

# Technical Documentation – Main Stage

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## 1 Contact list

### 1.1 Technical Departments

<b>Main number:</b>	<b>+49 30 20221</b>	<b>-0</b>
<b>Technical Direction</b>	Bernd Klein, <i>Technical Director</i>	-339
	Benedikt Schröter, <i>Tech Production Manager</i>	-470
	Vanessa Wujanz, <i>Assistant to the Tech. Director</i>	-336
	Email	<a href="mailto:technik@gorki.de">technik@gorki.de</a>
<b>Stage design</b>	Alissa Kolbusch, <i>Head of Department</i>	-326
	Assistant stage designers	-328
<b>Stage Technician</b>	Robert Rammelt <i>Head of Department</i>	-330
<b>Lighting</b>	Pierre Stolper, <i>Head of Department</i>	-317
<b>Sound &amp; Video</b>	Christopher v. Nathusius, <i>Head of Department</i>	-334
<b>Props</b>	Jens Gebhardt, <i>Head of Department</i>	-329
<b>Make up</b>	Paula Karer, <i>Head of Department</i>	-363
<b>Dresser</b>	Andrea Schulz, <i>Head of Department</i>	-227

### 1.2 Theatre workshops

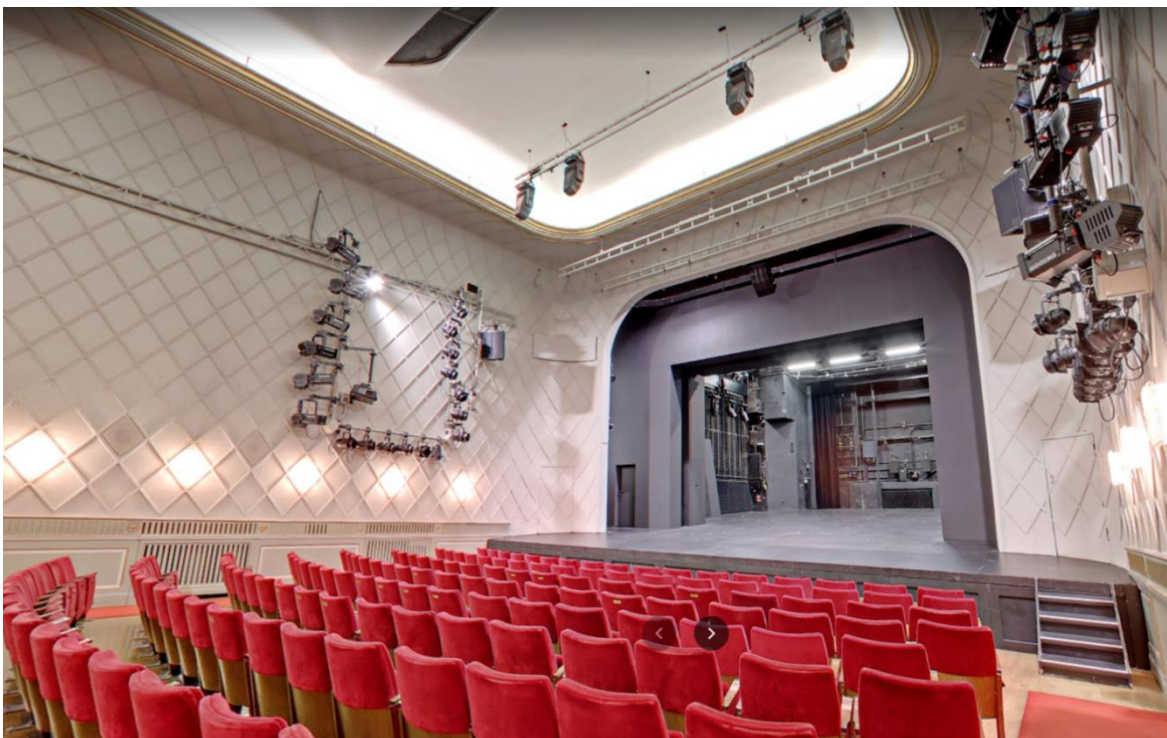
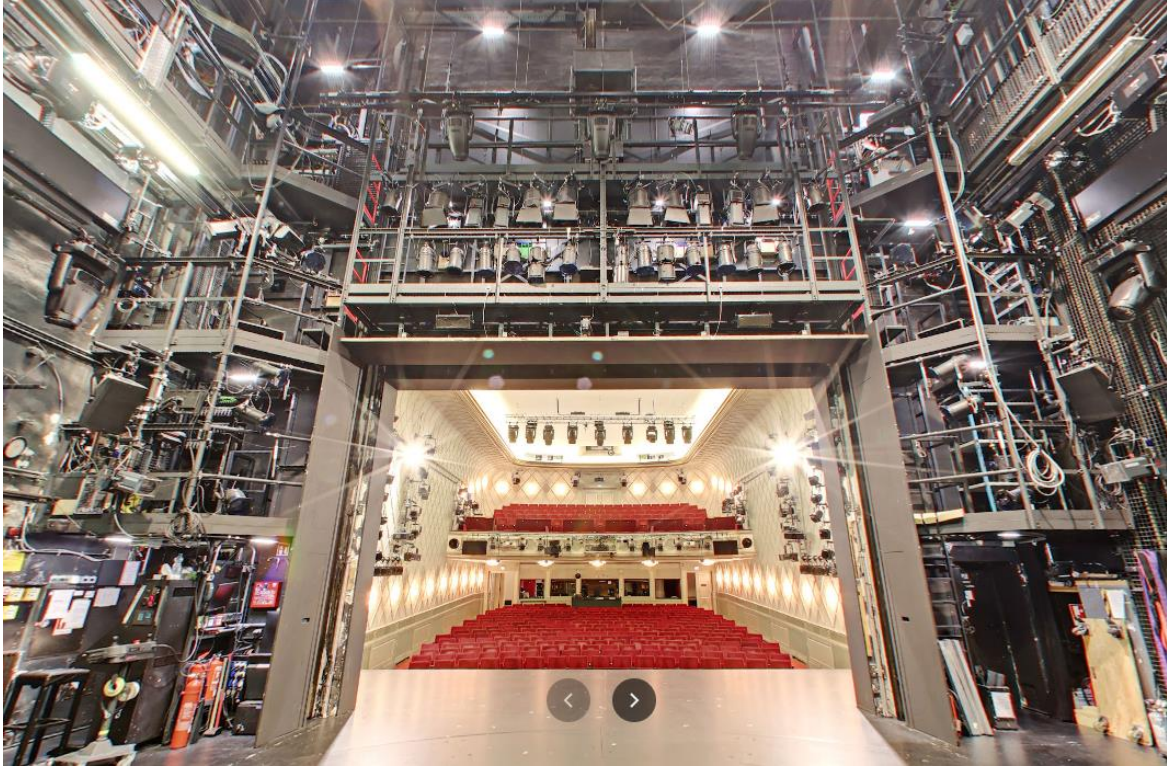
<b>Workshops</b>	Marcus Trettau, <i>Head of Department</i>	-601
	Maik Spät, <i>Deputy Head of Department</i>	-602
<b>Costumes</b>	Thomas Maché, <i>Head of Department</i>	-701

