BU - A-1

Permit Number

Checked By/Date

RES*check* Compliance Certificate
2003 IECC

RES*check* Software Version 3.6 Release 2
Data filename: C:\Program Files\Check\REScheck\Boulderunfinishedbasement.rck

PROJECT TITLE: Boulder/ Basic unfinished daylight basement

IRC Chapter 11 compliant using prescriptive method w/ max. 15% glazing

CITY: Lawrence
STATE: Kansas
HDD: 4734
CONSTRUCTION TYPE: Single Family
WINDOW / WALL RATIO: 0.19

DATE: 03/13/05
DATE OF PLANS: 03/12/05

COMPLIANCE: Passes
Maximum UA = 726
Your Home UA = 683
5.9% Better Than Code (UA)

	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor	UA
Ceiling 1: Cathedral Ceiling (no attic)	207	38.0	0.0		6
Ceiling 2: Flat Ceiling or Scissor Truss	551	38.0	0.0		17
Ceiling 3: Flat Ceiling or Scissor Truss	273	38.0	0.0		8
Ceiling 4: Flat Ceiling or Scissor Truss	141	38.0	0.0		4
Ceiling 5: Flat Ceiling or Scissor Truss	29	38.0	0.0		1
Ceiling 6: Flat Ceiling or Scissor Truss	123	38.0	0.0		4
Ceiling 7: Cathedral Ceiling (no attic)	158	38.0	0.0		4
Wall 1: Wood Frame, 16" o.c.	441	13.0	3.0		16
Window 1: Vinyl Frame:Double Pane	62			0.450	28
Window 2: Vinyl Frame:Double Pane	31			0.450	14
Window 3: Vinyl Frame:Double Pane	31			0.450	14
Window 4: Vinyl Frame:Double Pane	12			0.450	5
Window 5: Vinyl Frame:Double Pane	84			0.450	38
Wall 2: Wood Frame, 16" o.c.	315	13.0	3.0		22
Wall 3: Wood Frame, 16" o.c.	137	13.0	3.0		7
Window 6: Vinyl Frame:Double Pane	41			0.450	18
Wall 4: Wood Frame, 16" o.c.	63	13.0	3.0		4
Wall 5: Wood Frame, 16" o.c.	135	13.0	3.0		6
Window 7: Vinyl Frame:Double Pane	14			0.450	6
Door 1: Glass	41			0.140	6
Wall 6: Wood Frame, 16" o.c.	198	13.0	3.0		13

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Door 2: Solid	20			0.330	7
Wall 7: Wood Frame, 16" o.c.	252	13.0	3.0		14
Window 8: Vinyl Frame:Double Pane	31			0.450	14
Window 9: Vinyl Frame:Double Pane	29			0.450	13
Wall 8: Wood Frame, 16" o.c.	16	13.0	3.0		1
Wall 9: Wood Frame, 16" o.c.	32	13.0	3.0		2
Wall 10: Wood Frame, 16" o.c.	32	13.0	3.0		2
Wall 11: Wood Frame, 16" o.c.	126	13.0	3.0		9
Wall 12: Wood Frame, 16" o.c.	171	13.0	3.0		8
Window 10: Vinyl Frame:Double Pane	62			0.450	28
Wall 13: Wood Frame, 16" o.c.	189	13.0	3.0		13
Wall 14: Wood Frame, 16" o.c.	18	13.0	3.0		1
Wall 15: Wood Frame, 16" o.c.	81	13.0	3.0		4
Window 11: Vinyl Frame:Double Pane	25			0.450	11
Wall 16: Wood Frame, 16" o.c.	18	13.0	3.0		1
Wall 17: Wood Frame, 16" o.c.	54	13.0	3.0		3
Window 12: Vinyl Frame:Double Pane	16			0.450	7
Wall 18: Wood Frame, 16" o.c.	171	13.0	3.0		12
Wall 19: Wood Frame, 16" o.c.	32	13.0	3.0		2
Wall 20: Wood Frame, 16" o.c.	490	13.0	3.0		28
Window 13: Vinyl Frame:Double Pane	39			0.450	18
Window 14: Vinyl Frame:Double Pane	25			0.450	11
Window 15: Vinyl Frame:Double Pane	25			0.450	11
Wall 21: Wood Frame, 16" o.c.	190	13.0	3.0		10
Window 16: Vinyl Frame:Double Pane	49			0.340	17
Wall 22: Wood Frame, 16" o.c.	172	13.0	3.0		12
Basement Wall 3: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.5' Insulation depth: 9.0'	441	0.0	9.0		26
Basement Wall 4: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 9.0'	270	0.0	9.0		17
Basement Wall 6: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 9.0'	333	0.0	9.0		19
Basement Wall 7: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 9.0'	63	0.0	9.0		4
Basement Wall 8: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 9.0'	117	0.0	9.0		7
Basement Wall 9: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 9.0'	333	0.0	9.0		21
Floor 1: All-Wood Joist/Truss:Over Unconditioned Space	1448	19.0	0.0		68
Floor 2: All-Wood Joist/Truss:Over Unconditioned Space	440	19.0	0.0		21

