Case 01 Structural cracks

AREA OF APPLICATION

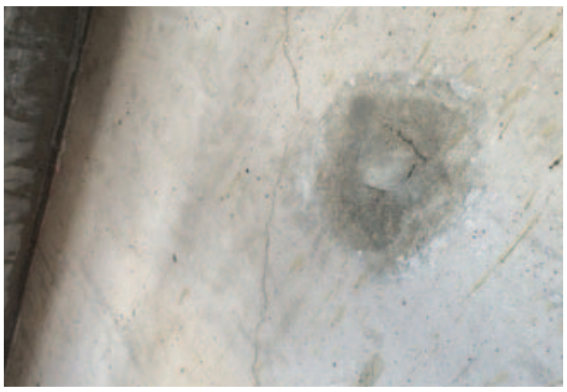
Cementitious plasters are applied internally such as living rooms, bathrooms, kitchens, etc... And externally where they might be exposed to different environment conditions: sun light, wind…

REASONS OF PLASTER CRACKING OR DE-BONDING

Many factors might affect the performance of an applied plaster.

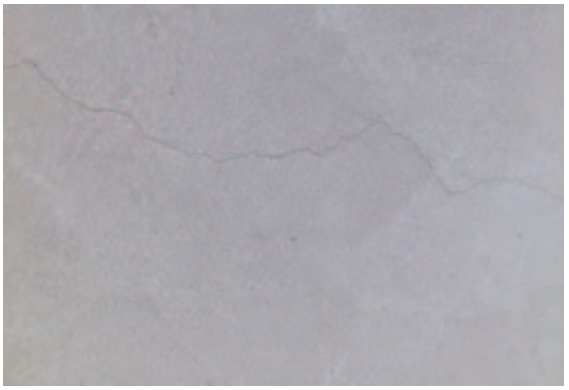
Cracks in the plaster may result from cracks in the substrate
Causes of Substrate failures:

- Thermal movement in the structure
- Differential foundation movement. As per the standard BS EN 13914 "render applied to backgrounds which may move are likely to crack, e.g. with movement of the structure, deflection of floor slab, high moisture of masonry"
- Settlement, moisture expansion and drying shrinkage of masonry units.



Structural cracks occur in the following directions:

- Horizontal cracks: expansion of wall ties, horizontal pressure.
- Vertical cracks: Pressure in the building structure, pressure around pipes.
- Racking cracks: Soil or Foundation settlement, shear pressure.



Solution 01 Structural cracks

weber.premix SRC-2 | weber.premix SRC-S | weber.premix SP-11 | weber.premix SP-33 | weber.premix fiber | weber.premix hand | weber.premix key coat

In case of structural cracks, the substrate is the element to be repaired.

- It is necessary according to EN 13914 the "Allowance of sufficient time between the construction background and the application of the rendering" in order to prevent any cracks due to drying shrinkage of masonry units or moisture expansion.
- Construction Engineers shall inspect the substrate for any damage or defect in order to take the necessary action for repairing before starting the plastering job. And to consider the load of the structure and the pressure around the openings before plastering.