

B

Type

X

Plans

BUDG9 - 0261

Permit Number

55

Street Number

Chelsea Dr

Street Name

WIN

Community Code

058 - 252 - 004

APN

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print Your Name: MARC MATULICH	Date Applied: 1/23/09
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INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY			
Site Address: 55 CHELSEA DR		City: SANTA ROSA	
Cross-Street: OLD REDWOOD HWY		APN: 058-252-004	Project Phone #: 5683715
Directions:		Subd. Name:	Unit #:
Describe Project: KITCHEN REMODEL		Living Area:	Contract Price: 20,000
Garage:			
Decks:			
OWNER NAME AND ADDRESS		APPLICANT NAME AND ADDRESS	
Name: STAN GOODELL		Name: MARC MATULICH-ARCH.	
Mailing Address: SAME		Mailing Address: 62 BROOKWOOD AVE	
City:	State:	City: SANTA ROSA	State: CA
Day Ph: ()	Fax: ()	Day Ph: () 523 4681	Fax: () 523 1437
ZIP: _____	ZIP: 95404		
CONTRACTOR INFORMATION		OTHER PERSONS (ARCHITECT, ENGINEER, ETC.)	
Company Name:		Name: ↑	
Address:		Address:	
City:	State:	City:	State:
Day Ph: ()	Fax: ()	Day Ph: ()	Fax: ()
ZIP: _____	ZIP: _____	ZIP: _____	ZIP: _____
WORKER'S COMPENSATION DECLARATION		CONSTRUCTION LENDING DECLARATION	
I hereby affirm under penalty of perjury one of the following declarations: <input type="checkbox"/> I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. <input type="checkbox"/> I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are: Carrier: _____ Policy No.: _____ (This section need not be completed if the permit is for one hundred dollars (\$100) or less.) <input checked="" type="checkbox"/> I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions. Exp. Date: _____ Applicant: _____ WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.		I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Sec. 3097, Civ. C.) Lenders Name: _____ Lenders Address: _____	
FOR DEPARTMENT USE			
Zoning: _____ File No. _____ Acres _____		Existing Use/Structures _____	
Proposed Use/Structures _____		Zoning Min. Yard Requirements: Front _____ Left _____ Right _____ Back _____	
NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated. <input type="checkbox"/> Mitigation Required <input type="checkbox"/> Address subject to change			
Approval for Permit Issuance: _____		Approval for Occupancy: _____	
By: _____		By: _____	
Date: _____		Date: _____	
Conditions: _____			
Sewer Connection: <input type="checkbox"/> Available <input type="checkbox"/> Fees Paid			
Approved by: _____		Date: _____	
Road Encroachment: <input checked="" type="checkbox"/> Fees Paid			
Approved by: _____		Date: _____	
Septic System Permit/Clearance # NR 40LF			
Approved by: _____		Date: 1-23-09	
Flood Zone: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 100 Year Flood Elevation: _____			
Site Review _____			
Drainage Review: _____			
Approved by: _____		Date: _____	
Fire: _____			
Approved by: _____		Date: _____	
Code Enforcement Violation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Violation # _____			
This permit is limited to _____ days.			
Work Authorized: INTERIOR REMODEL			
<input checked="" type="checkbox"/> Plans Approved <input type="checkbox"/> Post FIRM <input type="checkbox"/> Attest Prior Report Available <input type="checkbox"/> No Plans Subject to Field Inspection <input type="checkbox"/> Pre FIRM <input type="checkbox"/> Geotechnical report Available Plancheck Checked By: P. Mullin Date: 1-23-09 U.B. R3 Permitted for Assistance By: Regina Date: 1/23/09 Auto Fire Sprinklers Req'd: NO No. of Units: 1 Certificate of Occupancy: _____ PAYMENT OF FEE: NO JAN 23 2009 PERMIT AND RESOURCE MANAGEMENT DEPARTMENT COUNTY OF SONOMA			
OWNER-BUILDER DECLARATION			
I hereby affirm under penalty of perjury that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).): <input type="checkbox"/> I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.) <input checked="" type="checkbox"/> I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.) I am exempt under Sec. _____ B & P.C. for this reason: _____ Date: 1/23/09 Owner: Marc Matulich agent			
LICENSED CONTRACTOR'S DECLARATION			
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. Lic. Class: _____ Lic. No.: _____ Exp. Date: _____ Contractor: _____			
ASBESTOS DECLARATION			
Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that <input type="checkbox"/> does <input type="checkbox"/> does not contain asbestos, or that <input type="checkbox"/> no demolition is authorized by this permit. I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation law, this permit shall be deemed revoked. Permittee Signature: Marc Matulich ADDRESS: 62 BROOKWOOD AVE SR 95404 CITY: _____ ZIP: _____ <input type="checkbox"/> Contractor <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Other Licensed Professional			
Final Date: _____		Inspector: _____	

