



Petrographic evaluation

THE MOST FREQUENTLY USED AND EFFECTIVE FORENSIC ANALYSIS TECHNIQUE FOR BUILDING MATERIALS



Petrography is used for evaluating building material quality, deterioration causes, current condition, and material properties. It's most commonly applied to concrete but can also be used to evaluate mortar, grout, plaster, stucco, terrazzo, building stone, and the raw materials such as cement and aggregate.

SGS TEC Services has an experienced team of petrographers, professional engineers and professional geologists, who utilize advanced petrographic and chemical analysis equipment to determine the following material information:

- Water content
- Air content
- Chemical attack
- Alkali Silica Reactions (ASR)
- Freeze thaw damage
- Paste carbonation
- Improper curing
- Corrosion of reinforcing steel
- Fire damage
- Cause of cracking
- Sulfate attack
- Improper finishing
- Fly ash, slag, silica fume
- Aggregate lithology
- Aggregate segregation
- Specification compliance
- Service life

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INSPECTION, VERIFICATION,
TESTING AND CERTIFICATION
COMPANY**



PETROGRAPHIC EVALUATION CAN OFTEN ANSWER QUESTIONS LIKE:

- Why are compressive strength values less than the design?
- How do I know the provided concrete matches the mix design?
- Was too much air entrainment added?
- Why the surface of concrete flakes off?
- What is the condition of the concrete in the old building?
- Why is my slab surface color blotchy?
- How much surface prep is required?
- Why are there cracks in my slab?
- Is it time to remove and replace the existing concrete slab?
- Materials used in the historic mortar?
- Did material quality contribute to the building collapse?
- Why is there so much efflorescence?
- The probable future performance of my concrete?

CONTACT

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WHEN YOU NEED TO BE SURE

SGS