

Appendix 1.

Project Description and Specifications

For the acquisition of set pieces for:

Aida

Reference no.: 122101



August 2022



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Read more about RDT: <https://kglteater.dk/en/about-us/about-the-theatre/the-history-of-the-royal-danish-theatre/>



1. PROJECT DESCRIPTION

1.1 General Description

Set parts for Aida, opens March 2, 2023, at the grand stage / Operaen.

1.2 Artistic Team

Scenic Design	Merle Hensel
Director	Annabel Arden
Lightning design	Lee Curran

1.3 Story Line

Verdi's 1871 opera.

Neither elephants nor big processions will appear in this version. It all about close relations on a background of a large war. Based on the conflicts arising from the Western world's handling of race, culture, colonialism. Power is brutal, misogynist, and oppressive. With no precise geographical location, relatively contemporary in time.

Annabel Arden interprets Verdi's intention with Aida is a long plea for getting back, what was lost - sung out into the darkness. About a nation heading for doom and the frightening difference between the political, abstract, and theoretical handling of war and the senseless human losses that are distanced simply as 'collateral'. The enslaved prisoner of war Aida smuggled a suitcase of soil and water from his homeland, which contributes to the poetic realism to the storytelling of her harsh fate. With almost chamber-play-like intimate stories between the main characters in the grand frame of war and politics.

1.4 Summary – Scenic design

A space which can be interpreted both as a palace and as a military headquarter, with reference to both minimalist and fascist architecture. Modern and classic with concrete walls with shelled gilding. The colonnades contribute to the sense of surveillance and insecurity.



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1.5 Set Pieces

122101	-01	Floor
122101	-02	Side walls
122101	-03	Back wall (Stair, slith and stairs)
122101	-04	Bandstructure (lift)
122101	-05	VIP Platform
122101	-10	Table
122101	-11	Platform with elements

2. WORK PROCESS

2.1 Start-up meeting

A start up meeting with the production manager from RDT, covering the review of the full model, commenting in detail the specific items in the offer.

2.2 Model & drawings

The model will be available to the supplier during the production period.

All drawings apart from the PDF-version are available in the most common digital formats.

Digital model created in Autodesk Inventor.

2.3 Modifications

Modifications of any kind, such as any changes to solutions or materials, which might be a subject to discussion, must be approved by the production manager at RDT and documented in writing before implementation.

2.4 Regular meetings

Regular meetings at the supplier's premises with the Production Manager and representatives from RDT and/or the Set designer. The meetings must match the production flow, planned and scheduled to meet the quality approval on structure and surfaces.

If RDT / the production manager or representatives after supervision meetings are concerned about the



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progress in the workflow according to the delivery time, the supplier must document and proof the ability to comply. The documentation must include a time schedule, milestones, and adequate staffing. In addition to these, a status report and follow-ups on the progress stated to a frequency according to agreement.

2.5 Final supervision and pre-assembly meeting

The Set must be pre-assembled (and disassembled) in full scale before delivery.

The production manager and Chief Carpenter will attend the final supervision and pre-assembly meeting, where details of the “get in” will be discussed.

2.6 Delivery

Delivery of the Set pieces for “Aida” to RDT will take place: no later than
**08.00 AM , on the 09th of January 2023; at The Danish Royal Theatre
Operaen, Ekvipagemestervej 10, 1438 Copenhagen K**

The supplier must be present upon receipt of transport.

The assembly period is 5 days, starting 09.01.23. and ending 13.01.23.

The supplier must provide assembly assistance on stage.

The assistance is to guide the crew at RDT, who will execute the assembly.

To ensure a smooth assembly supervision – the supervisors must be able to communicate in Danish or English.

The crew consists of 8 tech crew members and a Chief Carpenter.

Loading facilities

The Opera/Operaen:

Please notice – No access for sideload at the Opera.
The loading dock for long trailer is for rear unloading.

Notice! The RDT Wagons supplied can/should be used as transport dollies.



3. GENERAL CONDITIONS

3.1 Model and technical drawings

In case of doubt - between model, photo or drawing, indications in drawings must be followed, unless specific notes prove differently.

3.2 Weight

The calculation of the total weight of all set pieces within the design process, based on material densities below:

Birch plywood:	700 kg/m ³	Poplar plywood:	448 kg/m ³
Polystyrene:	40 kg/m ³	Twin wall PC:	200 kg/m ³
Wood in general:	500 kg/m ³		

3.3 Materials

Birch plywood is required for certain use and specifically mentioned in drawings if so.

We require Birch plywood with structural strength and B-quality on one side.

Please note: All set pieces with paintwork delivered with additional paint for repairs.

3.4 Quality and safety

Ensure that all assembly and removal is possible by using a wrench, hammer, and a screwdriver only.

All bolts to be minimum M10, unless otherwise specified.

Labelling: all set pieces labelled with set piece number e.g. '122101.02.16' and weight indication.

Labels must be clear, accurate and consistent across the set.

- All hanging set pieces provided with rigging points M10.
- All rigging points used for RDT must be according to Directive 2006/42/EC, add. II A.
All rigging points must have at least one bolt with lock nut bolted through the set piece.
- Use planed and bevelled wood only with no sharp edges.
- Channels in Twin Wall PC – must be closed.
- When using hollow profiles, ensure that ends are closed, and all weld seams must be smooth.
- When using laser cut steel, edges bevelled.
- All drilled holes for bolted joints in metal profiles must be oversize, for simple installation of bolts.



