INSTALLATION INSTRUCTION No. 1 FOR INITIAL COVERING MEMBRANES – ICM

1. This instruction provides the most important principles for installation of vapour-permeable membranes referred to as “ICM” described in DoP as type 90 – type 265 with the weight from 90 to 265 g/m² in roofs with slope of 20° (36,4%), with ventilated coverings laid on battens and counter-battens. Installation of ICM on roofs with slope smaller than 20° is covered by separate instruction No. 5.
2. The complete set of information concerning installation of ICM for their all applications can be found on webpage [www.dachowa.com.pl](http://www.dachowa.com.pl) .
3. ICM is designed to be used as a sealing layer for coverings in sloping roofs. That is why, the construction of the roof eaves where ICM is installed should enable drainage of the condensate and leakages outside roof and should contain inlet for the ventilation of the covering.
4. ICM enables permanent drainage of the roof but only in case when there is a constant airflow over it along counter-battens (pic. 2). Inlets and outlets of the ventilation space or gap located over it must be permeable and protected from animals. The height of the gap must be suitable for the size of the roof according to Instruction No. 2 / DIN 4108 – 3.
5. ICM should be installed directly onto thermal insulation (pic. 1) placed between beams of the roof construction or on this constructions (on rafters). It can be also installed over unused attics where thermal insulation is laid on the ceiling (Instruction No. 9).
6. ICM should be installed thinner nonwoven inside and thicker (with overprint) outside.
7. Membrane should be slightly stretched (not too hard). Main fastening of ICM is made by well-pressed counter-batten. If there is any need for additional fastening, the membrane is initially nailed directly to the rafter by means of nails with wide heads or staples. Staples and nails should be situated under counter-batten. To avoid temporary leakages on ICM during the time when the final covering is not installed yet, a special kind of sealing tape (e.g. MARMA K1) should be taped under counter-battens.
8. Troughs made of ICM should be done over skylights, chimneys, roof windows etc. (pic. 5).
9. Around chimneys (pic. 6), hatches, roof windows etc. ICM should be taped by means of double-sided sealing tape, so that its curled up edges make a strip with height of 10-15 cm. At the end, all cuts on the corners and other cracks should be tightly sealed and those elements should be taped with self-adhesive sealing tape.
10. To obtain a tight connection, additional strip of ICM along the valleys should be installed before installation of main horizontal strips (pic. 4). On this additional strip, following strips should be laid on neighboring tracts with an overlap with minimal length of 15 cm.
11. ICM can be laid on a roof construction (pic. 1) and membranes with DoP type 120 – 265 can be laid on sheathing made of boards fixed on the construction according to Instruction No. 4.
12. Front connection of ICM strips (extension of the strip) is acceptable if made according to Instruction No. 12.
13. ICM lets the water vapour through and is used for sealing of the final roofing, but cannot substitute them. It also cannot be a temporary covering and its installation should be performed simultaneously with the final roofing. Because of the influence of sunlight (UV) on ICM, it is advised to:
14. Install the final roofing as soon as possible after its installation. It is best to install both parts of the roofing simultaneously.
15. Cover the membrane (e.g. with thermal insulation) from the inside (from attic), no later than 3 months from its installation on the roof (or cover the windows) and in eaves no later than 2 months.
16. We ask the performers of installation of the ICM to observe fire safety conditions, including not smoking during the installation.
17. We warn against the possibility of damaging of the ICM by means of ill-prepared (from concentrates) salt impregnations used for protection of the battens and counter battens located over it.
18. Initial fastening of ICM by means of nails or staples and nails fastening counter-battens can be a reason for leakages of the membrane during its installation when it is raining and there is no final roofing yet.

State of knowledge from 01.05.2019.

DESIGNATIONS ON DRAWINGS:

1. ICM membrane

2. Overlap between the strips

3. Batten

4. Counter-batten

5. Rafters - beams

6. Thermal insulation

7. Roof covering

8. Ridge

9. Eaves

10. Valley

11. Chimney

12. Ventilation gap