

Access Statement
Camera Obscura and World of Illusions
(30th June 2016)

This is our first access statement – feedback and constructive criticism would be most welcome.



Property Address:

Camera Obscura and World of Illusions
549 Castlehill,
Edinburgh
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United Kingdom

Pre-Arrival

Phone and e-mail

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E-mail: info@camera-obscura.co.uk

Information available from our website: <http://www.camera-obscura.co.uk>

Information in large print can be provided upon request.

Website font can be enlarged

This Access Statement is available on-line.

Information about accessible public transport

Accessibility of Edinburgh bus and tram stops can be found at:

Bus - <http://lothianbuses.com/>

Tram - <http://edinburghtrams.com/>

The nearest bus stops to the Camera Obscura are

Lady Stair's Close: CS1, MAC, ET1, WHT

The Hub: CS1, MAC, ET1, WHT

Victoria Street: 23, 27, 41, 42, 67, CS1, MAC

The nearest train station is Waverley Bridge. Taxis are available at the station to take customers to desired location.

Edinburgh black taxis are wheelchair accessible and provide hearing loop. Taxis work for different companies. The largest are City Cabs

(<http://www.citycabs.co.uk/> +44 131 228 1211) and ComCab (<http://www.comcab-edinburgh.co.uk/> +44 131 272 8000).

Arrival and Parking

Parking is not allowed on Castlehill nor Ramsay Lane at any time except for deliveries. Taxis and cars with passengers needing mobility assistance are allowed to drop passengers off on Castlehill. There can be seasonal closures such as at Temporary Road Traffic Order which closes Castlehill to traffic between 10.30am and 4.30pm, usually from May until September. Also during the Edinburgh Military Tattoo, which takes place at the Castle every August

Castlehill is closed to vehicles from 5.30pm onwards. There are sometimes short term closures for individual functions during the rest of the year. Please be aware that Castlehill is one of the busiest pedestrian areas in Edinburgh, particularly during summer.

Disabled parking is available on Johnston Terrace opposite the Hub, around the corner from Castlehill. Blue Badges need to be displayed. The nearest public parking are pay and display along Johnston Terrace and in the Grassmarket. Both are down the hill from the Camera Obscura. The nearest public car park is Edinburgh Castle Terrace, a ten minute walk downhill from the Camera Obscura.

All public car parking spaces can be found at

http://en.parkopedia.co.uk/parking/camera_obscura_%26_world_of_illusions_castlehill_edinburgh_united_kingdom/?ac=1&country=UK&lat=55.948948&lng=-3.19569999999988

Please contact the Camera Obscura if you require further information or clarification.

All measurements are in cm unless otherwise stated. All measurements are taken at the narrowest point.

Entrance and Reception

The Camera Obscura has four entrances, two that lead into the attraction, and two that lead into the shop.

- The Courtyard Entrance.



- There is a step (8.5 cm) to gain access into the courtyard, and a another 2 steps (17 cm and 15 cm) to gain access into the attraction reception itself. The first door is 109 cm wide and permanently open.
- There is a glass door that opens both ways. It is 83 cm wide.
- Castlehill Entrance.



- There are 5 steps to the entrance into the attraction reception with two doors at right angles. The largest step is 20cm. The doors are 112 cm wide and permanently open.
- There is a glass door that opens outwards. This door is heavy and requires a strong push. It is 93 cm wide.

- Shop entrance via Courtyard



- There is one step (8.5 cm) into the courtyard, and a descent of 3 steps (each step approximately 19 cm). There is one step up into the shop 18 cm high.
- There is a permanently open doorway 99 cm wide.
- There is a glass door that opens either way 84 cm wide.
- Shop entrance via Ramsey Lane
 - This entrance is on a slope.
 - There are two steps up into the shop. The first step is 16 cm high in the middle. The slope of Ramsay Lane means that the step height from the ground varies.
 - The second step is 14 cm.
 - The entrance door is permanently open. It is 96 cm wide.

