

Opera on the lake in 2026: *La traviata*

Questions & answers about the stage

Mirror wall

How many shards does the mirror have and how big are they?

The central wall at the rear of the stage set is made up of 86 shards and splinters. The largest pieces are over twelve metres long and up to two and a half metres wide, while the smallest are around 40 centimetres long and 20 centimetres wide. Together they represent a shattered glass mirror. The wall has a total area of 700 square metres and is the central element of the stage set.

What are the shards made of?

The mirror's shards are made of CNC-machined wooden panels with printed fabric stuck to them. The visible edges are covered by green-lacquered multi-wall sheets.

For the exact and efficient bonding of the fabric, a special machine was developed with the involvement of Bregenz Festival technicians. The machine made it possible to apply the adhesive evenly across several square metres of panels. This two-phase adhesive was then activated using radiant heaters built into the machine. Then, on the lake stage, the finished elements were mounted on a steel structure.

Is any technology integrated in the mirror's shards?

Yes, more than half of the shards are manoeuvrable, which means that 390 of the total 700 square metres of the mirror wall can be moved. The splintered mirror also functions as an enormous screen for film clips showing scenes from Violetta's life. In addition, 29 loudspeakers have been built into the mirror wall invisibly, to provide the characteristic sound on the lake stage. Recesses were cut into the shards' wooden substructure specifically for this purpose and then covered with metal grids before the shard surface was entirely overlaid with the printed fabric.

Can any parts of the mirror wall be walked on?

Yes, in the mirror wall there are two hinged areas for performers. The larger of them is located on the Bregenz side at a height of around 8 metres and is around 60 square metres in size. The second, smaller performance area is located on the Lindau side at a height of around twelve metres and measures around 15 square metres. Both performance surfaces are moved hydraulically by a cylinder.

Implosion

For an effect called the “implosion”, twelve splinters in the centre of the mirror wall are folded inwards. They are made up of 24 individually movable segments in all, and each of these segments has a joint that is operated by a hydraulic cylinder.

The complete opening of the implosion requires precisely coordinated interaction between all the elements. Every one of the splitter segments must be moved in a precisely defined sequence and at a precisely defined speed.

Mirror floor

The mirror floor is the main performance area. It’s a steel and timber construction with an area of 580 square metres. The surface has been treated and painted to imitate the appearance of splinters of a mirror. The edges contain light elements.

Ring

The red ring in the centre of the stage floor is eight metres in diameter and constructed of steel and timber. It can be raised up vertically using a hydraulic cylinder. Built into the ring are 96 LED spotlights as well as pipes for fresh water. During the performance, the water is finely aerated by nozzles into spray which is visible as mist.

Water basin

How big is the water basin and how much water does it hold?

The water basin has an area of approx. 1,400 square metres and holds around 400 cubic metres of filtered lake water. With a depth of around 30 centimetres, it’s one of the main performance areas of the lake stage – and has a number of special effects in store for spectators.

How is the basin constructed?

The basin is a wooden structure laid with pond liner. Before and after the rehearsal and performance periods, what are called “lake windows” are opened all over the basin in the interests of nature conservation, to facilitate the subsurface exchange of weather conditions and allow light to enter.

To ensure that the performers have a secure footing during the performance, the water basin has been surfaced with black poly turf. A total of twelve rolls of turf carpet with a total weight of 2.7 tonnes have been laid on the floor of the water basin.

How does water transfer work in the basin? What happens to the lake water?

The basin contains filtered lake water, which is fed in by two underwater pumps through hydrocyclone filters. No additives are put into the water in the basin. The entire volume of water in the basin is replaced daily and purified using backwash filters before being fed back into Lake Constance.

Any residues from preliminary and final purification, from the cleaning of the basin and backwashing through filters are not discharged into Lake Constance, but channelled into the local sewage system. The water quality is regularly checked by an accredited laboratory as part of a hygiene and monitoring plan.

How many companies are involved in creating the set?

A total of 36 external companies are involved in constructing the stage set. The static mirror wall is being made by Biedenkapp Stahlbau GmbH (Hohenems, Austria) and i+R Holzbau GmbH. REISCH Maschinenbau GmbH (Frastanz, Austria) is responsible for the movable elements, while Bereuter Holding AG (Volketswil, Switzerland) is building the platform for performers on the Bregenz side of the mirror wall.