### 1.3 Rehearsal stages

	Telephone number	+49 30 36500492
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## 2 Views

### 360° interior views (Google Maps)





**360° View Stage:** <https://maps.app.goo.gl/TNqcyCcx4M6nyx8a7>

**360° View Auditorium:** <https://maps.app.goo.gl/djY4GB13YRMAPxfM6>

**360° View Balcony:** <https://maps.app.goo.gl/H9uPJStzKzBxKd6f6>

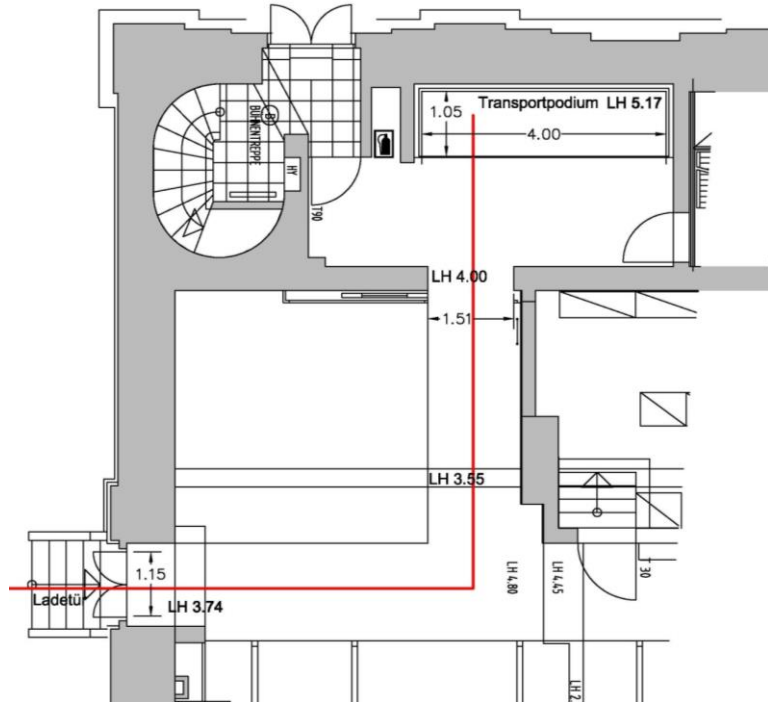
**360° View Foyers:** <https://maps.app.goo.gl/6VVVhWDcisUkCm6n7>

<https://maps.app.goo.gl/qcSHW8Mf9Pd9XVhi6>

### 3 Measurements and technical specification for the stage

#### 3.1 Access to stage

The loading route leads via the loading door (Dorotheenstraße 9, access by truck possible) via a freight elevator to the stage.



