

BSI

STEEL

Building System Integration W.L.L
شركة تكامل لأنظمة المباني المحدودة



CERTIFIED



OWNERS MAINTENANCE MANUAL



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MANUFACTURER OF PRE - ENGINEERED STEEL BUILDINGS (PEB'S)

MAINTENANCE FOR LONGER LIFE

Now that your Building System Integration (BSI) building is complete, we recommend that follow our simple maintenance recommendations.

By doing so, you will substantially enhance the life of your investment.

The frequency of maintenance is dependent upon the environmental zone in which the building is located. The table below contains the recommended maintenance frequencies for different building locations.

Building Location	Maintenance Frequency
Within 5km of the sea	Every 3 months
High pollution industrial area	Every 3 months
Medium pollution industrial area	Every 4 months
Areas of high humidity	Every 4 months
Low pollution industrial area	Every 6 months
Dry desert region	Every 6 months

SAFETY NOTES :

- Exercise extreme caution when working at roof.
- Use professional maintenance staff for maintenance works.
- Ensure that access ladders reach at least one meter above the step off point.
- Secure ladders to the building and ensure that they are on a firm base.
- Do not step on skylights.
- When walking on the roof, step in valleys of the panel, not on the ribs.
- Whenever possible, walk on purlin line, i.e., screws line.
- Protect areas of roof subject to frequent access by temporary or permanent walkways.
- When maintaining overhead crane runways, immobilize the crane before commencement of work.

EXTERIOR MAINTENANCE PROCEDURE

- Preventive maintenance shall commence immediately after a project is erected or modified.
- Debris and small items such as screws, pop rivets, drill bits or any ferrous object shall be removed by sweeping with a soft nylon brush. Large items such as sheet metal cut-offs shall be removed by hand to avoid damaging the surface of the roof panels. Such debris shall be removed after any trade (e.g., electricians, plumbers, air conditioning technicians, steel erectors, etc.) has worked on the roof.
- Sand and dust retain salt and moisture, which will eventually breakdown the paint and zinc layers, resulting in corrosion of the base metal. Sand and dust shall be removed by washing with clean potable water and a soft nylon brush, working from the highest point to the lowest, followed by a final rinse using a hose and clean potable water.
- The most vulnerable areas of the building are gutters, roof sheets, sheltered areas under eaves or canopies and upper portions of walls or roof extensions.
- For buildings located in high pollution industrial areas, or close to marine environments, water alone may not be sufficient to remove saline deposits that have become encrusted on the panels. In such cases, a mild detergent shall be added in the initial washing water. Panels shall be washed with the mild detergent solution and a soft nylon brush. A final rinse with clean potable water should follow. Oil, grease, tar, wax, or similar substances can be removed with mineral spirits followed by a detergent solution and a clean potable water rinse.
- Do not use caustic or abrasive cleaners, they may damage the paint and zinc layers.
- Ground level shall be maintained at least 150mm below the base of the wall panel. Accumulation of windblown sand shall be removed. Plants and shrubs surrounding the building shall not touch the wall panels, they may scratch the painted panels.
- Eave gutters and valley gutters shall be thoroughly cleaned with a mild detergent solution and a soft nylon brush, followed by a rinse of clean potable water. Downspouts shall be clear of blockage and the downspout discharge shall have adequate drainage area.

- Minor damage to sheeting or trims shall be repainted as follows :
 - Light abrade the affected area
 - If base metal is exposed, apply one coat of zinc chromate primer.
 - Apply one coat of matching touch-up paint.

- Equipment, which is located through or adjacent to roof or wall panels may cause moisture build-up on or near the panel. The following conditions shall be avoided :
 - Water run-off from air conditioning units
 - Open water storage tanks adjacent to panels
 - Steam outlets
 - Acid storage
 - Copper pipes fastened to steel panels

- Buildings with Cranes :
 - Every 6 months check that all bracings is tight.
 - Check that all high strength bolts in the crane beams and the main connections are tight.
 - Check the column vertically & Crane Runway beam adjustment to avoid skewing force.

MAINTENANCE OF ACCESSORIES

- Personnel Doors
 - Lubricate hinges and locksets
 - Remove dirt and grit from threshold
 - Ensure that the door cannot swing back and strike the wall panels, as this will sprain the hinges and damage the panel.

- Sliding Doors
 - Regularly clean the bottom guide to remove sand and stones.

- Roll-Up Doors
 - Clean and lubricate the chain and reduction drive gears.

- Power Vents
 - Clean fan blades to remove build-up of dust and dirt.

RECORD OF MAINTENANCE

- A periodic Maintenance Log Book shall be kept. All maintenance dates shall be recorded and signed by the maintenance staff.