May 7, 2020

How to Utilize NREL JTA's for Timekeeping

OKLAHOMA Commerce

Start Here → https://www.energy.gov/eere/wipo/guidelines-home-energy-professionals-accredited-training

- When you go to the above link, scroll down the page to see the links to the different JTA's for DOE WAP jobs.

Job Task Analyses

The backbone of the accreditation process are the JTAs. The JTAs define and catalogue the knowledge, skills, and abilities that a practitioner needs in order to perform a given job effectively and safely. They define what a home energy professional needs to know in order to do the job correctly.

The JTAs for **Single-Family Home Energy Upgrades** developed under the Guidelines project reflect the four most common job classifications in the U.S. Department of Energy's Weatherization Assistance Program (WAP) and home energy upgrade industry and are publicly available:

- NREL Job Task Analysis: Single-Family Energy Auditor
- NREL Job Task Analysis: Single-Family Quality Control Inspector
- NREL Job Task Analysis: Single-Family Crew Leader
    - Knowledge, skills, and abilities for a retrofit installer are contained in the Crew Leader JTA, "Domain 3: Implement Scope of Work"

Notice

https://www.energy.gov/eere/wipo/guidelines-home-energy-professionals-accredited-training

- As you can see here, the JTA for Retrofit Installer is now contained in the Crew Leader JTA under “Domain 3: Implement Scope of Work”

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NREL JTA Energy Auditor

- When a JTA link is selected it will open or download the PDF file. This depends on which browser you are using and the settings.
- It should look like this.

Single-Family Energy Auditor Job Task Analysis

Heather Head and Chuck Kurnik
National Renewable Energy Laboratory

NREL JTA Energy Auditor

- The first few pages provide definitions, background, and revisions to the JTA.
- The main content starts on Page 8.
  - “6.1 DOMAIN I”
  - See next slide

Table of Contents

NREL JTA Energy Auditor

- The main content starts on Page 8.
  - "6.1 DOMAIN I"
- There are 13 tasks associated with Domain I.
- This is an example of the first task.

6 Energy Auditor Content Outline

6.1 DOMAIN I: Collection of Visual, Material, Dimensional, and Appliance Information about the Building for an Energy Audit

6.1.1 D1-Task 1: Document energy consumption.

Ability to:

- Obtain 12 months of client utility bills
- Obtain annual fuel delivery information (oil, propane, etc.).

Knowledge of:

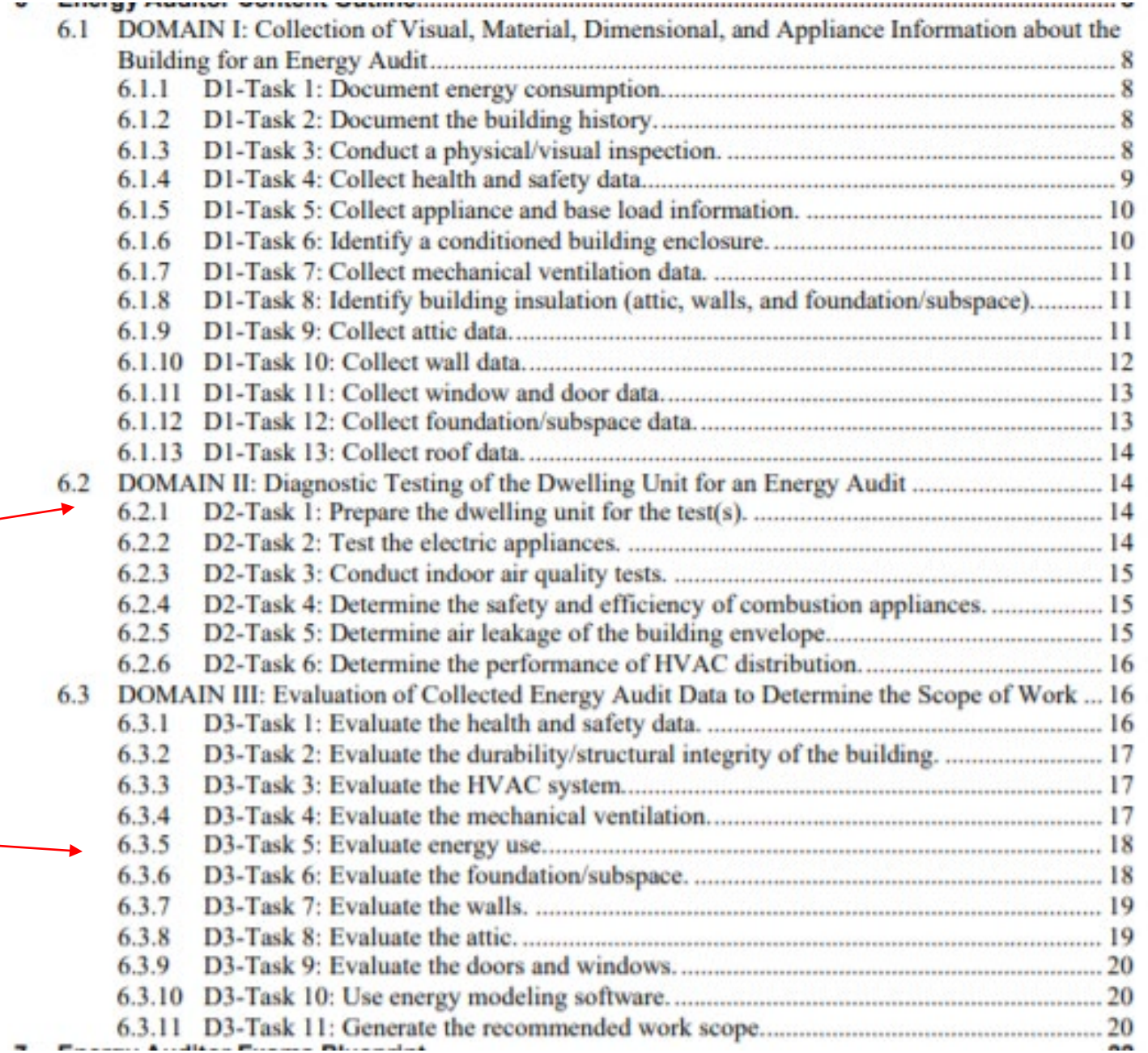
- How to access utility information
- Utility bill components.

6.1.2 D1-Task 2: Document the building history.

Ability to:

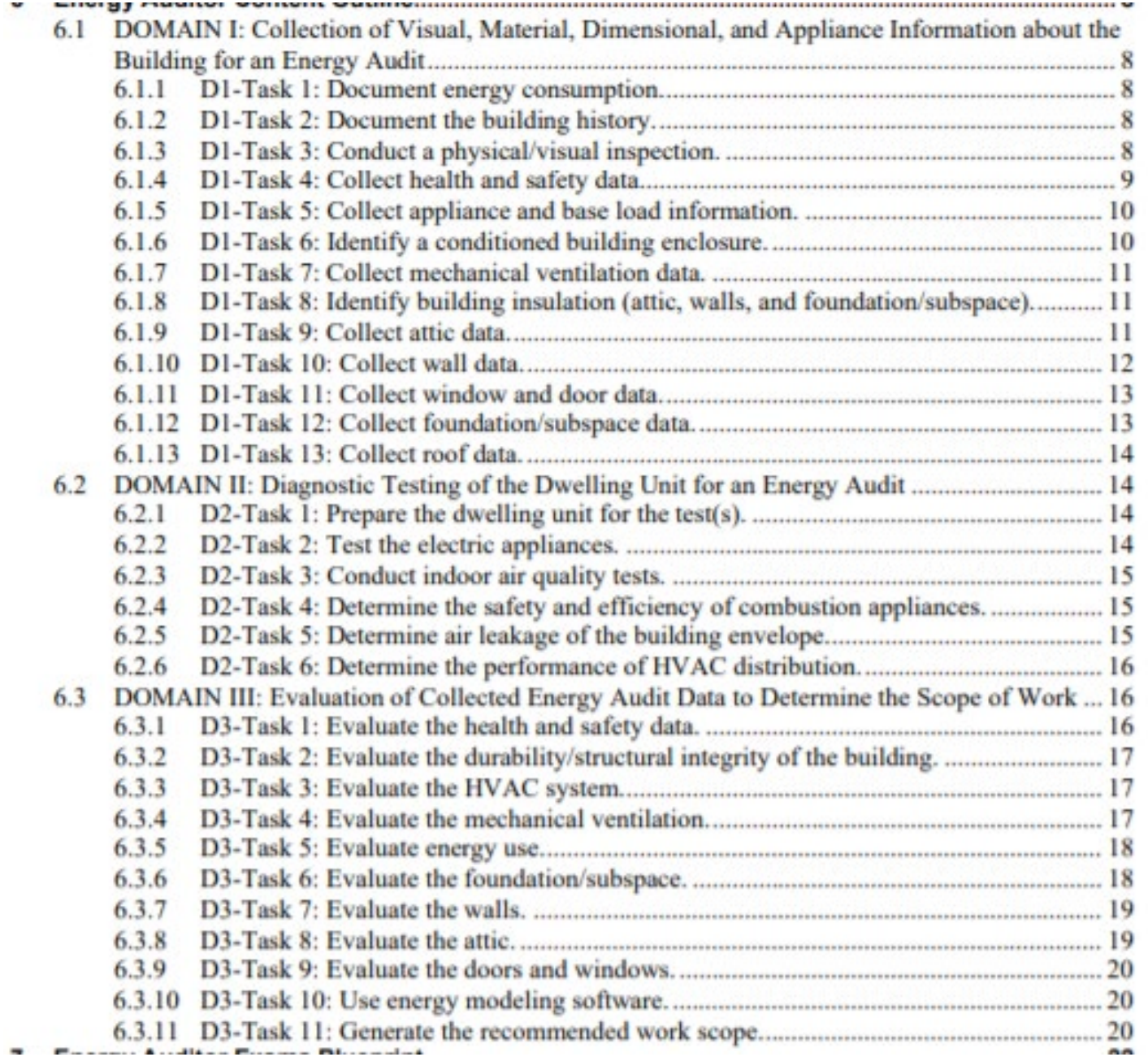
NREL JTA Energy Auditor

- There are a total of 3 domains.
- Shown here is the table of contents.
- 6.2 DOMAIN II has a total of 6 tasks.
- 6.3 DOMAIN III has a total of 11 tasks.



