Making the Case for A Preliminary HERS Rating

By: Sandra K. Adomatis, SRA, LEED Green Associate

Day: Wednesday, March 1, 2017

Time: 10:30am – 12:00pm
Room: Arizona III

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Meet Your Speaker

- Author
- Real Estate Appraiser
- REALTOR
- Educator – AI Instructor
- National Speaker on energy efficient and green valuation

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Objectives

- Identify power tips that increase the use of preliminary HERS Ratings
- List the ways appraisers use the preliminary ratings
- Describe ways to assist in liability concerns

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Poll Question

How many HERS Raters have received a call from an appraiser in your market?

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Poll Question

Why not?

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So What's In It for Me?

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HERS Rating Types

- ☐ Sampling Rating
- ☐ Projected (Preliminary) Rating
- ☐ Confirmed Rating

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A Sampling

A **Sampling Rating** is an application of the Home Energy Rating process whereby fewer than 100% of a builder's new homes are randomly inspected and tested to evaluate compliance with a set of threshold specifications.

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Projected (Preliminary) Rating

A Rating Type that encompasses one individual dwelling or dwelling unit and is conducted in accordance with Section 5.1.4.3.1 through 5.1.4.3.5 of the ANSI/RESNET/ICC Standard 301.

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Confirmed Rating

A Confirmed Rating is a rating type that encompasses one individual dwelling or dwelling unit and is conducted in accordance with Sections 5.1.4.1.1 through 5.1.4.1.3.

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Contracts for HERS Ratings

Include an Opt-Out consent in your service contract which all customers agree to share their data unless they choose not to participate in the data-sharing program. If the customer does not object, then their information – (entire HERS Report) will be shared according to the terms written in the consent clause.

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Contracts for HERS Ratings

Best Practices for Opt-In/Out-Out Consent

- Clearly identify the entities sharing and receiving data
- Include liability release for data-sharing entity.
  - Release should cover several actions:
    - Transfer of data to the third party
    - Unauthorized use of data by the third party
    - Data management by the third party

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Contracts for HERS Ratings

Best Practices for Opt-In/Out-Out Consent

- Disclose why the data are being collected For Example:
  - To auto-populate the MLS Listings
  - To establish a basis for valuation of the customer's home or other homes.
  - Assure them information will not be used for direct marketing

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Ratings Appraisers *Need*

1. **Projected or Preliminary HERS** at the time we receive the appraisal assignment!

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Why do builders reject preliminary HERS Ratings?

- Unnecessary
- Costs more than buyers will pay

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How Do Appraisers Use Preliminary Ratings?

Let us start at the beginning of the story:

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How Do Appraisers Use Preliminary Ratings?

1. The buyer signs a contract for construction of a new energy efficient home.
2. Builder puts plans, specifications, and cost breakdown together for buyer to take to lender for loan application.

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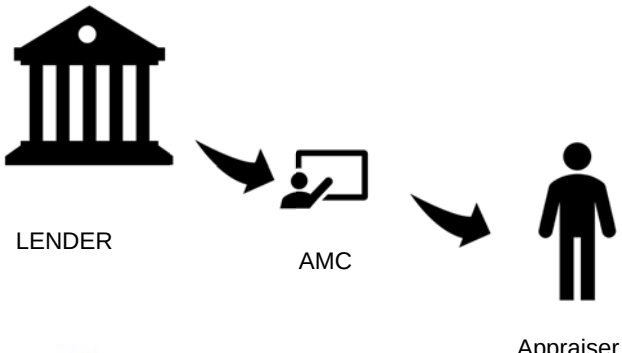
How Do Appraisers Use Preliminary Ratings?

