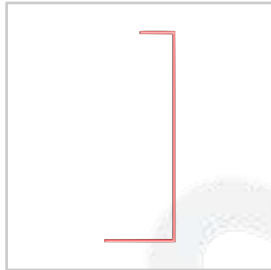


INSTALLATION INSTRUCTIONS FOR ROOF AND FACADE LAMELLA NATURAL VENTILATORS

I. Distance upstands for Nymbus RLAM roof lamella natural ventilator

I.1. Types of distance upstands for Nymbus RLAM lamella natural ventilator

I.1.1. Straight upstand



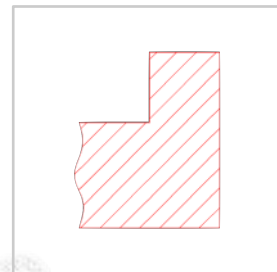
I.1.3. Combined upstand



I.1.2. Slopped upstand



I.1.4. Reinforced concrete upstand



II. Waterproofing of distance upstands and hydro insulation joining elements

II.1. Hydro insulation of different types of upstands

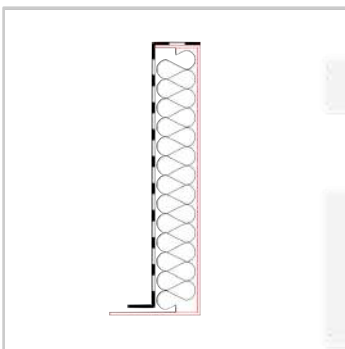


Fig. II.1.1. Vertical distance upstand

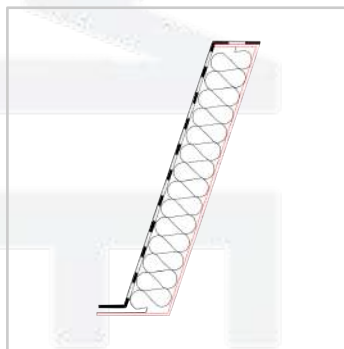


Fig. II.1.2. Sloped distance upstand

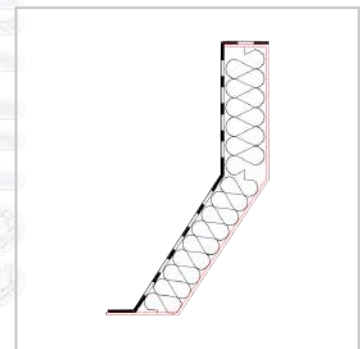


Fig. II.1.3. Combined distance upstand

II.2. Hydro insulation fixing elements for different types of distance upstands

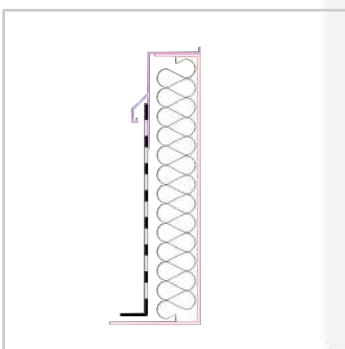


Fig. II.2.1. Vertical distance upstand with HJE

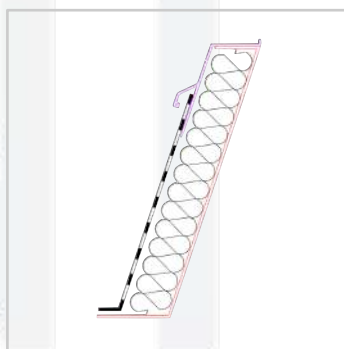


Fig. II.2.2. Sloped distance upstand with HJE

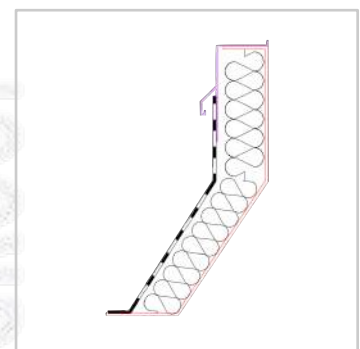


Fig. II.2.3. Combined distance upstand with HJE

Note: For more info [here](#)

