

SBC

MAINTENANCE GUIDE

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1. PURPOSE

This Maintenance Guide defines the requirements for the inspection, cleaning, maintenance and repair of surfaces coated with **THERMO SHIELD® AQUA IR 2K**.

The objective of this guide is to preserve:

- the aesthetic appearance of the coating;
- its technical performance;
- its service life;
- its infrared reflective properties;
- its long-term protective performance.

Proper maintenance contributes to maximizing the durability and effectiveness of the coating system throughout its intended service life.

2. SCOPE

This guide applies to all buildings, structures and components protected with **THERMO SHIELD® AQUA IR 2K**, regardless of substrate type or application method.

It is intended for use by:

- building owners;
 - facility managers;
 - maintenance personnel;
 - contractors;
 - inspection bodies;
 - authorized SBC representatives.
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3. GENERAL REQUIREMENTS

Under normal operating conditions, the coating system requires only minimal maintenance.

However, periodic inspections are recommended to:

- detect early signs of deterioration;
- identify accidental mechanical damage;
- maintain the product's protective and reflective performance;
- extend the overall service life of the coating system.

Preventive maintenance is always preferable to extensive corrective repairs.

4. INITIAL INSPECTION

The first visual inspection is recommended:

6–12 months after application.

The inspection should verify:

- coating continuity;
 - surface contamination;
 - mechanical damage;
 - cracks;
 - blistering;
 - peeling or delamination;
 - discoloration;
 - abnormal wear;
 - evidence of water ingress.
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5. PERIODIC INSPECTIONS

Recommended inspection frequency:

- annually under normal environmental conditions;
- every six months in industrial, coastal or high-exposure environments;
- after severe weather events such as hailstorms, flooding, storms or other exceptional environmental conditions.

Inspection records should be retained as part of the maintenance documentation.

6. CLEANING

Routine cleaning may be carried out using:

- clean water;
- low-pressure water washing;
- neutral pH cleaning agents;
- soft brushes;
- microfiber cloths or non-abrasive cleaning materials.

Cleaning shall be performed using methods that do not damage the coating surface.

7. CLEANING METHODS TO BE AVOIDED

The following cleaning methods are **not recommended**:

- strong acids;
- strong alkaline cleaners;
- aggressive organic solvents;
- steel brushes;
- abrasive pads or powders;
- high-pressure water jets applied at close range;
- flame cleaning or thermal treatment.

These methods may permanently damage the coating and reduce its service life.

8. REPAIR OF MECHANICAL DAMAGE

Where local mechanical damage occurs, the following procedure is recommended:

1. Remove all loose or damaged coating material.
2. Clean the affected area thoroughly.
3. Prepare the substrate in accordance with the Technical Data Sheet.
4. Apply **THERMO SHIELD® AQUA IR 2K** using the approved application method.
5. Restore the original coating thickness and system configuration.

Repairs should blend seamlessly with the surrounding coating wherever possible.

9. LOCAL REPAIRS

If damage is limited to isolated areas:

- repair only the affected section;
- restore the specified dry film thickness;

- ensure proper overlap with the existing coating;
 - inspect the repaired area after curing.
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10. COMPLETE REFURBISHMENT

Complete refurbishment may become necessary in cases of:

- extensive mechanical damage;
- severe long-term weathering;
- improper original application;
- changes in service conditions;
- major renovation projects.

A comprehensive condition assessment should be performed before full refurbishment.

11. IDENTIFICATION OF DEFECTS

The following conditions require technical evaluation:

- cracking;
- blistering;
- coating delamination;
- significant colour fading;
- loss of adhesion;
- water penetration;
- abnormal discoloration;
- excessive surface wear.

Any observed defects should be investigated promptly to prevent further deterioration.

12. MAINTENANCE RECORDS

The following information should be documented:

- inspection date;
- inspector's name;
- observed condition;
- corrective actions taken;
- repair materials used;

- photographic documentation;
- follow-up inspection results.

Maintaining complete records facilitates long-term asset management and quality assurance.

13. HEALTH & SAFETY

All maintenance and repair activities shall comply with:

- the applicable Safety Data Sheet (SDS);
- national occupational health and safety regulations;
- local workplace safety procedures.

Appropriate Personal Protective Equipment (PPE) shall be used at all times where required.

14. RELATED DOCUMENTS

This Maintenance Guide shall be used together with:

- Technical Data Sheet (TDS)
 - Application Guide
 - System Specification
 - Safety Data Sheet (SDS)
 - Inspection & Acceptance Checklist
 - Product Label
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15. DOCUMENT CONTROL

This Maintenance Guide is a controlled document within the SBC Quality Management System.

Any modification shall be subject to formal review, approval and document control procedures.

Only the latest approved revision shall be considered valid for use.