JOB ADDRESS: 55 CHELSEA DR WIN PERMIT NUMBER: B1009-0261 INSPECTION AREA: 11

THIS PERMIT SHALL EXPIRE IN THREE(3) YEARS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT

Distribution: White - File Canary - Applicant Pink - Audit Copy Blue - Assessor Cardstock - Inspector

131) SPECIAL INSPECTION REQUIRED		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	IF YES, SEE ADDITIONAL SHEET
INSPECTION RECORD	DATE	NAME	REMARKS	
101) ROUGH GRADING				
103) FOUNDATION				
FORMS/SETBACK				
FOOTING				
WALLS				
106) UFER GROUND #				
104) CAISSONS/PIERS				
105) SLAB				
107) UNDERGROUND UTILITIES				
110) MASONRY				
109) RETAINING WALLS				
113) FIREPLACE				
FOOTING				
HEARTH/PROTECTION				
THROAT				
114) CHIMNEY				
120) UNDERFLOOR/UNDERSLAB				
115) HYDRONICS				
116) U/F ELECTRICAL				
117) U/F MECHANICAL				
118) U/F PLUMBING				
119) U/F FRAMING				
139) U/F INSULATION				
126) SHEAR WALLS				
<input type="checkbox"/> INTERIOR	<input type="checkbox"/> EXTERIOR			
127) DIAPHRAGMS				
<input type="checkbox"/> ROOF	<input type="checkbox"/> FLOOR			
134) SIDING/SHEATHING				
125) HOLD DOWNS				
132) CLOSE-IN * *				* (132) AT KITCHEN 2-17-09 SB
122) ROUGH ELECTRICAL				
123) ROUGH MECHANICAL				(132) @ BATH #2 3.19.09 ✓
124) ROUGH PLUMBING				(142) " " " " 3.27.09 ✓
128) ROUGH FRAME				(142) @ Kitchen 4/28/09 Rob S.
160) SMOKE DETECTORS	(1.30.12)			(132) Headers/attic walls @ old office 10/19/09
139) INSULATION				(142) " " " " " " 10.16.09 ✓
142) WALLBOARD	Per 1.12.12			* SKYLIGHTS HAVE BEEN OMITTED FROM PROJECT
143) FIREWALLS				
135) STUCCO/PLASTER				
<input type="checkbox"/> LATH	<input type="checkbox"/> SCRATCH			
137) ROOFING				
130) TUB/SHOWER PAN				
162) FIRE DAMPERS/DOORS				
164) SUSPENDED CEILING				
<input type="checkbox"/> ROUGH ELEC.	<input type="checkbox"/> ROUGH MECH.			
165) EXITING - RAMPS/STAIRS				
163) HANDRAILS/GUARDRAILS				
CORRIDORS/DOORS				
166) ACCESSIBILITY COMPLIANCE				650) SUSMP INSPECTION
144) WATER TANKS				651) NPDES EROSION COMPLIANCE
<input type="checkbox"/> SLAB	<input type="checkbox"/> WALLS			652) NPDES SEDIMENT COMPLIANCE
170) TEMPORARY OCCUPANCY				653) NPDES DOCS/SWPPP
171) TEMPORARY ELECTRICAL				FIRE INSPECTION REQUIRED
172) TEMPORARY GAS				<input type="checkbox"/> Yes <input type="checkbox"/> No
174) ELECTRIC METER AUTHORIZATION				759) KNOX BOX
152) PANEL BOARDS/SERVICE				760) PROPANE TANK HOLD DOWNS
189) SEPTIC ELECTRIC FINAL				770) SPRINKLER FINAL
175) GAS METER AUTHORIZATION				771) ABOVEGROUND HYDROSTATIC
153) GAS PRESSURE TEST				772) UNDERGROUND HYDROSTATIC
HOUSE	YARD	3.11.09		773) UNDERGROUND FLUSH
190) MANUF. HOME FOUNDATION				774) THRUST BLOCKS
191) MANUF. HOME INSTALLATION				775) PIPE WELD
CONTINUITY				776) HYDRANTS/APPLIANCES
STAIRS/SKIRTS				777) PUMP ACCEPTANCE
RIDGE BOLTING				778) WATER SUPPLY/TANK
193) MANUF. HOME COND. FINAL				779) ALARM SYSTEM
SWIMMING POOLS				780) HOOD & DUCT SYSTEM
194) PRE-GUNITE				781) ABOVEGROUND TANK/DISPENSER
195) PRE-DECK				198) FIRE FINAL
196) PRE-PLASTER/FENCE				CLEARANCES:
197) VINYL/FIBERGLASS POOL EXCAVATION				FIRE <input type="checkbox"/> Local <input type="checkbox"/> County
102) GRADING FINAL				HEALTH DEPARTMENT
176) ELECTRICAL FINAL	(1.30.12)			ZONING
177) MECHANICAL FINAL	"			SANITATION
178) PLUMBING FINAL	1.12.12			
199) FINAL	(1.30.12)			
OCCUPANCY (OK TO OCCUPY)				PLAN RETENTION REQUIRED?
				<input type="checkbox"/> Yes <input type="checkbox"/> No

