

## Reducing drain blockages

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**As part of the November 2020 NZ Building Code update, modifications to AS/NZS 3500 Part 2 Sanitary Plumbing and drainage have been made to G13/AS3 to reduce the likelihood of drain blockages and support the use of water efficient fixtures.**

These changes are intended to support updates made to AS/NZS 3500.2:2018 figure 4.9.1(a) 45° Junction at grade which reduces the probability of drain blockages occurring.

The G13/AS3 modifications apply when AS/NZS 3500 Part 2 Sanitary plumbing and drainage is used as an Acceptable Solution to comply with NZ Building Code clause G13 Foul Water.

Those who use AS/NZS 3500 Part 2 Sanitary plumbing and drainage should familiarise themselves with the [G13/AS3 modifications to this standard](#)

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g13-foul-water/asvm/g13-foul-water-2nd-edition-amendment-9.pdf>)

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## What this means for you

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For new installations, DN100 45° 'Y' junctions installed in new graded drains or discharge pipes must be installed with a 15° minimum incline above the horizontal.

This requirement applies when using AS/NZS 3500 Part 2 Sanitary plumbing and drainage as an Acceptable Solution to comply with NZ Building Code clause G13 Foul water.

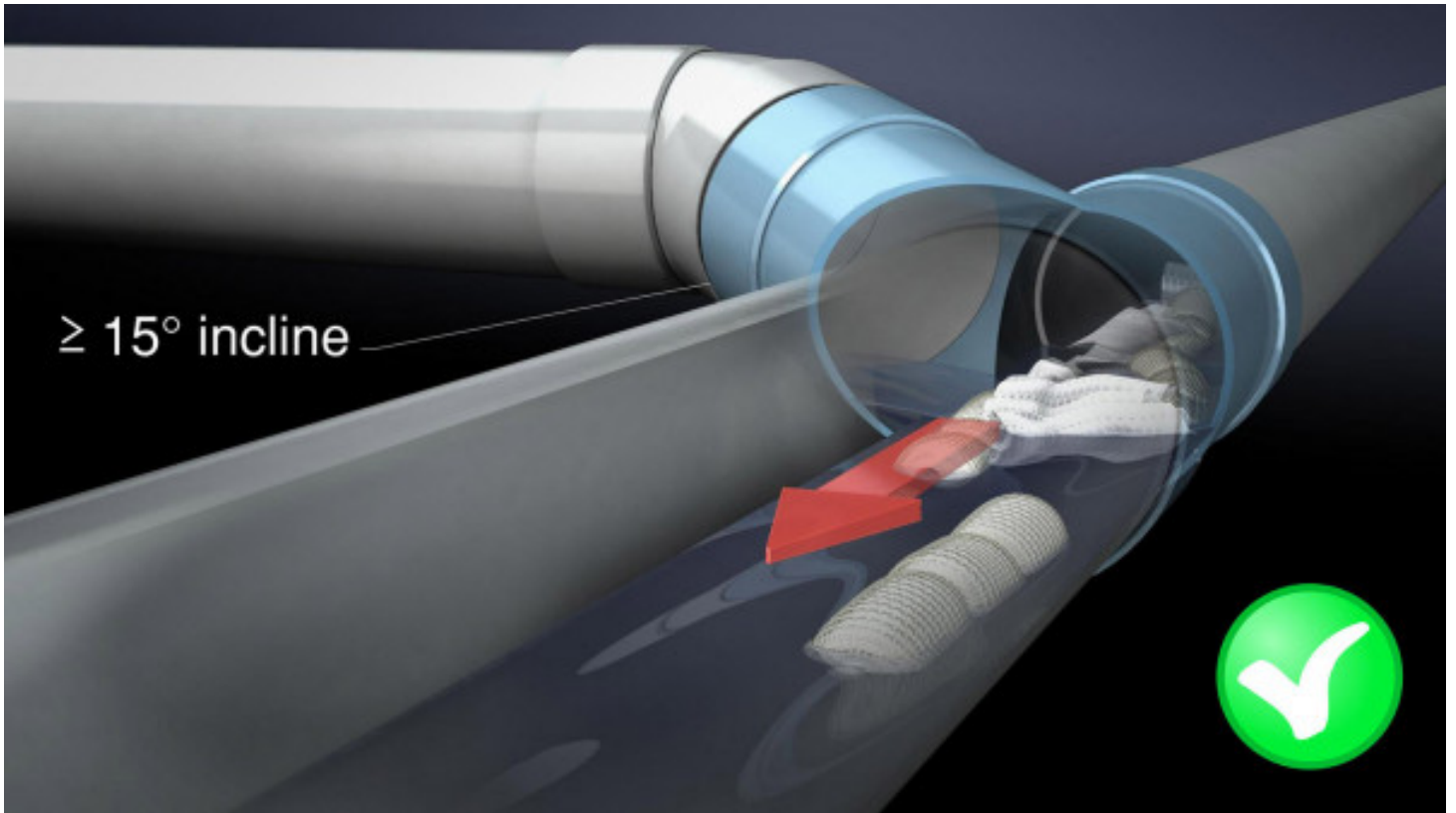
It is also recommended that DN100 45° 'Y' junctions are installed with an incline when altering existing sanitary plumbing and drainage installations (where sufficient height is available) and when installing DN100 sanitary plumbing and drainage pipework in accordance with G13/AS1 and G13/AS2.