Appraisal Ordering Sequence



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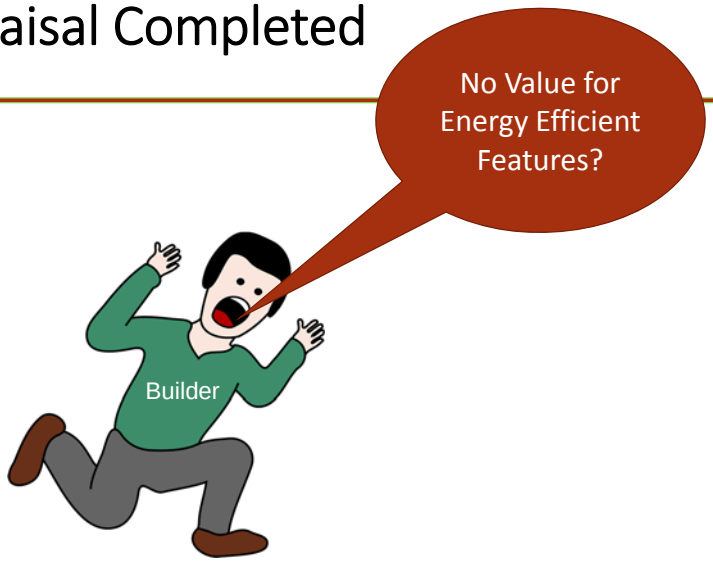
Appraisal Completed



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Likely Scenario

- BREAKING NEWS -

- No Preliminary HERS
- Plans & Specs show nothing new
- AMC was not aware it was EE
- Appraiser not qualified

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A teachable moment just occurred

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Power Tips from Rater to Builder

1. Let's review this brochure "Appraised Value and Energy Efficiency: Getting It Right"
2. Let us request a copy of the appraisal and read it to document errors
3. Ask the lender if they have a "Reconsideration of Value" Form? If not, we'll document errors and omissions in our own format.
4. Let's provide lender with a Projected or Preliminary HERS Rating
5. Once all data is completed, submit it directly to the lender – do not contact the appraiser. The lender will work with appraiser to revise or decide to order 2nd appraisal from another appraiser.

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If Builder had the "Getting It Right" Brochure First ….

What can builders do?

Builders can help the buyer assure a competent appraiser is selected by doing these things:

1. Complete and provide buyers with the Residential Green and Energy Efficient Addendum form.
2. Provide a copy of a complete Home Energy Rating System (HERS) report (if available).
3. Prepare the buyer to notify the lender that they require a competent appraiser for this special type of construction; add your logo and provide a copy of the directions on the next page.
4. Add your logo, the property address, and contact info to the attached letter. Direct your buyer to give the letter (along with 1 and 2 above) to their lender.

Appraisal Institute™ BCAP Building Codes Assistance Project NAHB National Association of Home Builders

https://www.appraisalinstitute.org/assets/1/29/AI-BCAP_Flyer.pdf

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Here are the choices…

Provide A Projected or Preliminary HERS to Appraiser Up Front

Lose money at closing table and confidence of buyer

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Sampling versus Projected Ratings

Comparison of these two ratings in eyes of Appraiser		
	Sampling	Projected
Increased Liability	X	
Increased Credibility		X
Easier Sell to Underwriter		X

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Without a Projected HERS-Documentation of Efficiency

1. Highly unlikely appraiser will call the property energy efficient.
2. Highly unlikely appraiser will seek sales that are energy efficient
3. Highly unlikely lender or appraisal management company will hire an appraiser with knowledge of energy efficient knowledge

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Overview of "BIG Data" You Provide

Building Summary

General Building Information	
Area of Conditioned. Space(sq ft)	2219
Volume of Conditioned. Space	19516
Year Built	2016
Housing Type	Single-family detached
Level Type(Apartments Only)	None
Floors on or Above-Grade	2
Number of Bedrooms	4
Foundation Type	Slab
Enclosed Crawl Space Type	N/A
Thermal Boundary Location	REM Default
Slab Floor Information	

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Overview of "BIG Data" You Provide

HERS Index: 71

General Information

Conditioned Area	2227 sq. ft.	House Type	Single-family detached
Conditioned Volume	21643 cubic ft.	Foundation	Slab
Bedrooms	4		