III. Types of end flanges for Nymbus RLAM/FLAM rood/facade lamella natural ventilators

III.1. Non-thermoinsulated bases and end flanges

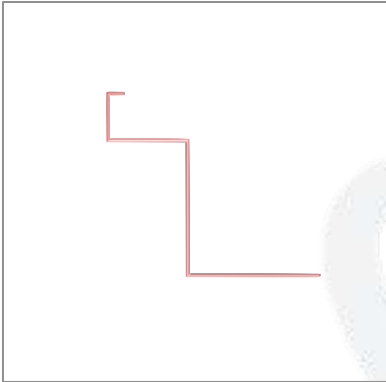


Fig. III.1.1. Non-thermo insulated base and horizontal end flange

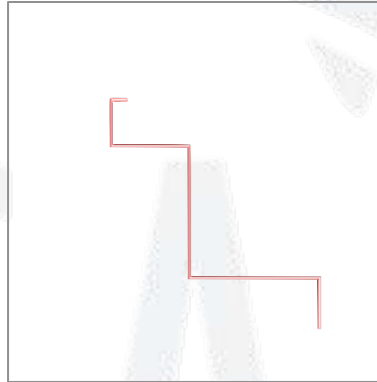


Fig. III.1.2. Non-thermo insulated base and vertical down end flange

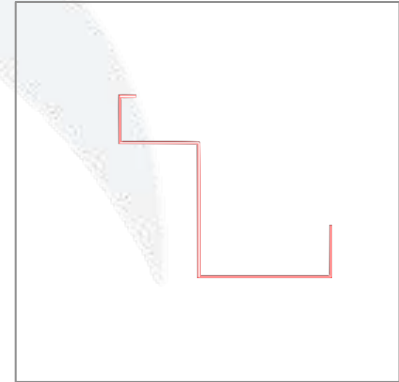


Fig. III.1.3. Non-thermo insulated base and vertical up end flange

III.2. Thermo insulated bases and non-thermo insulated end flanges

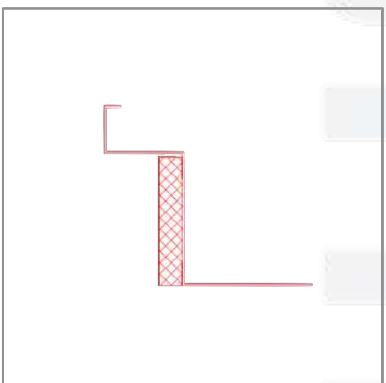


Fig. III.2.1. Thermo insulated base and non-thermo insulated horizontal end flange

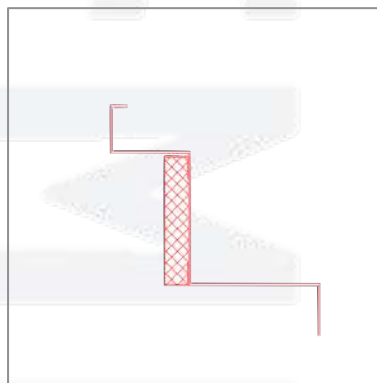


Fig. III.2.2. Thermo insulated base and non-thermo insulated vertical down end flange

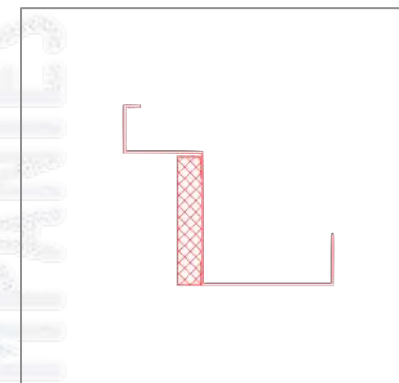


Fig. III.2.3. Thermo insulated base and non-thermo insulated vertical up end flange

