

## 1 GENERAL

This data is an appendix to the MONTANA – ARDONIT SLATES technical information, which continues to apply, except where the information below differs from this guideline.

Montana and Ardonit fibre-cement slates and their fittings are manufactured in accordance with the requirements of the European Standard EN 492.

## 2 WEATHER CONDITIONS

This annex is valid for roofs with moderate or severe exposure

## 3 ROOF PITCH

This annex is valid for low pitch roofs (15 – 20°), for vertical double-lap slating only.

## 4 PRINCIPLE

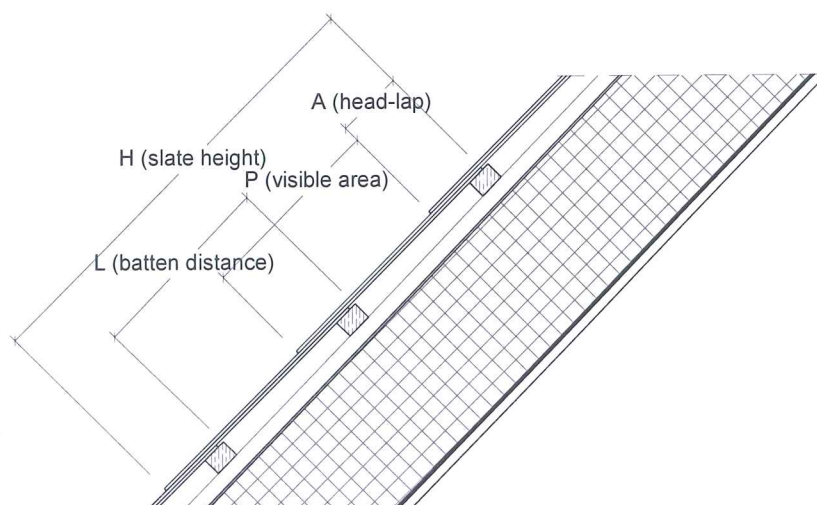
Vertical, double-lap slating is the common way of working. The slates are laid in broken bond. Double-lap means that each row of slates is partly covered by the two rows above. The head-lap is the distance by which the upper course of slates provides a lap with the next but one course below.

This way, each slate can be divided into three areas (see figure below):

- visible area;
- single lap area;
- double-lap area (= head-lap).

The double covered part is called the head-lap. The height of each of the two other parts equals the batten distance and is determined like this:

$$L \text{ (batten distance)} = \frac{H \text{ (slate height)} - A \text{ (head-lap)}}{2} = P \text{ (visible area)} = \text{single lap area}$$



The recommendations apply for limited rafter lengths, see § 5.

## 5 ROOF PITCH – MAXIMUM RAFTER LENGTH

The vertical head-lap and the maximum rafter length for the different slates are:

Slate	Roof pitch (°)	Fixing *	Headlap A **	Maximum rafter length
Ardonit smooth Ardonit textured	15° - 17,5°	nails and rivet / hook	11 cm	4 m
	17,5° - 22,5°	nails and rivet / hook	11 cm	6 m
	≥ 22.5°	See MONTANA - ARDONIT technical information		
Montana smooth Montana textured Moderate exposure	15° - 17,5°	nails and rivet / hook	15 cm	6 m
Montana smooth Montana textured Severe exposure	17,5°-22,5°	nails and rivet / hook	15 cm	6 m
Montana smooth Montana textured	≥ 22.5°	See MONTANA - ARDONIT technical information		

\* All slates are without holes - nails and rivet: holes to be made on site

\*\* In case of low-pitch roofs, special attention must be given to the quality and watertightness of the underlay. The headlap has to be increased. We refer to the BS EN 13859-1 and the BS 5534 Annex A

## 6 FIXING

- The slates are fixed with copper nails (in accordance with BS 1202-2), dimensions 30 x 2,65 mm
- The copper disk rivets have a 19 mm Ø base and a 2 mm Ø, 19 mm tail.

## 7 NUMBER AND DIMENSIONS

Ardonit smooth – Ardonit textured

Size in cm	Head-lap A in cm	Appx. batten gauge L in cm	Appx. pieces per m <sup>2</sup> (*)	Appx. weight per m <sup>2</sup> in kg
60 x 30 60 x 60	11	24,5 24,5	13,4 -	20,5 -
60 x 30 60 x 60	15	22,5 22,5	14,6 -	22,0 -

\* The numbers per m<sup>2</sup> are calculated with a perpendicular joint of 4 mm.

Montana smooth – Montana textured

Size in cm	Head-lap A in cm	Appx. batten gauge L in cm	Appx. pieces per m <sup>2</sup> (*)	Appx. weight per m <sup>2</sup> in kg
60 x 30 60 x 60	11	24,25 24,25	13,8 -	20,2 -
60 x 30 60 x 60	15	22,25 22,25	15,0 -	21,6 -

\* The numbers per m<sup>2</sup> are calculated with a perpendicular joint of 4 mm.