



BUILDING ENVELOPE REPAIR & MAINTENANCE MANAGEMENT

5-Day Training Program

INTRODUCTION

Buildings and structures may appear to be static, inert objects. However, in reality they are dynamic – they “move”, “breathe”, age and deteriorate with the passage of time. If buildings are designed and built without sufficient provision to “move” and/or “breathe” – significant stresses and cracks will develop that can result in failures, moisture infiltration, energy loss and other problems. Experience has shown that the failure to regularly inspect, maintain and repair the building envelope and structure will inevitably result in inadequate durability and a poor return against the original investment in the property.

Understanding the mechanisms of failure in relation to the building process will enable us to design and construct durable buildings and structures. Increased durability will result in reduced maintenance costs and longer service life of buildings and structures. This program is designed to develop an increased awareness of the proper design and specification of materials and methods of construction to produce durable buildings and structures.

WORKSHOP OBJECTIVES

This program will teach participants current building design trends and durable building construction techniques through intense and interactive case studies and group discussions. Attendees will have the opportunity to learn first-hand proven methods for success in the repair and maintenance of buildings.

WHO SHOULD ATTEND

This program will be of special interest and a major benefit to all those involved in the design, specification, construction and maintenance of buildings, including Building & Facility Owners and Managers, Government Agencies, Architects, Engineers and Contractors, as well as Specification Writers, Designers, Inspectors, Technicians, Technologists and Project Managers. The program will also be of interest to Contractors, Managers, Supervisors and Foremen



PROGRAM

DAY ONE

Defining the Building Envelope

- Air Barriers
- Vapour Barriers
- Thermal Separators
- Roofs
- Walls
- Windows

Mechanisms of Deterioration

- Thermal and Moisture Movement
- Wind Scour and its Effect on Roofing
- Wind Loads
- Solar Degradation
- Corrosion and Oxidation

DAY TWO

Building Envelope Inspection Procedures

- Review of Project Documents
- Determination of Maintenance
- Visual Inspection
- Destructive Testing
- Water Penetration Testing
- Standard Reporting Procedures
- Follow-up Procedures

DAY THREE

Building Investigations (Case Studies)

- Exterior Walls
- Fire & Sound Assemblies
- Windows



- Roofs
- Parking Structures

Building Repair Case Studies

- Foundations
- Exterior Walls
- Cladding
- Windows
- Roofs

DAY FOUR

Repair and Maintenance

- Writing Repair Specifications
- Tendering Projects
- Awarding Contracts
- Field Review
- Contract Administration
- Warranty Claims

Repair Case Studies

- Concrete Repairs
- Coatings
- Waterproofing

DAY FIVE

Preventative Maintenance

- Components of a Preventative Maintenance Program
- Modern Monitoring Methods
- Owner's Responsibilities

Inspection and Testing

- Codes
- Standards
- Quality Control