cyclehoop

Operation & Maintenance Instructions

Bikehangar 4.0

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Designed and manufactured by Cyclehoop, the Bikehangar offers a secure solution to long-term cycle parking and an effective way to protect bikes from tough weather conditions and vandalism. This award-winning product stores six bikes within half the space of a car parking bay, making it ideal for areas where outdoor cycle storage space is necessary.

To ensure maximum life can be achieved with the Bikehangar as well as minimising the costs for any potential refurbishments, this manual has been created to assist in any ongoing maintenance requirements.

Operating Instructions

Mechanical Cylinder

Please see video for how to unlock, open, close and lock the Bikehangar 4.0 with the mechanical cylinder.

Electronic Cylinder

Please see video for how to unlock, open, close and lock the Bikehangar 4.0 with the electronic cylinder.

Maintenance Schedule Instructions

- Grease the exposed ends of the locking rods where they enter the side frame, using Lithium grease.
- Gas springs are maintenance free. Do not grease or oil the piston rod.
- Apply Lithium grease to the door hinges using a brush.
- Mechanical Cylinder: Spray wet lubricant oil into the external lock cylinder where the key is inserted.
- Electronic Cylinder: Check for any maintenance tasks on Airkey Online Administration.
  See Assembly Manual for instructions on how to change the batteries if required.
- All bolting and fixings should be checked to ensure they remain tight and intact. Replace fixings that have been removed or worked their way from the structure.
- Remove any litter or organic debris from inside the Bikehangar.

Organic Coated Cladding (standard roof sheets)

Maintenance

Washing

Rainwater alone is often sufficient to keep exterior surfaces looking clean and bright. However, in order to maximise the lifetime of the organic coated product, it is important that accumulated dirt and debris that have not been washed away by normal rainfall should be removed regularly by cleaning. This reduces the risk of "poultice" corrosion.

Washing may be carried out with a hose and a soft-bristled brush, using fresh water. In areas where heavy industrial deposits dull the surface, a solution of fresh water and good-quality household detergent or proprietary cleaner may be applied to ensure thorough cleaning. For household detergent, use a 10% solution; for proprietary cleaners, follow the manufacturer's instructions. Always rinse thoroughly with clean water.

Caution

When cleaning, please note the following:

- Concentrations of cleaners stronger than those recommended can damage coating surfaces.
- After cleaning, rinse thoroughly to remove all detergents and cleaners.
- Organic solvents and abrasive cleaners should be avoided when cleaning any coated surface. Caulking compounds, tar and similar substances may be removed with mineral spirits, but wash the surfaces thoroughly afterwards.
- Always clean coated surfaces from top to bottom, and rinse immediately and thoroughly with fresh, clean water.
- Over-cleaning or scrubbing may do more harm than good.

Graffiti Removal

Remove any graffiti from the cladding as soon as possible after it's application. Use a spray suitable for non-porous surfaces (e.g. Urban Hygiene easy-off Graffiti Remover) and follow the instructions on the product.

Clean the area after the graffiti has been removed with fresh water as described in the *Washing* section.

Mould Growth

Some types of local environment are particularly conducive to mould growth, e.g. areas of wet, dark, wooded surroundings or low-lying marshland. In these areas, mould will grow, even on inert materials such as glass.

Mould can be removed by treating the affected surface with a basic solution of the ingredients listed below (by weight), which should be available from local chemical suppliers. Before using the first three of the following ingredients, you should refer to the manufacturers' health and safety information.

Good-quality household detergent or proprietary cleaner	0.5
Trisodium phosphate	3.0
5% sodium hypochlorite solution	25.0
Fresh water	71.5
	100.0

Before applying this mixture, wash the organic coated product first, as described under *Washing*, then apply the mixture to all surfaces using a low-pressure spray or brush. All surfaces must then be rinsed with cold water within 24 hours. The organic coating has been specially formulated to resist fungal growth; in most areas of Europe this should not therefore be a problem.

Touch-up

During inspection, you may find that the organic coated product has suffered some damage. It is better not to treat the surface of the organic coated product if it has been slightly scuffed. If it is scratched more deeply, say down to the substrate, the damage can be easily repaired by applying standard touch-up paint. It is important to ensure that the applied paint is no wider than the original scratch. To achieve this, the paint should be applied with a medium to fine artist's paintbrush. Touch-up paints are, of necessity, air-drying; whereas the original coating was oven dried; over time they will change colour differently from the original coating. For this reason, it is good practice to keep the applied area as small as possible.

Treatment of edge corrosion

Corrosion at the edges of the profiled steel cladding should be rectified as described below.

- Cut and remove, or abrade, any loose organic coating back to solid metal.

- Abrade to bright, solid metal, ensuring that the surface is not polished. Thoroughly clean and dry these surfaces before applying the specified materials, which must be applied as recommended by the paint system manufacturer.
- Coat the prepared areas with the appropriate anti-corrosive primer recommended by the materials supplier.
- When the first primer coat has dried, apply a second primer coat in a neat band to the prepared area so that the primer extends beyond the prepared area, covering the original surface.
- Apply a topcoat to the dry, primed area.

