SANITARY TAPWARE

Technical document 077-08

ECAU rating for Shower hoses for sanitary tapware and Extractable handspray hoses for sanitary tapware
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

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<th>Revision no.</th>
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<tr>
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<td>01/06/2017</td>
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1 Normative support for ECAU rating

1.1 Purpose
The purpose of this chapter is to list the articles of Standards NF EN 1113 and NF EN 16146+A1 that will be taken into account for the ECAU 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 1113.

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The table below lists the articles of the Standard NF EN 16146+A1.

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<th>Articles</th>
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<td>Rotating fitting</td>
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</table>
2 ECAU rating

2.1 Foreword

The ECAU rating was created to meet the expectations of market players who require performances that are superior or complementary to that indicated in Standards NF EN 1113 and NF EN 16146+A1.

For shower hoses and extractable handspray hoses for sanitary tapware, the following are required:

- Connection nut materials;
- Hydraulic performance levels according to user needs;
- Mechanical and endurance performance of stripwound or plastic hoses;

It should be noted, however, that the use of the ECAU rating is voluntary and supplementary to the evaluation of a product that is already certified under Standards NF EN 1113 and NF EN 16146+A1.

2.2 Purpose

The purpose of this chapter is to establish the material, hydraulic, mechanical and mechanical endurance performance levels to be met by shower hoses and extractable handspray hoses for sanitary tapware to qualify for the ECAU rating.

2.3 Field of application

This chapter applies to:

- shower hoses for sanitary tapware subject to Standard NF EN 1113;
- extractable handspray hoses for sanitary tapware subject to Standard NF EN 16146+A1.

2.4 References to standards and additional specifications

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>NF EN 1113: 2015</td>
<td>Sanitary tapware - Shower hoses for sanitary tapware for water supply systems type 1 and type 2 - General technical specifications</td>
</tr>
<tr>
<td>NF EN 16146+A1: 2015</td>
<td>Sanitary tapware - Extractable handspray hoses for sanitary tapware for water supply systems types 1 and 2 - General technical specifications</td>
</tr>
<tr>
<td>DT077-00</td>
<td>Regulations for use of marks</td>
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</table>
2.5 ECAU rating principle

The ECAU 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”.

The ECAU rating is characterised by the association of the letters ECAU, 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 taps:

- pursuant to Standards NF EN 1113 and NF EN 16146+A1. The test procedures are defined in Article 1 of this document.
- having passed the performance tests for the ECAU rating. The test procedures are provided in the Article:
  - 2.6 for products subject to NF EN 1113;
  - 2.7 for products subject to NF EN 16146+A1;
  - 2.8 for products subject to NF EN 1113 and NF EN 16146+A1;

2.5.1 Meaning of E

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

There are 3 classes for this characteristic. See Article 2.10.1.1.

2.5.2 Meaning of C

The comfort characteristics taken into account are the materials for the hose nuts and the hydraulic performance.

There are 2 classes for this characteristic. See Article 2.10.2.1.

<table>
<thead>
<tr>
<th>Standards</th>
<th>NF EN 1113</th>
<th>NF EN 16146+A1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>– Hose nut materials</td>
<td>– Hose nut materials</td>
</tr>
<tr>
<td>Class 2</td>
<td>– Must be C1</td>
<td>– Must be C1</td>
</tr>
<tr>
<td></td>
<td>– Must be E1</td>
<td>– Must be E0 for extractable handspray hoses for washbasins, bidets and sinks</td>
</tr>
</tbody>
</table>

2.5.3 Meaning of A

The acoustic characteristic shall not be taken into account for this type of product.
2.5.4 Meaning of U
The wear characteristic taken into account is the mechanical characteristic, endurance and, more precisely:

- for metal hoses (brass, stainless steel or aluminium):
  - endurance of stripwound hoses;
  - tensile shock resistance of stripwound hoses;
  - rotational resistance of fastener;
- for plastic hoses:
  - rigidity.

There is 1 class for this characteristic. See Article 0.
An application for an ECAU rating implies a class 3 application for endurance tests (U3).

