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1. WHAT IS A CURTAIN WALL?

A typical curtain wall is a non-structural outer skin of a building consisting mainly of glass panels and aluminum profiles.

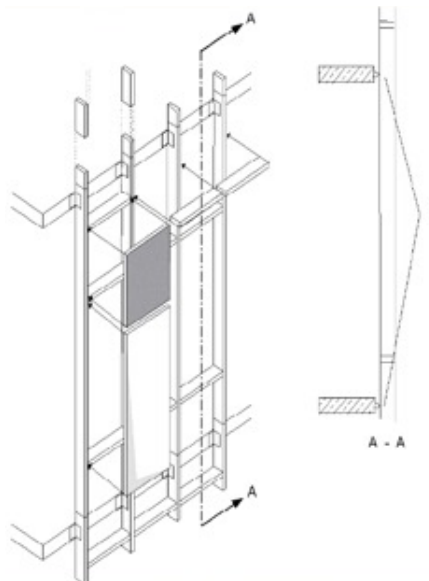
Function: In addition to its aesthetic function, the curtain wall is resistant to water and air infiltration, provides a thermal barrier, transfers wind loads to the structure of the building and avoids acoustic infiltration.

Typical examples of buildings built up out of a curtain wall are showrooms, office buildings and large constructions.



Example of Fixscreen 150 Curtain Wall 60

The Curtain Wall products of Renson have been developed for a specific curtain wall system. This type of curtain wall consists of transoms & mullions that are assembled on site to form a grid in which the filling elements (glazing and/or panels) are placed.





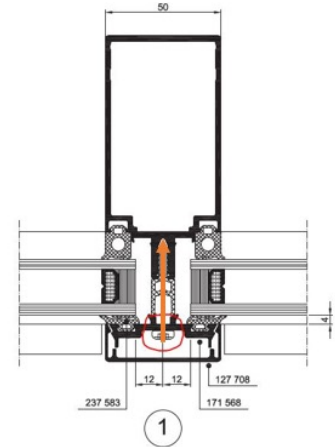
2. WHY DID RENSON LAUNCH THIS SEPARATE PRODUCT RANGE?

Due to the specific nature of curtain walls a separate product range was developed. Which are:

- 1) Central fixation
- 2) Thermal dilatation

Contrary to our standard Fixscreen range, the Curtain Wall range allows central fixation of the side guiding channels and is able to take into account the dilatation of the boxes. Which allows our screens to be coupled infinitely.

For more technical information, please consult our brochure.



Source: Kawneer



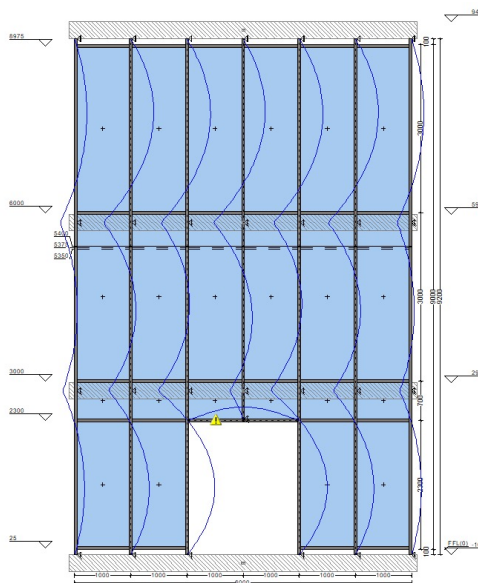
3. HOW IS THE DILATATION OF THE CURTAIN WALL TAKEN INTO ACCOUNT?

Dilatation is the expansion of aluminum profiles. This occurs as of temperatures differences of 40°C, and with ± 1 mm/m. To allow this expansion, all vertical profiles must be coupled in such a way that longitudinal movement remains possible.

Horizontal dilatation of our boxes is taken into account through its fixation. Only the motor side of the box needs to be fixated, which allows dilatation on the other side. This allows our screens to be coupled infinitely. This is also the reason why the maximum width of one screen is limited to 3600 mm, seeing that as of a width of 3600 mm the head box needs to be fixated in the center to avoid sagging of the head box itself and thus guarantee a perfect fabric tension.

Vertical and horizontal dilatation of the curtain wall structure must be possible for each trussing and/or battening.

