

Summary of Residential ACM Tests

Comparison Date: 11/11/2015
Comparison Author: Ken Nittler
Candidate Software: 2016 CBECC-Res 2016 797r395
Reference Software: 2016 CBECC-Res 2016 797r395
Type of Software: Reference
Type of Construction: Both
Tolerance: 0.04

Test	Pass	Description
U01	Pass	Standard Design in All Zones for Prototype S2100ft2
U02	Pass	Standard Design in All Zones for Prototype S2700ft2
U03	Pass	Standard Design in All Zones for Prototype S6960ft2
U04	Pass	Proposed Design in All Zones for Prototype P2100ft2
U05	Pass	Proposed Design in All Zones for Prototype P2700ft2
U06	Pass	Proposed Design in All Zones for Prototype P6960ft2
U07	Pass	Common Measures in Zone 12 for Prototype P2100ft2
U08	Pass	Water Heating in Zone 12 for Prototype P2100ft2
U09	Pass	Multiple Orientation in Zone 12 for Prototype S2100ft2/P2100ft2
U10	Pass	Multi Family Water Heating in Zone 12 for Prototype P6960ft2
U11	Pass	Source Energy in Zone 12 for Prototype P2100ft2
U12	Pass	E+A+A Base & Windows in Zone 12 for Prototype P1665ft2
U13	Pass	E+A+A Walls & HVAC in Zone 12 for Prototype P1665ft2

