cables, lights, etc.) must be provided.
The storage area and the lockable storage room must be close to the installation site.

If the material has to be stored externally (e.g. forwarding agent), the transport to the building site has to be carried out by the customer and free of charge.

3 Quality assurance for onsite installation of the system

3.1 General

All information contained in this document, which is the basis for the quality assurance of the system, shall be considered as part of this phase.

3.2 Requirements

If the **RooSy** modular room system is installed independently by a contractual partner, the latter must be trained in advance by a product expert / installation manager.
medifa hygienic rooms reserves the right to determine the period from which assembly support is no longer necessary. This depends on the size of the contracting company and the number of own assembly managers who have been trained on our system.
A corresponding confirmation/report is issued by the product expert / assembly manager of medifa hygienic rooms.

The contractor must ensure that the system is installed in accordance with the training specifications.
If the contractor commissions subcontractors, it must appoint an installation manager for quality assurance.

Only the supplied assembly material is to be processed; the instructed assembly steps must be followed. The use of own mounting material (e.g. sealing tapes, corner brackets, etc.) is prohibited.

3.3 Defective materials

Defects, damaged or parts that do not meet the quality requirements (e.g. scratches in the paint, dents in the sheet metal, etc.) and were delivered by medifa hygienic rooms must be documented visually and in writing and reported immediately in writing to medifa hygienic rooms GmbH.
After appraisal, the further procedure (replacement, ...) is assessed, the contractor is informed in writing and replacement is provided at short notice.

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3.4 <u>Quality assurance by the contractor</u>

After completion of the work, the room system has to be accepted by the client or its legal representative.

The acceptance must be documented in writing; the acceptance documents must be submitted to medifa hygienic rooms to complete the documentation.

The contractor (fitter of the room system) must confirm in writing that it has complied with the installation instructions of medifa hygienic rooms. A corresponding form will be provided.

The contractor is obliged to draw up an as-built plan. In this plan, all changes made in the basic planning (e.g. additional cut-outs, shortening of components, etc.) must be drawn in and submitted to medifa hygienic rooms GmbH. The planning documents are then modified / supplemented by medifa hygienic rooms and added to the customer profile. This guarantees that we can also react to subsequent reorders / requests for changes.

3.5 <u>Cleaning, disinfection and maintenance</u>

The cleaning, disinfection and maintenance instructions included in the scope of delivery must be adhered to.

3.6 <u>Liability disclaimer</u>

The information contained in this planning information does not release planners from their duty of care and compliance with current technical regulations. All relevant laws, ordinances, regulations, rules, standards and guidelines must be observed by the relevant specialist planner. This planning information only contains information on the installation of components supplied by medifa hygienic rooms GmbH. Additional components must be planned and coordinated by the specialist planners on their own responsibility.

3.7 <u>Planning services</u>

medifa hygienic rooms GmbH takes over the technical planning for the installation of the modular room concept and all directly associated components. Specialist planning for architecture, statics, electrical engineering, sanitary, heating and air conditioning technology as well as medical gases is not included in the scope of planning and services of medifa hygienic rooms GmbH.
Planning with regard to radiation protection must be made / stated by the respective manufacturer of the examination system.

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3.8 Scope of installation

Medifa hygienic rooms GmbH only takes over the assembly/installation of the elements and products we supply.
The installation for the areas of electrical, sanitary, heating and air-conditioning technology must be carried out by the customer.

3.9 On-site requirements

Substrate: Screed, thickness of approx. 10 cm (tolerance according to DIN 18202, Sheet 3)
Ceiling: Thickness 20-25 cm

The current terms and conditions of medifa hygienic rooms GmbH apply.

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