

Appendix 1.

Project Description and Specifications

For the acquisition of set pieces for:

Begærets mysterier (The Mysteries of Desire)

Reference no.: 122206



April 2021



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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

The opera premieres on August 18, 2021 during World Pride and Euro Games in Copenhagen.

1.2 Artistic Team

Scenic Design	Didzis Jaunzem
Costume Design	Henrik Vibskov
Director	Krystian Lada
Lightning design	Clement Irbil

1.3 Story Line

‘Begærets mysterier’ or ‘The Mysteries of Desire, a queer and quirky opera thriller’

The stage is set in a motel where strangers meet, as Mr. D invites both his wife, lover, son, and dominatrix. Everything takes place from late afternoon into the night. An investigation of death and desire and reflection on what may arise when patriarchy ends.

Music: recognizable selections from operas by Verdi, Bellini, Puccini, Wagner deconstructed with Weil, Glass and Freddy Mercury.

Video production with recorded monologues included.

1.4 Summary – Scenic design

Everything takes place in a motel, with a restaurant/diner interior, a tilted room and reception exterior. As a kind of sculptural replica of the original motel¹.

Created with units designed to rotate and connect, creating both the restaurant, reception, room, and reception exterior.

1.5 Set Pieces

122206 -01	Wagon
122206 -02	Walls
122206 -05	Furniture
122206-06	Motel Sign

¹ Based at Wittrup Motel, Denmark's first motel – located in Albertslund. Still in operation and with 50's décor.



2. WORK PROCESS

2.1 Start-up meeting

A start up meeting with the production manager from RDT, covering the review of the 3D model, commenting in detail the specific items in the offer.

2.2 Model & drawings

The 3D 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 construction and surfaces.

If RDT / the production manager or representatives after supervision meetings are concerned about the 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 at the Vælg et element., 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 “Begærets mysterier (The Mysteries of Desire)” to RDT will take place: no later than

**08.30 AM, the 2nd of August 2021; at The Danish Royal Theatre
Gamle Scene, August Bournonvilles 2-8, 1017 Copenhagen K**

The supplier must be present upon receipt of transport.

The assembly period is 3 days, starting August 2nd and ending August 4th.

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 of the RDT: OLD STAGE consists of 9 tech crew members and a Chief Carpenter.

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 quality BB/BB if visible, or BB/CP if covered.

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.



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Labelling: all sets pieces labelled with set piece number e.g. '111163.02.16' 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.

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.

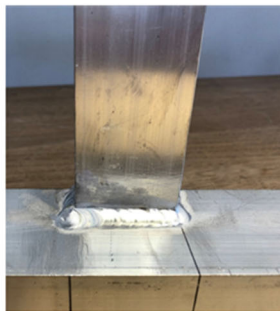
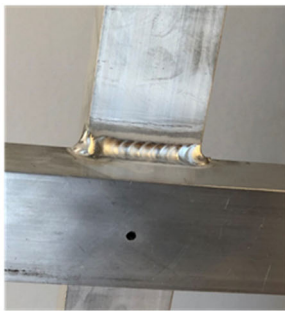
Welding according to DS/EN/ ISO standards equivalent:

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

3.5 Aluminium frame construction and welding

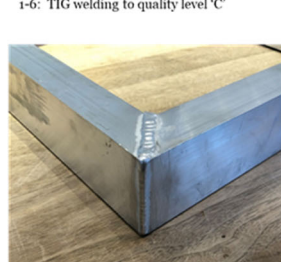
All aluminium frames welded according to DS/EN/ISO 10042 equivalent to quality level C.

Welding quality and details as shown below.



