

## Southface HERS Training Agenda - Atlanta, GA Calendar Year 2011 updated 02/02/11

	<u>Time*</u>	<u>Topic</u>
Sunday	<b>Day 0</b>	
	3:30 PM	Introductions, Goals of the Training - Quick HERS overview/ software demo
	5:00 PM	Geometry review - Take-offs, areas, volumes, roof pitch, etc.
	6:30 PM	Supper
	7:00 PM	Overview of wood-frame construction and Advanced Framing Concepts
	7:30 PM	Window Technologies
	8:00 PM	Adjourn
<i>Homework: 3 Geometry Takeoffs+"Uncle Bruce", Scan Krigger Book (Introduction + Chapters 1 &amp; 2)</i>		
<i>HW: Read SF Factsheet #22, "Blower Door &amp; Duct Blaster" + Appendix A-26 and A-27 of RESNET Standards</i>		
<i>HW: Read REMRate Help Screens "Property/Builder Info" through "Walls" (first nine screens)</i>		
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Monday	<b>Day 1</b>	
	7:45 AM	Arrival
	8:00 AM	HW Review
	8:45 AM	Overview of HERS
		High Performance Homes
		Energy Usage in Homes
	9:00 AM	House as a System
		Building Science Fundamentals
		Climate Map + Moisture Map
		Understanding Heat, Air, Moisture Flows
	11:30 AM	Building Components
		Air Sealing Techniques
		Intro Insulation Concepts
	12:30 PM	Lunch
	1:15 PM	Insulation & conduction heat flow
	1:45 PM	Insulating building components - foundations, walls, ceilings
	3:00 PM	Pressures and Diagnostics - Theory of Pressure Testing
	3:30 PM	Determining Infiltration: ACH50, ACHnat, ELR
	4:00 PM	Testing Protocol for House Depressurization - Blower Door Test
	6:00 PM	Adjourn
<i>Homework: HW Problems #1 - 15, plus assigned articles, Scan Krigger Chapters 3, 4, &amp; 5</i>		
<i>HW: Read REMRate Help Screens "Windows" through "Skylights" (next four screens)</i>		
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Tuesday	<b>Day 2</b>	
	8:00 AM	Homework Review
	9:00 AM	Energy - Units, Rates, & Quantities
	10:00 AM	HVAC I - Mechanical Equipment
		Mechanical Equipment Types
		Equipment Efficiencies & Load Calculation Basics
		Ductwork Types and applications
	12:30 PM	Lunch
	1:15 PM	HVAC II - Ductwork Essentials
		Ductwork Leakage and Pressure issues
		Duct leakage video
	2:00 PM	Water Heaters & Combustion Safety
	2:15 PM	Ventilation and IAQ for Homes
	2:45 PM	Fundamentals of Duct Pressure Testing
	3:00 PM	Testing Protocol for House/Duct Pressurization
	3:30 PM	Take-offs, Duct Blaster and Blower Door Testing (in field)
	6:00 PM	Adjourn
<i>Homework: HW Problems #16 - 30, plus assigned articles, Scan Krigger Chapters 6, 8 &amp; 9</i>		
<i>Homework: Read REMRate Help Screens "Mech Equipment" through "Lights &amp; Appliances" (next four screens)</i>		

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Wednesday **Day 3**

8:00 AM Homework Review and Tuesday Field Results  
9:15 AM Break  
9:30 AM Overview of RESNET + HERS standards, Ch 1-7 + Appendix  
10:30 AM Interactive ACME house REM/Rate Exercise  
12:30 PM Lunch  
1:00 PM HERS marketing / Providership / SF Program Overview / ENERGYSTAR etc  
2:15 PM Break  
2:45 PM Hands on Software Problem - Brady House Example Problem  
Analyzing Brady Example Problem Plans  
Participants create REM/Rate™ file  
5:30 PM Software reports - "Top Ten" run for Brady House  
6:00 PM Adjourn

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*Homework: HW Problems #31-45, Read "Top Ten Bloopers", Study for BD&db Oral Exam, Scan Krigger 7 & 10*

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Thursday **Day 4**

8:00 AM Homework Review  
8:45 AM Features of REM/Rate™ - Improvement analysis  
"Brady house" data entry, Improvement assessment  
10:45 AM HERS - REM/Rate™ Reports  
ENERGY STAR report  
Energy Codes and Other reports  
Upgrades / Predicting Actual Energy Costs  
12:15 PM Lunch  
1:00 PM Software exercise - "Tuesday House" - takeoffs, rating, improvement analysis  
(after lunch, Participants to perform Take-offs and rate the  
sessions are "Tuesday House" (base case) and optional improvement case  
concurrent) List all Assumptions and Improvements in Notepad  
Create 2 reports (side by side): "Energy Cost and Feature" and  
"Comp. Consump Graphic" - Turn in "TUESDAY-FirstLastName-Base" file  
Evaluation of Blower Door and Duct Blaster knowledge (oral exams)  
4:00 PM Classroom - Test prep - review for national electronic test  
6:00 PM Adjourn

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*Homework: Complete Tuesday Base file. Turn in "TUESDAY-FirstLastName-Base" file, study for Exam*

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Friday **Day 5**

7:15 AM In-field rating - at "Friday House"  
"Friday House" rating and optional Improvement Analysis  
Participants to perform FRIDAY HOUSE take-offs  
Complete checklist and Field Notes (as needed for rating)  
Software Performance Test (return to classroom)  
Perform rating using REM/Rate™  
11:30 AM Turn in "FRIDAY-FirstLastName software file  
Fill out course evaluation  
11:45 AM Lunch  
12:30 PM RESNET Electronic Test (open-book, open-notes, timed test)  
3:00 PM Adjourn

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\*Times and topics subject to change

There will be a 10-15 minute break in the morning and in the afternoon each day