INSTALLATION MANUAL

AF85 - SYSTEM

FIXED FRAME

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1 GENERAL NOTES

SYSTEM DESCRIPTION

- Extruded and filled aluminum framing, tested and approved by European NB - institutes.
- 85 mm frame depth
- Clear, fire-rated safety glazing

REQUIRED TOOLS

13mm open wrench

Power drill with 6-6,5 drill and TX30 head

Tape measure

Heavy-duty glass handling tools

Level

Rubber mallet

Non-metal hand wedges

Gasket roller

C-clamps

Knife

Silicone caulking

7.5x72/92mm countersink TX30 head screw

Mineral wool insulating material

Soap Water

Piece of wood

Strap cutter

Forklift

L-rack

Check to make sure that you have the required supplies and tools necessary for the installation. Any material substitutions must be of equal or greater quality. Consult Aluflam prior to substituting any material or for any other questions to ensure that the products' fire ratings are not violated.

Installation instructions are of a general nature and may not address every condition you encounter.

Cutting tolerances are ± 1 mm unless otherwise specified.

All work must start from, and be referenced to benchmarks, offset lines and/or column centerlines established by the architectural drawings and the general contractor.

All frames must be installed plumb, square, level and in accordance with approved shop drawings. Glass and glazing building codes governing the design and use of products vary widely.

Aluflam does not control the selection of the products, product configurations, operating hardware and its function, or glazing materials and assumes no responsibility for these design considerations.

It is the responsibility of the design professional, owner, architect or general contractor to make these selections in strict accordance with all applicable codes and project requirements.

System-to-structure fasteners are usually not supplied by Aluflam or if so - they need to be specified by customer.

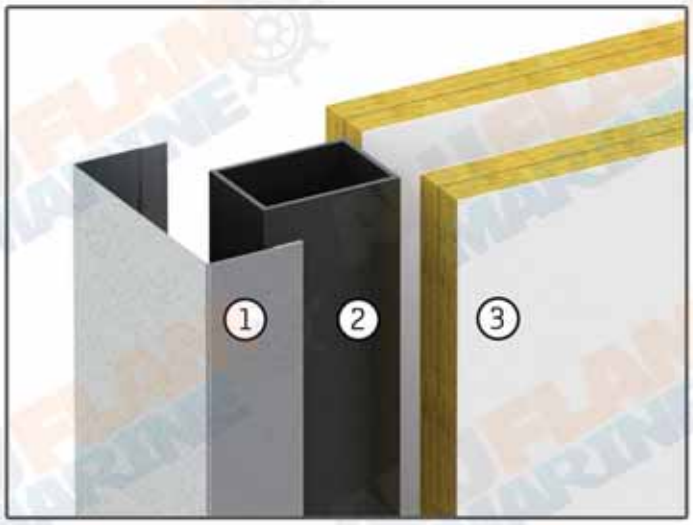
Fasteners called out on shop drawings usually show the tested and approved type and are to indicate minimum sizes.

1.1. Installation materials like sealants, bolts and screws are incl. Aluflam works unless other specified in the project or shop drawings.

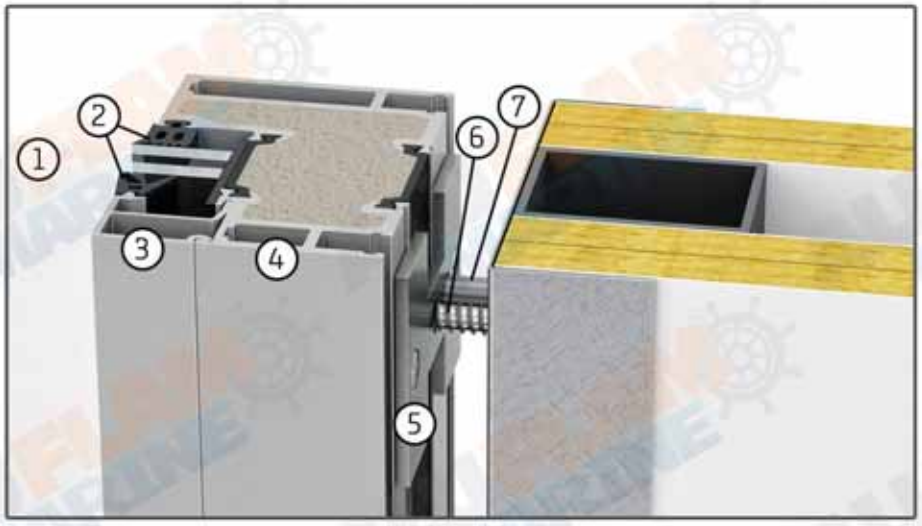
Screws or bolts must be suitable for substrate or wall to be confirmed from customer/yard

