



UL Qualified Firestop Contractor Program Management System Elements

March 13, 2013

Benefits to becoming a Qualified Firestop Contractor



Independent, 3rd Party Credential that differentiates contractor firm

It is a credential!

- Allows you to bid projects that specify a UL or ULC Qualified Firestop Contractor.
- Allows you to increase efficiencies in operations
- Increase the confidence for your customers and architects, specifiers, manufacturers and general contractors



Requirements for the Program

1. Firestop Industry Knowledge

- Employ at least one Designated Responsible Individual (DRI)
 - Knowledge is demonstrated & assessed through an Exam
 - Must score 80% or better on the UL Firestop Exam

2. Firestop Contractor Management System

- Establish, effectively implement & maintain a management system that meets UL Qualified Firestop Contractor Program Requirements
- Assessment of the management system is through
 - Initial and Annual Firestop Contractor Office Audit
 - Firestop project site visit audit site



Value of a Management System

Management system principles provide a framework for how companies operate and result in:

- Consistent and effective control of key processes and project management
- Promotion and standardization of good working practices
- Planned training & qualification of employees
- Enhanced communication, leadership, effective remote site management, accountability, contractual control, and control of suppliers



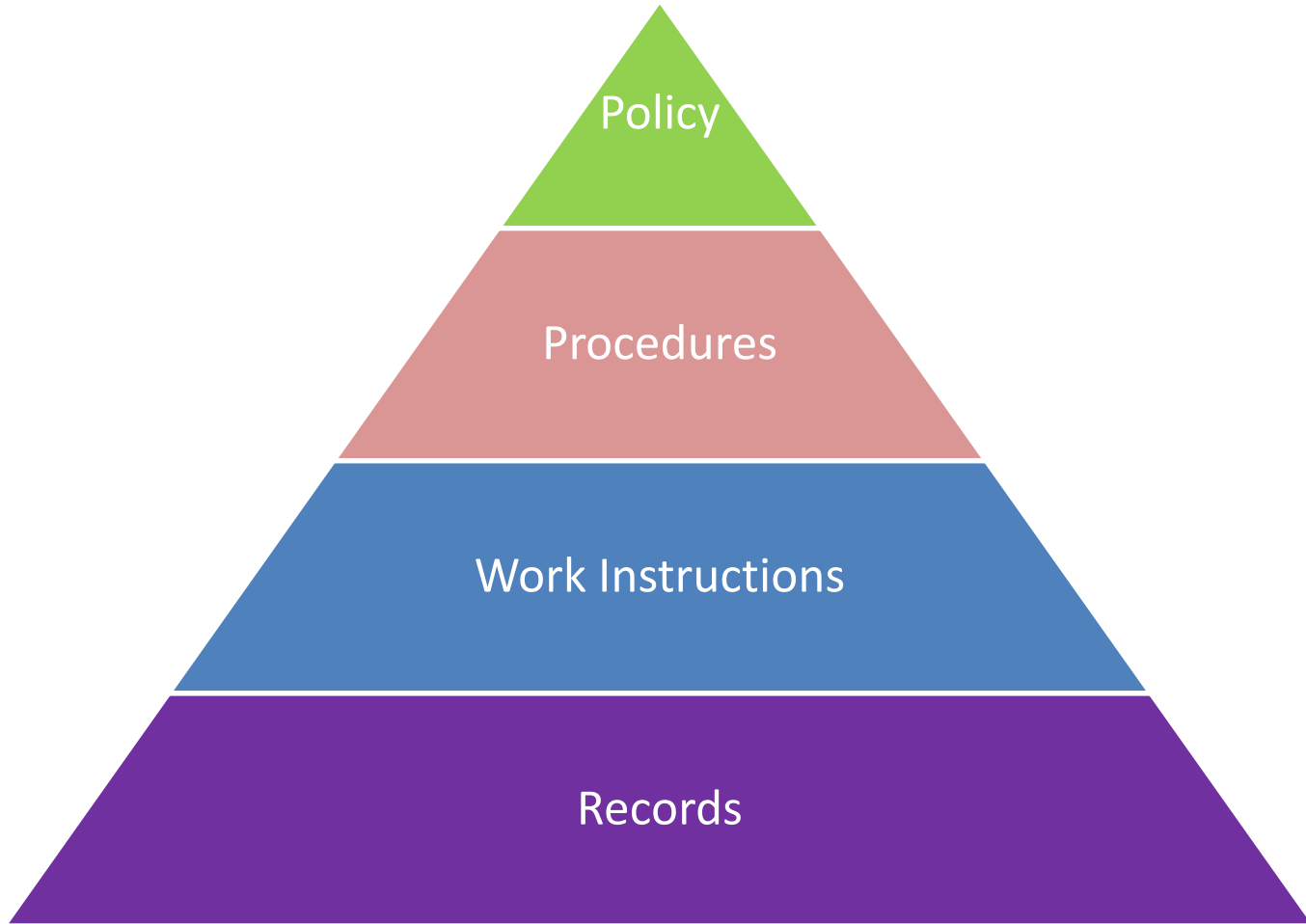
Development of your Management System

Critical key steps

- Identify processes needed
- Determine process sequence and interaction
- Determine effectiveness of processes
- Provide resources to support process operation and monitoring
- Create a Management System Manual to document processes including responsibilities and authorities of key staff
- Maintain control of any outsourced processes that could affect the conformity of selection and installation of firestop systems with requirements.
- Monitor, measure, and analyze to continually improve the processes.



Document Pyramid



Ten Elements of a Management System

1. Construction Document Requirements & Review
2. Procurement of Firestop Materials
3. Storage, Handling, Preservation & Delivery of Firestop Materials
4. Installation & Quality Assurance Procedures
5. Inspection & Testing
6. Control of Non-Conforming Materials
7. Training & Qualifying Staff
8. Corrective & Preventive Actions
9. Management System Monitoring & Improvement
10. Documentation & Recording Keeping



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- ➔ 10. Documentation & Recording Keeping

➔ These elements require documented procedures



Element 1



Construction Document Requirements & Review



Construction Document Requirements & Review

What are the requirements?

A Process for determining the firestop installation requirements for each job

What must be implemented?

Processes for reviewing and communicating firestop system installation requirements with customers on each project

The processes should:

- provide your organization with a clear understanding of the customer's requirements and expectations for each project to translate into installation instructions
- ensure all requirements for firestopping are considered and ambiguities are resolved
- confirm and document the requirements even when customer provides no documentation

What must be demonstrated?