III.3. Thermo insulated bases and end flanges

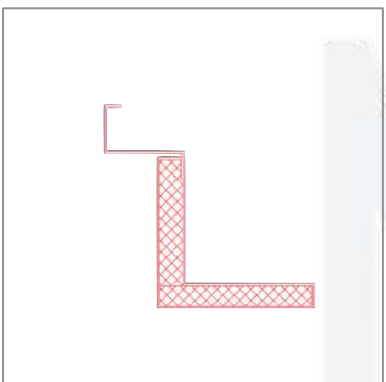


Fig. III.3.1. Thermo insulated base and horizontal end flange

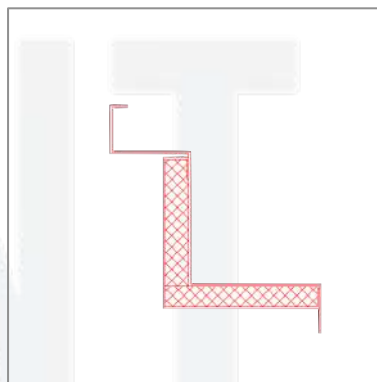


Fig. III.3.2. Thermo insulated base and vertical down end flange

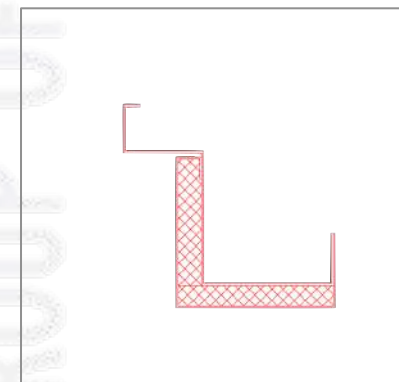
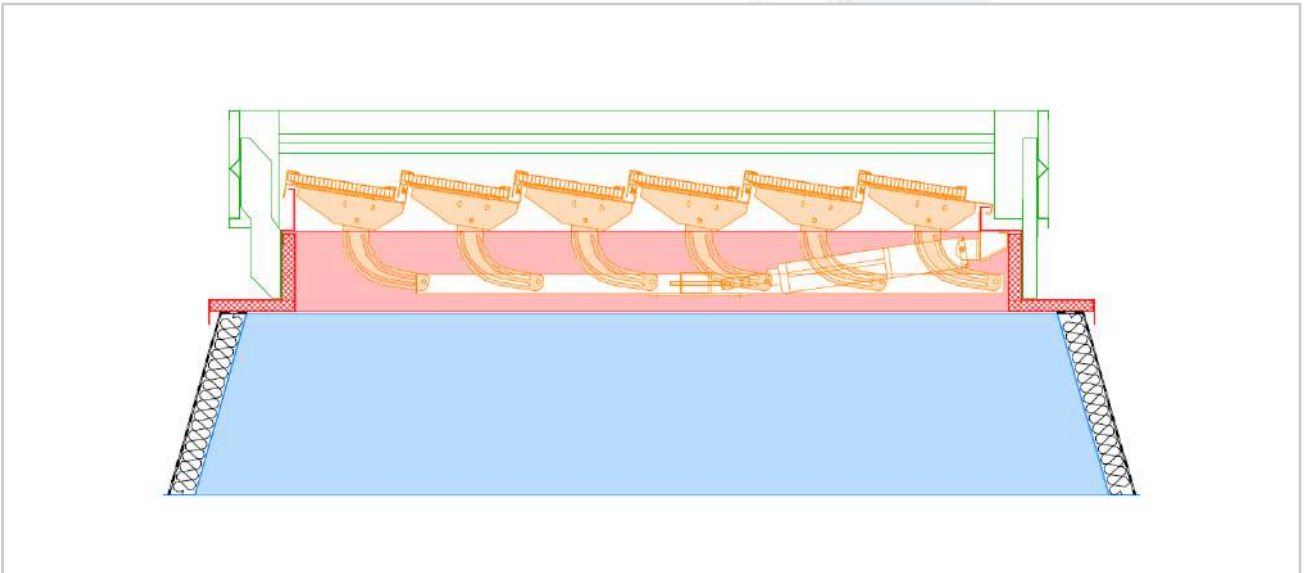