#### 3.2 Relevant dimensions for decoration parts

<b>loading door (entrance)</b>	Height:	3,74 m
	Width:	1,15 m
<b>fire door</b>	Height:	4,04 m
	Width:	1,45 m
<b>transport platform to stage</b>	<b>max. inside sizes</b>	
	Height:	5,17 m
	Width:	4,05 m
	Depth:	1,05 m
<b>transport platform external scenery storage (Lindentunnel)</b>	<b>max. load capacity</b>	
	statisch / dynamisch	2,50 t / 1,00 t
	Height:	3,20 m
	Width:	2,70 m
<b>container for scenery (20 foot container, TEU)</b>	Depth:	4,70 m
	<b>max. load capacity</b>	
	dynamisch:	1,00 t
<b>container for scenery (20 foot container, TEU)</b>	Height:	2,20 m
	Width:	2,30 m
	Länge:	7,00 m

### 3.3 Stage dimensions

Floor plan dimensions relating to zero line (Nulllinie, N). Zero Line=rear edge of technical portal.

<b>Stage depth</b>	forestage (proscenium) ↔ N	6,01 m
	N ↔ rear wall	10,90 m
<b>Stage width</b>	forestage (proscenium)	12,45 m
	main stage	12,03 m
	rear stage	10,26 m
<b>Stage height</b>	forestage (proscenium) =max. height VB-hoist 1	6,63 m
	main stage =max. height hoist 1	13,06 m
	rear stage =max. height HB-hoist 1	5,61 m
<b>Raked stage</b>	falling gradient	4,2%

### 3.4 Portal dimensions

<b>Decorative portal („Schmuckportal“)</b>	Height: Width: Depth: position: (rear edge ↔ N) door height	6,65 m 9,37 m 0,31 m 3,34 m 1,80 m
<b>Concrete portal („Mauerportal“)</b>	Height: Width: Depth: position: rear edge ↔ N	4,80 m 7,09 m 0,52 m 1,35 m
<b>Technical portal</b>	Height (variable): Width: Depth:	1,10 m – 4,75 m 7,29 m 0,81 m
<b>Iron curtain (Safety curtain)</b>	Height: Width: Depth: position: rear edge ↔ N bottom edge at highest position:	5,60 m 7,65 m 0,17 m 1,08 m 5,04 m
<b>Door in iron curtain (opens to stage)</b>	Height: Width:	1,85 m 1,00 m

**The Iron Curtain must be able to close smoke-tight at all times!**

### 3.5 Work galleries

First gallery	Height (proscenium) Height (rear wall / upstage)	6,88 m 6,66 m
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Second gallery	Height (proscenium)	11.44 m
	Height (rear wall / upstage)	11.22 m
Height difference is due to raked stage		

### 3.6 Forestage / Proscenium

<b>Floor openings:</b>	3x7 m (21 removable floor plates)
	1x7 m (7 removable floor plates)
<b>Forestage pit maximum height:</b>	approx. 2.10 m

### 3.7 Understage machinery

Revolving stage	
Diameter	9,75 m
Position (N ↔ center)	4,20 m
Total traffic load	5.000 kg (verteilt)
Max. static load	500 kg / m <sup>2</sup> (4.90 kN)
Max. dynamic load	250kg / m <sup>2</sup> (2.45 kN)
Rotational speed (outer edge) continuously adjustable	V <sub>min</sub> =0,01 m/sec V <sub>max</sub> =0,80 m/sec

### 3.8 Overstage machinery / Fly system

Flybar position	name	max. load capacity	vertical travel	width	info
Auditorium	BLZ Saal	400kg	7,80 m	9,00 m	motorised
Forestage / Proscenium	VB1	350 kg	8,90 m	8,00 m	motorised, 3 lift lines
	VB2	350 kg	6,95 m	10,00 m	
	VB3	350 kg	6,85 m	10,00 m	
	VB4	350 kg	7,05 m	8,00 m	motorised, 4 lift lines
	VB5	350 kg	9,50 m	8,20 m	
	VB6	350 kg	9,50 m	8,20 m	
	VB7	350 kg	9,50 m	8,00 m	
	VB Links	250 kg	6,85 m	1,20 m	motorised,

