



CITY OF SACRAMENTO

Downtown Permit Center
1231 I Street, Suite 200
Sacramento, CA 95814

www.cityofsacramento.org
Help Line: 1-916-808-5656 OR 1-866-EZ-PERMIT
Inspection: 1-916-808-7622

North Permit Center
2101 Arena Blvd., Suite 200
Sacramento, CA 95834

OWNER BUILDER VERIFICATION

1. Check one below - I or my immediate family (parent, spouse, or child) will perform:

- A - all the work authorized by this permit.
- B - a portion of the work.
- C - none of the work.

If B or C is checked, complete 2 or 3 below.

2. A State licensed contractor (*) will be hired to do:

- all of the authorized work.
- a portion of the authorized work.

Name _____ Phone _____

Address _____

Type of Work _____

Name _____ Phone _____

Address _____

Type of Work _____

Name _____ Phone _____

Address _____

Type of Work _____

Name _____ Phone _____

Address _____

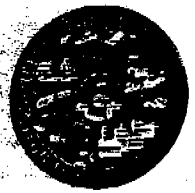
Type of Work _____

3. I will utilize unlicensed person(s) other than my immediate family to perform all or portions of the authorized work. A Certificate of Workers Compensation must be on file at this office.

I declare under penalty of perjury that the above is true and correct. I have read and understand the owner-builder information on the reverse side of this form.

Signed: Property Owner RI Development (Printed name) Cecilia (Signature) Permit No. 0508628
 Date 09/08/05 Case No. _____
 Job Address 6333 63rd St.

Note: * Information regarding unknown contractors or change in subcontractors shall be submitted to the Building Inspection field office.



Downtown Permit Center
 1231 I Street, Suite 200
 Sacramento, CA 95814
 Help Line: 1-916-264-5656

CITY OF SACRAMENTO
 DEVELOPMENT SERVICES DEPARTMENT
 BUILDING DIVISION
www.cityofsacramento.org

North Permit Center
 2101 Arena Blvd., Suite 200
 Sacramento, CA 95834
 Inspection: 1-916-808-4677

SITE DRAINAGE AND ENCROACHMENT QUESTIONNAIRE

PARCEL # 038 - 0202 - 008 PERMIT # 0508628
 SITE ADDRESS 6333 63 RD STREET ACREAGE _____

The City of Sacramento requires a building site to be graded to drain correctly and site drainage routed to an approved location. To help us understand the site drainage for your project and determine if a driveway permit or an encroachment permit is required please answer the following questions. All questions must be answered.

- | | | | |
|--|------------------------------------|------------------------------------|-----|
| 1. Are there existing structures on the site? | Y | <input checked="" type="radio"/> N | |
| 2. Is there an existing concrete or paved driveway to this parcel from the street? | Y | <input checked="" type="radio"/> N | |
| 3. Will the existing access to this parcel be changed in any way for this project? | *Y | <input checked="" type="radio"/> N | |
| 4. Are all portions of the lot higher than the crown of the street? | <input checked="" type="radio"/> Y | *N | |
| 5. Are all portions of the lot higher than the back of the sidewalk? | <input checked="" type="radio"/> Y | *N | |
| 6. Is there a curb and gutter at the street level? | <input checked="" type="radio"/> Y | N | |
| 7. Is there a sidewalk with a curb and gutter at the street? | <input checked="" type="radio"/> Y | N | |
| 8. Is the curb at the street square? | <input checked="" type="radio"/> Y | N | |
| 9. Is there a rolled curb at the street? | Y | N | N/A |
| 10. Is there a drainage ditch or culvert at the street? | Y | *N | N/A |
| 11. Does the lot drain from back to front? | Y | <input checked="" type="radio"/> N | |
| 12. Does the lot drain from front to rear? | <input checked="" type="radio"/> Y | *N | |
| 13. Does another lot drain across this parcel? | *Y | <input checked="" type="radio"/> N | |
| 14. Does the lot drain from side to side? | *Y | <input checked="" type="radio"/> N | |
| 15. Does the site have an existing low area or drainage swale? | *Y | <input checked="" type="radio"/> N | |
| 16. Does the drainage swale drain to an adjacent parcel? | *Y | N | N/A |
| 17. Does the drainage swale drain to the street? | Y | *N | N/A |
| 18. Will existing drainage be re-routed? | <input checked="" type="radio"/> Y | N | |
| 19. Will drainage ditches or culverts be constructed or modified? | *Y | <input checked="" type="radio"/> N | N/A |
| 20. Did this project require approval from the Zoning Administrator? | *Y | <input checked="" type="radio"/> N | |
| 21. Did the project require approval from the Planning Administrator? | *Y | <input checked="" type="radio"/> N | |

RECEIVED
 AUG 09 2005
 WILLDAN
 14388-1010

CITY OF SACRAMENTO
NORTH HERMIT
CENTRE

AUG 08 2005

RECEIVED

Department of
PUBLICWORKS
CITY OF SACRAMENTO

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS
TECHNICAL SERVICES DIVISION

Department of
PUBLICWORKS
CITY OF SACRAMENTO

SUBDIVISION & FRONTAGE IMPROVEMENT PROJECTS CASH RECEIPT

PROJECT NAME: 62233 63rd St PROJECT NO. _____
JOB NO. _____

RECEIVED FROM:

I understand that fees may be required if the cost to process the application is greater than the minimum fee. Also, for some applications, additional processing charges may be required after the requested entitlements are approved.

