

## MINE POLES

### TIMBER ELONGATE

#### DESCRIPTION

Specially sourced Eucalyptus grandis timber elongates, used as secondary underground mining support.

#### DIAMETER

- Both ends of the pole (thin and thick) must be measured using a diameter tape or an appropriate template.
- For 160mm-180mm poles, the thin end must be at least 160mm, and the thick end no more than 180mm. Poles outside these specifications will be rejected.

#### STRENGTH

- Poles with a diameter of 180mm-220mm: Minimum required strength is 550 kN, tested at 30mm/min in an accredited lab.
- Poles with a diameter of 160mm-180mm: Minimum required strength is 400 kN, tested under similar conditions.

#### TIMBER TYPE/SPECIES

Acceptable species include Eucalyptus grandis and CTE, provided they meet the strength requirements. Eucalyptus grandis is preferred.

#### LENGTH

Length tolerance: +50mm / -0mm.

#### FOREIGN MATTER

Poles should be free of nails, wire, clay, and soil.

#### STRAIGHTNESS

The maximum permissible sweep is half the pole diameter or 80mm over a length of 2250mm.

#### BINDING OF ENDS

If required, poles should be bound at both ends using either 19mm x 0.4mm steel strapping or new 3.0mm galvanized wire, 60mm-80mm from the ends.

#### BARK, BRANCHES AND KNOTS

- All bark should be removed.
- Branches must be trimmed, with knots no more than 25mm above the pole surface.

#### WOODROT

Poles must be free from wood rot, decay, or signs of borer beetle infestation.

#### CRACKS AND SPLITS

- Surface cracks must not exceed 12mm in width.
- Fine cracks up to 1mm in width are permissible if they do not extend beyond half the pole's diameter.
- Cracks 1mm-12mm wide should not exceed one-third (33%) of the pole length.

## CRACKING SPECIFICATIONS – MINE POLES

For cracks less than or equal to 12mm wide: Permissible crack length is one-third of the pole length. Any pole exceeding this limit should be discarded or cut to a shorter length.

12mm or less = ✓  
More than 12mm = X



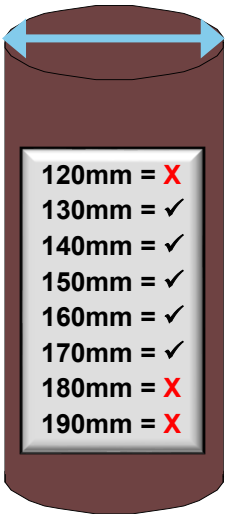
Length of Pole (m)	33% of Pole Length Allowed Cracking
1.0m	330mm
1.2m	390mm
1.5m	490mm
1.8m	590mm
2.4m	790mm

1/3 or less of total length = ✓  
More than 1/3 of total length = X

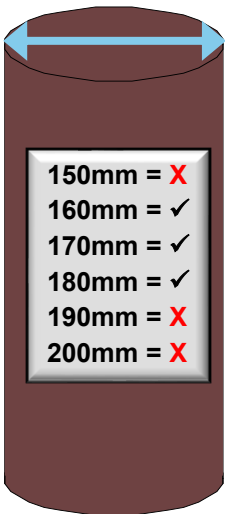
## DIAMETER SPECIFICATIONS – MINE POLES

Diameter measurements should be taken at both ends with a diameter tape or suitable template. Poles must meet the required diameter range for acceptance.

**Pole Diameter**  
130mm – 170mm



**Pole Diameter**  
160mm – 180mm



**Pole Diameter**  
180mm – 220mm



# TECHNICAL DATA SHEET



## 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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