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Welding according to DS/EN/ ISO standards equivalent:

- Steel: DS/EN/ISO 5817 equivalent
- Aluminium: DS/EN/ISO 10042:2018 equivalent; to quality level C

All material must be fire-retardant according to RDT regulations, in case of doubt please contact relevant contact person.

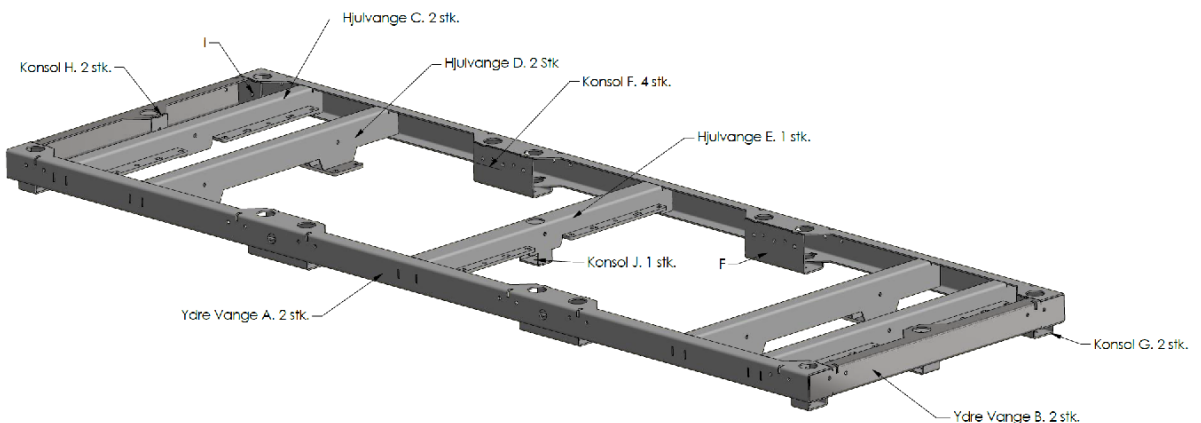
Packaging

- Please insure protective and re-useable packaging for all structures and elements. The packaging must be sturdy and durable, allowing to be used also for storage.



4. MATERIEL DELIVERIES BY RDT

RDT Wagons



RDT will deliver 20 RDT Wagons for this production.

- 16 pcs. for 122101-03 Backwall
- 04 pcs. for 122101-05 VIP platform
- Notice; supplier has to mount 4 wheels on each wagon

Casters/wheels

All necessary casters/wheels for the production will be delivered by RDT.

Other items supplied by RDT

For 122101-03 Back Wall, the motor system, additional staircase and Hepco motion system will be delivered by RDT

For 122101-01 Floor canvas, all floorboards with processed edges will be delivered by RDT.

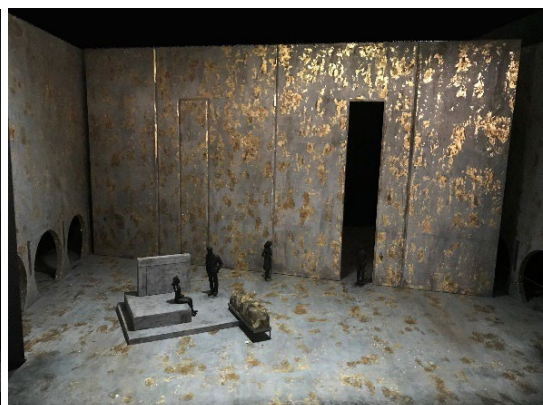
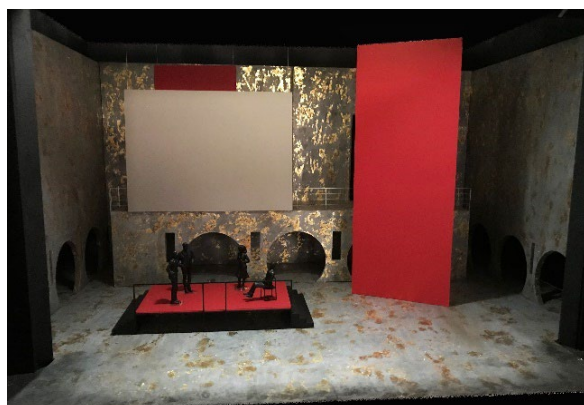
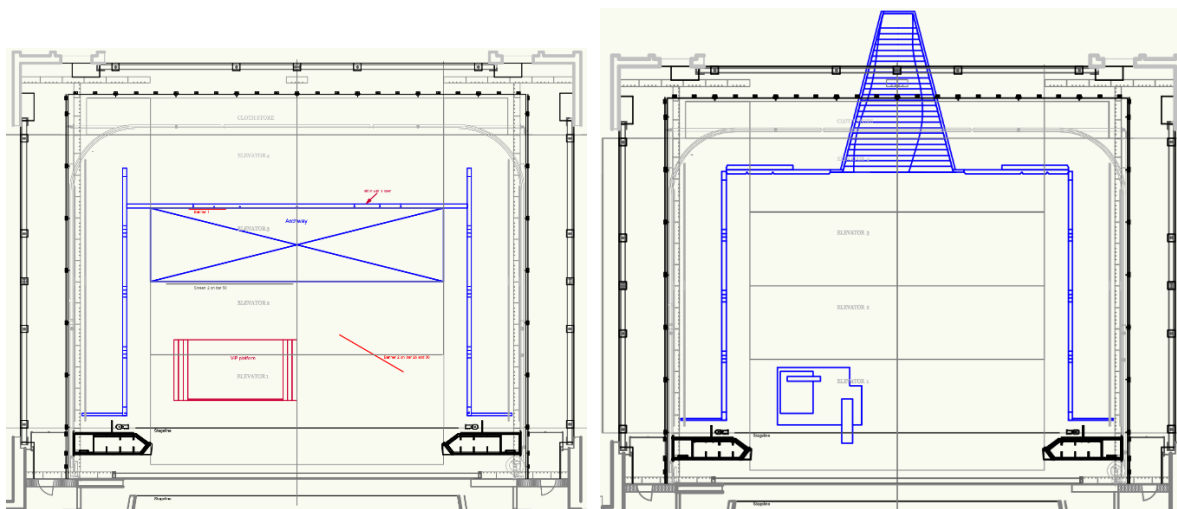
For 122101-02 Truss 4 pc. 16 meter will be delivered by RDT