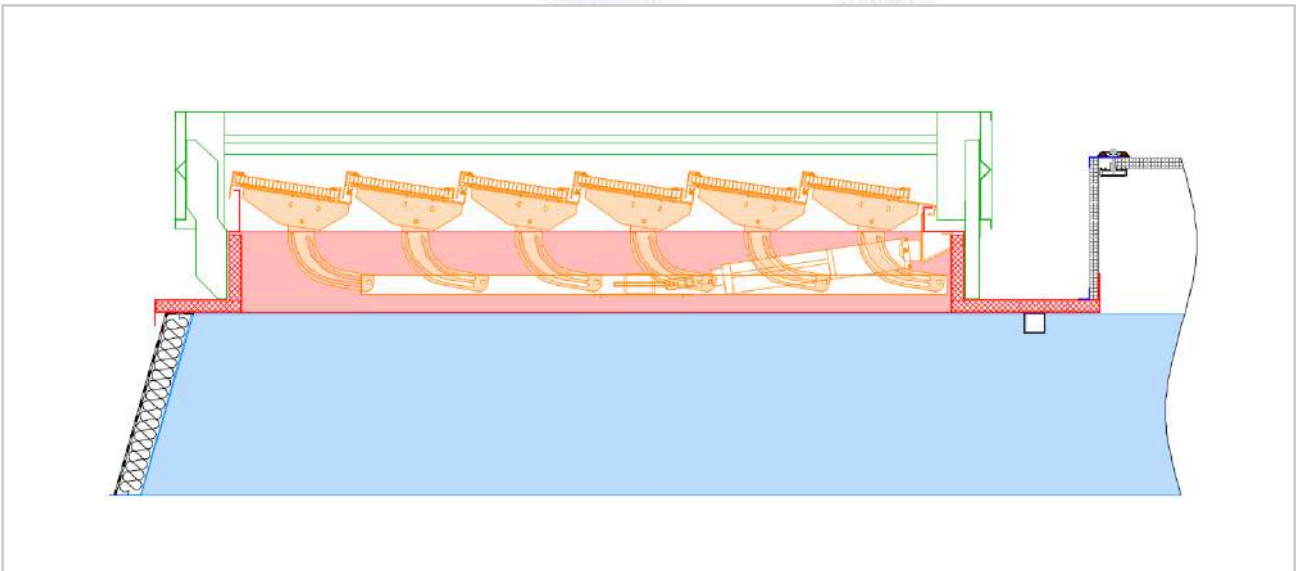
Fig. III.3.3. Thermo insulated base and vertical up end flange

IV. Installation types of Nymbus FLAM roof lamella natural ventilators

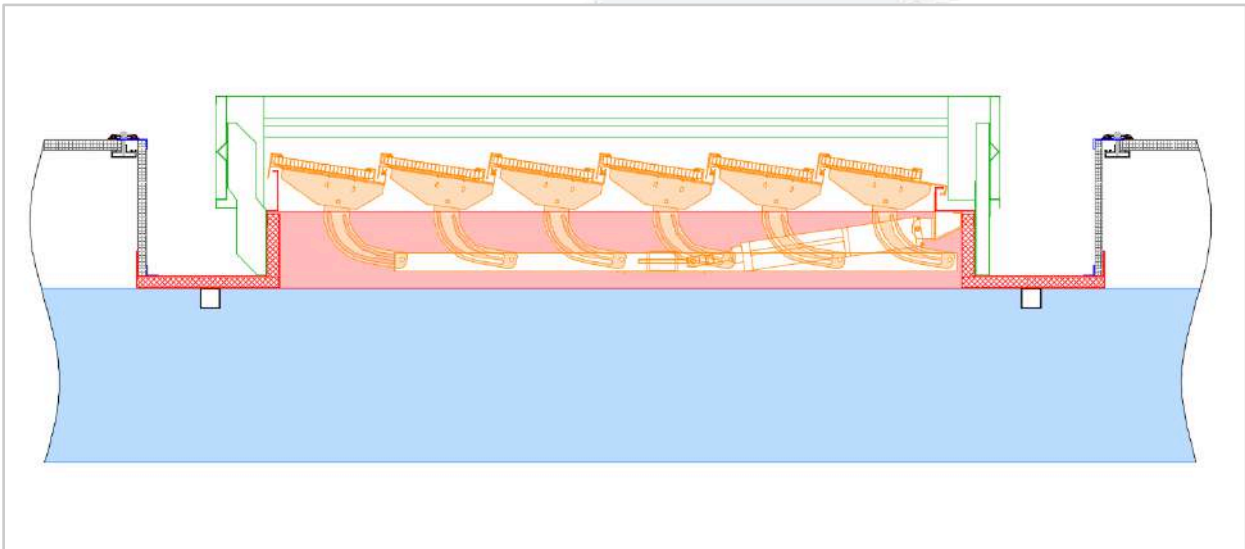
IV.1. Nymbus RLAM roof lamella natural ventilator installed independent on a distance upstand



