

A HOW TO GUIDE FOR RE-ROOFING



FOR SINGLE STORY
WOOD AND LIGHT
STEEL FRAME SKILLED
NURSING FACILITIES
& INTERMEDIATE
CARE FACILITIES
(OSHPD 2 Buildings)

A Companion

Document to the

HCAI FREER

Manual

November 2022

HOW-TO GUIDE

The How-To Guides are companion documents to the HCAI Field Review, Exempt, and Expedited Review (FREER) Manual intended as general reference guides and/or checklists to facilitate repair, maintenance, minor renovation/remodeling, or installation of certain equipment projects.

The How-To Guides are intended only for single-story Skilled Nursing Facilities (SNFs) and Intermediate-Care Facilities that are of wood frame construction and excluded from the definition of Hospital Building under Article 2, Section 7-111 in the California Administrative Code (CAC).

The use of the How-To Guide is made available for use at the discretion of the facility owner. HCAI does not mandate the use of the How-To Guide for any condition. Use of project-specific design and construction documents prepared by a California licensed design professional in lieu of using the How-To Guides is always acceptable, and in some cases, may be required.

This How-To Guide gives no consideration to suitability for use in a specific application, compatibility with other building systems, appropriate use of materials or design, appearances, etc. The facility owner and/or his/her representative shall review all such qualities, features, and/or properties to ensure compliance with the California Building Standards Code and all applicable local zoning codes and ordinances, appropriate integration with other building systems, and proper design for the project specific conditions and installation, etc.

While not mandatory, HCAI recommends the facility has a California licensed architect or engineer, or a California licensed contractor assist in the review of the code compliance checklist herein below. In this manner the facility will have a better understanding of the scope of work that may be required for a code compliant re-roofing project prior to beginning the work.

RE-ROOFING

A re-roofing project typically requires approval from the local Planning Department. This must be obtained separately by the facility, and the requirements typically include color and type of roofing material to be used and the visual screening of roof mounted mechanical equipment. Evidence of local approval is required prior to issuance of a Building Permit.

A large area greater than 300 square feet or total re-roofing project requires a Building Permit. Replacement of existing roofing in qualifying Skilled Nursing Facilities may be considered maintenance projects, and is exempt from a permit, if certain criteria are met as a roof repair. This How-To Guide presents those criteria for general assessment of the specific project conditions. The Field Review Expedited Exempt from Review (FREER) Guide also discusses re-roofing requirements in Appendix XI(g) Re-Roofing Criteria.

Installation of a replacement roof without a permit is subject to an investigation fee, submittal of a project to the Office for plan review, demolition and/or rework of defective non-code complying work, etc. in accordance with the California Administrative Code, (CAC) Title 24, Part 1, Section 7-128 "Work performed without a permit."

The facility owner or its authorized representative should review this checklist with their **HCAI Compliance Officer** to determine qualifications, assessment of specific project conditions and determination of possible approaches to the application, review, permitting, and construction process. Possible approaches include, but are not limited to the following:

Roof Repair – For limited repair or patching of an existing roof, where all existing conditions are fully compliant with current code and no modifications, repair, or remedial work is necessary, the facility may have the work performed by its maintenance staff or by a California licensed roofing contractor. Patching of a roof to prevent leaks must not exceed three squares (300 square feet). The material used must meet the fire rating classification (UL Class A or B) of the existing roof assembly (CBC 1505) and shall be reviewed by the Compliance Officer by providing specification information on packaging prior to beginning work. Re-roofing over 300 square feet requires a building permit.

Re-Roofing with Minor Repair Work. — For the permitted removal and replacement of an existing roof, where minor repair or remedial work is necessary to bring the roof into compliance with current code, the facility may hire a licensed general contractor or a licensed roofing contractor who shall prepare construction documents including annotated, dimensioned plans; installation, repair and flashing details; and specifications for materials and installation. Refer to Appendix F for flat roofs and Appendix G for sloped roof installation diagrams. The licensed contractor may administer the work of construction for health facility construction projects, subject to the following conditions, dependent upon the scope and nature of the remedial work involved (Section 7-115, California Administrative Code):

