SANITARY TAPWARE

Technical document 077-06

EChAU rating for extractable handsprays for sink and washbasin mixers
CSTB (Centre Scientifique et Technique du Bâtiment), a public establishment supporting innovation in construction, has five key activities—research and expertise, assessment, certification, tests, and dissemination of knowledge—organised to meet the challenges of the ecological and energy transition in the construction sector. Their fields of expertise include construction materials, buildings and their integration into districts and towns.

With over 900 employees, its subsidiaries and networks of national, European and international partners, the CSTB group works for all the stakeholders in the construction sector to advance building quality and safety.
## MODIFICATION HISTORY

<table>
<thead>
<tr>
<th>Revision no.</th>
<th>Application date</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>01/06/2017</td>
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<td>02/04/2019</td>
<td>Technical document 077-06_Rev18, on the “Jet Regulator” product family, is replaced by the product family “Extractable handsprays for sink and washbasin mixers” Update of technical document according to the new frame: “Trame_doc_technique_VF_PC_DT_R3.” Content modifications: establishment of EChAU rating</td>
</tr>
<tr>
<td>02</td>
<td>01/10/2020</td>
<td>Reference to the regulation for use of marks (DT077-00)</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

## 1 NORMATIVE SUPPORT FOR ECHAU RATING

1.1 Purpose ................................................................................................................. 6
1.2 List of the tests involved ....................................................................................... 6

## 2 ECHAU RATING

2.1 Foreword ............................................................................................................... 7
2.2 Purpose ................................................................................................................... 7
2.3 Field of application ............................................................................................. 7
2.4 References to standards and additional specifications ........................................... 7
2.5 EChAU rating principle ....................................................................................... 7
   2.5.1 Meaning of E ........................................................................................................ 8
   2.5.2 Meaning of Ch ..................................................................................................... 8
   2.5.3 Meaning of A ....................................................................................................... 8
   2.5.4 Meaning of U ....................................................................................................... 8
2.6 Performance level for the EChAU rating for products subject to Standard NF EN 16145 ........................................................................................................ 8
   2.6.1 Marking ................................................................................................................ 8
   2.6.2 Materials .............................................................................................................. 8
   2.6.3 Dimensional characteristics ............................................................................. 9
   2.6.4 Leaktightness characteristics .......................................................................... 9
   2.6.5 Mechanical characteristics ............................................................................. 9
   2.6.6 Hydraulic characteristics ............................................................................... 9
   2.6.7 Acoustic characteristics ................................................................................... 10
   2.6.8 Maintenance ..................................................................................................... 10
   2.6.9 Rotating fitting ................................................................................................. 10
   2.6.10 Order of tests .................................................................................................. 11
2.7 EChAU rating for extractable handsprays .......................................................... 12
   2.7.1 Hydraulic or flow characteristic .................................................................... 12
   2.7.2 Acoustic characteristic ................................................................................... 13
   2.7.3 Mechanical endurance or wear resistance characteristic ................................ 13
2.8 Example of EChAU rating .................................................................................. 13
2.9 Rating presentation ............................................................................................ 14
   2.9.1 Specific information for the catalogue or other commercial media ................... 14
   2.9.2 Product information .......................................................................................... 14

## 3 ECHAU RATING APPLICATION

3.1 For an initial rating application ........................................................................... 15
3.2 For a complementary rating application ............................................................. 15
3.3 For a new rating application following a penalty of withdrawal of the EChAU rating ........................................................................................................ 15
3.4 For an application for the suspension of the EChAU rating ................................ 15
3.5 For an application for renunciation of the EChAU rating .................................. 15
4 PRICES .................................................................................................................. 26

4.1 Services related to the ECAU and EChAU ratings .............................................. 26

4.2 Paying for the services .......................................................................................... 27
  4.2.1 Initial application/complementary application ................................................... 27
  4.2.2 Monitoring ........................................................................................................ 27
  4.2.3 Non-payment of amounts due ........................................................................ 27

4.3 Prices ....................................................................................................................... 27
1 Normative support for EChAU rating

1.1 Purpose
The purpose of this chapter is to list the articles of standard NF EN 16145 - version 2013 that are taken into account for the EChAU rating in accordance with the regulation for use DT077-00.