Mechanical Systems Features

Water Heating:	Instant water heater, Natural gas, 0.80 EF, 0.0 Gal.
Cooling:	Air conditioner, Electric, 14.0 SEER.
Heating:	Fuel-fired air distribution, Natural gas, 80.0 AFUE.
Duct Leakage to Outside	82.00 CFM25.
Ventilation System	None
Programmable Thermostat	Heat=Yes; Cool=Yes

Building Shell Features

Ceiling Flat	R-38.0 w/RB	Slab	R-0.0 Edge, R-0.0 Under
Sealed Attic	NA	Exposed Floor	NA
Vaulted Ceiling	R-30.5 w/RB	Window Type	U-Value: 0.340, SHGC: 0.230
Above Grade Walls	R-13.5	Infiltration Rate	Htg: 1686 Clg: 1686 CFM50
Foundation Walls	NA	Method	Blower door test

Lights and Appliance Features

Percent Interior Lighting	60.00	Range/Oven Fuel	Electric
Percent Garage Lighting	0.00	Clothes Dryer Fuel	Electric
Refrigerator (kWh/yr)	575	Clothes Dryer EF	2.67
Dishwasher Energy Factor	0.65	Ceiling Fan (cfm/Watt)	0.00

Appraisers understand these details and can use them in the analysis of value and selecting sales.

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Overview of "BIG Data" You Provide

Above-Grade Wall Library List

Above-Grade Wall: R-13 II + .5 OSB

Information From Quick Fill Screen

Wall Construction Type	Standard Wood Frame
Continuous Insulation (R-Value)	0.5
Frame Cavity Insulation (R-Value)	13.0
Frame Cavity Insulation Thickness (in)	3.5
Frame Cavity Insulation Grade	2
Stud Size (w x d, in)	1.5 x 3.5
Stud Spacing (in o.c.)	16.0
Framing Factor - (defined)	0.1800

REM/Rate - Residential Energy Analysis and Rating Software v14.6.1
This information does not constitute any warranty of energy cost or savings.

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Overview of "BIG Data" You Provide

Roof Information

Name	Library Entry	Ceiling Area(sq ft)	Roof Area(sq ft)	Exterior Color	Radiant Barrier	Type	Uo Value	Cement or Clay Tiles	Roof Tile Ventilation
ceiling 1	R-38 I Blown, Attic	747.00	747.00	Medium	Yes	Attic	0.026	No	No
Vaulted Ceiling	R-30 Vault	562.00	562.00	Medium	Yes	Vaulted	0.034	No	No
Batt Insualtion	R-30 Batts, flat	455.00	455.00	Medium	Yes	Attic	0.057	No	No

Roof Library List

Ceiling: R-38 I Blown, Attic

Information From Quick Fill Screen

REM/Rate - Residential Energy Analysis and Rating Software v14.6.1

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Overview of "BIG Data" You Provide

Ceiling: R-30 Vault	
Information From Quick Fill Screen	
Continous Insulation (R-Value)	0.5
Cavity Insulation (R-Value)	30.0
Cavity Insulation Thickness (in)	10.0
Cavity Insulation Grade	1
Gypsum Thickness (in)	0.500
Bottom Chord/Rafter Size(w x h, in)	1.5 x 12.0
Bottom Chord/Rafter Spacing (in o.c.)	24.0
Framing Factor - (default)	0.1100
Ceiling Type	Vaulted
Note	

Ceiling: R-30 Batts, flat	
Information From Quick Fill Screen	
Continous Insulation (R-Value)	0.0
Cavity Insulation (R-Value)	30.0
Cavity Insulation Thickness (in)	9.0
Cavity Insulation Grade	3
Gypsum Thickness (in)	0.500
Bottom Chord/Rafter Size(w x h, in)	1.5 x 10.5
Bottom Chord/Rafter Spacing (in o.c.)	24.0
Framing Factor - (default)	0.1100
Ceiling Type	Attic

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Overview of "BIG Data" You Provide

Mechanical Equipment	
Number of Mechanical Systems	3
Heating SetPoint(F)	70.00
Heating Setback Thermostat	Present
Cooling SetPoint(F)	75.00
Cooling Setup Thermostat	Present

