

**OPERATOR MANUAL**  
**SCREWS FOR FIXING THIN STEEL ELEMENTS MW-0 TYPE**  
**WITH FLAT HEAD PH2**  
No. OM\_MW-0

Installation carried out in an appropriate way, using professional tools is extremely important for proper and safe use of building fasteners. Always follow all instructions listed in this operator manual.

**General rules:**

- The operator manual, apply only to original products of Baltic Fasteners Sp. z o.o.;
- Observe the mounting parameters and take into account the loads of the connections given in valid approval or technical evaluation issued for the product;
- The steel elements Manufacturer's recommendations must be observed;
- Only tools that are equipped with clutch adjustment should be use;
- Modification of **MW-0** screws is not permitted. Cutting of screws that extend beyond the substrate element is forbidden due to the risk of losing their load capacity;
- Products may only be used for their intended purpose.

**Product selection rules:**

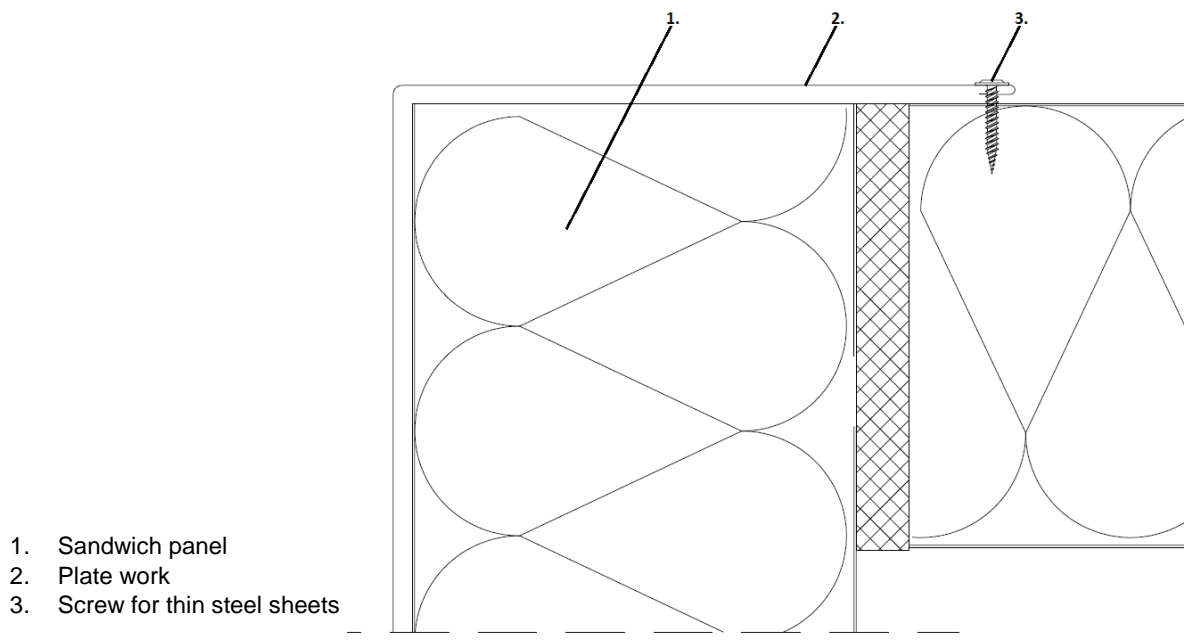
- **MW-0** without washer are designed for fixing thin steel elements to steel substrates where the tightness of joints is not required. Screws **MW-0** equipped with additional pure EPDM washers **R09** can be used in applications requiring joints tightness;
- **MW-0** are designed for fixing thin steel elements (including standing seam sheets) to wooden or steel substrate;
- **MW-0** screws are covered by class **A1** reaction to fire and can be used in this class;
- The corrosion protection of the screws should be suitably selected for the corrosive environment in which they will be used. **MW-0** screws are protected against corrosion by **5µm** zinc coating, which allows them to be used in corrosive environments **C1**;
- The length of the screws should be appropriately selected depending on the thickness of all fixed elements:
  - thickness of the fixed element;
  - thickness of **PES** sealing tapes, if used;
  - thickness of other components, if used.The thickness of the steel substrate should be taken into consideration when choosing the length of the screws;
- Screws can be used on steel substrates of grade not worse than **S280GD**;
- Screws can be used in wooden structures of minimum class **C24**;
- Screws can be used for steel substrates with a minimum thickness of **0,50mm**;
- Maximum steel drilling capacity for screws **2x0,88mm**. Maximum tool speed **2200rpm**;