SIGNATURE: [Signature] Description: DRIVE WAY

RECEIVED
AUG 09 2005
WILLDAN
14388-1010

Applicants address for mailing receipt:
Name: Olevis Builders TOTAL AMOUNT PAID: 250.00
Address: 1900 Builder Prepared by / Date: AW 7-14-05
City, State, Zip: 400 SAC CA 95818 Check No. 10591
Paid by CASH Yes No

Dev Svc Fee Form #3 Revised 6/6/03
Distribution - White - File Yellow - Customer

0508628

TITLE 24 REPORT

Title 24 Report for:
63rd St.
63rd St.
Sacramento, CA 95838

Project Designer:

Olenka Builders
6525 32nd St. Suit A
North Highlands, CA 95660
(916)339-1267

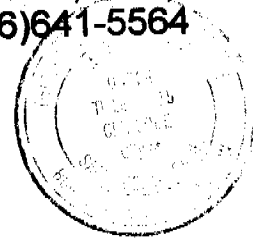
Report Prepared By:

Alex Martynovskiy
OLENKA BUILDERS
1400 Bell Ave
Sacramento, CA 95838
(916)641-5564

Revised

This set of plans and specifications must be approved by the City of Sacramento. It is understood that the City of Sacramento is not responsible for any errors or omissions from the information provided. No permission from the City of Sacramento is required for the use of this plan and specification. No liability shall be held for any violation of any City Ordinance or State Law.

JOB SITE COPY



JK6 11-1-05

Job Number:
231

Date:
10/28/2005

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2001 Building Energy Efficiency Standards. This program developed by EnergySoft, LLC (415) 883-5900.

Certificate of Compliance: Residential

(Part 1 of 2) **CF-1R**

63rd St.

Project Title

63rd St. Sacramento

Project Address

OLENKA BUILDERS

Documentation Author

Computer Performance

Compliance Method (Package or Computer)

(916)641-5564

Telephone

12

Climate Zone

10/28/2005

Date

Building Permit #

Plan Check / Date

Field Check / Date

Enforcement Agency Use Only

GENERAL INFORMATION

Total Conditioned Floor Area: 1,890 ft²

Average Ceiling Height: 8.0 ft

Total Conditioned Slab Area: 820 ft²

Building Type:

(check one or more)

Single Family Detached

Single Family Attached

Multi-Family

Addition

Existing Building

Existing Plus Addition

Front Orientation: (South) 180 deg Floor Construction Type: Slab Floor

Number of Dwelling Units: 1.00

Number of Stories: 2

Raised Floor

BUILDING SHELL INSULATION

Component Type	Frame Type	Const. Assembly U-Value	Location/Comments (attic, garage, typical, etc.)
Slab On Grade	n/a	0.756	Covered Slab w/R-0.0 Perimeter Insulation
Slab On Grade	n/a	0.756	Exposed Slab w/R-0.0 Perimeter Insulation
R-13 Wall (W.13.2x4.16)	Wood	0.088	Exterior Wall
Solid Wood Door	None	0.387	Exterior Door
R-38 Roof (R.38.2x4.24)	Wood	0.024	Exterior Roof
R-19 Floor (F.19.2x8.16)	Wood	0.049	Exterior Floor / Over Open Space

FENESTRATION

Shading Devices

Type	Orientation	Area (SF)	U-Factor	Fenestration SHGC	Exterior Shading	Overhang Yes / No	Side Fins Yes / No
Front	(South)	85.0	0.56	0.65	Bug Screen	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>
Left	(West)	59.0	0.56	0.65	Bug Screen	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>
Rear	(North)	116.0	0.56	0.65	Bug Screen	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>
Right	(East)	16.0	0.56	0.65	Bug Screen	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>
						<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
						<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
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						<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Run Initiation Time: 10/28/05 22:11:45

Run Code: 1130562705

Mandatory Measures Checklist: Residential (Page 1 of 2) MF-1R

NOTE: Lowrise residential buildings subject to the Standards must contain these measures regardless of the compliance approach used. Items marked with an asterisk (*) may be superseded by more stringent compliance requirements listed on the Certificate of Compliance. When this checklist is incorporated into the permit documents, the features noted shall be considered by all parties as minimum component performance specifications for the mandatory measures whether they are shown elsewhere in the documents or on this checklist only.