BU - A-3

Furnace 1: Forced Hot Air, 78 AFUE
Air Conditioner 1: Electric Central Air, 10 SEER

COMPLIANCE STATEMENT: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2003 IECC requirements in RES*check* Version 3.6 Release 2 (formerly MEC*check*) and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

Builder/Designer_____ Date_____

BU - B-1

Permit Number

Checked By/Date

RES*check* Compliance Certificate
2003 IECC

RES*check* Software Version 3.6 Release 2
Data filename: C:\Program Files\Check\REScheck\Boulderunfinishedbasement.rck

PROJECT TITLE: Boulder/ Basic unfinished daylight basement
Typical current construction
w/ max 15% glazing

CITY: Lawrence
STATE: Kansas
HDD: 4734
CONSTRUCTION TYPE: Single Family
WINDOW / WALL RATIO: 0.19

R-13 walls
R-30 clgs.
R-13 frame walls in unfinished daylight basement

DATE: 03/13/05
DATE OF PLANS: 03/12/05

Double pane glas

COMPLIANCE: Fails
Maximum UA = 632
Your Home UA = 845
33.7% Worse Than Code (UA)

	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor	UA
Ceiling 1: Cathedral Ceiling (no attic)	207	30.0	0.0		7
Ceiling 2: Flat Ceiling or Scissor Truss	551	30.0	0.0		19
Ceiling 3: Flat Ceiling or Scissor Truss	273	30.0	0.0		10
Ceiling 4: Flat Ceiling or Scissor Truss	141	30.0	0.0		5
Ceiling 5: Flat Ceiling or Scissor Truss	29	30.0	0.0		1
Ceiling 6: Flat Ceiling or Scissor Truss	123	30.0	0.0		4
Ceiling 7: Cathedral Ceiling (no attic)	158	30.0	0.0		5
Wall 1: Wood Frame, 16" o.c.	441	13.0	0.0		18
Window 1: Vinyl Frame:Double Pane	62			0.490	30
Window 2: Vinyl Frame:Double Pane	31			0.490	15
Window 3: Vinyl Frame:Double Pane	31			0.490	15
Window 4: Vinyl Frame:Double Pane	12			0.490	6
Window 5: Vinyl Frame:Double Pane	84			0.490	41
Wall 2: Wood Frame, 16" o.c.	315	13.0	0.0		26
Wall 3: Wood Frame, 16" o.c.	137	13.0	0.0		8
Window 6: Vinyl Frame:Double Pane	41			0.490	20
Wall 4: Wood Frame, 16" o.c.	63	13.0	0.0		5
Wall 5: Wood Frame, 16" o.c.	135	13.0	0.0		7
Window 7: Vinyl Frame:Double Pane	14			0.490	7
Door 1: Glass	41			0.140	6
Wall 6: Wood Frame, 16" o.c.	198	13.0	0.0		15