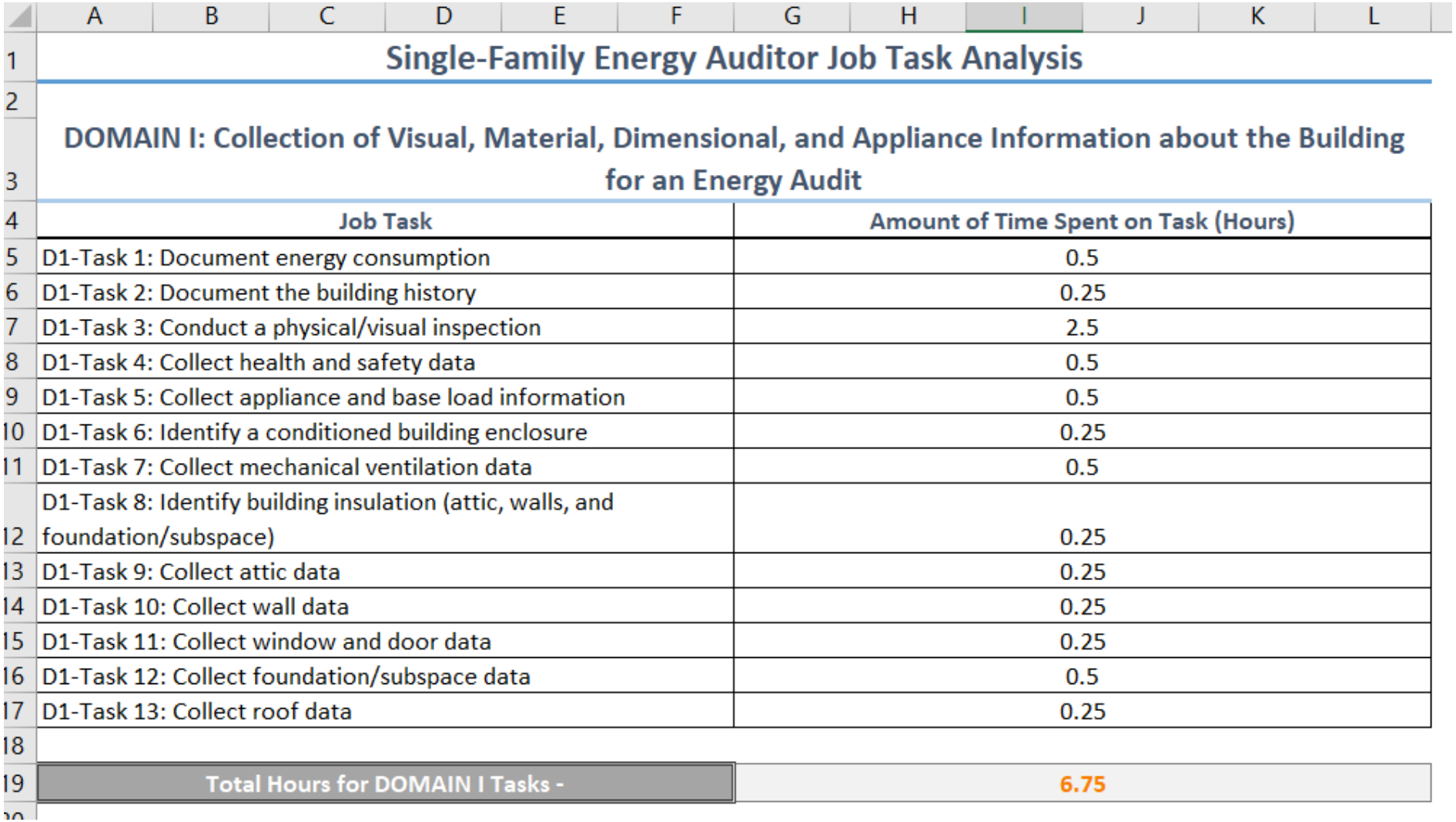
NREL JTA Energy Auditor

- The table of contents could be used for timekeeping as is,
- OR a spreadsheet can be created using the Domains and Tasks from this table of contents.
  - See next slide.



NREL JTA Energy Auditor

- This is an example of how a spreadsheet can be created for each JTA.
- This example shows “DOMAIN I” and the tasks associated with it.
- Time can be kept for each individual task and totaled for the individual Domain I.
- The spreadsheet can be adjusted for each home and have additional staff columns also, if needed.



Single-Family Energy Auditor Job Task Analysis

DOMAIN I: Collection of Visual, Material, Dimensional, and Appliance Information about the Building for an Energy Audit

Job Task	Amount of Time Spent on Task (Hours)
D1-Task 1: Document energy consumption	0.5
D1-Task 2: Document the building history	0.25
D1-Task 3: Conduct a physical/visual inspection	2.5
D1-Task 4: Collect health and safety data	0.5
D1-Task 5: Collect appliance and base load information	0.5
D1-Task 6: Identify a conditioned building enclosure	0.25
D1-Task 7: Collect mechanical ventilation data	0.5
D1-Task 8: Identify building insulation (attic, walls, and foundation/subspace)	0.25
D1-Task 9: Collect attic data	0.25
D1-Task 10: Collect wall data	0.25
D1-Task 11: Collect window and door data	0.25
D1-Task 12: Collect foundation/subspace data	0.5
D1-Task 13: Collect roof data	0.25
Total Hours for DOMAIN I Tasks -	**6.75**

NREL JTA Energy Auditor

- In Section 7, on Page 22, you can find the Exams Blueprint.
- This provides a breakdown of the Domains and the tasks associated with them.
- This could be used to track time as is (with minor adjustments)
- OR to help create a spreadsheet for timekeeping.

