Practical Tips for Handling Clay Pipe Successfully
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1. Unloading of the truck
Pipes are to be checked upon unloading. Possible damages must be reported on the delivery ticket and notification to the manufacture for replacement shall be expedited.

a) Crane or excavator
- Use lifting straps; chain or ropes are not recommended.
- The lifting straps must be placed outside around the pallets and outside the base timber.
- Steer the pallets manually to prevent them colliding with anything.
- Do not move the pallets on the truck with the aid of levers or crowbars.
- Do not allow the pipes to be impacted by any hard object (e.g. crane hook, chain, etc.).

b) Forklift truck or forks on loader
- When placing the pallets transversely on the forks, make sure the forks are positioned sufficiently widely apart.
- Use a cushioning board or other soft material between the pipe and the vertical portion of the forks.
- When placing the pallets longitudinally on the forks, place protective timber between the park and the fork's base. It is better to transport the parcel in transversal direction on the forks.
- When transporting individual pipes by sliding a tooth into a pipe, always have protective material between the forks and the pipe. Do not allow the pipe to contact the vertical portion of the forks.

2. Storage on site

- Do not put the packs or pipes down on to hard ground abruptly.
- Put the packs down only on ground that is sufficiently hard to prevent the base timber sinking into it.
- Leave sufficient space between individual packs.
- To avoid damage to the sealing elements, store individual pipes only on a wooden board to avoid contact with the ground.
- Store packs on level ground.
- Store fittings standing upright on their sockets.
3. Transportation to the pipe trench

- Transport individual pipes with straps (measure length wise for centre of gravity to ensure the pipe hangs level).
- Preferably transport complete packs to the point of laying before opening them.
- Put down the parcel on flat ground so that the pipes do not slip or roll when the securing bands are cut
  - Never transport individual pipes in the excavator or loader bucket.

4. Placement of Pipes in Trench

- Pulling the pipes together with the excavator bucket and a strap - normally on larger than 15” pipe sizes.
- Pushing the pipes together with a crowbar – always have a piece of timber between the pipe and the crowbar normally for 18” pipe or smaller sizes)
- Do not push against the pipe with the excavator shovel in order to correct the axial line.
- In a normal practice the sockets will point in the upstream direction.
- Install pipes always in the centerline of the trench. This allows for adequate work room on each side of the pipe for shovel slicing, inspection of the joint for cleanliness, etc.
- Always level the bedding to accommodate the grade.
- Never push pipes with equipment or drop the pipe to reach the grade.
- Never place pipe on blocks or mounds of bedding to achieve grade. This will cause point loadings rather than distribute the load along the barrel of the pipe.
- Dig bell holes when bell type joints are used.
5. Special consideration at Structures

Structures are areas that need special consideration.

Due to different loading of the structures and different disturbance of the insitu soils, short lengths of pipe should be used at points where differences of settlement are to be expected. These areas are found in the region of manholes, building foundations or other structures.

This allows for more joints to accommodate relative large settlements.

Flexibility with the structure connection to the pipe may be additionally enhanced by flexible elastomeric materials. Dimensional tolerances between the pipe and elastomeric connections must be investigated where a water tight seal is necessary between the structure and the pipe.

Allow for Differential Settlement at Foundations

Allow for Differential Settlement at Manholes