DESCRIPTION <small>Instructions: Check or initial applicable boxes or enter N/A if not applicable.</small>	DESIGNER	ENFORCEMENT
Building Envelope Measures		
<input checked="" type="checkbox"/> *§150(a): Minimum R-19 ceiling insulation.	AM AM	
<input checked="" type="checkbox"/> §150(b): Loose fill insulation manufacturer's labeled R-Value.	AM	
<input checked="" type="checkbox"/> *§150(c): Minimum R-13 wall insulation in wood framed walls or equivalent U-value in metal frame walls (does not apply to exterior mass walls).	AM	
<input checked="" type="checkbox"/> *§150(d): Minimum R-13 raised floor insulation in framed floors or equivalent.	AM	
<input type="checkbox"/> §150(l): Slab edge insulation - water absorption rate no greater than 0.3%, water vapor transmission rate no greater than 2.0 perm/inch.		
<input checked="" type="checkbox"/> §118: Insulation specified or installed meets insulation quality standards. Indicate type and form.	AM	
<input checked="" type="checkbox"/> §116-17: Fenestration Products, Exterior Doors and Infiltration/Exfiltration Controls <ol style="list-style-type: none"> 1. Doors and windows between conditioned and unconditioned spaces designed to limit air leakage. 2. Fenestration products (except field fabricated) have label with certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration certification. 3. Exterior doors and windows weatherstripped; all joints and penetrations caulked and sealed. 	AM	
<input type="checkbox"/> §150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.		
<input type="checkbox"/> §150(f): Special infiltration barrier installed to comply with Section 151 meets Commission quality standards.		
<input checked="" type="checkbox"/> §150(e): Installation of Fireplaces, Decorative Gas Appliances and Gas Logs. <ol style="list-style-type: none"> 1. Masonry and factory-built fireplaces have: <ol style="list-style-type: none"> a. Closeable metal or glass door b. Outside air intake with damper and control c. Flue damper and control 2. No continuous burning gas pilots allowed. 	AM	
Space Conditioning, Water Heating and Plumbing System Measures		
<input checked="" type="checkbox"/> §110-13: HVAC equipment, water heaters, showerheads and faucets certified by the Commission.	AM	
<input checked="" type="checkbox"/> §150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	AM	
<input checked="" type="checkbox"/> §150(i): Setback thermostat on all applicable heating and/or cooling systems.	AM	
<input checked="" type="checkbox"/> §150(j): Pipe and Tank Insulation <ol style="list-style-type: none"> 1. Storage gas water heaters rated with an Energy Factor less than 0.58 must be externally wrapped with insulation having an installed thermal resistance of R-12 or greater. 2. First 5 feet of pipes closest to water heater tank, non-recirculating systems, insulated (R-4 or greater) 3. Back-up tanks for solar system, unfired storage tanks, or other indirect hot water tanks have R-12 external insulation or R-16 combined internal/external insulation. 4. All buried or exposed piping insulated in recirculating sections of hot water systems. 5. Cooling system piping below 55 degrees F. insulated. 6. Piping insulating between heating source and indirect hot water tank. 	AM	
EnergyPro 3.1 By EnergySoft User Number: 5661	Job Number: 231	Page: 5 of 16

Computer Method Summary

(Part 1 of 3) C-2R

10/28/2005

63rd St
Project Title
63rd St Sacramento
Project Address
OLENKA BUILDERS
Documentation Author

(916)641-5564
Telephone
12
Climate Zone

Date
Building Permit #
Plan Check/Date
Field Check/Date

Computer Performance
Compliance Method (Package or Computer)

Source Energy Use (kBtu/sf-yr)	Standard Design	Proposed Design	Compliance Margin
Space Heating	19.23	9.22	10.01
Space Cooling	7.25	5.32	1.92
Domestic Hot Water	13.51	22.61	-9.10
Totals	39.99	37.16	2.83
			7.1%

Percent better than Standard:

BUILDING COMPLIES

Total Conditioned Floor Area: 1,890 ft²
 Building Type: Single Fam Detached
 Building Front Orientation: (South) 180 deg
 Number of Dwelling Units: 1.00
 Number of Stories: 2

Floor Construction Type: Raised Floor Slab Floor
 Total Fenestration Area: 14.6%
 Total Conditioned Volume: 15,118 ft³
 Total Conditioned Slab Area: 820 ft²

BUILDING ZONE INFORMATION

Zone Name	Floor Area	Volume	# of Units	Zone Type	Thermostat Type	Vent Hgt.	Vent Area
HVAC System	1,890	15,118	1.00	Conditioned	Setback	8	n/a

OPAQUE SURFACES

Type	Area	U-Fac.	Act. Azm.	Tilt	Solar Gains Y/N	Form 3 Reference	Location / Comments
Wall	171	0.088	180	90	X	R-13 Wall (W.13.2x4.16)	1st Floor
Door	20	0.387	180	90	X	Solid Wood Door	1st Floor
Wall	270	0.088	270	90	X	R-13 Wall (W.13.2x4.16)	1st Floor
Wall	150	0.088	0	90	X	R-13 Wall (W.13.2x4.16)	1st Floor
Wall	292	0.088	90	90	X	R-13 Wall (W.13.2x4.16)	1st Floor
Roof	39	0.024	0	0	X	R-38 Roof (R.38.2x4.24)	1st Floor
Floor	270	0.049	0	180	X	R-19 Floor (F.19.2x8.16)	2nd Floor
Wall	199	0.088	180	90	X	R-13 Wall (W.13.2x4.16)	2nd Floor
Wall	279	0.088	270	90	X	R-13 Wall (W.13.2x4.16)	2nd Floor
Wall	209	0.088	0	90	X	R-13 Wall (W.13.2x4.16)	2nd Floor
Wall	300	0.088	90	90	X	R-13 Wall (W.13.2x4.16)	2nd Floor
Roof	1,070	0.024	0	0	X	R-38 Roof (R.38.2x4.24)	2nd Floor

Computer Method Summary

(Part 3 of 3)

C-2R

10/28/2005

63rd St.