- 1. The work shall be performed and supervised by a licensed general contractor or licensed roofing contractor who prepares the construction documents
- 2. The work does not require the professional services of an architect or engineer,
- 3. The re-roofing project is not a component of a larger scope project
- 4. The contractor responsible for the design and installation shall also be the person responsible for the filing of Verified Compliance Reports, pursuant to CAC Section 7-151
- 5. The contractor shall provide a signed statement certifying their license is in full force and effect, their name and the license number
- 6. Drainage shall be compliant per the California Building Code (CBC) Chapter 1503 and 1512
- 7. All the items on the Checklist are checked "Yes"
- 8. Roofs shall comply with Chapter 15 of the CBC

More Involved Work – For more involved removal and replacement of an existing roof, which does not meet the above criteria for "Repairs or Re-Roofing with Minor Repair Work", where modification, repair or remedial work is necessary to bring the system into compliance with current code, the facility may need to involve a design professional (Architect and/or Structural/ Mechanical/Electrical engineers, dependent upon the scope and nature of the remedial work). This work might be of sufficiently limited scope that field review by the Compliance Officer/DSE can be used. More involved work may require review by HCAI Regional Architectural & Engineering Unit. When re-roofing involves repairs or replacement to mechanical systems and/or electrical equipment, design professionals are required to evaluate and submit plans showing compliance with current code. Refer to Appendix F for flat roofs and Appendix G for sloped roof diagrams.

Existing Roof - Unless otherwise noted, the code excerpts on the following pages apply to re-roofing projects. It is important to note that, for the purposes of this Guide, an "existing roof" is a roof where the installation was **previously inspected and approved by HCAI**.

Determination of Eligibility - Determination of eligibility and appropriate permitting process is the responsibility of the HCAI Compliance Officer (CO). Facilities are encouraged to work with their Compliance Officer prior to assuming eligibility or an approach to permitting.

Inspections – The approved Inspector of Record (IOR), hired by the facility, must inspect the work in progress and at completion. Interim inspections will be required when construction materials will cover the finished work. Any deficiencies identified through inspection shall be corrected before a Construction Final is issued. A "Construction Final" issued by the HCAI Compliance Officer is required when the work is deemed complete. Responsible parties, including the licensed contractor(s), IOR and facility representative shall file Verified Compliance Reports certifying the work is in compliance with the approved drawings and specifications in accordance with the requirements of the Testing, Inspection, and Observation (TIO) Program. (See Appendix A)

Manufacturer's written installation instructions. The installation shall comply with the manufacturer's written installation instructions. The installer (maintenance staff or contractor) shall submit to the Compliance Officer, the manufacturer's installation and maintenance instructions, in a location on the premises where they will be readily available for reference and guidance for the IOR, HCAI staff, service personnel, and the owner or operator (Section 1507.1, CBC "Requirements for Roof Coverings"). Reroofing systems shall be installed in a manner that is in accordance with the California Building Code (CBC) and applicable standards.

New Project/Building Permit Application Requirements

- **Step 1.** Verify that the project is eligible for this program. Consultation with the HCAI Compliance Officer is recommended.
- **Step 2.** If the project exceeds 300 square feet, or the Compliance Officer advises, hire a California Licensed Roofing Contractor to assist with completing the checklist and plans.
- **Step 3.** Use the eServices Portal online application process or download and print the Expedited Building Permit Guide and complete the "Code Compliance Checklist for Re-Roofing with Minor Repair Work" beginning on page 5 of this Guide and complete the **Application for New Project/Building Permit** beginning on page 10 of this Guide. These documents may be filled-in electronically in the <u>Electronic Service Portal</u> or manually on paper.
- **Step 4.** Prepare plans showing the location(s) of where the re-roofing work will be installed, location of remedial work, and notes for repairs and flashing. Provide specifications of materials to be used and installation instructions from package data including the listed fire rating.
- **Step 5.** Submit for and obtain local approval (Planning Department) for a re-roofing project. This may require alterations to the plans or the specified materials.
- **Step 6.** If not using the online application, print one (1) complete set of the entire package (the Expedited Building Permit with completed checklist and applications, the Testing Inspection & Observation form, and the plans), sign and date where required, and mail or deliver to:

For construction in Northern California, submit to:

Department of Health Care Access and Information Facilities Development Division 2020 W. El Camino Avenue, Suite 800 Sacramento, CA 95833 (916) 440-8300 phone (916) 274-0102 fax

For construction in Southern California, submit to:

Department of Health Care Access and Information Facilities Development Division 355 South Grand Avenue, Suite 1900 Los Angeles, CA 90071 (213) 897-0166 phone (213) 217-8511 fax

Upon issuance of the building permit for the project by the Office, you must submit a construction start letter to begin installation of the Re-Roofing project.