1.2. Statically stable underlay, framing or walls are excluded Aluflam works and solutions are given just as advice.

Aluflam is not taking any responsibility for its statical stability.



1. Steel endcap
2. Steel profile-reinforcement 35x50mm
3. B15 panel



1. Glass
2. Glazing gasket
3. Glazing bead
4. Frame
5. H-plate
6. 92mm tx30 head screw
7. M8 adjustment bolt

1.3. Glass is always supplied dismounted.

2 INSTALLATION

2.1.1. Unpack Frame

2.1.2. Remove loose components, such as glazing beads, intumescent strips, seals etc. and set aside in a well-protected area.

2.1.3. Carefully lift frame out of packaging. At this point, the frame joints are unprotected. Handle the frame with extreme care to avoid separation of the corner joints.

2.2.1. **Determine Frame Reference Point**
Establish the frame reference lines on the exterior/interior plane of the frames to be installed using benchmarks, offset lines, or column centrelines provided by the general contractor and referenced in the shop drawings.

2.2.2. Use the established reference points to determine the installation points for each frame opening at the head, and jambs.

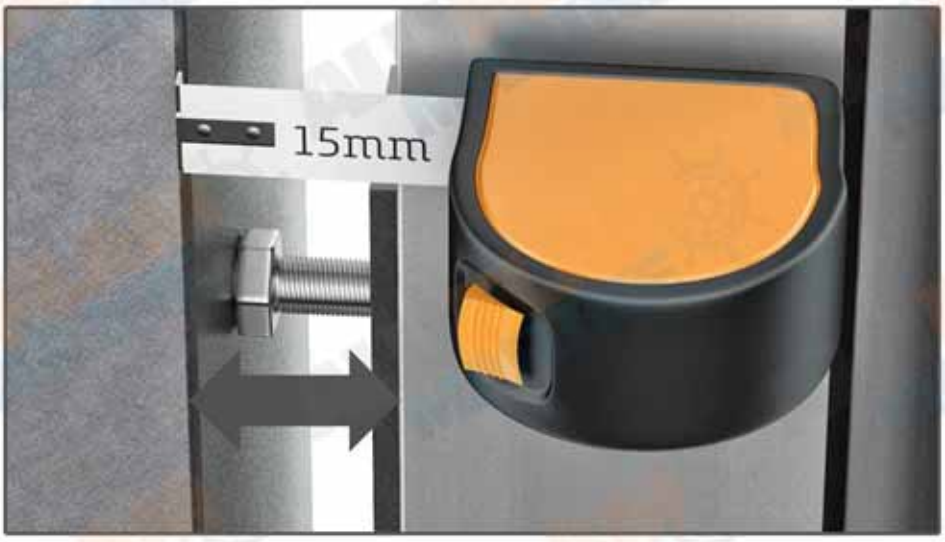
2.2.3. Measure the size of the frame and confirm that it meets the dimensions referenced in the shop drawings.

2.3.1. Installation Of the Frame

2.3.2. Install the frame plumb, square, level and true.

2.3.3. Gradually and evenly back out all adjustment screws with a 13mm open wrench (see detail). Be careful, excessive adjustment may cause frame distortion. Always check the frame sides for the M8 bolts. The bolted side of the frame should always be beside the structural opening. The unbolted side should always be beside the next frame.

2.3.4. 15mm is the standard between the wall opening and the frame.

