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English Version

**Recommendations for prevention of Legionella growth in
installations inside buildings conveying water for human
consumption**

Recommandations de prévention du développement des
légiennelles dans les installations de distribution d'eau
destinée à la consommation humaine à l'intérieur des
bâtiments

Empfehlungen zur Verhinderung des
Legionellenwachstums in Trinkwasser-Installationen

This Technical Report was approved by CEN on 25 March 2012. It has been drawn up by the Technical Committee CEN/TC 164.

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Foreword

This document (CEN/TR 16355:2012) has been prepared by Technical Committee CEN/TC 164 "Water Supply", the secretariat of which is held by AFNOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This Technical Report should be read in conjunction with national regulations.

The status of this document as CEN Technical Report has been chosen because most of its content is not completely in line with practice and regulations in each Member State. This document gives recommendations for good practice concerning the prevention of Legionella growth in drinking water installations but existing national regulations remain in force.

In this report, one item of the technical concept to prevent proliferation of Legionella in drinking water installations is to keep the water temperature out of the range where Legionella can grow and to make the provision for thermal disinfection.

1 Scope

This Technical Report provides basic information about the conditions for Legionella growth in drinking water installations in accordance with EN 806 series up to draw-off points and gives recommendations for preventing the growth of Legionella in these installations.

NOTE 1 For further information, cf. Annex A.

NOTE 2 National documents regarding the prevention of Legionella growth are shown in Annex B.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 806-1:2000, *Specifications for installations inside buildings conveying water for human consumption — Part 1: General*

3 Terms and definitions

For the purposes of this document, the terms and definitions in EN 806-1:2000 and the following apply.

3.1

redundant pipe (dead end)

part of a drinking water installation which is permanently not in use but full of water

3.2

cut-off end

remaining part of a redundant pipe after being cut off

4 General recommendations

4.1 Conditions for Legionella growth

The following conditions encourage legionella growth:

- water temperature between 25 °C and 50 °C;
- stagnation of the water;
- nutrients, biofilm and sediment within the installation including water heaters, etc.

4.2 Temperature

4.2.1 General

To restrict the growth of Legionella bacteria the water temperature shall be in a range that the bacteria will not grow or have minimum growth, wherever possible.