

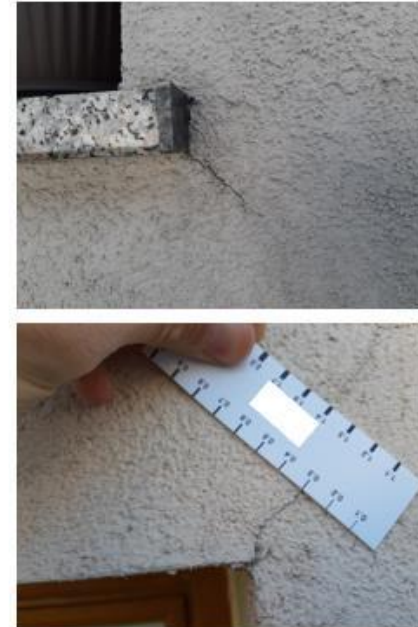
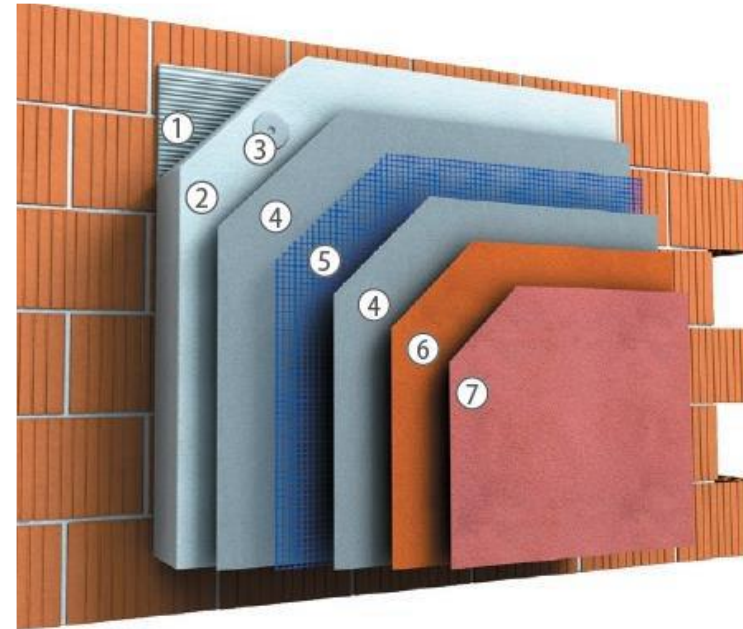
THE CHALLENGE: 25_BUILD_CMC_HEALmortar

SCOPE

- Develop **self-healing mortar for the base coat**.
- It needs to **prevent water to penetrate** deeper into the facade system when cracking occurs by auto healing mechanism.
- Needs to **use waste material from local productions**, to contribute to reducing pollution.

OBJECTIVES

- Develop formulation of **mortar with self-healing properties**.
- **Quantify properties** of developed mortar (chemical, mechanical, applicable, healing).



