# BMA/DEFRA/Water Company Voluntary Interim Agreement for newly installed WC suites

#### 11th December 2019

## Summary of BMA's proposed agreement

The BMA's proposed agreement advocates water companies not enforcing the 300mm dimensional requirements: however, It does set out the regulatory expectations: compliance with the harmonised BS EN 997 and other appropriate standards, the 15mm dimension; and the inlet backflow requirements with an AG air gap. If an AG cannot be achieved an AC airgap should be used or if in any doubt about the arrangements a Double Check Valve (DCV).

## BMA/Defra/Water Company Interim Voluntary Agreement for newly installed WC suites

# Subject to Defra and Welsh Government assurance & written confirmation

Following communications with all water companies through the WRAS Technical Support Group and Water UK, water companies generally supported the interim proposal from BMA subject to caveats as set out below. Acceptance of the proposal and caveats will constitute a Voluntary Interim Agreement that will be valid from the date when formally agreed by all parties.

- Products must comply with the relevant harmonised standards e.g. WCs suites must comply with BS EN 997 and WC cisterns must comply with BS EN 14055 for which a declaration of performance covering all essential characterises must be issued. Manufacturers should note that harmonised standard in the UK also require compliance with BS 1212 for inlet valves other UK equivalent regulators specifications will be acceptable for the interim period. This agreement will not apply to WC suites which are not compliant with BS EN 997:2012.
- The AG air gap will be required in the case of all new installations in public buildings and high-risk premises, where this is achievable. The Task and Finish Group recognise that there will be non-AG air gaps products currently in the market which may be installed – acceptance will be considered on a case by case basis and in agreement with the local water company.
- For other lower risk premises, a non-mechanical AC air gap (with an air gap open to the
  atmosphere) may be acceptable where an AG is not achievable (including joints below
  the waterline). Where there is no declaration or a visual inspection calls into question a
  declaration suggesting an arrangement is non-compliant, a double check valve could be
  used where appropriate.
- AG and AC air gaps must be self-declared by manufacturers to confirm they have passed backflow conformity tests against recognised standards (including BS EN 14623 and BS EN 13078). Additionally, the inlet valve must meet the requirements of BS:1212

for the WC cistern in which they are installed or have been tested by a recognised third-party test organisation i.e. KIWA, NSF. If there is any doubt, a double check valve should be installed. It should be noted that AG, AC and double check valves (EC or ED) are all recognised backflow arrangement providing fluid category 3 protection. This means that all installations will contain a water industry recognised backflow protection to reduce public health risks.

- In addition to water companies confirming compliance when installed, there is a requirement to confirm that all water fittings must comply with Regulation 4 (1) (a).
- The AUK1 dimensional elements of 15mm and 300mm work in conjunction to provide backflow protection. Water companies accept the proposal not to enforce the 300mm dimensional requirement for the interim period but agree that the 15mm dimension should be retained as a requirement. The point of measurement for the 15mm dimension requirement should be in accordance with TCS 2213.14.i.e. must be between the maximum level of the receiving vessel (category 5) and the lowest internal level of the interposed cistern (category 3).
- The Voluntary Interim Agreement will have a defined timescale and only apply to newly
  installed WCs and flushing cisterns. Timescale will be six months to allow resolution of
  all outstanding issues. This will commence from 1 January 2020 until 30 June 2020 with
  a review commencing in May 2020.
- The key deliverable by the end of the six months should be: evidence supplied by the BMA to demonstrate that alternative backflow protection arrangements can provide an equivalent level of protection to AUK1 or AB.
- At the end of the time limited period, the default position will be a requirement for full fluid category 5 backflow protection.
- If there is evidence that alternative backflow protection provides an equivalent level of protection, an extension may be considered. This will then enable steps to be taken to formally recognise the alternative backflow arrangement. e.g. relaxation.
- Any interim agreement would not affect the right of water companies to enforce should category 5 backflow protection (1) evidence come to light that the interim measures are insufficient to protect health or (2) site-specific circumstances pose a greater public health risk or a water quality issue has been identified.
- In the event of a backflow incident that occurs during the period of the interim agreement, manufacturers would be responsible under consumer protection law, if their product did not prevent backflow, provided that the device was installed and used in accordance with the manufacturers' instructions.
- The Voluntary Interim Agreement has been agreed by all parties (to include all water companies, regulators and BMA members and non-members) with appropriate communications to developers, test houses and other stakeholders.
- There will be a process of ongoing review or audit to monitor implementation and efficacy of the Voluntary Interim Agreement.

# Supplementary Notes to the voluntary agreement:

# Addressing public health risk

• The Voluntary Interim Agreement will go a significant way to mitigate any public health risks associated with this approach. However, this would not eliminate all risks.

## **Backflow protection**

- An AG air gap is clearly visible once installed. A visual check on submerged inlet devices cannot confirm that a device does not include mechanical elements which are not permitted for an AC. A double check valve is less desirable than an AG, as it contains mechanical elements that may fail.
- Confirmation of an air gap can only be provided by manufacturers declaration based on laboratory testing. It should be noted joints which are not permanently fused are not permitted below the critical waterline for AG or AC air gaps and silencer tubes can obstruct an air gap.
- It should be noted that Type AB air gaps provide fluid category 5 protection, and these are used by some WC manufacturers. These are currently most common in toilets with bidet functions. BMA to confirm which type.
- It should be noted that double check valves are not always suitable if there is low pressure.

#### **Installations which meet Voluntary Interim Agreement requirements**

- Consideration must be given to what happens to any inlet valves, cisterns and WCs which were installed during the operation of the Voluntary Interim Agreement period, once the period comes to an end.
  - Ideally owners/occupiers should not be required to take any action or to only take action if they are planning to replace a WC, cistern or inlet valve. However, action would always need to be taken immediately, if a water quality issue was identified.

# Support for proposal

- The BMA/manufacturers on the task and finish group will be responsible for communicating the Voluntary Interim Agreement to those manufacturers who can achieve AUK1/AB protection in their products.
- In order to implement the Voluntary Interim Agreement, water companies would need the approval by our Regulators; Defra and DWI.

#### Communication

To help those seeking to comply with the regulations, the Voluntary Interim Agreement will be publicly available through the BMA, WRAS and Water UK websites.