

L'aria che respiriamo... gli ambienti che viviamo, attuali normative



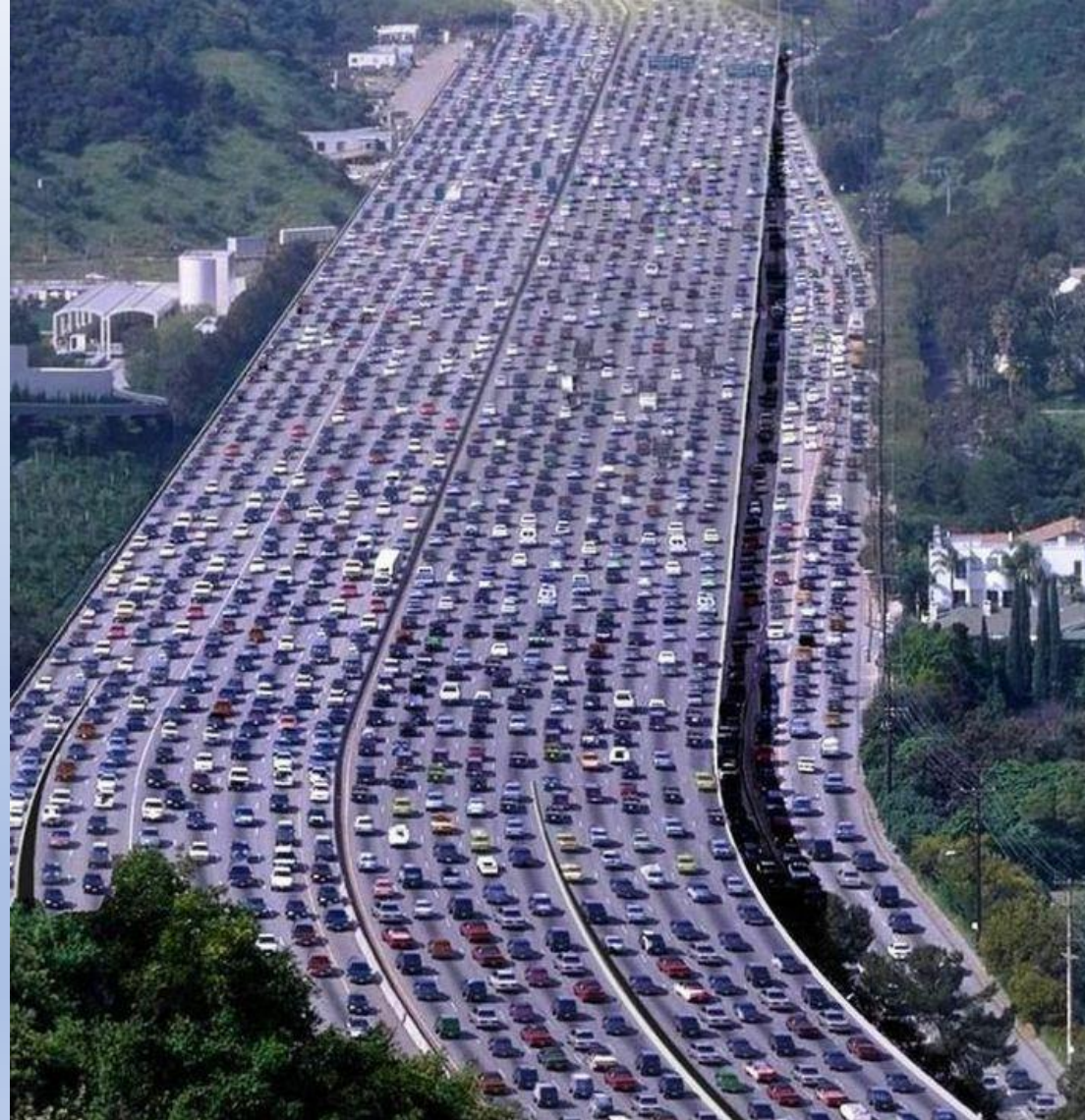