		Compl	iance
		Yes	No
PRO	DJECT DESCRIPTION		
1.	The re-roofing project is located in a single-story Skilled Nursing Facility building of wood or light steel frame construction.		
2.	The roof has been previously inspected and approved by HCAI.		
3.	The project is only for roof replacement as routine maintenance.		
4a.	The work is performed and supervised by the licensed specialty contractor who prepares the construction documents, 7-115 (c) 1. California Administrative Code or		
4b.	The work is performed by facility staff who shall prepare the construction documents required for approval by the Office.		
5.	The work is limited to reroofing where minimum ¼ -inch vertical in 12-inch horizontal roof slopes are existing and will be maintained (7-115 (c) 6 C, California Administrative Code) or provides positive roof drainage (CBC1512 exception 1)		
	And any roof mounted equipment needing remounting does not exceed 400 pounds, (7-115 (c) 6 C, California Administrative Code)		
	May include the reinstallation, support and bracing of existing rooftop pipes, ducts, conduit, and fire sprinkler piping.		
COI	NTRACTOR (required if project area exceeds 300 square feet)		
6.	The contractor is licensed by the California Contractors State License Board and provides a written and signed statement to the Office, stating that he or she is licensed by the State of California, the license number, and affirms that the license is current, 7-115 (c) 5., California Administrative Code.		
7.	The contractor responsible for the design and installation, shall also be responsible for the filing of HCAI required reports, pursuant to Section 7-115 (c) 4., California Administrative Code.		
DO	CUMENTS FOR SUBMITTAL TO HCAI		
8.	Application for New Project (Appendix B)		
9.	Application for Inspector of Record (IOR) (Appendix D)		

		Compl	iance
		Yes	No
10.	Testing, Inspection & Observation (TIO) Program (Appendix A)		
11.	Application for Building Permit (Appendix C)		
12.	Plans which include the following information:		
13.	Local Planning Department Approval letter		
14.	Existing Roof Demolition Plan showing area to be re-roofed, number of existing roofing layers, roofing to be removed, existing roof penetrations (roof/attic vents, plumbing vents, rooftop fans, HVAC equipment, etc.), sheathing type and thickness to be removed, scuppers and roof drain size and locations, gutters and downspout size and locations, seismic separations locations, roof mounted ductwork, piping, and conduit; slope arrows and pitch of all sections of the existing roof.		
15.	New Roof Plan showing locations of replaced sheathing, sheathing type, thickness and nailing pattern; insulation type and fasteners required; vapor barrier type and installation; new flashing, counter flashing locations; roof vent locations, HVAC equipment curbs, crickets/saddles/cants, ductwork supports and bracing; piping & conduit supports and bracing; roof drain locations, gutters and downspouts size and location, slope arrows and pitch of roof, roof access ladder location.		
16.	Specifications of Roofing System (UL Class A or B Fire Retardant) including UL design number or system number specifically approved for re-roofing and manufacturer's installation instructions for new products.		
INS	TALLATION		
17.	General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of California Building Code (CBC), Chapter 15.		
18.	Existing slope is equal or greater than ¼" vertical in 12" horizontal. "Positive roof drainage is a continuous, unobstructed sloping path (slope ¼" per foot minimum) for completely draining water within 48 hours following rainfall."		
19.	Substrate . Deteriorated or damaged wood structure, including any sheathing, shall be replaced so as to restore the original integrity of the roof. Such materials shall be installed in accordance with the applicable portions of CBC chapter 23 Wood. 3401.2, California Building Code.		

	Compl	iance						
		Yes	No					
20.	Reinstallation of materials. Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars and metal counter flashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled. 1510.5, California Building Code.							
21.	Flashings. Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation. 1510.6, California Building Code.							
ROC	OF MOUNTED MECHANICAL UNITS							
22.	Flat or low sloping roofs: Mechanical units mounted on curbs shall have sloped cant strips at the base on the high side(s) to ensure that positive drainage away from curbs is provided. Flashing shall be installed at vertical elements to prevent moisture wicking upwards or seeping beneath the roofing barrier, facilitating the flow of drainage around all raised obstructions.							
23.	Sloped roofs: on sloped roof decks, mechanical units may be installed on level platforms that would normally obstruct the downward flow of running water. These platforms shall be trimmed with "crickets" that provide the minimum 1/4" per foot drainage around the obstruction framing, and metal flashing over the framing and beneath the roofing material as required by California Plumbing Code 1503.2.							
PRO	DJECT CLOSURE							
24.	At the completion of the project, Verified Reports shall be provided by the installer/contractor in accordance with the approved TIO for the project. Additionally, the owner shall submit a final verified cost of the project to the Office.							
25.	Schedule the HCAI Compliance Officer to provide final inspection and clearance.							
26.	The Office will administratively close the project upon receipt of all required documents, clearances and fees. (See Section IX of the FREER Manual)							
	END OF CHECKLIST	END OF CHECKLIST						