Important: When installing our Curtain Wall product to a curtain wall structure, the configuration of this structure is leading. Our Curtain Wall products will be installed in correspondance with the curtain wall configuration. This does however, need to be checked on a project base, so project per project, to guarantee a perfect fit between the two systems.

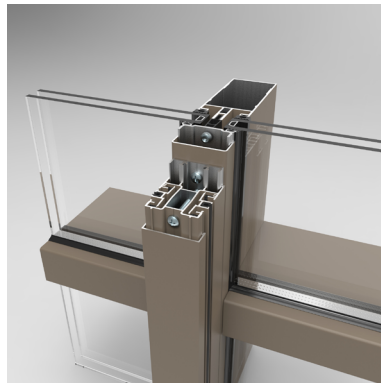


 **4. WHICH PRODUCTS DOES RENSON OFFER FOR CURTAIN WALLS?**

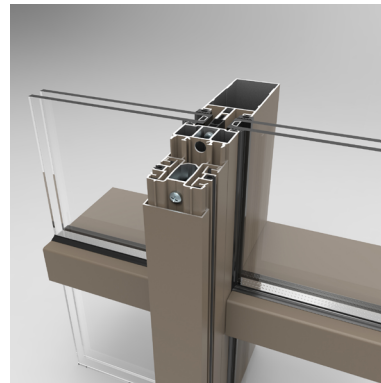
- Fixscreen Minimal Curtain Wall 50
 - Standard version
 - Co-development with Reynaers Aluminium
- The Fixscreen 150 Curtain Wall 60 via the Presales department, will be rationalised. This product was still available as a project solution, but will no longer be offered from May 2022. Current projects that are already on offer can still be carried out until the end of 2022.

 **5. ON WHICH TYPE OF CURTAIN WALLS CAN THIS PRODUCT BE FITTED?**

- Fixscreen Minimal Curtain Wall 50 is available in two versions.
 - As a standard application with side guiding channel C.50, applicable for a curtain wall of which the profiles have a width of 50 mm. However, it can also be applied to curtain wall systems with larger or smaller profile widths.
 - As a co-development with Reynaers Aluminium, with side guiding channel C.50 Reynaers Aluminium, which is developed specially to fit the ConceptWall50 side guiding clamp couple guide **034.0565.XX**.



C.50 (Standard)



C.50 Reynaers Aluminium

The combination of the Renson Curtain Wall solution with the curtain wall structure should be validated in consultation with the system supplier.

 **6. WHAT TYPE OF INSTALLATION METHODS ARE AVAILABLE?**

Both product types are installation method 7A, recessed installation, but can also be installed surface-mounted.

 **7. ARE THE TWO CURTAIN WALL TYPES INTERCHANGEABLE?**

No, the Fixscreen Minimal Curtain Wall 50 Reynaers Aluminium is only compatible with the Reynaers Aluminium ConceptWall 50 with side guiding clamp couple guide **034.0565.XX**. The standard Curtain Wall 50 application can be combined with any type of curtain wall.

 **8. FOR WHICH COUNTRIES IS THIS PRODUCT AVAILABLE?**

- Fixscreen Minimal Curtain Wall 50
 - Standard application: Available worldwide as of the 1st of July 2021 (excl. USA)
 - Co-development with Reynaers Aluminium for the ConceptWall 50: Available worldwide as of the 15th of September 2021 (excl. USA)

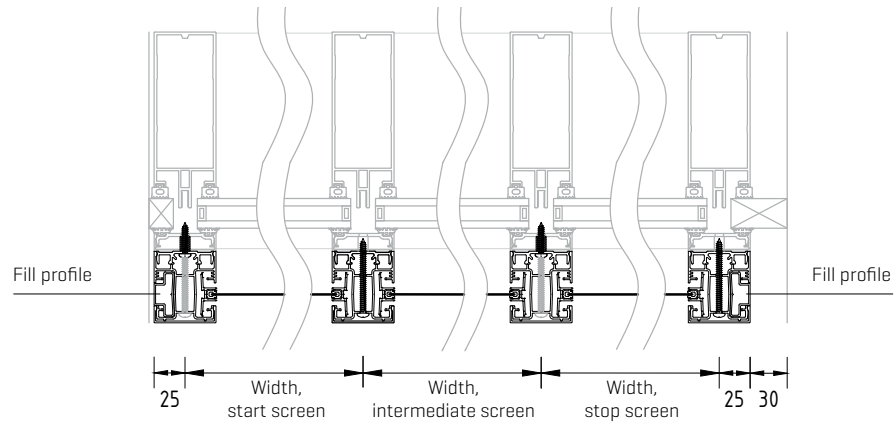
 **9. IS THERE A SEPARATE TRAINING AVAILABLE FOR THIS PRODUCT RANGE?**

Yes, via the Renson Academy we offer a separate Fixscreen Minimal Curtain Wall 50 installer training.

