

**ÉMI ÉPÍTÉSÜGYI MINŐSÉGELLENŐRZŐ INNOVÁCIÓS
NONPROFIT KORLÁTOLT FELELŐSÉGŰ TÁRSASÁG**

ÉMI ÉPÍTŐIPARI VIZSGÁLÓ LABORATÓRIUM

**Decision rule applied by ÉMILAB according to MSZ EN ISO / IEC 17025: 2018 and
ILAC-G8: 09/2019**

FOREWORD

This document provides an overview for customers concerning decision rules and conformity with requirements. It is intended to provide customer with the basic information they need to decide what should form the basis of their laboratory / test evaluation.

The operation of the laboratory of ÉMI Nonprofit Kft. Accredited by the National Accreditation Authority (hereinafter: NAH) complies with MSZ EN ISO/IEC 17025:2018 standard, which clause 7.8.6 of the standard provides for the communication of declarations of conformity.

- the customer must indicate in written his / her need for certification (conformity assessment).
- the customer must select the decision rule to be applied during the conformity assessment. (Decision rules BASIC RULE, or A, or B)

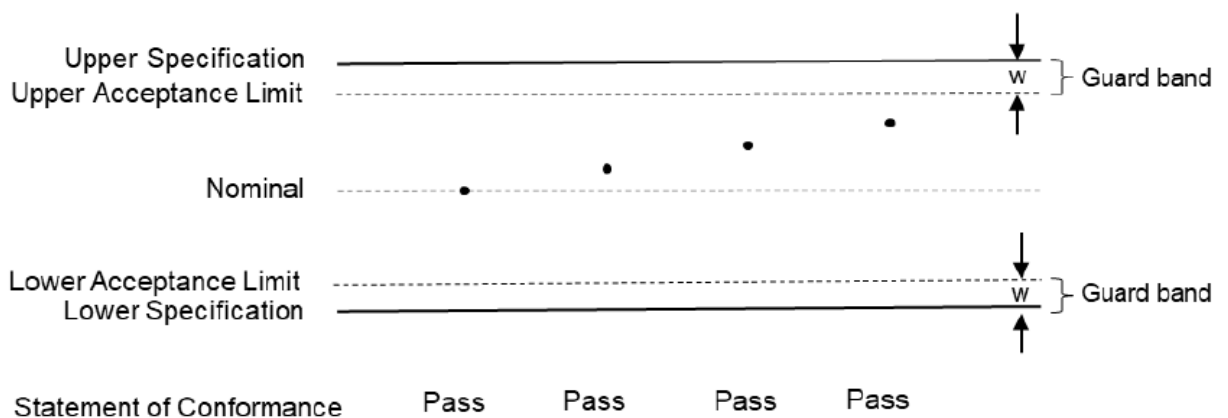
It must also be noted that there is a difference between overall “Laboratory Risk” and the “Risk” which is associated with a decision rule (Measurement Decision Risk in this case). The latter is directly in the control of recipients of statements of conformity as it is they who specify the decision rules to apply by laboratories. Accordingly, it is the recipient who takes the risk associated with statements, that is, false acceptance or rejection of results.

DEFINITIONS

The decision rules described in ILAC-G8: 2019 are described below. In the written qualification request, our Clients must choose from these options. The basic purpose of decision rules is to determine how measurement uncertainty is taken into account in rating.

To understand, you need to know some basic concepts:

1. Tolerance Limit (TL)
 specified upper or lower bound of permissible values of a property
2. Acceptance Limit (AL)
 specified upper or lower bound of permissible measured quantity values
3. Guard band (w)
 interval between a tolerance limit and a corresponding acceptance limit where length $w = |TL - AL|$



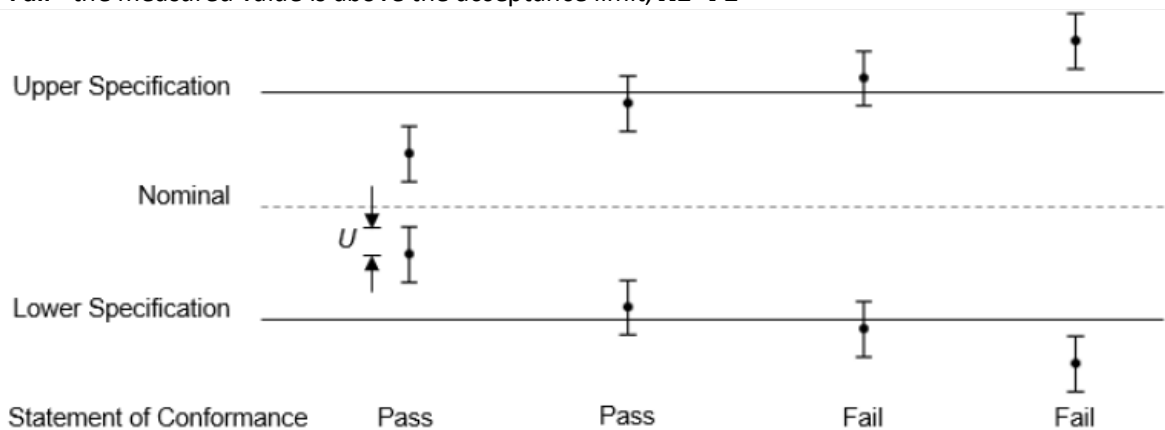
4. Measurement Uncertainty (U)