1-6: TIG welding to quality level 'C'

7-8: Surface grinded for smooth mounting of twin wall



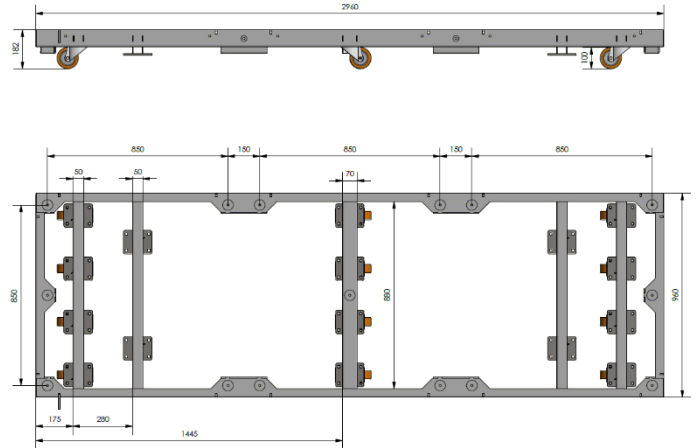
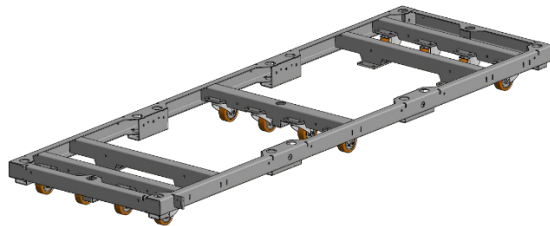


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4. MATERIEL DELIVERIES BY RDT

DK†
Multivogn



The Multi wagon is 1 x 3 m when mounted together. When assembled with turtle wheels and with an 18 mm plywood on top, the total height is 300 mm.

RDT will deliver 16 pcs. with wheels, but without the 18 m plywood.

 350 - 1000 kg

**Black ECONOMY
polyurethane turtles**



mm

mm

mm

mm

mm

kg

mm

mm

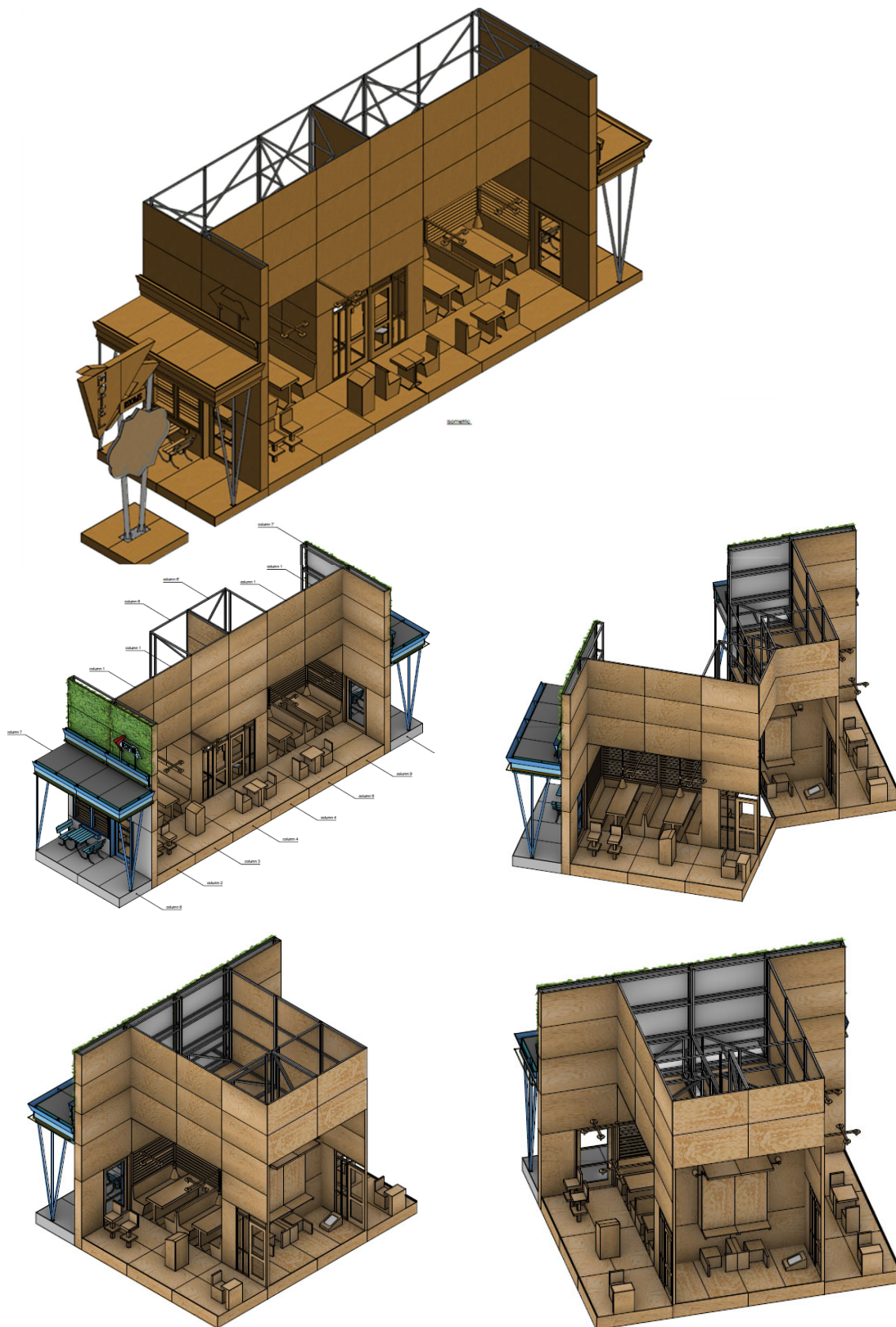
TLGPTS100KUP3L/160	300x300x300	100x40	160	135x105	105x80	600	456	11
TLGPTS100KUP3/164	300x300x300	100x40	164	135x105	105x80	600	456	11
TSLGPTS100KUP3/166	300x300x300	100x40	166	135x105	105x80	1000	456	11
TSLGPTS100KUP3S/178	300x300x300	100x40	178	135x105	105x80	1000	456	11
TSLGPTS100KUP3S/185	300x300x300	100x40	185	135x105	105x80	1000	456	11