1.2 List of the tests involved
The table below lists the articles of the Standard NF EN 16145.

<table>
<thead>
<tr>
<th>Articles</th>
<th>Title of articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Marking</td>
</tr>
<tr>
<td>7</td>
<td>Materials</td>
</tr>
<tr>
<td>7.1</td>
<td>Chemical and hygienic requirements</td>
</tr>
<tr>
<td>7.2A</td>
<td>State of visible surfaces and coating quality (<em>neutral salt spray test</em>)</td>
</tr>
<tr>
<td>7.2A</td>
<td>State of visible surfaces and coating quality (<em>“air” thermal shock resistance test</em>)</td>
</tr>
<tr>
<td>8</td>
<td>Dimensional characteristics</td>
</tr>
<tr>
<td>9</td>
<td>Leaktightness characteristics</td>
</tr>
<tr>
<td>9.1</td>
<td>Grid supply leaktightness</td>
</tr>
<tr>
<td>9.2</td>
<td>Leaktightness of manually operated jet selector</td>
</tr>
<tr>
<td>9.3</td>
<td>Leaktightness and operation of automatic jet selectors</td>
</tr>
<tr>
<td>10</td>
<td>Mechanical characteristics</td>
</tr>
<tr>
<td>10.2</td>
<td>Mechanical strength</td>
</tr>
<tr>
<td>10.3</td>
<td>Mechanical endurance of jet selectors</td>
</tr>
<tr>
<td>10.4</td>
<td>Thermal shock resistance test</td>
</tr>
<tr>
<td>11</td>
<td>Hydraulic characteristics</td>
</tr>
<tr>
<td>12</td>
<td>Protection against backflow</td>
</tr>
<tr>
<td>13</td>
<td>Acoustic characteristics</td>
</tr>
<tr>
<td>14</td>
<td>Rotating fitting</td>
</tr>
</tbody>
</table>
2 EChAU rating

2.1 Foreword

The EChAU rating was created to meet the expectations of market players who require performances that are superior or complementary to that indicated in standard NF EN 16145.

For extractable handsprays for sink and washbasin mixers, the requirements are as follows:

- Hydraulic performance levels according to user needs;
- Creation of the 3 acoustic classes to clarify this performance;
- Increase in mechanical characteristics requirements by a change in the temperature of the thermal shock test (hot water at (93 ± 2) °C instead of 70 °C) in the European standard to optimise shower lifespan;
- Increased endurance performance by multiplying by 2.5 the requirements of the European standard to optimise maintenance frequencies;
- Improved maintenance with an anti-limescale system for handspray jets.

It should be noted, however, that the use of the EChAU rating is voluntary and supplementary to the evaluation of a product that is already certified under standard NF EN 16145.

2.2 Purpose

The purpose of this chapter is to establish the hydraulic, mechanical, mechanical endurance, acoustic and maintenance performance levels to be met by extractable handsprays for sink and washbasin mixers to qualify for the EChAU rating.

2.3 Field of application

This chapter applies to extractable handsprays for sink and washbasin mixers that are subject to Standard NF EN 16145.

2.4 References to standards and additional specifications

<table>
<thead>
<tr>
<th>Standard</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NF EN 16145</td>
<td>Sanitary tapware - Extractable handsprays for sink and washbasin mixers - General technical specifications</td>
</tr>
<tr>
<td>NF EN ISO 3822-1</td>
<td>Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 1: Method of measurement</td>
</tr>
<tr>
<td>NF EN ISO 3822-2</td>
<td>Acoustics - Laboratory tests on noise emission from tapware and hydraulic equipment used in water supply installations - Part 2: Guidelines for the installation and operation of draw-off taps and tapware.</td>
</tr>
<tr>
<td>DT077-00</td>
<td>Regulations for use of marks</td>
</tr>
</tbody>
</table>

2.5 EChAU rating principle

The EChAU rating is based on four characteristics:

- hydraulic or flow characteristic, symbolised by the letter “E”;
- comfort characteristic symbolised by the letter “C”;
- acoustic characteristic symbolised by the letter “A”;
- mechanical or wear characteristic, symbolised by the letter “U”.

Technical Document 077-06 rev02 – page 7/28
The EChAU rating is characterised by the association of the letters EChAU, each of which is provided with a class: 1, 2, 3, etc. according to a level of performance or quality.

It can only be assigned to extractable handsprays for sink and washbasin mixers:
- pursuant to Standard NF EN 16145. The test procedures are defined in Article 1 of this document.
- having passed the performance tests for the EChAU rating. The test procedures are provided in Article 2.6 below.

2.5.1 Meaning of E

The flow characteristic taken into account is the use flow ‘q’ of the tap as it is equipped (standard accessories: regulators, fittings, etc.).

There are 6 classes for this characteristic. See Article 2.7.1.1.

2.5.2 Meaning of Ch

The comfort characteristics taken into account are hydraulic performance, endurance and thermal shock resistance.

There are 2 classes for this characteristic. See Article 2.7.1.3.

<table>
<thead>
<tr>
<th>Field of application</th>
<th>Ch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Household with waiver (house, apartment, student residence)</td>
</tr>
<tr>
<td></td>
<td>- Public (Hospitality, ERP (institution receiving the public), office, EHPA (nursing home), non-medical retirement home, spa treatment centre)</td>
</tr>
<tr>
<td>Class 1</td>
<td>- Maintenance (handspray jets (soft silicone part or other to facilitate jet cleaning))</td>
</tr>
<tr>
<td>Class 2</td>
<td>- Must be Ch1</td>
</tr>
<tr>
<td></td>
<td>- Must be E00 (for washbasin handsprays)</td>
</tr>
<tr>
<td></td>
<td>- Must be E0 (for sink handsprays)</td>
</tr>
</tbody>
</table>

2.5.3 Meaning of A

The acoustic characteristic taken into account is the sound pressure level, $L_{ap}$.

There are 2 classes for this characteristic. See Article 2.7.2.1.

2.5.4 Meaning of U

The wear characteristic taken into account is the mechanical characteristic and, more precisely:
- mechanical endurance: the number of operating cycles to which the jet selectors of extractable handsprays of sink and washbasin mixers are subjected
- thermal shock resistance

There is 1 class for this characteristic. See Article 2.7.3.1.