Comparison between Reference & Candidate Software in kTDV/ft2

Comparison Date: 11/11/2015

Comparison Author: Ken Nittler

Candidate Software: 2016 CBECC-Res 2016 797r395

Test	Run	Description	Pass/Fail	Reference Proposed	Candidate Proposed	Percent Difference	Within Tolerance	Standard Equals	Reference Standard	Candidate Standard	Percent Difference	Within Tolerance
U01 Standard Design in All Zones for Prototype S2100ft2			Standard = Proposed for this test									
U01	R01	Zone 01	Pass	42.56	42.56	0.00%	Yes		42.58	42.58	42.58	0.00% Yes
U01	R02	Zone 02	Pass	32.82	32.82	0.00%	Yes		32.82	32.82	32.82	0.00% Yes
U01	R03	Zone 03	Pass	23.53	23.53	0.00%	Yes		23.53	23.53	23.53	0.00% Yes
U01	R04	Zone 04	Pass	27.57	27.57	0.00%	Yes		27.57	27.57	27.57	0.00% Yes
U01	R05	Zone 05	Pass	21.08	21.08	0.00%	Yes		21.08	21.08	21.08	0.00% Yes
U01	R06	Zone 06	Pass	19.16	19.16	0.00%	Yes		19.16	19.16	19.16	0.00% Yes
U01	R07	Zone 07	Pass	12.64	12.64	0.00%	Yes		12.64	12.64	12.64	0.00% Yes
U01	R08	Zone 08	Pass	20.33	20.33	0.00%	Yes		20.33	20.33	20.33	0.00% Yes
U01	R09	Zone 09	Pass	32.92	32.92	0.00%	Yes		32.92	32.92	32.92	0.00% Yes
U01	R10	Zone 10	Pass	33.29	33.29	0.00%	Yes		33.29	33.29	33.29	0.00% Yes
U01	R11	Zone 11	Pass	64.46	64.46	0.00%	Yes		64.46	64.46	64.46	0.00% Yes
U01	R12	Zone 12	Pass	41.41	41.41	0.00%	Yes		41.41	41.41	41.41	0.00% Yes
U01	R13	Zone 13	Pass	65.58	65.58	0.00%	Yes		65.58	65.58	65.58	0.00% Yes
U01	R14	Zone 14	Pass	61.38	61.38	0.00%	Yes		61.38	61.38	61.38	0.00% Yes
U01	R15	Zone 15	Pass	99.52	99.52	0.00%	Yes		99.52	99.52	99.52	0.00% Yes
U01	R16	Zone 16	Pass	56.78	56.78	0.00%	Yes		56.78	56.78	56.78	0.00% Yes
Result U01			Pass									
U02 Standard Design in All Zones for Prototype S2700ft2			Standard = Proposed for this test									
U02	R01	Zone 01	Pass	32.92	32.92	0.00%	Yes		32.92	32.92	32.92	0.00% Yes
U02	R02	Zone 02	Pass	29.60	29.60	0.00%	Yes		29.60	29.60	29.60	0.00% Yes
U02	R03	Zone 03	Pass	19.03	19.03	0.00%	Yes		19.03	19.03	19.03	0.00% Yes
U02	R04	Zone 04	Pass	25.61	25.61	0.00%	Yes		25.61	25.61	25.61	0.00% Yes
U02	R05	Zone 05	Pass	16.50	16.50	0.00%	Yes		16.50	16.50	16.50	0.00% Yes
U02	R06	Zone 06	Pass	18.04	18.04	0.00%	Yes		18.04	18.04	18.04	0.00% Yes
U02	R07	Zone 07	Pass	11.66	11.66	0.00%	Yes		11.66	11.66	11.66	0.00% Yes
U02	R08	Zone 08	Pass	21.07	21.07	0.00%	Yes		21.07	21.07	21.07	0.00% Yes
U02	R09	Zone 09	Pass	33.32	33.32	0.00%	Yes		33.32	33.32	33.32	0.00% Yes
U02	R10	Zone 10	Pass	34.16	34.16	0.00%	Yes		34.16	34.16	34.16	0.00% Yes
U02	R11	Zone 11	Pass	63.48	63.48	0.00%	Yes		63.48	63.48	63.48	0.00% Yes
U02	R12	Zone 12	Pass	42.55	42.55	0.00%	Yes		42.55	42.55	42.55	0.00% Yes
U02	R13	Zone 13	Pass	64.65	64.65	0.00%	Yes		64.65	64.65	64.65	0.00% Yes
U02	R14	Zone 14	Pass	60.60	60.60	0.00%	Yes		60.60	60.60	60.60	0.00% Yes
U02	R15	Zone 15	Pass	92.96	92.96	0.00%	Yes		92.96	92.96	92.96	0.00% Yes
U02	R16	Zone 16	Pass	53.67	53.67	0.00%	Yes		53.67	53.67	53.67	0.00% Yes
Result U02			Pass									
U03 Standard Design in All Zones for Prototype S6960ft2			Standard = Proposed for this test									
U03	R01	Zone 01	Pass	34.06	34.06	0.00%	Yes		34.06	34.06	34.06	0.00% Yes
U03	R02	Zone 02	Pass	36.27	36.27	0.00%	Yes		36.27	36.27	36.27	0.00% Yes
U03	R03	Zone 03	Pass	24.84	24.84	0.00%	Yes		24.84	24.84	24.84	0.00% Yes
U03	R04	Zone 04	Pass	33.33	33.33	0.00%	Yes		33.34	33.34	33.34	0.00% Yes
U03	R05	Zone 05	Pass	23.70	23.70	0.00%	Yes		23.70	23.70	23.70	0.00% Yes
U03	R06	Zone 06	Pass	26.34	26.34	0.00%	Yes		26.34	26.34	26.34	0.00% Yes
U03	R07	Zone 07	Pass	24.03	24.03	0.00%	Yes		24.03	24.03	24.03	0.00% Yes
U03	R08	Zone 08	Pass	35.10	35.10	0.00%	Yes		35.10	35.10	35.10	0.00% Yes
U03	R09	Zone 09	Pass	45.63	45.63	0.00%	Yes		45.63	45.63	45.63	0.00% Yes
U03	R10	Zone 10	Pass	46.47	46.47	0.00%	Yes		46.47	46.47	46.47	0.00% Yes
U03	R11	Zone 11	Pass	71.45	71.45	0.00%	Yes		71.45	71.45	71.45	0.00% Yes
U03	R12	Zone 12	Pass	54.75	54.75	0.00%	Yes		54.75	54.75	54.75	0.00% Yes
U03	R13	Zone 13	Pass	72.70	72.70	0.00%	Yes		72.70	72.70	72.70	0.00% Yes
U03	R14	Zone 14	Pass	67.48	67.48	0.00%	Yes		67.48	67.48	67.48	0.00% Yes
U03	R15	Zone 15	Pass	106.45	106.45	0.00%	Yes		106.45	106.45	106.45	0.00% Yes
U03	R16	Zone 16	Pass	56.81	56.81	0.00%	Yes		56.81	56.81	56.81	0.00% Yes
Result U03			Pass									
U04 Proposed Design in All Zones for Prototype P2100ft2			Standard = T01 Standard for this test									
U04	R01	Zone 01	Pass	40.70	40.70	0.00%	Yes		42.58	42.58	42.58	0.00% Yes
U04	R02	Zone 02	Pass	31.06	31.06	0.00%	Yes		32.82	32.82	32.82	0.00% Yes
U04	R03	Zone 03	Pass	21.41	21.41	0.00%	Yes		23.53	23.53	23.53	0.00% Yes
U04	R04	Zone 04	Pass	24.25	24.25	0.00%	Yes		27.57	27.57	27.57	0.00% Yes
U04	R05	Zone 05	Pass	18.87	18.87	0.00%	Yes		21.08	21.08	21.08	0.00% Yes
U04	R06	Zone 06	Pass	17.57	17.57	0.00%	Yes		19.16	19.16	19.16	0.00% Yes
U04	R07	Zone 07	Pass	11.83	11.83	0.00%	Yes		12.64	12.64	12.64	0.00% Yes
U04	R08	Zone 08	Pass	18.54	18.54	0.00%	Yes		20.33	20.33	20.33	0.00% Yes
U04	R09	Zone 09	Pass	29.16	29.16	0.00%	Yes		32.92	32.92	32.92	0.00% Yes
U04	R10	Zone 10	Pass	29.69	29.69	0.00%	Yes		33.29	33.29	33.29	0.00% Yes
U04	R11	Zone 11	Pass	58.82	58.82	0.00%	Yes		64.46	64.46	64.46	0.00% Yes
U04	R12	Zone 12	Pass	37.33	37.33	0.00%	Yes		41.41	41.41	41.41	0.00% Yes
U04	R13	Zone 13	Pass	60.00	60.00	0.00%	Yes		65.58	65.58	65.58	0.00% Yes
U04	R14	Zone 14	Pass	54.45	54.45	0.00%	Yes		61.38	61.38	61.38	0.00% Yes
U04	R15	Zone 15	Pass	92.78	92.78	0.00%	Yes		99.52	99.52	99.52	0.00% Yes
U04	R16	Zone 16	Pass	53.18	53.18	0.00%	Yes		56.78	56.78	56.78	0.00% Yes
Result U04			Pass									