- In case of steel substrate to select the appropriate length of the screws, the thickness of all fixed elements must be summed. Then add to that sum the thickness of the steel substrate and check in the Baltic Fasteners product catalog exact length of the **MW-0** screws that is suitable for fixing the obtained thickness. The sum of the thicknesses of all the elements including substrate must be within the range  $h_{\min} - h_{\max}$  given in the catalog;
- In case of wooden substrate to select the appropriate length of the screws, the thickness of all fixed elements must be summed. Then check in the Baltic Fasteners product catalog exact length of the **MW-0** screws that is suitable for fixing the obtained thickness. Anchoring depth in wooden substrate  $h_{ef} = 17\text{mm}$ . The sum of the thicknesses of all fixed elements must be within the range  $h_{\min} - h_{\max}$  given in the catalog.  
Product catalog is available on the website [www.balticfasteners.com](http://www.balticfasteners.com);

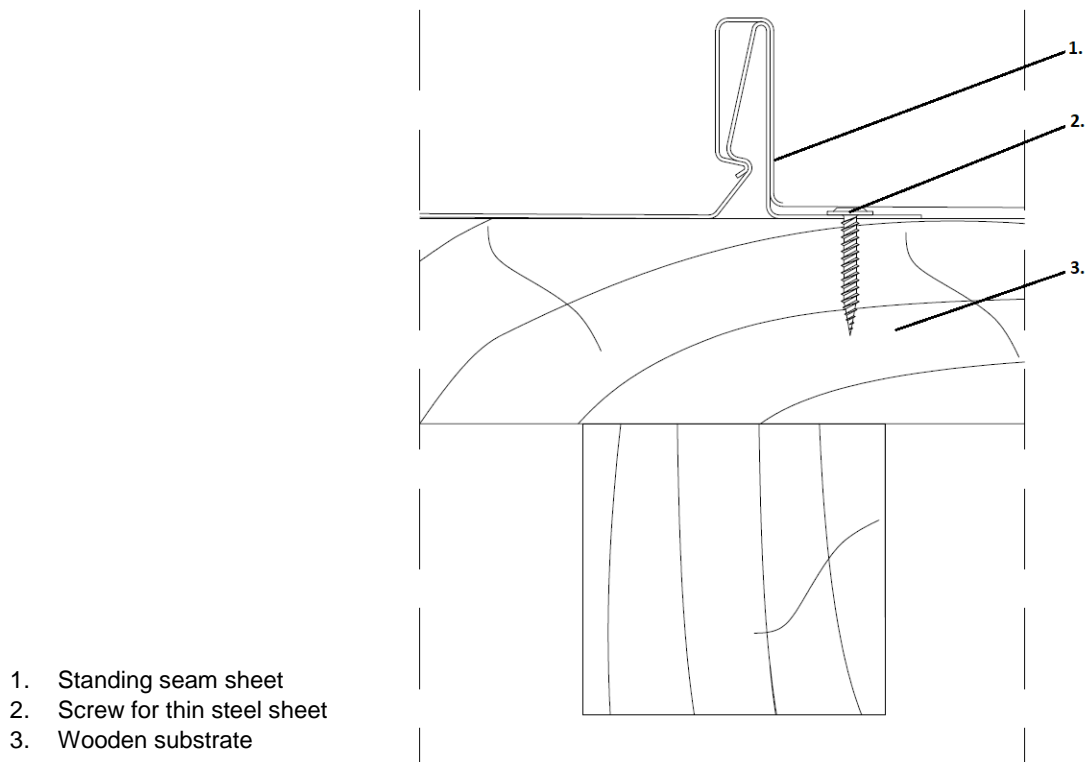
**Installation process:**

- Place the steel element, following instruction provided by the Manufacturer;
- In case of a wooden substrate, the screws can be screwed directly into the substrate through the steel element without pre-drilling (assumption: steel element thickness is in **MW-0** drilling capacity range);
- When installing standing seam sheets, fasten the sheet through longitudinal holes. If the longitudinal holes have not been made during production process, follow the information given in Manufacturer manual;
- The steel element should be screwed to the substrate with the selected screws.
  - a) Screws must always be mounted perpendicular to the substrate.
  - b) For installation use **PH-2** bits.
  - c) Recommended tightening torque **3Nm**.
  - d) With properly selected screws, at least two threads of full diameter must be protruded outside of the substrate.
  - e) Fixing parameters specified for the screw **MW-0** need to be retained.
  - f) Use dedicated nut-setters for a given screw line.
- In case of damage to the corrosion or paint coating on the screws, the defects must be further secured;
- Once you have fixed the steel element, proceed to assemble the next one by following the procedure given above.

**Pictures 1-2** illustrate the fixing of **MW-0** screws to steel or wooden substrate.



Picture 1. Assembling of the MW-0 with plate work on sandwich panel lining.



Picture 2. Assembling of the MW-0 with standing seam sheet on wooden substrate.

**Basic dimensions of screws MW-0 without washer type:**