DHW: Demand-Gas 0.80EF	
Water Heater Type	Instant water heater
Fuel Type	Natural gas
Energy Factor	0.80
Recovery Efficiency	0.00
Water Tank Size (gallons)	0
Extra Tank Insulation (R-Value)	0.0
Note	
Number Of Units	1
Location	Garage or open crawl space
Performance Adjustment	100
Percent Load Served	100

Cool: 14SEER A/C 3 ton

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Overview of "BIG Data" You Provide

Mechanical Equipment	
Fuel Type	Natural gas
Rated Output Capacity (kBtuh)	60.0
Seasonal Equipment Efficiency	80.0 AFUE
Auxiliary Electric	735 Eae
Note	
Number Of Units	1
Location	Attic
Performance Adjustment	100
Percent Load Served	100

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Overview of "BIG Data" You Provide

Infiltration and Mechanical Ventilation	
Whole House Infiltration	
Measurement Type	Blower door test
Heating Season Infiltration Value	1559 CFM @ 50 Pascals
Cooling Season Infiltration Value	1559 CFM @ 50 Pascals
Shelter Class	4
Code Verification	Tested
Mechanical Ventilation for IAQ	
Type	None
Rate(cfm)	0
Sensible Recovery Efficiency(%)	0.00
Total Recovery Efficiency(%)	0.00
Hours per Day	24.0
Fan Power (watts)	0.00
Ventilation Strategy for Cooling	
Cooling Season Ventilation	Natural Ventilation

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Overview of "BIG Data" You Provide

Mandatory Requirements	
IECC Requirements	
Verified IECC 04	true
Verified IECC 06	true
Verified IECC 09	true
Verified IECC 12	false
Verified IECC 15	false
Verified NY-ECCC 2010	false
ENERGY STAR Products	true
ENERGY STAR Version 3 Checklist	
Thermal Enclosure Checklist	true
HVAC System Quality Installation Contractor Checklist	true
HVAC System Quality Installation Rater Checklist	true
Water Management System Builder Checklist	true
ENERGY STAR Version 3 Appliances	Exist
Refrigerators	false
Ceiling Fans	false
Exhaust Fans	false
Dishwashers	false

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Overview of "BIG Data" You Provide

Active Solar	
System Type	None
Collector Loop Type	None
Collector Type	None
Collector Orientation	None
Area(sq ft)	0.0
Tilt(degrees)	0.0
Volume(cu ft/gal)	0.0

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Case Study – HERS Report to Value

GENERAL DESCRIPTION		FOUNDATION	EXTERIOR DESCRIPTION materials/condition		INTERIOR materials/condition	
Units [X] One [ ] One with Accessory Unit		[X] Concrete Slab [ ] Crawl Space	Foundation Walls	Concrete/New	Floors	Bamboo/Cer/New
# of Stories 2		[ ] Full Basement [ ] Partial Basement	Exterior Walls	ICF/New	Walls	Drywall/New
Type [X] Det. [ ] Att. [ ] S-Det./End Unit		Basement Area 0 sq. ft.	Roof Surface	Metal/Insula/New	Trim/Finish	Wood/New
[ ] Existing [X] Proposed [ ] Under Const.		Basement Finish 0 %	Gutters & Downspouts	Alum/New	Bath Floor	Ceramic/New
Design (Style) Key West		[ ] Outside Entry/Exit [ ] Sump Pump	Window Type	Low-E/H.Impact/New	Bath Wainscot	Denshield/New
Year Built 2014		Evidence of [ ] Infestation	Storm Sash/Insulated	Low-E/New	Car Storage	[ ] None
Effective Age (Yrs) 1		[ ] Dampness [ ] Settlement	Screens	Fiberglass/New	[X] Driveway	# of Cars 0
Attic	[ ] None	Heating [X] FWA [ ] HWBB [ ] Radiant	Amenities	[ ] WoodStove(s) #0	Driveway Surface	Cir w/Pavers
[ ] Drop Stair	[ ] Stairs	[ ] Other Fuel Electric	[X] Fireplace(s) # 1	[ ] Fence None	[X] Garage	# of Cars 2
[ ] Floor	[X] Scuttle	Cooling [X] Central Air Conditioning	[X] Patio/Deck Rear	[X] Porch Scr	[ ] Carport	# of Cars 0
[ ] Finished	[ ] Heated	[ ] Individual [ ] Other	[ ] Pool None	[ ] Other None	[ ] Att. [ ] Det.	[X] Built-in

