

Tech Note 13: Casting In AusPress Stainless Drainage Points

TN.13

Applicable Products:

- AusPress Stainless Drainage Pipe & Fittings
- AusPress Stainless Drain Bowl Floor Wastes
- AusPress Stainless Channel Drains

Related Documents:

- Tech Note TN.01 Chlorides, Chlorine & Stainless Steel
- Tech Note TN.07 Underground & Stainless Steel
- Tech Note TN.15 Load Ratings
- Tech Note TN.29 Cleaning & Maintaining Stainless Steel
- Tech Note TN.33 Bimetallic Corrosion
- AusPress Drainage "IOM" (Installation, Operation & Maintenance) Manual

Installing drainage normally involves casting drainage components in or through concrete slab construction which AusPress drainage products are suitable. Depending on the construction method, both on-ground and suspended slabs are considered, with installation instructions and typical details described in the current AusPress Drainage "IOM" Manual.

Preparation

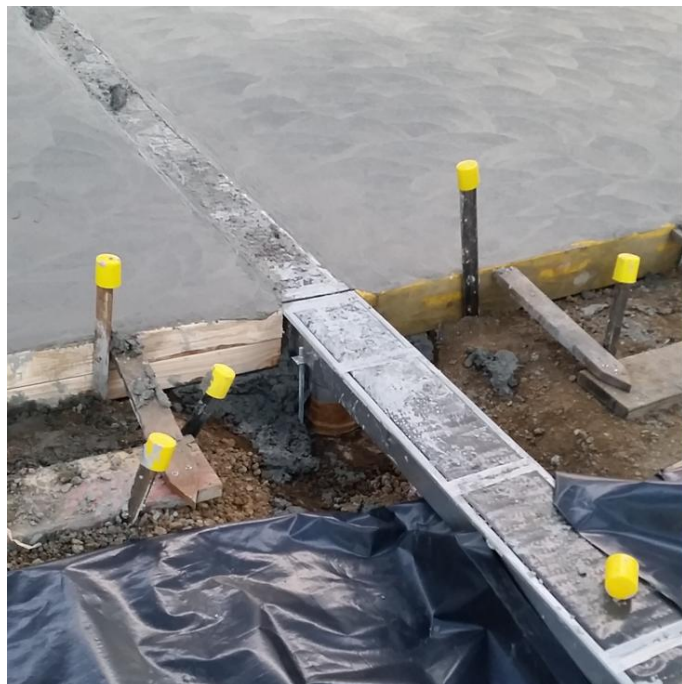
During the concrete pour the stainless floor wastes and channels are often subjected to unexpected actions including being stood upon by workers, inadvertently covered in concrete, bumped, knocked and lifted (floating).

Secure

Adequate preparation is required to secure the fixture in-place. AusPress products are supplied with levelling angles and fixing brackets that shall be used to maintain position horizontally and vertically. Double nut above and below the bracket is expected and shown in the IOM manual.

Cover

It is critical that concrete and other site debris are prevented from contaminating and entering the drainage system and components. Prevention methods include covering the drain bowl with a suitable covering, PVC (also known as grey) tapes, builders plastic wrap, foams and plywood materials all of which are suitable to be used with stainless steel for the duration of the construction.



AusPress supply recyclable drain insert covers that sit flush with the top of the drain bowl to allow floor falls to be clearly achieved and prevent debris entering the drainage on request.

Note other metals including galvanised and mild steel coverings are not suitable with stainless steel.

Water Filling

Although not necessary for AusPress stainless products, filling a clean channel with potable water to increase the weight of particularly channels is acceptable however the channel shall still be adequately covered and protected, plus drained fully after the concrete pour and cleaned of any residual debris to prevent possible surface damage as the construction process continues.

In-Situ vs Box Out

Drainage items are preferred to be installed and cast in-situ as part of the concrete pour however, depending on the construction programme and extent of concrete pour this may not be possible. Boxing out is an acceptable method to frame around the drainage item with a timber frame or similar to prevent the concrete from obstructing the location where the floor waste or channel is to be positioned. In either method, ensuring the finished concrete level is critical for the floor gradient to be achieved towards the drain point.

Top Frame Rebate

The long standing method to form a sound junction between the concrete finished floor, whether burnished concrete or an applied finished such as epoxy flooring, is to form a 10mm rebate around the floor waste frame where post-pour a suitable flexible polyurethane sealant fills the rebate void.

How this void is formed is up to the installer, with foam strips and plywood surrounds used successfully and the sealant installed. Depth of the rebate is 10-15mm and care required to ensure the installation of sealant fills the void, including under the edges of any overhangs or steps in the edge (such as vinyl lock edging).

More recently, improvements in epoxy flooring materials allow the floor coating to be applied directly up to the grate opening, with excellent adhesion to the stainless top facing edge. This method allows a continuous and uniform floor surface material from wall to outlet, omitting possible issues with joins, steps and ponding points which are best avoided when hygiene is critical.

Top Facing Edge

Avoid concrete tools scratching or dragging along the stainless surfaces with PVC tapes or suitable cover to protect these surfaces. Note that falls to the required edge height can be impaired by thick covers and obscure the actual level required. Protection tapes should not be removed until the construction process is at a point where damage cannot occur; preparation for the flooring to be installed or when commissioning the drainage system are suitable points to remove the tapes.



Construction Vehicles

Floor wastes and channels are best avoided to be driven over including scissor lifts, boom lifts, and vehicles and storing loads to prevent damage to the vehicles and damage to the cast in drainage.

Protection covers are normally not load-rated and not able to withstand these loads. Physical barricading is preferred to prevent damage before grates are installed and/or handover.

If this can not be avoided and floor grates are installed, grates, channels and other drainage must be inspected for any damage and cleaned thoroughly before handover at the responsibility of the installer.

Further Information

Please contact AusPress for additional technical or product information – technical@auspress.com.au or 1300 287 773.