

Specification for

Metal ties for cavity wall construction

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Cooperating organizations

The Hardware and Ironmongery Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- Aluminium Window Association
- Association of Builders' Hardware Manufacturers
- British Hardware Federation
- British Lock Manufacturers' Association
- British Plastics Federation
- Copper Development Association*
- Department of the Environment (Building Research Establishment)*
- Department of the Environment (Housing and Construction)
- Greater London Council
- Guild of Architectural Ironmongers
- Institution of Municipal Engineers*
- Metropolitan Police
- Royal Institute of British Architects*
- Royal Institution of Chartered Surveyors
- Steel Window Association
- Zinc Development Association

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- Agrément Board
- Brick Development Association
- British Non-ferrous Metals Federation
- British Steel Industry (Wire Section)
- Institution of Building Control Officers Ltd.
- National Building Agency
- National Federation of Builders' and Plumbers' Merchants
- National Federation of Building Trades Employers
- Stainless Steel Fabricators Association of Great Britain
- Timber Research and Development Association

This British Standard, having been prepared under the direction of the Hardware and Ironmongery Standards Committee, was published under the authority of the Executive Board on 30 June 1978

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The following BSI references relate to the work on this standard:
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Amendments issued since publication

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Foreword

This British Standard is a revision of BS 1243:1972. The technical requirements are similar to those of the 1972 edition with the following alterations and additions. The specification for stainless steel wire has been updated and a new specification for stainless steel strip has been added for the vertical-twist type of wall tie.

There is a growing demand for a standard wall tie for use in structures which incorporate a cavity between a structural timber frame and a brick veneer outer skin. However, the committee revising the standard felt that there was insufficient evidence of performance in use to justify including guidance in the present edition of BS 1243. Instead, a separate Draft for Development is to be published as soon as possible. Users and manufacturers will be invited to comment on this draft, with a view to incorporating material from it in future editions of the standard.

Consideration was given to wall ties made from plastics materials and zinc die cast alloys but, because of insufficient evidence of their performance in use, they are not included.

Recent investigations of the condition of ties in cavity walls have indicated that corrosion of galvanized steel in this location, specifically in the outer leaf, occurs at a higher rate than previously assumed. The corrosion of galvanized ties is a gradual process so that any possible structural weakening of the wall will occur slowly. With vertical-twist ties the consequence of corrosion will often be observed by cracking of the mortar joints, and in extreme cases, by distortion of the brickwork. For the wire tie, visible external indication of corrosion may not be seen. Deterioration of galvanized ties appears to occur with normal mortars for masonry and is not restricted to those mortars regarded as particularly corrosive, such as black ash mortar, or to specific localities such as marine locations where increased corrosion may have been expected. The higher corrosion rate observed on galvanized steel ties will reduce the anticipated life of ties manufactured in accordance with the previously accepted requirements; Amendment No. 1 therefore amends the specification for galvanized ties to increase the anticipated life.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 6, 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.