The reception area is a large, open space. At busy times a moveable tensa barrier is placed 90 degree in front of the front desk to assist with queues. This can be moved upon request.



The front desk is at the far end. The desk is 100 cm high with staff on an elevated seat behind. Staff can easily move to the front of the desk if required.

Storage cupboards (100 by 48 cm) are available behind the desk for no charge. These do not lock, but the staff need to be asked before access is gained. A larger cupboard is also available next to the giant kaleidoscope. This can store items under 54 cm wide. This room is lockable and only staff have access.

Pushchair and wheelchair parking is available next to the giant kaleidoscope. It is 206 cm wide and can store several pushchairs and wheelchairs. This can fill up in the busy periods of summer and the school holidays.



For customers with hearing loss and who use a hearing aid: we have an induction loop both at the reception desk, and also in the Camera Obscura show on the sixth floor. For those without a hearing aid, we have transcripts of the show available at reception, or from your Camera Obscura Show Guide on the sixth floor.

Staff can be made aware of disabilities and will treat all such information with respect. All staff are knowledgeable about the building and exhibitions and can

answer specific questions, or contact another member of staff with further details or training. All information will be treated confidentially. The staff can place customers in a later time for the Camera Obscura show if additional time is needed to reach the top of the floor where the show takes place.

Access to Exhibitions

The Camera Obscura and World of Illusions is situated in two conjoined buildings. The oldest part of these structures dated from the reign of Charles II (1660-1685). The most recent additions to the building date from 1853. The building is listed and as such alterations to the exterior and structure are not permissible. The age and strength of the building, as well as its listed status, means that the Camera Obscura is not allowed to have a lift.

Walking stick seats are available for hire free of charge is requested. The Camera Obscura has three chairs available of different heights (94 cm, 87 cm and 81 cm).

Access to the exhibitions is via the main stairway.



There are 98 steps to the top of the structure. The steps are an average of 15 cm high. Due to being in use for over 400 years, some of the steps are slightly uneven.

There are six floors, with two flights of steps between each floor. These averages at 9 steps per flight. The stairway is 100 cm wide and there is a handrail on the right hand side, 95 cm from the ground.

Toilets

The toilets are located on the first floor. The gents is on the left and the ladies is on the right.

The ladies toilets are accessed through a door 84 cm wide. There is a short corridor before another door 82 cm wide with an area of 107 cm x 330 cm. There are four toilets. Each cubicle is 75 cm wide, with a special wide access toilet with a door 80 cm wide with an area of 110 x 165 cm. The toilet seat is 41 cm high. This toilet has its own hand basin, 72 cm high, and traditional hand dryer, 104 cm. All doors open inwards. They are situated in a communal area 425cm long and 110 cm wide at its narrowest point.

All hand basins are 78 cm from the floor. The hand dryers are Dyson airblades. One hand dryer is 82 cm high, the other is 92 cm high.

The gents toilets is accessed through a door 92 cm wide and down a corridor 182 cm long. The door at the end of this corridor is 79cm wide. The toilet room is 485cm long and 108 cm wide at its narrowest point. There are two cubicle toilets and three urinals. The cubicles are 63 cm wide. The toilet seats are 43 cm above the ground. The urinals are 63 cm above the ground. A smaller urinal at the far end is 54 cm high. There are two sinks, 78 cm above the ground, and two hand dryers, 84 cm and 101cm above the ground.

Baby changing facilities are provided in cubicles in both male and female toilets.

Second floor – Bewilderworld.

