

## DURAPACK 60-300

Durapak cellular lightweight concrete blocks, reinforced with annealed steel wire mesh, stirrups, and polypropylene fibers, are engineered to withstand extremely high loads in mining environments where stope closure is minimal. This design ensures long-term stability and structural integrity in high-stress conditions.

### AREA OF APPLICATION

- **Fire-Resistant Design:** Suitable for all fire risk areas, enhancing underground safety.
- **High Load Capacity:** Engineered to withstand extremely high load demands, making it ideal for deep-level and high-stress mining conditions.
- **Minimal Stope Closure Compatibility:** Specifically designed for environments with minimal stope closure, ensuring long-term structural stability.
- **Bed-Separation Prevention:** Effectively reduces the risk of bed-separation, maintaining overall rock mass integrity.
- **Pillar Reduction Support:** Provides essential reinforcement in scenarios involving pillar size reduction or removal, improving excavation flexibility.
- **Key Block Stability:** Prevents loosening of key blocks, reducing fall-of-ground hazards and maintaining excavation safety.

### PACKAGING

- **Standard Stacking Configuration:** Each pallet contains 126 blocks to ensure safe handling and transport.
- **Protective Wrapping:** Pallets are wrapped in plastic to prevent contamination and maintain product integrity.
- **Storage Requirements:** Pallets must be stored side by side on a stable surface, avoiding vertical stacking to prevent compression damage.
- **Optimized Pallet Capacity:** Pallet quantities can be increased to 144 blocks per pallet when required, depending on handling and storage conditions.

### CONSTRUCTION STEPS

- **Footwall Integrity:** Ensure the footwall is securely constructed and provides a solid foundation for support placement.
- **Perpendicular Alignment:** Build the pack at 90° between the hanging wall and footwall to maximize structural stability and load distribution.
- **Tight Block Placement:** Maintain precise construction by positioning blocks skin-to-skin, ensuring a uniform and interlocked support structure.
- **Pre-Loading Efficiency:** Correctly position the pre-loading bag to facilitate effective load transfer and immediate support activation.



# TECHNICAL DATA SHEET



- Gully Pack Orientation:** Align bottom slabs in the DIP direction when installing gully packs to enhance stability and load-bearing efficiency.

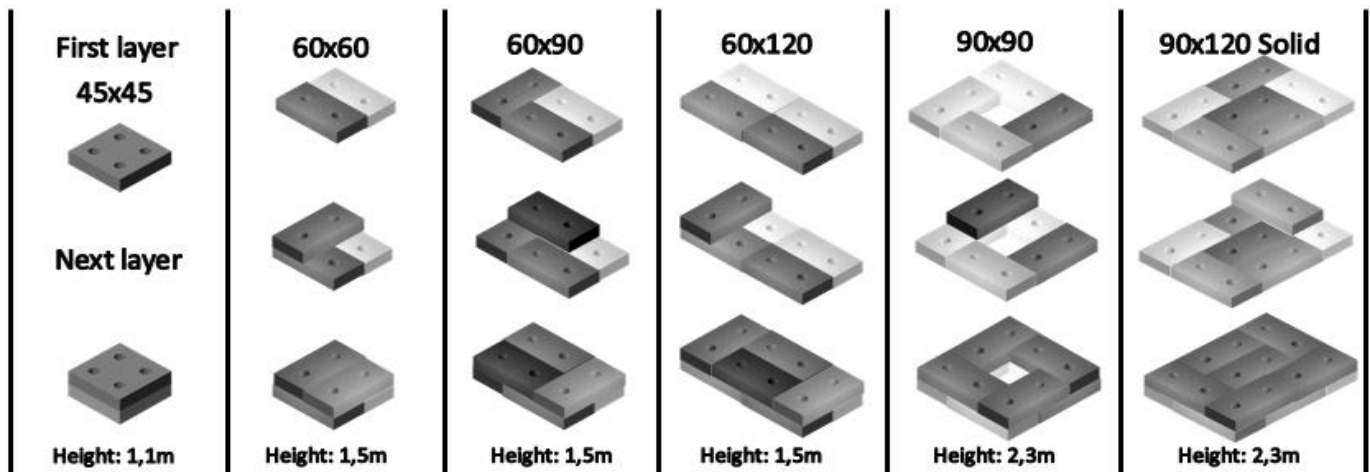
## DURAPAK DESIGN

Weight: 21kg

Dimension: 60cm x 30cm x 10cm

PACK SIZE	MAXIMUM PACK HEIGHT (m)	UNITS PER LAYER (m)	STATIC YIELD LOAD (kN)
0.6 x 0.6	1.5	2	3000
0.6 x 0.9	1.5	3	4000
0.9 x 0.9	2.3	4	5500
0.9 x 1.2	2.3	6	7000

## PACK CONSTRUCTION



## QUALITY ASSURANCE

Rainbow Mining Support (Pty) Ltd production and testing programs comply with all local (ISO 9001:2015) and international testing standards.

## CUSTOMER SERVICE

For additional support options available at your area, contact our local offices.  
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