



OPERATOR MANUAL
SCREWS FOR STEEL SHEET OVERLAPS
MO-SP TYPE WITH WASHER
No. OM_MO-SP_E14

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. bearing the Manufacturer's logo, which allows for their identification;
- The use of screws shall be confirmed by a fixing plan made on the basis of complete building data;
- When carrying out the fixing plan, observe the mounting parameters and take into account the loads of the connections given in valid approval or technical evaluation issued for the product;
- When carrying out the fixing plan, comply with applicable laws and standards;
- The steel sheet or roofing sandwich panel Manufacturer's recommendations must be taken into account;
- The number and type of screws must be in line with the information given in the fixing plan;
- Only tools that are equipped with clutch adjustment should be use;
- Modification of **MO-SP** screws with washer **E14** is not permitted. Cutting of screws that extend beyond the steel sheet is forbidden due to the risk of losing their load capacity;
- Products may only be used for their intended purpose.

Product selection rules:

- **MO-SP** screws with **E14** washer are designed for linear joining together steel sheets or roofing sandwich panel linings, where the tightness of joints is required;
- **MO-SP** 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. **MO-SP** screws are protected against corrosion by coating **SUPER PREMIUM** with **1000h** resistance in a salt spray test, which allows them to be used in corrosive environments **C4**. Washers **E14** delivered with screws are made of stainless steel, which allows them to be used in corrosive environments **C4**;
- The length of the screws should be appropriately selected depending on the thickness of joined steel sheets/linings and insulation tapes if used;
- Screws can be used for steel sheets and linings of grade not worse than **S280GD**;
- Screws can be used for joining steel sheets or linings with a minimum thickness of **0,50mm**;
- Maximum steel drilling capacity for screws **2x1,00mm**. Maximum tool speed **2200rpm**;

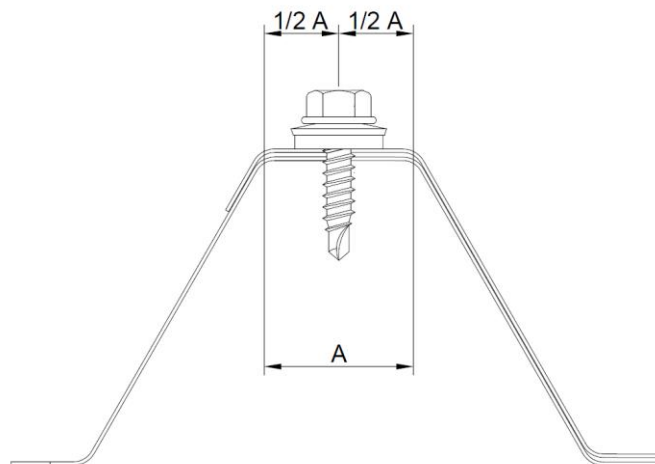
- To verify if **M0-SP** screws with washer **E14** are suitable for your application, the thickness of all fixed elements (sheets/linings and tapes) should be summed. Then check in the Baltic Fasteners product catalog, if screws are suitable to fix that thickness. The sum of the thicknesses of all the elements must be within the range $h_{min} - h_{max}$ given in the catalog. Product catalog is available on the website www.balticfasteners.com;

Installation process:

- Steel sheets can be joined longitudinally when mounted to the substrate. The roofing sandwich panels can be joined longitudinally when the panels are mounted to the substrate;
 - Steel sheets or lining should be joined with the selected screws in accordance with the fixing plan. The distance between the screws should be **max. 250mm**;
- Screws must always be mounted perpendicular to the steel sheet/lining.
 - The EPDM should be properly tightened as shown on the picture below. Recommended tightening torque **4Nm**.

