
International Standard



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Directives for fixing asbestos-cement corrugated and asymmetrical section sheets and fittings for roofing

Directives pour la mise en œuvre des plaques ondulées et nervurées et de leurs accessoires en amiante-ciment pour couvertures

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8108 was prepared by Technical Committee ISO/TC 77, *Products in fibre reinforced cement*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Directives for fixing asbestos-cement corrugated and asymmetrical section sheets and fittings for roofing

0 Introduction

This International Standard has been prepared on the basis of experience in laying roofs of corrugated or asymmetrical section sheets.

It has been written in the form of directives and is intended for use by manufacturers in the preparation of instructions for fixing sheets, by installers/contractors engaged in the fixing of sheets, by those responsible for preparing national specifications, by designers, by architects and by engineering departments, etc.

It states general principles¹⁾ for establishing methods for the fixing of sheets and will, therefore, be usefully complemented by taking into account climatic conditions and local usage.

1 Scope and field of application

This International Standard gives guidelines for the design, execution and maintenance of roofs made of asbestos-cement corrugated and asymmetrical section sheets.

It is applicable to the conditions most often found on buildings, wherever they are sited. For special or exceptional laying conditions, particular instructions, additional to those given in this International Standard, are required.

Roofing works, as defined in this International Standard, have to be carried out on load-bearing structures built in accordance with International Standards or national standards.

The sheets are impermeable but, as is the case with all overlapping elements, they depend upon roofing installation properly carried out to ensure watertightness of the roof.

This International Standard does not apply to roofing using corrugated or asymmetrical section sheets as support for other roofing materials; in this case, other rules should be adopted.

2 Design of roofing

2.1 Pitch

The load-bearing structure shall be such that the roof has at least the required pitch for the climatic conditions, length

of roof slope, height of sheet corrugations and use of the building.

Unless special precautions are required in order to ensure watertightness, and according to the extent of the longitudinal overlapping²⁾, the pitch should not be less than 9 % (5°).

2.2 Supports

2.2.1 The centreline spacings between the supports depend on

- the materials to be used : profile and length of the sheets;
- the transverse overlapping of the sheets;
- the applied loads;
- the safety conditions.

2.2.2 The contact surface between the sheets and their supports shall be such that puncturing can be avoided.

2.3 Principles for placing sheets

2.3.1 The sheets should be placed on two or more supports in such a manner that the corrugations are parallel to the greatest slope of the roof.

2.3.2 They shall be placed either

- after cutting the corners (this is called "laying sheets with mitred corners"), or
- without cutting the corners (this is called "laying sheets with staggered junctions")³⁾.

In the case of laying sheets with mitred corners, the sheets shall be placed from the eave towards the ridge in rows perpendicular to the eave.

In the case of laying sheets with staggered junctions, the sheets shall be placed from the eave towards the ridge in

1) A certain number of these principles are common to all roofs and are independent of the materials used.

2) For example, increasing transverse and longitudinal overlapping (if possible, taking into consideration problems of fixing, compatibility with fittings and constraints due to traffic), addition of a weatherstripping product within overlaps, double roofing or addition of a sub-roof. In all cases, if the slope is less than 9 %, precise verification of the slope is required when laying.

3) This method cannot be used for all profiles. The manufacturer should give relevant information.