PERMIT # BLD09-0261

CERTIFICATE OF COMPLIANCE: RESIDENTIAL (Page 2 of 5) **CF-1R**

Project Title: **GOODELL REMODEL** Date: **1/22/09**

FENESTRATION PRODUCTS - U-FACTOR AND SHGC

FENESTRATION MAXIMUM ALLOWED AREA WORKSHEET WS-4R - must be included for New Construction, Additions, and Alterations.

Fenestration #/Type/Pos. (Front, Left, Rear, Right, Skylight)	Orien-tation, N, S, E, W ¹	Area (ft ²)	U-factor ²	U-factor Source ³	SHGC ⁴	SHGC Source ⁵	Exterior Shading/Overhangs ^{6,7} ✓ box if WS-3R is included
SKYLIGHT	N	12					<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>

- 1) Skylights are now included in West-facing fenestration area if the skylights are tilted to the west or tilted in any direction when the pitch is less than 1:12. See §151(f)3C and in Section 3.2.3 of the Residential Manual.
- 2) Enter values in this column from either NFRC Certified Label or from Standards Default Table 116-A.
- 3) Indicate source either from NFRC or Table 116-A.
- 4) Enter values in this column from NFRC or from Standards Default Table 116B or adjusted SHGC from WS-3R.
- 5) Indicate source either from NFRC, Table 116B or WS-3R
- 6) Shading Devices are defined in Table 3-3 in the Residential Manual and see WS-3R to calculate Exterior Shading devices.
- 7) See Section 3.2.4 in the Residential Manual.

HVAC SYSTEMS

Heating Equipment Type and Capacity (furnace, heat pump, boiler, etc.)	Minimum Efficiency (AFUE or HSPF)	Distribution Type and Location (ducts, attic, etc.)	Duct or Piping R-Value	Thermostat Type	Configuration (split or package)

Cooling Equipment Type and Capacity (A/C, heat pump, evap. cooling)	Minimum Efficiency (SEER or EER)	Distribution Type and Location (ducts, attic, etc.)	Duct or Piping R-Value	Thermostat Type	Configuration (split or package)

CERTIFICATE OF COMPLIANCE: RESIDENTIAL (Page 3 of 5) **CF-1R**

Project Title GUNDEL REMODEL Date 1/22/09

SEALED DUCTS and TXVs (or Alternative Measures)

A signed CF-4R Form must be provided to the building department for each home for which the following are required.

- Sealed Ducts (all climate zones) (Installer testing and certification and HERS rater field verification required.)
- TXVs, readily accessible (climate zones 2 and 8-15 only) (Installer testing and certification and HERS Rater field verification required.)
- Refrigerant Charge (climate zones 2 and 8-15 only) (Installer testing and certification and HERS Rater field verification required.)

OR

- Alternative to Sealed Ducts and Refrigerant Charge /TXVs (See Package D Alternative Package Features for Project Climate Zone in the RM Appendix B Table 151-C, Footnotes 7-14.

OR

- No ducts installed.
- New ducts from existing space conditioning equipment, not exceeding 40ft. in length.
- For additions and alterations, duct systems that are not documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Residential ACM Manual. Duct systems with more than 40 linear feet in unconditioned spaces shall meet the requirements of Section 150(m) and duct insulation requirements of Package D.