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5 SET AND STAGE PLAN AND MODEL PHOTOS



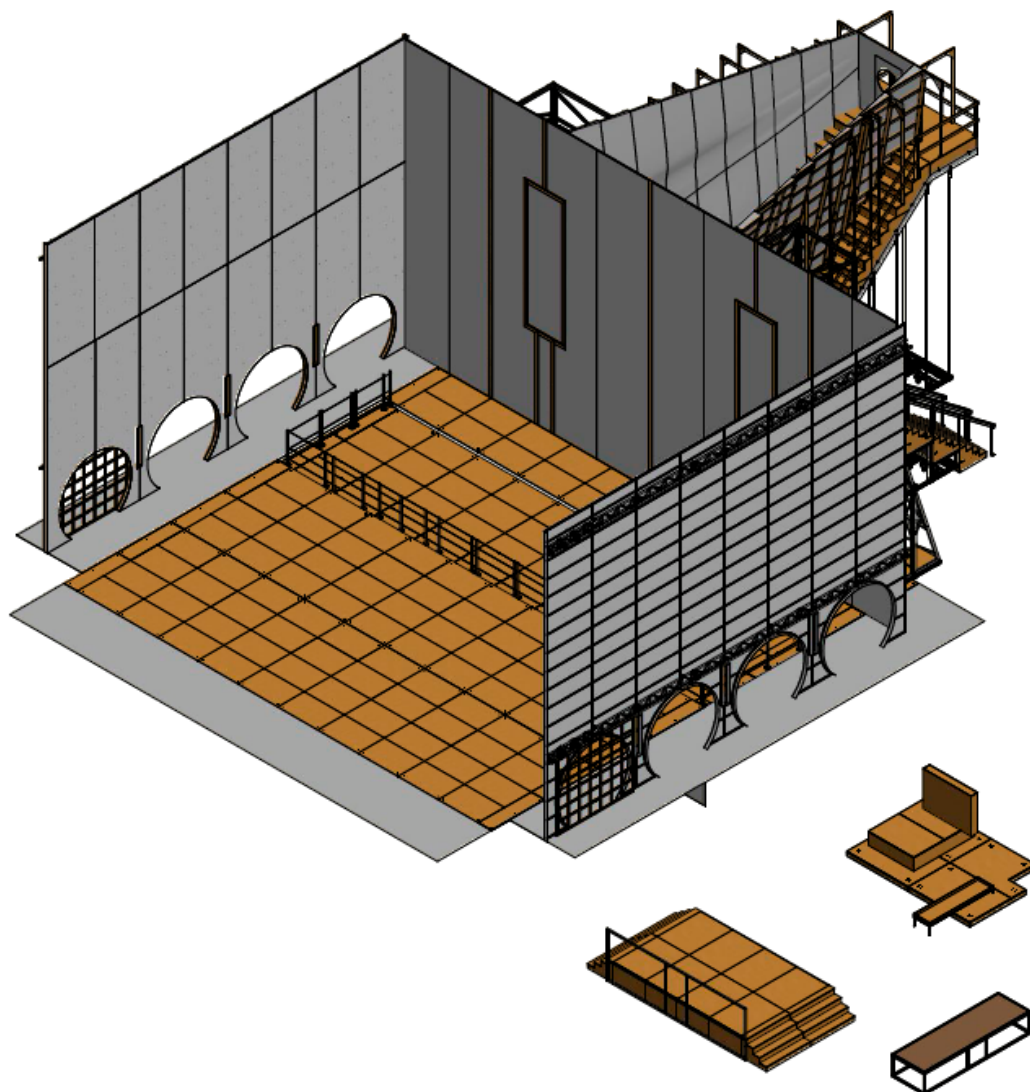


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Photos of the model

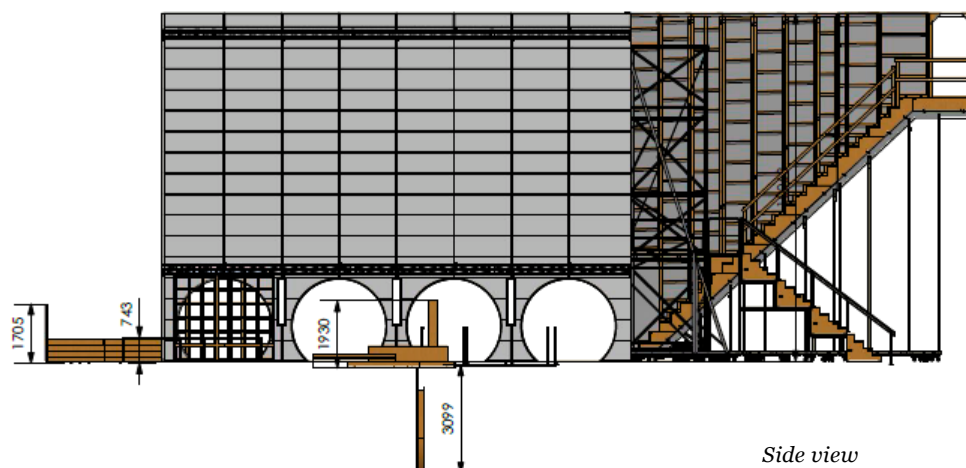


Isometric view



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Side view



6. SURFACE – FLOOR AND WALLS

The set designer has defined the set painting for floor and walls in the notes below:

AIDA set painting

I would like the walls of the set to look like concrete walls that used to be completely gold, but with time the gold has started to come off/peeled/cracked so the concrete underneath is revealed.

This represents a political regime of extreme wealth and power (opulent gold walls) that is now corrupted and crumbling (Russian oligarchs, Saddam Hussain, Donald Trump etc.).