* with silver rim

TURTLE WHEELS: We will deliver all the wheels needed for this production.



5 SET AND STAGE PLAN AND MODEL PHOTOS

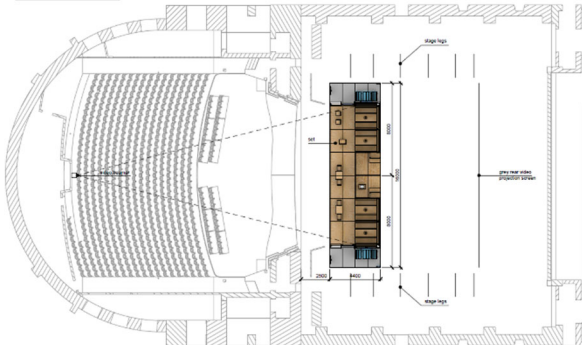




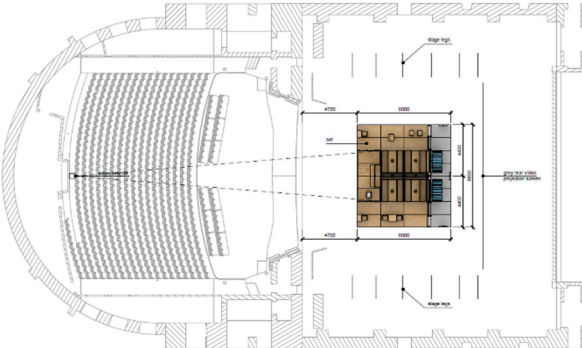
Appendix 1. Project Description and Specifications

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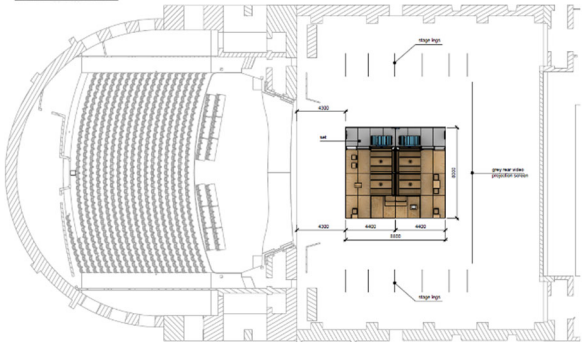
THEATER PLAN - SET POSITION 1