WATER HEATING SYSTEMS

- Check box if system meets criteria of a "Standard" system. Standard system is one gas-fired water heater per dwelling unit. If the water heater is a storage type, 50 gallons is the maximum capacity and recirculation system is not allowed.
- Check box when using Preapproved Alternative Water Heating table, Table 5-4 in Chapter 5 in the Residential Manual. No water heating calculations are required, and the system complies automatically.
- Check box if system does not meet criteria of "Standard" system, and does not comply with the Preapproved Alternative Water Heating table. In this case, the Performance Method must be used and must be included in the submittal.
- Check box to verify that a time control is required for a recirculating system pump for a system serving multiple units.

Systems serving single dwelling units (See RM Table 5-4, Alternative Water Heating Systems for recirculation requirements)

Water Heater Type/Fuel Type	Distribution Type	Number in System	Rated Input ¹ (kW or Btu/hr)	Tank Capacity (gallons)	Energy Factor ¹ or Thermal Efficiency	Standby ¹ Loss (%)	Tank External Insulation R-Value

System serving multiple dwelling units (See Residential Manual Section 5.3.3)

Water Heater Type	Distribution Type	Number in System	Rated Input ¹ (kW or Btu/hr)	Tank Capacity (gallons)	Energy Factor ¹ or Thermal Efficiency	Standby ¹ Loss (%)	Tank External Insulation R-Value

1) For small gas storage water heaters (rated inputs of less than or equal to 75,000 Btu/hr), electric resistance, and heat pump water heaters, list Energy Factor. For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Rated Input, Recovery Efficiency, Thermal Efficiency and Standby Loss. For instantaneous gas water heaters, list Rated Input and Thermal Efficiencies.

Pipe Insulation (kitchen lines $\geq 3/4$ inches) All hot water pipes from the heating source to the kitchen fixtures that are $1/2$ inches or greater in diameter shall be thermally insulated as specified by Section 150 (j) 2 A or 150 (j) 2 B.

CERTIFICATE OF COMPLIANCE: RESIDENTIAL

(Page 4 of 5)

CF-1R

Project Title GOODELL RENOVEL

Date 7/22/09

SPECIAL FEATURES REQUIRING BUILDING OFFICIAL or HERS RATER VERIFICATION

Indicate which special features are parts of this project. The list below only represents special features relevant to the prescriptive method. (Check Applicable boxes)

Category	Building Official Verification of Special Features	HERS Rater Verification	HERS Rater Diagnostic Testing	Measure
Ducts				
<input type="checkbox"/>	Y			100% of ducts in crawlspace/basement
<input type="checkbox"/>		Y		Buried ducts
<input type="checkbox"/>		Y		Diagnostic supply duct location, surface area, and R-value
<input type="checkbox"/>	Y			Duct increased R-value
<input type="checkbox"/>			Y	Duct leakage
<input type="checkbox"/>	Y			Ducts in attic with radiant barriers
<input type="checkbox"/>		Y		Less than 12 ft. of duct outside conditioned space
<input type="checkbox"/>		Y		Non-standard duct location
<input type="checkbox"/>	Y			Supply registers within two ft of floor
<input type="checkbox"/>				
Envelope				
<input type="checkbox"/>	Y			Air retarding wrap
<input type="checkbox"/>	Y			Cool roof
<input type="checkbox"/>	Y			Exterior shades
<input type="checkbox"/>	Y			High thermal mass
<input type="checkbox"/>	Y			Inter-zone ventilation
<input type="checkbox"/>	Y			Metal framed walls
<input type="checkbox"/>	Y			Non-default vent heights
<input type="checkbox"/>		Y		Quality insulation installation
<input type="checkbox"/>	Y			Radiant barrier
<input type="checkbox"/>			Y	Reduced infiltration (blower door). May also require mechanical ventilation.
<input type="checkbox"/>	Y			Solar gain targeting (for sunspaces)
<input type="checkbox"/>	Y			Sunspace with interzone surfaces
<input type="checkbox"/>	Y			Vent area greater than 10%
<input type="checkbox"/>				
HVAC Equipment				
<input type="checkbox"/>			Y	Adequate air flow
<input type="checkbox"/>		Y		Air conditioner size
<input type="checkbox"/>			Y	Air handler fan power
<input type="checkbox"/>		Y		High EER
<input type="checkbox"/>	Y			Hydronic heating systems
<input type="checkbox"/>		Y		Mechanical ventilation
<input type="checkbox"/>			Y	Refrigerant charge
<input type="checkbox"/>		Y		Thermostatic expansion valve (TXV)
<input type="checkbox"/>	Y			Zonal control
<input type="checkbox"/>				
Water Heater				
<input type="checkbox"/>	Y			Combined hydronic
<input type="checkbox"/>	Y			High EF for existing water heaters
<input type="checkbox"/>	Y			Non-NAECA water heater
<input type="checkbox"/>	Y			Non-standard water heaters (wh/unit)
<input type="checkbox"/>	Y			Water heater distribution credits