U05 Proposed Design in All Zones for Prototype P2700ft2					Standard = T02 Standard for this test							
U05	R01	Zone 01	Pass	31.01	31.01	0.00%	Yes	32.92	32.92	32.92	0.00%	Yes
U05	R02	Zone 02	Pass	26.97	26.97	0.00%	Yes	29.60	29.60	29.60	0.00%	Yes
U05	R03	Zone 03	Pass	16.90	16.90	0.00%	Yes	19.03	19.03	19.03	0.00%	Yes
U05	R04	Zone 04	Pass	23.24	23.24	0.00%	Yes	25.61	25.61	25.61	0.00%	Yes
U05	R05	Zone 05	Pass	14.56	14.56	0.00%	Yes	16.50	16.50	16.50	0.00%	Yes
U05	R06	Zone 06	Pass	16.40	16.40	0.00%	Yes	18.04	18.04	18.04	0.00%	Yes
U05	R07	Zone 07	Pass	10.82	10.82	0.00%	Yes	11.66	11.66	11.66	0.00%	Yes
U05	R08	Zone 08	Pass	19.08	19.08	0.00%	Yes	21.07	21.07	21.07	0.00%	Yes
U05	R09	Zone 09	Pass	29.43	29.43	0.00%	Yes	33.32	33.32	33.32	0.00%	Yes
U05	R10	Zone 10	Pass	30.16	30.16	0.00%	Yes	34.16	34.16	34.16	0.00%	Yes
U05	R11	Zone 11	Pass	57.42	57.42	0.00%	Yes	63.48	63.48	63.48	0.00%	Yes
U05	R12	Zone 12	Pass	37.62	37.62	0.00%	Yes	42.55	42.55	42.55	0.00%	Yes
U05	R13	Zone 13	Pass	58.37	58.37	0.00%	Yes	64.65	64.65	64.65	0.00%	Yes
U05	R14	Zone 14	Pass	53.24	53.24	0.00%	Yes	60.60	60.60	60.60	0.00%	Yes
U05	R15	Zone 15	Pass	85.89	85.89	0.00%	Yes	92.96	92.96	92.96	0.00%	Yes
U05	R16	Zone 16	Pass	49.21	49.21	0.00%	Yes	53.67	53.67	53.67	0.00%	Yes
Result U05			Pass									

