

CAVITY GROUTING



GFWA
SUSTAINABLE TECHNOLOGY

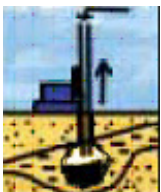


Cavity grouting of macro voids with bulk materials is a safe technique for ensuring that structures built on the ground will not be influenced by the sudden collapse of the cavity.

Cavity Grouting is a frequent requirement in areas where new developments are to be constructed above natural void formations or man made cavities that have been created due to mining activities.

This technique can eliminate the risk of structural damage due to the progressive collapse of the cavity's roof and the movement of the void towards the surface.

Design of cavity grouting has progressed from totally filling up the void to a rationally justified approach in which partial filling of the void is considered sufficient to eliminate the effects of any void collapse as evidenced at the surface.



Work procedure for Cavity Grouting

The basic method of cavity grouting for mine workings is drilling bores into the workings and pumping cement based grout into the cavity. However, there are a number of issues that must be considered.

This type of work fits very well into the range of activities offered by Austress Menard, with its range of in-house drilling rigs and its experience in designing purpose specific backfill materials to accommodate different design requirements and to achieve economic solutions.

Issues that must be considered in Cavity Grouting

- Whether mine working is flooded
- Whether there has been roof collapse in the mine workings
- Whether the fluid backfill material needs to be contained
- The need for plugging drill holes
- Availability of information action concerning the mine workings
- Depth of the mine workings hence the ability to intersect them with the drilling
- Pattern of drill holes required to achieve the design outcome



Recent References

Northam Pool (WA, Australia)
Meekatharra Pool (WA, Australia)
Lee Wharf (NSW, Australia)
Merewether Street (NSW, Australia)
Steel Street (NSW, Australia)

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