An application for an EChAU rating implies a class 3 application for endurance tests (U3).

2.6 Performance level for the EChAU rating for products subject to Standard NF EN 16145

2.6.1 Marking

No requirements in addition to those under the NF EN 16145 Standard.

2.6.2 Materials

No requirements in addition to those under the NF EN 16145 Standard.
2.6.3 Dimensional characteristics
No requirements in addition to those under the NF EN 16145 Standard.

2.6.4 Leaktightness characteristics
No requirements in addition to those under the NF EN 16145 Standard.

2.6.5 Mechanical characteristics

2.6.5.1 Mechanical endurance of jet selectors
Endurance performance is modified by multiplying by 2.5 the jet selector requirement in Standard NF EN 16145.

2.6.5.2 Thermal shock resistance tests
The test under the standard is modified as follows:

2.6.5.2.1 Operating procedure
The product is subjected to water circulation, at a flow rate of 0.08 to 0.12 L/s without exceeding a supply pressure of 2.8 bar.
- Mount the product on a test device of the type for which it is normally intended.
- Subject it to 5 cycles of water circulation, with each cycle including:
  - (15 ± 1) min water flow at (93 ± 2) °C, with flow upstream of the jet regulator limited to a maximum of 0.15 L/s;
  - (10 ± 1) min water flow at (20 ± 5) °C, with flow upstream of the jet regulator limited to a maximum of 0.15 L/s

2.6.5.2.2 Requirements
No leaks should be observed during the last three test cycles. At the end of the test, there must be no visible permanent deformation of the product and no peeling or flaking of the coating.

2.6.6 Hydraulic characteristics

2.6.6.1 Flow rate with “high flow” jet selection
Verification of the flow rate value obtained with class E, see Article 2.7.1.1.

2.6.6.2 “Water saving” controlled flow rate
To be considered in the framework of the EChAU rating, the “water saving” characteristic must meet the following requirements:
Handsprays used in sanitary tapware are subjected to a controlled flow rate when they are used for washbasins and sinks.
To ensure the flow rate, it seemed appropriate to use a test described in Article 11 of Standard NF EN 16145 and measure the flow rate value.

2.6.6.2.1 Test principle
The purpose is to determine, for the tested handsprays, the value of the flow rate for reference pressures of 1.5 - 3 and 4.5 bar, also constant on the cold water supply.
The measurement is performed on a handspray.

2.6.6.2.2 Equipment
See Article 11.2.2 of Standard NF EN 16145.
2.6.6.2.3 Operating procedure

- Supply the product with a dynamic pressure of 0.3 (+ 0.02/0) MPa or 3 (+ 0.2/0) bar.
- Measure and record the flow rate values.
- Repeat this test with dynamic pressures of 1.5 (+ 0.2/0) MPa or 1.5 (+ 0.2/0) bar and 4.5 (+ 0.2/0) MPa or 4.5 (+ 0.2/0) bar.

2.6.6.2.4 Required characteristics

*Flow rate according to the product*

<table>
<thead>
<tr>
<th>Type of product</th>
<th>Flow requirements in L/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic test pressures:</td>
<td>3 (+0,2/0)</td>
</tr>
<tr>
<td>Washbasin and sink within the setting range of 34 to 44 °C</td>
<td>$4 \leq q \leq 6$</td>
</tr>
</tbody>
</table>

2.6.7 Acoustic characteristics

Handsprays with Lap > 30 cannot be admitted for the EChAU rating.
Verification of the acoustic value obtained with class A; see article 2.7.2.1.

2.6.8 Maintenance

Extractable handsprays for sink and washbasin mixers are equipped with an anti-limescale system for handspray jets (soft silicone part or other to facilitate jet cleaning).

2.6.9 Rotating fitting

No requirements in addition to those under the NF EN 16145 Standard.
### 2.6.10 Order of tests