	VB Rechts	250 kg	6,85 m	1,20 m	3 lift lines
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Flybar position	name	max. load capacity	vertical travel	width	info
Main stage	H1	200 kg	12,80 m	7,85 m	manual flybar, 4 lift lines
	H2	200 kg	12,80 m	8,60 m	manual flybar, 4 lift lines
	H4, H8, H10, H12, H14, H15, H17, H19, H21, H23, H25	200 kg	12,80 m	9,00 m	manual flybars, 4 lift lines
	M3	350 kg	12,80 m	8,80 m	motorised flybars, 4 lift lines
	M5, M6, M7, M9, M11, M13, M16, M18, M20, M22, M24, M26	350 kg	12,80 m	9,00 m	motorised flybars, 4 lift lines
	BLZ 1	500 kg	12,80 m	9,00 m	motorised, lighting
	H27 + Rund Links + Rund Rechts	200 kg (H27) +200 kg or 200 kg (H27) +2x100 kg	12,80 m	8,50 + 5,20 + 5,20 m (without round part)	manual cyclorama flybar (with H27) or panorama (side) flybars
	PZ1-PZ6	200 kg	12,80 m	-/	6 mobile point hoists
Rear stage	HB1	300kg	5.61 m	5,60 m	motorised flybars
	HB2 rund	300 kg		8,60 m	
	HB3	300 kg		7,50 m	

Diameter of all battens (steel pipes) is 60,3 mm.

All flybars have side extensions on both sides. The lengths of this extensions are different, to optimise the use of the available spaces on side.

All widths in the following list are given without side extensions.