Date

Project Title

THERMAL MASS FOR HIGH MASS DESIGN

Type	Area (sf)	Thick. (in.)	Heat Cap.	Cond.	Form 3 Reference	Inside R-Val.	Location Comments
Frame Wall, Gyp. Board	171	0.00	13	0.09	R-13 Wall (W.13.2x4.16)	0	1st Floor / Exterior Mass
Frame Wall, Gyp. Board	270	0.00	13	0.09	R-13 Wall (W.13.2x4.16)	0	1st Floor / Exterior Mass
Frame Wall, Gyp. Board	150	0.00	13	0.09	R-13 Wall (W.13.2x4.16)	0	1st Floor / Exterior Mass
Frame Wall, Gyp. Board	292	0.00	13	0.09	R-13 Wall (W.13.2x4.16)	0	1st Floor / Exterior Mass
Frame Wall, Gyp. Board	199	0.00	13	0.09	R-13 Wall (W.13.2x4.16)	0	2nd Floor / Exterior Mass

PERIMETER LOSSES

Type	Length	F2 Factor	Insulation R-Val.	Depth	Location / Comments
Slab Perimeter	102	0.76	0.0	0	1st Floor
Slab Perimeter	31	0.76	0.0	0	1st Floor

HVAC SYSTEMS

Heating Equipment Type (furnace, heat pump, etc.)	Minimum Efficiency (AFUE/HSPF)	Distribution Type and Location (ducts/attic, etc.)	Duct R-Value	Thermostat Type	Location / Comments
Split Heat Pump	8.20 HSPF	Ducts in Attic	4.2	Setback	HVAC System

Hydronic Piping System Name	Pipe Length	Pipe Diameter	Insul. Thick.

Cooling Equipment Type (air conditioner, heat pump, evap. cooling)	Minimum Efficiency (SEER)	Duct Location (attic, etc.)	Duct R-Value	Thermostat Type	Location / Comments
Split Heat Pump	10.0 SEER	Ducts in Attic	4.2	Setback	HVAC System

WATER HEATING SYSTEMS

Water Heater System Name	Water Heater Type	Distribution Type	# in Syst.	Rated ¹ Input (Btu/hr)	Tank Cap. (gal)	Energy Fact ¹ or Recovery Efficiency	Standby ¹ Loss (%)	Tank Insul. R-Value Ext.
GENERAL ELECTRIC GE50T6EA	Storage Elec.	Standard	1	15,358	50	0.93	n/a	n/a

¹ For small gas storage (rated input <= 75000 Btu/hr), electric resistance and heat pump water heaters, list energy factor. For large gas storage water heaters (rated input > 75000 Btu/hr), list Rated Input, Recovery Efficiency and Standby Loss. For instantaneous gas water heaters, list Rated Input, and Recovery Efficiency.

REMARKS

Run Initiation Time: 10/28/05 22:11:45

Run Code: 1130562705

EnergyPro 3.1

By EnergySoft

User Number: 5681

Job Number: 231

Page:9 of 16

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

PROJECT NAME 63rd St.	DATE 10/28/2005
SYSTEM NAME HVAC System	FLOOR AREA 1,890

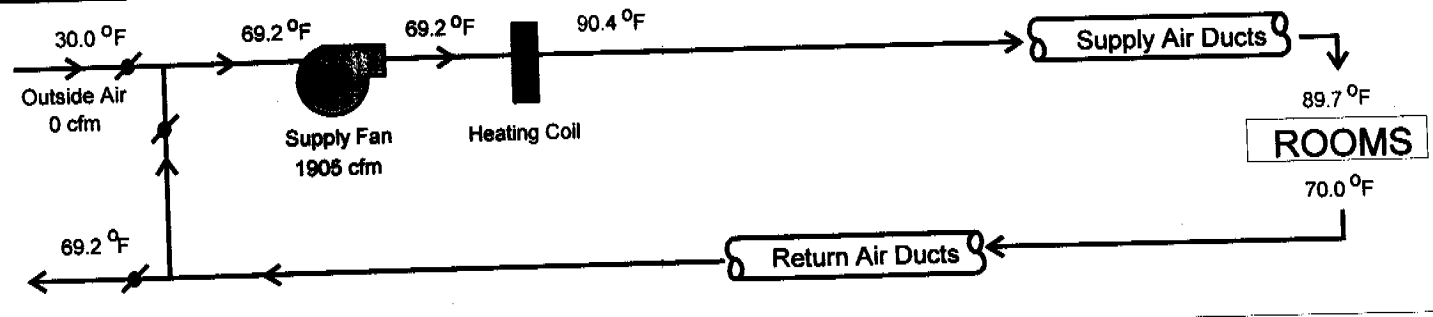
ENGINEERING CHECKS	
Number of Systems	1
Heating System	
Output per System	61,000
Total Output (Btuh)	61,000
Output (Btuh/sqft)	32.3
Cooling System	
Output per System	57,500
Total Output (Btuh)	57,500
Total Output (Tons)	4.8
Total Output (Btuh/sqft)	30.4
Total Output (sqft/Ton)	394.4
Air System	
CFM per System	1,905
Airflow (cfm)	1,905
Airflow (cfm/sqft)	1.01
Airflow (cfm/Ton)	397.6
Outside Air (%)	0.0
Outside Air (cfm/sqft)	0.00