2020 West El Camino Avenue, Suite 800 Sacramento, CA 95833 355 South Grand Avenue, Suite 1900 Los Angeles, CA 90071



Testing, Inspection, and Observation Program

2019 California Building Standards Code - OSHPD 2/5

SECTION B			NOTE: Approved agencies, individuals, and all changes to the TIO program shall be identified, evaluated by the DPOR and approved by HCAI prior to proceeding with the related work.							
Faci	lity #:	Facility Name:			Project #:					
				"X" or provide PAA information:						
# xəpul	Stage 1 Required (Select with "X")	TESTS	Samples of Test & Inspection Reports Included	OPAA No. and Expiration Date	Responsible Approved Agency And/Or Individual	Compliance Verification by IOR (Initial/Date)	HCAI/FDD Use (Initial/Date)			
C-013	Х	Substrate for roof covering CBC 1507 Requirements for Roof Coverage								
C-0T4	X	Installation of roofing materials CBC 1506 Materials								

NOTE: To Be Determined (TBD) – The name of the firm or individual to perform this test or special inspection shall be submitted to and approved by the Office, prior to proceeding with the work that requires this test or special inspection.

SECTION F		CONSTRUCTION VERIFICATION										
Facility #:	Facilit	lity Name:		Project #:			ct #: }					
	VERIFIED CONSTRUCTION INS	PECTIO	N AND	OBSER	ATION	REPORT	ING					58005
REFERENCE NUMBER	PROJECT STAGE(S), MILESTONE, OR INTERVAL (Clearly indicate which Stage(s) apply to which Milestone/Interval)	VERIFIED COMPLIANCE REPORT REQUIRED AS INDICATED (Form OSH-FD-123) (See "PERSONAL KNOWLEDGE" as defined in California Administrative Code, Section 7-151)						HCAI/FDD USE				
		GEOR	AOR	SEOR	MEOR	EEOR	CONT	IOR	SP	TEST LAB		OH.
	Construction Final						Х	X				
	FOR OFF	105 11	05.01	\II \/								

FOR OFFICE USE ONLY	
HCAI Field Acceptance	
Name:	
	Date:

APPENDIX B



Reset Form

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

RECEIVED

			OFFICE	JOE ONE I
Project Application	roject Application			Increment #
Project				
Type (select one) O Alternate Method of Compliance O Annual Building Permit O Application for Building Permit	Application for Seismic Extension NPC SPC Incremental (select one) Increment Master Phase Segment	F	 Application Request for 	
Facility				
Project #				
Facility #	Facility Name			
HCAI Building # BLD -	Building Name			
HCAI Building # BLD -	Building Name			
HCAI Building # BLD -				
Type of Facility	-		Skilled Nursin	g or Intermediate Care Facility
Address				
Street Address Address Line 2				
City	County	Star	te <u>CA</u>	Zip Code
Phone				
Contact				
O Primary Type Legal Owner /	Administrator (Required for all applicat	tions)		
	M.I Last			
Organization Name				
Street Address				
Address Line 2				
City		Zip Code		
Phone	Phone 2		Fax	
Signature	Date	·	Email	
Notes				
O Primary Type _Authorized Ag	ent (Authorization must be attached)			
First Name		Name		
Organization Name				
Street Address				
Address Line 2				
City		Zip Code		
Phone	Phone 2		Fax	
Signature	Dat	e		
Notes				



ald bit.				OFFICE USE ONLY
Project .	Application	Proje	ect #	Increment #
Costs				
Cost Type	□ Contract □ Estimated (excluded design fees, in Note: For SB 1838 project	ling fixed equipment, in aspection fees, and off-s	site improvements)	_\$
	(sterilizers ch	Fixed Eq illers, boilers, etc., exclu	uipment Costs	\$
	(X-ray, MRI, C	Cost of Imag	ging Equipment ginstallation cost)	
Reason	N.	lote: See Instructions for	or Fee Information	
Enclosur	es			
Number of Copies	Enclosure Type	Number of Copies	Enclosure Typ	De
	Application for New Project		Plans	
	Building Permit Form		Project Schedu	ile
	Certificate of Insurance		Site Data Repo	orts
	Contract Information		Specifications	
	Demolition Plans		Structural Calc	ulations
	Design Program		Testing, Inspec	tion and Observation Program (TIO)
	Equipment Anchorage Calculations		Transmittal Let	ter (Section 7-131)
	Geotechnical Reports (for Buildings and Additions	s)	Verification of	Conformance to Local Codes
	Inspector Qualification Form		Other	
	Letter of Authorization			