<table>
<thead>
<tr>
<th>Sample Sequence</th>
<th>Order</th>
<th>Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>1.</td>
<td>§7.2A Materials (salt spray)</td>
</tr>
<tr>
<td><strong>Sample 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>1.</td>
<td>§7.2B Materials (air thermal shock)</td>
</tr>
<tr>
<td><strong>Sample 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Endurance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample 1A – manual selector</td>
<td>1.</td>
<td>§6 Marking</td>
</tr>
<tr>
<td>Sample 1B – automatic selector</td>
<td></td>
<td>§6 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§12 Protection against backflow</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§9.2 Leaktightness</td>
</tr>
<tr>
<td></td>
<td>4.</td>
<td>§10.3A Endurance</td>
</tr>
<tr>
<td></td>
<td>5.</td>
<td>§9.2 Leaktightness</td>
</tr>
<tr>
<td></td>
<td>6.</td>
<td>§2.6.5 Endurance</td>
</tr>
<tr>
<td></td>
<td>7.</td>
<td>§9.2 Leaktightness</td>
</tr>
<tr>
<td><strong>Sample 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thermal shocks</strong></td>
<td>1.</td>
<td>§6 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§12 Protection against backflow</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§10.4 Thermal shock reaction</td>
</tr>
<tr>
<td></td>
<td>4.</td>
<td>§9 Leaktightness</td>
</tr>
<tr>
<td><strong>Sample 5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thermal shocks</strong></td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§12 Protection against backflow</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§2.6.5.2 Thermal shock reaction</td>
</tr>
<tr>
<td></td>
<td>4.</td>
<td>§9 Leaktightness</td>
</tr>
<tr>
<td><strong>Sample 6</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydraulic</strong></td>
<td>1.</td>
<td>§6 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§12 Protection against backflow</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§8 Dimensions</td>
</tr>
<tr>
<td></td>
<td>4.</td>
<td>§11 Hydraulic characteristic</td>
</tr>
<tr>
<td></td>
<td>5.</td>
<td>§2.6.6.1 Class E for flow rate with “High flow” selection</td>
</tr>
<tr>
<td></td>
<td>6.</td>
<td>§2.6.6.2 “Water saving” controlled flow rate</td>
</tr>
<tr>
<td></td>
<td>7.</td>
<td>§9 Leaktightness</td>
</tr>
<tr>
<td></td>
<td>8.</td>
<td>§10.2 mechanical strength</td>
</tr>
<tr>
<td><strong>Sample 7-8-9</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acoustic</strong></td>
<td>1.</td>
<td>§6 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§12 Protection against backflow</td>
</tr>
<tr>
<td><strong>Sample 10</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rotating fitting</strong></td>
<td>1.</td>
<td>§6 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§12 Protection against backflow</td>
</tr>
</tbody>
</table>
2.7 EChAU rating for extractable handsprays

The essential principle of the EChAU rating is that the different characteristics are independent of each other. The level of each characteristic is to be selected as needed. The highest level may apply for one characteristic, while the lowest level may apply for another.

2.7.1 Hydraulic or flow characteristic

2.7.1.1 Classification

Depending on their performance level, extractable handsprays for sink and washbasin mixers can be classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Flow rate value</th>
</tr>
</thead>
<tbody>
<tr>
<td>E00</td>
<td>$4 \text{ L/min} \leq q \leq 6 \text{ L/min}$</td>
</tr>
<tr>
<td>E0</td>
<td>$9 \text{ L/min} \leq q &lt; 12 \text{ L/min}$</td>
</tr>
<tr>
<td>E1</td>
<td>$12 \text{ L/min} \leq q &lt; 15 \text{ L/min}$</td>
</tr>
<tr>
<td>E2</td>
<td>$15 \text{ L/min} \leq q &lt; 20 \text{ L/min}$</td>
</tr>
<tr>
<td>E3</td>
<td>$20 \text{ L/min} \leq q &lt; 25 \text{ L/min}$</td>
</tr>
<tr>
<td>E4</td>
<td>$25 \text{ L/min} \leq q &lt; 30 \text{ L/min}$</td>
</tr>
</tbody>
</table>

2.7.1.2 Selection criteria

Flow rate class selection will be based on:
- the supplied device;
- the building comfort level;
- the type of room to be equipped.
- Comfort characteristics

2.7.1.3 Classification

Depending on their performance level, extractable handsprays for sink and washbasin mixers can be classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Extractable handsprays for sink and washbasin mixers must comply with the following articles:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch1</td>
<td>2.6.8 Maintenance</td>
</tr>
</tbody>
</table>
| Ch2   | meets the requirements of class Ch1  
|       | 2.6.6.2 “Water saving” controlled flow rate                                             |

2.7.1.4 Selection criteria

The comfort class selection will mainly depend on the characteristics and use of the building.
2.7.2 Acoustic characteristic

2.7.2.1 Classification
Depending on their performance level, extractable handsprays for sink and washbasin mixers can be classified as follows:

<table>
<thead>
<tr>
<th>Acoustic group</th>
<th>Class</th>
<th>Lap</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A2</td>
<td>10 dB (A) &lt; Lap ≤ 15 dB (A)</td>
</tr>
<tr>
<td>I</td>
<td>A3</td>
<td>Lap ≤ 10 dB (A)</td>
</tr>
</tbody>
</table>

2.7.2.2 Selection criteria
The acoustic class selection will mainly depend on the characteristics and use of the building.

2.7.3 Mechanical endurance or wear resistance characteristic

2.7.3.1 Classification
Depending on the actual wear resistance level of their individual components, extractable handsprays for sink and washbasin mixers can be classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>U3</td>
<td>Jet selector</td>
</tr>
<tr>
<td></td>
<td>20,000 cycles</td>
</tr>
<tr>
<td></td>
<td>Thermal shocks</td>
</tr>
<tr>
<td></td>
<td>5 cycles</td>
</tr>
</tbody>
</table>

2.7.3.2 Selection criteria
U3: intensive use and use in harsh conditions.

2.8 Example of EChAU rating
An extractable handspray for sink mixers with a flow rate during use of 14 L/min that passes comfort level 1 tests, with an $L_{ap}$ of 12 dB (A), and that passes the endurance tests (20,000 cycles) and thermal shock tests shall be classified as:

E1 Ch1 A2 U3

An extractable handspray for washbasin mixers with a flow rate during use of 5 L/min that passes comfort level 2 tests, with an $L_{ap}$ of 9 dB (A), and that passes the thermal shock resistance test shall be classified as:

E00 Ch2 A3 U3
2.9 Rating presentation

2.9.1 Specific information for the catalogue or other commercial media

See Chapter 6.1 of the regulations for use of DT077-00.
The specific information on the methods for rating: extractable handsprays for sink and washbasin mixers taps are as follows:

<table>
<thead>
<tr>
<th>Flow</th>
<th>E</th>
<th>Q L/min measured under 3 bar</th>
<th>E00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 L/min q &lt; 6 L/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 L/min q &lt; 12 L/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 L/min q &lt; 15 L/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 L/min q &lt; 20 L/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 L/min q &lt; 25 L/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25 L/min q &lt; 30 L/min</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comfort</th>
<th>Ch</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ch1</td>
<td>Anti-limescale system</td>
</tr>
<tr>
<td></td>
<td>Ch2</td>
<td>Water saving characteristics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acoustics</th>
<th>A</th>
<th>Lap dB (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td></td>
<td>10 dB (A) &lt; Lap ≤ 15 dB (A)</td>
</tr>
<tr>
<td>A3</td>
<td></td>
<td>Lap ≤ 10 dB (A)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wear</th>
<th>U</th>
<th>Number of cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>U3</td>
<td></td>
<td>Jet selector endurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20,000 cycles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thermal shock resistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 cycles</td>
</tr>
</tbody>
</table>

2.9.2 Product information

See Chapter 6.2 of the regulations for use of DT077-00.
3 EChAU rating application

The rating application must be issued by the applicant/holder in one copy (1 original on the applicant's letterhead paper in French or English) according to the cases and models indicated below. All the documents are to be remitted to CSTB.

In the event that the product comes from a manufacturing unit located outside the European Economic Area, the applicant shall designate a representative within the European Economic Area who co-signs the application.

Note: Electronic versions of template letters and sheets may be obtained from CSTB.

The applicant produces a file that contains the elements described in the following table depending on the type of application.

<table>
<thead>
<tr>
<th>Type of application</th>
<th>Initial application</th>
<th>Complementary application</th>
<th>Admission following a penalty of withdrawal</th>
<th>Suspension application</th>
<th>Renunciation application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application and commitment letter</td>
<td>Standard letter 1A or 1B (for a representative)</td>
<td>Standard letter 2A or 2B (for a representative)</td>
<td>Standard sheet 7 specific items</td>
<td>Standard letter 5A or 5B (for a representative)</td>
<td>Standard letter 4A or 4B (for a representative)</td>
</tr>
<tr>
<td>Sales literature</td>
<td>YES</td>
<td>If applicable</td>
<td>YES</td>
<td>Instructions or extract from the catalogue</td>
<td></td>
</tr>
</tbody>
</table>

3.1 For an initial rating application
The applicant shall prepare a dossier which includes:
- an application and commitment letter in accordance with standard letter 1 A;
- if representative, application and commitment letter as per standard letter 1 B;

3.2 For a complementary rating application
The holder shall prepare a file containing the following:
- an application and commitment letter in accordance with standard letter 2 A;
- if representative, application and commitment letter as per standard letter 2 B;

3.3 For a new rating application following a penalty of withdrawal of the EChAU rating
The holder shall prepare a file containing the following:
- specific items that all applicants must submit as part of a new admission application where the right of use has been withdrawn as a result of a sanction, using standard sheet 7.

3.4 For an application for the suspension of the EChAU rating
The holder shall prepare a file containing the following:
- a suspension letter as per standard letter 5 A;
- if a representative, a suspension letter as per standard letter 5 B.

3.5 For an application for renunciation of the EChAU rating
The holder shall prepare a file containing the following:
- a renunciation letter as per standard letter 6A;
- if a representative, a renunciation letter as per standard letter 6B.
Subject: ECAU and/or EChAU rating admission application
Attachment(s): a technical file.

Dear Sir, Madam,

I would like to request an ECAU and/or EChAU rating:

- for the following product/range of products: ………… (detailed list of the product/range of products or specify “as set out in the list included with this application”);
- produced at the following production unit: ………… (company name, address);
- and for the following trade name: ………… (trademark and/or specific trade reference, which may be on the list included with this application).

For this purpose, I declare that I have read and accept technical document 077 associated with this rating and undertake to comply with it and to inform my commercial network during the entire validity period of the ECAU and/or EChAU rating and in particular to comply without restrictions or reservations with the decisions made by CSTB.

Yours faithfully,

Date, signature and name in full of the applicant/holder’s legal representative
STANDARD LETTER 1B
ECAU AND/OR EChAU RATINGS

ECAU OR EChAU RATING APPLICATION FORM
FOR APPLICANTS LOCATED OUTSIDE OF THE EUROPEAN ECONOMIC AREA
(to be drawn up on the applicant's/holder's letterhead paper)

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Hydraulique et Equipements Sanitaires, (HES)
Division Robinetterie et Appareils Sanitaires (RAS)
For the attention of Mr. Laurent Rousseau
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

Subject: ECAU and/or EChAU rating admission application (with a representative)
Attachment(s): a technical file.