CERTIFICATE OF COMPLIANCE: RESIDENTIAL (Page 5 of 5) CF-1R	
Project Title GOODSELL RESIDENCE	Date 1/22/09

Special Remarks

COMPLIANCE STATEMENT

This certificate of compliance lists the building features and specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations, and the administrative regulations to implement them. This certificate has been signed by the individual with overall design responsibility. The undersigned recognizes that compliance using duct design, duct sealing, verification of refrigerant charge and TXVs, insulation installation quality, and building envelope sealing require installer testing and certification and field verification by an approved HERS rater.

Designer or Owner (per Business and Professions Code)	Documentation Author
Name: MARC MATULICH	Name: SAME
Title/Firm: MATULICH ARCHITECT	Title/Firm:
Address: 62 BROOKWOOD AVE SANTA ROSA	Address:
Telephone: 707 523 4681	Telephone:
License #: G12701	License #: (if applicable)
(signature) <i>Marc Matulich</i> (date) 1/29/09	(signature) (date)

Enforcement Agency

Name: _____	Comments: _____ _____ _____ _____
Title: _____	
Agency: _____	
Telephone: _____	
(signature / stamp) _____ (date) _____	

MANDATORY MEASURES SUMMARY: RESIDENTIAL (Page 1 of 2) MF-1R

Project Title	Date
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Note: Low-rise residential buildings subject to the Standards must contain these measures regardless of the compliance approach used. More stringent compliance requirements from the Certificate of Compliance supersede the items marked with an asterisk (*) below. 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.

Instructions: Check or initial applicable boxes or check NA if not applicable and included with the permit application documentation.

DESCRIPTION	NA	Designer	Enforcer
Building Envelope Measures:			
* §150(a): Minimum R-19 in wood frame ceiling insulation or equivalent U-factor in metal frame ceiling.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
§150(b): Loose fill insulation manufacturer's labeled R-Value: <u>19</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
* §150(c): Minimum R-13 wall insulation in wood framed walls or equivalent U-factor in metal frame walls (does not apply to exterior masonry walls).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* §150(d): Minimum R-13 mixed floor insulation in framed floors or equivalent U-factor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(e): Installation of Fireplaces, Decorative Gas Appliances and Gas Logs.			
1. Masonry and factory-built fireplaces have:			
a. closeable metal or glass door covering the entire opening of the firebox	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. outside air intake with damper and control, fire damper and control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. No continuous burning gas pilot lights allowed.			
§150(f): Air retarding wrap installed to comply with §151 meets requirements specified in the ACM Residential Manual.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(i): Slab edge insulation - water absorption rate for the insulation material alone without facings no greater than 0.3%, water vapor permeance rate no greater than 2.0 perm/inch.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§118: Insulation specified or installed meets insulation installation quality standards. Indicate type and include CP-GR Form:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§116-§117: Fenestration Products, Exterior Doors, and Infiltration/Exfiltration Controls.			
1. Doors and windows between conditioned and unconditioned spaces designed to limit air leakage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Fenestration products (except field-fabricated) have label with certified U-factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration certification.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Exterior doors and windows weather-stripped; all joints and penetrations caulked and sealed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Space Conditioning, Water Heating and Plumbing System Measures:			
§110-§113: HVAC equipment, water heaters, showerheads and faucets certified by the Energy Commission.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(i): Setback thermostat on all applicable heating and/or cooling systems.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(j): Water system pipe and tank insulation and cooling systems line insulation.			
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Back-up tanks for solar system, unfired storage tanks, or other indirect hot water tanks have R-12 external insulation or R-16 internal insulation and indicated on the exterior of the tank showing the R-value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The following piping is insulated according to Table 150-A/B or Equation 150-A Insulation Thickness:			
1. First 5 feet of hot and cold water pipes closest to water heater tank, non-recirculating systems, and entire length of recirculating sections of hot water pipes shall be insulated to Table 150-B.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Cooling system piping (suction, chilled water, or brine lines), piping insulated between heating source and indirect hot water tank shall be insulated to Table 150-B and Equation 150-A.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Steam hydronic heating systems or hot water systems >15 psi, meet requirements of Table 123-A.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MANDATORY MEASURES SUMMARY: RESIDENTIAL (Page 2 of 2)