2.6 Performance level for the ECAU rating for products subject to Standard NF EN 1113

2.6.1 Marking
No requirements in addition to those under the NF EN 1113 Standard.

2.6.2 Materials
No plastic nut to equip shower hoses for sanitary tapware.

2.6.3 Dimensional characteristics
No requirements in addition to those under the NF EN 1113 Standard.

2.6.4 Hydraulic characteristics

2.6.4.1 Flow rate
Verification of the flow rate value obtained with class E, see Article 2.10.1.1.

2.6.4.2 “Water saving” flow rate
This test applies to class C2.
To be examined for the ECAU rating, the “water saving” characteristic must meet the following requirements:
Hoses used in sanitary tapware are subject to a flow rate when they are used for showers and bath showers (on the shower outlet).
To ensure the flow rate, it seemed appropriate to use a test described in Article 8.2 of Standard NF EN 1113 and measure the flow rate value.

2.6.4.2.1 Test principle
The purpose is to determine, for the tested product, the value of the flow rate for a reference pressure 3 bar, also constant on the cold water supply.
The measurement is performed on a hose.

2.6.4.2.2 Equipment
See Article 8.2.3 of Standard NF EN 1113.

2.6.4.2.3 Operating procedure
- Supply the hose with a dynamic pressure of 0.3 (+ 0.02/0) MPa or 3 (+ 0.2/0) bar.
- Measure and record the flow values in the full flow position.
2.6.4.2.4 Required characteristics

Flow rate according to the product

<table>
<thead>
<tr>
<th>Type of product</th>
<th>Flow rate requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shower and bath shower (shower output) hose</td>
<td>$15 \text{ L/min} \leq q &lt; 25.2 \text{ L/min}$</td>
</tr>
</tbody>
</table>

2.6.5 Mechanical and leaktightness characteristics
No requirements in addition to those under the NF EN 1113 Standard.

2.6.6 Rotating fitting
No requirements in addition to those under the NF EN 1113 Standard.

2.7 Performance level for the ECAU rating for products subject to Standard NF EN 16146+A1

2.7.1 Marking
No requirements in addition to those under the NF EN 16146+A1 Standard.

2.7.2 Materials
No plastic nut to equip extractable handspray hoses for sanitary tapware.

2.7.3 Dimensional characteristics
No requirements in addition to those under the NF EN 16146+A1 Standard.

2.7.4 Hydraulic characteristics

2.7.4.1 Flow rate
Verification of the flow rate value obtained with class E, see Article 2.10.1.1.

2.7.4.2 “Water saving” flow rate
This test applies to class C2.
To be examined for the ECAU rating, the “water saving” characteristic must meet the following requirements:
Hoses used in a sanitary tapware are subjected to a flow rate when they are used for washbasins, bidets and sinks.
To ensure the flow rate, it seemed appropriate to use a test described in Article 8.2 of Standard NF EN 16146+A1 and measure the flow rate value.

2.7.4.2.1 Test principle
The purpose is to determine, for the tested product, the value of the flow rate for a reference pressure 3 bar, which is constant on the cold water supply.
The measurement is performed on a hose.

2.7.4.2.2 Equipment
See Article 8.2.3 of Standard NF EN 16146+A1.

2.7.4.2.3 Operating procedure
- Supply the hose with a dynamic pressure of $0.3 (\pm 0.02/0) \text{ MPa or } 3 (\pm 0.2/0) \text{ bar}$.
- Measure and record the flow values in the full flow position.
2.7.4.2.4 Required characteristics

Flow rate according to the product

<table>
<thead>
<tr>
<th>Type of product</th>
<th>Flow rate requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose for washbasins, bidets and sinks</td>
<td>( 9 \text{ L/min} \leq q &lt; 15 \text{ L/min} )</td>
</tr>
</tbody>
</table>

2.7.5 Mechanical and leaktightness characteristics

No requirements in addition to those under the NF EN 16146+A1 Standard.

2.7.6 Rotating fitting

No requirements in addition to those under the NF EN 16146+A1 Standard.