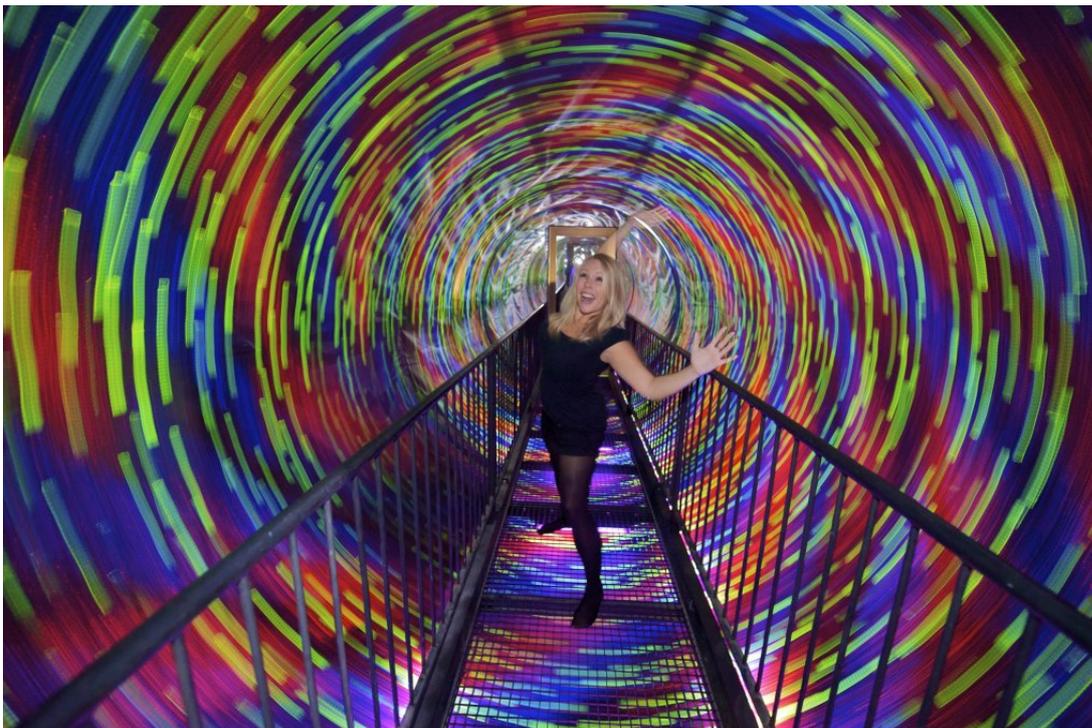
Access to this floor is through a door 90 cm wide. The overhead lighting on this floor is dimmed to highlight the light effects of the exhibits. Inside these are some of the main exhibits:

- Mirror Maze



- The entrance for this exhibit is up a step 14 cm high. The maze consists of multiple mirrors. The width of the passage is 109 cm. Plastic gloves are worn inside the maze to prevent fingerprints on the mirrors.

- Vortex Tunnel



- This is accessed by climbing up 3 steps 14 cm high. There is a handrail on the right hand side 89cm high. The tunnel consists of a cylinder moving around with light patterns to create the effect of falling. The Vortex Tunnel is traversed across a bridge 100 cm wide and 600 cm long. The bridge is made of grating, an open grid floor with holes 4 cm by 4 cm. Handrails 107 cm high are on either side of the tunnel.

Third floor – Edinburgh Vision

The entrance to this floor is 80 cm wide.

Areas of this room are 77 cm at their narrowest.

Exhibitions include

- Victorian stereoscopy
 - Raised a maximum of 150 cm from the ground. Stools are offered for access.
- Giant Pinhole Camera
 - Entrance 74 cm wide. Viewing screens at various heights inside and adjustable.
- Infinity corridor
 - Entrance 134 cm wide.
 - Entrance covered by black heavy curtain.
 - Corridor 137 cm by 490 cm
- Heat Camera



- This is in a separate room. The entrance 100 cm wide.
- The Camera room 284 cm by 271 cm.

Fourth floor – Light Fantastic

The entrance to this floor is 90 cm wide. The narrowest part of this floor is 83 cm.

The Camera Obscura and World of Illusions consists of two separate buildings which have been joined. This is one of the few floors where the two buildings share a floor. As a result, there are two steps after the Shadow Wall to access the rest of the exhibitions.

The 2 steps are 90 cm high and in a corridor 83 cm wide.

The lighting level is dimmed in the hologram collection to ease hologram viewing.

