

EDM SPANWALL RF50 RAINSCREEN

Standard Installation Guide

The Façade Contractor and the rainscreen Installation Squad should read this guide completely before starting any installation work on site.

1. **Before commencing work** the rainscreen installation contractor must **check that he has received all the materials necessary** to complete the designated area of façade.
2. The contractor **must satisfy himself that the supporting structure is sound and capable of carrying the load** of the rainscreen and any necessary thermal or acoustic insulation.
3. The installer **must have on site at all times all the relevant project drawings** relating to the installation of the rainscreen and **the interface details relating to all other façade components**.
4. The installation contractor must start from an **accurate datum level** usually given to him by the main contractor.
5. The installation contractor must strike off a **vertical plumb reference line** or ask the main contractor to give him a reference plumb line.

Vertical carrier installation

6. If the vertical carrier is supplied pre-cut for each elevation, these items must be identified and referenced to the correct area of the facade.
7. The quantity and approx position of the extruded aluminium wall brackets will be identified on the project drawings. They should be friction fitted to the appropriate position on the vertical carrier.
8. The quantity and approx position of the extruded aluminium panel support hooks should be identified on the project drawings. These should be fitted to the vertical carrier and **temporarily fixed** in place using the stainless steel bolts, nylon washers and nylock nuts.
9. The carrier assembly can then be offered up to the support wall and **set to the horizontal datum and vertical plumb line**.

10. The support brackets can then be fixed using the appropriate wall anchor with washer selected according to the **design requirements by the installation contractor or his structural engineer.**
11. When the wall brackets are securely fixed the vertical carrier rail can then be adjusted out and **plumbed off the support wall** to give the correct insulation and ventilation zone, shown on the project drawing.
12. The carrier is secured by using the stainless steel self-drilling / self-tapping screws. **Care must be taken not to over torque these fixings.**
13. It is essential to have **only one 'fixed' point per mullion** by using **all 6** circular holes in the wall brackets. This will generally be at the mid-point. All other brackets must be **secured through all 4 slotted holes** to allow for vertical thermal movement but to offer horizontal restraint.
14. This is repeated for all the vertical carriers on the façade, as indicated in the project drawings.
15. Care must be taken to **leave an expansion gap of at least 3mm** between the carriers in a vertical run.
16. This vertical gap can be sealed on the face by inserting a small plate of 1.5mm aluminium into the side slots on the carrier and fixing with a pop rivet **on the topside only.**
17. The gasket can then be fitted continuously down each of the two front edges of the carrier **taking care not to join the gasket at a break in the carrier.**

Installation of a vapour barrier

Installation of a damp proof membrane if required should be carried out as detailed in the project drawings. This is not a standard component of the RF50 system.

Panel installation

18. Care must be taken when handling all PPC coated rainscreen panels to avoid damage.

19. The RF50 system is designed to be fixed from the bottom up.
20. **The datum level for the first panel must be accurately set.**
21. From this datum level the top row of support hooks should be accurately set and **securely fixed in place using the nylock bolts (see Figure 1).**
22. The panel will hang on the top two slots sitting on the hooks, which will offer both vertical and horizontal restraint.
23. The lower hooks should be **set to allow a 3mm gap** between the bottom inside of the hook and the top edge of the slot positions. This allows for easier panel adjustment and levelling on the top set of hooks only.
24. **All the hooks will offer horizontal restraint against the effects of the wind and other loading on the facade.**
25. Setting and securing of the panel support hooks should proceed in this manner up the façade until all the necessary hooks for the installation of an area of façade are in position.
26. Panel installation can then proceed from the bottom row of panels up.
27. The two rows of EPDM gasket act as both a seal and an anti-rattle device and must be in place.
28. If the installer finds that there is too much resistance when pushing the panels down, then the application of a small amount of soapy water may assist with
29. When each panel is completely lined and levelled it **must be secured** by fitting the anti-lifting screw through the holes in the up-stand baffle.
30. Care should be taken to ensure that **all datum levels are met** and that all necessary adjustments are made as the installation proceeds to **avoid a build up of tolerances**, which would result in joint not lining through.
31. Final stripping of the protective polyfilm should be carried out as work proceeds to avoid tide marking around the edge of pulled back film.
32. The **finished façade must be protected from abuse by other trades** to avoid damage to the paint film or aluminium skin.
33. Details around window openings, door openings, curtain walling etc. should be dealt with as the installation proceeds to ensure all

necessary vertical carriers , hooks, closer pieces, and DPM`s are in place to **avoid the unnecessary removal and replacement of panels.**

GENERAL COMMENT

This guide is intended to be a **general outline only** of the standard methodology for installing the RF50 rainscreen system on a suitable support wall / structure. The installation contractor is required to use good practice and to conform to all the requirements of the **specific project design** and the **current national Building Regulations** in the relevant jurisdiction.

If there is any doubt or ambiguity the installation contractor should in the first instance contact the Façade Contractor and then if necessary the Technical Office of EDM Spanwall Ltd.

Figure 1 – Hook Set-Out