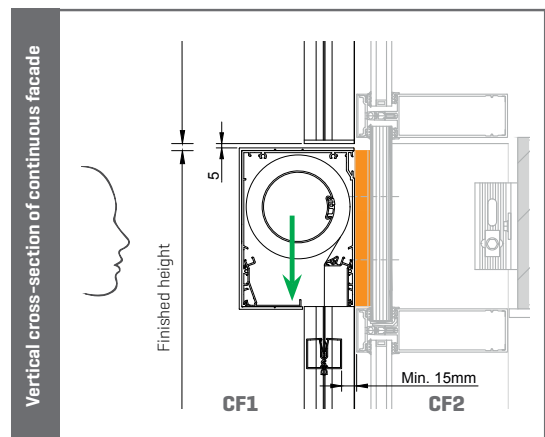
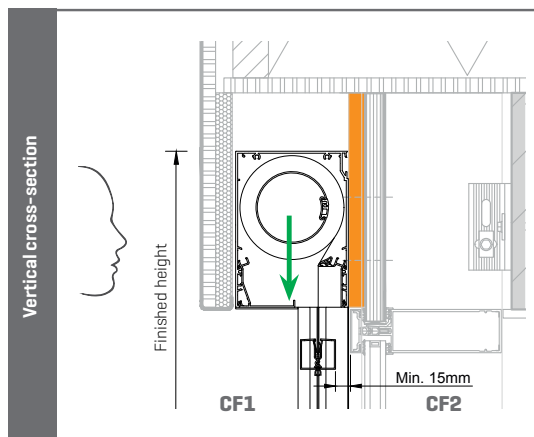
10. HOW DO I MEASURE THIS PRODUCT?

Width = the center-to-center width, i.e. between the centers of the side guiding channels.

Finished height = side guiding channels (incl. footplate) + head box



* 30 - see question 12



Viewing direction determines selection option cable feed left or right

← Direction in which fabric roller should be demounted

In case of a **recessed** installation, a new-built project, the dimensions can be determined based on the technical drawings of the curtain wall structure, provided that the structure is installed entirely according to the plan. It is however, strongly recommended to confirm the actual dimensions once the structure is installed, to avoid issues during the installation of the screens.

In case of a **surface-mounted** (retro-fit) installation onto an existing curtain wall structure, the dimensions are determined by measuring the real life structure, in cross reference to the technical drawings.

11. HOW ARE THE SCREENS FIXATED ONTO THE CURTAIN WALL STRUCTURE?

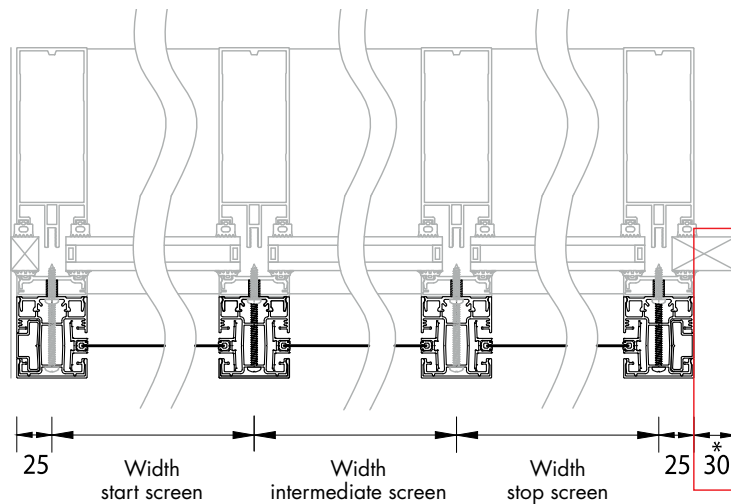
The products are fixated via two ways.