APPENDIX C



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

	Project #	Increment #
Application for Building Permit	BP#	
Facility		
Project #		
Facility #Facility Name		
HCAI Building # BLD - Building Name		
Type of Facility Acute Psychiatric Hospital General Acute C Correctional Treatment Center Licensed Clinic	are Hospital	Skilled Nursing or Intermediate Care Facility
Application Specific Information – Building Permit		
Construction Performed By (check one)		
Licensed Contractor		
State of California Contractor's License Number	Class	Expiration Date
First Name M.I Last N	ame	
Organization Name		
Street Address		
Address Line 2		
City State		
Phone Phone 2		Fax
CALIFORNIA LICENSED CONTRACTOR'S DECLARATION I hereby affirm under penalty of perjury that I am licensed under provisio of the Business and Professions Code, and my license is in full force an Contractor or Authorized Agent's Name	d effect.	
Signature D		
Owner/Builder		
OWNER-BUILDER DECLARATION I hereby affirm under penalty of perjury that I am exempt from the Contrabelow by the checkmark(s) I have placed next to the applicable items(s) city or county that requires a permit to construct, alter, improve, demolish applicant for the permit to file a signed statement that he/she is licensed Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Builcensure and the basis for the alleged exemption. Any violation of Section a civil penalty of not more than five hundred dollars [\$500].).	below: (Sec. n or repair any pursuant to the siness and Pre-	7031.5, Business and Professions Code: Any r structure, prior to its issuance, also requires the ne provisions of the Contractors State License ofessions Code) or that he/she is exempt from
Please check all that apply for the following: I, as owner of the property, or my employees with wages as their sole intended or offered for sale (Section 7044, Business and Professions an owner of property who, through employees' or personal effort, built are not intended or offered for sale. If, however, the building or improbuilder will have the burden of proving that it was not built or improve I am exempt under Section:	Code: The Co ds or improve vement is solo d for the purp	ontractors State License Law does not apply to s the property, provided that the improvements d within one year of completion, the Owner- ose of sale.).
I, as owner of the property, am exclusively contracting with licensed of Professions Code: The Contractor's State License Law does not apply to who contracts for the projects with a contractor(s) licensed pursuant to the	an owner of	property who builds or improves thereon, and
By my signature below I acknowledge that, I cannot legally sell a structur constructed in its entirety by licensed contractors. I understand that a cop Professions Code, is available upon request when this application is sub- http://leginfo.legislature.ca.gov/.	y of the applic	cable law, Section 7044 of the Business and
Signature of Legal Owner or Authorized Agent		Date
		Date





Project # Increment # Application for Building Permit BP# Application Specific Information - Building Permit Worker's Compensation Coverage WORKERS' COMPENSATION DECLARATION (Section 3800, Labor Code): WARNING: FAILURE TO SECURE WORKERS' 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 herby affirm under penalty of perjury one of the following declarations: Exempt: 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 workers' compensation laws of California, and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions. ☐ Insured through Carrier: I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are: Insurance Carrier Expiration Date ___ Insurance Agent Phone ___ Insurance Agent Name □ Copy Attached Self-insured: I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. Certificate # Applicant's Signature ___ Date Costs Construction Costs Estimated Cost Type (excluding fixed equipment, imaging equipment, Contract design fees, inspection fees, and off-site improvements) Notes: For SB 1838 projects, this amount must not exceed \$50,000 For Incremented projects include the combined costs for all increments _\$ Fixed Equipment Costs (sterilizers, chillers, boilers, etc., excluding installation) _\$ Cost of Imaging Equipment (X-ray, MRI, CT Scan, etc., excluding installation cost) _\$ Note: See Instructions for Fee Information Reason