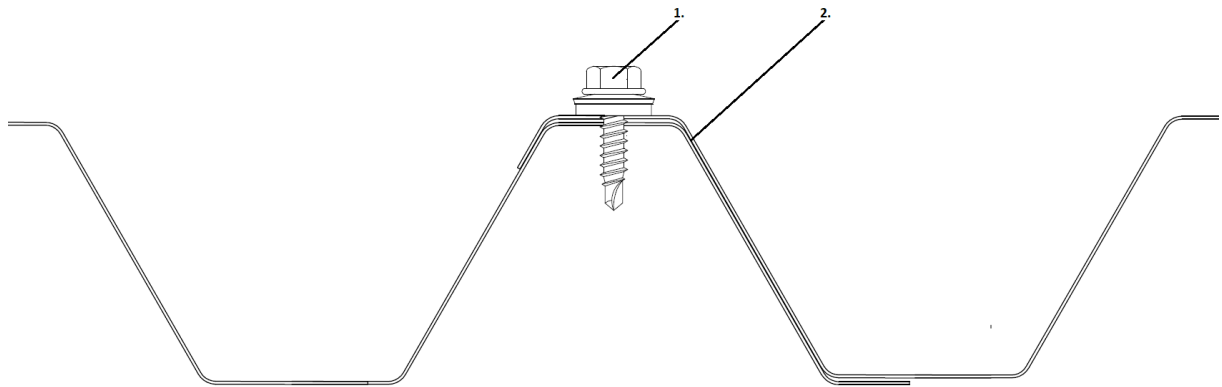


- It is recommended to mount in the center of the shelf, above the capillary groove on the bottom sheet, if any.



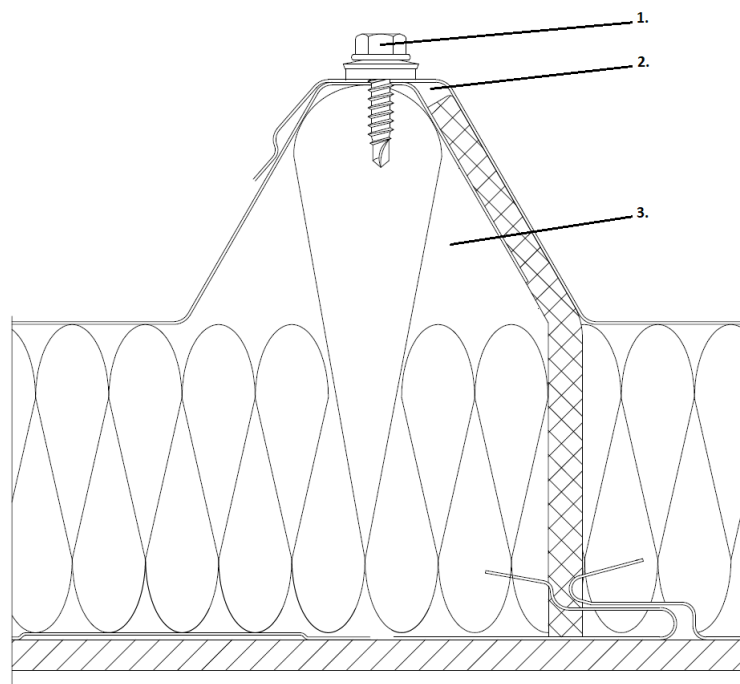
- With properly selected screws, at least the whole drilling point and two full diameter threads must be protruded outside of the bottom steel sheet (visual inspection is not needed when joining roofing sandwich panel linings).
 - Fixing parameters specified for the screw **M0-SP** need to be retained.
 - Use dedicated nut-setters for a given screw line. For fixing screws coated with paint use spring nut-setters.
- In case of damage to the corrosion or paint coating on the screws, the defects must be further secured;

Pictures 1-2 illustrate joining of steel sheets and sandwich panel linings with use of **M0-SP** screws.



- 1. Screw for joining steel sheets
- 2. Steel sheet overlap

Picture 1. Joining of steel sheets using M0-SP screws with washer E14.



- 1. Screw for joining steel sheets
- 2. Sandwich panel overlap
- 3. Sandwich panel

Picture 2. Joining of roofing sandwich panel linings using M0-SP screws with washer E14.