7 Energy Auditor Exams Blueprint

Domain and Tasks	% Written	% Field
DOMAIN 1: Collection of Visual, Material, Dimensional, and Appliance Information about the Building for an Energy Audit	42.8%	66.7%
Task 1: Document energy consumption	2.2%	N/A
Task 2: Document the building history	3.0%	N/A
Task 3: Conduct a physical/visual inspection	4.5%	7.9%
Task 4: Collect health and safety data	4.7%	8.3%
Task 5: Collect appliance and base load information.	3.2%	5.6%
Task 6: Identify a conditioned building enclosure	3.2%	5.6%
Task 7: Collect mechanical ventilation data	3.2%	5.7%
Task 8: Identify building insulation (attic, walls, and foundation/subspace)	3.2%	5.6%

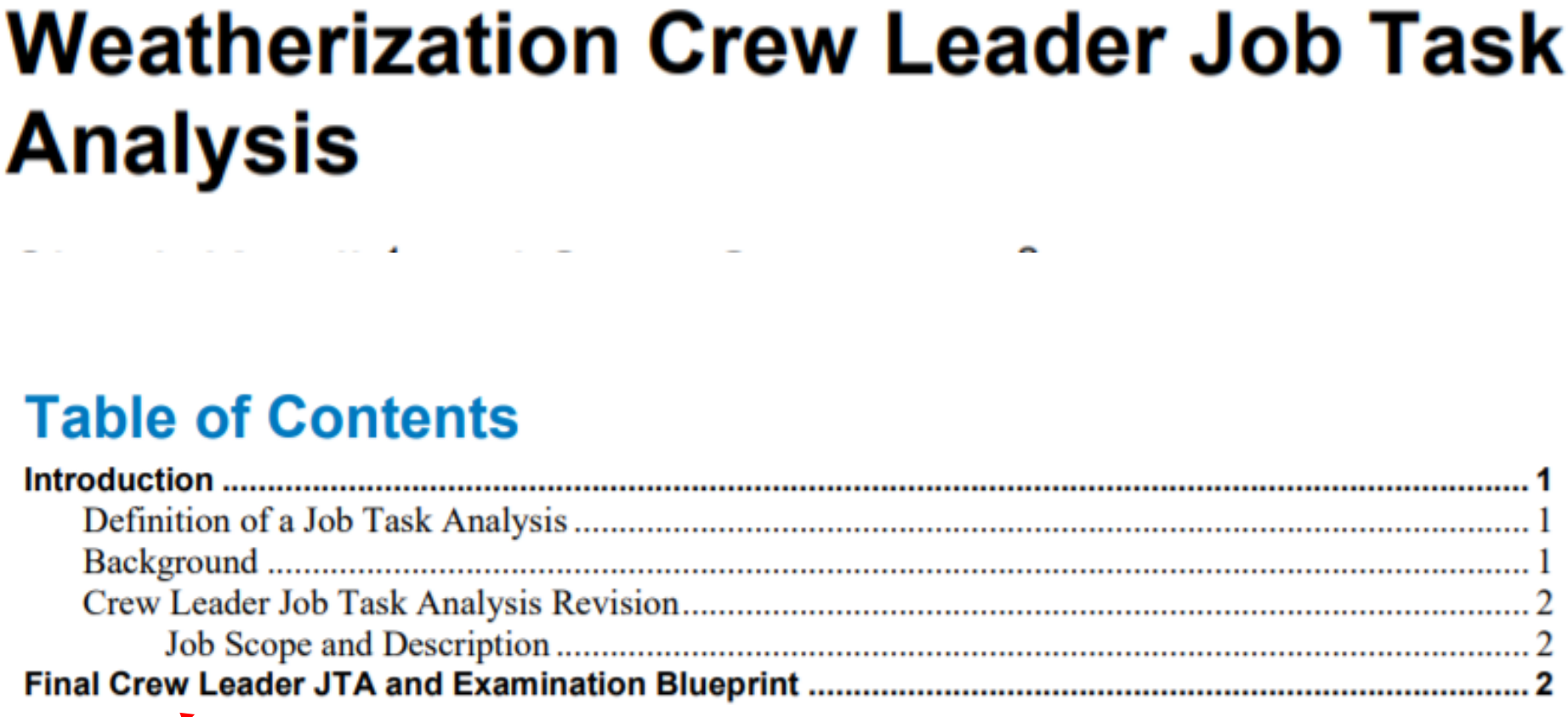
NREL JTA Quality Control Inspector

- The same previous steps can be completed for each of the three JTA's.
- This is the QCI JTA Table of Contents.
- The QCI JTA has 3 Domains with a total of 6 tasks.
- The QCI JTA also has an Exam Blueprint.

Single-Family Quality Control Inspector Job Task Analysis

NREL JTA Crew Leader

- The same previous steps can be completed for the Crew Leader JTA
- This is the Crew Leader JTA Table of Contents
- The Crew Leader JTA also has an Exam Blueprint.
- The Exam Blueprint is where you will find the breakdown of each DOMAIN and tasks for the Crew Leader JTA.
  - See next slide.



Weatherization Crew Leader Job Task Analysis

Table of Contents

NREL JTA Crew Leader

- The Crew Leader JTA Exam Blueprint for Domain I, Task 1.
- This Exam Blueprint breaks the Tasks down further.
- This could easily be converted to a spread sheet or used as is for timekeeping.
- DOMAIN III of the Crew Leader JTA is where you will find the tasks associated with Retrofit Installers.
