

ผนวก จ

ผลการทดลองในโปรแกรม DOE

VisualDOE 4.0 - Architectural Details???????? 11, 2549

Project Information

Name: New Project
Address: Address
Description:
Analysis done by: moi @ DEPARTMENT OF ARCHITECTURE
Gross Area: 1,100 ft?
Conditioned Area: 400 ft?
Project File: c:\program files\gd14\run\newproject75.gph
Case Name: Basecase
Case Description: Copy based on Copy based on Base Case
Number of Blocks: 4

Block 1, Level 2: Block_2

Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions

Coordinates (ft)		Widths (ft)		Depths (ft)	
X	0	Width	10	Depth	20
Y	0				
Z	8				

Block Constructions

Construction	Description	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Roof	Mtl. Fm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling	1.246	0.4
Floor	Copy of R-19 Wd. Fm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions

Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	3.25	6
Surface_1030	10	3.25	6
Surface_1032	10	3.25	6

Facade Shading

Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions

Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VLT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Surface_1029	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1030	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1031	n.a.	n.a.	n.a.	n.a.	4" BRICK, Face	0.562	8.1
Surface_1032	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1

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Project Information

Name: New Project
Address: Address
Description:
Analysis done by: mol @ DEPARTMENT OF ARCHITECTURE
Gross Area: 1,100 ft?
Conditioned Area: 400 ft?
Project File: c:\program files\gdt4\run\newproject75.gph
Case Name: Basecase
Case Description: Copy based on Copy based on Base Case
Number of Blocks: 4

Block 1, Level 2: Block 2

Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions

Coordinates (ft)		Widths (ft)		Depths (ft)	
X	0	Width	10	Depth	20
Y	0				
Z	8				

Block Constructions

Construction	Description	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Roof	Mtl. Frm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling	1.246	0.4
Floor	Copy of R-19 Wd. Frm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions

Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	3.25	6
Surface_1030	10	3.25	6
Surface_1032	10	3.25	6

Facade Shading

Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions

Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VLT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Surface_1029	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1030	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1031	n.a.	n.a.	n.a.	n.a.	4" BRICK, Face	0.562	8.1
Surface_1032	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1

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Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions		Widths (ft)		Depths (ft)	
Coordinates (ft)		Width		Depth	
X	0	10		20	
Y	0				
Z	8				

Block Constructions		U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Roof	Mtl. Frm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling	1.246	0.4
Floor	Copy of R-19 Wd. Frm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions			
Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	3.25	6
Surface_1030	10	3.25	6
Surface_1032	10	3.25	6

Facade Shading							
Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions							
Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VLT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Surface_1029	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1030	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1031	n.a.	n.a.	n.a.	n.a.	4" BRICK, Face	0.562	8.1
Surface_1032	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1

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Project Information

Name: New Project
 Address: Address
 Description:
 Analysis done by: mol @ DEPARTMENT OF ARCHITECTURE
 Gross Area: 1,100 ft?
 Conditioned Area: 400 ft?
 Project File: c:\program files\gdt4\run\newproject75.gph
 Case Name: Basecase
 Case Description: Copy based on Copy based on Base Case
 Number of Blocks: 4

Block 1, Level 2: Block 2

Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions

Coordinates (ft)		Widths (ft)		Depths (ft)	
X	0	Width	10	Depth	20
Y	0				
Z	8				

Block Constructions

Construction	Description	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Roof	Mtl. Fm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling	1.246	0.4
Floor	Copy of R-19 Wd. Fm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions

Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	3.25	6
Surface_1030	10	3.25	6
Surface_1032	10	3.25	6

Facade Shading

Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions

Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VLT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Surface_1029	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1030	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1031	n.a.	n.a.	n.a.	n.a.	4" BRICK, Face	0.562	8.1
Surface_1032	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1

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VisualDOE 4.0 - Architectural Details

??????? 11, 2549

Project Information

Name: New Project
Address: Address
Description:
Analysis done by: mol @ DEPARTMENT OF ARCHITECTURE
Gross Area: 1,100 ft?
Conditioned Area: 400 ft?
Project File: c:\program files\gdt4\run\newproject75.gph
Case Name: Glass
Case Description: Copy based on Copy based on Copy based on Base Case
Number of Blocks: 4

Block 1, Level 2: Block 2

Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions

Coordinates (ft)		Widths (ft)		Depths (ft)	
X	0	Width	10	Depth	20
Y	0				
Z	8				

Block Constructions

Construction	Description	U-Factor (Btu/h-ft ² -°F)	HC (Btu/h-ft ² -°F)
Roof	Mtl. Fm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling	1.246	0.4
Floor	Copy of R-19 Wd. Fm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions

Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	3.25	6
Surface_1030	10	3.25	6
Surface_1032	10	3.25	6

Facade Shading

Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions

Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VLT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/h-ft ² -°F)
Surface_1029	Tinted Ocean Green 6 mm	1.0	0.65	0.72	4" BRICK, Face	0.562	8.1
Surface_1030	Tinted Ocean Green 6 mm	1.0	0.65	0.72	4" BRICK, Face	0.562	8.1
Surface_1031	n.a.	n.a.	n.a.	n.a.	4" BRICK, Face	0.562	8.1
Surface_1032	Tinted Ocean Green 6 mm	1.0	0.65	0.72	4" BRICK, Face	0.562	8.1

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VisualDOE 4.0 - Architectural Details

??????? 11, 2549

Project Information
Name: New Project
Address: Address
Description:
Analysis done by: moi @ DEPARTMENT OF ARCHITECTURE
Gross Area: 1,100 ft?
Conditioned Area: 400 ft?
Project File: c:\program files\gdt4\run\newproject75.gph
Case Name: InsCeil
Case Description: Copy based on Copy based on Copy based on Base Case
Number of Blocks: 4

Block 1, Level 2: Block 2

Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions		Widths (ft)		Depths (ft)	
Coordinates (ft)		Width	10	Depth	20
X	0				
Y	0				
Z	8				

Construction	Description	U-Factor (Btu/h-ft ² -°F)	HC (Btu/h-ft ² -°F)
Roof	Mtl. Frm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling+ins	0.081	0.5
Floor	Copy of R-19 Wd. Frm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions			
Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	4.5	5.5
Surface_1030	10	4.5	5.5
Surface_1031	10	4.5	5.5
Surface_1032	10	4.5	5.5

Facade Shading							
Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1031	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions							
Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VLT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/h-ft ² -°F)
Surface_1029	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1030	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1031	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1032	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1

กรณีเพิ่มผนังระบบ EIFS

VisualDOE 4.0 - Architectural Details

???????? 11, 2549

Project Information

Name: New Project
Address: Address
Description:
Analysis done by: moi @ DEPARTMENT OF ARCHITECTURE
Gross Area: 1,100 ft?
Conditioned Area: 400 ft?
Project File: c:\program files\gdt4\run\newproject75.gph
Case Name: EIFS
Case Description: Copy based on Copy based on Copy based on Base Case
Number of Blocks: 4

Block 1, Level 2: Block_2

Block Information		Ceiling and Plenum Heights	
Shape	Rect	Floor to Floor Height	8 ft
Zoning	Single	Plenum Height	4 ft
Zone Depth	10 ft	Number of Floors	1
Number of Zones	1		
Number of Facades	4		

Block Dimensions		Widths (ft)		Depths (ft)	
Coordinates (ft)		Width		Depth	
X	0	10		20	
Y	0				
Z	8				

Construction	Description	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Roof	Mtl. Fm. R-7	0.151	1.9
Ceiling	Gyp. bd. ceiling	1.246	0.4
Floor	Copy of R-19 Wd. Fm.	0.043	5.8
Int. Floor	R-0 Mass	0.293	9.3
Interior Wall	Partition	0.387	1.0

Facade Dimensions			
Name	Bay Width (ft)	Window Height (ft)	Window Width (ft)
Surface_1029	10	4.5	5.5
Surface_1030	10	4.5	5.5
Surface_1031	10	4.5	5.5
Surface_1032	10	4.5	5.5

Facade Shading							
Name	Window Recess (ft)	Interior Shading	Exterior Shading	Overhang Distance (ft)	Overhang Projection (ft)	Side Fin Distance (ft)	Side Fin Projection (ft)
Surface_1029	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1030	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1031	0	No	No	n.a.	n.a.	n.a.	n.a.
Surface_1032	0	No	No	n.a.	n.a.	n.a.	n.a.

Facade Constructions							
Name	Window Construction	U-Factor (Btu/h-ft ² -°F)	SC	VT	Wall Construction	U-Factor (Btu/h-ft ² -°F)	HC (Btu/ft ² -°F)
Surface_1029	Single Clear 6 mm	1.087	0.95	0.881	EIFS 2"+Brick	0.093	8.3
Surface_1030	Single Clear 6 mm	1.087	0.95	0.881	EIFS 2"+Brick	0.093	8.3
Surface_1031	Single Clear 6 mm	1.087	0.95	0.881	4" BRICK, Face	0.562	8.1
Surface_1032	Single Clear 6 mm	1.087	0.95	0.881	EIFS 2"+Brick	0.093	8.3