IMPROVEMENTS

Appliances [p] Refrigerator [X] Range/Oven [X] Dishwasher [X] Disposal [X] Microwave [ ] Washer/Dryer [X] Other (describe) Elevator

Finished area above grade contains: 7 Rooms 2 Bedrooms 3.0 Bath(s) 2,357 Square Feet of Gross Living Area Above Grade

Additional features (special energy efficient items, etc.). 19.5 SEER air, 5kW Generator, ENERGY STAR appl, LED Lighting, two skylights, on demand water heaters, R-30 Icynene Insulation, R-45 Walls and R-35 Ceiling insulation, Indoor Air Plus Package for improved indoor air quality

See the connection to your report and the appraiser's form?

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Case Study – HERS Report to Value

Energy Efficient Improvements

An energy-efficient property is one that uses resource-effective design, materials, building systems, and site orientation to conserve nonrenewable fuels.

Special energy-saving items must be recognized in the appraisal process and noted on the appraisal report form. For example, when completing the appraisal report (Form 1004), special energy-efficient items are to be addressed in the Improvements section in the Additional features field. The nature of these items and their contribution to value will vary throughout the country because of climactic conditions, differences in utility costs, and overall market reaction to the

Printed copies may not be the most current version. For the most current version, go to the online version at https://www.fanniemae.com/singlefamily/originating-underwriting. **603**

Part B, Origination Through Closing December 16, 2014
Subpart 4, Underwriting Property
Chapter 1, Appraisal Requirements, Appraisal Report Assessment

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Case Study – HERS Report to Value

- Builder provided lender wrong specifications
- Builder did not have a HERS Report
- Lender hired appraiser without knowledge of green although the appraiser was told it was green.
- Builder/Borrower challenged 1st and 2nd appraisal.
- Lender agreed to hire 3rd appraiser
- Borrower paid for 3 appraisals

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Second Rating Appraisers Need

2. **Confirmed or Final HERS** at the time of completion and final inspection by the appraiser!

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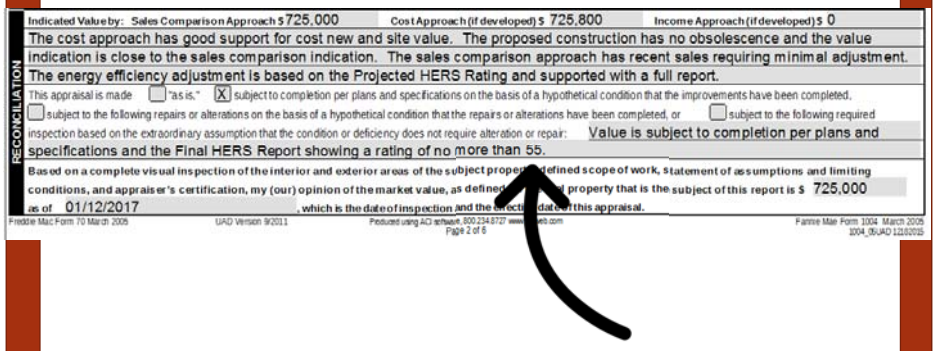
Appraisal is subject to Final Rating



RECONCILIATION

Indicated Value by: Sales Comparison Approach $ 725,000 Cost Approach (if developed) $ 725,800 Income Approach (if developed) $ 0

The cost approach has good support for cost new and site value. The proposed construction has no obsolescence and the value indication is close to the sales comparison indication. The sales comparison approach has recent sales requiring minimal adjustment. The energy efficiency adjustment is based on the Projected HERS Rating and supported with a full report.

