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Sheet roof and wall coverings —

Part 10: Galvanized corrugated steel — Metric units

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Galvanized corrugated steel roofing

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Foreword

This metric edition of Part 2 of CP 143, which has been designated Part 10, is the metric version of that published in imperial units in 1961.

Part 10 has been prepared as part of the change to the metric system and gives values in SI units; it is not a complete technical revision.

PD 6030, "*Programme for the change to the metric system in the construction industry*", outlines a programme for sizing building components and assemblies in order to achieve the co-ordination of dimensions where appropriate.

According to the recommendations of Technical Committee B/94 set out in PD 6432, "*Dimensional co-ordination in building. Arrangement of building components and assemblies within functional groups*," corrugated sheet materials are classified as grade B components.

In recognition of the wide variety of materials and profiles used as roof and wall cladding a special investigation panel B/-/12 was set up charged with the task of formulating recommendations for the long- and short-terms, recognizing that long-term changes would involve new profiles and of necessity be spread over a period of several years.

Long-term recommendations laid stress on the importance of "cover width" as the co-ordinating dimension and, to assist as far as possible until sheets are manufactured to such dimensionally co-ordinated widths, metric equivalents given include the cover widths for the existing profiles, as a first stage towards the use of the "cover width" for dimensional co-ordination.

This Code of Practice represents a standard of good practice and therefore takes the form of recommendations. Compliance with it does not confer immunity from relevant statutory and legal requirements.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 14, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 General

1.1 Scope

This Code deals with the use of galvanized corrugated steel sheets for roofing and cladding in building. It does not refer to standardized forms of building which are already covered by other British Standards, e.g. in BS 1754.

Recommendations are given on materials and design, construction and maintenance, together with information on weathertightness, durability, thermal insulation, fire hazard, rainwater drainage from roofs and other characteristics.

NOTE The titles of the British Standards referred to in this standard are listed on the inside back cover.

1.2 Definitions

The terms used throughout this Code have the meaning assigned to them in BS 2717.

1.3 Exchange of information and time schedule

The working drawings and specification should be prepared in sufficient detail to afford proper guidance in the preparation of estimates and the execution of the work. Where bills of quantities form part of the contract, they should be prepared in accordance with the Standard Method of Measurement for Building Works or the Scottish Mode for the Measurement of Building Works, as appropriate. There should be a full exchange of information between all concerned with the roofing and the work adjacent to it in sufficient time to ensure that the covering can be carried out at the proper time and that all necessary provisions for fixing have been made in advance. Early arrangements should be made on the site for rainwater disposal. Roof covering should be completed before internal finishes are begun.

2 Materials, appliances and components

2.1 Galvanized corrugated steel sheets

Galvanized corrugated steel sheets used in constructing roofs and sides of buildings in accordance with the recommendations of this Code are to comply with the requirements of BS 3083. Where a profile other than a corrugated sheet is required, the quality requirements are to comply with BS 3083.

2.2 Profiles and dimensions of galvanized corrugated steel sheets

The most commonly used profile is the 76.2 mm corrugation with either eight or ten corrugations per sheet; the profiles are shown diagrammatically in Figure 1. The dimensions and the net width covered per sheet of galvanized corrugated steel are given in Table 1. Any profile, however, may be used that provides adequate strength for the particular loading conditions and for the purlin spacing adopted.

2.3 Accessories and fittings

A wide range of galvanized steel sheet roofing accessories are made by the sheet producers and can be obtained from them or through builders' merchants.

Special fittings to meet specific purposes may be obtained from constructional and sheet metal engineers.

Where continuously galvanized steel sheet is used to construct these accessories it should comply with the requirements of BS 2989.

2.4 Fixing accessories

Hook bolts, drive screws, bolts, nuts, rivets and washers should comply with the requirements of BS 1494. Any other fixings required should be of similar quality, and care should be taken in their design to ensure that they do not impair the efficiency of the roof or side covering.

2.5 Sealing material

Where flexible seals are required, a bituminous mastic or other material of similar characteristics is recommended.

2.6 Flashings

Where zinc and lead sheets are used for flashings they should comply with the following requirements:

- 1) *Zinc*. BS 849 and not lighter than 0.813 mm (14 zinc gauge).
- 2) *Lead*. BS 1178 and not less than the following thicknesses
 - a) gutters: BS Gauge No. 6.
 - b) flashings: BS Gauge No. 4.