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	1,248	27,069	-181	1,476	31,230
Return Vented Lighting		0			
Return Air Ducts		1,353			1,562
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		0			0
Supply Air Ducts		1,353			1,562
TOTAL SYSTEM LOAD		29,776	-181		34,353

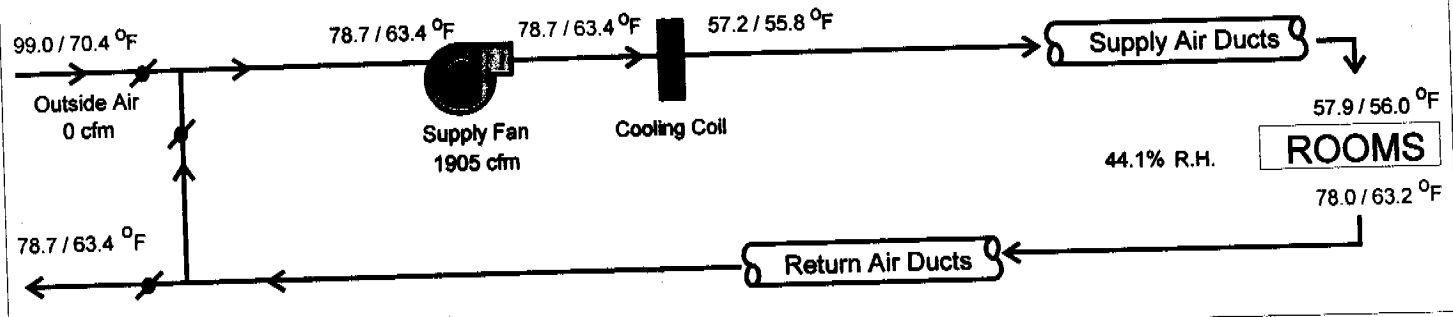
HVAC EQUIPMENT SELECTION			
YORK E4FD060S06	44,023	9,180	43,436
Total Adjusted System Output (Adjusted for Peak Design Conditions)			
	44,023	9,180	43,436
TIME OF SYSTEM PEAK		Aug 2 pm	Jan 12 am

Note: values above given at ARI conditions

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



RESIDENTIAL ROOM COOLING LOAD SUMMARY

63rd St.

Project Title

10/28/2005

Date

Room Name

1st Floor

Design Indoor Dry Bulb Temperature:

78°F

Design Outdoor Dry Bulb Temperature:

100°F

Design Temperature Difference:

22°F

Conduction	Area		U-Value		DETD ¹	Btu/hr
R-13 Wall (W.13.2x4.16)	883.0	X	0.0885	X	19.6	= 1,531
Ashrae Wndw Dbl NonMtl Clr	147.0	X	0.5600	X	22.0	= 1,811
Solid Wood Door	20.0	X	0.3872	X	19.6	= 152
R-38 Roof (R.38.2x4.24)	39.0	X	0.0241	X	40.0	= 38
		X		X		=
		X		X		=
		X		X		=
		X		X		=
		X		X		=
		X		X		=

1. Design Equivalent Temperature Difference (DETD)

Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Page Total 3,532

Solar Gain	Orientation	Shaded		Unshaded		SC	Btu/hr
		Area	SGF	Area	SGF		
Window	(South)	0.0	15	30.0	32	0.724	= 695
Window	(West)	0.0	15	34.0	73	0.724	= 1,796
Window	(North)	0.0	15	71.0	15	0.724	= 771
Window	(East)	0.0	15	12.0	73	0.724	= 634
							=
							=
							=
							=
							=
							=

Page Total 3,895

Internal Gain	Sched. Frac.	Area	Heat Gain		Btu/hr
Lights	1.00	820	0.200	Watts/sqft x 3.413	Btuh/Watt = 560
Occupants	1.00	820	245	Btuh/occ. / 333	sqft/occ. = 603
Receptacle	1.00	820	0.500	Watts/sqft x 3.413	Btuh/Watt = 1,399
Process	1.00	820	0.000	Watts/sqft x 3.413	Btuh/Watt = 0

Infiltration: $\frac{1.00}{\text{Schedule Fraction}} \times \frac{1.077}{\text{Air Sensible}} \times 820 \times \frac{8.00}{\text{Ceiling Height}} \times \frac{1.00}{\text{ACH}} / 60 \times 22 = 2,589$

