

Glossary of
Mining terms —

Section 11: Strata control

Confirmed
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Co-operating organizations

The Colliery Requisites Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government department and scientific and industrial organizations:

- Association of Mining Electrical and Mechanical Engineers*
- British Electrical and Allied Manufacturers' Association
- British Iron and Steel Federation
- Electric Cable Makers' Confederation
- Federation of Associations of Mining Equipment Manufacturers
- Institution of Electrical Engineers
- Institution of Mechanical Engineers
- Institution of Mining Engineers*
- Mechanical Handling Engineers' Association
- Ministry of Power*
- National Association of Colliery Managers*
- National Coal Board*

The Government department and industrial 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:

- University of Birmingham
- University of Leeds
- University of London
- University of Newcastle-upon-Tyne

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Foreword

In preparing this glossary the object has been to standardize and to co-ordinate the technical terms in current use in mining in the United Kingdom. Although the majority of the terms are necessarily concerned with coal mining, account has been taken of certain terms used in other forms of mining and of quarrying.

During the long period which has elapsed since the publication of the last authoritative mining glossary¹⁾, many new terms have come into use. The need for the present glossary has arisen from the widely varying interpretation and use of such new terms, and the prevalent use of more than one synonym, some purely local in origin, to indicate specific meanings.

The glossary will initially be issued in a number of sections, according to subject matter, and will include terms relevant to the following fields of mining:

Planning and Surveying; Ventilation; Boring and Exploration; Drainage; Geology; Drilling and Blasting; Electrical Engineering and Lighting; Winning and Working; Transport; Shafts and Associated Equipment; Strata Control.

i) Where two or more terms are in use the term which is favoured is given first and printed in heavy type.

It is hoped that such preferred terms will gradually displace the non-preferred terms. Where the use of any term is considered to be undesirable it is marked "deprecated".

ii) Taking a broad view of the various sections of this glossary, only terms which have a specific meaning in mining have been included and, generally, where a technical term has an accepted meaning in other fields of engineering it has been omitted; the few exceptions are terms which are of particular and fundamental importance in mining.

iii) Purely local terms are not defined, but those of sufficient importance are included as non-preferred terms alongside the preferred synonyms.

iv) Obsolete terms are excluded.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8 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⁾ "A glossary of the mining and mineral industry" by A.H. Fay, U.S. Bureau of Mines, Washington, 1920.

Section 11. Strata control

Term	Definition
abutment	The region adjoining an excavation which is normally subjected to increased stress as a consequence of the redistribution of load. This may be at the front of, or at the sides or rear of a working face.
advance pack BUTTRESS PACK	A small pack built in advance of the gate side pack to limit the spreading of the adjoining caved waste towards the roadway in a longwall face.
anti-flushing shields	A curtain of bars, plates or chains on the waste side of powered supports to hold back the material which flushes or falls from the caved waste.
anti-slewing struts	Bars fitted between powered supports to prevent slewing of the supports on gradients.
arch girder RING, <i>deprecated</i>	A rolled steel section bent into the form of an arch and normally in two or more lengths joined together to form a support for the roof and sides of a roadway.
articulated arch	An arch in which the component lengths are hinged together.
articulated bar	See <i>link bar</i> .
backfill	1. Material which is used to fill the void following extraction of mineral. 2. Overburden replaced after opencast extraction of mineral. 3. Loose material placed behind the shaft wall or the lining of any other excavation.
backward hading breaks	Breaks whose planes are inclined from the normal to the plane of the seam, towards the goaf.
bar	A support set parallel to the roof.
barrier pillars	Pillars or strips of coal or other mineral suitably dimensioned and disposed, left unworked for the purpose of dividing a seam or mine into separate working panels or districts.
bar slide bracket system	A system of support in which roof bars are slid forward on brackets attached to adjacent parallel bars, props being then set to the newly advanced bars.
bar slide head	A device at the top of a support enabling the support to remain set to the roof while the bar above it is released and slid forward to a new setting position.
bar slide head system	A system of support in which roof bars are moved forward through bar slide heads, the props continuing to carry load.
bed separation	The moving apart of stratified beds caused by excavation.
breaking-off line	The support line at the rear edge of a longwall face along which the roof is induced to break.
breaking-off props	Props set alongside the edge of the intended goaf or of a ripping, to determine the line of break.
breaks	The fractures that develop in the roof, floor or sides of an excavation, due to deformation of the surrounding strata.
bump CRUMP	A sudden and heavy release of strain energy in the major body of rock surrounding a mine working, resulting in displacement of the strata.
buttress pack	See <i>advance pack</i> .
cambered girder	A curved roof bar set in a roadway with its convex surface to the roof.
cantilever bar	A roof bar projecting forward to support the roof beyond the propped area.
cap	See <i>lid</i> .
capsule	See <i>hydraulic load cell</i> .
catch prop JACK PROP, <i>deprecated</i>	A supplementary prop not forming part of the planned support system.