Exhibitions include;

- Holograms
 - These range between 110-140 cm up from the ground. Stools are provided to offer some elevation.
- Light wall
- Framed images
- Ames Room



- This side room is accessed via three steps, 16 cm high. The third step is on a slope. The doorway is 92 cm wide.
- The nature of the Ames room requires a slope for the illusion to work. The slope is 10°.
- The room has an area of 236 cm by 247 cm at its narrowest point.

- A viewing television screen is outside the room for people to see the illusion inside.
- Headless table
 - For the illusion to work, the customer needs to crawl through an opening 81 by 100 cm at floor level and insert their head through an oval hole with a diameter of 25cm by 32 cm.
- Wild Animal
 - A hand is inserted into a slot 20 by 20 cm, 80 cm high from the floor. A roar is created from the sensors inside.
- Kaleido-Draw
 - The drawing controls to create a kaleidoscope are 78 cm from the ground and consist of three buttons and a roller ball. The image is produced on a screen 237 cm away from the control panel.
- Morph Machine
 - Each morph machine is in an enclosed space 106 cm by 82 cm, entered through a doorway 82cm wide. An adjustable stool is inside each booth. The machine is controlled by a control panel with two buttons and a roller.

Fifth floor – Magic Gallery

The entrance to this floor is a doorway 73 cm. Visitors take a sharp right turn into the exhibition space, this is 90 by 106 cm wide.

The first room on this floor has low lighting to help illuminate the light exhibitions.

The exhibits include

- Mesmer tube
- Plasma Dome

These can cause electric shocks to some customers wearing high static clothing or who are natural conductors. None of the other electrical exhibits on this floor can cause electric shocks.

- Mesmer tube
 - This extends off the ground from a height of 75 cm to 165 cm.
- Plasma dome
 - This is 75 cm above the ground.
 - An additional pole, which lights up when a customer touches both the ball and the pole, is 45 cm to the right of the plasma dome and is 70 cm off the ground and 158 cm long.

The second part of the floor is reached through a corridor 95 cm wide and 334 cm long. This opens into a large room. The lighting level in this room is of the same level as the rest of the building.

Exhibitions include

- Framed pictures
 - These are different illusions at different heights around the walls.
 - Illusions include hidden images, optical illusions, composite pictures, and moving images.
- Hand movement
 - This is 94 cm above the ground on a solid wooden block.
 - Each hand is placed on a horizontal metal pole either side of a mirror and the customer looks into the left mirror and moves the right hand up and down on the pole.
- Moving heads
 - These heads are between 94 and 194 cm above the ground. The pictures are concave but appear convex, 3D, and appear to follow the customer across the room.
- Colour inside the box
 - This box is 127 cm above the ground and asks customers to look inside, guess the colour, and then lift the lid to see the true colour.
- True mirror
 - These two mirrors are 136 cm above the ground.
- Distorting lenses
 - These lenses are 74 cm above the ground and moved using handles 131 cm above the ground. They are in the middle of the room. To pass them, there is a space of 98 cm and 90 cm either side.
- Dominant eye
 - This exhibit is 118 cm above the ground and asks customers to place their face against a glass screen and see which image inside is clearer.
 - There are two screens on either side of the exhibit.
 - The screen is 54 by 19 cm.
- Swap facial features
 - The customers sit on adjustable swivel seats with no backs or arms.
 - The panel between the customers is a mix of mirrors and glass, swapping certain parts of each other's faces.
- Shake hands
 - This is 80 cm above the floor and is a mirrored concave dome surrounded by lights that produce a 3D reflection of anything put inside.
- Fibreoptic kaleidoscope
 - This is 137 cm above the ground and has a viewing screen in the form of an equatorial triangle 41cm.
- Kaleidoscope
 - This is 112 cm above the ground and has an open space of 68 by 68 cm, surrounded by mirrors.