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 12,578

Latent Gain	Sched. Frac.	Area	Heat Gain		Btu/hr
Occupants	1.00	820	155	Btuh/occ. / 333	sqft/occ. = 382
Receptacle	1.00	820	0.000	Watts/sqft x 3.413	Btuh/Watt = 0
Process	1.00	820	0.000	Watts/sqft x 3.413	Btuh/Watt = 0

Infiltration: $\frac{1.00}{\text{Schedule Fraction}} \times \frac{4.827}{\text{Air Latent}} \times 820 \times \frac{8.00}{\text{Ceiling Height}} \times \frac{1.00}{\text{ACH}} / 60 \times -0.00087 = -460$

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM -79

Filing Category: EXTERIOR COATINGS

AUG 08 2005
RECEIVED

OMEGA DIAMOND WALL INSULATING EXTERIOR STUCCO SYSTEM #4004

OMEGA PRODUCTS INTERNATIONAL, INC.
1681 CALIFORNIA DRIVE
CORONA, CALIFORNIA 92881

1.0 SUBJECT

Omega Diamond Wall Insulating Exterior Stucco System #4004.

2.0 DESCRIPTION

2.1 General:

The Omega Diamond Wall Insulating Exterior Stucco System #4004 is a proprietary mixture of portland cement, sand, fibers, water and proprietary ingredients reinforced with wire fabric or metal lath, and applied to substrates of expanded polystyrene (EPS), extruded polystyrene (XEPS) and polyisocyanurate foam insulation boards, Fome-Cor Board Lathing Material, concrete or concrete masonry, wood structural panels, fiberboard, and gypsum sheathing. The system is installed on exterior walls of wood or steel stud construction, and concrete or concrete masonry walls.

2.2 Materials:

2.2.1 Concentrate: The concentrate is a factory-prepared mixture of Type I or II portland cement complying with ASTM C 150, chopped fibers and proprietary additives. The mixture is packaged in 80-pound (36 kg) bags. Approximately 4½ to 6 gallons (17 to 22.7 L) of water and between 160 and 240 pounds (72 and 109 kg) of sand are added to each bag in the field, and mixing is done in accordance with the manufacturer's recommendations.

As an alternate, the Diamond Wall PM system allows the substitution of the Omega Diamond Wall PM Admix 500, an admixture composed of acrylic polymers and modifiers, for approximately one half of the water requirement. The Admix 500 is packaged in 1-gallon (3.8 L) bottles, 3½-gallon (13.25 L) pails, or 5-gallon (18.9 L) pails. The admixture has a shelf life of approximately one year when protected from extreme sunlight and freezing for extended periods. Storage temperatures should generally be between 40°F and 110°F (4°C and 39°C). The Diamond Wall PM system requires the inspections specified in Section 2.7.1 of this report.

2.2.2 Sand: Sand must be clean and free from deleterious amounts of loam, clay, silt, soluble salts and organic matter. Sampling and testing must comply with ASTM C 144 or C 897. Sand must be graded in accordance with ASTM C 144 or C 897 or within the following limits:

RETAINED ON U.S. STANDARD SIEVE	PERCENT RETAINED BY WEIGHT ± 2 PERCENT	
	Min.	Max.
No. 4		0
No. 8	0	10
No. 16	10	40
No. 30	30	65
No. 50	70	90
No. 100	95	100

2.2.3 Insulation Board:

2.2.3.1 EPS Insulation Board: EPS board has a nominal density of 1.5 pounds per cubic foot (24 kg/m³), a Class I flame-spread classification and a smoke-developed rating not exceeding 450 and must comply with ASTM C 578-95, as Type II boards. Boards installed without sheathing over open framing are 1 to 1½ inches (2.5 to 3.8 mm) thick and are provided with ¾-inch-high (9.5 mm) tongues with compatible grooves for horizontal joints. See Figure 1 for joint details. All boards must be recognized in a current evaluation report issued by ICBO ES. See Section 2.8 for board identification. Over solid substrates, a square-edge foam plastic board with a minimum ½-inch (12.7 mm) thickness and a minimum nominal density of 1 pcf (16 kg/m³) is permitted.

2.2.3.2 XEPS Insulation Board: This board has a minimum nominal density of 1.5 pounds per cubic foot (24 kg/m³) and must comply with ASTM C 578-95, as Type II boards. See Section 2.2.3.1 for other details and requirements.

2.2.3.3 Fome-Cor Board Lathing Material: Fome-Cor Board Lathing Material is described in evaluation report ER-3335.

2.2.3.4 Polyisocyanurate Foam Board: Polyisocyanurate foam plastic board has a nominal density of 2 pounds per cubic foot (32 kg/m³), a maximum flame-spread rating of 25 and a smoke-developed rating not exceeding 450 and must comply with ASTM C 1289-98. The foam plastic board is 1 to 1½ inches (2.5 to 3.8 mm) thick, is provided with ¾-inch-high (9.5 mm) tongues with compatible grooves for horizontal joints, and is limited to nonfire-rated and combustible construction. See Figure 1 for joint details. All boards must be recognized in a current evaluation report issued by ICBO ES or the National Evaluation Service. See Section 2.8 for board identification. Over solid substrates, a square-edge foam plastic board is permitted with the same requirements set forth in Section 2.2.3.1.