Here are some references for the set paint effect I would like to achieve.

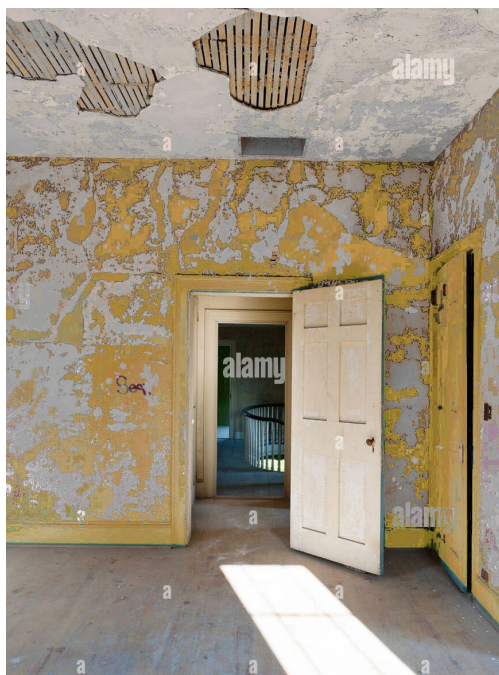
The first two images show the scale and amount of gold I would like to have on the walls:





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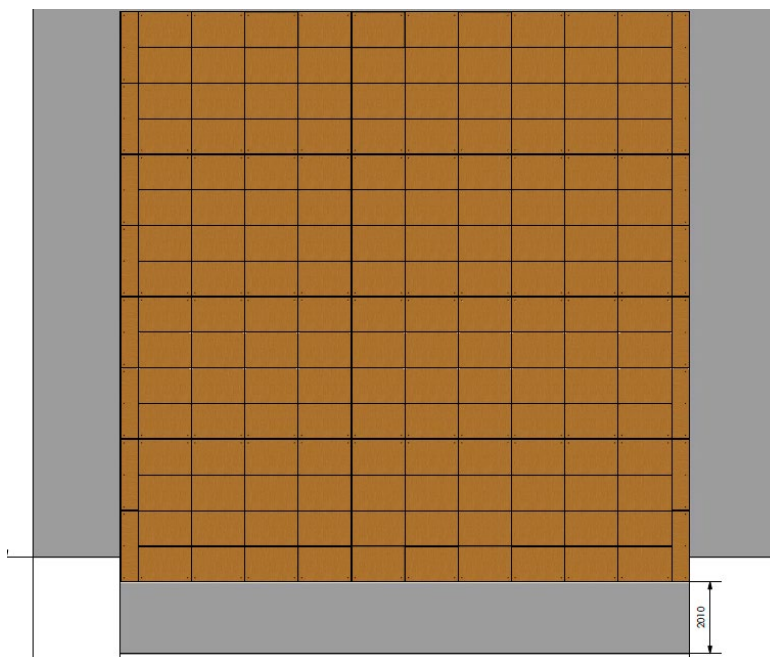
The pictures below for details.





7. 122101-01 FLOOR

General Description



The entire floor, app. 16 x 24 meter + 2 x 16 meter, in total 416 m², is covered with painted canvas.

The center part 16 x 16 meter need to be glued to the floorboards.

The SL/SR part (2 pc. 4 * 16 meter) and the frontstage part (2 x 16 meter) need to be made using a canvas with antislip on the back.

Both kind of fabrics, with and without antislip, needs to have a similar appearance.

The floorboards covering 16 x 16 meter, will be delivered by RDT; the painted canvas must be glued on the floorplates.

