



## BITUMEN SHINGLES INSTALLATION

1. The bitumen shingles are laid on pitched roofs with slope above 12°. They should be installed on continuous sheathing. When they are installed on roof with slope between 12° and 18° a bitumen sheet for greater security must be underlaid.
  2. Thick wooden planking or Oriented Strand Board (OSB) can be used for the continuous sheathing with maximum thickness – 20 mm.
  3. When a wood-board sheathing is used, the boards must be dry, tightly arranged with equal thickness and maximum width of 0,20m. If the board wood material is not dry, during the time when it begins to dry it strains and causes damage of the bitumen shingles.
  4. The bitumen shingles installation starts from the eave drip edge. The starter strip called a starter course must be laid upside down (with tab slots upside or strip has been laid). Bitumen shingles with tabs cut off can be used. The shingle course is to be laid with the cut line over the drip edge and overlapped the gutter system or cut the overhanging shingles flush with the fascia board.
  5. The first course of shingles are nailed through the top part in regular intervals or bonded using a gas torch. The second line of shingles are nailed and fully bonded. The successive rows of shingles are staggered during the installation.
  6. Each shingle strip 1 m long is fixed with large head nails. The bitumen shingles are nailed above each slot as the nail passes through two thicknesses of the shingles. For roof slopes exceeding 60° extra nailing at 0.2 – 0.3 m from the top side is required.
  7. The shingle tabs are heated with a small gas torch or hot air and bonded one on another.
  8. The ridge are capped by shingles cutting in separate elements in the shape of trapezoid, bent after heating and then applied bearing in mind the direction of the prevailing winds.
  9. On the fascia board cut strips of bitumen shingles as it is mentioned above about the ridge or galvanized steel flashing can be used.
  10. The wall roof joint is formed by previously bent bitumen strips covered with flashing.
  11. The bitumen shingle strips tightly bonded overlap the flashing around the chimney from the ridge side. On the lower side the flashing is over the bitumen strips.
- All roof accessories: flashings, air vents, gutters etc. must be installed before bitumen shingles application. To prevent the water condensation and for roof breathing air vents for ventilation must be installed.