Dear Sir, Madam,

I would like to request an ECAU and/or EChAU rating:
- for the following product/range of products: …………… (detailed list of the product/range of products or specify “as set out in the list included with this application”);
- produced at the following production unit: …………… (company name, address);
- and for the following trade name: …………… (trademark and/or specific trade reference, which may be on the list included with this application).

For this purpose, I declare that I have read and accept technical document 077 associated with this rating and undertake to comply with it and to inform my commercial network during the entire validity period of the ECAU and/or EChAU rating and in particular to comply without restrictions or reservations with the decisions made by CSTB.

Furthermore, I appoint the Company …………… (company name), …………… (company legal form), …………… (registered office) represented by Mr/Ms …………… (name of the legal representative) in that person’s capacity as …………… (position) to represent me in the European Economic Area for all matters relative to ECAU and/or EChAU ratings.

I undertake to immediately notify CSTB of any new appointment of the representative designated above.

In this regard, I request that the expenses that are to be borne by me be invoiced directly to the representative. They will make the payments on my behalf and in my name as soon as the invoices are received, as agreed when accepting the role of representative.

Yours faithfully,

Date, signature and name in full of the applicant's legal representative
preceded by the handwritten wording “Approving representation”

Date, signature and name in full of the representative in the European Economic Area
preceded by the handwritten wording “Accepting representation”.

Technical Document 077-06 rev02 – page 18/28
STANDARD LETTER 2A
ECAU AND/OR EChAU RATINGS

COMPLEMENTARY APPLICATION FORM FOR ECAU AND/OR EChAU RATING
FOR APPLICANTS LOCATED IN THE EUROPEAN ECONOMIC AREA
(to be drawn up on the applicant’s/holder’s letterhead paper)

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Hydraulique et Equipements Sanitaires, (HES)
Division Robinetterie et Appareils Sanitaires (RAS)
For the attention of Mr. Laurent Rousseau
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

Subject: Complementary application for the ECAU and/or EChAU rating
Attachment(s): a technical file.

Dear Sir, Madam,

As holder of the ECAU and/or EChAU rating for the product(s) of our manufacture identified below:
- designation of the product(s): …………
- production unit: …………
- right of use granted on ………… (date) and bearing the following number: ………… (number of valid certificate)

I am writing to apply for the ECAU and/or EChAU rating for the following product/range of products that we manufacture:
- detailed list of the product/range of products: …………
- specific trade reference: …………

(This information may be included in a list attached to this application)

For an extension application, please provide the information below:

This product deviates from the certified product/range of products due to the following modifications: …………
<description of the modifications>.

The product/range of products for which I am seeking an extension will replace the certified product listed above:
- NO (1);
- YES (1).

I declare that the products/product range covered by this application are, with relation to the other characteristics, strictly in conformity with the products/product range already certified and manufactured under the same conditions.

For this purpose, I declare that I have read and accept technical document 077 associated with this rating and undertake to comply with it and to inform my commercial network during the entire validity period of the ECAU and/or EChAU rating and in particular to comply without restrictions or reservations with the decisions made by CSTB.

Yours faithfully,

Date, signature and name in full of the applicant/holder’s legal representative

(1) Delete as appropriate.
STANDARD LETTER 2B
ECAU AND/OR EChAU RATINGS

COMPLEMENTARY APPLICATION FORM FOR ECAU AND/OR EChAU RATING
FOR APPLICANTS LOCATED OUTSIDE OF THE EUROPEAN ECONOMIC AREA
(to be drawn up on the applicant's/holder's letterhead paper)

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Hydraulique et Equipements Sanitaires, (HES)
Division Robinetterie et Appareils Sanitaires (RAS)
For the attention of Mr. Laurent Rousseau
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

Subject: Complementary application for the ECAU and/or EChAU rating (with a representative)
Attachment(s): a technical file.

Dear Sir, Madam,

As holder of the ECAU and/or EChAU rating for the product(s) of our manufacture identified below:
- designation of the product(s): …………
- production unit: …………
- right of use granted on ………… (date) and bearing the following number: ………… (number of valid certificate)

I am writing to apply for the ECAU and/or EChAU rating for the following product/range of products that we manufacture:
- detailed list of the product/range of products: …………
- specific trade reference: …………

(this information may be included in a list attached to this application)

For an extension application, please provide the information below:

This product deviates from the certified product/range of products due to the following modifications: ………… <description of the modifications>.

The product/range of products for which I am seeking an extension will replace the certified product listed above:
- NO (1);
- YES (1).

I declare that the products/product range covered by this application are, with relation to the other characteristics, strictly in conformity with the products/product range already certified and manufactured under the same conditions.

For this purpose, I declare that I have read and accept technical document 077 associated with this rating and undertake to comply with it and to inform my commercial network during the entire validity period of the ECAU and/or EChAU rating and in particular to comply without restrictions or reservations with the decisions made by CSTB.

Furthermore, I appoint the Company ………… (company name), ………… (company legal form), ………… (registered office) represented by Mr/Ms ………… (name of the legal representative) in that person's capacity as ………… (position) to represent me in the European Economic Area for all matters relative to ECAU and/or EChAU ratings.