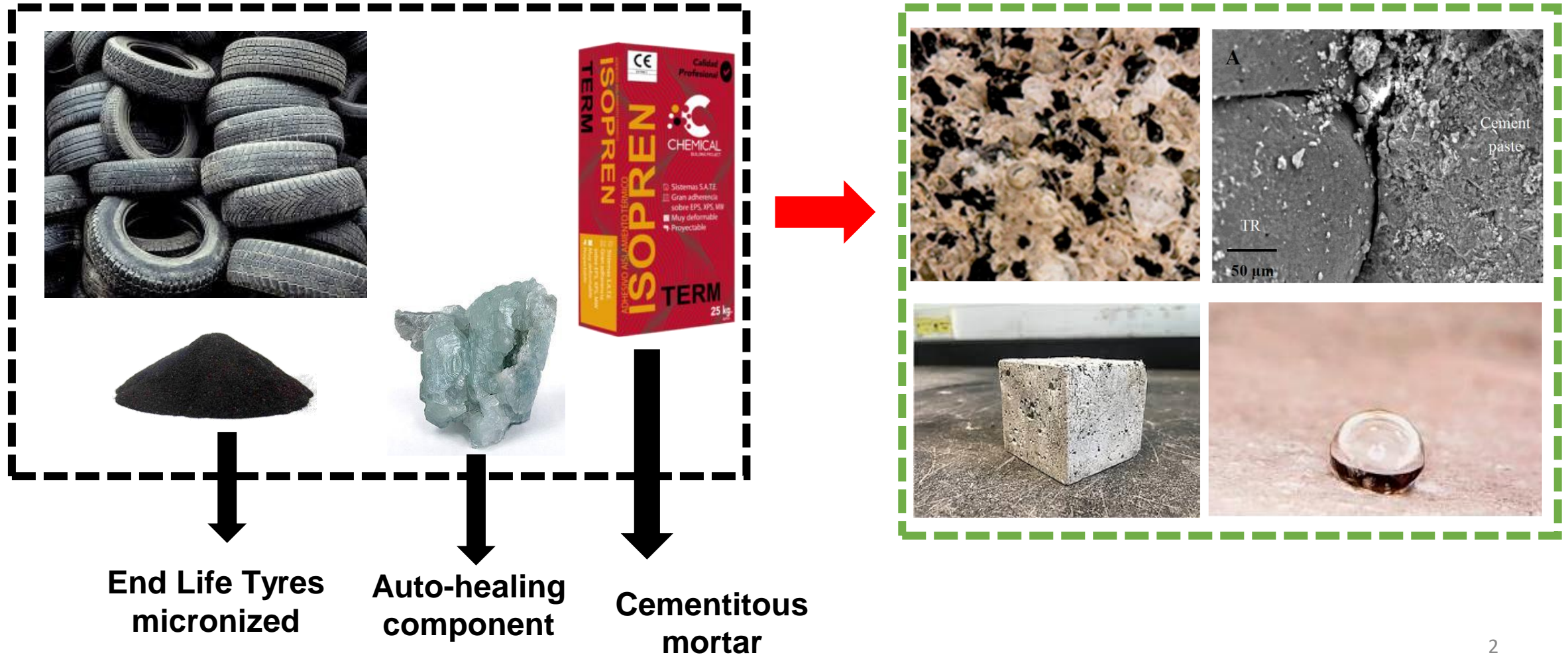
Figures:

Left - 1-Primer, 2-Thermal insulation, 3-Anchor, 4-Base coat, 5-Reinforcement mesh, 6-Primer, 7-Top coat.

Right - crack examples

THE SOLUTION:

Development formulation of **lightweight mortar** with **self-healing properties** using **End Life Tyres residues** for **ETICS** application



- 2 PARTICIPATING COUNTRIES
- 2 EUROPEAN REGIONS INVOLVED
- 3 Partners of different nature