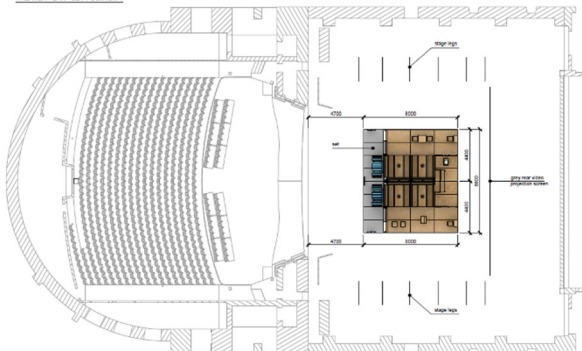
THEATER PLAN - SET POSITION 2



THEATER PLAN - SET POSITION 3

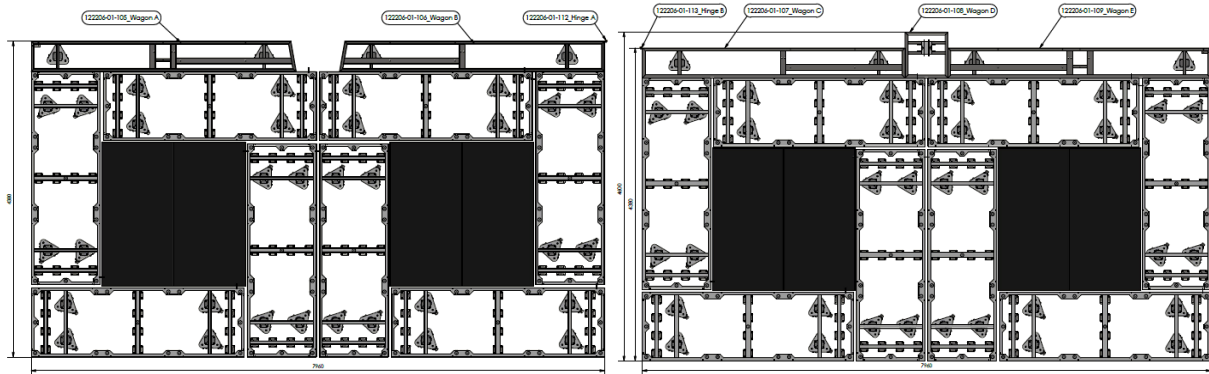


THEATER PLAN - SET POSITION 4





6. 122206-01 WAGON



Wagon SR

SR = stage right

Wagon SL

SL = stage left

General Description

Due to repertoire the set is divided in two parts; wagon SR and SL, and are transported on two wagon systems. The two parts are joined together by custom-made hinges at the top and the bottom, the one at the bottom is mounted on the wagons and makes it possible to “fold” the two wagon parts from a rectangular, into a cubic shape.

The wagons consist of:

1. *Multi wagons, 8 pcs (RDT delivery)*
2. *Podiums, 4 pcs (RDT delivery)*
3. **Custom made wagons A-E, 2-3 pcs, (bidder delivery)**
4. **Custom made hinges, (bidder delivery)**

The custom-made wagons are added to the backside of the assembled wagon and are produced in the same height as the Multi wagons = 282 mm!

The custom-made wagons have turtle wheels mounted, Height = 164 mm, Load capacity = 600 kg DWD.

Wagon A, B, C and E, are all alike, but different.

Wagon D is special because it is not a wagon, but a pivot point for our pneumatic cylinder. The Pneumatic cylinder and the and system are delivered by RDT, but the frame is to build.

Construction

All are steel constructions and are welded together.

The wagons are bolted together.



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There are pop-nuts and additional steel plates added in the frames, allowing the walls to be mounted tight to the wagons.

The hinges are produced custom-made and thereafter bolted to wagon B and C.

Materials

They are made of profile sizes:

80 x 40 x 3 mm

70 x 40 x 3 mm

40 x 40 x 3 mm

9 mm steel plate for the mounting of the turtle wheels.

5 mm steel plate for mounting of the walls.

Function Description

To prolong a wagon that consist of stand elements.

To create the necessary space to the Pivot point, pneumatic cylinder.

Surface

The steel is degreased and are spray painted matte black.