I undertake to immediately notify CSTB of any new appointment of the representative designated above.

In this regard, I request that the expenses that are to be borne by me be invoiced directly to the representative. They will make the payments on my behalf and in my name as soon as the invoices are received, as agreed when accepting the role of representative.

Yours faithfully,

Date, signature and name in full of the applicant’s legal representative preceded by the handwritten wording “Approving representation”

(1) Delete as appropriate.
Subject: Application for renunciation of the ECAU and/or EChAU rating

Dear Sir, Madam,

As holder of the ECAU and/or EChAU rating, I would like to renounce the ECAU and/or EChAU rating for the product(s) that we manufacture identified by the following references:

- designation of the product(s): …………
- manufacturing unit: ………… (company name, address): …………
- brand name: …………
- commercial reference: …………
- date of ECAU and/or EChAU rating admission: ………… or certificate No.: …………

for the following reasons:

- …………

for a maximum duration of 6 months, renewable once.

Manufacturing is due to cease on: …………

The inventories of these products with packaging marked ECAU or EChAU are the following: …………

The anticipated time it will take to deplete them is: …………

Yours faithfully,

Date, signature and name in full of the holder’s legal representative
APPLICATION FOR RENUNCIATION OF THE ECAU AND/OR EChAU RATING WITH A REPRESENTATIVE
FOR APPLICANTS LOCATED OUTSIDE OF THE EUROPEAN ECONOMIC AREA

For the attention of Mr Laurent Rousseau
Division Robinetterie et Appareils Sanitaires (Tapware and Sanitaryware Division)
Direction HES
CSTB
84 avenue Jean Jaurès
CHAMPS-SUR-MARNE
77447 MARNE LA VALLEE CEDEX 2 (France)

Subject: Application for renunciation of the ECAU and/or EChAU rating with a representative

Dear Sir, Madam,

As holder of the ECAU and/or EChAU rating, I would like to renounce the ECAU and/or EChAU rating for the product(s) that we manufacture identified by the following references:

- designation of the product(s):
- manufacturing unit: (company name, address):
- brand name:
- commercial reference:
- date of ECAU and/or EChAU rating admission or admission no.:

for the following reasons:

Manufacturing is due to cease on:

The inventories of these products with packaging marked ECAU or EChAU are the following:

The expected time for their depletion is:

Yours faithfully,

Date and signature of the holder's legal representative

Date and signature of the representative in the European Economic Area
APPLICATION FORM FOR SUSPENSION OF THE ECAU AND/OR EChAU RATING FOR APPLICANTS LOCATED IN THE EUROPEAN ECONOMIC AREA
(to be drawn up on the applicant’s/holder’s letterhead paper)

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Hydraulique et Equipements Sanitaires, (HES)
Division Robinetterie et Appareils Sanitaires (RAS)
For the attention of Mr. Laurent Rousseau
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

Subject: Application for suspension of the ECAU and/or EChAU rating

Dear Sir, Madam,

As holder of the ECAU and/or EChAU rating, I would like to request the suspension of the ECAU and/or EChAU rating for the product(s) that we manufacture identified by the following references:
- designation of the product(s):
- manufacturing unit: ............ (company name, address): ............
- brand name: ............
- commercial reference: ............
- date of ECAU and/or EChAU rating admission: ............ or certificate No.: ............

for the following reasons:
- ............

for a maximum duration of 6 months, renewable once.

Manufacturing is due to cease on: ............

The inventories of these products with packaging marked ECAU or EChAU are the following: ............

The anticipated time it will take to deplete them is: ............

Yours faithfully,

Date, signature and name in full of the holder’s legal representative
APPLICATION FORM FOR SUSPENSION OF THE ECAU AND/OR EChAU RATING
FOR APPLICANTS LOCATED OUTSIDE OF THE EUROPEAN ECONOMIC AREA
(to be drawn up on the applicant's/holder's letterhead paper)

Centre Scientifique et Technique du Bâtiment (CSTB)
Direction Hydraulique et Equipements Sanitaires, (HES)
Division Robinetterie et Appareils Sanitaires (RAS)
For the attention of Mr. Laurent Rousseau
84, avenue Jean Jaurès
Champs sur Marne
F-77447 Marne La Vallée Cedex 2

Subject: Application for suspension of the ECAU and/or EChAU rating (with a representative)

Dear Sir, Madam,

As holder of the ECAU and/or EChAU rating, I would like to request the suspension of the ECAU and/or EChAU rating for the product(s) that we manufacture identified by the following references:

- designation of the product(s):
- manufacturing unit: ………… (company name, address): …………
- brand name: …………
- commercial reference: …………
- date of ECAU and/or EChAU rating admission: ………… or certificate No.: …………

for the following reasons:

- …………

for a maximum duration of 6 months, renewable once.

Manufacturing is due to cease on: …………

The inventories of these products with packaging marked ECAU or EChAU are the following: …………

The anticipated time it will take to deplete them is: …………

Yours faithfully,

Date, signature and name in full of the holder's legal representative

Date, signature and name in full of the representative in the European Economic Area
In the event of an act of deceptive commercial practice under Articles L 121-2 to L121-5 of the Consumer Code (indication of a false rating of a certified product or a false label).