BUILDING PERMIT			This permit shall be posted.
Facility Building Permit			
Project #			
Facility #			
HCAI Building # BLD -	_		
Type of Facility Acute Psy Correction		neral Acute Care Hospital ensed Clinic	Skilled Nursing or Intermediate Care Facility
Record Detail			
Record/Project Name			
Detailed Description			
		JMENTS, OR WORK IS	N ONE YEAR AFTER OBTAINING THE SUSPENDED OR ABANDONED FOR A MENCEMENT.
ordinances, rules, regulations a	•	ng construction, and with an	agree to comply with all city and county y and all conditions of permit. I hereby on purposes.
Printed Name		Authoriz	zed Agent Legal Owner
Signature		Date	
OFFICE USE ONLY			
Project #	Increment #		
BP #			
Permit issued on			
By Regional Compliance Offi	cer, Department of Health Care	Access and Information	
regional compliance can	of, Department of Florida Salo	Access and information	
Special Conditions			



RECEIVED	

Application for Inspector of Record

Facility					
Project #					
Facility #	Facility Name				
HCAI Building # BLD -	Building Name				
Type of Facility Acute Psychiatric			Skilled Nursing or Intermedia	te Care Facility	
Correctional Trea	tment Center	Licensed Clinic			
Applicant					
First Name	M.:	I Last Name			
Organization Name					
Street Address					
Address Line 2					
City					
Phone	Phor	ne 2	Fax		
Email		_			
Application Specific Informat	•	_			
HCAI Certification Number		Class	3 () c		
Are you engaged in a business or other					
If yes, describe					
CERTIFICATION OF APPLICANT fo	r INSPECTOR C	DE RECORD			
I hereby certify that all answers to the questions on this form are true, and I agree and understand that any misstatement of material fact contained in this application will be sufficient cause for my dismissal on this project, and possible suspension or revocation of my Hospital Inspector Certification. If I undertake additional work other than stated herein, I will notify the owner, the Architect, and/or Engineer, and the Department of Health Care Access and Information, without delay. If appointed, I will accept the responsibilities of Inspector of Record on the above mentioned project and will discharge the duties imposed upon me by all applicable sections of the Health and Safety Code.					
Signature			Date		
LEGAL OWNER This person is being employed by the professional engineer, and HCAI, and construction of this project.					
Printed Name		Title			
Signature			Date		
PROFESSIONAL This person known to me, is qualified,	and is satisfacto	ry to me as an Inspector of Record	d on this project.		
Signature of Architect or Engineer in F	Responsible Cha	rge	Date		
Signature of Structural Engineer			Date		
(R	equired on projects th	hat include primary gravity and/or lateral load			
OFFICE USE ONLY					
HCAI APPROVAL					
Printed Name		Title _			
Signature			Date		



APPENDIX E



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION

FACILITIES DEVELOPMENT DIVISION – www.hcai.ca.gov/fdd 2020 West El Camino Avenue, Suite 800, Sacramento, CA 95833 355 South Grand Avenue, Suite 1900, Los Angeles, CA 90071

Phone (916) 440-8300 Phone (213) 897-0166 FAX (916) 274-0102 FAX (213) 217-8511

Letter of Authoriz (Agent for Legal Appli		Project #:			
To: Department of	Health Care Access and Informatio	n			
I hereby authorize	1)	Name)	(Title)		
To be known as the "A	Agent for Legal Applicant" in accord	lance with the Applicat	tion for New		
Project and as the "Le	egal Owner, or Authorized Agent" o	n Building Permit, Pos	t Approval		
Document, Notice of S	Start of Construction and other HCA	Al FDD forms and requ	iired		
documents, for the facility known as					
		, Facility #			
Date:					
Signature:					
orginature.					
Name:					
Title:					
Address:					
Phone:					