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Door 2: Solid	20			0.330	7
Wall 7: Wood Frame, 16" o.c.	252	13.0	0.0		16
Window 8: Vinyl Frame:Double Pane	31			0.490	15
Window 9: Vinyl Frame:Double Pane	29			0.490	14
Wall 8: Wood Frame, 16" o.c.	16	13.0	0.0		1
Wall 9: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 10: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 11: Wood Frame, 16" o.c.	126	13.0	0.0		10
Wall 12: Wood Frame, 16" o.c.	171	13.0	0.0		9
Window 10: Vinyl Frame:Double Pane	62			0.490	30
Wall 13: Wood Frame, 16" o.c.	189	13.0	0.0		15
Wall 14: Wood Frame, 16" o.c.	18	13.0	0.0		1
Wall 15: Wood Frame, 16" o.c.	81	13.0	0.0		5
Window 11: Vinyl Frame:Double Pane	25			0.490	12
Wall 16: Wood Frame, 16" o.c.	18	13.0	0.0		1
Wall 17: Wood Frame, 16" o.c.	54	13.0	0.0		3
Window 12: Vinyl Frame:Double Pane	16			0.490	8
Wall 18: Wood Frame, 16" o.c.	171	13.0	0.0		14
Wall 19: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 20: Wood Frame, 16" o.c.	490	13.0	0.0		33
Window 13: Vinyl Frame:Double Pane	39			0.490	19
Window 14: Vinyl Frame:Double Pane	25			0.490	12
Window 15: Vinyl Frame:Double Pane	25			0.490	12
Wall 21: Wood Frame, 16" o.c.	190	13.0	0.0		12
Window 16: Vinyl Frame:Double Pane	49			0.490	24
Wall 22: Wood Frame, 16" o.c.	172	13.0	0.0		14
Basement Wall 3: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.5' Insulation depth: 0.0'	441	0.0	0.0		76
Basement Wall 4: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	270	0.0	0.0		55
Basement Wall 6: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 0.0'	333	0.0	0.0		47
Basement Wall 7: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 0.0'	63	0.0	0.0		9
Basement Wall 8: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	117	0.0	0.0		24
Basement Wall 9: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	333	0.0	0.0		68
Furnace 1: Forced Hot Air, 78 AFUE					
Air Conditioner 1: Electric Central Air, 10 SEER					

BU – C-1

Permit Number

Checked By/Date

RES*check* Compliance Certificate
2003 IECC

RES*check* Software Version 3.6 Release 2
Data filename: C:\Program Files\Check\REScheck\Boulderunfinishedbasement.rck

PROJECT TITLE: Boulder/ Basic unfinished day light basement Typical Current construction w/as built glazing (7.4%) and 80% AFUE furnace

CITY: Lawrence
STATE: Kansas
HDD: 4734
CONSTRUCTION TYPE: Single Family
WINDOW / WALL RATIO: 0.09

R-13 walls
R-30 clgs
R-13 frame walls in unfinished basement
Double pane glass.

DATE: 03/13/05
DATE OF PLANS: 03/12/05

COMPLIANCE: Fails
Maximum UA = 645
Your Home UA = 725
12.4% Worse Than Code (UA)

	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor	UA
Ceiling 1: Cathedral Ceiling (no attic)	207	30.0	0.0		7
Ceiling 2: Flat Ceiling or Scissor Truss	551	30.0	0.0		19
Ceiling 3: Flat Ceiling or Scissor Truss	273	30.0	0.0		10
Ceiling 4: Flat Ceiling or Scissor Truss	141	30.0	0.0		5
Ceiling 5: Flat Ceiling or Scissor Truss	29	30.0	0.0		1
Ceiling 6: Flat Ceiling or Scissor Truss	123	30.0	0.0		4
Ceiling 7: Cathedral Ceiling (no attic)	158	30.0	0.0		5
Wall 1: Wood Frame, 16" o.c.	441	13.0	0.0		27
Window 1: Vinyl Frame:Double Pane	30			0.490	15
Window 2: Vinyl Frame:Double Pane	15			0.490	7
Window 3: Vinyl Frame:Double Pane	15			0.490	7
Window 4: Vinyl Frame:Double Pane	6			0.490	3
Window 5: Vinyl Frame:Double Pane	41			0.490	20
Wall 2: Wood Frame, 16" o.c.	315	13.0	0.0		26
Wall 3: Wood Frame, 16" o.c.	137	13.0	0.0		10
Window 6: Vinyl Frame:Double Pane	20			0.490	10
Wall 4: Wood Frame, 16" o.c.	63	13.0	0.0		5
Wall 5: Wood Frame, 16" o.c.	135	13.0	0.0		9
Window 7: Vinyl Frame:Double Pane	7			0.490	3
Door 1: Glass	20			0.140	3
Wall 6: Wood Frame, 16" o.c.	198	13.0	0.0		15

