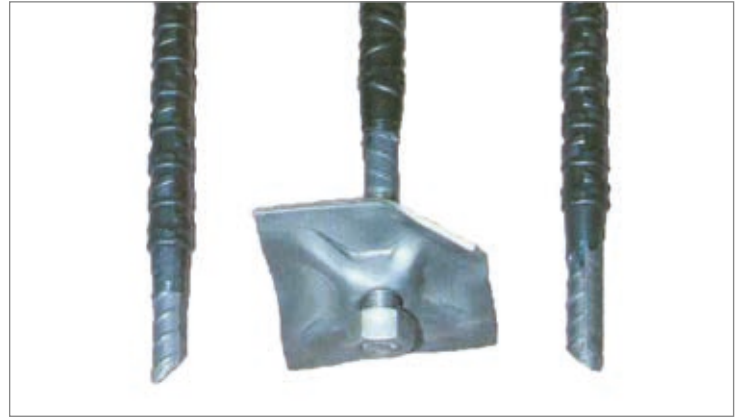


The INSTaL+ bolting system has been developed as an annulus correcting resin bolt. For use in resin bolting applications where normal bolting parameters are outside the limits to achieve acceptable load transfer results.

The system allows for full column resin bolting to be done with a smaller core diameter steel bolt in a hole up to 40 [mm] diameter with acceptable performance in terms of mixing and pull-out loads.

Advantages

- Reduces effective annulus
- Reduces risk of finger-gloving
- Simple installation in large holes
- No exotic equipment required
- More possible resin bolting applications
- No special training required
- Easy to install
- Corrosion resistant
- Less mass than equivalent steel bar



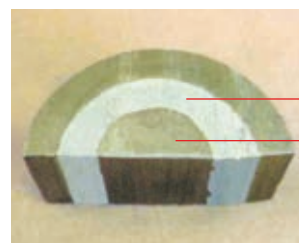
Hazard Information

- All tests done by FIRELAB
- Flammability – the material does not spread fire and does not sustain burning
- Toxicity – the material has a toxicity index of 0.875 (an index of 5 is acceptable)

Technical Data			
Bar Diameter [mm]	16	18	20
Min. yield strength [MPa]	500	500	500
Typical ultimate load [kN]	140	178	220
25 [mm] coating			
Major diameter [mm] ¹⁾	27	27	-
Effective diameter [mm] ¹⁾	25	25	-
27 [mm] coating			
Major diameter [mm] ¹⁾	29	29	29
Effective diameter [mm] ¹⁾	27	27	27

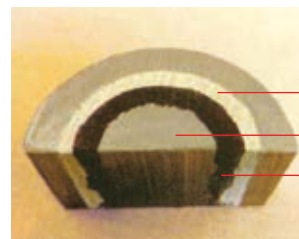
1) After coating.

- PET compound coating – injection moulding
- Nut/bearing plate/load indicator as required



Annulus too Large

Steel Bolt



Annulus Acceptable

Steel Bolt

Pet Coating