

A.3.3 Backfill materials

A.3.3.1 General

The backfill used should be non-cohesive granular material which will surround the tank to give adequate support and restrain.

The choice of backfill used can depend upon the native soils and their compatibility with the coating of the tank. For possible combinations see Table A.1.

All backfill material should be washed, graded and free flowing, free from ice, clay, organic materials and free of heavy objects. The minimum bulk density should be 1 500 kg/m³.

Table A.1 — Recommended backfill according to coating used

BACKFILL COATING	Sand	Gravel	Stone crushings
Bitumen	✓✓	×	×
Epoxy	✓✓	✓	×
Glassfibre	✓✓	✓	✓
Polyurethane	✓✓	✓	✓
PVC	✓✓	✓	✓
✓✓ Recommended ✓ Possible × Not recommended (but may be possible according to coating producers' instructions)			

A.3.3.2 Sand

Sand should be well graded and shall have less than 8 % passing a 75 µm screen with the largest particle size less than 3 mm.

A.3.3.3 Gravel

The backfill material should not have more than 3 % passing a 2,4 mm screen. The material shall be well-rounded pea gravel with a mix of particle size not less than 3 mm and not more than 20 mm.

A.3.3.4 Stone crushings

Stone crushings with angular particle size of not less than 3 mm, not more than 16 mm, not more than 3 % should pass a 2,4 mm screen.

A.3.3.5 Concrete

Concrete should not be used.

A.3.4 Installing backfill

Sufficient backfill should be placed on the excavation base before the tank is lowered in the excavation.

Backfill should be carefully placed around the installation.

The installer should compact the backfill to ensure the backfill reaches all parts of the excavation, taking all necessary precautions to avoid deformation of the tank. Sufficient backfill should be placed above the top of the tank.

A.3.5 Access chamber

An access chamber being liquid tight and capable of preventing any spilt liquid being stored from entering the environment should be fitted to the tank.

The access chamber should be designed in such a way to prevent loads from the traffic area above being transmitted to the tank.