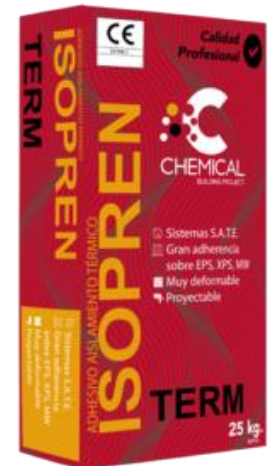
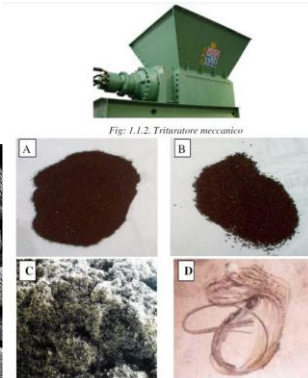
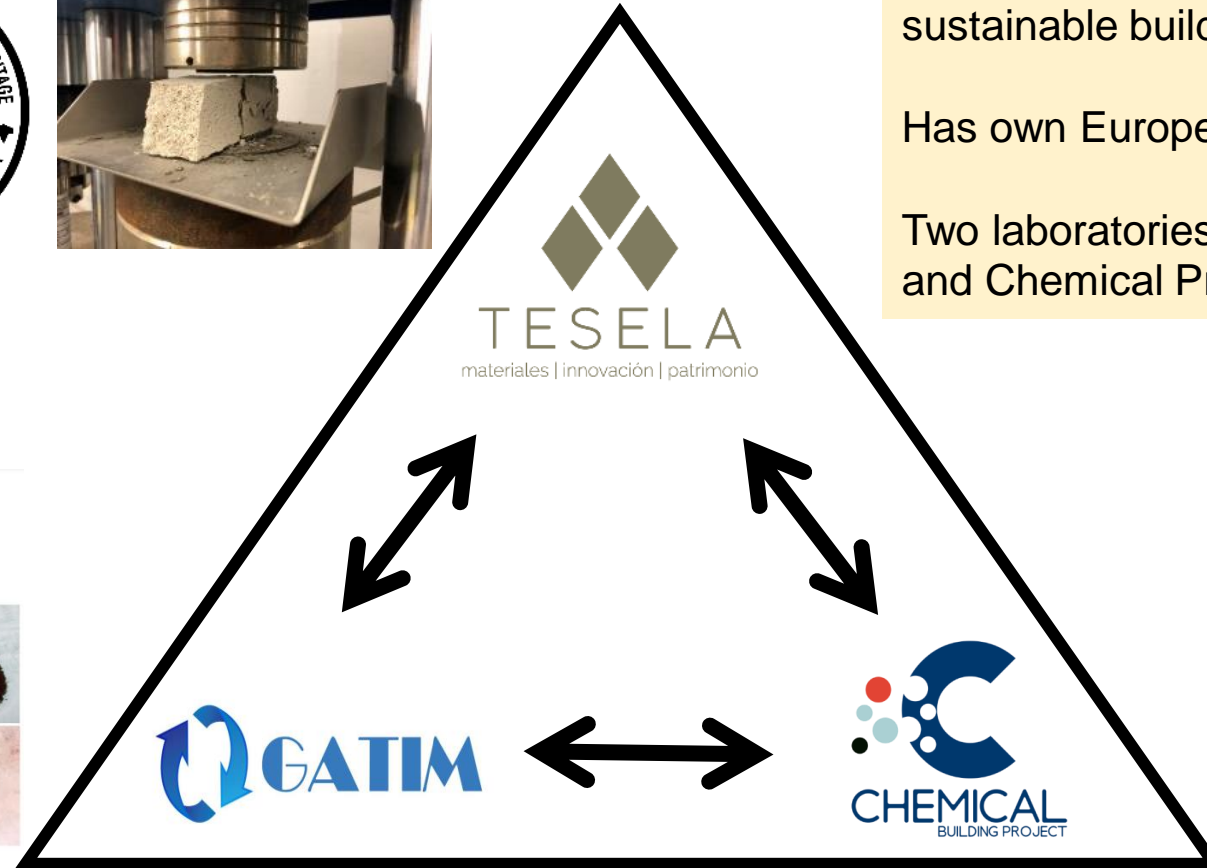
Advanced Materials and Manufacturing
Technologies **United for LightwEighT**



Expert partner in developing advanced and sustainable building materials in special mortars

Has own European seal for heritage mortars

Two laboratories full equipped for testing the Physical and Chemical Properties of building materials



Expert partner in the formulation and creation of new cementitious building materials dopped with ELT for building materials

Recycling of used tyres (PFU) generation mixed rubber-based products for building materials.

Pre-mixing technology unique

Manufacturer partner of chemical products for construction.

Two production centres fully automated production lines composed of different equipment and machinery.