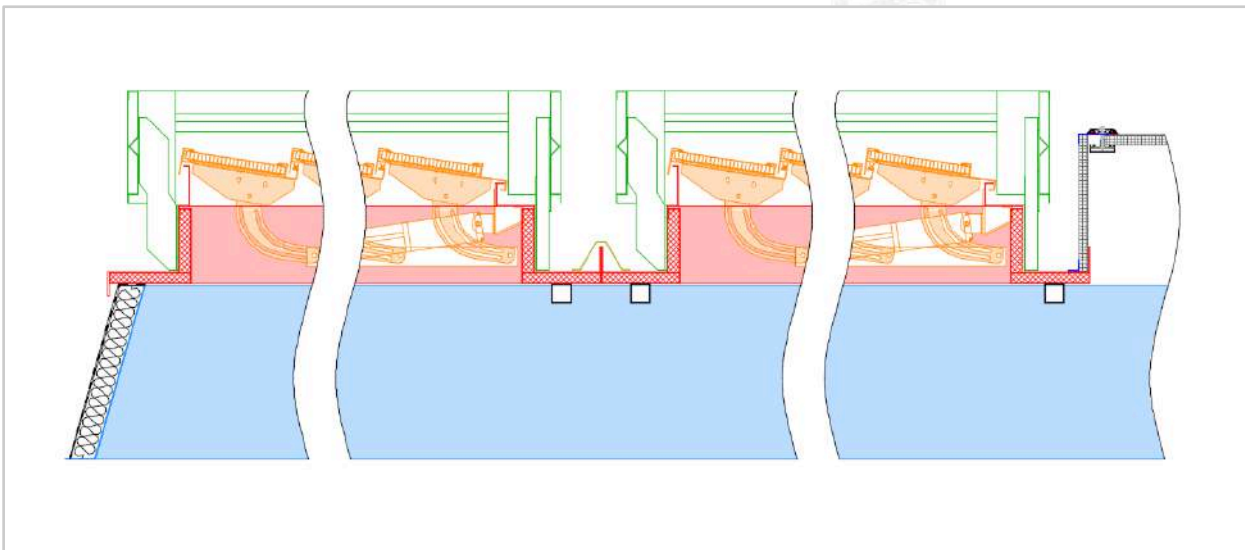
IV.2. Nymbus RLAM roof lamella natural ventilator integrated at the end section of a continuous roof light



IV.3. Nymbus RLAM roof lamella natural ventilator integrated in the centre of a continuous roof light



IV.4. A group of Nymbus RLAM roof lamella natural ventilators integrated in the centre of an INTEGRA continuous roof light system



IV.5. Fixing elements

Table 1. Installation of roof lamella natural ventilator on distance upstand

<i>Installation of Nymbus RLAM on distance upstand</i>			
<i>Fixing element</i>	<i>Reinforced concrete</i>	<i>Steel</i>	<i>Wooden bar</i>
I Fixing of Nymbus RLAM to different distance upstands			
Segment anchor M10 x 100 mm or Self-drilling concrete screw 11 x 80 mm	1 pc. per 0,3 m distance		
Self- drilling screw for steel 6,3 x 30 mm		1 pc. per 0,3 m distance	
Self- drilling screw for wood 6,3 x 50 mm			1 pc. per 0,3 m distance

Note: For more info [here](#)

V. Installation of facade lamella natural ventilators - Nymbus FLAM

V.1.Nymbus FLAM facade lamella natural ventilator - installed in reinforced concrete or brick facade