- 1) Via the side guiding channels, which are fixated to either the cover profiles of the curtain wall or directly to the side guiding clamp (co-development Reynaers Aluminium). To prevent the cover profiles from bending due to too much point pressure, Renson offers spacing bushes to transfer the pressure to the transom. See question 1.5 b. for more information.
- 2) Via the head box, which is aligned with the side guiding channels via the connection link and fixated to the structure via the side consoles on the motor side, either via the top or via the rear to the underlying structure.

For more details on the installation please consult the installation manual via the Renson professional portal (<https://www.renson.eu/gd-gb/professional-platform>).

12. WHAT IF THE CURTAIN WALL CONNECTS TO ANOTHER STRUCTURE?

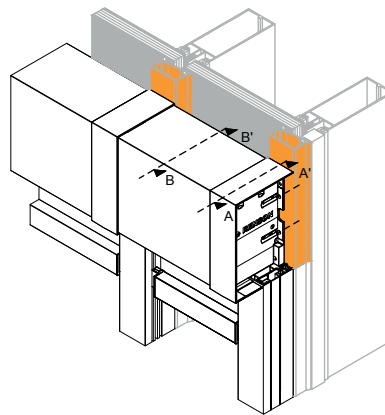
In this case, it is advisable to provide at least 30 mm clearance for a smooth installation of the stop screen.



Example of Fixscreen Minimal Curtain Wall 50

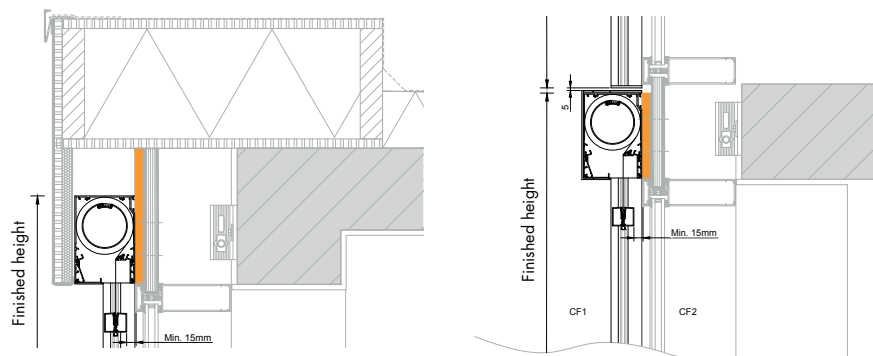
13. WHAT IF A GLASS PANEL IN THE CURTAIN WALL BREAKS AND NEEDS REPLACEMENT?

If during the installation of the screens, the necessary interruptions in the side guide clamp and cover profiles of the curtain wall were made, it is perfectly possible to replace the glazing without having to demount the screen completely. Only the side guiding channels around the impacted window will need to be demounted. After replacement of the window, the demounted parts can simply be reused.



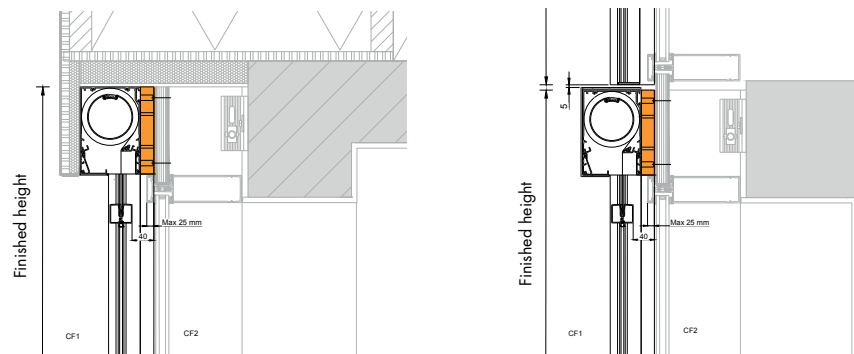
3D-view standard application

For this reason, it is also advised to install the box above a horizontal mullion and not directly in front of the glass or mullion.