This appraisal is made ☐ "as is," ☒ subject to completion per plans and specifications on the basis of a hypothetical condition that the improvements have been completed, ☐ subject to the following repairs or alterations on the basis of a hypothetical condition that the repairs or alterations have been completed, or ☐ subject to the following required inspection based on the extraordinary assumption that the condition or deficiency does not require alteration or repair: Value is subject to completion per plans and specifications and the Final HERS Report showing a rating of no more than 55.

Based on a complete visual inspection of the interior and exterior areas of the subject property, defined scope of work, statement of assumptions and limiting conditions, and appraiser's certification, my (our) opinion of the market value, as defined, of the real property that is the subject of this report is $ 725,000 as of 01/12/2017, which is the date of inspection and the effective date of this appraisal.

Freddie Mac Form 70 March 2005 UAD Version 9/2011 Produced using ACI software, 800.234.8727 Page 2 of 6 Fannie Mae Form 1004 March 2005 1004_05UAD 12/2/2015

Appraisal is subject to Final Rating

Appraisal Update and/or Completion Report

☐ CERTIFICATION OF COMPLETION

INTENDED USE: The intended use of this certification of completion is for the lender/client to confirm that the requirements or conditions stated in the appraisal report referenced above have been met.

INTENDED USER: The intended user of this certification of completion is the lender/client.

HAVE THE IMPROVEMENTS BEEN COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS STATED IN THE ORIGINAL APPRAISAL REPORT? ☐ Yes ☐ No If No, describe any impact on the opinion of market value.

APPRAISER'S CERTIFICATION: I certify that I have performed a visual inspection of the subject property to determine if the conditions or requirements stated in the original appraisal have been satisfied.

SUPERVISORY APPRAISER'S CERTIFICATION: I accept full responsibility for this certification of completion.

Problem with a Sampling Rating

No Confirmed HERS Rating required?

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Describe ways to assist in liability concerns

1. Auto Populating the MLS with HERS and Verified Information limits liability for users.
2. Providing full reports to appraisers results in more accurate valuations
3. Auto Populating the AI Res. Green and Energy Efficient Addendum from RESNET Database offers more accurate information.
4. Making the data accessible prevents energy or green washing and delays or additional costs to buyer.

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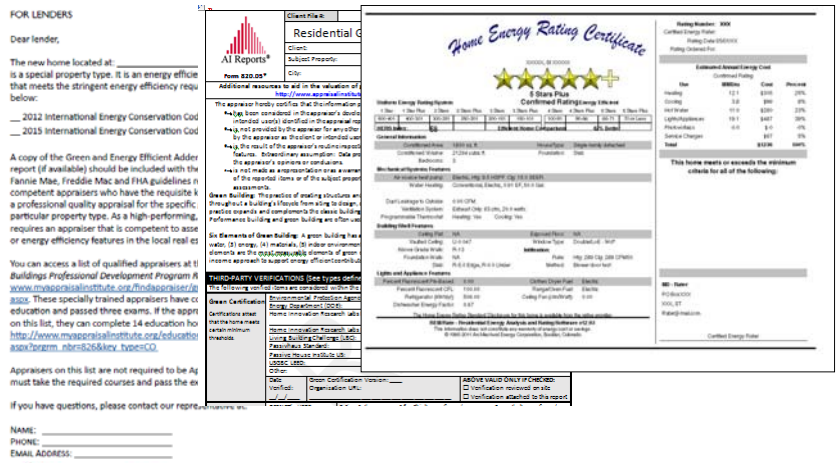
Documents that are a MUST