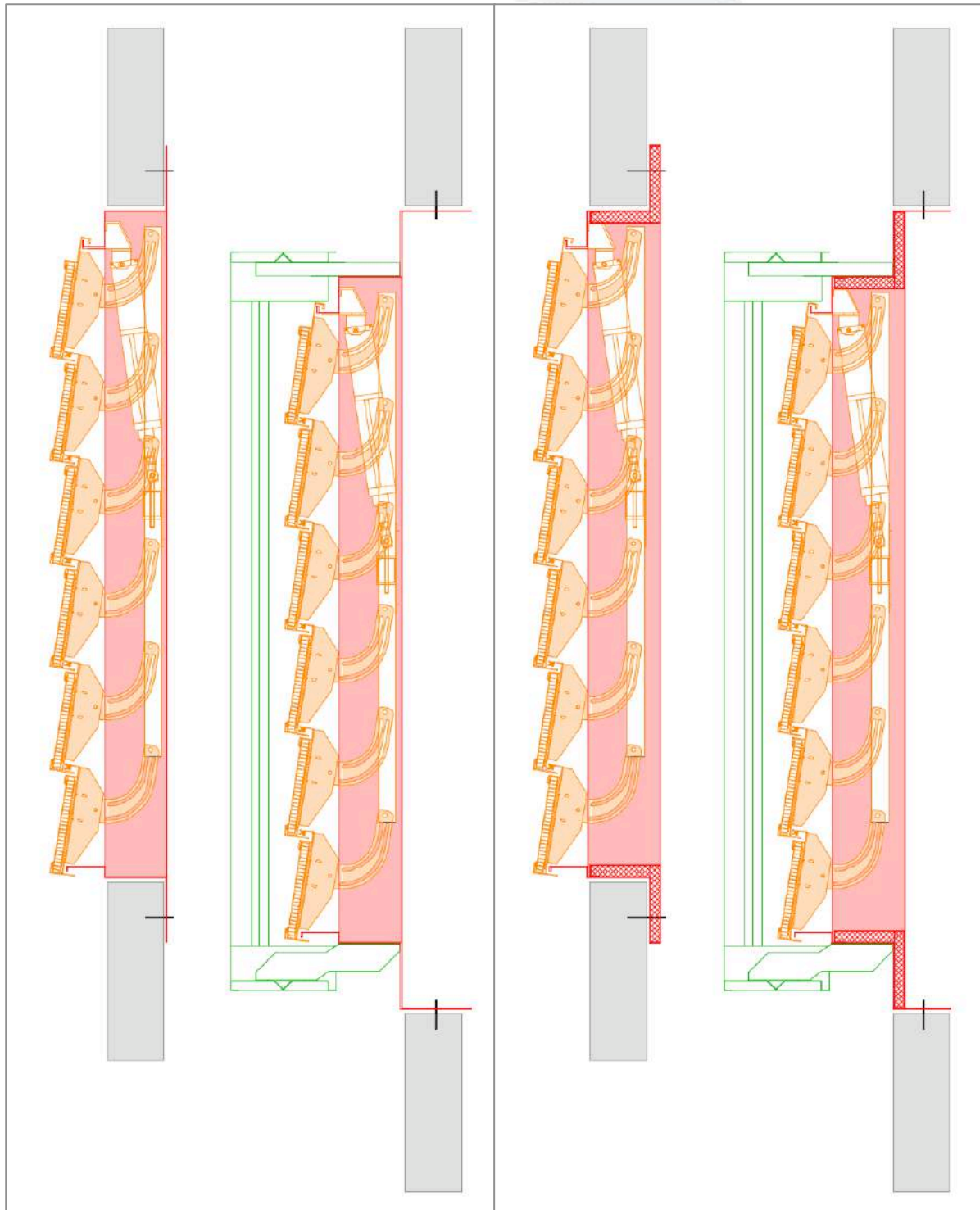


Fig.V.1.1. Fixing of Nymbus FLAM with non-thermoinsulated base and end flange

Fig.V.1.2. Fixing of Nymbus FLAM with thermoinsulated base and end flange

V.2. Nymbus FLAM facade lamella natural ventilator - installed in sandwich panel facade

