

SRI LANKA STANDARD 1189 : PART 2 :1999
UDC 692:4 :693.5

SPECIFICATION FOR
CONCRETE ROOFING SEMI-SHEETS, TILES
AND FITTINGS
PART 2 - TEST METHODS

SRI LANKA STANDARDS INSTITUTION

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TILES AND FITTINGS
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SLS 1189 PART 2 : 1999

Gr. 8

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FOREWORD

This standard was approved by the sectoral committee on Building and Construction Materials, and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 1999-02-11.

Micro-concrete roofing, a newly introduced roofing material in Sri Lanka, is prepared using concrete with small size aggregates but without reinforcements. This can be made as a semi-sheet or a tile, but the semi-sheet is more popular.

Micro-concrete semi-sheets and roofing tiles, developed using economic, simple and labour intensive technology as an alternative to asbestos roofing sheets, gained popularity in Sri Lanka rapidly, and is now used in housing as well as institutional buildings. Their advantages are : asbestos free and, hence, more environmentally friendly; labour intensive production process with even unskilled workers; economical compared to asbestos or burnt clay roofing; capital investment required is small; avoids use of scarce materials like clay and firewood; lighter than burnt clay tiles and hence a lighter roof structure is required; good fire resistance; uses more local materials easy to obtain; provides good thermal control inside the building; production can be set up in a location with meagre infrastructure facilities; can be coloured; good roof drainage and, hence, roof slope can be 20 degrees and above; can be cut to shape with a hack-saw or pincers; and a unit can be removed and replaced from inside the roof. Their disadvantages are: machine and moulds are imported still; greater care is needed during transport to minimise breakages; although skills needed are easily learned, greater supervisory effort is needed at all stages of production and delivery; at ridges, more effort and materials are required to close openings; not intended to be walked on without a crawling board or roof ladder; and more prone to breakage by impact. Emergence of new manufacturers and new users emphasise that advantages seem to outweigh the disadvantages of these roofing units.

Sri Lanka Standard on these roofing units was considered opportune to ensure good quality control, build up manufacturer and user confidence, introduce technological changes more suited to local conditions, and to stimulate this industry to grow rapidly.

This part of the standard specifies the test methods, while Part 1 of this standard specifies the requirements.