  - See next slide

Final Crew Leader JTA and Examination Blueprint

Identifier	Content Area	Exa Wei
D1.	**Domain 1: Develop Plan to Execute Scope of Work**	**16.5**
D1.T1	**Task 1: Identify materials and staffing needs.**	**3.9%**
	Knowledge of:	
D1.T1.K1	Safety protocols	
D1.T1.K2	Code compliance	
D1.T1.K3	Scope of work	
D1.T1.K4	Manufacturer specifications	
D1.T1.K5	Materials required	
D1.T1.K6	Personnel required	
D1.T1.K7	Physical parameters of the job	
D1.T1.K8	Schedule changes	
D1.T1.K9	Resources	
D1.T1.K10	SDS (Safety Data Sheet)	

NREL JTA
Crew Leader

- The Crew Leader JTA Exam Blueprint for Domain 3, Task 1.
- This Exam Blueprint breaks the Tasks down further.
- This could easily be converted to a spread sheet or used as is for timekeeping.
- DOMAIN III of the Crew Leader JTA is where you will find the tasks associated with Retrofit Installers.
- There are a total of 11 Tasks in DOMAIN 3 of the Crew Leader JTA, which are broken down to provide greater detail per task.

D3	**Domain 3: Implement Scope of Work**	**37.8%**
D3.T1	**Task 1: Identify and report potential combustible safety hazards.**	**5.3%**
	Knowledge of:	
D3.T1.K1	Combustion appliance exhaust venting systems	
D3.T1.K2	Safety protocols	
D3.T1.K3	Manufacturer specifications	
D3.T1.K4	Ventilation systems	
D3.T1.K5	Heat producing devices	
D3.T1.K6	Applicable building science	
	Ability to:	
D3.T1.A1	Identify and report potential safety issues	

For More Information

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- To find the links to each JTA go to the above link and scroll down.

Job Task Analyses

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Any Questions or Comments?

Thank you for joining.