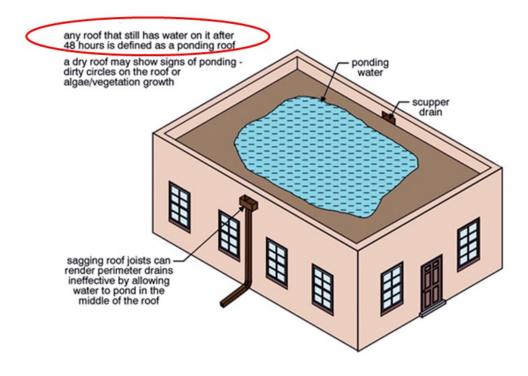


Figure 1 Ponding on flat roofs

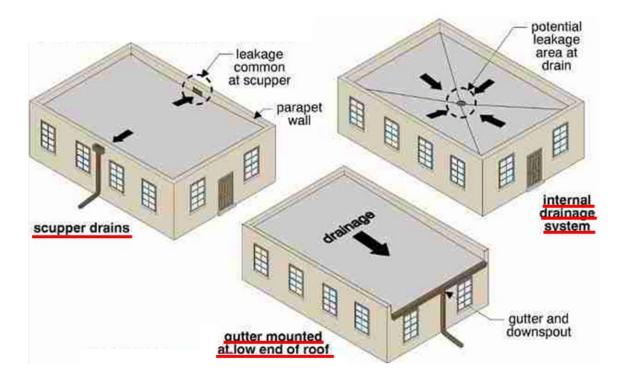


Figure 2 Flat roof drainage systems

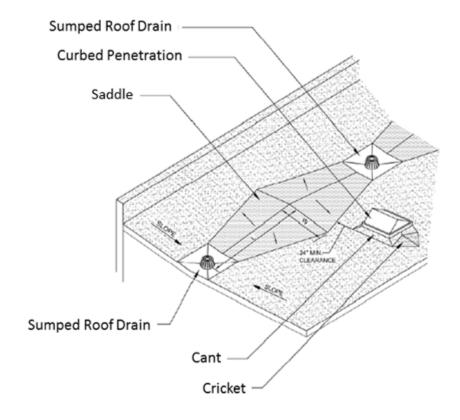


Figure 3 Typical cricket and saddle layout

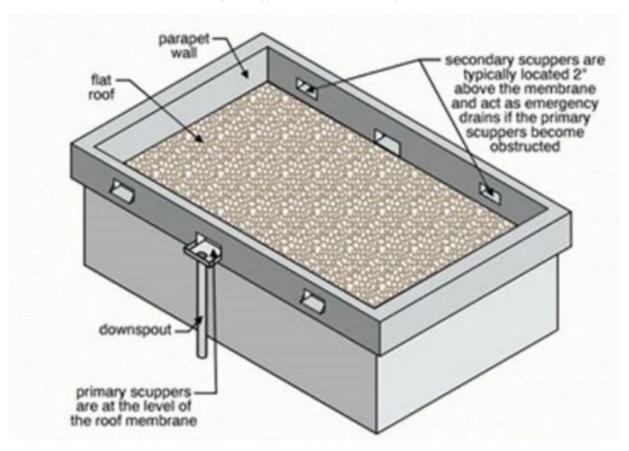


Figure 4 Scupper drains

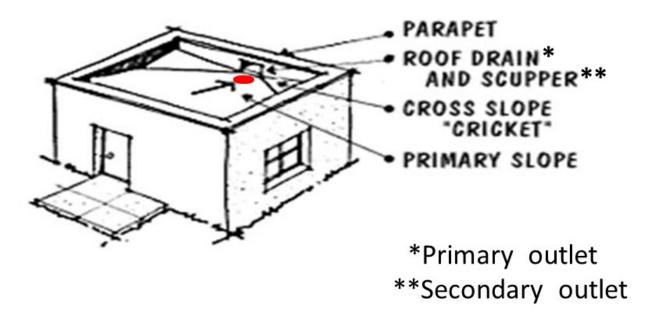


Figure 5 Basic elements of good drainage in flat roofs with parapets

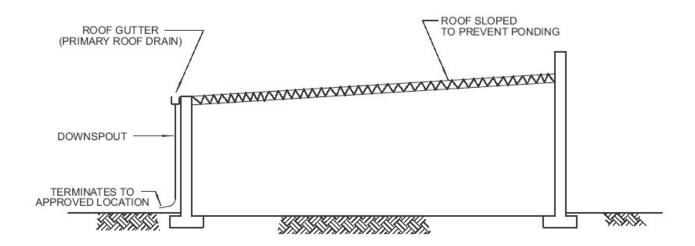
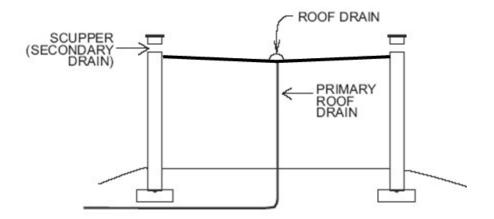


Figure 6 Secondary roof drainage not required



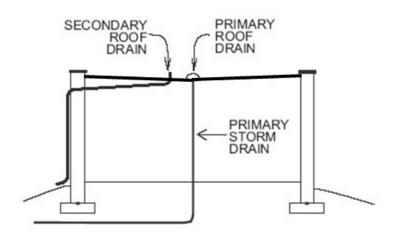


Figure 7 Separate primary and secondary roof drains

Rain Loads

- CBC does not permit under any circumstances any roof configurations without **positive drainage**.
- The term "positive drainage" is defined as "the drainage condition in which
 consideration has been made for all loading deflections of the roof deck, and
 additional roof slope has been provided to ensure drainage of the roof
 within 48 hours of rainfall".