Vertical Cross Section

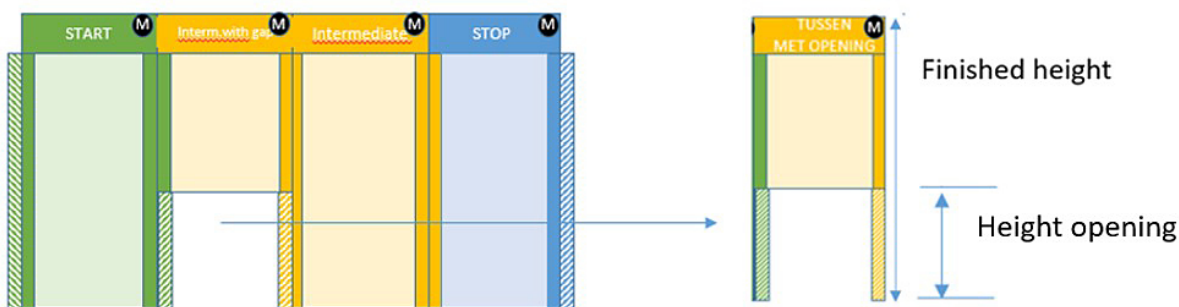
For the Reynaers Aluminium co-development special box support profiles were developed to replace the side guiding clamp profile behind the head box, assuring the necessary interruptions.



Vertical Cross Section

14. WHAT IF THERE IS AN OPENING IN THE CURTAIN WALL?

In case of an (door) opening in the curtain wall, the screens can be equipped with extended side guiding channels for an esthetical finish. The specific screen needs to be configured in correspondence to the total finished height, including the opening. The height of the opening is then specified and fitted with extended side guiding channels. Optionally filling profiles can be ordered, to fill out the unused height of the side guiding channel and guaranteeing an esthetical finish.



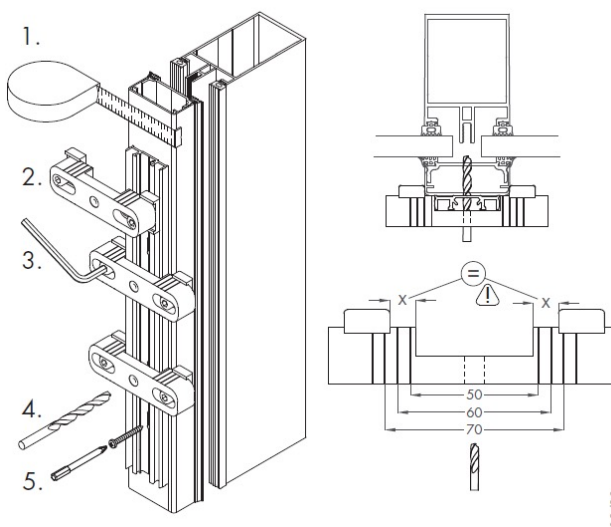
Example

15. WHAT TOOLING DOES RENSON OFFER?*

a. Caliber and how to use it


Since the Curtain Wall range allows central fixation of the side guiding channels, Renson developed a caliber to facilitate an easy and efficient preparation of the curtain wall structure. The caliber can be ordered as an option during the configuration in e-REPS.

Fixscreen Minimal Curtain Wall 50 (Standard): Measure the width of the curtain wall system (1). Place the fixed profile of the coupling side channel on the curtain wall system (2). Take the caliber and adjust it to the width of the CW (3). Make sure that both sides of the caliber are nicely symmetrical. The caliber centers the fixed profile of the coupling side channel on the CW profile. Drill holes with a 4.2 mm drill bit, through the removable profile and the side guide clamp of the CW (4). Do not forget to enlarge the holes in the removable profile (Ø 8 mm) in order to insert the spacer bush, if applicable. Now screw on the fixed profile of the coupling side channel (5).



03/20

* Useable for the standard Fixscreen Minimal Curtain Wall 50, not relevant for the co-development with Reynoers Aluminium.

 **b. Spacing bushes and how to use them**

To prevent the cover profile from opening, Renson offers spacing bushes. These are available in a number of standard lengths, as well as on demand sizes. The spacing bushes are placed over the entire height of the screens, so over the height of the side guiding channels as well as behind the head box.

 **DETERMINE REQUIRED SPACING BUSH SIZE**

To determine the required size, following steps must be taken:

1. Use the caliber to drill a hole through the curtain wall cover, NOT through the side guide clamp of the curtain wall.
2. Measure the depth with a caliper to know the needed size of the spacing bushes.

 **INSTALLATION**

Fixscreen Minimal Curtain Wall 50 (Standard): Drill holes \varnothing 8 mm in the center of the curtain wall cover (1) and push the spacing bush (2) through before fastening the Renson fixed profile (3) to the curtain wall. This ensures the cover (1) will not bend when the fixed profile (3) is mounted. Attention: When drilling the holes, make sure you only pierce the cover of the curtain wall, not the clamp (4).

