## DuraVisıon

mirror systems

## EQUINE HORSE ARENA MIRROR



Portrait
Multi-Unit Assembly

## CONFIGURATIONS



SINGLE PORTRAIT DOUBLE PORTRAIT


SINGLE LANDSCAPE


DOUBLE LANDSCAPE

## INSTALLATION INSTRUCTIONS

## PLEASE READ AND UNDERSTAND THE INSTALLATION AND SAFETY PROCEDURES BEFORE STARTING THE INSTALL.

## ATTENTION: DO NOT LAY THE MIRROR FLAT AT ANY TIME.


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ALWAYS Carry Mirror on its Edge.
NEVER Carry Mirror Laying Flat.

Description:

- Horse Arena Mirror, available in Portrait or Landscape configuration.
- Size is $2440 \times 1220 \mathrm{~mm}$
- Glass Mirror 6mm in thickness.
- For Portrait mode, the posts are 4 meters long and if the hole is approx. 1 metre deep, the bottom of the mirror will be approximately 470 mm from ground level. You can make the holes deeper if you want the mirror lower.
- For Landscape mode. There are two standard pole height options: P1.3 Option: The bottom of the mirror is 1.3 m from the ground. P1.6 Option: The bottom of the mirror is 1.6 m from the ground.
- Multiple mirrors can be added together. Therefore if you want, for example, two mirrors fitting together, you will only need three posts.


## PREPARE POST HOLES

1. Carefully decide the area for installation.

Note1: We suggest sighting the mirrors at least 600mm out from the edge of the arena and parallel with the side or end of the arena.

Note2: We suggest bringing the mirror in from the side or end of the arena by 500 mm to 1 meter.
2. Once you have decided on the mirror position, measure the centre of each mirror post 1219 mm apart.
3. Dig post holes so the dimensions of the holes are 3 times the width of the post (i.e. the hole for a 100 mm post should be at least 300 350 mm wide). The depth of the hole should be at least 1 m in the ground.
4. The pole depth and width should always take into account soil structures and wind loadings.
5. Make sure the holes are clean of loose material. You may need to trim the post holes to obtain the correct position and to make sure concrete can get around the posts.
Note1: Digging the hole 1 m deep will place the bottom of the mirror approx 470 mm from the ground (Portrait).

Hole set up for Double Portrait Mirror configuartion.
$300-350 \mathrm{~mm}$


## PLACE POSTS IN HOLES

6. Place supplied white blocks into the bottom of the holes to prevent the posts from sinking into the soil.
7. Place the posts into the holes on top of the blocks.

Note: The posts are heavy, so this is a two person job.

WHITE BLOCK


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8. Follow the numbering on the Hole Configuration sheet to match the rails and braces to the posts.
9. Bolt on the top and bottom rails following the numbers.

Note: There are rubber buffers on top of the bottom rail. The mirror must sit on the rubber buffers which are designed to allow moisture flow away from the mirror and reduce condensation.
10. Install the diagonal brace.
11. Once the post and rails are bolted together, adjust the posts to the centre of the holes and adjust until the posts are vertical and the rails are level. Use a spirit level.
Note: You may need to lift or lower the post to get the frame level.


## BRACE POSTS AND LEVEL

12. Brace the posts in place with tiedowns or similar and check the posts are vertical and rails are level.
Note1: Check the posts are the correct distance back from the arena and are parallel with the edge of the arena.
Note2: While there is some vertical and horizontal adjustment once the mirror is installed, this is limited. Therefore, make sure the posts are in the correct position, vertical and level.


## MIX CONCRETE

13. Mix the concrete, a wetter mix will find its way around the posts. Gently ram the concrete around the posts making sure not to move the post. Continue to check the posts are plumb.

Note: While concrete will take 28 days to reach its full strength, we have installed mirrors after 3 days without any issues.


## FIT MIRROR INTO FRAME

14.Remove the tie downs or bracing.
15. The mirror unit weighs 75 kg , so you will need at least 3 people to install the mirror onto the frame.
16. Place two blocks of wood approx $100 \times 50$ and 500 mm long on the ground at the base of the frame to sit the mirror on.
17. Keep the mirror on its edge and manoeuvre it to the base of the installed posts.
18. Position two people about a third of the way up from the bottom of the mirror and one or two people at the other end, or what will be the top of the mirror.
19.Lay the mirror over and lift it onto the base rail, then lift the mirror up to a vertical position, MAKING SURE YOU KEEP THE BOTTOM OF THE MIRROR
 FIRMLY ON THE BASE RAIL.
20. Each mirror has three drain holes at the bottom of the frame to let any moisture build up, drain out from inside the mirror (to help minimise delamination). Make sure these DRAIN HOLES are at the BOTTOM when you install. Keep rubber pads clear of the drain holes.

21. Position the mirror so it is sitting in the middle of each post and hold it in place until it is secured with a tiedown.
22. Place the tiedown over the top of the mirror and around the rails to keep the mirror in place while the adjustors are fitted.

Note1: Position the tiedown buckles at the back of the mirrors so they do not hit the glass. They could break the glass!!

Note2: Have a person firmly hold the mirror back against the posts.

23. Starting and the top, screw the adjustor brackets into the back of the mirror using the short bolts provided and tighten firmly.

24. Make sure the two adjustment nuts on the adjuster bolt are loose before positioning the angel bracket so it is just back from the edge of the post. Don't force the angle bracket into place. Tex-screw in place using the tex-screws supplied.
Note1: Use the adjustor nuts to angle the mirror down, however it can only tilt back as far as the posts will allow.

Note2: Use the adjustors to angle the mirror to the side by loosening the three adjustor on the side required and lift the bottom of the mirror out. However, this should be a maximum of 25 mm .



## TIGHTEN ADJUSTORS

25. Fix the remaining adjustors to the posts.
26. Finger tighten the adjustor nuts up either side of the angle, then tighten evenly and firmly.
Note: If this is not done evenly the mirror will be distorted or it could break the mirror.
27. Check all bolts and nuts are firmly tightened. Repeat for each mirror.


## ENJOY!

28. Remove the tiedowns, being carful not to damage the mirrors with the metal buckles.
29. Clean off any marks and enjoy.
30. Please send us some pictures.


## CARE AND MAINTENANCE:

As the mirrors are glass, we recommend removing excess water from the mirror surface when ever possible with a squeegee to prevent water marks.

Rinse with warm soapy water and a soft cloth every 3-6 months to remove dirt.

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