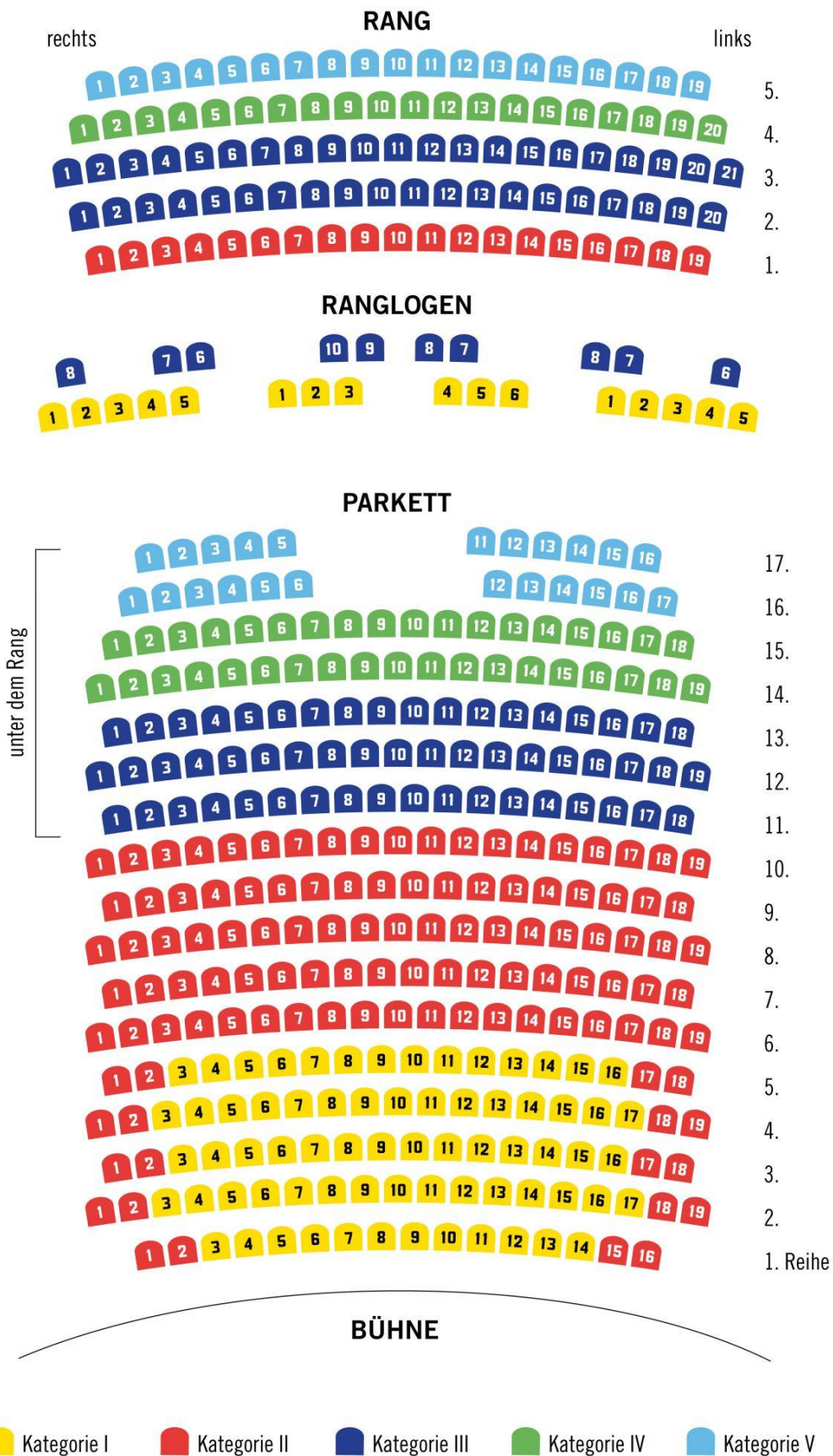


### 3.9 Projection Screens

Screens				
ratio	dimensions in cm	type	name	info
16:9	280x160 (270x150)	front proj. / white	Stumpfl Vario 32	aluminium frame with feet
4:3	360x270 (350x260)	front&rear proj. white / grey	Stumpfl Vario 32	aluminium frame with feet front: white / rear: grey
special	320x245 (310x235)	rear proj. / grey	Stumpfl Vario 32	aluminium frame with feet
16:9	365x210 (345x190)	front proj. / white	Stumpfl Vario 64	aluminium frame with feet
16:9	460x270 (450x260)	Front & rear proj. white / grey	Stumpfl Vario 64	aluminium frame with feet front: white / rear: grey
4:3	600x450 (590x440)	front proj. / white	Stumpfl Vario 64	aluminium-frame with feet
16:9	752x431 (732x411)	front proj. / white	Stumpfl Vario 64	aluminium frame with feet
16:10	752x477 (732x457)	rear proj. / grey	Stumpfl Vario 64	aluminium frame with feet
15,6:9	600x346 (580x326)	rear proj. / grey	Stumpfl Vario 64	aluminium frame with feet

### 3.10 Auditorium Seats

Pit	298 seats (17 rows) 4 wheelchair locations (12 seats have to be removed)	
	auditorium width	
	pit length	
	total auditorium height	
Tier	99 seats (tier, 5 rows) 26 seats (tier loge, 2 rows)	
	auditorium width	
	tier length	