Drawing references

Drawing no.:

122206-01-101_01 Wagon SR

122206-01-102_01 Wagon SL

122206-01-103_01 Stage Wagons SR

122206-01-104_01 Stage Wagons SL

122206-01-105_01 Wagon A

122206-01-106_01 Wagon B

122206-01-107_01 Wagon C

122206-01-108_01 Wagon D

122206-01-109_01 Wagon E

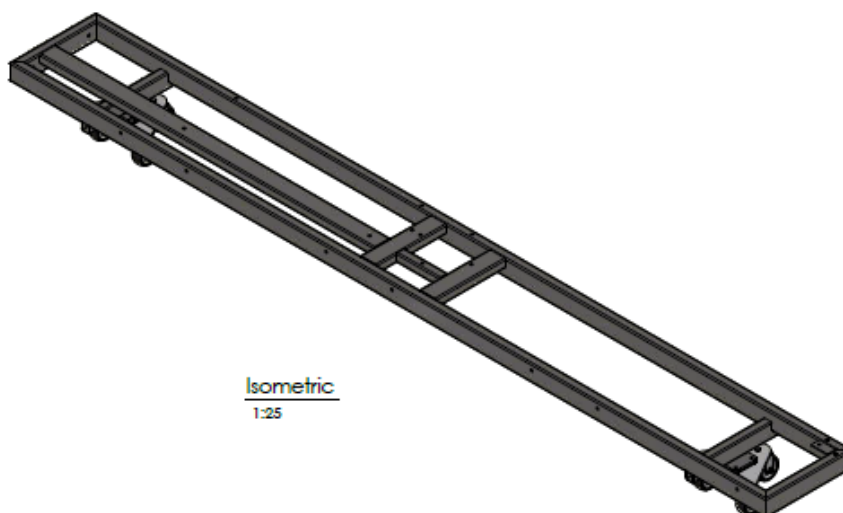
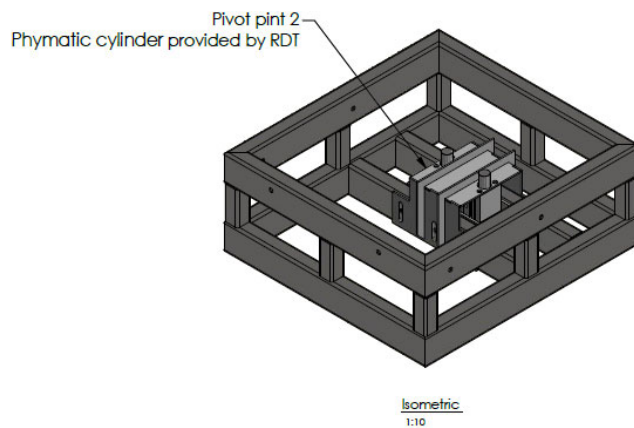
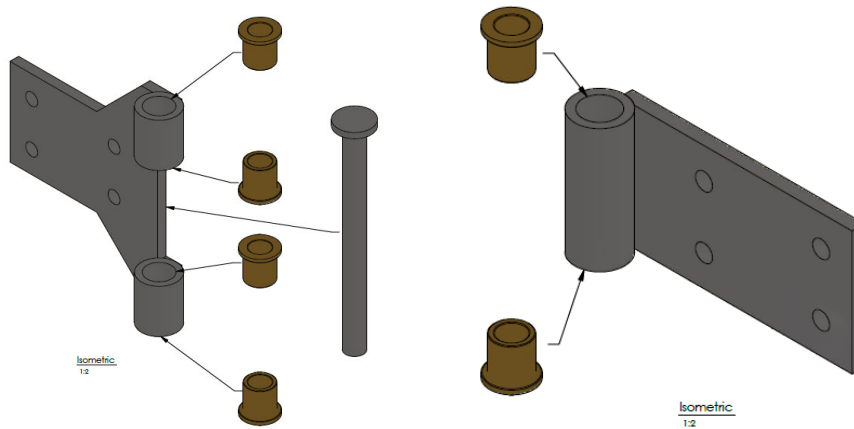
122206-01-112_01 Wagon - Hinge A

122206-01-113_01 Wagon - Hinge B



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7. 122206-01 COVER (WAGON) AND ATTACHMENT PLATES

General Description

To hide all the bottomplates and make the joint between floor and walls as invisible as possible, the cover of the wagon base and the flooring are divided into two layers.