- Records of the review of construction documents conducted by qualified individuals.
- Records include construction records, contracts, systems and amendments
- Records must show the customer's specifications, steps taken to address all building elements, and requirement changes

Note:

- Records ensure that appropriate firestop systems are chosen to meet the construction requirements.
- Records of each project review shall be maintained for 7 years



Element 2



Procurement of Firestop Materials



Procurement of Firestop Materials

What are the Requirements?

Process for the selection, evaluation and periodic re-evaluation of your suppliers based on their ability to supply firestop materials in accordance with the requirements.

What must be implemented?

- A purchasing process that provides your suppliers with material specifications being purchased
- A process for the selection, evaluation and periodic re-evaluation of all material and product suppliers based on your performance criteria
- A process for the verification of purchased material to ensure that material meets the contractor's specifications and requirements
- A process for corrective action to handle suppliers' product or delivery non-compliances
- An organized record-keeping process for supplier evaluations, purchase orders and purchased material inspection records.

What must be demonstrated?

- Records of all materials purchased for each project including verbal orders.

Records should include - manufacturer and supplier name, product name, product type, quantity, traceability requirements, such as Lot number, shelf-life, and approval agency label, where applicable.

- Records showing that suppliers have been evaluated and periodically re-evaluated
- Methods for communicating to suppliers when they fail to meet your specifications including expected corrective action
- Records of incoming inspection and verification of purchased product to provide evidence that the purchased product meets specified requirements



Element 3



Storage, Handling, Preservation & Delivery



Storage, Handling, Preservation & Delivery

What are the Requirements?

Established processes for labeling, storage, handling, preservation and delivery of firestop materials, including at the job-site.

Note: Processes are intended to prevent any misuse, contamination, damage or deterioration of firestop materials.

What must be implemented?

- Established good practices for material storage, handling, identification, preservation, shelf life (first in/first out), and delivery to job site and back
- Adequate storage conditions and handling methods to preserve materials and to control shelf life from receipt to installation including at the job site
- Established good practices for the identification and segregation of noncompliant or defective materials

What must be demonstrated?

The processes and practices must ensure that:

- All materials are adequately labeled or identified with manufacturer name, product name, type, etc.
- Handling and storage methods prevent damage and contamination of materials in compliance to manufacturers' specifications including at the job site.
- Material with shelf life are used prior to the specified expiration date or removed or tested to determine usability.
- Materials are protected during delivery to and storage at the job-site.
- Noncompliant materials are appropriately identified and segregated both in storage and at the job site.