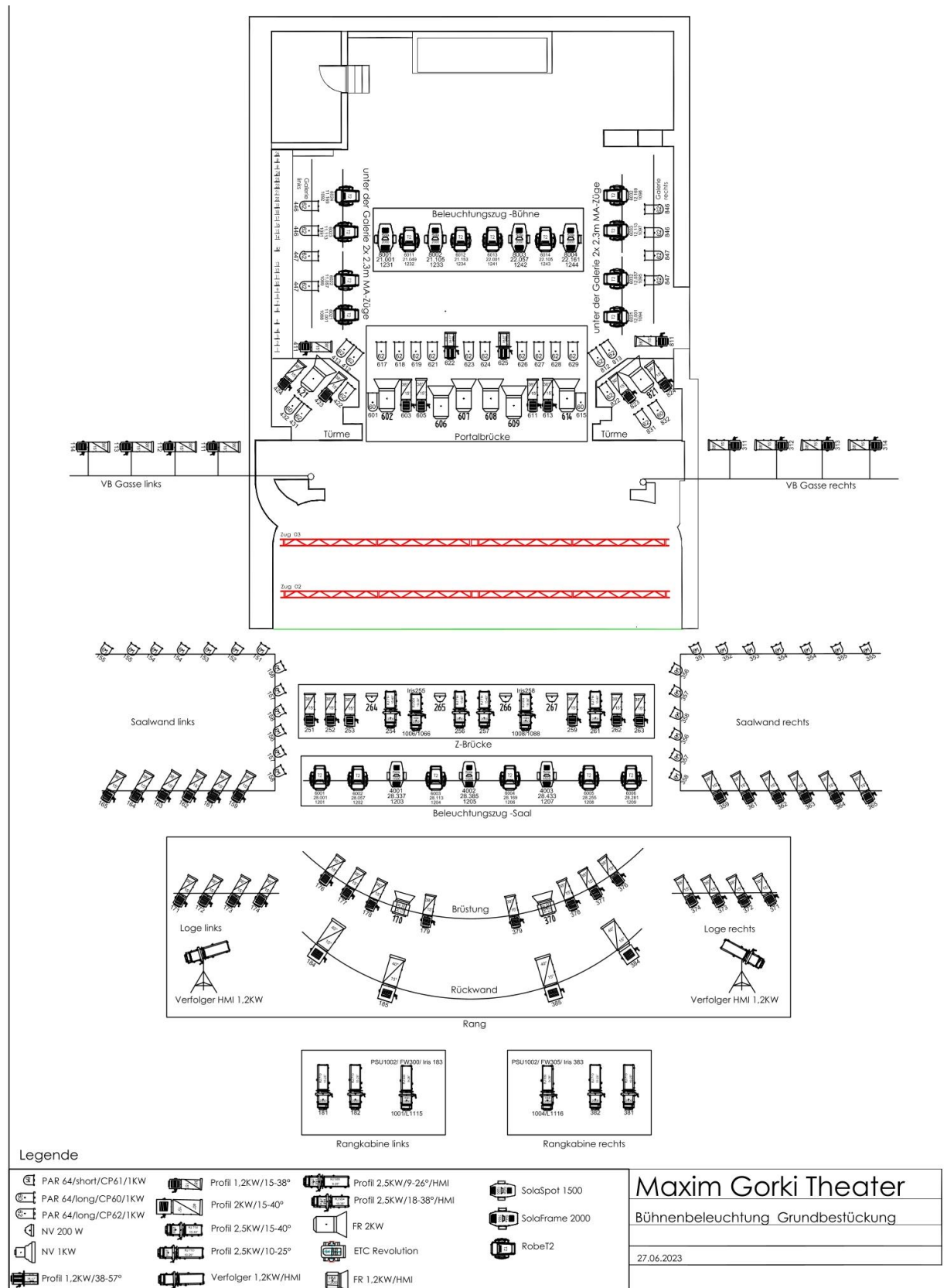


## 4 Lighting

### 4.1 Fixed installation

<b>Lighting control booth</b>	lighting desks	<ul style="list-style-type: none"> <li>• main desk ETC-GIO</li> <li>• emergency desk ETC-ION</li> <li>• Network protocol sACN</li> <li>• 4096 nodes</li> </ul>
	network access points	<ul style="list-style-type: none"> <li>• auditorium pit</li> <li>• stage manager's panel</li> <li>• rear stage</li> <li>• rank</li> </ul>
<b>Dimmers</b>	dimmer Transtechnik	<ul style="list-style-type: none"> <li>• 234 x 2,5kW</li> <li>• 44 x 5 kW</li> <li>• 86 x 2,5kW, ND</li> <li>• 12 x 5kW, ND</li> </ul>
	dimmer LSC GEN VI	<ul style="list-style-type: none"> <li>• 48 x 2 kW</li> </ul>
	dimmer MA-Lighting	<ul style="list-style-type: none"> <li>• 12 x 3,7kW</li> </ul>
<b>Circuit points</b>	three phase current sockets	<ul style="list-style-type: none"> <li>• 17 x CEE 32A, 400V, ND</li> </ul>
	sockets in junction boxes	<ul style="list-style-type: none"> <li>• 16A / 220V AC schuko socket</li> <li>• 63A Socket (DIN 15564)</li> <li>• 32A CEE 5-pole, 400V</li> <li>• fluorescent tube 3-pole. +PE, HAN3</li> <li>• multicore 16-pole +PE, HAN16</li> <li>• DMX 5-pole</li> </ul>

## 4.2 Stage lighting: Standard setup



<b>Stage</b>			
<b>location</b>	<b>type</b>	<b>amount</b>	<b>kW</b>
forestage left ("VB-Gasse")	profile spot	4	1,2
forestage right ("VB-Gasse")	profile spot	4	1,2
technical portal left bottom	profile spot	1	1,2
	PAR64 /CP62	2	1
technical portal left middle	Fresnel	1	2
	PAR64 /CP62	1	1
	profile spot	2	1,2
technical portal left top	PAR64 /CP60/CP62	2	1
technical portal right bottom	profile spot	1	1,2
	PAR64 /CP62	2	1
technical portal right middle	Fresnel	1	2
	PAR64 /CP62	1	1
	profile spot	2	1,2
technical portal right top	PAR64 /CP60/CP62	2	1
lighting bridge (portal)	Fresnel	6	2
	profile spot	6	1,2
	PAR64 /CP62	10	1
	PAR64 /CP60	2	1
lighting flybar (stage)	Robe Robin T2 profil	4	0,84
	SolaFrame 2000 High CRI	4	0,6
fly gallery left	low-voltage lamp	1	1
	PAR64 /CP62	4	1
fly gallery right	low-voltage lamps	1	1
	PAR64 /CP62	4	1
Light flybar stage left	Robe Robin T2 profil	4	0,84
light flybar stage right	Robe Robin T2 profil	4	0,84

<b>Auditorium</b>			
<b>location</b>	<b>type</b>	<b>amount</b>	<b>kW</b>
tier booth left	profile spot HMI, FW	1	2,5
	profile spot	2	2,5
tier booth right	profile spot HMI, FW	1	2,5
	profile spot	2	2,5
tier, rear wall, left	profile spot	2	2
tier, rear wall, right	profile spot	2	2
tier, loge left	profile spot	4	1,2
	follower spot HMI	1	1,2
tier, loge right	profile spot	4	1,2
	follower spot HMI	1	1,2
tier balustrade	profile spot	8	1,2
	FR HMI	2	1,2
lighting flybar (auditorium)	Robe Robin T2 profil	6	0,84
	SolaSpot Pro 1500	3	0,4
audience bridge ("Z-Brücke")	profile spot	6	1,2
	profile spot HMI	2	2,5
	profile spot	4	2,5
	low-voltage lamp	4	0,2
auditorium wall left	profile spot	6	1,2
	PAR64/CP61	13	1
auditorium wall right	profile spot	6	1,2
	PAR64/CP61	13	1