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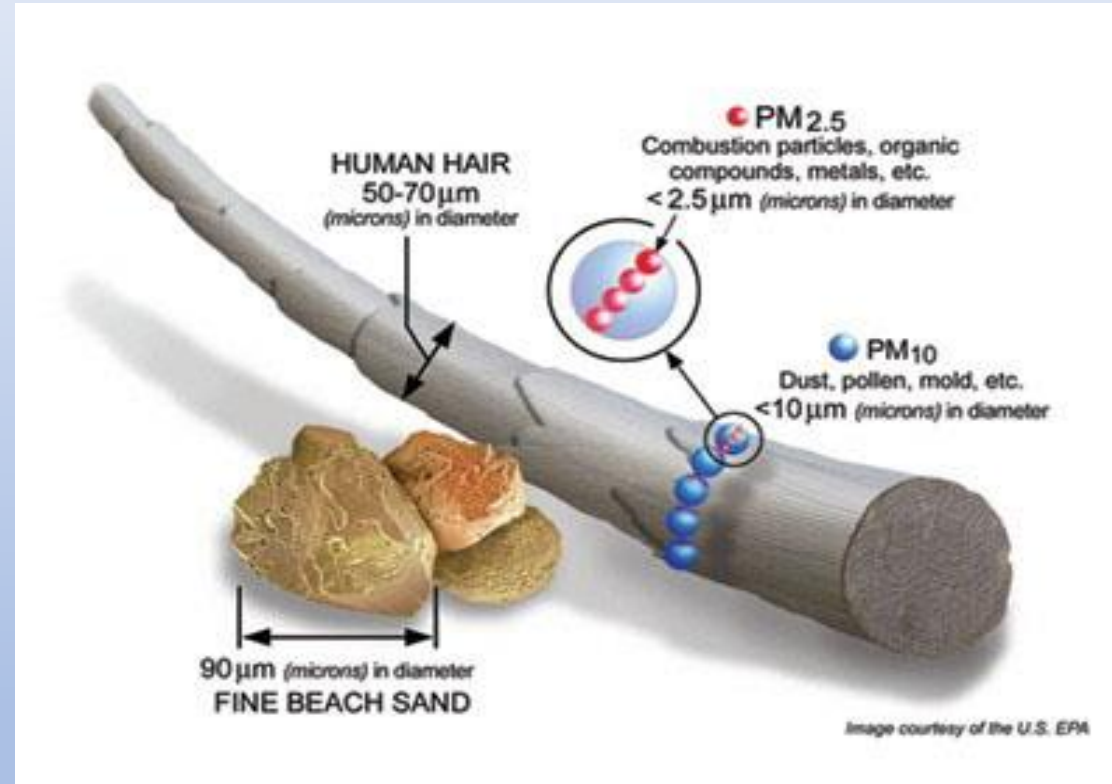
Qualità dell'Aria