U06 Proposed Design in All Zones for Prototype P6960ft2					Standard = T03 Standard for this test							
U06	R01	Zone 01	Pass	34.79	34.79	0.00%	Yes	34.06	34.06	34.06	0.00%	Yes
U06	R02	Zone 02	Pass	33.92	33.92	0.00%	Yes	36.27	36.27	36.27	0.00%	Yes
U06	R03	Zone 03	Pass	23.72	23.72	0.00%	Yes	24.84	24.84	24.84	0.00%	Yes
U06	R04	Zone 04	Pass	29.82	29.82	0.00%	Yes	33.34	33.34	33.34	0.00%	Yes
U06	R05	Zone 05	Pass	22.66	22.66	0.00%	Yes	23.70	23.70	23.70	0.00%	Yes
U06	R06	Zone 06	Pass	24.35	24.35	0.00%	Yes	26.34	26.34	26.34	0.00%	Yes
U06	R07	Zone 07	Pass	21.48	21.48	0.00%	Yes	24.03	24.03	24.03	0.00%	Yes
U06	R08	Zone 08	Pass	31.85	31.85	0.00%	Yes	35.10	35.10	35.10	0.00%	Yes
U06	R09	Zone 09	Pass	40.37	40.37	0.00%	Yes	45.63	45.63	45.63	0.00%	Yes
U06	R10	Zone 10	Pass	41.30	41.30	0.00%	Yes	46.47	46.47	46.47	0.00%	Yes
U06	R11	Zone 11	Pass	65.36	65.36	0.00%	Yes	71.45	71.45	71.45	0.00%	Yes
U06	R12	Zone 12	Pass	49.09	49.09	0.00%	Yes	54.75	54.75	54.75	0.00%	Yes
U06	R13	Zone 13	Pass	65.73	65.73	0.00%	Yes	72.70	72.70	72.70	0.00%	Yes
U06	R14	Zone 14	Pass	61.14	61.14	0.00%	Yes	67.48	67.48	67.48	0.00%	Yes
U06	R15	Zone 15	Pass	97.76	97.76	0.00%	Yes	106.45	106.45	106.45	0.00%	Yes
U06	R16	Zone 16	Pass	53.88	53.88	0.00%	Yes	56.81	56.81	56.81	0.00%	Yes
Result U06			Pass									

U07 Common Measures in Zone 12 for Prototype P2100ft2					Standard = T01 Standard for this test							
U07	R01	Package	Pass	37.33	37.33	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R02	Fenestration U 0.40/S 0.40	Pass	43.12	43.12	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R03	Wall R13/Roof Deck Above R6	Pass	36.33	36.33	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R04	Ceiling R49 /Roof Deck Below R0/Radiant Barrier	Pass	41.65	41.65	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R05	Furnace AFUE 92	Pass	34.86	34.86	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R06	Air Conditioner SEER 16/EER 14	Pass	36.10	36.10	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R07	No Cool Vent	Pass	41.95	41.95	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R08	Ducts 2% Leakage	Pass	36.75	36.75	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R09	Insulation Construction Quality Improved	Pass	32.84	32.84	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U07	R10	Air Leakage ACH50 2.0	Pass	35.80	35.80	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
Result U07			Pass									