Companies involved in construction of the stage

Correct as of 2 April 2026 (subject to alteration)

Construction firms (principal contractors)	
Bereuter Totalunternehmung <i>folding-out performance platform on Bregenz side, ring</i>	Effretikon (CH)
Biedenkapp Stahlbau GmbH <i>mirror wall, mirror floor</i>	Dornbirn (A)
Blitzschutztechnik Krottenhammer <i>monitoring of the lightning protection system</i>	Lauterach (A)
Edelbunt <i>dry construction and surface treatment of mirror floor</i>	Telfs (A)
Handelsagentur Mathias Welte e.U. <i>water basin</i>	Hohenems (A)
i+R Gruppe Holzbau GmbH <i>water basin</i>	Lauterach (A)
Kiechel & Hagleitner GmbH <i>monitoring of electrical equipment</i>	Bregenz (A)
Kritzinger GmbH <i>carpentry work infrastructure</i>	Lauterach (A)
Reisch Maschinenbau GmbH <i>implosion, folding-out performance platform on Lindau side, sphere</i>	Frastanz (A)

Unican GmbH <i>flowers – technology and control</i>	Neuss (D)
Subcontractors	
Agrargemeinschaft Altgemeinde Altenstadt <i>foundations for lighting and sound technology towers</i>	Feldkirch (A)
Automa GmbH <i>folding-out performance platform on Bregenz side, ring</i>	Therwil (CH)
Budai Montagen GmbH <i>folding-out performance platform on Bregenz side, ring</i>	Oberriet (CH)
Eurocert GmbH <i>reception engineer for implosion, folding-out performance platform on Lindau side</i>	Dornbirn (A)
Lener & Schmid Ingenieure ZT-GmbH <i>statics (detail/implementation) for implosion, folding-out performance platform on Lindau side, sphere</i>	Göfis (A)
Ludwig Steurer Maschinen und Seilbahnenbau GmbH & Co KG <i>foundations for lighting and sound technology towers</i>	Doren (A)
Rusch Spengler und Dachdecker GmbH <i>leak-proofing of water basin</i>	Lauterach (A)
Salzmann Hafengebäude GmbH <i>pile driving</i>	Fußach (A)

Schlossereiservice Stark

Mäder (A)

metalworking infrastructure

Senn Konstruktionswerkstätte AG <i>folding-out performance platform on Bregenz side, ring</i>	Therwil (CH)
STB Steuerungstechnik Beck GmbH <i>control technology for implosion, folding-out performance platform on Lindau side</i>	Andelsbuch (A)
Wüst Metallbau AG <i>folding-out performance platform on Bregenz side, ring</i>	Altstätten (CH)
Artistic realisation and scenery building	
Bregenzner Festspiele GmbH <i>realisation of flowers</i>	Bregenz (A)
Typico GmbH <i>surfacing for mirror wall and mirror floor</i>	Lochau (A)
Polsterei Sporeni <i>adhesive bonding for mirror shard surfaces</i>	Dornbirn (A)
Statics and planning	
Exent AG	Hüttwilen (CH)
Gaisberger ZT GmbH	Dornbirn (A)
Kaplina Engineering GmbH & Co KG	Bludenz (A)
merz kley partner GmbH	Dornbirn (A)

Project management, planning and bidding process

Bregenzner Festspiele GmbH	Bregenz (A)
ISSM GmbH	Hohenweiler (A)
Rudhardt Gasser Pfefferkorn – Ziviltechniker	Bregenz (A)
Building site coordination	
Huber ZT GmbH	Lustenau (A)
SafeSide Consulting GmbH	Bregenz (A)
3D visualisation	
Simon Wimmer Screenpix	Altach (A)
Special effects	
Bregenzner Festspiele GmbH	Bregenz (A)
Industrial divers	
Jessica Vogel	Lustenau (A)
Laguna Lochau Tauchsport GmbH	Lochau (A)
Cranes	
Liebherr Österreich Vertriebs- und Service GmbH	Rankweil (A)