- PM 10
- PM 2.5
- VOC
- CO₂
- HCHO

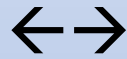


Ivano Battaglia

Un Capello, la Sabbia e ... le microParticelle PM 10-2.5



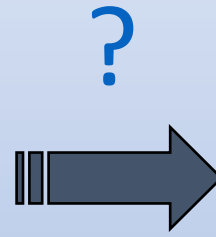
Misurare...

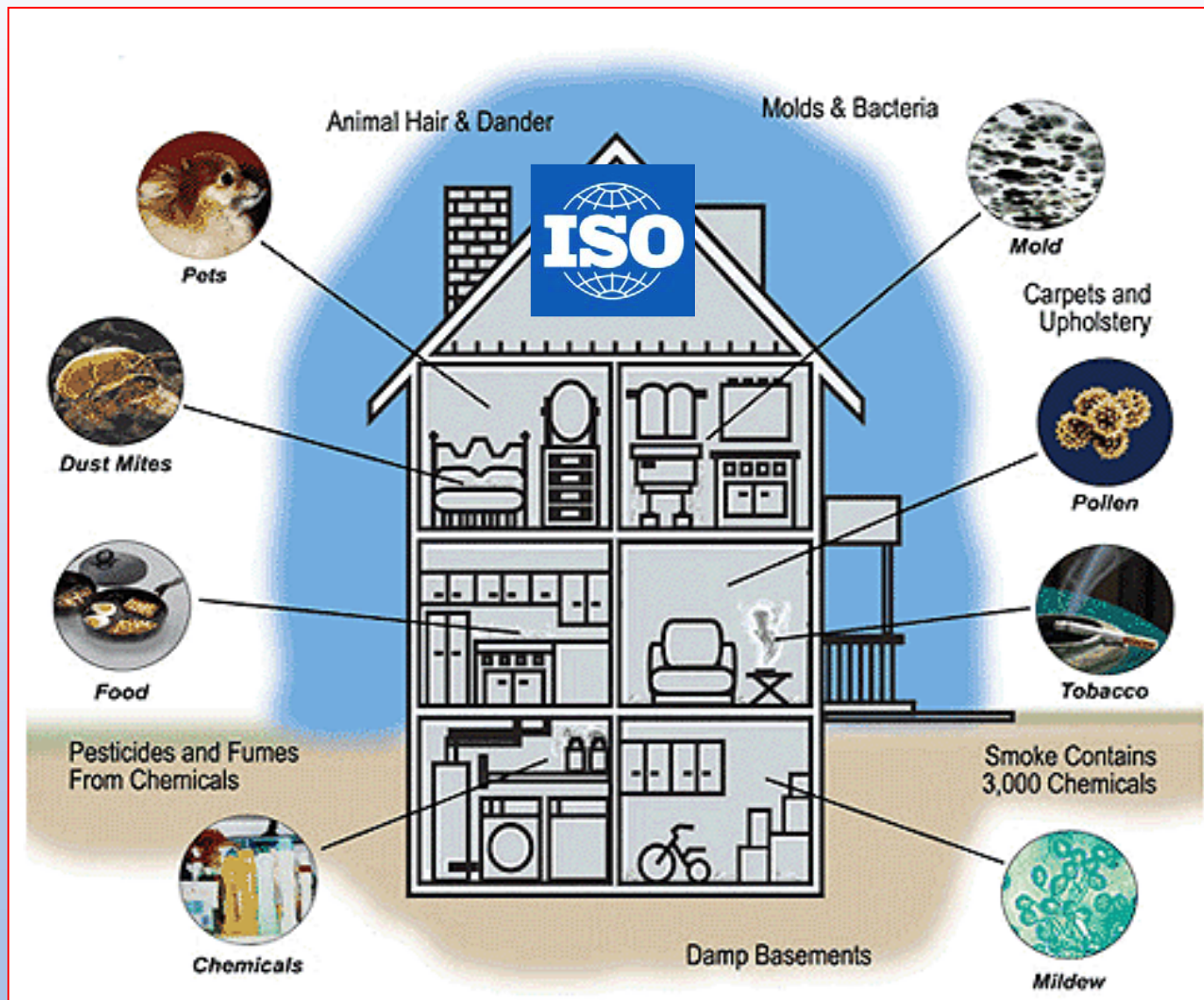


1 nanometro (10⁻⁹ mt)

1 mt







BUILDING <> CHEMICAL REACTOR

*' ..IT IS NOT A MATTER OF OVERREACTION
IT IS ABOUT QUALITY OF LIFE'*









EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG



- **UNI** - Ente Nazionale Italiano di Unificazione –
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Le principali tipologie di soci UNI sono Imprese, Professionisti, Associazioni, Enti pubblici, Centri di ricerca e Istituti .
- **UNI** rappresenta l’Italia presso le **Organizzazioni di Normazione**
 - **CEN** (Comunità Europea) e
 - **ISO** (Int.Stand.Organ.,Mondiale).

Indoor air —Part 41: Assessment and classification

*Air intérieur —Partie 41:
Évaluation et classification*

ISO/TC 146/SC 6
Secretariat: DIN
Voting terminates on:2023-06-02

Classification in quality classes

- [Table 1](#) provides an overview of the **quality classes** and describes the requirements on the room air quality on which these classes are based. The designations and descriptions of the requirements according to [Table 1](#) are only partly applicable for the parameter “Mould – microbial infestation”.

Quality class	Designation	Description
A	High room air quality	Room air with low substance concentrations
B	Medium room air quality	Room air with average substance concentrations
C	Low room air quality	Room air with above-average substance concentrations
Exceedance of quality classes		Substance concentrations above the class limits of quality class C



Table 1 — Indoor air — Quality classes

If any main criteria permanently exceed quality class C, the indoor air shall not be classified, but is considered to be “outside quality class”.