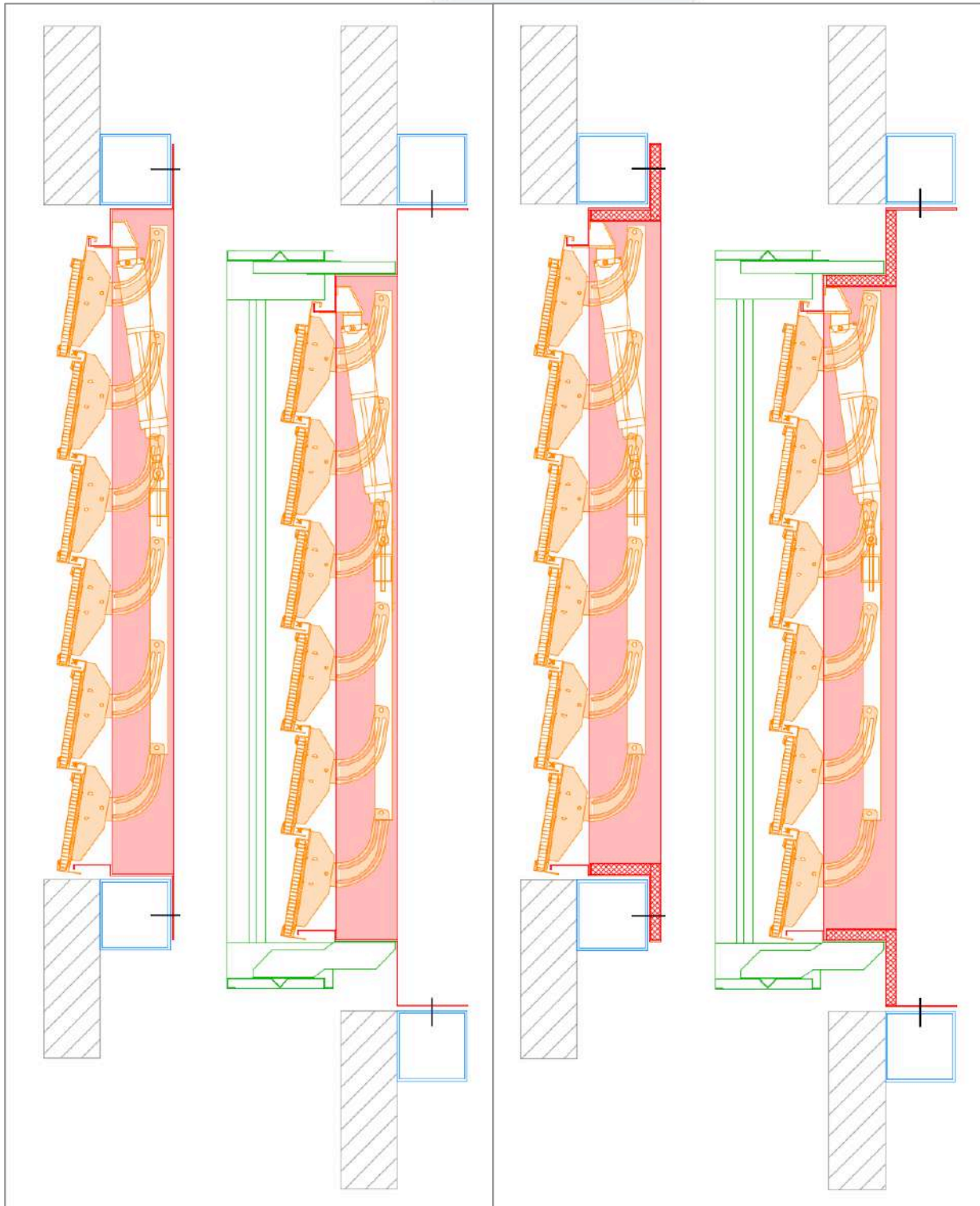


Fig.V.2.1. Fixing of Nymbus FLAM with non-thermoinsulated base and end flange

Fig.V.2.2. Fixing of Nymbus FLAM with thermoinsulated base and end flange

V.3. Fixing elements

Table 2. Installation in reinforced concrete/ brick facade

<i>Installation in reinforced concrete/ brick facade</i>		
<i>Fixing element</i>	<i>Reinforced concrete</i>	<i>Brick</i>
I Fixing of Nymbus FLAM in facade of reinforced concrete/ brick		
Segment anchor M10 x 100 mm or Self - drilling screw for concrete/brick 7,5 x 72 mm	1 pc per 0,2 m distance Note: Not less than 5 pcs. per side	
Brick fixing element M8 x 100 mm Chemical anchor M8 x 100 mm Self - drilling screw for concrete/brick 7,5 x 72 mm		1 pc per 0,2 m distance Note: Not less than 5 pcs. per side

Table 3. Installation in sandwich panel facade

<i>Installation in sandwich panel facade</i>	
<i>Fixing elements</i>	<i>Sandwich panel</i>
I Fixing of Nymbus FLAM in sandwich panel facade	
Self- drilling screw 6,3 x 70 mm	1 pc per 0,2 m distance Note: Not less than 5 pcs. per side

I. Recommendations for safe installation

To safely execute the assembly process, we recommend:

- Take all necessary precautions to safely secure loads when lifting on to the roof. Use appropriate and secure equipment and certified fasteners with a reserved holding capacity at least 50%
- The necessary safety equipment should be provided for all roof mounting activities
- All power tools used must be in a good working order and used in accordance with the manufacture's instructions
- It is obligatory to comply with all National Health and Safety in the Workplace legislation