

EnergyLogic University

Two Week Rater & BPI Training Curriculum (page 1 of 2)

Time	Sunday	Monday	Time	Tuesday	Time	Wednesday
8:00		Introductions	8:00	Windows - 54 Slides	8:00	Mechanical Systems 83 Slides
8:15		Logistics & class expectations	8:15	NFRC, U-value, SHGC, VT, AL, Low-e	8:15	Space heating, space cooling
8:30		Building Science 101 - 126 slides	8:30	Gases, frame, edge, comfort, passive solar	8:30	Heat pumps, low energy cooling
8:45		Overview - the cert and & brief history	8:45		8:45	Default values
9:00		The climate & systems thinking	9:00		9:00	
9:15		Air-flow - driving forces	9:15		9:15	
9:30		Energy & energy movement	9:30		9:30	
9:45		Human comfort	9:45		9:45	
10:00		Intro to Thermography	10:00	15 min break	10:00	15 min break
10:15		15 min break	10:15	Principals of Moisture - 85 Slides	10:15	
10:30		Advanced Framing - 54 slides	10:30	Durability, Bulk Water, Vapor, IAQ, CO	10:30	
10:45		Framing factor & window-to-wall ratio	10:45	Ventilation ASHRAE 62.2	10:45	Intro To Blower Door - 37 Slides
11:00		Thermal bridging, types of framing	11:00		11:00	Pascal, doing a test, intro to the DG700
11:15			11:15		11:15	Can't reach 50, expressions of leakage, ACH, NACH
11:30			11:30		11:30	
11:45			11:45		11:45	
12:00		Lunch	12:00	Lunch	12:00	Lunch
12:15		Lunch	12:15	Lunch	12:15	Lunch
12:30		Lunch	12:30	Lunch	12:30	Lunch
12:45		Lunch	12:45	Lunch	12:45	Lunch
1:00	Arrive in town with enough time to be at class at 8 am on MONDAY	Insulation 101 - 135 slides	1:00		1:00	Blower Door Demo and Hands-On
1:15		R & U-Value, RESNET grading.	1:15	RESNET Standards - 61 Slides	1:15	
1:30		Heat flow, weighted-R, parallel path	1:30	Read Provider expectation on your own time	1:30	
1:45		Types and application, retrofitting	1:45	It is on the thumb drive and in the class binder	1:45	
2:00			2:00	EEMs and EIMs - 19 Slides	2:00	
2:15		"	2:15	How they work	2:15	"
2:30		"	2:30		2:30	
2:45		"	2:45		2:45	
3:00			3:00		3:00	
3:15		15 min break	3:15	15 min break	3:15	15 min break
3:30		Air Barriers & Vapor Barriers - 57 slides	3:30	Water Heaters -43 Slides	3:30	Duct-Blaster Video
3:45		Defining the two, problems, condensation	3:45	Energy factor, tanks, tankless, solar	3:45	Intro to Duct Leakage - 53 Slides
4:00		How to install	4:00		4:00	Mastic, efficiency, total leakage, LTO
4:15			4:15		4:15	Leakage frame of reference
4:30			4:30	Intro to Mechanical - 33 Slides	4:30	
4:45			4:45	Comfort, HVAC design, design temp	4:45	Duct Leakage Demo
5:00			5:00	HHD, CDD, sensible and latent heat	5:00	EnergyLogic House
5:15			5:15		5:15	
5:30			5:30		5:30	
5:45			5:45		5:45	
6:00		Homework: Read Krigger, Practice Test #1	6:00	Homework: Read Krigger, Practice Test #2	6:00	Homework: Read Krigger, Practice Test #3

Objective: Produce well grounded basic energy raters capable of conducting energy ratings on homes

Focus points:
 Emphasize building science foundation
 Emphasize hands-on whenever possible
 Emphasize "rater" as analyst not data gatherer
 Build up to advanced training

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Thursday		Friday		Saturday		Sunday	
Time		Time		Time		Time	
8:00	Pressure Diagnostics - 58 Slides	8:00	RESNET Test Review and Prep	8:00	Data collection On EnergyLogic House		
8:15	Review driving forces, goals of PD, 50 pa reference, ALA, TBC issues	8:15		8:15	Sketch		
8:30		8:30		8:30	Windows		
8:45	Mechanical driven pressures	8:45		8:45	Mechanical & Ventilation		
9:00	Pressure house Demo	9:00		9:00	Insulation		
9:15		9:15		9:15			
9:30	Last Questions, Make sure computers are working	9:30		9:30			
9:45	15 min break	9:45	15 min break	9:45			
10:00		10:00		10:00			
10:15		10:15		10:15			
10:30	Blue Print Basics - 63 Slides	10:30		10:30			
10:45	Scale, plan view, section, elevation	10:45		10:45			
11:00	Compass, measuring a house, math,	11:00		11:00			
11:15	Demonstration TOW, extra time	11:15		11:15			
11:30	"	11:30		11:30			
11:45	"	11:45		11:45			
12:00	Lunch	12:00	Lunch	12:00			
12:15	Lunch	12:15	Lunch Back at Office	12:15			
12:30	Lunch	12:30	Lunch	12:30			
12:45	Lunch	12:45	Lunch	12:45	Test Prep		
1:00	Into to REM/Rate™ - 32 Slides	1:00	National RESNET HERS Test	1:00	Existing Home Take-off and REM/Rate™ In		
1:15	How REM/Rate™ works, the reference house, libraries	1:15		1:15			
1:30	The REM/Rate™ data entry pages, conditioned space	1:30		1:30			
1:45	"	1:45		1:45			
2:00	"	2:00		2:00			
2:15	"	2:15		2:15			
2:30	"	2:30		2:30			
2:45	"	2:45		2:45			
3:00	"	3:00		3:00			
3:15	15 min break	3:15		3:15			
3:30		3:30	RESNET ReTest day	3:30			
3:45		3:45		3:45			
4:00		4:00		4:00			
4:15	"	4:15		4:15			
4:30	Review Practice Test #2 & #3 if time	4:30		4:30			
4:45	"	4:45		4:45			
5:00		5:00		5:00			
5:15		5:15	Review what is needed for existing home	5:15			
5:30		5:30	Data collection: begin collecting the data	5:30	Quick review of plan-set in binder		
5:45		5:45		5:45	available for practice rating or one Probationary Rating		
6:00	Homework: Read Krigger, Practice Test #4	6:00	Homework: Study for RESNET Test	6:00			

