



This technical note has been produced to provide clarification on the options when connecting condensate from refrigerated air conditioners, refrigerated cabinets, sterilizers, autoclaves and similar appliances to sanitary or sanitary drainage systems. Clarification is also given in relation to the demarcation between mechanical services work and plumbing work that can only be performed by licensed plumbers.

Regulatory requirements

Condensate from refrigerated cabinets, sterilizers, autoclaves and similar appliances shall discharge over a tundish in accordance with AS/NZS 3500.2:2003 Clause 11.21. Regulation 62 of the Plumbers Licensing and Plumbing Standards Regulations 2000 (the Regulations) requires that refrigerated air conditioners shall be discharged in the same manner.

The installation of a tundish and waste directly connected to a plumbing system is considered plumbing work and therefore all conditions of the Regulations and prescribed plumbing standards apply. The installation of a condensate line from any of the appliances mentioned above, to the point of discharge over a tundish with an air gap or any location other than a plumbing system is not deemed as regulated plumbing work.

Connection of tundishes

AS/NZS 3500.2:2003 Clause 11.21 states that tundishes shall be connected in the following ways:

- Through an untrapped wastepipe not smaller than DN 25 to the riser of a floor waste gully. Maximum unvented length 10m (see Diagram 1).
- Through a trapped wastepipe not smaller than DN 40 to either;
 - i) a floor waste gully. Maximum unvented length 10m (see Diagram 2)
 - ii) a disconnecter gully. Maximum unvented length 6m (see Diagram 2)
 - iii) a fully vented modified, single stack or single stack modified. Maximum unvented length 2.5m (see Diagram 3).
- Through a DN 40 trap and DN 65 wastepipe to either;
 - i) a DN 100 floor waste gully. Maximum unvented length 10m (see Diagram 4)
 - i) a disconnecter gully. Maximum unvented length 10m (see Diagram 4)
 - i) a vented drain. Maximum unvented length 10m (see Diagram 5)
 - i) a fully vented modified, single stack or single stack modified. Maximum unvented length 2.5m (see Diagram 6)

- i) a reduced velocity aerator stack system. Maximum unvented length 10m (see Diagram 6).

- to a fixture trap (see Diagram 7).

When the tundish and discharge pipe is connected to a fixture trap—

- (i) the connection shall be made above the level of the water seal; and
- (ii) the top of the tundish shall be above the flood level rim of the fixture (see Diagram 7).

Pipes discharging over a tundish shall have an air gap of a size at least twice the internal diameter of the discharging pipe. Tundishes shall also be accessible.

Connection using self-sealing traps (dry traps)

Self-sealing traps (WaterMarked to WMTS 5200.047) are permitted to be used as tundish waste traps under the same provisions as water traps (see Diagrams 8 and 9).

NOTES:

It is not acceptable to use the appliance connection nipple on fixture traps to connect a DN 20mm flexible hose (see photo below). Connection must be made using approved junction fittings.

Due to the risk of foul air being drawn into the air conditioning system, condensate lines shall terminate over the tundish with an approved air gap in all circumstances when the tundish is connected to a sanitary or sanitary drainage plumbing system.