2.8 Performance level for the ECAU rating for products subject to Standards NF EN 1113 and NF EN 16146+A1

2.8.1 Endurance characteristics of stripwound hoses

2.8.1.1 Test principle

The test consists of verifying the behaviour of the strip winding during coiling of the hose. The hose is subjected to a specified number of cycles.

2.8.1.2 Equipment

The test device is composed of:

- an anchor point of the hose to be tested;
- a force of \((30 \pm 3) \text{ N}\);
- a drum of a diameter of: \((80 \pm 3) \text{ mm}\);
- of an alternative machine driving the drum at a speed of \((0.1 \pm 0.01) \text{ m/sec}\).
2.8.1.3 Operating procedure
- Install the hose on the test device
- Adjust the H course of the drum to apply stress on the hose along its entire length, without applying stress at the fasteners.
- Submit the hose to 10,000 cycles.

2.8.1.4 Required characteristics
After the test, no visible signs of deterioration of the hose should be observed.

2.8.2 Tensile shock resistance of stripwound hoses

2.8.2.1 Test principle
The test consists of verifying the strip winding and the resistance of the end fittings.

2.8.2.2 Equipment
The device is composed of:
- two anchor points for fastening the end fittings of the hose to be tested;
- a cylinder with a diameter of \( (150 \pm 5) \) mm bearing a force of \( (150 \pm 5) \) N;

2.8.2.3 Operating procedure
- raise the cylinder and force by a height of \( (70 \pm 5) \) mm
- release the assembly
- repeat this operation 3 times

2.8.2.4 Required characteristics
After the test, the hose must not show any visible signs of deterioration.
2.8.3 Rotational resistance of stripwound hose fastener

2.8.3.1 Test principle
The test consists of verifying the behaviour of the hoses regarding the resistance of the fasteners.

2.8.3.2 Equipment
The device is composed of:
- an anchorage point in the upper part simulating a shower or bath shower tap outlet;
- a force of (70 ± 5) N

2.8.3.3 Operating procedure
- attach the hose to be tested on the device;
- apply force to the other end of the hose;
- apply a rotation equal to 1.5 turns in the opposite direction to the coiling of the hose;
- maintain the rotational force by mechanical means to prevent it from returning over (15 ± 1) min.

2.8.3.4 Required characteristics
After the test, no visible signs of deterioration of the fastener or the hose must be observed.
2.8.4 Rigidity test
This test only applies to plastic hoses.

2.8.4.1 Test principle
The test consists of verifying the rigidity of the hoses at pipe.

2.8.4.2 Equipment
The device consists of a cylinder with a diameter of (40 ± 1) mm.

2.8.4.3 Operating procedure
- Wrap the hose around the cylinder

2.8.4.4 Required characteristics
The outer diameter of the hose in the event of deformation must not be less than 0.8 x D.
2.9 Test sequence

2.9.1 Sequence of tests for products subject to Standard NF EN 1113

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<td>Sample 2 Materials</td>
<td>1.</td>
<td>§6.2B Materials (air thermal shock)</td>
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<td>Sample 3 C1</td>
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<td>1.</td>
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<td>§5 Marking</td>
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<td>§8 Hydraulic characteristic</td>
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<td>§2.6.4.1 Class E for flow rate</td>
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<td>§9.5 Leaktightness after tensile and bending strength tests</td>
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<td>2.</td>
<td>§9.3 Bending strength</td>
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<tr>
<td>3.</td>
<td>§9.5 Leaktightness after tensile and bending strength tests</td>
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<td>§5 Marking</td>
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<td>2.</td>
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<td>2.</td>
<td>§9.6 Thermal shock reaction</td>
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<td>3.</td>
<td>§9 Leaktightness</td>
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<td>§10 Rotating fittings</td>
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<td>Sample 9 U3</td>
<td>Sample 10 U3</td>
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<td>§5 Marking</td>
<td>§5 Marking</td>
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<td>§2.8.1 Endurance of stripwound hoses</td>
<td>§2.8.2 Tensile shock resistance of stripwound hoses</td>
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### 2.9.2 Sequence of tests for products subject to Standard NF EN 16146+A1

