

## Introduction

Hydro Stor End Caps are used to terminate the chamber rows and are also the location for inlet and outlet manifold pipe connections. As such, the end caps can be purchased with pre-fabricated stubs or can be modified in the field to connect the inlet/outlet manifold pipe. HydroStor End Caps are equipped with scribe lines for multiple pipe sizes making field cutting a simple process. The steps below summarise the requirements for a field fabricated stub connection into Tricel's HydroStor NS1, NS2, NS5 and NS8 End Caps.

## Procedure

### Step 1: Scribe Line Identification

Locate the scribe line for the size of pipe to be stubbed into the end cap at either the top or bottom of the end cap. Each scribe line is labeled with the corresponding pipe diameter. Using a marker to highlight the scribe line will aid in tracking the correct line while cutting the end cap.



Figure 1: Scribe Line Tracing



Figure 2: Hole Cutting

### Step 2: Hole Removal

Lay the end cap on the ground and insert the saw blade into the starting hole. Carefully start cutting, following the respective scribe line. The hole must closely match the outside of the pipe to be stubbed in. Remove cut material and dispose.



Figure 3: End Cap Screw Locations

### Step 3: End Cap Attachment

Place the end cap on the desired HydroStor chamber row. To ensure the end cap does not shift during backfilling, use three evenly spaced screws to properly secure the coupling between the end cap and chambers.

**Step 4: Pipe Insertion**

Slide the pipe into the opening of the end cap a minimum of 300 mm. If the pipe resists insertion into the endcap, find where the pipe is being obstructed and trim the end cap using small increments.

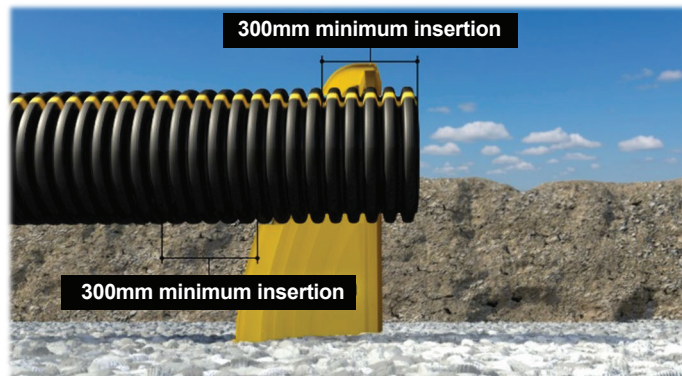


Figure 5: Proper Stub Insertion



Figure 4: Inserting the Pipe

**Step 5: Geotextile and Backfill Placement**

Cover the connection between the end cap and the pipe with a non-woven geotextile to keep the embedment stone from entering the connection. Ensure adequate backfill support is placed under and around the connection after the stub is installed.



Figure 6: Proper Geotextile Placement

**Notes**

To ensure desired field performance, the following conditions must be met:

1. Maximum pipe stub diameters:
  - 250 mm for field cut NS1 End Caps, 300 mm with a fabricated adapter.
  - 450 mm for field cut NS2 End Caps, 600 mm with a fabricated adapter.
  - 750 mm for NS5 End Caps using bottom of chamber inverts, 600 mm using top of chamber inverts.
  - 1050 mm for NS8 End Caps using bottom of the chamber inverts, 600 mm using top of chamber inverts.
2. Adequate backfill support is placed under and around the stub connection.
3. A maximum of a 13 mm gap is recommended between the cut hole and outside diameter of the stub.