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HERS Auto Populating MLS =

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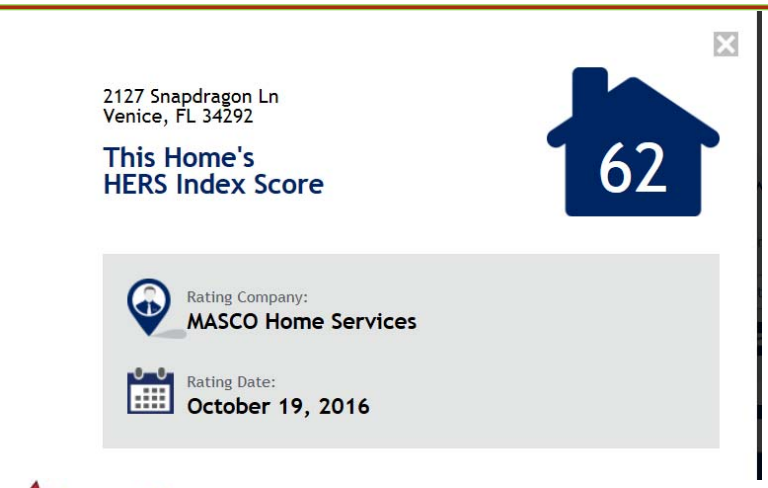
RESNET Database



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RESNET Database

MLS Shows:

2127 Snapdragon Ln, Venice, FL 34292

HERS Index: 62

Comments: READY NOW – *ENERGY STAR CERTIFIED* NEW CONSTRUCTION HOME.

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What's Missing From MLS/RESNET

MLS –

- No HERS Report Attached to MLS
- No ENERGY STAR Certificate attached or in Photo Gallery

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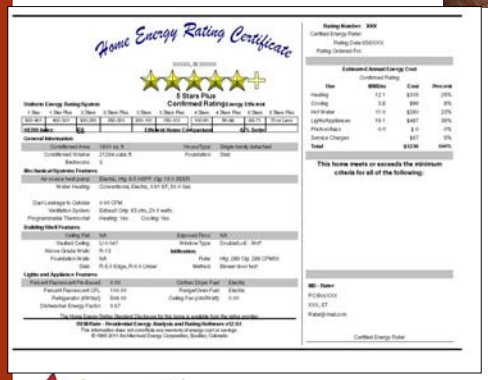

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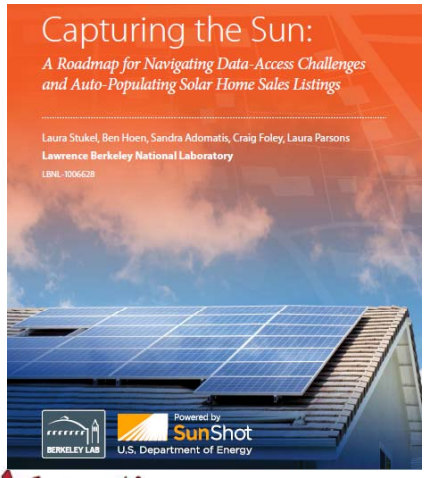
Roadmap to Auto-Populate MLS



Review the Roadmap and be prepared to do your part in auto-populating the MLS.

https://emp.lbl.gov/publications/capturing-sun-roadmap-navigating-data

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Solar Data Assessment

RESO®

- Real Estate Standards Organization
- Provides the targets to link solar data to MLS
- Data Dictionary v1.5 (July 2016)
- PV fields included as part of RESO Silver Certification

Data required for auto-pop of PV listings:

- Address
- Ownership details (see *Current Financing* and *Electric* fields)
- Size of the system (see *Power Production Size* field)
- Year the system was installed (see *Power Production* Year field)
- Actual or estimated annual system output (see *Power Production Annual* field)

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What Does Auto-Population Mean to a HERS Rater?

1. More reliable and consistent data provided to public.
2. Higher recognition of HERS as the market continues to see the term.
3. Sales data will be available to understand how and if HERS affect decision-making and sales prices.

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HERS Studies

Studies that will add credibility to HERS		
1. HERS Study	**SystemVision** Guarantees energy 4,500 + guaranteed since 2001	Study showing how close HERS Ratings are to actual.
2. HERS Study	Heavily populated **MLSs**	Value and Days On Market

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Key Take Aways

- Preliminary HERS-Full Report
- Final HERS
- Open more fields on the RESNET Database
- Promote HERS Study

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Sandra K. Adomatis, SRA, LEED Green Associate says….

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