Title 24 (CBC, CPC, etc.) - "positive roof drainage"

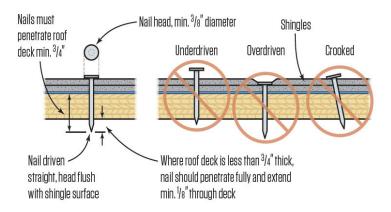
- **Section 1101.11.2** of the CPC requires secondary drainage on roof areas by roof scuppers, an open side, or a secondary roof drain.
- **Section 1107.1** of the CPC requires "Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

Title 24 (CBC, CPC, etc.) - "positive roof drainage"

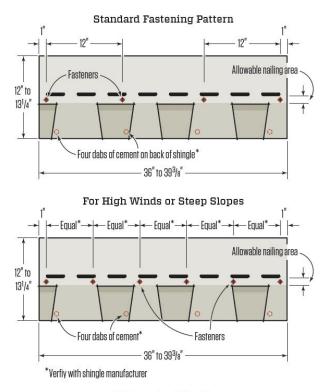
Section 1107.2 of the CPC, Separate systems required, states:
 Secondary roof drain systems shall have the end point of discharge
 separate from the primary system. Discharge shall be above grade, in a
 location that would normally be observed by the building occupants or
 maintenance personnel.

Reroofing Project Conditions

- Single ply roofing system validation
- Manufacturers QA/QC for the installation and maintenance of the roofing material
- New crickets & cants sloped at ½ in 12 to ¼ in 12
- Slopes to be added around each drain
- New lower scuppers

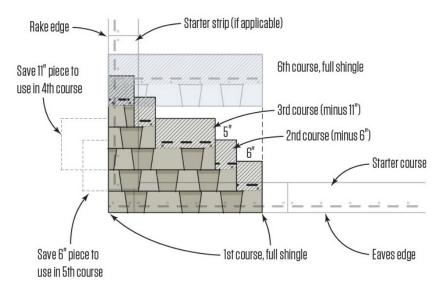


Properly Driven Nails

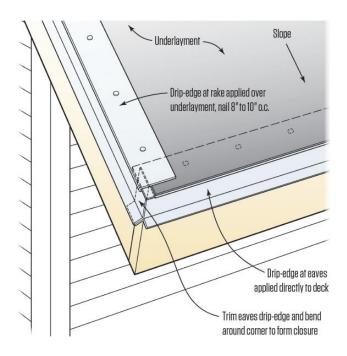


Shingle Nailing

APPENDIX G

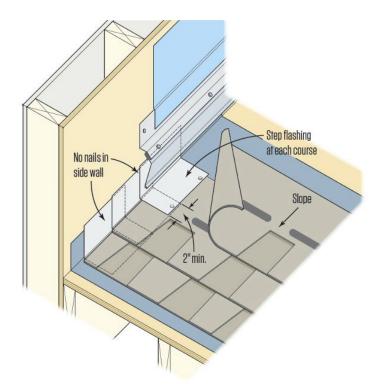


Offsets for Laminated Shingles

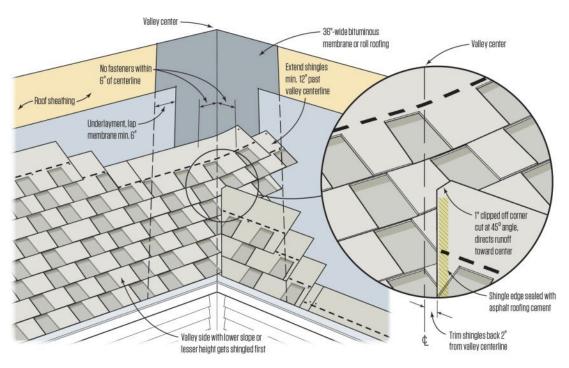


Drip-Edge Installation

APPENDIX G



Step Flashing



Closed-Cut Valley

APPENDIX G



Shingles at Roof Vent



Shingles at Pipe Vent