### 4.3 Mobile lighting equipment

type	amount	kW	info
<b>PC / Fresnel</b>			
prismatic lens ADB	6	0,65	barn door
Fresnel ADB	5	2	barn door
Fresnel HMI Arri	4	1,2	electrical shutter, barn door
<b>Profile spots</b>			
profile Niethammer HPZ 115	6	1,2	zoom profile
profile ETC 50°	2	0,75	
<b>PAR</b>			
PAR 64, BAR CP62	4	6x1	
PAR 64, Lang, CP61/62	15	1	
PAR 64, Short, CP61/62	10	1	
PAR Cameo Zenit P100 DTW	8	0,125	LED WW
<b>Moving Lights</b>			
SolaFrame 2000 High CRI	2	0,6	
SolaSpot Pro 1500	3	0,4	
Robe Robin T1 Profil	8	0,55	
<b>Flood lights</b>			
LDDE NanoPix CYC	5	0,205	RGB WW CW
Cameo Zenit W 600	4	0,565	RGBW barn door
ADJ Flood 36	4	0,036	UV-LED
<b>Ramps, LED BAR</b>			
Cameo Pixbar 600 Pro IP 65	2	0,160	RGBWAUV
Cameo Pixbar 600 Pro	2	0,160	RGBWAUV
NanoPix Slim 1200	12	0,077	RGB WW CW, 4 Solo-PSU / 1 PSU 2x3 Exits
<b>LED strips and tubes</b>			
LED stripes cold white	14		10x2m / 2x1m / 2x 0.5m
Astera FP1 Titan Tube	8	0,048	RGBA-Mint
		-	
		0,072	
<b>Strobes / Hazer / Fan</b>			
Strobe Atomic 3000	2	1,5	DMX connection
Hazer Look Unique 2.1	2	1,5	DMX connection
MDG Atmosphere ATMe Hazer	1	0,715	DMX connection
Cameo Instant AIR 2000 Pro	2	0,250	DMX connection

### 4.4 Additional lighting equipment

type	amount	info
floor stand	4	Niethammer / tripod / h=10cm
hinged roll stand	2	Manfrotto / h=1,32-2,15 m / 30kg
hinged stand "beta 3 al"	2	Despar / h=0,96-2,50m / 40kg
telescope stand	4	Strand Lighting / h=1,50-4,50m / 25kg
crank stand "Samson"	2	Strand Lighting / h=1,55-2,55m / 45kg

alley towers	2	h=1,80m / 3 floors
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## 5 Sound

**Location FOH:** fixed, open in the pit, rear wall, middle

<b>Mixing console</b>	LAWO MC <sup>2</sup> 96 Grand Production Console: <ul style="list-style-type: none"> <li>• 40 strips (configurable)</li> <li>• FX-Engine: Waves SoundGrid with Mercury-Bundle</li> </ul>
<b>Audio content delivery</b>	<ul style="list-style-type: none"> <li>• Ableton Live 10 with Mac OSX</li> <li>• Audio Interfaces: RME MADiface XT, DANTE Virtual Soundcard</li> </ul>
<b>Effects</b>	<ul style="list-style-type: none"> <li>• RELAB LX480 Plug IN</li> <li>• Guitar Rig Pro 5</li> <li>• Antares Auto Tune</li> <li>• Waves Mercury Bundle</li> </ul>
<b>In Ear Monitoring</b>	<ul style="list-style-type: none"> <li>• 6 IEM-Transmitters Sennheiser SR2050/EK-IEM-G4 Receivers</li> </ul>
<b>Microport system</b>	<ul style="list-style-type: none"> <li>• 16 channels Sony DWX Digital Wireless</li> <li>• 14x DWT B01 pocket transmitter</li> <li>• DPA 4061 Lavalier microphones</li> <li>• 8x DWM 02 hand-held transmitter</li> <li>• 4 x DWT-P01N XLR plug-on transmitter</li> </ul>
<b>Speaker systems</b>	<ul style="list-style-type: none"> <li>• Portal: 4x d&amp;b AL90</li> <li>• Center: 4x d&amp;b T10</li> <li>• Subwoofer: 4x d&amp;b Y-Sub</li> <li>• Infra: 2x KSL-SUB</li> <li>• Stage:                     <ul style="list-style-type: none"> <li>rear stage: 4x d&amp;b 602 / 2x d&amp;b E15x / 2x d&amp;b E12</li> <li>portal bridge: directed to the back 4x E1 / to the front 2x E1</li> </ul> </li> <li>• 32 sound effects speaker in the auditorium</li> <li>• mobile monitors: 6x d&amp;B 44S / 4x d&amp;b E6 / 2x d&amp;b E8/ 6x d&amp;b M6</li> </ul>
<b>Intercom</b>	Riedel-Intercom with permanently installed intercom stations: <ul style="list-style-type: none"> <li>• Stage Managers desk</li> <li>• Lighting booth</li> <li>• Auditorium directors desk</li> <li>• Sound Desk FOH</li> <li>• Lighting desk position in auditorium</li> <li>• Video booth</li> <li>• Surtitle booth</li> <li>• Props room</li> <li>• Transfer option to Motorola walkies on three channels</li> </ul>
<b>Stage manager's system</b>	<ul style="list-style-type: none"> <li>• 41 light signals (group switching possible)</li> <li>• Special sound effect bells</li> <li>• Broadcast call, single call to various rooms,</li> </ul>



	group call technical areas <ul style="list-style-type: none"><li>• Video and sound monitoring</li></ul>
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## 6 Video

