Refrigerated Cabinet Condensate Drains Connected Via Tundishes

AIM
The aim of this technical solution is to provide an approved method to connect the discharges of condensate lines from large refrigeration units.

PLUMBING REGULATIONS 2008
The Plumbing Code of Australia (PCA) is adopted by and forms part of the Plumbing Regulations 2008. Part C2 of the PCA specifies the objectives and performance requirements related to the installation of sanitary drainage systems. AS/NZS 3500.2: Plumbing and drainage Part 2: Sanitary plumbing and drainage is a “deemed to satisfy” document listed in Part C2 of the PCA and contains sections on floor waste gullies and connection of tundishes.

Q: What are the requirements for the discharges of condensate lines from large refrigeration units (such as those found in supermarkets)?
A: Condensate drains from refrigeration units are required to be connected to the sewer.
To comply with this technical solution, this connection must be made via a DN100 disconnector gully. The DN100 common drain may be unvented and connected to the DN100 disconnector gully laid at a reduced minimum gradient of 1:100 (see Figure 1). If the disconnector gully riser is fitted with a sealed cap, which is usually a brass plate finishing flush with the floor, then the riser of the disconnector gully must be vented.

The maximum length of discharge pipe from the tundish to the floor waste gully is 10 metres.

The connection of the refrigeration units via tundish connections must comply with the air gap requirements in AS/NZS 3500.2 Clause 11.21.

Note:
- Refer to Figure 4.3A and Clause 4.6.7.8 of AS/NZS 3500.2.

FIGURE 1 - EXAMPLE OF ODOURLESS CONDENSATION DRAINS
Notes:

- Maximum unvented drain length 10m.
- DN50 open vent required if more than 10m (air admittance valve not permitted).
- Sealed disconnector gully inside building installed in accordance with Clause 4.6.5.
- DN100 at minimum grade 1:100.