

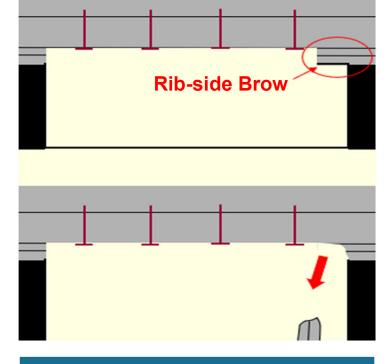
**Preventive Roof/ Rib Outreach** Program **Coal PROP** 



# WHAT IS A **BROW?**

A brow is a block of overhanging material that is not flush with the roof and does not have rib below it.

A piece of overhanging material.





## REMOVING **BROWS**

Evaluate the area and alert your supervisor of any brows.

## HAZARDS

Bedding planes or geologic structure in the roof divide rock into layers.

Brows form when the rib sloughs below a stronger layer of rock.

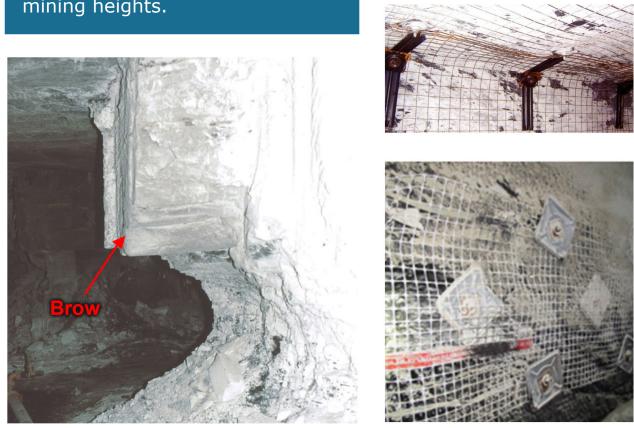
When a brow forms along a pillar rib, more support may be necessary.

Brows can also occur in intersections with the change of mining heights.

#### **SUPPORT**

- Be sure to bolt THROUGH the brow.
- Confirm a solid anchorage horizon.
- The bearing plate should be large and strong enough to support the brow.
- Brackets, mesh, channel, straps, monster mats, and other skin control can further strengthen support.





The safest way to remove brows is with a continuous miner.

If scaling is necessary to remove the brow: look at it from different angles, scale from good to bad ground, and use the proper length bar.