NB! Very important that samples of the PINE PLYWOOD are approved, before everything is ordered.

Construction

The bottomplates are screwed into the wagons and podiums.

On top of the bottomplates, the attachment plate A and B are screwed tight and precise.

After the two steps, finally the top plates can be mounted – screwed with tiny brass-colour screws.

The skirt is mounted in the end with screws as well.

Materials

Bottomplates are made of 18 mm birch plywood.

Top plates are made of 6 mm PINE-PLYWOOD, as everything else you see inside the motel.

Skirt is made of the same PINE-PLYWOOD but are 21 mm in thickness.

Function Description

The bottomplates cover the wagon and work as a stabilizing unit, also obtaining the vertical loads.

When screwed into the wagons they help the base to become one strong unit.

The top plate is for show only, to create the same surface as the on the walls and furniture.

The skirt is to hide the wagons and to mount some small LED's to light on the singers (LED is not included in this tender).



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The attachment plates are the fixtures that makes it possible to bolt the walls tight together with the floor and are made as invisible as possible.

Surface



PINE PLYWOOD – Not birch.

It is super important that there is structure in the surface of the plywood, and very important to sort out all plywood boards with repaired surfaces!

Look at picture to the left.

NB! Remember to sort the plywood in colour to avoid obvious differences, like the two samples in the picture above. There is a harmony in the colour of the fibres of the boards, like in the picture to the right:

FINISH is two times lacquer, matte, with an intermediate grinding in the process.

Drawing references

Drawing no.:

122206-01-110_01 Wagon - Bottom plates

122206-01-111_01 Wagon - Top plates



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8. 122206-02 WALLS

General Description

The walls are built as aluminium construction and the cladded with pine plywood, which are divided in a grid. The large surfaces are used for projection of a pre-made video, both in the room and the diner.

The walls define an indoor area in the Diner and an outdoor area under the Canopy, which can be accessed though doors installed in the walls. The Canopy will be supported by three sets of columns, since the building are spilt in two during the show, the middle set of columns are split up as well.

The different areas will come to show when the “building” is turned over the pivot point.

The walls are attempted to be modalized and kept in pieces that quickly can be assembled on stage.

The outdoor area has to be painted as the original motel.

Construction

The inner frames consist mostly of 40x40x2mm profiles, with a few exceptions the profiles are 80x40x2mm in order to strength and space for bolting to the attachment plates.

All alu is welded together. All the wall elements are bolted together.



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In the bottom profile holes are drilled for the threaded profiles in the floor, therefore accuracy is important.

The construction of the windows, doors and canopy are thoroughly described in the drawings.

The supports for the Canopy are steel pipes with a top and bottom plate, which can be bolted to the construction.

Materials

Alu-profiles: 40 x 40 x 2 mm and 80 x 40 x 20 mm.

Ø 70 x 3 steel pipe profiles.

6 mm steel plates

3 mm steel for the attachment plates.

Pine plywood 6 mm.

Pine Plywood 18 mm.

Wooden strips VAR dimension.

4 mm Polycarbonate

Pant

Function Description

Defining the indoor and outdoor space!

Surface

There are two different surfaces:

1. Indoor: FINISH is two times lacquer, matte, with an intermediate grinding in the process.
2. Outdoor: Painter as the original motel