To ensure the correct pattern in assembly the floorboards must be marked individually by numbers on the back side, followed by a drawing with the same numbers.

Materials

Canvas and canvas with antislip.

Surface

See surface description in section 6.



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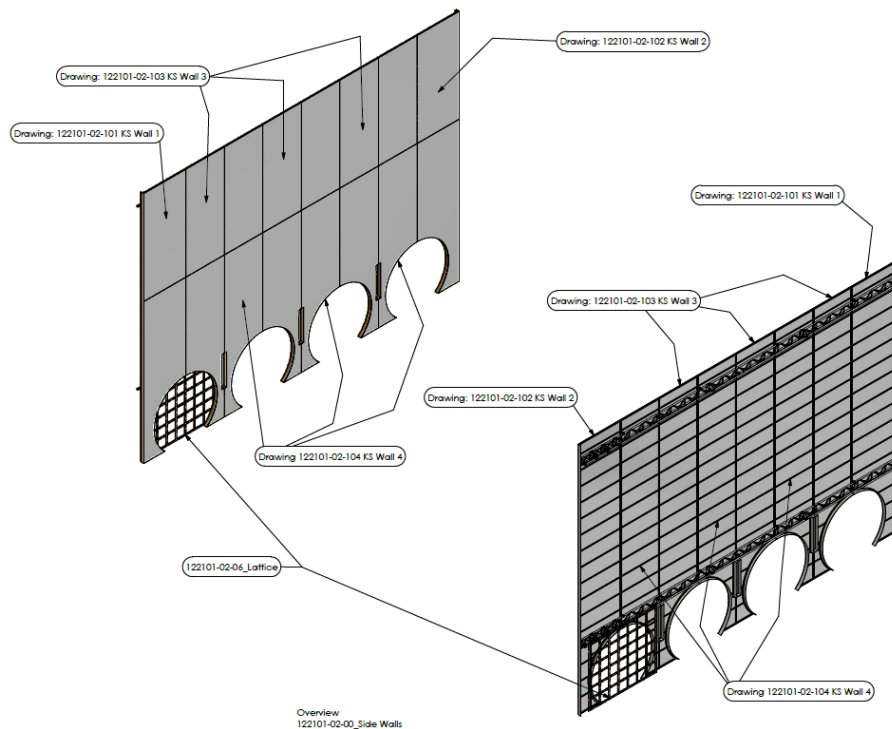
Aida

Drawing references

122101-01-100_01



8. 122101-02 SIDE WALLS



General Description

A hanging structure of walls with arcades and narrow horizontal window holes at the lower part.

Structure

Frame structure made of steel profiles cladded with 6mm twin wall polycarbonate sheets.

The steel structure is bolted together and braced with a truss.

The arcades and horizontal window holes are cladded with plywood boards to give depth.

Notice the front arch both SR and SL must be equipped with removable latices.

Materials

- Steel profiles
- Twin wall Polycarbonate sheets
- Canvas
- Plywood boards



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Function Description

The sidewalls will be at a permanent position during the entire show.

Surface

See surface description in section 6.

The canvas must be glued onto the walls.

Channels in Twin Wall PC – must be closed.

Steel frames

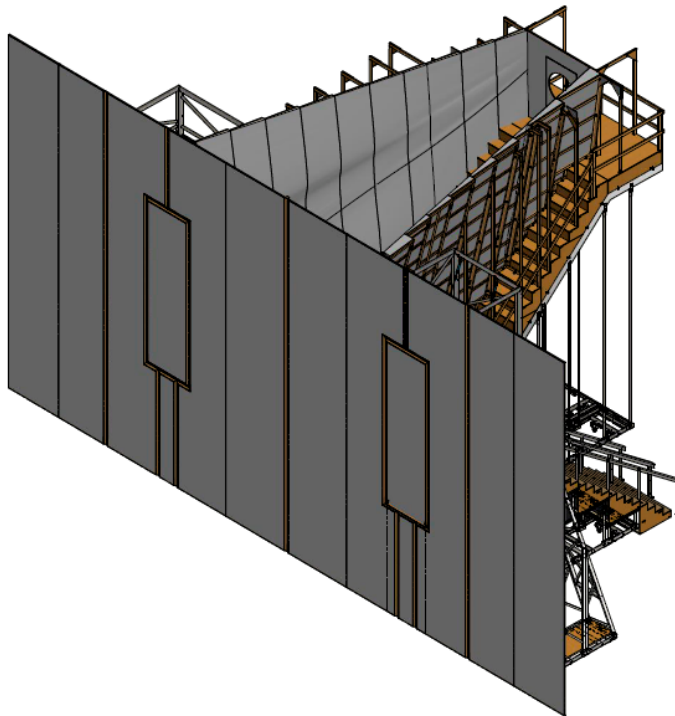
All steel frames must be painted black, to prevent rust in storage periods.

Drawing references

122101-02-100_01_Side Walls
122101-02-101_01_KS Sidewall 1
122101-02-102_01_KS Sidewall 2
122101-02-103_01_KS Sidewall 3
122101-02-104_01_KS Sidewall 4
122101-02-105_01_Lattice



9. 122101-03 BACK WALL (STAIR, SLITH AND STAIRS)



122101-03-00 Backwall Total - Isometric view

The Back Wall consist of the following elements:

- Back Walls sections, SL and SR
- Towers
- Staircase
- Up stage landing plateau with door
- Rock wall

General Description

Back wall sections SL and SR

Wall frame structures similar to the sidewalls - steel profiles cladded with 6mm twin wall polycarbonate sheets.