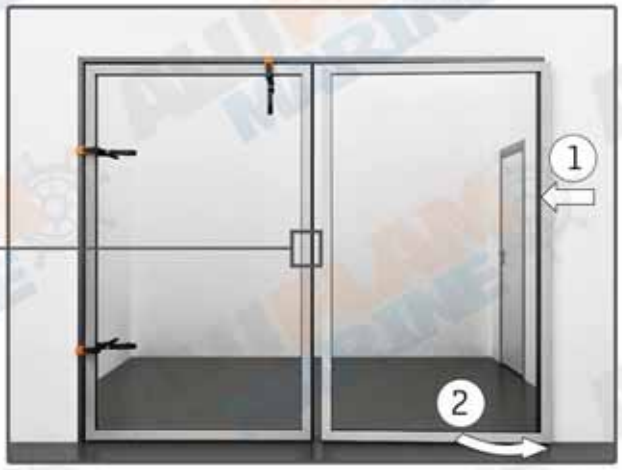


2.3.5. Drill the anchor locations into the surrounding structure using the factory pre-drilled frame holes as guides. Use a 6-6.5 mm drill. Drill the anchor locations on the vertical side of the frame into the surrounding structure.

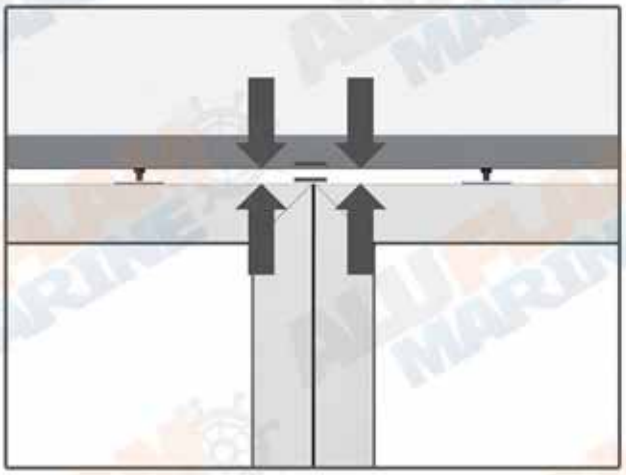
2.3.6. <u>DO NOT</u> turn the screws into the head yet, since adjustments needs to be made when all the frames are installed.

2.3.7. After fixing the frame place the Pyroplex tape in the middle of the frame profile where it needs to meet with the next frame.Use silicon or other glue if necessary.

2.3.8. Mount the connection gaskets into the frame and prepare to mount the next frame by measuring it and checking the shop drawing.
Make sure that the new frame is mounted in same way as the first one, by checking glazing bead side and H-plate
Place the frame next to each other, and push the new frame towards the prepared one. When the gaskets has connected the profiles, push the frame into the wall opening and secure it with c-clamps.



2.3.9. Using the wrench, adjust and level the frames so they are at the same height.



2.3.10. Drill the anchor locations using the factory pre-drilled holes at the connection of the frame. Use a 6-6.5 mm drill but DO NOT drill completely through. Leave the other side of the frame intact.

2.3.11. Place 72mm screws in the pre-drilled locations and fasten them, so the distance between the 2 frames are between 4.5 to 5.5mm

2.3.12. With the tape measurer, check and confirm that the frame is centred in the opening. If the frame is not centred, adjust the M8 bolts so that the distances are matching on opposite sides.

2.3.13. After all adjustements are finished drill, holes for the screws all around the frames with the 6-6.5 drill. Use the factory pre-drilled holes as guides.

2.3.14. Fasten the frames horizontally with 92mm screws into the bulkhead and finish fixation at the vertically placed screws by turning them completely in.

2.4.1. **Glazing and finish**

2.4.2. Prepare the glass for installation.
Move the box onto an L-rack.

2.4.3. When the box is secured on the L-rack, cut the steel straps using a strap-cutter/metal-cutter. First, remove the top and front.
Second, remove the two side covers.

2.4.4. Remove overlaps of glue if they are bigger than 5mm with a knife to ensure easy installation.
Always check for direction signs in the glass.

<u>NEVER Rotate the glass (see picture)</u>, this may cause bubbles inside the fire gel.