Door 2: Solid	20			0.330	7
Wall 7: Wood Frame, 16" o.c.	252	13.0	0.0		18
Window 8: Vinyl Frame:Double Pane	15			0.490	7
Window 9: Vinyl Frame:Double Pane	14			0.490	7
Wall 8: Wood Frame, 16" o.c.	16	13.0	0.0		1
Wall 9: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 10: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 11: Wood Frame, 16" o.c.	126	13.0	0.0		10
Wall 12: Wood Frame, 16" o.c.	171	13.0	0.0		12
Window 10: Vinyl Frame:Double Pane	30			0.490	15
Wall 13: Wood Frame, 16" o.c.	189	13.0	0.0		15
Wall 14: Wood Frame, 16" o.c.	18	13.0	0.0		1
Wall 15: Wood Frame, 16" o.c.	81	13.0	0.0		6
Window 11: Vinyl Frame:Double Pane	12			0.490	6
Wall 16: Wood Frame, 16" o.c.	18	13.0	0.0		1
Wall 17: Wood Frame, 16" o.c.	54	13.0	0.0		4
Window 12: Vinyl Frame:Double Pane	8			0.490	4
Wall 18: Wood Frame, 16" o.c.	171	13.0	0.0		14
Wall 19: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 20: Wood Frame, 16" o.c.	490	13.0	0.0		37
Window 13: Vinyl Frame:Double Pane	19			0.490	9
Window 14: Vinyl Frame:Double Pane	12			0.490	6
Window 15: Vinyl Frame:Double Pane	12			0.490	6
Wall 21: Wood Frame, 16" o.c.	190	13.0	0.0		14
Window 16: Vinyl Frame:Double Pane	24			0.490	12
Wall 22: Wood Frame, 16" o.c.	172	13.0	0.0		14
Basement Wall 3: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.5' Insulation depth: 0.0'	441	0.0	0.0		76
Basement Wall 4: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	270	0.0	0.0		55
Basement Wall 6: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 0.0'	333	0.0	0.0		47
Basement Wall 7: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 0.0'	63	0.0	0.0		9
Basement Wall 8: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	117	0.0	0.0		24
Basement Wall 9: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	333	0.0	0.0		68
Furnace 1: Forced Hot Air, 80 AFUE					
Air Conditioner 1: Electric Central Air, 10 SEER					

BU - D-1

Permit Number

Checked By/Date

RES*check* Compliance Certificate
2003 IECC

RES*check* Software Version 3.6 Release 2
Data filename: C:\Program Files\Check\REScheck\Boulderunfinishedbasement.rck

PROJECT TITLE: Boulder/ Basic unfinished daylight basement
Typical current construction
w/ as built glazing (7.4%)
and 90% AFUE Furnace (cost $750)

CITY: Lawrence
STATE: Kansas
HDD: 4734
CONSTRUCTION TYPE: Single Family
WINDOW / WALL RATIO: 0.09

R-13 walls
R-30 clgs.
R-13 frame walls in unfinished basement
Double pane glass

DATE: 03/13/05
DATE OF PLANS: 03/12/05

COMPLIANCE: Passes
Maximum UA = 730
Your Home UA = 725
0.7% Better Than Code (UA)