U08 Water Heating in Zone 12 for Prototype P2100ft2					Standard = T01 Standard for this test							
U08	R01	Package	Pass	37.33	37.33	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R02	Parallel Piping	Pass	37.44	37.44	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R03	Small Tankless EF 0.80/Input 195000/0 gal	Pass	37.57	37.57	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R04	Large Tankless RE 0.76/Input 300000/0 gal	Pass	38.09	38.09	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R05	Large Storage RE 0.77/Input 100000/75gal/Stby 0.01	Pass	40.11	40.11	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R06	Large Storage RE 0.77/Input 100000/75gal/Stby 0.03	Pass	46.08	46.08	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R07	Electric Resistance EF 0.92/Input 4500	Pass	60.26	60.26	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R08	Heat Pump EF 2.4/Input 4500	Pass	43.04	43.04	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R09	2 Water Heaters using Multiplier	Pass	37.33	37.33	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U08	R10	2 Water Heaters Using 2 entries	Pass	37.33	37.33	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
Result U08			Pass									

U09 Multiple Orientation in Zone 12 for Prototype S2100ft2/P2100ft2					Standard = T01 Standard for this test							
U09	R01	Single Standard Front 45	Pass	42.68	42.68	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R02	East Standard	Pass	41.41	41.41	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R03	South Standard	Pass	41.41	41.41	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R04	West Standard	Pass	41.41	41.41	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R05	North Standard	Pass	41.41	41.41	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R06	Single Proposed front 45	Pass	42.51	42.51	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R07	East Proposed	Pass	44.13	44.13	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R08	South Proposed	Pass	37.86	37.86	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R09	West Proposed	Pass	43.10	43.10	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
U09	R10	North Proposed	Pass	37.33	37.33	0.00%	Yes	41.41	41.41	41.41	0.00%	Yes
Result U09			Pass									

U10 Multi Family Water Heating in Zone 12 for Prototype P6960ft2					Standard = Varies for this test							
U10	R01	8 Storage	Pass	59.41	59.41	0.00%	Yes	54.75	54.75	54.75	0.00%	Yes
U10	R02	8 Storage 2 Systems	Pass	59.41	59.41	0.00%	Yes	54.75	54.75	54.75	0.00%	Yes
U10	R03	8 LgStor	Pass	66.12	66.12	0.00%	Yes	54.75	54.75	54.75	0.00%	Yes

U10	R04	2 LgStor Central Solar	Pass	49.22	49.22	0.00% Yes	54.88	54.88	54.88	0.00% Yes
U10	R05	2 LgStor Central Solar Recirc	Pass	60.29	60.29	0.00% Yes	65.95	65.95	65.95	0.00% Yes
U10	R06	2 LgStor Central Recirc	Pass	65.13	65.13	0.00% Yes	65.95	65.95	65.95	0.00% Yes
U10	R07	2 SmInstantant Central Solar	Pass	45.42	45.42	0.00% Yes	51.08	51.08	51.08	0.00% Yes
U10	R08	2 SmInstantant Central Solar Recirc	Pass	57.05	57.05	0.00% Yes	62.71	62.71	62.71	0.00% Yes
U10	R09	1 Indirect Central Solar	Pass	51.90	51.90	0.00% Yes	56.89	56.89	56.89	0.00% Yes
U10	R10	1 Indirect Central Solar Recirc	Pass	63.78	63.78	0.00% Yes	68.76	68.76	68.76	0.00% Yes

Result U10

U11 Source Energy in Zone 12 for Prototype P2100ft2							Standard = Varies for this test			
U11	R01	Package	Pass	37.33	37.33	0.00% Yes	41.41	41.41	41.41	0.00% Yes
U11	R02	Package No Natural Gas	Pass	61.59	61.59	0.00% Yes	66.59	66.59	66.59	0.00% Yes
U11	R03	Electric DHW	Pass	57.94	57.94	0.00% Yes	41.41	41.41	41.41	0.00% Yes
U11	R04	Electric DHW no Natural Gas	Pass	72.95	72.95	0.00% Yes	66.59	66.59	66.59	0.00% Yes
U11	R05	Heatpump DHW	Pass	43.04	43.04	0.00% Yes	41.41	41.41	41.41	0.00% Yes
U11	R06	Heatpump DHW no Natural Gas	Pass	58.05	58.05	0.00% Yes	66.59	66.59	66.59	0.00% Yes
U11	R07	Heatpump HVAC	Pass	34.79	34.79	0.00% Yes	39.66	39.66	39.66	0.00% Yes
U11	R08	Heatpump HVAC no Natural Gas	Pass	44.04	44.04	0.00% Yes	48.91	48.91	48.91	0.00% Yes
U11	R09	Heatpump HVAC & DHW	Pass	40.50	40.50	0.00% Yes	39.66	39.66	39.66	0.00% Yes
U11	R10	Heatpump HVAC & DHW no Natural Gas	Pass	40.50	40.50	0.00% Yes	48.91	48.91	48.91	0.00% Yes