Classification in quality classes

1. Classification in quality classes

Example of quality classes for CO₂



Quality class	Arithmetic mean for class limits for CO ₂ ppm absolute	Description of the quality classes
A	≤1 000	Requirements for indoor rooms for the continuous stay of persons in which intellectual activities are carried out or which are used for regeneration
B	1 001 to 1 400	General requirements for indoor rooms for the continuous stay of persons
C	1 401 to 5 000	Requirements for indoor rooms with brief use by persons
Outside the quality classes c	>5 000	Not acceptable for use by persons

[Table A.2](#) shows an example of quality classes for the assessment value for the main parameter CO₂ during the assessment period.

Main parameters

- Parameters most frequently giving rise for complaints due to the quality of indoor air are defined as **main parameters** in this document.
- In the framework of the overall assessment, the expert shall assess all these main parameters, however a measurement of every parameter is not always necessary

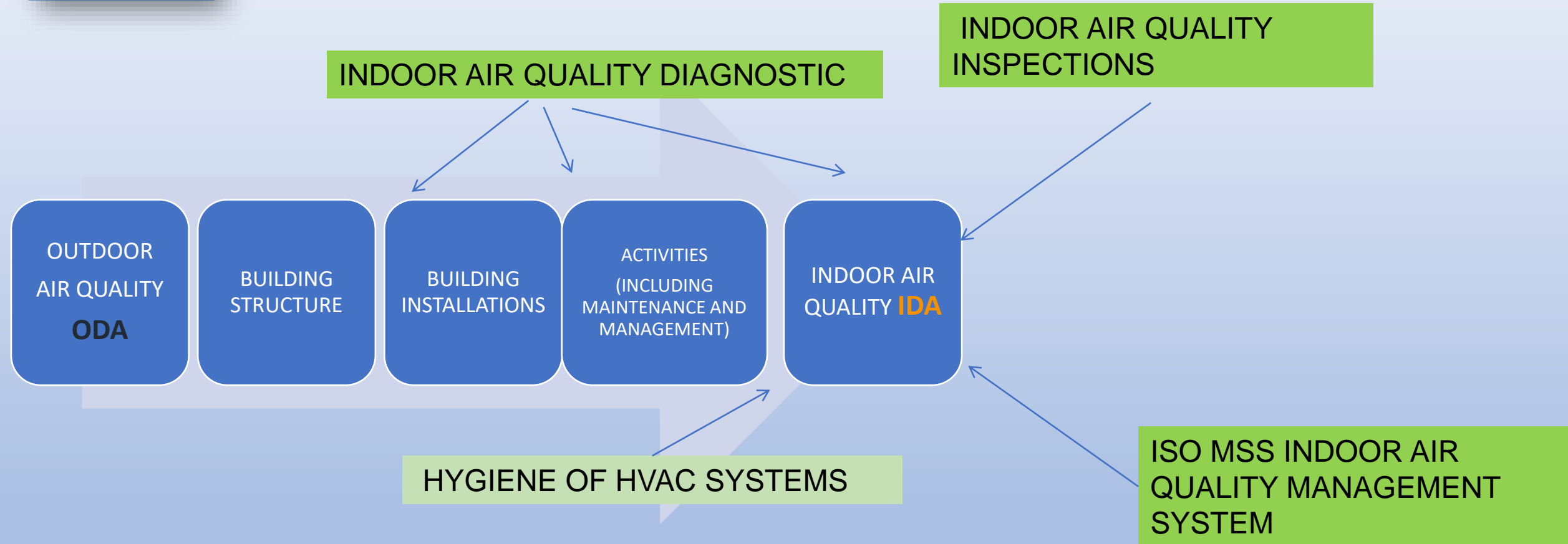
Table 2 — Main parameters

Parameter	Clause
Formaldehyde	A.2
Volatile organic compounds (VOC)	A.3
Radon	A.4
Carbon dioxide	A.5
Mould - microbial infestation	A.6
Odour	A.7
Fine dust (PM1, PM2.5, PM10), ultrafine particles (UFP)	—