- A computer screen is 170 cm inside the kaleidoscope.
- Zoetrope
 - This is 119 cm above the ground.
 - Customers need to gently spin the zoetrope and look through the slits in the side to see the moving image.
- Living floor
 - This floor was developed for autistic education.
 - It is motion sensitive and can take the weight of grown adults.
 - It is 149 cm by 200 cm.
 - The interactive elements are on a cyclical loop and include a football field, fish tank with sand and stone, Edinburgh Castle fireworks and a busy road.
- Bendy mirrors



- These mirrors are 43 cm from the ground, 157 cm high and 59 cm wide.

The final part of the room is of lower lighting, with UV light pictures on the walls. Exhibits include:

- Stairway to Australia
 - This is a panel 79 cm off the ground. The customer looks down to see an infinity ladder stretching down.
- Swap heads
 - The customers sit opposite each other on wooden benches 35 cm above the ground with a gap of 64x cm between the table edge and the wall. The lights will dim or brighten on each side as controlled by a metallic knob in front of each person to change the mirror from showing the customer to showing the other person.
- Shadow Wall
 - This is in a separate space 280 cm by 350 cm. There is a white photosensitive wall at one end.
 - A button 105 cm above the ground is pressed and there are 5 seconds worth of beeps.
 - The customer stands in front of the wall.
 - There is a bright flash after the five seconds has elapsed and a shadow of the customer is left on the wall.
 - This exhibit could potentially trigger an EPILEPTIC FIT.
- Infinity tube
 - This is in the same space as the Shadow wall.
 - It is 127 cm above the ground.
 - Customers look into a panel with a diameter of 53 cm.
- Mystery light
 - The box for this exhibit is 103cm above the ground.

Sixth floor – Camera Obscura and Rooftop Terrace

This section of the building is at the top of the stairs. The rooms and terrace are over 160 years old.

- The Camera Obscura waiting room is 460 cm by 345 cm. There are benches all along the walls. These are 42 cm above the ground. Each wall has windows.
- There are two rooftop terraces; North and South. These are accessed through two separate doors.
- The North Terrace



- This is the larger of the terraces and looks over the New Town to the Firth of Forth and Fife. It is accessed through a doorway 82 cm by 165 cm. There is a panel that needs to be stepped over that is 20 cm high.
- The wall surrounding this terrace is 81 cm high, with railings 40 cm high on top.
- Binoculars are tied to these railings. They are on chord 70 cm long.
- There are three telescopes on the north terrace. These are accessed via a step, 12 and 22 cm, 24 cm and 24 cm respectively.
- The turret is accessed via 2 number of steps 23 and 18 cm high. The turret diameter is 154 cm and the walls are 144 cm high at the lowest point (the turret has crenulations).
- The Castle can be seen either side of the turret. The views top the right of the turret have the same wall and rails set up as the rest of the North Terrace.
- There are two benches on the terrace either side of the steps roof. These are 42 cm high.
- The roof for the stair case bisects the terrace. The narrowest part of the terrace is between this rooftop and the wall. It is 142 cm wide.

- The South Terrace
 - This is accessed via a step in the waiting room, 14 cm high, and through a door 57 cm.
 - There is one step down to the terrace 19 cm high.
 - This terrace offers views of the Royal Mile to the East (down to St Giles Cathedral) and the South over the Old Town and to the Pentland Hills.
 - This terrace is 210 cm wide at widest point and 90cm wide at narrowest.
 - There is a ledge that is 66 cm wide and 40 cm high, leaving 70 cm of walking space at narrowest part.
 - The views are accessed by climbing on the ledge. The wall is 80 cm high and the rails are 34 cm high.
 - The rails have binoculars the same as the North Terrace.
 - The turret is accessed by climbing 4 stairs 17 cm high. There are railing beside the stairs 76cm high. The turret has a diameter of 160 cm and the walls are 142cm high at lowest point
 - The terrace on the south side proper has a step half way up, 9 cm high. The terrace is therefore slightly sloped meaning the ledge is 40 cm high at the turret and 21 cm high at the far end.

Camera Obscura

The building is named after the Camera Obscura on the sixth floor. This purpose built room was completed in 1853.

