



1. Maintenance

Maintenance leads to maintaining quality and functionality. The same goes for FALK insulated metal panels. In this chapter, we provide information on insulated metal panel maintenance. Please take our advice and have your building inspected and cleaned periodically.

1.1 Building inspection and cleaning

Proper installation and maintenance is extremely important in obtaining the very best service and appearance of your FALK insulated metal panels.

All dirt, oil, grease, fingerprints, metal filings or other contaminants should be removed to assure proper service life of the paint system. This type of maintenance work also influences the applicable product warranties. The appropriate inspection and cleaning depend on the situation and the materials that have been used. An insulated metal panel has an Interior and exterior side. Both sides endure completely different (weather) influences.

Maintenance and inspection inside

The inside of an insulated metal panel deals with various situations. Depending on the coating that has been used, maintenance and inspection work will have to be done to prevent or treat (early signs of) corrosion. The most frequently used coating for the Interior sheet is Dutch White. This coating is suitable for dry and clean areas that require little or no maintenance. In case of dirt or damage, maintenance work will have to be done. Therefore, periodical inspections are highly recommended by us.

When insulated metal panels need to be protected from more aggressive environments, Agri Coating will be used. To keep your warranty, mandatory annual inspections are required. The main objective of inspection and maintenance work is to remove dirt and, if necessary, repair any damage.

Maintenance and inspection outside

Different types of circumstances apply to the outside environment. However, in this case cleaning requirements also differ per coating. For PVDF and PE20 coatings periodical maintenance and inspection work are required for warranty purposes. The frequency of this work differs per warranty. However, it is always important to remove dirt and repair any damage as soon as possible. By doing so, the quality of the coating will stay at the required level. Dirt and dust may cause apparent discoloration of the paint after prolonged exposure. Slight chalking from strong sunlight exposure may also cause a change in appearance. A thorough cleaning will usually restore the original appearance of the panels.





In many cases, a simple low-pressure wash of the building with plain water will be adequate. In areas of heavy dirt deposits, a solution of water and detergent (1/3 cup liquid Tide per gallon of water) may be used. Use a rag, sponge, or soft bristle brush to clean. A clean water rinse should follow this procedure.

Maintenance work in practice

Thorough cleaning of a building requires knowledge of the coating quality and using proper cleaning products. In general, these products need to be pH neutral and nonabrasive. The cleaning solution needs to dissolve in cold or lukewarm water. High pressure cleaning should always be avoided! Mildew may occur in areas subjected to high humidity. To remove mildew, we recommend the following solution followed with a clear water rinse: 1/3 cup of detergent (Tide), 2/3 cup of tri-sodium phosphate (Soilex), 1 quart sodium hypochlorite 5% solution (Clorox), 3 quarts water.

Caulking compounds, oil, grease, tars, wax and similar substances can be removed by wiping with a cloth soaked with WD-40 lubricant. Test on an inconspicuous area first. Do not rub excessively as this may damage the finish.

To remove oxidation and tough stains, use a household cleaner recommended for use on porcelain skins and bathtubs. This should be followed with a thorough rinsing. Wire brushing or any abrasive material will damage the painted surface and should not be used.

When dirt cannot be removed by these suggested products, a special cleaning solution will be necessary. Please check with your supplier first, before applying this cleaning product. In case of any damage, this will need to be repaired in accordance with the method described in paragraph 1.2.

Additional measures regarding air scrubbers

Air scrubbers should, of course, be monitored well. To enhance sustainability of the panels and the fixtures near the exhaust, we recommend finishing/detailing the edges.

Maintenance on polycarbonate

Under normal circumstances polycarbonate is exposed to rain. In general, rain provides sufficient cleaning. However, when sheets are too filthy, they can be cleaned with water and a non-alkaline cleaner. Please make sure the cleaning solution is nonabrasive and does not contain any solvents. Always use clean and dry cloths. Grease stains can be removed by using a bit of mineral spirits or cleaning spirit.

Warning!

Wrong cleaning products may inflict irreparable damage to polycarbonate. When cleaning polycarbonate sheets, please be aware of any safety risks.





1.2 Repairing panels

In the previous paragraph we focused on the importance of inspections and maintenance work on a building. However, it is still possible for damage to occur. In most cases this is covered by the insurance on the building or insurance of the culprit causing the damage. However, dents, scratches and ensuing repairs do influence the warranties issued by FALK or possible third parties.

Consequences for the FALK product warranty after any damage

Falk product warranty covers insulation, measurements, shapes, product quality and the composition of these elements. When one of these components is damaged by external influences, product warranty on this damage is cancelled.

How can damage be repaired?

Once insulated metal panels have been damaged, they do not offer the same protection as before. Several layers of coating are exposed which may result in corrosion or decay. Therefore, it is very important to have damages repaired by professionals so corrosion and such will not expand. If desired, you can always consult with FALK to find a suitable party for these repairs. Depending on the way that damage has been repaired, warranty can be issued on the performed repair work.

Usual repair techniques

Common repair techniques are removing loose paint, rust removal, cleaning, restoring texture by using a filler, and applying one or two layers of paint with a paint brush. This repair paint can also be applied by using a HVLP (high volume low pressure) paint sprayer.

Tip:

During or after installation a panel may get damaged. Panels are replaceable, but to avoid any additional expenses, we suggest ordering an extra panel in advance. When damage does occur, you will already have a back-up panel on hand. By doing so, panels will be guaranteed to have the same color, texture and fitting.

1.3 Discoloration

The color of an insulated metal panel may differ from the original color. This is mainly caused by sunlight. The EN10169 European standard, categorizes UV resistance from RUV1 through RUV4. Color HPS200 Ultra and Colorcoat Prisma both exceed the highest resistance level RUV4. Our supplier Tata Steel only guarantees color retention on the Colorcoat Prima coating. All other coatings do not offer any guarantees on discoloration. Feel free to ask your FALK representative about the UV resistance of your desired coating.

Discoloration is one of the first signs of wear. A lower UV resistance partly determines the life expectancy of an insulated metal panel.





Phased construction / building expansion

Discoloration is an important factor when a building is being expanded or partially renewed. It is nearly impossible to prevent discoloration in these situations. When a repeat order is placed shortly after completion of the building, there is a chance that steel from the same roll can be used again. Therefore, when placing your order, it is important to clearly mention that this is a repeat order.

