

Applications for Construction Materials Testing

M+P Labs specializes in evaluating the properties and composition of construction materials, and performing failure analysis. We can help you evaluate the quality of workmanship, assess damage, identify appropriate repair materials and procedures, and determine the root causes for premature failure.



We can provide answers to questions such as:

CONCRETE/ASPHALT

- Did the concrete placed match the mix design?
- Why is the concrete cracking, dusting, scaling or spalling?
- Was it placed and finished properly?
- Did it cure properly?
- What is the water to cement ratio?
- What is the concrete density (ASTM C642)?
- What is the entrapped and entrained air content (ASTM C457)?
- Was the proper aggregate used?
- Are these repair materials compatible?

REINFORCED CONCRETE STRUCTURES

- Did chloride penetration increase corrosion (ASTM C1218)?
- What is the extent of corrosion?
- Where are the corroded areas located?
- Is the damage cosmetic or structural?
- What repair materials should be used?

MORTAR/STUCCO

- Why did it crack?
- What repair materials should be used?
- Can new mortar be matched to existing?

METALS

- Was the proper metal/alloy used?
- Is it steel or cast iron?
- Was it coated properly?
- What is the tensile strength (ASTM E8)?
- Is the weld quality acceptable?
- What is the composition of the weld material?
- Can new steel be welded to the existing structure?
- What is the extent of corrosion?



All testing is performed in compliance with the quality requirements mandated by:

