

# Hydrocell

## Pre-Stressing Plate

Hydrocell Pre-Stressing plate is a welded, expandable sheet-metal plate used for preloading roof support props and cribs



- Installed between head-plates and the mine roof, the Hydrocell expands using water pressure to apply load to the roof and floor
- Depending on the size of the plate, normal expansion is between 1 and 3 inches
- Load applied on the roof and floor depends on the size of Hydrocell, the roof support used and the water pressure applied
- Hose and gauge assembly is available to control applied water pressure
- Maximum installed water pressure is 100 psi
- Equipped with relief valve to prevent over pressure
- Hydrocells are made to order with sizes starting at 12" x 12"

*Note:* Hydrocells are designed to provide pre-load to a support not to substitute for proper sizing of supports or blocking above or below supports.

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### INSTALLATION

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#### Step 1

Cut or stack support to proper height for area to be supported

#### Step 2

Using blocking or wedges to assist in leveling the surface contact with the roof such that the load applied by the Hydrocell will be in line with the long axis of the support

#### Step 3

Attach the connecting fitting to the Hydrocell

#### Step 4

Apply water pressure up to a maximum of 100 psi to expand the Hydrocell and load the support

#### Step

Shut off water pressure from supply line, release pressure and disconnect fitting from Hydrocell