You will be given a show time on entry at the main desk. Shows are every 15-20 minutes and customers are booked into the next available slot. Out of season this is normally the next show, but during peak times in summer and school holidays the wait can be up to two hours. If you require a show to be earlier or later then please ask the member of staff at the front desk.

Entry into the Camera Obscura itself is up a flight of four steps. The first step is 24cm high and all subsequent steps are 18cm high. The steps are all 76 cm wide, with hand railings each side, 79 cm high. The door is 75 cm wide and opens outwards onto the stairs.

The Camera Obscura is a circular room with a diameter of 470 cm. There are two levels.



- Standing around the back.
 - This is accessed via 3 steps on either side of the doorway. The highest step is 22cm.
 - The width of the ledge is 70 cm.
 - There is a railing 88 cm high around the edge of the ledge.
- Seating around the table.
 - This is along the ledge of the upper level. It is 63 cm above the ground.
 - This is usually reserved for those with children or those who need to sit down for any reason. If concerned please speak to the guide before the show.
 - The minimum width between the camera table and the ledge is 47 cm.
 - The railing is 88 cm high with poles ranging from 89cm to 136cm apart.

The Camera Obscura can be viewed from anywhere in the room.

There are stools available for children and those below average height to stand upon to gain a better view.

The shows are 15-20 minutes. Customers can leave at any time by informing the guide.

The room needs to be dark for the Camera Obscura to operate (Camera Obscura translate from the original Latin into dark room). There are no windows and the walls are painted black. The room can potentially cause concern for people who are **CLAUSTROPHOBIC**. The show starts with five red lights on, which are dimmed during the show to make the room dark, lit only by the Camera Obscura. The dimming process can be slow or quick; please ask the guide if you have any preferences or would rather not have lights turned fully down. This does reduce the quality of the image but we will try and accommodate where available.



For customers with hearing loss and who use a hearing aid: we have an induction loop in the camera obscura. For those without a hearing aid we have transcripts of the show available from your guide.

If any customer becomes uncomfortable during the show, please inform the guide and you can be let out at any time.

Shop

The shop is on the ground floor.



There are three entrances.

- From outside.
 - The two entrances are the Shop entrance via courtyard and Shop entrance via Ramsay Lane (see above).
 - Both entrances lead into a small room, 334 cm by 150 cm. The shop is entered via a glass door that opens both ways, 208 cm by 83 cm.
- From the reception foyer.



- Entrance is via a corridor on the left side of the reception.
- The corridor is lined with posters for sale.
- At the end, there are four steps 21cm high, with railing each side, 63 cm high.

- From the second floor exhibits.



- This exit is the most frequently used and is the way out of the building for the majority of customers.
- Exit via the door on the right hand side of the 2nd floor next to the Vortex Tunnel. The door is 74cm wide.
- There is a staircase with four flights of stairs, 3, 10, 5 and 10 flights respectively. The last flight is the musical piano. The railing is 105cm high.
- The steps are 17cm high each.
- These enter a room which contains the Autowed and the Penny Press.
- Entry to the shop is via a swing gate at the bottom of the steps. The swing gate that only opens outwards. The doorway is 68cm wide.

- The shop contains numerous exhibits mounted on displays throughout and of varying height.
- The lowest products are 13 cm above the ground, the highest products are 200 cm above the ground.
- The widest space in the shop is 230 cm.
- The narrowest space in the shop is 66cm.
- The checkout desk is 94 cm high.
- The desk is always manned should assistance be needed.
- Not all the displays are moveable; most are static.

Evacuation

All staff are trained in the fire escape procedures. Exit is via the staircases. If, in the very unlikely event of the fire bell ringing, you will need assistance with evacuating, please tell a member of staff before your visit.

Staff training

All staff are trained in customer service, including those with specific requirements. Many of the staff have first-hand experiences with disabilities and are aware of the issues involved. Staff training on assisting disabled customers is on the training schedule.

If any customer has any specific request or requirement, the staff will assist in any way they can.

There is always a trained first aid officer in the building and the building has a fully equipped first aid kit.