QA Genie Lessons Learned

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Presentation Agenda

- Introduction to QA Genie
- Common Flags
- Common QA Findings
- Interpretation Needs
- QA Genie: 2018 and Beyond
- Q&A

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Introduction

- Purpose of QA Genie

IDENFIY AND STOP

BAD ACTORS

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Introduction

- QAG Basic Functions
  - Rating Data Parsed
  - Data Analyzed for Outliers/Anomalies
    - Some Outliers are Hard-Coded
    - Additional Detection of Outliers "in Cluster"

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QAG Interface

Most Common Flags

- Ratings in One Day

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Most Common Flags

- Mechanical Equipment Set to Default EAE

Most Common Flags

- No Window Overhangs

Most Common RED Flags

Wall Framing Factor 🚩	35.93%
Duct LTO Testing Repeat Values 🚩	19.31%
Climate Zone 🚩	11.71%
Ventilation Fan Watts 🚩	6.15%
Blower Door Testing Repeat Values 🚩	4.91%
Window SHGC Value(s) 🚩	4.54%
Window Interior Shading 🚩	4.23%
Water Heater EF 🚩	3.54%
Sealed Attic Ceiling Area-to-Attic Exterior Ratio 🚩	2.35%
Water Heater EF 🚩	2.15%
Window-to-Wall Ratio 🚩	2.10%
Water Heater EF 🚩	1.99%
Refrigerator kWh/yr 🚩	1.81%
Door-to-Wall Ratio 🚩	1.42%
Door-to-Floor Ratio 🚩	1.21%
Window U-value(s) 🚩	1.20%
Furnace AFUE 🚩	0.72%

Most Common RED Flags

- Wall Framing Factor

Most Common Findings

- Rounding

Most Common Findings

- Repeat Test Values

Unique Test Values - Blower Door

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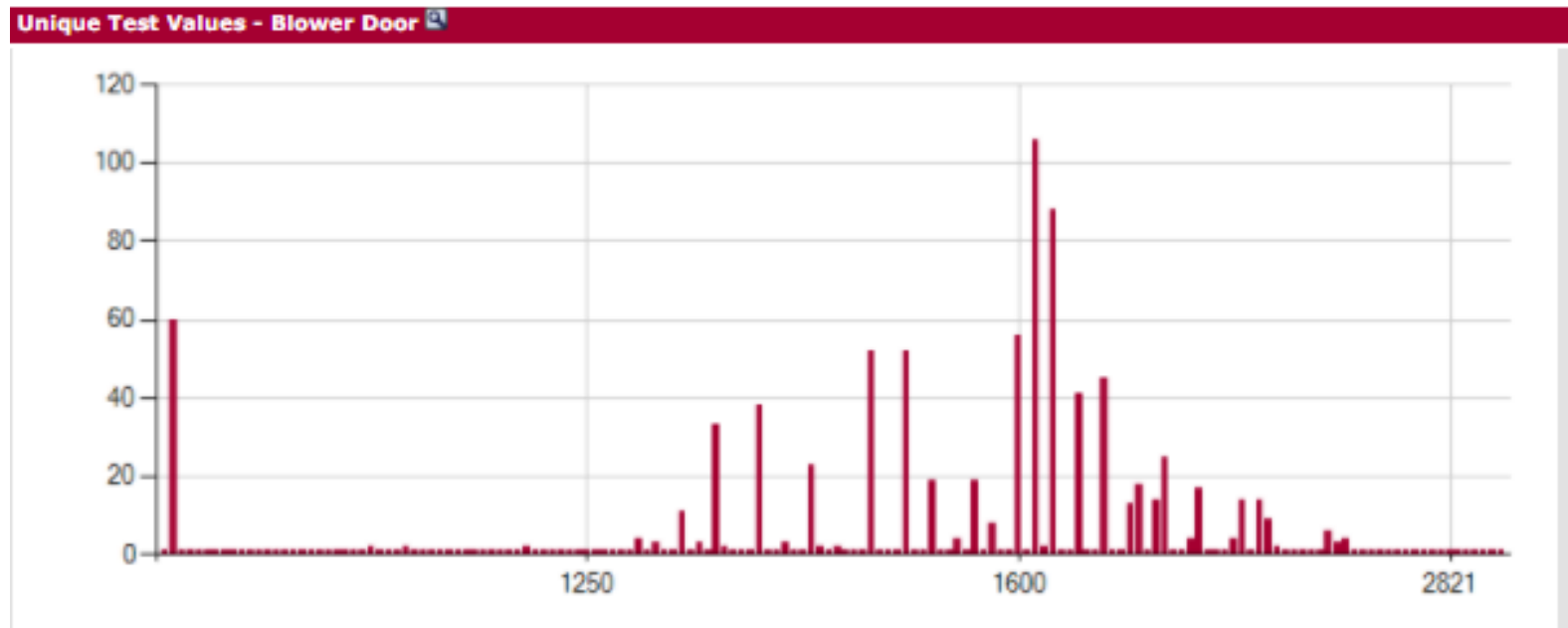
Most Common Findings