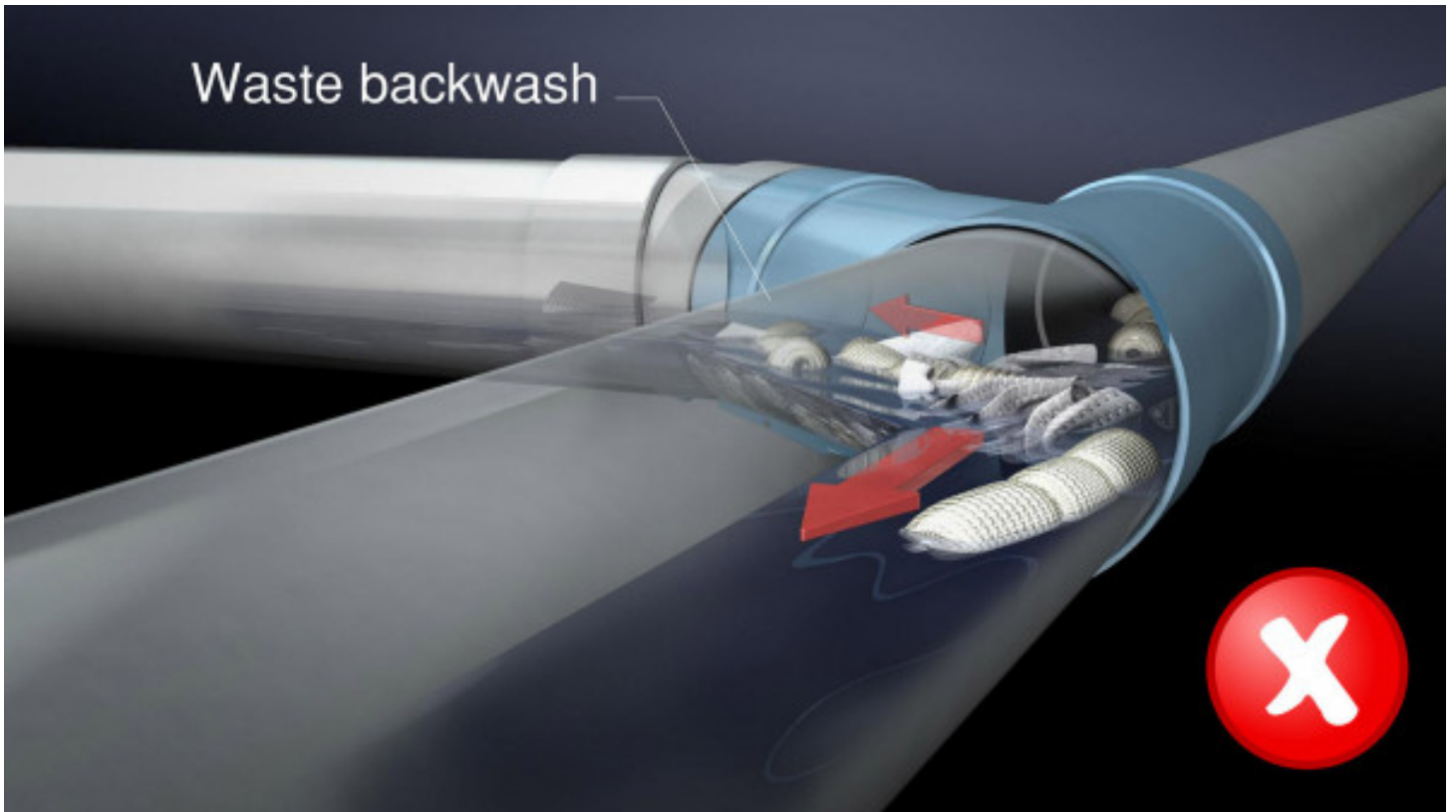
DN100 drain with 45° 'Y' junction installed with a  $\geq 15^\circ$  incline above horizontal.



DN100 drain with 45° 'Y' junction installed at grade.



Caption



caption

## Benefits of the change

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This change will help reduce the likelihood of drain blockages occurring and graded discharge pipes by:

- removing the probability of partial backwash of a discharge into branches
- minimising stranding of solids and paper in junctions and branch lines
- improving solid waste transportation efficiency within the drainage network by maintaining discharge volumes
- providing clarity on how junctions in graded drains and discharge pipes can be installed using best practices.

These changes support the ongoing move towards the installation of water efficient fixtures, and in particular toilet cisterns with reduced flush volumes (e.g. dual-flush 6 / 3 litre and 4.5 / 3 litre toilet cisterns).

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All guidance related to G13 Foul water

<https://www.building.govt.nz/building-code-compliance/g-services-and-facilities/g13-foul-water/?stage=Stage>

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