DECISION RULES

BASIC RULE: Binary Statement for Simple Acceptance Rule ($w=0$)

In this case, the measurement uncertainty is not taken into account. Statements of conformity are reported as:

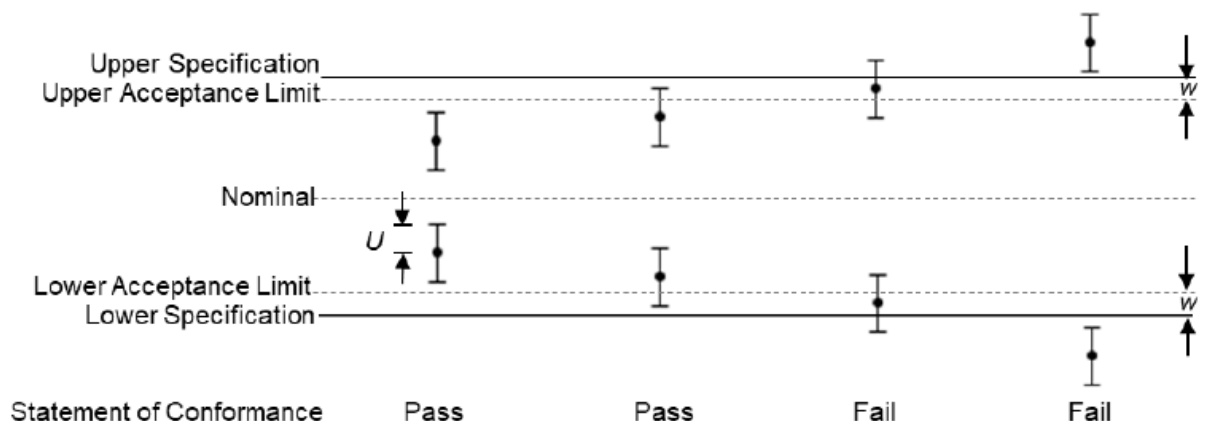
- **Pass** - the measured value is below the acceptance limit, $AL = TL$
- **Fail** - the measured value is above the acceptance limit, $AL=TL$



A. Binary Statement with Guard Band ($w \neq 0$)

In this case, the measurement uncertainty is taken into account. The value of the guard band (w) is equal to the measurement uncertainty (U). Statements of conformity are reported as:

- **Pass** - acceptance based on guard band; the measurement result being below the acceptance limit, $AL = TL - w$
- **Fail** - rejection based on guard band; if the measurement result is above the acceptance limit, $AL = TL + w$

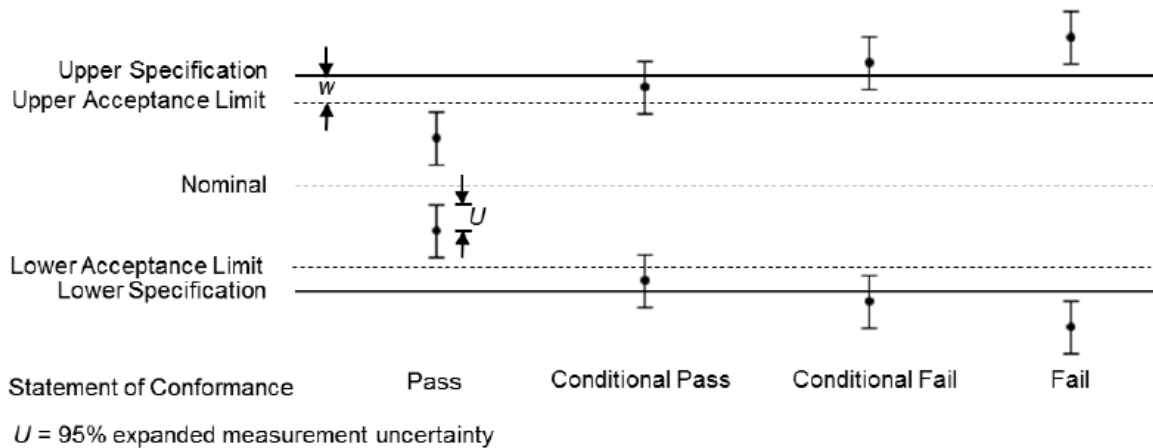


B. Non-binary Statement with Guard Band ($w \neq 0$)

In this case, the measurement uncertainty is taken into account. The value of the guard band (w) is equal to the measurement uncertainty (U). Statements of conformity are reported as:

- **Pass** - the measured result is below the acceptance limit, $AL = TL - w$.
- **Conditional Pass** - the measured result is inside the guard band and below the tolerance limit, in the interval $[TL - w, TL]$.
- **Conditional Fail** - the measured result is above the tolerance limit but below the tolerance limit added to the guard band, in the interval $[TL, TL + w]$.
- **Fail** - the measured result is above the tolerance limit added to the guard band, $TL + w$.

The probability of a wrong decision is maximum 2,5%.



In basic case ÉMILAB apply the BASIC RULE (Binary Statement for Simple Acceptance Rule ($w=0$)). In this case, the measurement uncertainty is not taken into account

If you need any further information about the qualification or the decision rules, feel free to contact your contact person.