Profiles are bolted together. On the backside a profile railing is mounted to enable sideways movement.

The steel structure is bolted together.

Cladding also with wooden profiles to create an illusion of cast concrete elements.

The two frames – both SL and SR – are hinged.

There is a door in SL wall structure – opening inwards



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The wall sections are supported by aluminium jacks on wagons (mounted on RDT Multi wagons).

Towers

Towers SL and SR connect to the profile railing on the wall sections.

Hepco motion systems for the movement of the wall sections are delivered by RDT

The towers are made of steel frames and steel wagons bolted together.

Notice! The SL tower is equipped with a tiling plateau.

Notice! Connection frames are made in different sizes to support the jack wagons in their different positions.

Those connection frames must be connected to towers with hinges and an easy solution for the connection to the jack wagons. See drawing 122101-03-100 page 4+5 for details

Staircase/Up stage landing plateau with door

The staircase consists of two elements – the front stairs and the upstage stairs with a landing plateau and a door and wall wings - this upstage plateau is in use in Act 4 only.

The staircases are both made with wooden stairs on an aluminium structure.

The aluminium structure is made from vertical round aluminium profiles supporting a slanted aluminium beam. The aluminium structure is fixed on RDT wagons

The wooden steps are made in sections and are mounted on the slanted beam with small, twisted fittings.

Motor system, wagons and wheels are provided by RDT

Rock Wall

Front and back angled wooden frames connection to the staircase with wooden jacks and z-profiles.

Notice! slits for SL and SR, steel profiles and twin wall polycarbonate sheets.

The surface must match the model – looking like a rock wall (the drawings do not visualise this). see surface description below.

Function Description

The Rock walls will be permanently mounted on top of the staircases.

When chorus is placed on the staircase, those rock walls will also be the railing to secure the singers.



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The entire staircase with rock walls, sliding doors and towers, will be moving upstage/downstage during the show, as well as it will be positioned angled towards the sidewalls.

Surface:

Steel frames

All steel frames must be painted black, to prevent rust in storage periods.

Walls – see surface description in section 6.

The Rock walls

The Rockwall is to comply roughly with the model photos below.

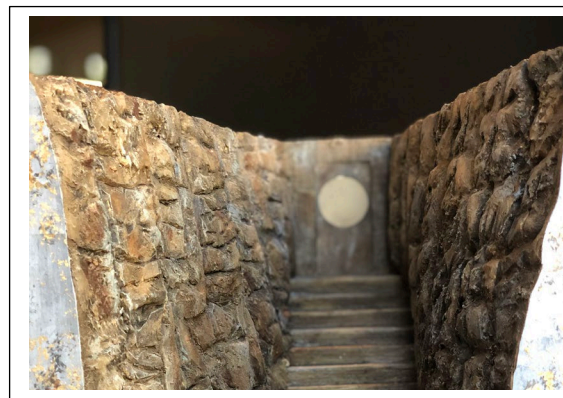
The set designer is keen to use a standard element/type if this can keep the pricing down.

Under all circumstances the surface itself must not exceed 3 kg/square meter.



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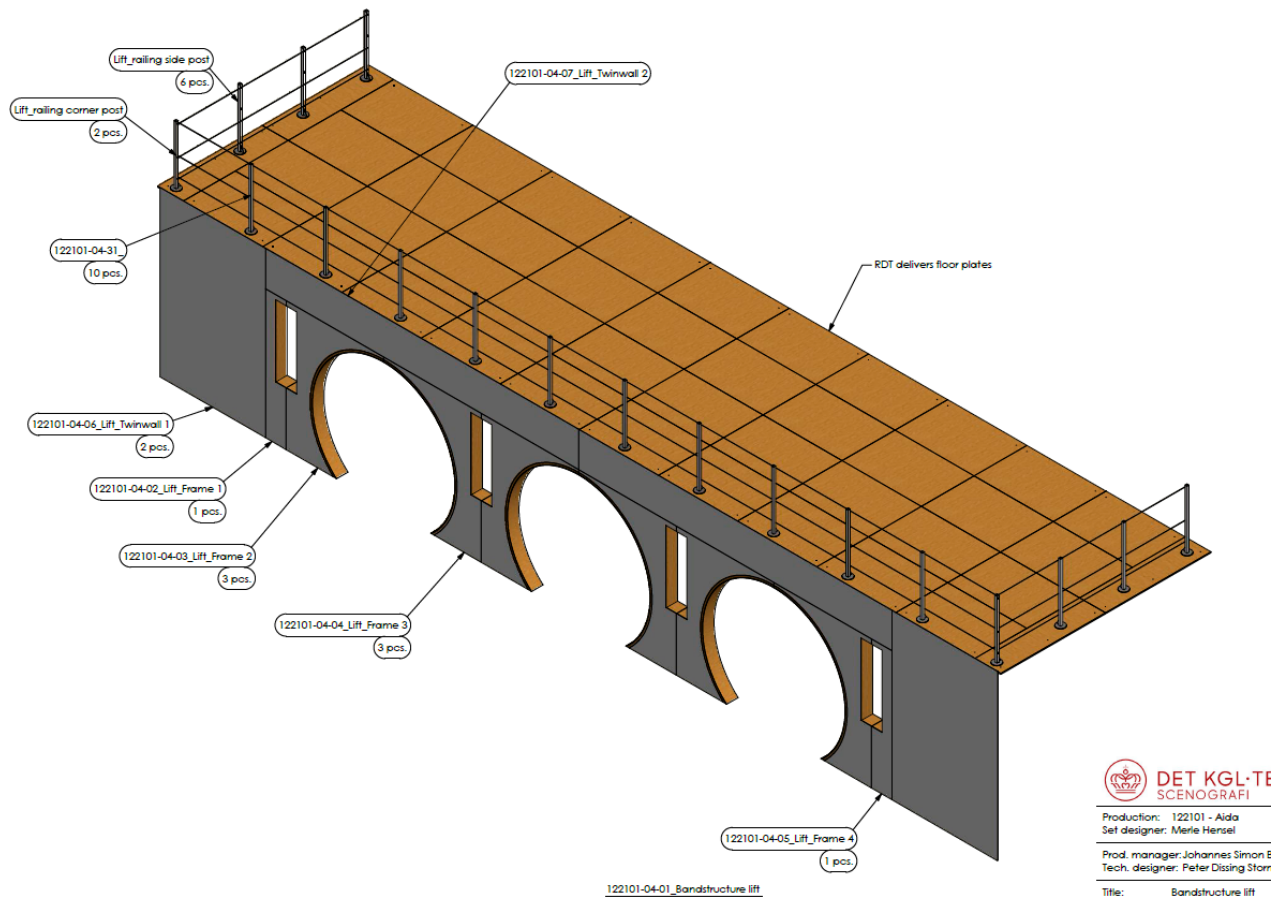
Aida