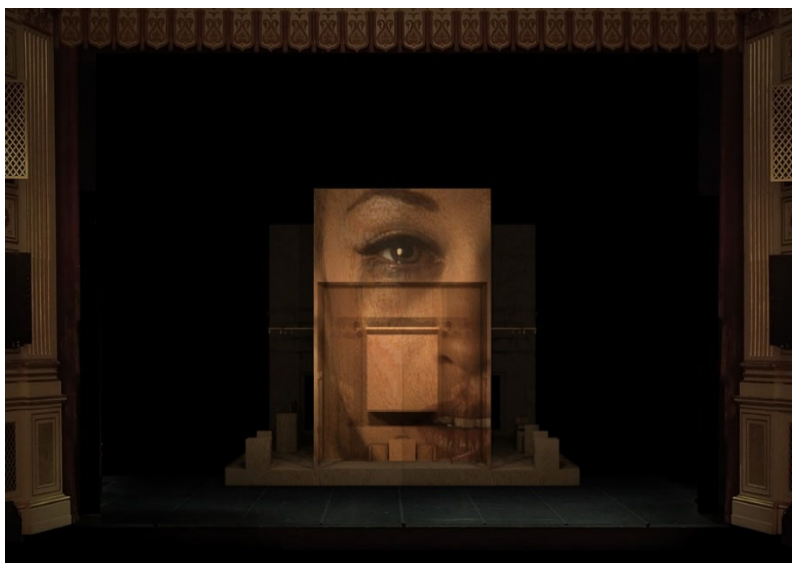
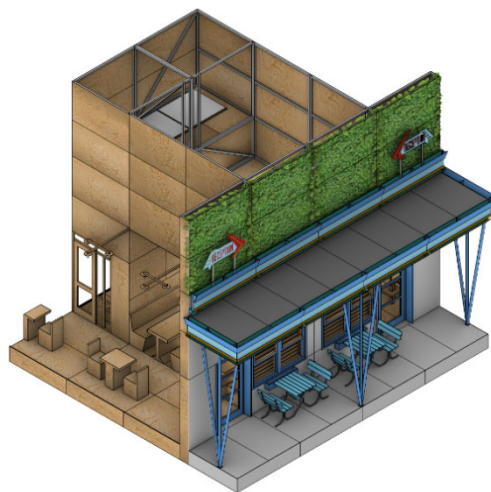




Drawing references

Overview all

122206-02-101_01 Walls SR
122206-02-102_01 Walls SL
122206-02-103_01 Wall A
122206-02-104_01 Wall B
122206-02-105_01 Wall C
122206-02-106_01 Wall D
122206-02-107_01 Wall E
122206-02-108_01 Wall F
122206-02-109_01 Wall G
122206-02-110_01 Wall H
122206-02-111_01 Wall I
122206-02-112_01 Wall J
122206-02-113_01 Wall K
122206-02-114_01 Wall L
122206-02-115_01 Wall M
122206-02-116_01 Walls - Column A
122206-02-117_01 Walls - Column B
122206-02-118_01 Walls - Attachmentplate A
122206-02-119_01 Walls - Attachmentplate B

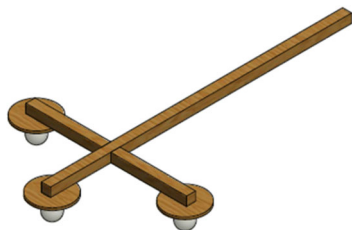


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9. 122206-05 FURNITURE





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General Description

There is a lot furniture inside and outside of the diner and they have a common appearance of simplicity and surface: Cubic and pine plywood.

The drawings are set up to CNC, but the method is optional.

The TV in the bedroom has a diffused Polycarbonate(PC)-screen and the exterior benches are made of steel and wooden boards, otherwise the rest of the furniture and lamps are made of the same pine plywood.

Construction

The build-up is simplified to a minimum. Typically, the furniture consists of 18 mm plywood stringers and a 6- or 12-mm cover in pine plywood.

Cross bracings in different dimensions are used to stabilise the elements.

The lamps need to have cables and light fixtures installed, which has not been drawn.

They are thought as handmade elements with a finish in the same style as rest of the furniture, but we are open for other suggestions.

Materials

18 mm birch plywood.

6-, 12- and 18 mm pine plywood.

VAR dimensions of wood for cross bracings.

30 x 2 mm steel pipe.

110 x 30 mm original wood boards

Paint, the benches.

Lacquer, matte, everything else.

Function Description

To sit and stand on.

Surface

FINISH is two times lacquer, matte, with an intermediate grinding in the process.