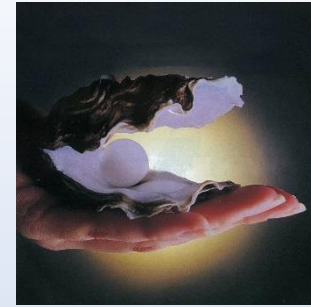




THE ISO APPROACH

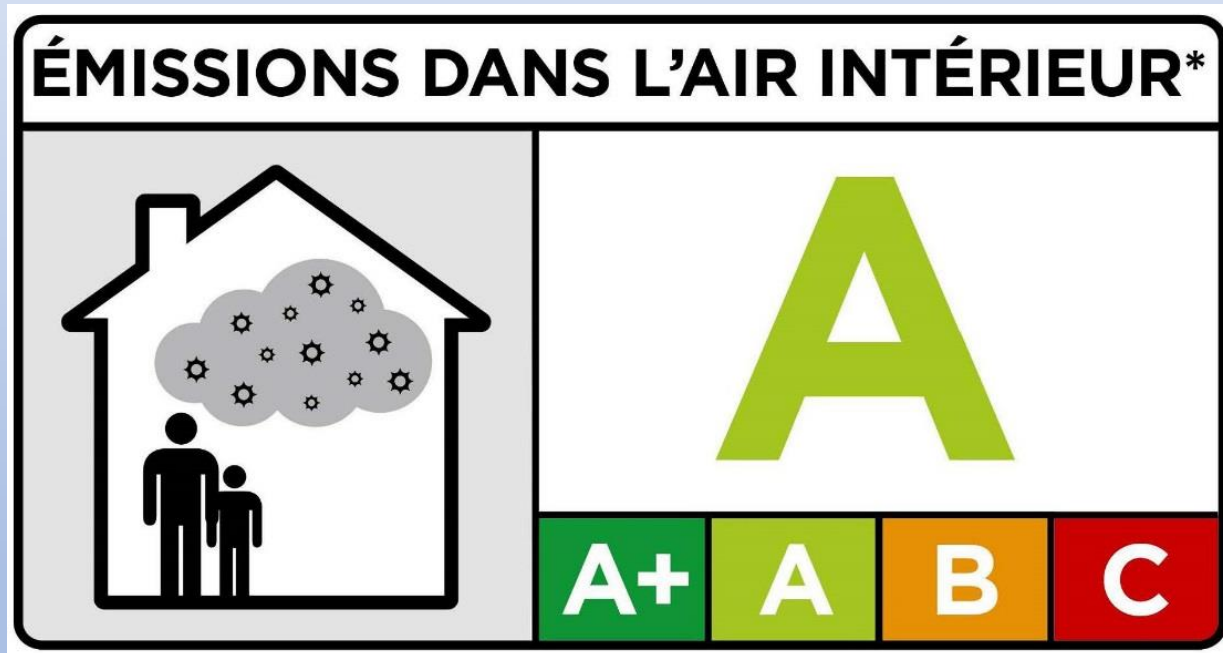


“ Indoor Air Quality ” ... →



- Migliorare le condizioni abitative,
- Migliorare la qualità della vita
- Diminuire le patologie
- e
- **PRODURRE SALUTE.**

SCOPE → DIMINISH THE EMISSIONS
OF THE MATERIALS,
INSTALLATIONS, ACTIVITIES, ...

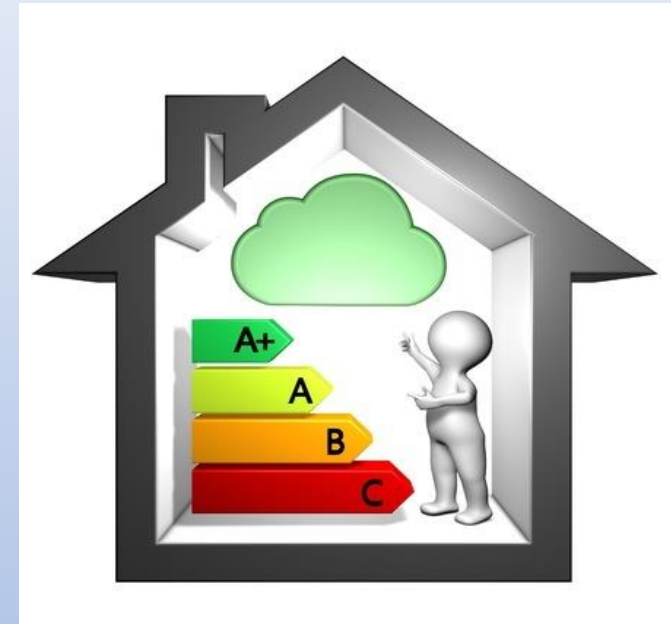


News

IAQ MONITOR

Qualità dell'aria negli ambienti di vita





Temperatura



Umidità



Pressione

Qualità dell'aria [VOC, CO2, ...]



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