COAL MINING / HARD ROCK MINING

COMBI PLATES

OPTIMAL SURFACE SUPPORT FOR SOLID, FRICTION AND COAL BOLTS

DESCRIPTION

Combi plates are high load bearing capacity plates that provide optimal support in a range of strata conditions. Combi plates are designed where either a dome plate or crown plate is fixed onto a strata plate. Combi plates are typically used with friction bolts, coal bolts and solid (Secura) bolts.

Combi plates are available with or without a utility slot for supporting miscellaneous services. Plates can be supplied in black steel or hot dip galvanised.

APPLICATION AND USES

Primary use is strata reinforcement in underground mines. Designed to help prevent loose material from falling between the roof bolt patterns and provide strength to the immediate roof.

ADVANTAGES

- Optimal Surface Support
- Flexibility
- Variety of Coatings
- Variety of Configurations
- Reduces the number of plates and handling required on site

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Product</th>
<th>Dome Combi Plate</th>
<th>Dome Combi Plate</th>
<th>Dome Combi Plate</th>
<th>Crown Combi Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (mm)</td>
<td>240x300</td>
<td>280x300</td>
<td>280x400</td>
<td>280x300</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Height (mm)</td>
<td>18.0</td>
<td>25.5</td>
<td>25.5</td>
<td>35.0</td>
</tr>
<tr>
<td>Hole Size (mm)</td>
<td>38</td>
<td>50</td>
<td>50</td>
<td>38-42</td>
</tr>
<tr>
<td>Tensile Strength (MPa)</td>
<td>360-430</td>
<td>360-430</td>
<td>360-430</td>
<td>360-430</td>
</tr>
<tr>
<td>Plate Load (kN)</td>
<td>200</td>
<td>150</td>
<td>150</td>
<td>180</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1.7</td>
<td>2.1</td>
<td>2.5</td>
<td>2.2</td>
</tr>
</tbody>
</table>

1 Test conducted over 100mm hole
2 Test conducted over 70mm hole
PACKAGING AND TRANSPORTATION

<table>
<thead>
<tr>
<th>Plate Dimensions</th>
<th>Crown Combi Plate</th>
<th>Dome Combi Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Units (pcs)</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Nominal Weight (kg)</td>
<td>528</td>
<td>480</td>
</tr>
<tr>
<td>Pallet Size (mm)</td>
<td>1150x1150</td>
<td>1150x1150</td>
</tr>
</tbody>
</table>

APPROVALS AND CERTIFICATES

Product Standards

Material : AS1594
Galvanising : AS4680

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work. All technical data sheets can be found on www.minovaglobal.com

DISTRIBUTOR

Minova trading name of Orica Australia (Pty) Ltd
George Booth Drive Kurri Kurri, NSW 2327

An ISO 9001:2015 Quality Management Certificated Company

ADDITIONAL INFORMATION

Minova Australia offers a comprehensive range of products, all of which have been developed after extensive research and testing on a global scale via our international network of operations. These products include:

- Resin anchor systems
- High yield grouts and foams
- Monolithic chock systems
- High performance cable bolt grouts
- Polyurethane resin systems
- Sprayable coatings for ventilation control
- Water stop grouts
- Ventilation formwork systems including: Meshblock and Tecmesh
- Grout mixers and batchers both air and hydraulically operated
- Contract Installations
- Flexible membranes for strata support and waterproofing applications

CUSTOMER SERVICE

sales_au@minovaglobal.com
1800 646 682 (1800 Minova)
1300 646 682 (1300 Minova)
+61 2 49395159 (International)

DISCLAIMER

All information contained in this document is provided for informational purposes only and is subject to change without notice. Since Minova cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Minova specifically disclaims all warranties express or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. Minova specifically disclaims, and will not be responsible for, any liability or damages resulting from the use or reliance upon the information in this document.

The Minova Logo is a registered trademark.

© 2018 Minova Australia Pty Ltd
© Registered trademark of Minova International Limited