Drawing references

122101-03-100_01_Backwall total
122101-03-101_01_Backwall KS + DS
122101-03-104_01_KS Tower
122101-03-105_01_DS Tower
122101-03-106_01_KS + DS Slith
122101-03-107_01_Stair wagon total
122101-03-108_01_Stair wagon Front
122101-03-109_01_Stair wagon Front_Wagon
122101-03-110_01_Stair wagon Front_Chassis
122101-03-111_01_Stair wagon Front_Wooden cassettes
122101-03-112_01_Stair wagon Back
122101-03-113_01_Stair wagon Back_wagon
122101-03-114_01_Stair wagon Back_chassis
122101-03-115_01_Stair wagon Back_wooden cassettes
122101-03-116_01_Rockwall front
122101-03-117_01_Rockwall Top
122101-03-118_01_Stair Backwall + railing



10. 122101-04 BANDSTRUCTURE



General Description

Positioned on elevator 3, cladding for the interior elevator front.

Plywood frames with twin wall polycarbonate cladding – mounted with Velcro/build onto elevator system.

Boards of plywood are used to create depth here.

Railing is made with 18 single balusters, connected with a wire covered in black.

As the railing must be established on stage during the show, it must be easy to bring the balusters in position and fix them to the floor.

Structure

Mainly made from PC twin wall sheets and frames from plywood.



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Function Description

The band structure will be hidden in the stage floor.

During the show the structure will be lifted to a position + 3.10 meters and brought back to stage floor level.

Surface

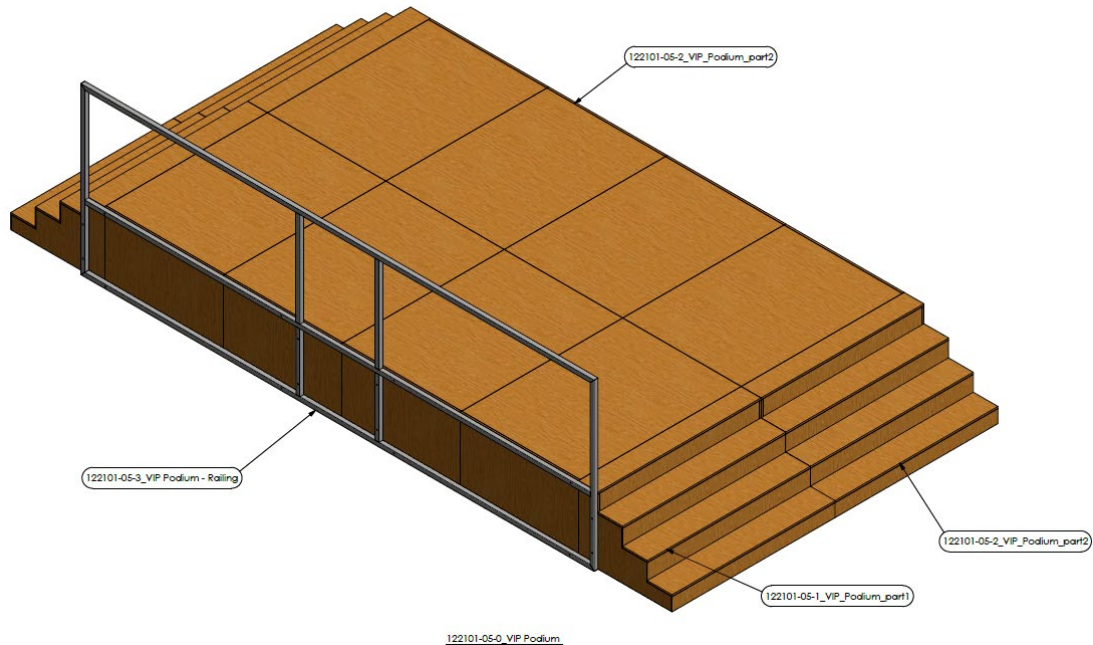
See surface description in section 6.