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<td>Sample 3 C1</td>
</tr>
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<td>2.</td>
<td>§7 Dimensional</td>
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<td>3.</td>
<td>§8 Hydraulic characteristic</td>
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<td>4.</td>
<td>§2.7.4.1 Class E for flow rate</td>
</tr>
<tr>
<td></td>
<td>5.</td>
<td>§2.7.4.2 “Water saving” flow rate</td>
</tr>
<tr>
<td>Sample 4 Tensile strength</td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§9.2 Tensile strength</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§9.5 Leaktightness after tensile and bending strength tests</td>
</tr>
<tr>
<td>Sample 5 Bending</td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§9.3 Bending strength</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§9.5 Leaktightness after tensile and bending strength tests</td>
</tr>
<tr>
<td>Sample 6 Durability</td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§9.4 Durability test</td>
</tr>
<tr>
<td>Sample 7 Resistance to pressure</td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§9.4 Resistance to pressure at high temperature</td>
</tr>
<tr>
<td>Sample 8 Thermal shock</td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§9.6 Thermal shock reaction</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>§9 Leaktightness</td>
</tr>
<tr>
<td>Sample 9 Rotating fitting</td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§10 Rotating fittings</td>
</tr>
<tr>
<td>Sample 10-11-12</td>
<td></td>
<td>Sample 10 – U3</td>
</tr>
<tr>
<td></td>
<td>1.</td>
<td>§5 Marking</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>§2.8.1 Endurance of stripwound hoses</td>
</tr>
</tbody>
</table>
2.10 ECAU rating

The essential principle of the ECAU 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.

2.10.1 Hydraulic or flow characteristic

2.10.1.1 Classification

Depending on performance level, shower hoses and extractable handspray hoses for sanitary tapware can be classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Flow rate value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NF EN 1113</td>
</tr>
<tr>
<td>E0</td>
<td>9 L/min ≤ q &lt; 15 L/min</td>
</tr>
<tr>
<td>E1</td>
<td>15 L/min ≤ q &lt; 25.2 L/min</td>
</tr>
<tr>
<td>E2</td>
<td>25.2 L/min ≤ q</td>
</tr>
</tbody>
</table>

2.10.1.2 Selection criteria

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

2.10.2 Comfort characteristics

2.10.2.1 Classification

Depending on their performance level, shower hoses for sanitary tapware and extractable handspray hoses for sanitary tapware can be classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Shower hoses for sanitary tapware and extractable handspray hoses for sanitary tapware must comply with the requirements of the following articles:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NF EN 1113</td>
</tr>
<tr>
<td>C1</td>
<td>2.6.2 Materials</td>
</tr>
<tr>
<td>C2</td>
<td>Must be C1</td>
</tr>
<tr>
<td></td>
<td>Must be E1</td>
</tr>
</tbody>
</table>

2.10.2.2 Selection criteria

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

2.10.3 Acoustic characteristic

No acoustic characteristics for this type of product. In this case, class "A₀" is used.
2.10.4 Mechanical endurance or wear resistance characteristic

Classification
Depending on the actual level of wear resistance of its various components, tapware can be classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>U3</td>
<td>Metal hoses</td>
</tr>
<tr>
<td></td>
<td>Strip winding endurance</td>
</tr>
<tr>
<td></td>
<td>Tensile shock resistance</td>
</tr>
<tr>
<td></td>
<td>Rotational resistance of strip winding</td>
</tr>
<tr>
<td></td>
<td>Plastic hoses</td>
</tr>
<tr>
<td></td>
<td>Pipe rigidity</td>
</tr>
</tbody>
</table>

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

2.11 Example of ECAU rating
A metal shower hose for sanitary tapware with a flow rate during use of 27 L/min that passes comfort level 1 tests and passes the mechanical endurance test shall be classified as:

\[ E_2 \, C_1 \, A_0 \, U_3 \]

An extractable handspray hose for sink and washbasin mixers with a flow rate during use of 10 L/min that passes comfort level 2 tests and that passes the mechanical endurance tests shall be classified as:

\[ E_0 \, C_2 \, A_0 \, U_3 \]
2.12 Rating presentation

2.12.1 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 shower and extractable handspray hoses for sanitary tapware are as follows:

<table>
<thead>
<tr>
<th>Flow</th>
<th>E</th>
<th>‘q’ L/min measured under 3 bar</th>
<th>E0</th>
<th>E1</th>
<th>E2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 L/min ≤ q &lt; 15 L/min</td>
<td>15 L/min ≤ q &lt; 25.2 L/min</td>
<td>25.2 L/min ≤ q</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comfort</th>
<th>C</th>
<th>Type</th>
<th>C1</th>
<th>Materials (Non-plastic nut for hoses)</th>
<th>C2</th>
<th>Water saving system (must be E0 (NF EN 16146+A1) or E1 (NF EN 1113))</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Acoustics</th>
<th>A</th>
<th>Lap dB (A)</th>
<th>A0</th>
<th>No acoustic requirement</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Wear</th>
<th>U</th>
<th>Number of cycles</th>
<th>U3</th>
<th>Metal hoses</th>
<th>Strip winding endurance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tensile shock resistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rotational resistance of strip winding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plastic hoses</td>
<td>Pipe rigidity</td>
</tr>
</tbody>
</table>

2.12.2 Product information

See Chapter 6.2 of the regulations for use of DT077-00.
3 ECAU 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>Elements</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 1A;
- if a representative, application and commitment letter as per standard letter 1B;

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 2A;
- if a representative, application and commitment letter as per standard letter 2B;

3.3 For a new rating application following a penalty of withdrawal of the ECAU 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 ECAU rating

The holder shall prepare a file containing the following:

- a suspension letter as per standard letter 5A;
- if a representative, a suspension letter as per standard letter 5B.
3.5 For an application for renunciation of the ECAU 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.
STANDARD LETTER 1A
ECAU AND/OR EChAU RATINGS

ECAU OR EChAU RATING APPLICATION FORM
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
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
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”.

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: …………

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

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: ..............

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”

Date, signature and name in full of the representative in the European Economic Area

preceded by the handwritten wording “Accepting representation”.

(1) Delete as appropriate.
STANDARD LETTER 4A
ECAU AND/OR EChAU RATINGS

APPLICATION FORM FOR RENUNCIATION 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 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 ratings

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
Subject: Application for suspension of the ECAU and/or EChAU ratings (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&lt;br&gt;☐ List not sent&lt;br&gt;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&lt;br&gt;☐ List not sent&lt;br&gt;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.&lt;br&gt;☐ Letter of information duly implemented, corroborated by those affected&lt;br&gt;☐ Letter of information not implemented or partially implemented&lt;br&gt;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&lt;br&gt;☐ Letter of information duly implemented, corroborated by those affected&lt;br&gt;☐ Letter of information not implemented or partially implemented&lt;br&gt;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&lt;br&gt;☐ Action is not relevant&lt;br&gt;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>Management:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development and</td>
<td>Participation in the implementation of the ratings, including preparation of the</td>
<td>➢ Initial/complementary application: See § 4.2.1</td>
</tr>
<tr>
<td>implementation of</td>
<td>associated technical document.</td>
<td></td>
</tr>
<tr>
<td>ratings, examination</td>
<td>Services including examination of application files, relations with applicants,</td>
<td></td>
</tr>
<tr>
<td>of the rating</td>
<td>laboratories and assessment of inspection results.</td>
<td></td>
</tr>
<tr>
<td>application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management: Rating</td>
<td>Services including management of rating files, relations with holders, laboratories,</td>
<td>➢ Monitoring: See § 4.2.2</td>
</tr>
<tr>
<td>operation</td>
<td>publication of ratings data on certificates, assessment of inspection results.</td>
<td></td>
</tr>
<tr>
<td>Tests</td>
<td>Laboratories’ testing services</td>
<td></td>
</tr>
</tbody>
</table>

The laboratories’ price lists are provided upon request.
The applicant/holder supplies samples free of charge and makes them available at the laboratory’s address.
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.

➢ Initial/complementary application: See § 4.2.1
➢ Monitoring: See § 4.2.2
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.