



## Material Selection & Suitability

### Using natural stone correctly - indoors, outdoors, wet areas and in operation

Most wrong decisions in natural stone are not caused by lack of knowledge,  
but by false assumptions:

*"It will be fine."*

*"We've always done it this way."*

*"It looks perfect."*

#### **Natural stone is honest.**

It does not respond to trends –  
it responds to use.

Not to intention, but to exposure.

Not to design wishes, but to daily reality.

This guide helps to approach material selection **realistically**.

Not emotionally. Not dogmatically.

But in the context of **location, use and operation**.



# Purpose & Scope

## Purpose of this guide

This PDF supports you in:

- selecting natural stone based on **suitability**, not appearance
- identifying risks **early**
- avoiding wrong decisions **before ordering or installation**

## What this guide deliberately is not

- a complete material science handbook
- a substitute for professional planning or expert reports
- a recommendation of specific stone types

Good decisions are not made by more information, but by asking the **right questions at the right time**.

# Step 1: Clearly define the area of use

Before discussing material, the **area of use must be clear**.

- Interior – private / office
- Interior – public / high traffic
- Exterior – covered
- Exterior – fully exposed
- Wet areas (bathrooms, spa, pool surroundings)
- Special use (hotel, gastronomy, retail, office)

### Note:

A natural stone may perform perfectly in one area and cause long-term issues in another.



## Step 2: The five decisive influencing factors

Assess each point realistically – not optimistically.

### 1. Moisture & water

- permanent
- regular
- occasional
- negligible

### 2. Mechanical load

- point loads (furniture, edges, heels)
- surface load (foot traffic, trolleys, cleaning machines)

### 3. Chemical exposure

- cleaning agents
- food, acids, fats
- de-icing salts / environmental exposure

### 4. Visual expectation

- as uniform as possible
- naturally varied
- patina explicitly desired

### 5. Operation & maintenance

- professional facility management
- limited maintenance
- private use without training

### Key insight:

The higher the use intensity, the more honest the material choice must be.

## Typical misconceptions

⚠️ **“The stone is hard – it can handle it.”**

→ Hardness alone does not define operational suitability.

⚠️ **“It’s a natural product – that’s normal.”**

→ Yes. But only if this was consciously accepted in advance.

⚠️ **“With the right maintenance, everything works.”**

→ Maintenance can support – it cannot fix a wrong material choice.

⚠️ **“We used this stone elsewhere as well.”**

→ Same stone ≠ same use ≠ same conditions.

## Decision support: the traffic-light logic

Evaluate the planned material objectively:

### ● Suitable

- use, load and operation are aligned

### ● Conditionally suitable

- only with defined measures & expectation management

### ● Critical

- high risk of damage, complaints or additional costs

- Use clearly defined
- Operation realistically assessed
- Maintenance effort accepted
- Decision documented

# Closing

## **Good material selection is invisible.**

It simply works – quietly and reliably, for years.

This guide does not replace professional planning.  
But it protects against decisions that become expensive later.

Further insights, case examples and in-depth knowledge  
can be found in our additional guides and expert formats.



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