Drawing references

122101-04-100_01_Bandstructure lift



11. 122101-05 VIP PODIUM



General Description

The platform is made in two parts to be connected on stage during play.

This is a necessary action to be able to bring the parts on stage.

The platform is mounted on RDT wagons.

Steel railing.

Structure

Plywood frames

Materials

- Plywood
- Steel profiles

Function Description

Must be able to turn and move, movement ensured by castors and a motor system. (Provided by RDT)

Surface

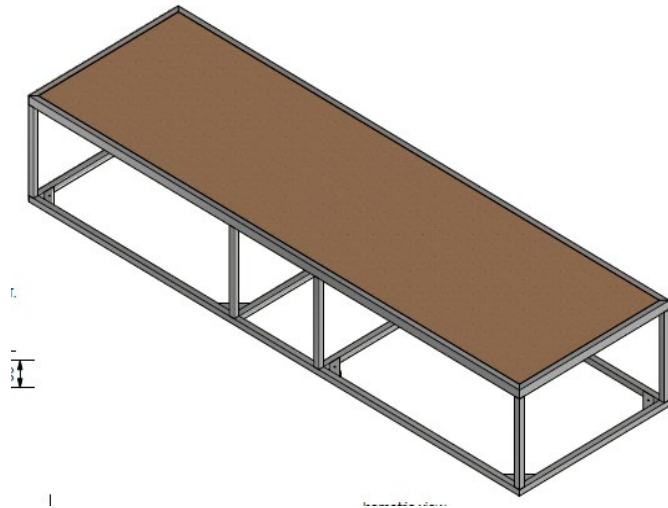
Painted black

Drawing references

122101-05-100_01_VIP_Podium



12. 122101-10 TABLE



General Description

Table with wheels, to be moved into the stage during the show, and put in different positions.

Structure

The table structure is made from aluminum profiles, and tabletop from birch plywood.

Materials

Aluminum profiles

18 mm. Birch plywood

Wheels delivered by RDT

Function Description

Must be sturdy as three singers will be performing on top of it.

Surface

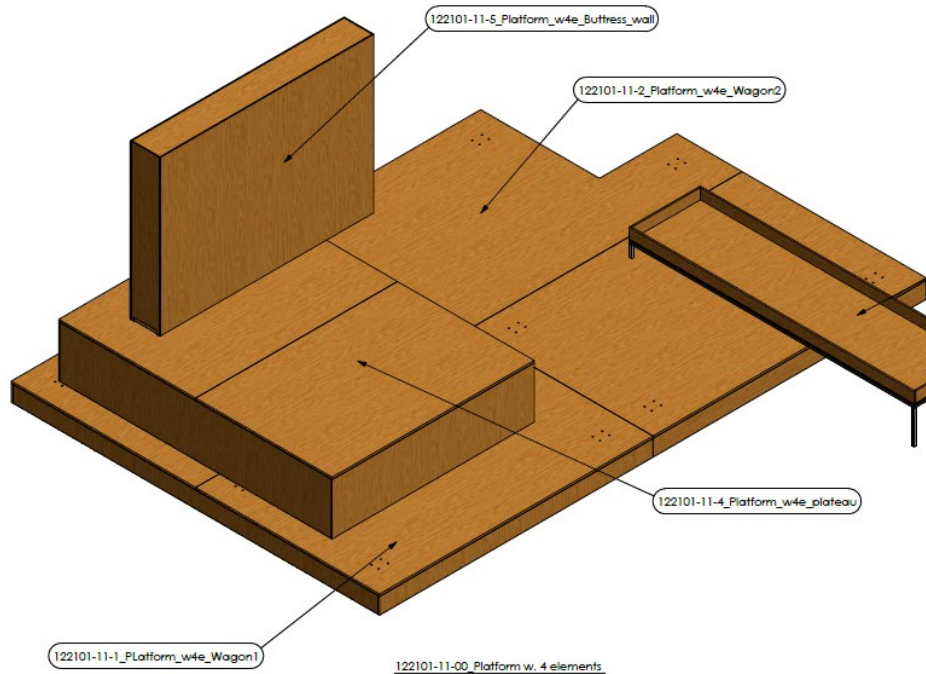
Both aluminum profiles and both sides of the tabletop must be painted black.

Drawing references

122101-10-100_01_Table



13. 122101-11 PLATFORM WITH ELEMENTS



General Description

”Concrete” platforms on wheels.

Made from four single elements that are fixed together with bolts or other fittings as defined in drawings.

Structure

This element is made purely from wood.

Plywood spants and sheets.

Materials

18 mm and 15 mm birch plywood

Wheels will be delivered by RDT.

Function Description

Must carry a max of six people on it, standing or sitting.



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Surface

Same surface as back and sidewall, described in section 6.

Drawing references

122101-11-100_01_Platform w. 4 elements