

## Technical Data Sheet : D.299

### DYWIDAG Mechanical Expansion Shells - Installation Instructions

Part No. 15 F 2135 to suit DYWIDAG 15mmØ 900/1100 Threadbar

**IMPORTANT NOTES :**

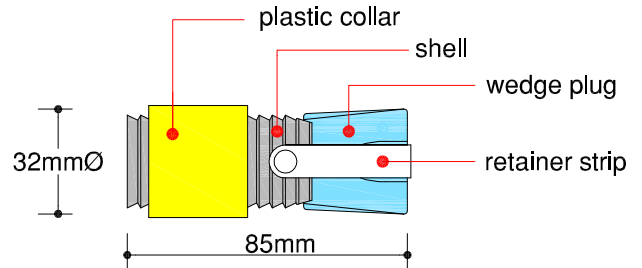
Rotary percussive borehole : 35 - 37mmØ

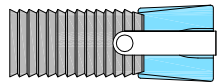
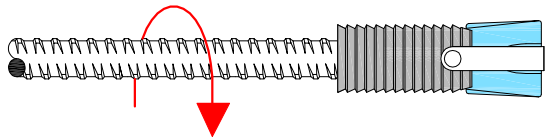
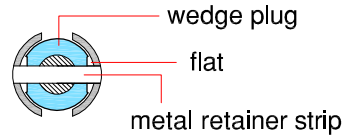
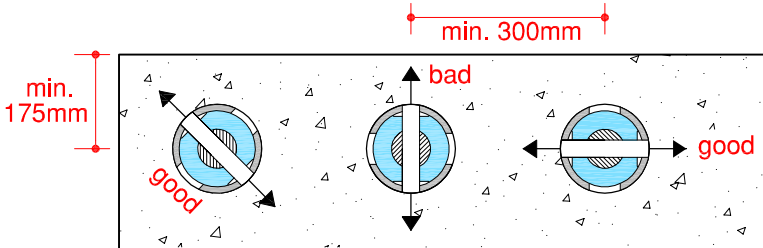
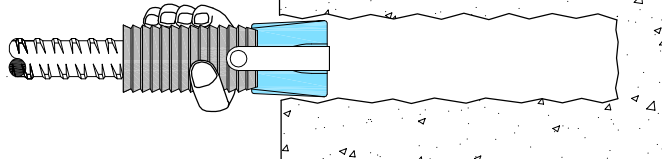
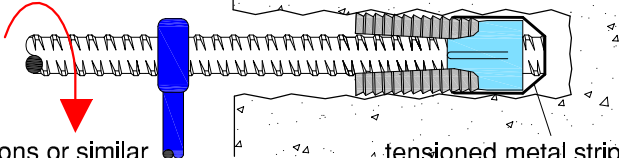
Hole depth : 125 - 200mm (dependant on concrete strength)

Minimum hole centres : 300mm \*

Minimum edge distance : 175mm \*

\*Based on concrete strength of 30N/mm<sup>2</sup>



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|----------|--|--|
| <b>1</b> | <p>Removal of plastic transit collar:<br/>Remove and discard the temporary plastic collar.</p>   |   |
| <b>2</b> | <p>Engagement of bar into anchorage:<br/>Screw the Threadbar fully into the 40mm long wedge plug.</p>  |    |
| <b>3</b> | <p>Orientation of wedge plug:<br/><b>Ensure flats of wedge plug are in-line with metal retainer strip</b><br/>otherwise anchorage cannot be inserted into the borehole</p>   |  |
| <b>4</b> | <p>Orientation of shells within borehole:<br/>Ensure the thrust direction of the shell is not towards the edge of the concrete.</p>  |  |
| <b>5</b> | <p>Insertion into borehole:<br/>Hold the anchorage together in one hand and slide into the borehole to required depth, ensuring components remain correctly assembled. Ensure the borehole is cleaned with compressed air.</p>   |  |
| <b>6</b> | <p>Setting of the anchorage:<br/>Set the anchorage by pulling by hand, then torque the bar using a wrench, <b>ensuring bar screws through the wedge plug and engages on the metal strip, to tension the strip.</b><br/>Shells must not rotate in the borehole during setting.</p> <p><b>IMPORTANT :</b><br/><b>It is essential that the bar is done up with firm torque against the metal strip to set the anchorage</b><br/><b>Failure to do so is likely to result in slippage of the anchorage. Do not over-torque the bar.</b></p> |  |

**GENERAL NOTES :**

1. Anchorage loads are highly dependent on concrete strength with a typical load range 20kN - 100kN.
2. To assess safe working load of the anchorage on site, pull out tests using a hollow hydraulic jack are recommended.
3. If the 15mm bar needs to be removed following concreting, grease the bar only within the anchorage.
4. Where vibration is present, the loads on the anchorage should be constantly monitored.
5. This information is given in good faith. Check installation to ensure compliance with design requirements.