Result U11

U12 E+A+A Base & Windows in Zone 12 for Prototype P1665ft2							Standard = Varies for this test			
U12	R01	E 1440ft2 as New Construction	Pass	218.64	218.64	0.00% Yes	145.13	145.13	145.13	0.00% Yes
U12	R02	E 1440ft2 as Addition/Alteration	Pass	221.17	221.17	0.00% Yes	221.17	221.17	221.17	0.00% Yes
U12	R03	EA 1665ft2	Pass	193.42	193.42	0.00% Yes	190.05	190.05	190.05	0.00% Yes
U12	R04	EAA Ceiling R38 Verified	Pass	168.16	168.16	0.00% Yes	190.05	190.05	190.05	0.00% Yes
U12	R05	EAA Ceiling R38 Verified Wind U0.41/S0.36	Pass	133.99	133.99	0.00% Yes	157.49	157.49	157.49	0.00% Yes
U12	R06	EAA Ceiling R38 Verified Wind U0.41/S0.36 Verified	Pass	133.99	133.99	0.00% Yes	157.49	157.49	157.49	0.00% Yes
U12	R07	EAA Ceiling R38 Verified Wind U0.40/S0.35	Pass	133.08	133.08	0.00% Yes	157.49	157.49	157.49	0.00% Yes
U12	R08	EAA Ceiling R38 Verified Wind U0.40/S0.35 Verified	Pass	133.08	133.08	0.00% Yes	190.05	190.05	190.05	0.00% Yes
U12	R09	EAA Ceiling R38 Verified Wind U0.39/S0.34	Pass	132.26	132.26	0.00% Yes	157.49	157.49	157.49	0.00% Yes
U12	R10	EAA Ceiling R38 Verified Wind U0.39/S0.34 Verified	Pass	132.26	132.26	0.00% Yes	190.05	190.05	190.05	0.00% Yes

Result U12

U13 E+A+A Walls & HVAC in Zone 12 for Prototype P1665ft2							Standard = Varies for this test			
U13	R01	EAA Ceiling R38 Verified Wall R11	Pass	131.76	131.76	0.00% Yes	153.89	153.89	153.89	0.00% Yes
U13	R02	EAA Ceiling R38 Verified Wall R11 Verified	Pass	131.76	131.76	0.00% Yes	153.89	153.89	153.89	0.00% Yes
U13	R03	EAA Ceiling R38 Verified Wall R13	Pass	129.61	129.61	0.00% Yes	153.89	153.89	153.89	0.00% Yes
U13	R04	EAA Ceiling R38 Verified Wall R13 Verified	Pass	129.61	129.61	0.00% Yes	190.05	190.05	190.05	0.00% Yes
U13	R05	EAA Ceiling R38 Verified HVAC Worse	Pass	128.77	128.77	0.00% Yes	113.82	113.82	113.82	0.00% Yes
U13	R06	EAA Ceiling R38 Verified HVAC Worse Verified	Pass	128.77	128.77	0.00% Yes	113.82	113.82	113.82	0.00% Yes
U13	R07	EAA Ceiling R38 Verified HVAC Equal	Pass	101.77	101.77	0.00% Yes	113.82	113.82	113.82	0.00% Yes
U13	R08	EAA Ceiling R38 Verified HVAC Equal Verified	Pass	101.77	101.77	0.00% Yes	190.05	190.05	190.05	0.00% Yes
U13	R09	EAA Ceiling R38 Verified HVAC Better	Pass	83.19	83.19	0.00% Yes	113.82	113.82	113.82	0.00% Yes
U13	R10	EAA Ceiling R38 Verified HVAC Better Verified	Pass	83.19	83.19	0.00% Yes	190.05	190.05	190.05	0.00% Yes

Result U13