2.2.4 Lath:

2.2.4.1 Wire Fabric Lath: Minimum No. 20 gage [0.0350-inch (0.8889 mm)], 1-inch (25 mm) galvanized steel, woven-wire fabric. Lath must be self-furring or furred when applied over all substrates except unbacked polystyrene board. Self-furring lath for coatings must comply with the following requirements:

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roofing nails for wood studs or self-tapping screws for steel studs. A weather-resistive barrier must be applied over the fiberboard under the conditions set forth in Section 2.2.9 prior to installation of the lath or optional foam board. The lath is then attached to the studs through the sheathing, with fasteners and spacing as described in Section 2.3.2.1 of this report or as described in Table 23-II-B-1 of the UBC, whichever is more restrictive. All walls must be braced in accordance with the code. Exposed sheathing edges are protected with screeds. Holes in the substrate surface are caulked and the coating is applied in accordance with Section 2.3.1. The fiberboard, optional foam board, lath and coating may be applied to minimum No. 20 gage [0.0359 inch (0.91 mm)] steel studs spaced a maximum of 24 inches (610 mm) on center, provided the fasteners and their placement are as set forth in Section 2.3.2.1 for steel studs.

2.3.3.2 Gypsum Sheathing: Minimum $\frac{1}{2}$ -inch-thick (12.7 mm), water-resistant core gypsum sheathing, complying with ASTM C 79, is installed directly over wood studs spaced a maximum of 24 inches (610 mm) on center. Gypsum sheathing is fastened in accordance with Table 25-G of the code. A weather-resistive barrier is applied over the gypsum sheathing before application of lath or optional insulation board. The lath is then attached to studs through the sheathing, with fasteners and spacings as described for insulation board in Section 2.3.2 of this report. All walls must be braced in accordance with the code. Exposed sheathing edges are protected with screeds. Holes in the substrate surface are caulked, and the coating is applied as described in Sections 2.3.1 and 2.3.2.

Application to minimum No. 20 gage [0.0359 inch (0.91 mm)] steel studs at a maximum of 24 inches (610 mm) on center is permitted, provided No. 8 gage, Type S, drywall screws with 1-inch-diameter (25 mm) washers, or No. 8, self-tapping pan-head screws with a minimum $\frac{3}{8}$ -inch (9.5 mm) head diameter are installed at the same spacing as that for nails or staples in wood studs.

2.3.3.3 Wood-based Sheathing: Wood-based sheathing is applied directly to wood studs under the conditions set forth in Section 2.2.7 of this report and Table 23-IV-D-1 of the UBC. The weather-resistive barrier, wire fabric lath, optional foam board and coating are applied as described in Section 2.3.3.1 for fiberboard. Installation to minimum No. 20 gage [0.0396 inch (0.91 mm)] steel studs spaced a maximum of 24 inches (610 mm) on center, is also as described in Section 2.3.3.1 for fiberboard. For staple spacing and gages for lath attachment to wood studs of various species, with plywood and nominal $\frac{1}{2}$ -inch-thick (12.7 mm) foam plastic, see Table 2. For staple spacing and gages for lath attachment to wood-based sheathing and wood studs of various species, having a nominal foam plastic thickness of 1 inch, see Table 3.

2.3.3.4 Concrete and Masonry: Surface must be clean, free of dust and other particles, and sufficiently damp to ensure proper bonding. The Diamond Wall is applied directly to the prepared surface at a minimum thickness of $\frac{3}{8}$ inch (9.5 mm), in accordance with applicable provisions of Section 2.3.1.

2.4 One-hour Fire-resistive Assembly:

2.4.1 First Assembly:

2.4.1.1 Interior Face: One layer of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X wallboard, water-resistant backer board or veneer base is applied parallel or at right angles to the interior face of 2-by-4 wood studs spaced a maximum of 24 inches (610 mm) on center. The wallboard is attached using $1\frac{1}{8}$ -inch-long (48 mm) 6d coated nails having a $\frac{1}{4}$ -inch-diameter (6.4 mm) head, at 7 inches (178 mm) on center to studs, plates and

blocking. All wallboard joints must be backed with minimum 2-by-4 wood framing and taped and treated with joint compound. Fastener heads must also be treated with joint compound.

2.4.1.2 Exterior Face: One layer of minimum $\frac{5}{8}$ -inch-thick (15.9 mm), Type X, water-resistant core gypsum sheathing, 48 inches (1219 mm) wide, is applied parallel to studs using No. 11 gage, galvanized roofing nails having a $\frac{7}{16}$ - or $\frac{1}{2}$ -inch-diameter (11.1 or 12.7 mm) head, at 4 inches (102 mm) on center at board edges and 7 inches (178 mm) on center at intermediate studs. The sheathing is nailed to top and bottom plates at 7 inches (178 mm) on center. A weather-resistive barrier is required over the sheathing. The lath and wall coating are then applied without insulation board as described in Section 2.3.2.