Drawing references

Overview all

122206-05-100_Furniture

122206-05-101_Furniture – Outdoor Bench

122206-05-102_Furniture – Indoor bench

122206-05-103_Furniture – Long Table

122206-05-104_Furniture – High Chair

122206-05-105_Furniture – Rostrum

122206-05-106_Furniture – Low Chair

122206-05-107_Furniture – Short Table

122206-05-108_Furniture – TV

122206-05-109_Furniture – Half Table

122206-05-110_01 Furniture - Lamp 1

122206-05-111_01 Furniture - Lamp 2

122206-05-112_01 Furniture - Lamp 3





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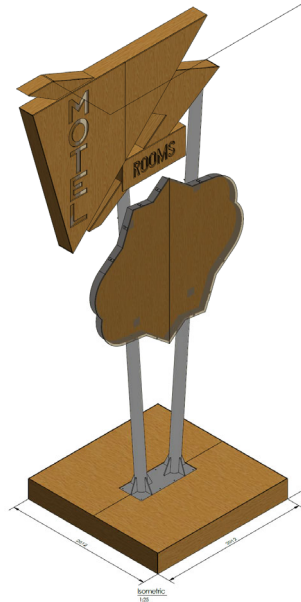
Begærets mysterier (The Mysteries of Desire)





122206-06

MOTEL SIGN



General Description

The Motel Sign is an iconic element for the Motel in real life and has a fairly original appearance, in many colours and with build-in lights.

Our motel sign looks the same and it is built on a steel frame wagon, allowing the technicians to trolley it in and out of stage when needed.

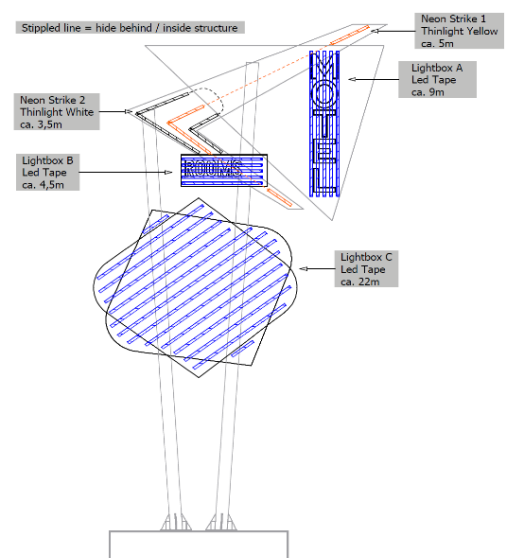
We have prepared for the light department the light boxes that are detachable, so they can install all the LED on the ground.

The letters in the upper sign are cut out by CNC and are covered on the inside with a clear PC, where the lower sign is an “open” light box with a fully cover of a clear PC. The PC are covered with a coloured and difused foil.

The Motel sign is divided in 4 parts, the wagon, the columns and the lower + upper sign.

Construction

The Wagon base are made of the steel as a frame with cross bracings and wheelbases for the turtle wheels. The wheels are the same as the ones used for wagons in chapter 6, provided by RDT.





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The frame is clad with 18 mm plywood on top and on the sides, then painted.

The columns are made of Aluminum pipes and are welded together as one unit, in the angle that fits the lower and upper sign. They are welded to a baseplate and the joint are enforced eight supports, fully welded to ensure a strong hold.

The columns are bolted to the steel frame in the wagon.

The lower sign is a big element and at the maximum size in terms of transportation.

It consists of plywood backwall with an outer steel frame, which has suitable holes for the brackets of the front cover.

The front cover consists of 6 mm PC with foil mounted and brackets for the final assembly with the steel frame.

The upper sign is divided in two parts in terms of handling and are constructed with an alu-frame system and CNC cut covers in 12 mm plywood.

Materials

12 and 18 mm Plywood

80x40x3 mm steel profiles

40x40x3 mm steel profiles

70x40x3 mm steel profiles

9 mm steel plate

5 mm steel plate

3 mm steel plate

M10 threads

140x4 mm aluminum pipes

10 mm alu plates

Function Description

It has to be stabile enough to move around manually with lights turned on.

Surface

PC in the lower sign is covered with foil. PC in the upper sign is clear.

All plywood and visible alu is painted.



Drawing references

Overview all

122206-06-100_01 Motel Sign

122206-06-101_01 Motel Sign – Wagon

122206-06-102_01 Motel Sign – Column

122206-06-103_01 Motel Sign - Lower Sign

122206-06-104_01 Motel Sign - Upper Sign