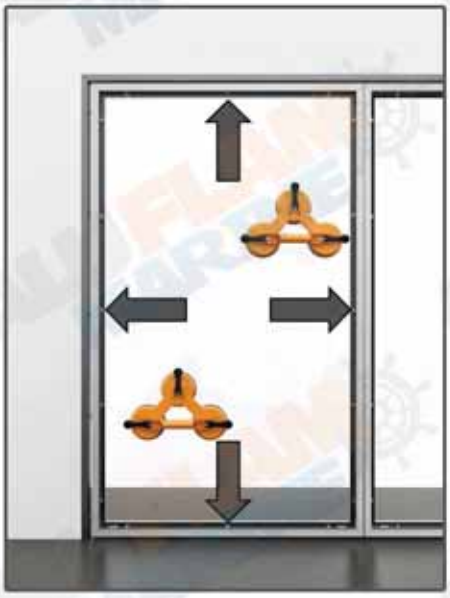
2.4.5. Prepare for the glass mounting by retrieving the correct glazing gasket from the package. Confirm the correct type by checking the shop drawings for each frame. Push the gasket in the channel on all sides.

2.4.6. Promatect glazing bricks will provide the exact height and placement of glass. The bricks has to be placed on top of the steel angle brackets on the top of bottom profiles.

2.4.7. To ensure easy installation of the glass, place two wood pads on the floor in front of the frame. NEVER place the glass on a hard surface like concrete or steel. With help of suction cups, the glass is carried to the frame and placed on the wooden pads.

2.4.8. Position the bottom of the glass on the glazing bricks and carefully push the top of the glass inside the frame. Secure the glass with 3-4 glazing clips by bending them over the glass.





2.4.9. Start bending the glazing clips by using a piece of wood.
First press towards the glass with care, then gently hammer from top down until the end part of the clips is horizontal to the glass and pushes the glass in.

Even the clips where it got bend to secure stability.





2.4.10. Snap in the glazing beads on all four sides of the frame.

2.4.11. Lubricate the glazing beads with liquid soap to ease insertion of the correct gasket.

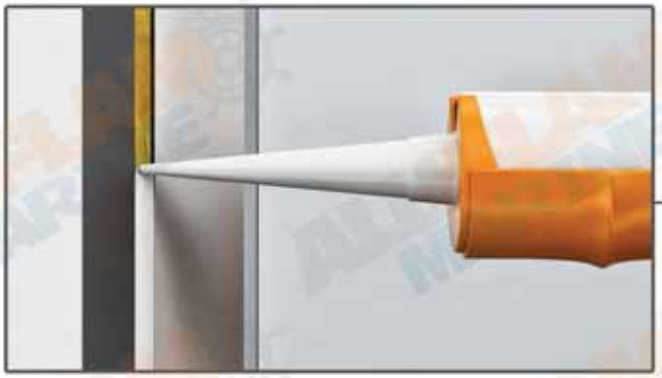
Always use 5mm extra gasket on each side, since in cold conditions the gasket will shrink.

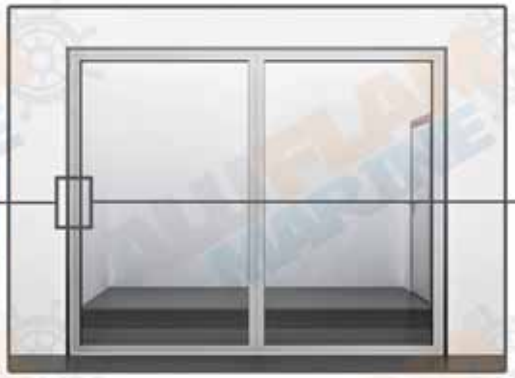
2.4.12. Cut the gaskets in the corners by bending them 90 degrees and cutting them up to the inner channel. The inner side of the channel must be kept intact, to hold and connect the gasket.

2.4.13. Make two incisions on the gaskets in the end corner at a 45 degree angle an connect them inside the channel.

2.4.14. Cut the mineral wool into 35-50mm thick pieces for 15mm gap. Fill gaps around frame with mineral wool insulating material. Use the non-metal hand wedge to push to its central position.

2.4.15. Finish the gaps by applying a continuous bead of silicone caulking.





Please do not hesitate to contact us if you have any further questions or concerns.
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