Over-painting

Surface preparation and over-painting of cladding should be carried out by specialist contractors using approved maintenance paints. Cleaners, touch-up systems and materials for treatment of edge corrosion or over-painting are generally available from reputable paint manufacturers.

Annual Inspection

This inspection is based upon good practice. It should be carried out annually throughout the lifetime of the unit.

The items marked with asterisks should be checked soon after the unit has been installed and during every annual inspection.

You should watch for changes in the condition of the coating, particularly as you approach the end of the **Period to Re-paint Decision (PRD)**, which is the minimum length of time before the unit owner needs to consider whether to re-paint the cladding.

Check for:	Action:
Build-up of debris A build-up can cause "poultice" corrosion, i.e. the debris retains water, forming a "poultice".	Remove debris.
Dirt retention in areas of cladding not washed naturally by rainwater, e.g. overhangs This affects the appearance of the building and could, if left, cause the breakdown of the coating.	Wash down. See *Washing* section.

Mould growth This rarely occurs but can arise in extreme conditions and affect appearance.	Wash down and treat as described under *Mould Growth* section.
Local damage* If the damage has broken through the protective paint coating, this could cause corrosion of the steel substrate.	Assess extent and type of damage. Actions may involve: 1. Touching-up affected area. See *Touch-up* 2. Over-painting affected area. See *Over-painting* 3. Replacement of damaged sheets. Contact Cyclehoop.
Drilling swarf, rivet stems and other fixing debris* These can rust and cause staining.	Remove debris.
Condition of fasteners* Faulty or inappropriate fasteners can cause leakage, or rust staining on the surface of the cladding, or both.	Replace faulty fasteners and any missing caps.
Corrosion of cut edges Corrosion of cut edges at sheet overlaps and at overhangs can, if ignored, spread up the sheet.	Treat as described under *Treatment of edge corrosion.*

Galvanised Steelwork (frame & racks)

Parts are hot dip galvanized to BS EN ISO 1461; a sacrificial layer of zinc is bonded to the base metal to protect from corrosion. In rural and urban areas (C1 -C3) this provides many years of protection, in highly corrosive coastal or industrial areas (C4, C5-I, C5-M) lifespan is reduced. Regular care can help prolong lifespan.

Cleaning

Cleaning should be conducted routinely at three monthly intervals and six months should be considered the longest interval. In industrial or marine locations particular attention should be paid to regular maintenance due to harsher atmosphere.

- Clean with a dilute solution of mild liquid detergent. Avoid excessively hot solutions.

- Use a soft bristle brush. Do not use abrasive tools on the coating. After cleaning, rinse thoroughly with fresh water. Ensure that areas that are not normally exposed to rain are washed and rinsed also.
- Do not use strong solvent type cleaners. Where the use of solvent is required, such as cleaning paint spills, use nothing other than Methylated Spirits. Ensure that the contact time is as short as possible and rinse the solvent cleaner thoroughly from the surface with copious amounts of drinking quality water.
    - Methylated Spirits is highly flammable and extreme safety and care should be exercised when using this product.
    - It is strongly recommended that a small test area be checked first, to ensure that no damage will occur to the whole area.
- Any areas exhibiting a rust mark should be wiped over as above. This is the atmospheric rust caused by steel particles caught in the rainwater. The discolouration should be removed at the periodic cleaning but does not pose a threat to the integrity of the surface.
- Galvanised structures may exhibit a white powdery oxide deposit, sometimes known as "white rust". This is usually due to water being held against the surface of the structure and holding condensation/rainwater. This is not detrimental to the structure, but the cause should be investigated, and a remedy sought as soon as possible as this is an acceleration of the normal process of sacrificial corrosion of galvanised structures.
  This accelerated breakdown may limit the structure life to less than the 25 years normally associated with galvanised structures.
  Removal of the "white rust" by wiping with an acetic acid solution is suggested, 5% by volume in water and quickly washing away with copious amounts of clean drinking quality water. Ensure all operators wear correct & appropriate PPE (Personal Protective Equipment at Work Regulations 1992) and are informed of the COSHH Requirements when cleaning the structure and using this media. Should you expose the surface to this media incorrectly (proportions/period of contact) the surface will become stained black.

Graffiti Removal

Remove any graffiti from the cladding as soon as possible after its application. Use a spray suitable for non-porous surfaces (e.g. Urban Hygiene easy-off Graffiti Remover) and follow the instructions on the product.

Clean the area after the graffiti has been removed with fresh water as described in the *Cleaning* section.

Repair

Knocks and bruising to the structure should not pose a significant threat to the life of the structure provided the galvanised surface remains unbroken. Any light damage resulting in a break in the galvanised surface should be painted with zinc rich quality paint such as galvafroid or other proprietary paint. Any areas repaired in this way should be monitored annually and repainted as necessary. Parts with heavy damage may need to be replaced.