The applicant is responsible for determining and carrying out a course of action that will fully address and remedy the causes and consequences of their commitments as regards the correct usage of the certification mark.

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINIMUM PROOF TO BE SUPPLIED BY THE CSTB APPLICANT SHOWING THE ACTIONS THEY HAVE UNDERTAKEN TO FULLY ADDRESS AND REMEDY THE CAUSES AND CONSEQUENCES</th>
<th>VALIDITY OF THE PROOF RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURATIVE ACTIONS</td>
<td>• A list of those affected including full contact details (customers, prospects, technical controllers, etc.) who have received false attestations/false certificates; failing that, a list of those affected (customers, prospects, technical controllers, etc.) who have been contacted over the preceding 24 months.</td>
<td>☐ List sent  ☐ List not sent  Comments: .........................................</td>
</tr>
<tr>
<td></td>
<td>• List of customers, including full contact details, who have received products with inappropriately marked packaging information; otherwise, the list of customers of the past 24 months.</td>
<td>☐ List sent  ☐ List not sent  Comments: .........................................</td>
</tr>
<tr>
<td></td>
<td>• Letter written by the Applicant’s manager informing those affected of the invalidity of the false attestations/false certificates they have been sent.</td>
<td>CSTB will verify that this action has been carried out by contacting 5% of those affected or at least 5 customers and technical controllers.  ☐ Letter of information duly implemented, corroborated by those affected  ☐ Letter of information not implemented or partially implemented  Comments: .........................................</td>
</tr>
<tr>
<td></td>
<td>• Letter written by the Applicant’s manager informing the customers of products that are inappropriately marked or products bearing the certification mark(s).</td>
<td>CSTB will verify that this action has been carried out by contacting 5% of the customers or at least 5 customers  ☐ Letter of information duly implemented, corroborated by those affected  ☐ Letter of information not implemented or partially implemented  Comments: .........................................</td>
</tr>
<tr>
<td></td>
<td>• Action undertaken against the person or persons responsible for approving and issuing the false attestations/false certificates and/or delivering inappropriately marked products.</td>
<td>☐ Action is relevant  ☐ Action is not relevant  Comments: .........................................</td>
</tr>
</tbody>
</table>
## 4 Prices

The purpose of this chapter is to determine the amount due for services related to the ECAU and EChAU ratings and describe the terms of payment.

The ECAU and EChAU ratings include the following services:

- Development, examination of application and implementation of ECAU and/or EChAU ratings;
- Operation of ECAU and/or EChAU ratings;
- Testing.

### 4.1 Services related to the ECAU and EChAU ratings

<table>
<thead>
<tr>
<th>Nature of the service</th>
<th>Definition of the service</th>
<th>Paying for the services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management:</strong> Development and implementation of ratings, examination of the rating application</td>
<td>Participation in the implementation of the ratings, including preparation of the associated technical document. Services including examination of application files, relations with applicants, laboratories and assessment of inspection results.</td>
<td>➢ <em>Initial/complementary application: See § 4.2.1</em></td>
</tr>
<tr>
<td><strong>Management:</strong> Rating operation</td>
<td>Services including management of rating files, relations with holders, laboratories, publication of ratings data on certificates, assessment of inspection results.</td>
<td>➢ <em>Monitoring: See § 4.2.2</em></td>
</tr>
<tr>
<td><strong>Tests</strong></td>
<td>Laboratories’ testing services</td>
<td><strong>The laboratories’ price lists are provided upon request.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>The applicant/holder supplies samples free of charge and makes them available at the laboratory’s address.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>The costs related to the import duties and taxes are to be borne by the test applicant; the applicant shall pay all duties and taxes before sending the samples.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ <em>Initial/complementary application: See § 4.2.1</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ <em>Monitoring: See § 4.2.2</em></td>
</tr>
</tbody>
</table>
4.2 Paying for the services

4.2.1 Initial application/complementary application

Management and testing fees related to examination services are invoiced in the framework of an initial or complementary ECAU and/or EChAU rating application. They are payable in one instalment, at the time at which the application is filed, for official registration.

Such fees shall remain payable even if the ECAU and/or EChAU rating is not granted or extended or if the application is withdrawn during the examination.

4.2.2 Monitoring

Fees for annual services related to management and testing of ECAU and/or EChAU ratings are invoiced during the first quarter of each year and shall remain payable in the event of non-renewal, withdrawal, cancellation or suspension of the ECAU and/or EChAU rating during the year.

4.2.3 Non-payment of amounts due

The applicant or holder of the ECAU and/or EChAU rating must pay all fees in accordance with the established terms of payment. Any failure on their part is an obstacle to the fulfilment by CSTB of the responsibilities of inspection and corrective action that are incumbent upon it hereunder.

If a first official notice by registered letter with acknowledgement of receipt does not result in the payment of all amounts due within one month, any established penalties may be applied for all of the products accepted for such holder.

4.3 Prices

Prices are reviewed annually, in the form of a price list drawn up by CSTB. This revision is reported by CSTB.

If holders refuse to recognise the annual revision of fees, they shall be deemed to have voluntarily terminated the ratings for their products.