2.4.2 Second Assembly:

2.4.2.1 Interior Face: One layer of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum wallboard, complying with ASTM C 36, is applied horizontally to the interior face of wood studs spaced a maximum of 16 inches (406 mm) on center. The wallboard is fastened to studs using 5d gypsum wallboard nails having minimum $\frac{15}{64}$ -inch-diameter (6 mm) head, at 6 inches (152 mm) on center to studs, plates and sills. All wallboard joints must be backed with minimum 2-by-4 wood framing, and taped and treated with joint compound. Fastener heads must also be treated with joint compound. Mineral wool insulation batts, R-13, $3\frac{5}{8}$ inches (92 mm) thick and having a minimum 1.97-pcf (31.56 kg/m³) density, are placed in the cavities between studs, and secured to studs.

2.4.2.2 Exterior Face: A weather-resistive barrier is applied over the exterior face of wood studs in accordance with Section 2.2.9. One-inch-thick (25 mm), 1.5-pcf-density (24 kg/m³) EPS board is applied in accordance with Section 2.3.2, followed by 1-inch (25 mm) by No. 20 gage woven-wire lath. The lath is fastened through the EPS board to studs and plates at 6 inches (152 mm) on center as required by Section 2.3.2.1. Lath overlaps are a minimum of 2 inches (51 mm). The Diamond Wall mixture, with glass fibers only, is then applied to the lath in accordance with Section 2.3.1.

2.4.3 Third Assembly:

2.4.3.1 Interior Face: One layer of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum wallboard, complying with ASTM C 36, is applied horizontally to the interior face of 2-by-4 wood studs spaced a maximum of 24 inches (610 mm) on center. The wallboard is fastened to the studs and perimeter framing using $1\frac{5}{8}$ -inch-long (41.3 mm), 0.100-inch-diameter (2.54 mm) galvanized steel cup head nails, having a minimum head diameter of 0.300 inch (7.62 mm), spaced a maximum of 8 inches (203 mm) on center. All wallboard joints must be taped and treated with joint compound. All vertical joints in the wallboard must occur over studs. Fastener heads must also be taped and treated with joint compound. Fiberglass insulation batts, R-11, measuring $3\frac{1}{2}$ inches thick (89 mm) and having a minimum density of 0.62 pcf (9.93 kg/m³), are placed in the cavities between the framing and fastened to the framing.

2.4.3.2 Exterior Face: One layer of building paper is attached to the studs and perimeter framing in accordance with Section 1402.1 of the UBC. One-inch-thick (25 mm), 1.5 pcf density (24 kg/m³), tongue-and-groove EPS board is attached to the studs and perimeter framing in accordance with Section 2.3.2 of this report. All vertical joints in the EPS board must occur over studs. The EPS board is followed by 1-inch (25.4 mm) by No. 20 gage woven-wire lath fastened through the EPS boards to the studs and perimeter framing using 2-inch-long (51 mm), No. 16 gage galvanized staples,

INSTALLATION CARD
Diamond Wall One Coat System
Omega Products International, Inc.

Project Address

6333 63rd St
SACRAMENTO CA
95824

ICBO Evaluation Service, Inc.
Report ER-4004

Date Completed

12-18-05

Plastering Contractor

Name:

OLENKA BUILDERS

Address:

6525 32nd St # A N. Highlands CA

Telephone No.

(916) 339-1287

Approved contractor number as issued by Omega Products Int'l, Inc.

7025

This is to certify that the exterior coating system on the building exterior at the above address has been installed in accordance with the evaluation report and the manufacturer's instructions.

Leonid Melnychuk
Signature of authorized representative of
plastering contractor

1-18-05
Date

This installation card must be presented to the building inspector after completion of work and before final inspection.



Email: leo@olenkabuilders.com

Telephone: (916) 339 - 1267

Fax: (916) 404 - 5395

INSULATION CERTIFICATE

JOB ADDRESS: 6333 68 Rd St
SACRAMENTO CA 95824

CERTIFICATE # 63-2006

INSTALLED BY: ENGELS Insulation

INSULATION INSTALLED		YES/NO	TYPE	R - RATING
EXTERIOR WALLS		<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>UNFACED BATTS</u> FOAM	<u>R - 13</u> , R - 19
WALLS BETWEEN UNITS		YES <input checked="" type="radio"/> NO	UNFACED BATTS - FOAM	R - 11, R - 13, R - 19
ATTIC	ACCESSIBLE	<input checked="" type="radio"/> YES <input type="radio"/> NO	UNFACED BATTS <u>BLOWN</u>	<u>R - 38</u>
	NON ACCESSIBLE	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>UNFACED BATTS</u> BLOWN	<u>R - 38</u>
FLOOR		<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>UNFACED BATTS</u> BLOWN	<u>R - 19</u>

INSPECTED BY SUPERVISOR: Leonid Melnychuk 1/18/06

PRINT NAME: Leonid Melnychuk