- Ensure damaged area is clean prior to repair.
- Abrade damaged area using 240 Grit glass paper ensuring even abrasion around edges.
- Apply zinc spray following manufacturer's instructions for an even application. Ensure all raw steel is thoroughly coated.

Any excessive heat generated, such as from a fire within or adjacent to the shelter/structure, may cause deterioration of the galvanised surface and accelerated corrosion/premature failure in the structure may occur. Any such cases where fire may have damaged part of the whole of the structure, it should be assessed to determine follow up action/continued use.

Powder Coated Steelwork (side panels, handles & custom cladding)

Powder coating parts can provide many years of protection. Regular care can help prolong lifespan of the material, finish and colour.

Cleaning

Cleaning should be conducted routinely at three monthly intervals and six months should be considered the longest interval. In industrial or marine locations particular attention should be paid to regular maintenance due to harsher atmosphere.

- Clean with a dilute solution of mild liquid detergent. Avoid excessively hot solutions.
- Use a soft bristle brush. Do not use abrasive tools on the coating. After cleaning, rinse thoroughly with fresh water. Ensure that areas that are not normally exposed to rain are washed and rinsed also.

- Do not use strong solvent type cleaners. Where the use of solvent is required, such as cleaning paint spills, use nothing other than Methylated Spirits. Ensure that the contact time is as short as possible and rinse the solvent cleaner thoroughly from the surface with copious amounts of drinking quality water.
    - Methylated Spirits is highly flammable and extreme safety and care should be exercised when using this product.
    - It is strongly recommended that a small test area be checked first, to ensure that no damage will occur to the whole area.
- Any areas exhibiting a rust mark should be wiped over as above. This is the atmospheric rust caused by steel particles caught in the rainwater. The discolouration should be removed at the periodic cleaning but does not pose a threat to the integrity of the surface.

Graffiti Removal

Remove any graffiti from the cladding as soon as possible after its application. Use a spray suitable for non-porous surfaces (e.g. Urban Hygiene easy-off Graffiti Remover) and follow the instructions on the product.

Clean the area after the graffiti has been removed with fresh water as described in the *Cleaning* section.

Repair

Any small chips to powder coating due to damage should be rectified as described below. It is recommended seeking professional painting services to achieve best results. Parts with damage extending beyond the surface powder coat may need to be replaced. Contact Cyclehoop for technical advice.

- Cut and remove, or abrade, any loose coatings back to solid metal.
- Using 240 Grit glass paper, abrade damaged area to bright, solid metal, ensuring that the surface is not polished. Thoroughly clean and dry these surfaces before applying the specified materials, which must be applied as recommended by the paint system manufacturer.
- Coat the prepared areas with the appropriate anti-corrosive primer recommended by the materials supplier.
- When the first primer coat has dried, apply a second primer coat in a neat band to the prepared area so that the primer extends beyond the prepared area, covering the original surface.

- One the primer has dried, apply aerosol topcoat following manufacturer's instructions for an even application.

Stainless Steel Components (lock rods, face plate & fixings)

Stainless steel is corrosion resistant. Surface rust of other metals can lightly adhere to stainless steel parts, this can be prevented through regular care.

Cleaning

- Carefully remove any loose surface deposits with a nonabrasive brush.
- Clean with a dilute solution of mild liquid detergent and warm water. Do not use abrasive products. Rinse thoroughly with potable water after cleaning to remove all residues.
- Products can be cleaned with a stainless-steel cleaning agent and a lint free cloth. Follow manufacturer's instructions.

Repair

Light damage such as surface scratches can be repaired using an emery cloth (240 grit) and a freeing oil such as WD40. Take care to follow the grain direction on brushed parts.

Key & lock cylinder

Stainless steel is corrosion resistant. Surface rust of other metals can lightly adhere to stainless steel parts, this can be prevented through regular care.

Key maintenance

Before introducing the key to the cylinder lock, check for any debris on the key and remove where possible. This will help prevent any contamination of the keyway (keyhole). The key can be simply cleaned with a lint free cloth.

Occasionally keys can become impregnated with grime which builds up in the key cuts (dimples). To maintain the keys when they are in this condition, use a suitable wet lubricant (such as ABS Lube). Products like graphite powder, WD40, 3in1 and heavy viscous oils should be avoided.

Cylinder maintenance

The cylinder face is always visible and as such it is possible that daily environmental ingress can occur. If left unattended, this debris can impact on the performance of the cylinder. Preventative maintenance is recommended to prolong the life of the cylinder. Using recommended wet lubricant oil (such as ABS Lube) should be sprayed into the keyway (keyhole) to displace any debris whilst lubricating the cylinder. Products like graphite powder, WD40, 3in1 and heavy viscous oils should be avoided.

If in cold temperatures, water enters the keyway and freezes, the ice should be melted with warm water. The water should then be flushed out using a wet lubricant oil to prevent refreezing.