- Ratio of Slab and Framed Floors (Footprint) to Roof/Ceiling Areas
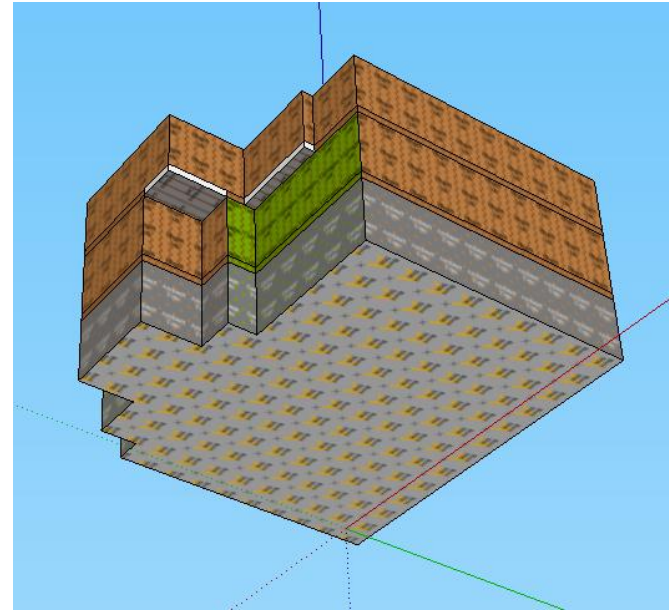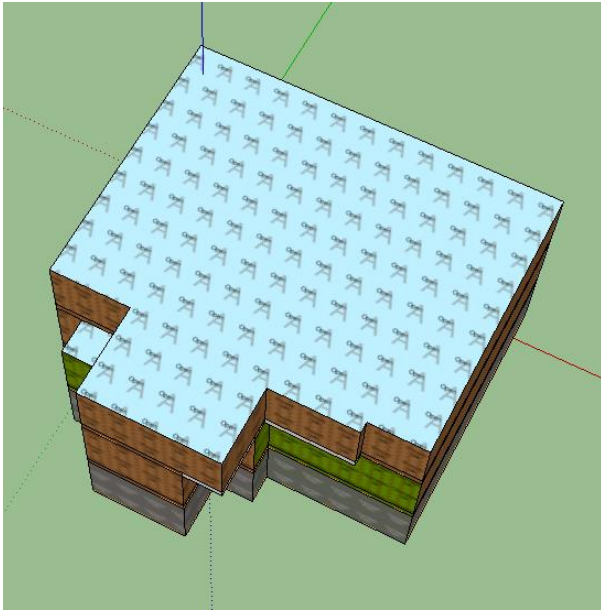
Most Common Findings

- Utility Rates

Most Common Findings

- Ventilation Fan Watts

Interpretation/Clarification Needs

- # Stories Above Grade

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Interpretation/Clarification Needs

- Wall Framing Factor

	No. of Plates	Framing Factor*	Default
Walls (std):			
8 ft high, @16" o.c.	3	23%	X
8 ft high, @24" o.c.	3	20%	X
10 ft high, @16" o.c.	3	22%	
10 ft high, @24" o.c.	3	19%	
Walls (advanced):			
8 ft high, @16" o.c.	2	19%	
8 ft high, @24" o.c.	2	16%	
10 ft high, @16" o.c.	2	18%	
10 ft high, @24" o.c.	2	15%	
Floors (std):			
@16" o.c.	2	13%	X
@24" o.c.	2	10%	X
Floors (advanced):			
@16" o.c.	1	11%	
@24" o.c.	1	8%	
Ceilings (standard trusses):**			
@16" o.c.	0	14%	X
@24" o.c.	0	11%	X
Ceilings (advanced trusses – "raised heel"):			
@16" o.c.	0	10%	
@24" o.c.	0	7%	
Ceilings (conventional framing *):**			
@16" o.c.	2	13%	
@24" o.c.	2	9%	