Element 4



Installation, Application & Field Quality Assurance Procedures



Installation, Application & Field Quality Assurance Procedures

What are the requirements?

Plan and carry out installation of firestop systems under controlled conditions.

What must be implemented?

A process for controlling conditions for the installation of firestop systems.

The process should:

- Ensure information describing the firestop systems to be installed is available at the job site.
- Ensure adequate resources are available such as equipment and qualified personnel.
- Implement firestop system specification and installation practices that follow the FCIA Firestop Manual of Practice and other industry standards.
- Ensure records are maintained including completion of field inspections and tests.

What must be demonstrated?

Demonstrate that firestop installations have been carried out following your defined process and that the following conditions have been controlled:

- Information describing firestop systems
- work instructions
- equipment for installation, monitoring and measuring
- application environment is prepared and maintained according to industry guidelines
- required tests and inspections conducted and with calibrated equipment

Note:

Installation personnel should understand their responsibilities to follow processes, ensure systems meet requirements and actions when a nonconformance is detected.

- Records of all field tests conducted showing results and actions taken to resolve nonconformities



Element 5



Inspection, Testing & Calibration



Inspection, Testing & Calibration

What are the requirements?

Process for inspection and testing of firestop materials and system installations to verify that installation requirements have been met.

What must be implemented?

Established processes for:

- Performing inspections and tests of firestop materials and installations to a plan or procedures that follow established industry guidelines.
- Calibration and verification of measuring devices used for inspections and tests to verify they are fit for use.

What must be demonstrated?

Show evidence of:

- Firestop material and system inspections & testing are carried out for your projects.
- Firestop materials and systems conform to specified requirements.
- Monitoring and measuring devices are calibrated or verified at specified intervals.
- Records are maintained for inspections and testing and measuring device calibration or verification.



Element 6



Control of Nonconforming Materials & Systems



Control of Nonconforming Materials & Systems

What are the requirements?

A documented procedure for the control of nonconforming firestop materials and systems from receipt to installation

What must be implemented?

- Documented procedure that defines the responsibilities, authority, and processes for controlling firestop materials and systems, including those on the job site, that are nonconforming and do not meet specified requirements.
- Control processes including the identification, segregation, documentation, evaluation and disposition of the nonconforming materials and installed systems.
- Control processes for rework, repair, re-inspection and recorded results (pass/fail) of nonconforming installed systems.

What must be demonstrated?

- Documented procedure that defines the processes, responsibilities, authorities and controls for dealing with nonconforming firestop materials and systems.
- Records of nonconforming firestop materials or systems and actions taken to resolve.
- Data or records used as input for your corrective action and management reviews.



Element 7



Training and Qualification of Staff



Training and Qualification of Staff

What are the requirements?

Provide the necessary personnel to select, install, inspect and test firestop systems & to implement and maintain your management system

What must be implemented?

- Competency requirements for key personnel
- Training process that incorporates education and training to satisfy the level of competency needed for key personnel
- Evaluation process that:
 - Assesses the effectiveness of the education and training that is provided.
 - Assesses and periodically re-evaluates staff competence.
- A means to demonstrate that the DRI and responsible personnel have appropriate skills and knowledge with regard to the selection and installation of firestop materials and systems
- Record keeping of staff's training, competency and training effectiveness.
- Contingency Plan in the event the DRI is no longer employed by the Contractor



Training and Qualification of Staff

What must be demonstrated?

Show:

- The competency requirements for staff
- Your DRI passed the required UL DRI Exam and continues to maintain their DRI certification
- Your DRI Contingency plan
- Your training and evaluation process
- Evaluations of the effectiveness of your training process
- Records of personnel training, performance evaluations and training effectiveness



Element 8



Corrective & Preventive Action



Corrective & Preventive Action

What are the requirements?

A documented procedure for corrective and preventive action

What must be implemented?

A formalized, documented procedure for handling corrective and preventative actions focused on eliminating causes of nonconformities in order to prevent recurrence.

What must be demonstrated?

A documented procedure that addresses:

- Reviewing nonconformities (customer complaints, nonconformity reports, audit & test results, inspections)
- Determining the cause of the nonconformities
- Evaluating the need for action to correct the nonconformity and ensuring that the nonconformity does not reoccur
- Determining and implementing the action needed
- Maintaining records of the action taken
- Reviewing the effectiveness of the action taken

Records of corrective and preventive action



Element 9



Management System Monitoring and Improvement



Management System Monitoring and Improvement

What are the Requirements?