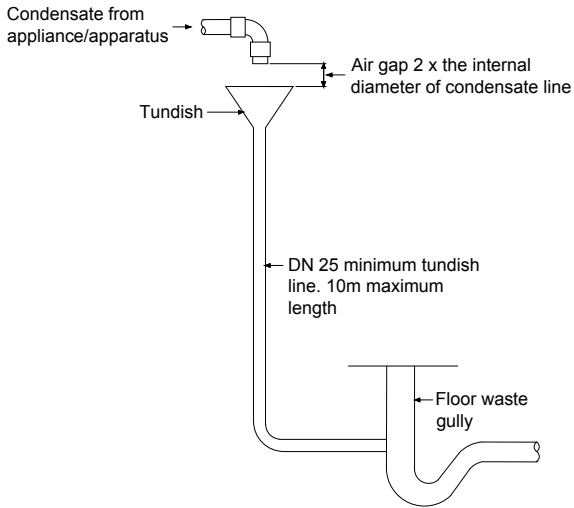


Diagram 1

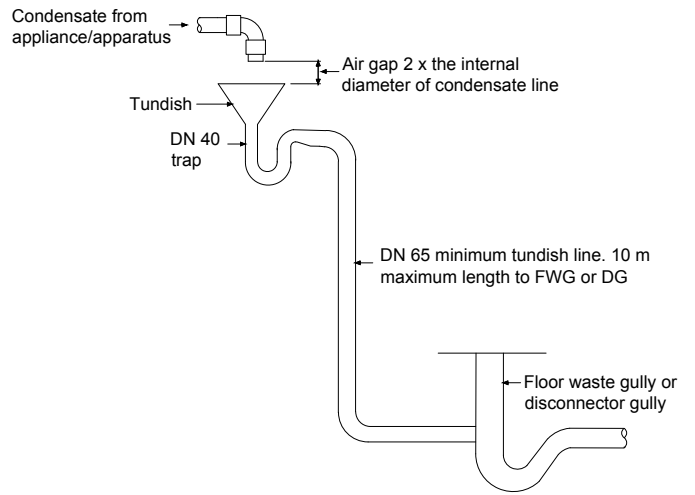


Diagram 4

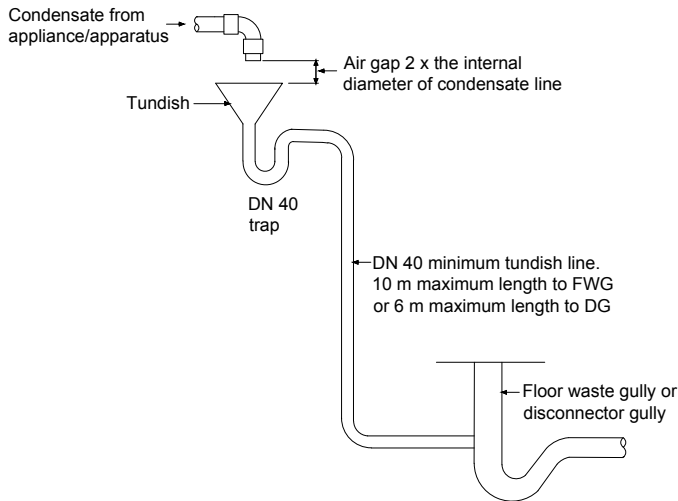


Diagram 2

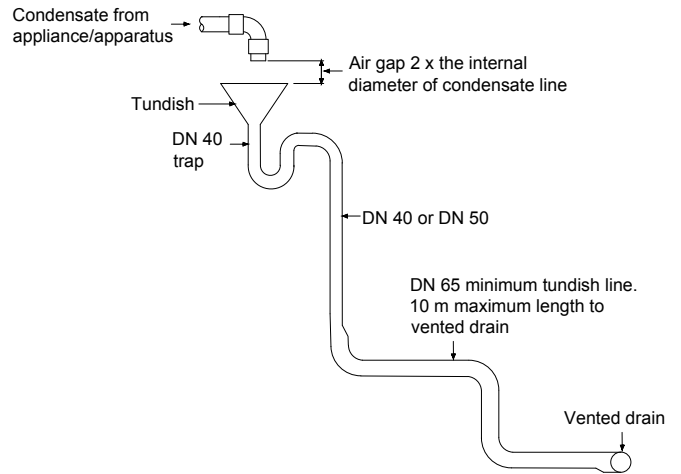


Diagram 5

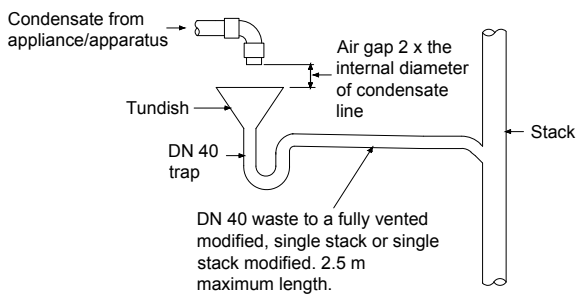


Diagram 3

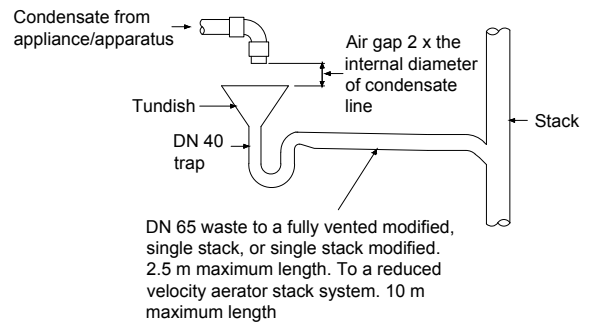


Diagram 6

Plumbers Licensing Board

Level 1, Mason Bird Building, 303 Sevenoaks Street
(entrance Grose Avenue), Cannington WA 6107

Postal: Locked Bag 14, Cloisters Square WA 6850

Plumbers Service Line (08) 6251 1377

Facsimile: 1300 449 185

plumbers@commerce.wa.gov.au

Technical Advice Line 1300 360 897
www.commerce.wa.gov.au/building-commission

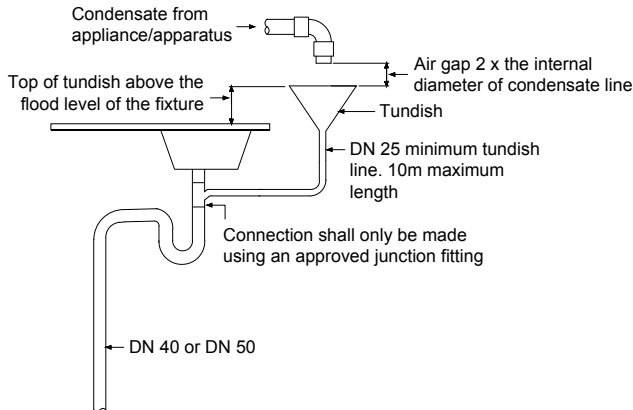


Diagram 7

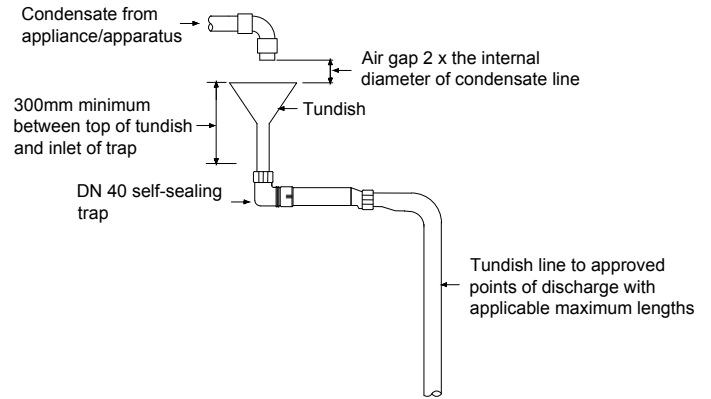


Diagram 9

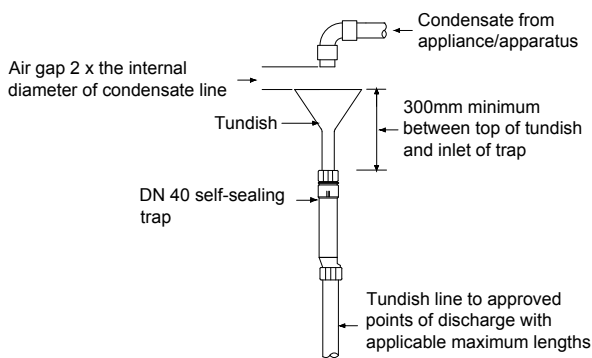


Diagram 8

Notes

The technical note series is issued by the Plumbers Licensing Board to assist the plumbing industry to comply with the Plumbers Licensing and Plumbing Standards Regulations 2000 applicable to plumbing work in Western Australia.

Each technical note is to be read in conjunction with Part 6 of the Regulations that currently adopt the Plumbing and Drainage Standard AS/NZS 3500:2003 but modified in certain matters to suit the State's building approach and other local conditions.

Feedback

The Plumbers Licensing Board welcomes your feedback. If you have any questions on this technical note or any suggestions on any areas of plumbing work that the technical notes should cover, please contact the Board's Senior Technical Officer on (08) 6251 1377.

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