Day of Rest
or RESNET
ReTest day

Monday		Tuesday		Wednesday	
Time		Time		Time	
8:00	New Construction Field Rating	8:00	Analyzing Consumption & Low Hanging Fruit- 24 Slides	8:00	Field House Hands On
8:15	Meet on site	8:15	Background on energy in your market	8:15	Mentoring Do a Full Energy Audit & Rating
8:30	Data collection, total duct leakage	8:30	Utility bill analysis	8:30	CAZ Testing
8:45	LTO, blower door test	8:45	Lights and Appliances	8:45	Building tightness limits
9:00		9:00		9:00	Auditing discussion
9:15		9:15	Auditing 101 - 52 Slides	9:15	Draw a house
9:30		9:30	The Building Analysis	9:30	
9:45		9:45	Approaching a house -Drawing	9:45	
10:00		10:00	Intro to scope of work	10:00	
10:15	15 min break	10:15	15 min break	10:15	
10:30		10:30	BPI Building Analyst Standards - 55 Slides	10:30	
10:45		10:45	Health & Safety	10:45	
11:00		11:00	Building air flow Standard	11:00	
11:15		11:15	Test in - Test out	11:15	
11:30		11:30	Building Evaluation	11:30	
11:45		11:45	CO- Testing	11:45	
12:00	Lunch	12:00	Lunch	12:00	Lunch
12:15	Lunch Back at Office	12:15	Lunch	12:15	Lunch
12:30	Lunch	12:30	Lunch	12:30	Lunch
12:45	Lunch	12:45	Lunch	12:45	Lunch
1:00	Field Rating	1:00	BPI - CAZ Testing - 118	1:00	Field Rating
1:15	Take-off and Input	1:15	CO what is it How is it produced	1:15	Take-off and Input
1:30		1:30	Combustion air	1:30	Reporting self directed with instructure
1:45		1:45	Venting Draft and spillage	1:45	Support
2:00		2:00	BPI Testing procedure	2:00	
2:15		2:15		2:15	
2:30	"	2:30	"	2:30	
2:45	"	2:45	"	2:45	
3:00		3:00	15 min break	3:00	
3:15	15 min break	3:15	Field House Hands On	3:15	
3:30		3:30	On EnergyLogic House	3:30	
3:45		3:45	CAZ Testing	3:45	
4:00		4:00	Building tightness limits	4:00	
4:15		4:15		4:15	
4:30		4:30		4:30	
4:45		4:45		4:45	
5:00		5:00		5:00	
5:15		5:15		5:15	
5:30		5:30		5:30	
5:45		5:45		5:45	
6:00	Homework: Read Krigger, Practice Test	6:00	Homework: Read Krigger, Practice Test	6:00	Homework: Read Krigger, Practice Test

Thursday		Friday		Saturday	
Time		Time		Time	
8:00	Test Prep	8:00	Field Test	8:00	Field Test
8:15		8:15		8:15	
8:30		8:30		8:30	
8:45		8:45		8:45	
9:00		9:00		9:00	
9:15	"	9:15		9:15	
9:30	"	9:30		9:30	
9:45	15 min break	9:45		9:45	
10:00	BPI written knowledge test	10:00		10:00	
10:15		10:15	Field Test	10:15	Field Test
10:30		10:30		10:30	
10:45		10:45		10:45	
11:00		11:00		11:00	
11:15		11:15		11:15	
11:30		11:30		11:30	
11:45	"	11:45		11:45	
12:00	Lunch	12:00		12:00	
12:15	Lunch	12:15		12:15	
12:30	Lunch	12:30	Field Test	12:30	Field Test
12:45	Lunch	12:45		12:45	
1:00	Field Test	1:00		1:00	
1:15		1:15		1:15	
1:30		1:30		1:30	
1:45		1:45		1:45	
2:00		2:00		2:00	
2:15	"	2:15		2:15	
2:30	"	2:30		2:30	
2:45	"	2:45	Field Test	2:45	Field Test
3:00		3:00		3:00	
3:15	Field Test	3:15		3:15	
3:30	"	3:30		3:30	
3:45	"	3:45		3:45	
4:00	"	4:00		4:00	
4:15	"	4:15		4:15	
4:30	"	4:30		4:30	
4:45	"	4:45	Field Test	4:45	Field Test
5:00		5:00		5:00	
5:15		5:15		5:15	
5:30		5:30		5:30	
5:45		5:45		5:45	
6:00	Review for Field Test	6:00		6:00	