Management must be committed to your organizations' management system and provide evidence of that commitment by:

- Establishing a policy
- communicating the importance of meeting requirements
- defining and communicating responsibilities and authorities of staff
- providing adequate resources
- conducting management reviews to continually improve the effectiveness of the management system

The DRI is responsible for:

- planning & conducting periodic audits of the management system
- reporting audit results
- maintaining audit records

Document these responsibilities and requirements



Management System Monitoring and Improvement

What must be implemented?

- Your organization must have a policy for quality
- Your management must effectively communicate the policy
- Your management must review the Management System & continuously improving the System
- Your DRI must audit the Management System at planned intervals to assess its suitability, adequacy and effectiveness



Management System Monitoring and Improvement

Management Reviews:

The **inputs** into the management reviews should include:

- management objectives
- results of inspections
- results of DRI audits
- staff competency
- customer and UL feedback
- project nonconformities
- status of corrective and preventive actions
- follow-up actions from previous management reviews
- changes that could affect the Management System
- recommendations for improvement

The **output** from management reviews should include decisions and actions to improve:

- the effectiveness of the Management System
- processes
- resources



Management System Monitoring and Improvement

What must be demonstrated?

To demonstrate your management's commitment show evidence of:

- a policy for quality
- planned DRI audits
- planned management reviews
- continuous improvement objectives and actions based on inputs from management's review, DRI audits and customer feedback

Show evidence of Management Review Inputs including:

- Management Objectives
- Customer and UL feedback
- Results of inspections
- Results of DRI audits
- Status of corrective and preventive actions
- Staff competency
- Follow-up actions from previous management reviews
- Changes that could affect the management system and recommendations for improvement

Demonstrate that records have been maintained of DRI audits and management reviews.



Element 10



Documentation & Recordkeeping

Documentation & Recordkeeping

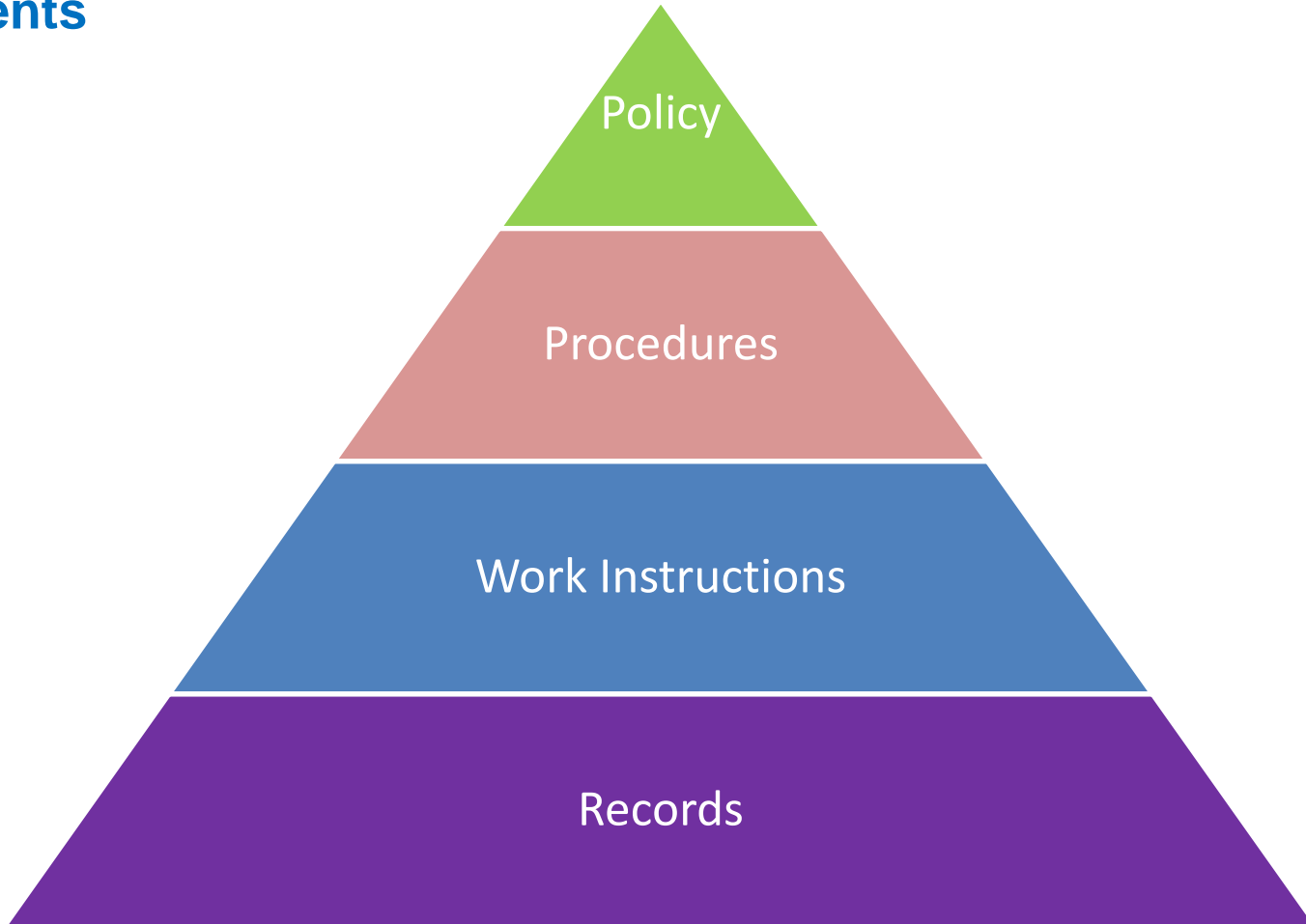
What are the requirements?