**Location of video booth:** pit, booth in the back, stage left

**Working space for surtitles:** video room on 3<sup>rd</sup> floor

<b>Video feed system</b>	<ul style="list-style-type: none"> <li>• Software: Isadora 3 (Troikatronix)</li> <li>• Optional QLAB 3 (Figure53)</li> <li>• Hardware: MacPro Octa-Core, 64 GB RAM, D700</li> <li>• VIDEO-OUT: 5x 1080i50</li> <li>• VIDEO-IN: 4x 1080i50</li> </ul>
<b>Signal distribution</b>	<ul style="list-style-type: none"> <li>• VIDEO via SDI</li> <li>• BLACKMAGIC VIDEOHUB 72 routing matrix</li> <li>• various junction boxes in stage area (SDI, CAT)</li> <li>• further junction boxes close to stage area (audience, foyers, etc.)</li> </ul>
<b>SDI peripherals</b>	<ul style="list-style-type: none"> <li>• BLACKMAGIC ATEM ME/2 Video-Mixer</li> <li>• BLACKMAGIC Multiview 16</li> <li>• various FO/SDI/HDMI/analogical converters</li> </ul>
<b>Video projectors</b>	<ul style="list-style-type: none"> <li>• 1x Panasonic MZ16K WUXGA 16.000 Lumen, fixed to the tier balustrade</li> <li>• 1x Panasonic MZ16K WUXGA 16.000 Lumen for mobile use in stage area</li> <li>• MZ16K lenses: continuous lens set from 0.48:1 to 7.4:1</li> <li>• 3x Panasonic MZ770 WUXGA 8.000 Lumen; fixed on the auditorium side walls (right, left, back)</li> <li>• 2x Panasonic MZ770 WUXGA 8.000 Lumen for mobile use in stage area</li> <li>• MZ770 lenses:             <ul style="list-style-type: none"> <li>2x 0,8:1</li> <li>1x 0,8-1,0:1</li> <li>3x 1,3-1,7:1</li> <li>4x 1,7-2,4:1</li> <li>1x 2,4-4,7:1</li> <li>1x 4,7-7,2:1</li> </ul> </li> </ul>
<b>Cameras</b>	<ul style="list-style-type: none"> <li>• 3x Canon XF205</li> <li>• 2x Dwarf Connect</li> <li>• 3x Panasonic AW130 HE PTZ Remote-Kamera</li> </ul>
<b>Surtitles</b>	<ul style="list-style-type: none"> <li>• Separate surtitling system with Powerpoint or Spectitular</li> <li>• 2 surtitling surfaces left/right of decorative portal</li> <li>• 2x fixed Sanyo PLC XM150 (6000 Lumen, XGA, 4,7-7,2:1)</li> </ul>

List of available screens: see paragraph **Fehler! Verweisquelle konnte nicht gefunden werden..**

## 7 Props

### 7.1 Fog machines

Fog machines			
Typ	output	amount	info
MDG Atmosphere		1	Haze machine
Base Classic	1300W	2	liquid-vaporizing fog machine
Hazebase Highpower	2600W	2	liquid-vaporizing fog machine
Power Tiny Akku	400W	3	liquid-vaporizing fog machine
Tiny S Akku	-	1	liquid-vaporizing fog machine
Cryo-Fog	2300W	1	CO <sub>2</sub> ("low lying" fog) CO <sub>2</sub> order is necessary
Pea Souper Trockeneis	-		Dry ice fog machine Dry ice order is necessary

### 7.2 Music instruments

The props department possesses a number of various musical instruments, which are often used in our own productions. We can send you a list of the musical instruments, but please check availability with the props department.

There are also several upright pianos and a grand piano "August Förster 190" in the house. The availability depends on our playing schedule and must be discussed in advance.

## 8 Dresser and Make up

**Location:** The wardrobes are above the stage area on second, third and fourth floor

2nd floor	No. 1	5 places	all places are makeup places
	No. 2	4 places	
	No. 3	3 places	
	No. 4	3 places	
3rd floor	No. 5	6 places	
	No. 6	4 places	
4th floor	Make up	6 places	make up places
		3 places	drying hoods

### Additional equipment:

- 2 washing machines
- 1 dryer
- 2 automatic steam irons
- 1 sewing machine