Installation Guide Concrete Sleepers

1. Hole centre.

- Set pegs at each end of the retaining wall site and connect with a string line to give the required alignment.
- Holes should be dug at 2010mm centres for 2.0m sleepers and 2410mm for 2.4m sleepers (Note: a similar allowance of 10mm can be used for other lengths).
- Hole diameter must be at least 450mm for a one metre high retaining wall. To be confirmed by a qualified engineer.



1000mm

1000mm

100m

2. Post holes.

- For a one metre wall, the post holes must be dug 1100mm deep.
- After ensuring that the post tops are the same height, place steel in the hole and concrete.

Note: <u>DO NOT</u> OVERFILL HOLES. For all walls over 1m pier depth to be confirmed by a qualified engineer.

3. String line.

- With the string line still in place, check the alignment of all posts with a spirit level.
- Re-check distances between posts. This can be done with a tape measure or a piece of cord cut at 2010mm or 2410mm.



Please check with your local council before constructing any retaining wall as council approval and Engineering advice may be required.

4. Sleepers.

- · Ensure concrete has cured overnight.
- Place first sleeper between posts, then proceed to check the measurement from the top of the sleeper to the top of each post.
- Ensure that the face of the sleeper (smooth or patterned face) is positioned at the front of the steel posts i.e. the back of the sleeper (rougher side) will take the backfill.
- Use fibro-cement sheeting for packaging under the bottom of the sleeper to adjust height, then install the rest of the sleepers.
- Check the measurements from the top of the post to sleeper as you go.
 Note wedge/packers: It's good practice to make wedges from scrap timber to ensure sleepers are held against the front of the post.



5. Drainage-

- Once sleepers have been installed, place a plastic membrane (Forticon) behind the wall and AG pipe or strip drain at bottom (back) of the wall. (See diagram)
- Cover the pipe with 20mm gravel for drainage.



Note: Please ensure that during installation no equipment is to be driven over the backfill within 75% of the wall height. Compaction, if any, within this area should be with non-vibrating hand equipment, weighing no more than 500kg per square metre of footprint. If greater compaction is required, please obtain engineering advice. Wall designs shown are for 'typical' soil conditions. For walls over 1 metre, you should seek independent engineering advice based on your specific site conditions.