A documented procedure for the control of your documents and records



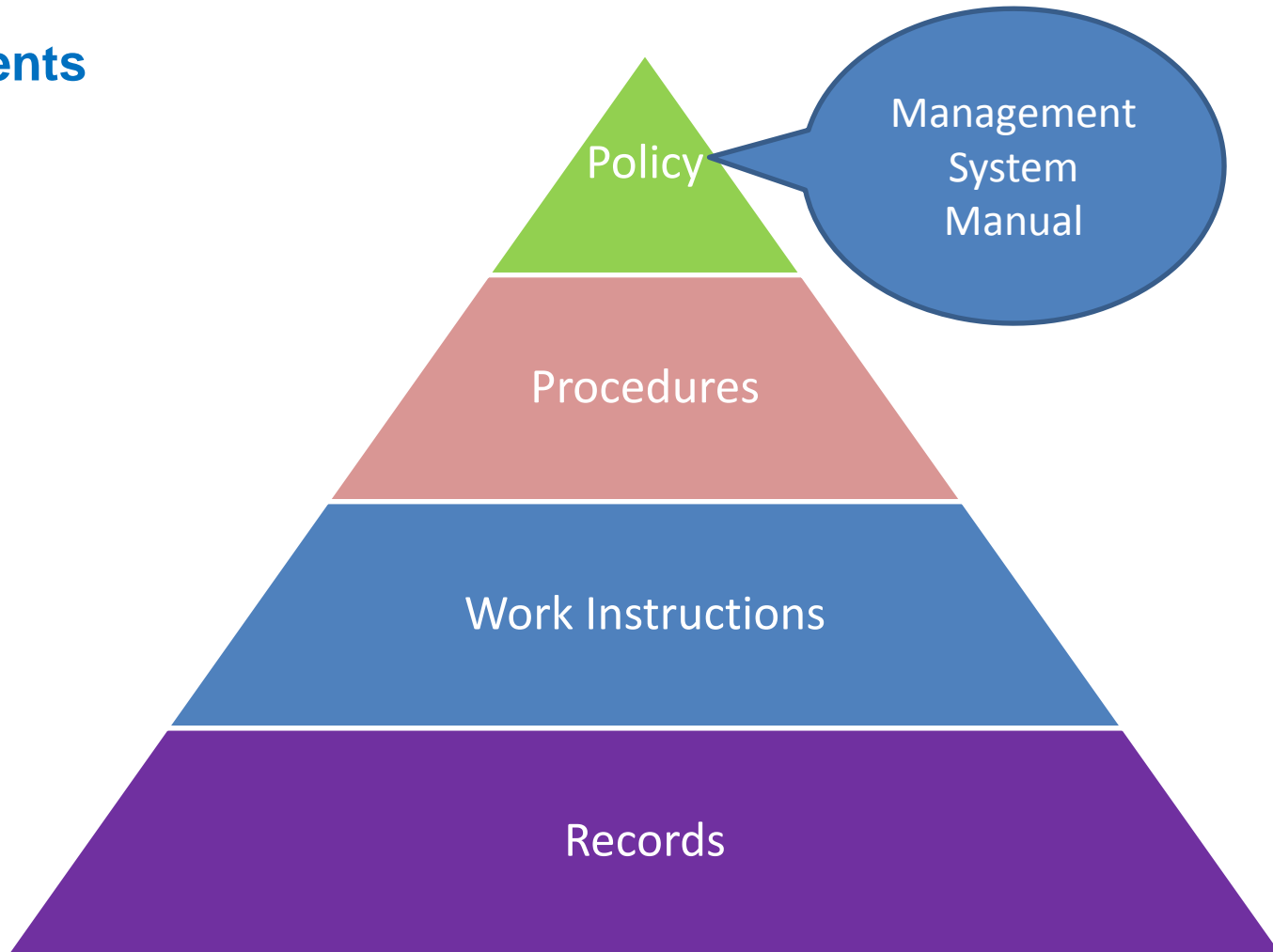
Documentation & Recordkeeping

Documents



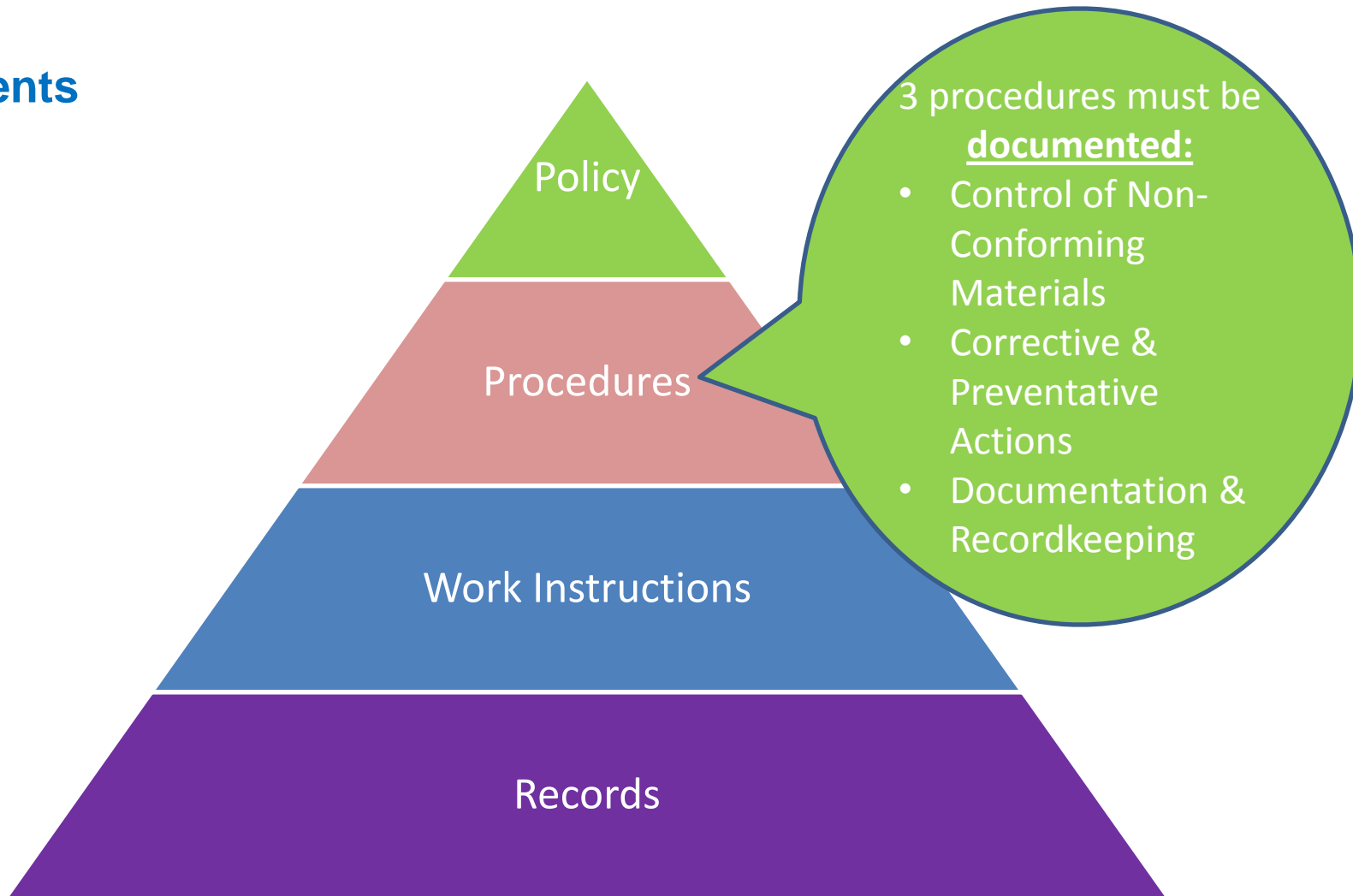
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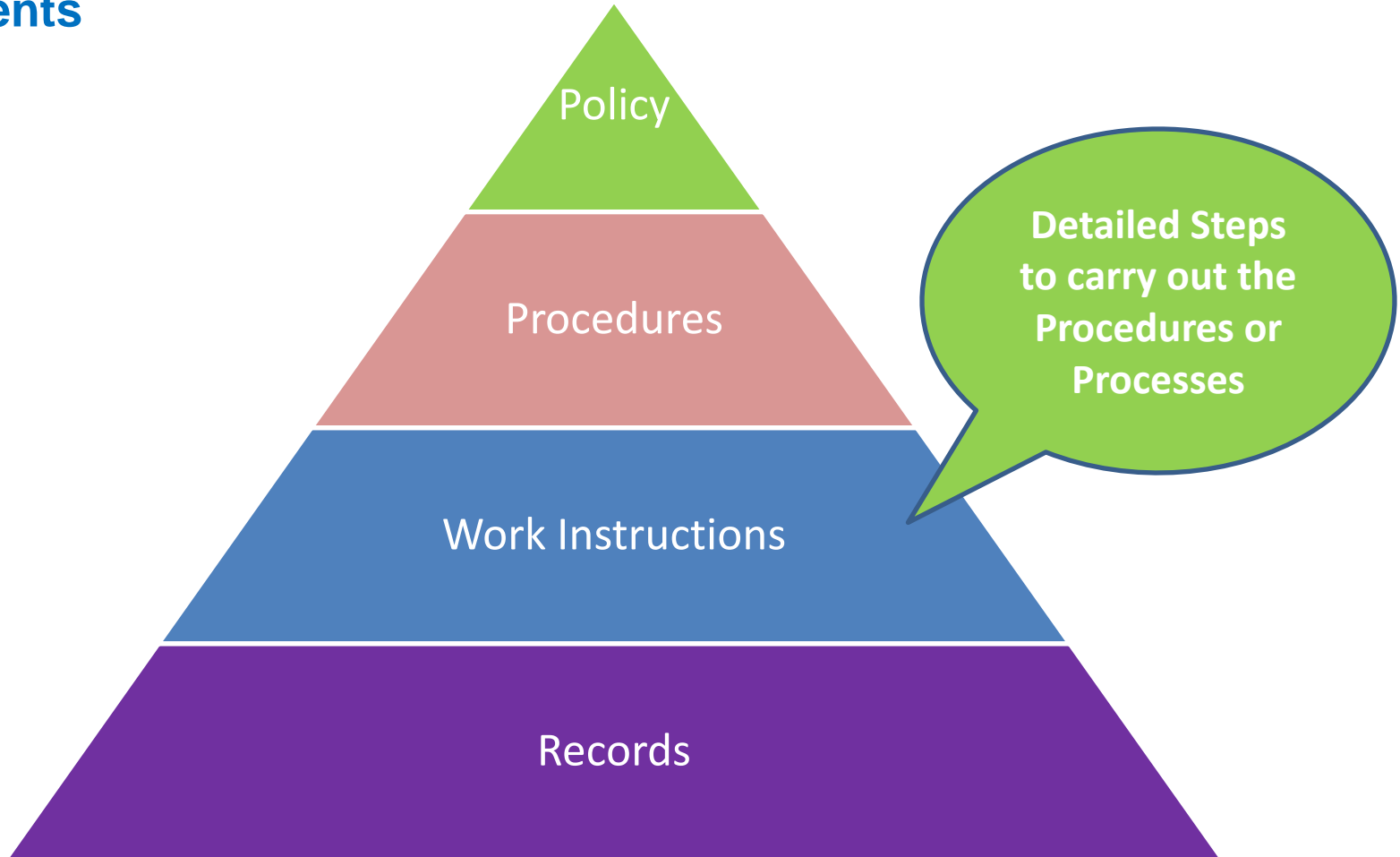
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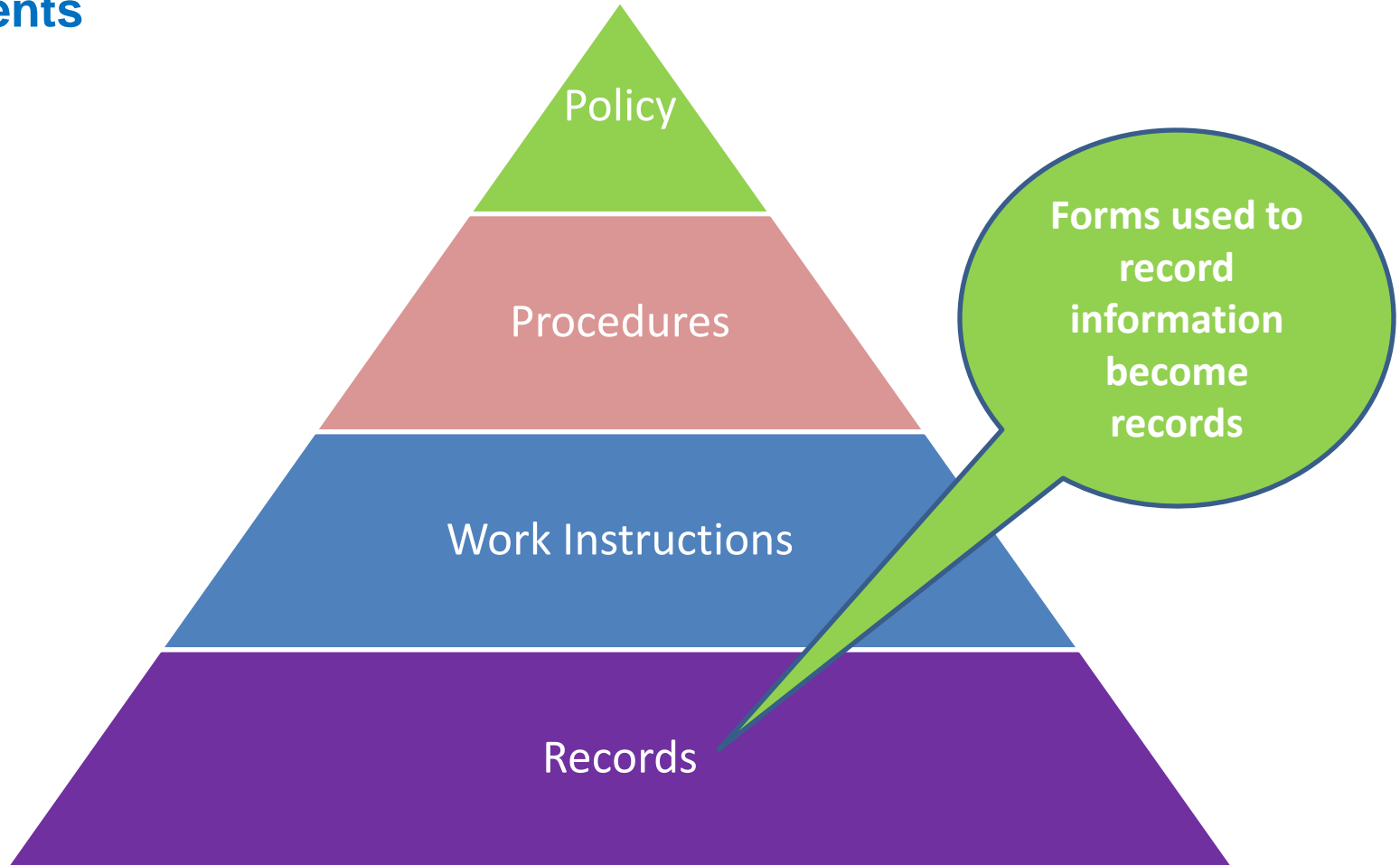
Documentation & Recordkeeping

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Documentation & Recordkeeping

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Documentation & Recordkeeping

Records required:

- Construction records, including contracts, systems and amendments
- Incoming material inspection
- Installation inspection and test records
- Equipment records including calibration when applicable
- Customer complaint records, with corrective action (and preventative action as appropriate)
- Corrective and Preventive Action records
- Non-conforming material records
- Staff education, training, competency evaluations and training effectiveness
- DRI Audits
- Management review records



Documentation & Recordkeeping

Document and record controls required:

- having approvals for initial release, review and revision of documents
- ensuring that only current documents are in use
- ensuring availability at the appropriate use points
- ensuring legibility and unique identifiers
- Preventing use of obsolete documents
- Ensuring records are legible, readily identifiable and retrievable

What must be demonstrated?

- Show your documented procedure for controlling your documents and records
- Show that records have been established and maintained
- Demonstrate that documents and records are controlled



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UL's Qualified Contractor Program e-learning

www.ul.com

- FCIA Firestop Manual of Practice
- FCIA Management System Template

FCIA resources can be obtained by going to:

www.FCIA.org



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