	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor	UA
Ceiling 1: Cathedral Ceiling (no attic)	207	30.0	0.0		7
Ceiling 2: Flat Ceiling or Scissor Truss	551	30.0	0.0		19
Ceiling 3: Flat Ceiling or Scissor Truss	273	30.0	0.0		10
Ceiling 4: Flat Ceiling or Scissor Truss	141	30.0	0.0		5
Ceiling 5: Flat Ceiling or Scissor Truss	29	30.0	0.0		1
Ceiling 6: Flat Ceiling or Scissor Truss	123	30.0	0.0		4
Ceiling 7: Cathedral Ceiling (no attic)	158	30.0	0.0		5
Wall 1: Wood Frame, 16" o.c.	441	13.0	0.0		27
Window 1: Vinyl Frame:Double Pane	30			0.490	15
Window 2: Vinyl Frame:Double Pane	15			0.490	7
Window 3: Vinyl Frame:Double Pane	15			0.490	7
Window 4: Vinyl Frame:Double Pane	6			0.490	3
Window 5: Vinyl Frame:Double Pane	41			0.490	20
Wall 2: Wood Frame, 16" o.c.	315	13.0	0.0		26
Wall 3: Wood Frame, 16" o.c.	137	13.0	0.0		10
Window 6: Vinyl Frame:Double Pane	20			0.490	10
Wall 4: Wood Frame, 16" o.c.	63	13.0	0.0		5
Wall 5: Wood Frame, 16" o.c.	135	13.0	0.0		9
Window 7: Vinyl Frame:Double Pane	7			0.490	3
Door 1: Glass	20			0.140	3
Wall 6: Wood Frame, 16" o.c.	198	13.0	0.0		15

BU- D-2

Door 2: Solid	20			0.330	7
Wall 7: Wood Frame, 16" o.c.	252	13.0	0.0		18
Window 8: Vinyl Frame:Double Pane	15			0.490	7
Window 9: Vinyl Frame:Double Pane	14			0.490	7
Wall 8: Wood Frame, 16" o.c.	16	13.0	0.0		1
Wall 9: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 10: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 11: Wood Frame, 16" o.c.	126	13.0	0.0		10
Wall 12: Wood Frame, 16" o.c.	171	13.0	0.0		12
Window 10: Vinyl Frame:Double Pane	30			0.490	15
Wall 13: Wood Frame, 16" o.c.	189	13.0	0.0		15
Wall 14: Wood Frame, 16" o.c.	18	13.0	0.0		1
Wall 15: Wood Frame, 16" o.c.	81	13.0	0.0		6
Window 11: Vinyl Frame:Double Pane	12			0.490	6
Wall 16: Wood Frame, 16" o.c.	18	13.0	0.0		1
Wall 17: Wood Frame, 16" o.c.	54	13.0	0.0		4
Window 12: Vinyl Frame:Double Pane	8			0.490	4
Wall 18: Wood Frame, 16" o.c.	171	13.0	0.0		14
Wall 19: Wood Frame, 16" o.c.	32	13.0	0.0		3
Wall 20: Wood Frame, 16" o.c.	490	13.0	0.0		37
Window 13: Vinyl Frame:Double Pane	19			0.490	9
Window 14: Vinyl Frame:Double Pane	12			0.490	6
Window 15: Vinyl Frame:Double Pane	12			0.490	6
Wall 21: Wood Frame, 16" o.c.	190	13.0	0.0		14
Window 16: Vinyl Frame:Double Pane	24			0.490	12
Wall 22: Wood Frame, 16" o.c.	172	13.0	0.0		14
Basement Wall 3: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.5' Insulation depth: 0.0'	441	0.0	0.0		76
Basement Wall 4: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	270	0.0	0.0		55
Basement Wall 6: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 0.0'	333	0.0	0.0		47
Basement Wall 7: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 9.0' Insulation depth: 0.0'	63	0.0	0.0		9
Basement Wall 8: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	117	0.0	0.0		24
Basement Wall 9: Solid Concrete or Masonry Wall height: 9.0' Depth below grade: 8.0' Insulation depth: 0.0'	333	0.0	0.0		68
Furnace 1: Forced Hot Air, 90 AFUE					
Air Conditioner 1: Electric Central Air, 10 SEER					