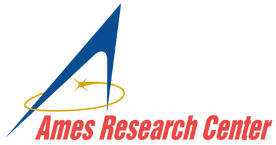


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# **MICROROOFER**

## **FACILITIES MAINTENANCE SERVICES**

**NASA Ames Research Center  
MOFFETT FIELD, CA 94035-1000**



# INTRODUCTION TO MICROROOFER

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- What is the NASA Ames MicroRoofer System
- History of MicroRoofer
- Purpose
- Objectives
- Benefits of MicroRoofer
- Reports
- Examples of Worksheets and ACAD Files

# WHAT IS THE AMES MICROROOFER SYSTEM

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- An Engineering Management System
  - PC based computerized system
  - Database, analysis, and cost estimating features
  - AutoCAD graphics of roofs
- Types of Roofs
  - Bituminous built-up roofs
  - Single ply roofs
  - Shingled roofs

# OBJECTIVES OF MICROROOFER

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- Systematic
  - Inclusive of wide ranging variables and conditions found on typical facilities
- Objective
  - Remove as much individual subjectivity from evaluations as possible
- Repeatable
  - Periodic inspections must be consistent for data input and report output
- Efficient
  - Checklist forms and computer-based data management
  - Training on MicroRoofer Inspection Protocols

## BENEFITS OF MICROROOFER

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- A complete inventory of the roof area, including roof system components, features, and penetrations
- Update of roof area plans on electronic media in AutoCAD
- Detection of defects by:
  - Wet insulation sampling and analysis
  - Visual inspection of membrane and flashings
- Summarizes findings in a ten year maintenance/repair program
- Determination of remaining useful life

# HISTORY OF MICROROOFER

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- Developed by the U.S. Army Construction Engineering Research Laboratory
- Technical Assistance Provided by:
  - U.S. Army Cold Regions Research and Engineering Labs
  - U.S. Army Engineering and Housing Support Center
  - U.S. Navy
  - University of Illinois Technical Assistance Center
  - Civilian Roofing Consultants