Interpretation/Clarification Needs

- Hybrid Ventilation Systems
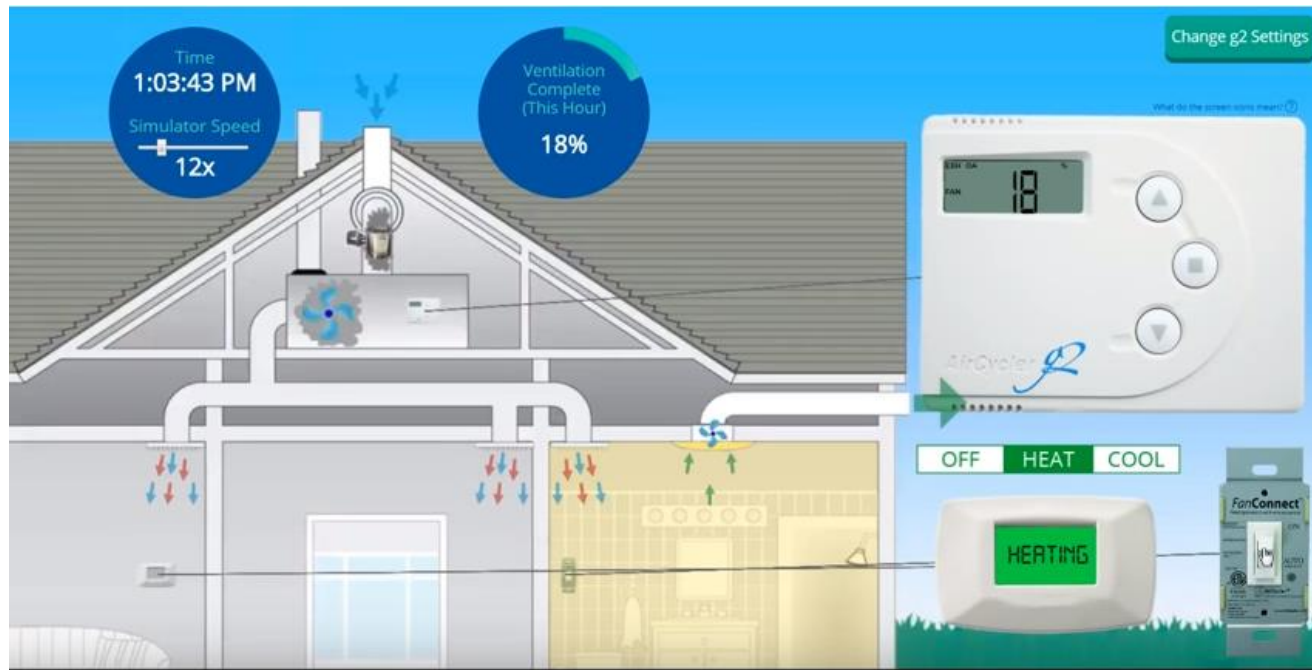
Interpretation/Clarification Needs

- Window Overhangs

Overhang

Enter the correct dimensions for the window overhangs. The win

Depth (ft):

The overhang depth is the horizontal distance (in feet) from tl

To Top of Window (ft):

This is the vertical distance (in feet) from the bottom of the ov

To Bottom of Window (ft):

This is the vertical distance (in feet) from the bottom of the ov

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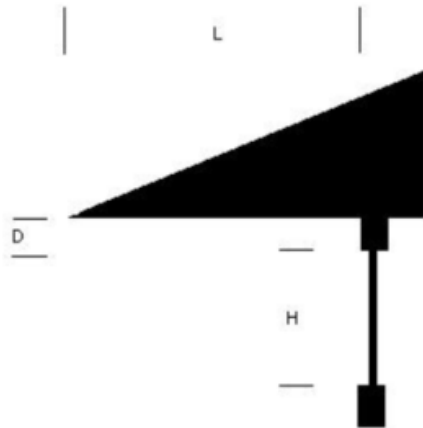
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QA Genie 2018 and Beyond

- Support RESNET Enhanced QA Efforts

- 25% Online/Remote
- 25% In Field

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QA Genie 2018 and Beyond

- Validate QA Genie Flags

Flags

Outlier:	5,359 (5.68 per rating)
Red:	1,463 (1.55 per rating)

Most Common Flags

No Window Overhang(s) (99.68%)
Rater Location (96.93%)
Ratings in One Day (95.02%)
Duct LTO Testing Repeat Values (81.25%)
Blower Door Testing Repeat Values (72.88%)
Mechanical Equipment Set to Default EAE (71.19%)
Ratio of Slab and Framed Floor Areas to Roof Area (64.30%)
Conditioned Square Footage-to-Framed Floor and Slab Ratio (30.40%)
Average Wall Height (28.07%)
Electric rate (26.27%)

QA Genie 2018 and Beyond

- Adjustments to Flags/Functionality
  - Window SHGC
  - Washing Machine EF
  - Ratings in One Day
  - Improve Interface/Search Filters

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QA Genie 2018 and Beyond

- Continue Sharing Lessons
- QA Webinar Series

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Questions?

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