MF-1R

DESCRIPTION

DESCRIPTION	NA	Designer	Enforcement
Space Conditioning, Water Heating and Plumbing System Measures: (continued)			
5. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Insulation for chilled water piping and refrigerant suction piping includes a vapor retardant or is enclosed entirely in conditioned space.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Solar water-heating systems/collectors are certified by the Solar Rating and Certification Corporation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(m): Ducts and Fans			
1. All ducts and plenums installed, sealed and insulated to meet the requirement of the CMC Sections 601, 602, 603, 604, 605 and Standard 6-5; supply-air and return-air ducts and plenums are insulated to a minimum installed level of R-4.2 or enclosed entirely in conditioned space. Openings shall be sealed with mastic, tape or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Building cavities, support platforms for air handlers, and plenums defined or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Exhaust fan systems have back draft or automatic dampers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Protection of insulation. Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Flexible ducts cannot have porous inner cores.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§114: Pool and Spa Heating Systems and Equipment			
1. A thermal efficiency that complies with the Appliance Efficiency Regulations, on-off switch mounted outside of the heater, weatherproof operating instructions, no electric resistance heating and no pilot light.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. System is installed with:			
a. at least 36" of pipe between filter and heater for future solar heating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. cover for outdoor pools or outdoor spas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Pool system has directional inlets and a circulation pump time switch.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§115: Gas fired fan-type central furnaces, pool heaters, spa heaters or household cooking appliances have no continuously burning pilot light. (Exception: Non-electrical cooking appliances with pilot < 150 Btu/hr)			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§118(j): Cool Roof material meets specified criteria			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Residential Lighting Measures:			
§150(k)1: HIGH EFFICACY LUMINAIRES OTHER THAN OUTDOOR HTD: contain only high efficacy lamps as outlined in Table 150-C, and do not contain a medium screw base socket (E24/E26). Ballast for lamps 13 watts or greater are electronic and have an output frequency no less than 20 kHz	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§150(k)1: HIGH EFFICACY LUMINAIRES - OUTDOOR HTD: contain only high efficacy lamps as outlined in Table 150-C, luminaire has factory installed HTD ballast	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(k)2: Permanently installed luminaires in kitchens shall be high efficacy luminaires. Up to 50 percent of the wattage, as determined in § 130 (c), of permanently installed luminaires in kitchens may be in luminaires that are not high efficacy luminaires, provided that these luminaires are controlled by switches separate from those controlling the high efficacy luminaires.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§150(k)3: Permanently installed luminaires in bathrooms, garages, laundry rooms and utility rooms shall be high efficacy luminaires. OR are controlled by an occupant sensor(s) certified to comply with Section 119(d) that does not turn on automatically or have an always on option.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(k)4: Permanently installed luminaires located other than in kitchens, bathrooms, garages, laundry rooms, and utility rooms shall be high efficacy luminaires (except closets less than 70ft ²); OR are controlled by a dimmer switch OR are controlled by an occupant sensor that complies with Section 119(d) that does not turn on automatically or have an always on option.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(k)5: Luminaires that are recessed into insulated ceilings are approved for zero clearance insulation cover (IC) and are certified airtight to ASTM E283 and labeled as air tight (AT) to less than 2.0 CFM at 75 Pascals.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§150(k)6: Luminaires providing outdoor lighting and permanently mounted to a residential building or to other buildings on the same lot shall be high efficacy luminaires (not including lighting around swimming pools/water features or other Article 680 locations) OR are controlled by occupant sensors with integral photo control certified to comply with Section 119(d).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(k)7: Lighting for parking lots for 8 or more vehicles shall have lighting that complies with Sec. 130, 132, and 147. Lighting for parking garages for 8 or more vehicles shall have lighting that complies with Sec. 130, 131, and 146.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§150(k)8: Permanently installed lighting in the enclosed, non-dwelling spaces of low-rise residential buildings with four or more dwelling units shall be high efficacy luminaires OR are controlled by occupant sensor(s) certified to comply with Section 119(d).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>