

**TITLE 16. DENTAL BOARD OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS**

ORDER OF ADOPTION

Amend California Code of Regulations, Title 16, Sections 1021, 1028, 1030, 1031, 1032, 1032.1, 1032.2, 1032.3, 1032.4, 1032.5, 1032.6, 1033, 1033.1, 1034, 1034.1, 1035, and 1036; Adopt California Code of Regulations, Title 16, Sections 1032.7, 1032.8, 1032.9, 1032.10, 1036.01; and, Repeal California Code of Regulations, Title 16, Sections 1035.1, 1035.2, 1036.1, 1036.2, 1036.3, 1037, 1038, and 1039; as follows:

**CHAPTER 1. GENERAL PROVISIONS APPLICABLE TO ALL LICENSEES
ARTICLE 6. FEES**

§ 1021. Examination, Permit and License Fees for Dentists

The following fees are set for dentist examination and licensure by the board**:

(a) Initial application for the board clinical and written examination pursuant to Section 1632(c)(1) of the code, Initial application for those applicants qualifying pursuant to Section 1632(c)(2) and those applicants qualifying pursuant to Section 1634.1	\$100
(b) Initial application for restorative technique examination	\$250
(c) Applications for reexamination	\$75
(d) Board clinical and written examination or pursuant to Section 1632(c)(1) of the code	\$450
(<u>e</u>) Restorative technique examination or reexamination	\$250
(<u>f</u>) Fee for application for licensure by credential	\$283
(<u>g</u>) Initial license	\$450 \$365
(<u>h</u>) Biennial license renewal fee	\$450 \$365.
(<u>i</u>) Biennial license renewal fee for those qualifying pursuant to Section 1716.1 of the code shall be one half of the renewal fee prescribed by subsection (<u>g</u>), (<u>h</u>).	
(<u>j</u>) Delinquency fee - license renewal - The delinquency fee for license renewal shall be the amount prescribed by section 163.5 of the code.	
(<u>k</u>) Substitute certificate	\$50
(<u>l</u>) Application for an additional office permit	\$100
(<u>m</u>) Biennial renewal of additional office permit	\$100

(am) Late change of practice registration	\$50
(en) Fictitious name permit The fee prescribed by Section 1724.5 of the Code	
(po) Fictitious name renewal	\$150
(qp) Delinquency fee-fictitious name renewal	
The delinquency fee for fictitious name permits shall be one-half of the fictitious name permit renewal fee.	
(rq) Continuing education registered provider fee	\$250
(sr) General anesthesia or conscious sedation permit or adult or minor oral conscious sedation certificate	\$200
(ts) Oral Conscious Sedation Certificate Renewal	\$75
(ut) General anesthesia or conscious sedation permit renewal fee	\$200
(vu) General anesthesia or conscious sedation on-site inspection and evaluation fee	\$250

*Fee pro-rated based on applicant's birth date.

** Examination, licensure, and permit fees for dentistry may not all be included in this section, and may appear in the Business and Professions Code.

Note: Authority cited: Sections 1614, 1635.5, 1634.2(c), 1724 and 1724.5, Business and Professions Code. Reference: Sections 1632, 1634.1, 1646.6, 1647.8, 1647.12, 1647.15, 1715, 1716.1, 1718.3, 1724 and 1724.5, Business and Professions Code.

CHAPTER 2. DENTISTS

ARTICLE 2. APPLICATION FOR LICENSURE

§ 1028. Application for Licensure.

(a) An applicant for licensure as a dentist shall submit an "Application for Licensure to Practice Dentistry" (WREB) Form 33A-22W (Revised 11/06), which is hereby incorporated by reference, or "~~Application for Examination for Licensure to Practice Dentistry~~Determination of Licensure Eligibility (Portfolio)" Form 33A-22P (New 11/201408/2013), which are hereby incorporated by reference, ~~which are forms prescribed by the board and the application shall be accompanied by the following information and fees:~~

(b) Applications for licensure shall be accompanied by the following information and fees:

- (1) The application and examination(s) fees as set by Section 1021;

(2) Satisfactory evidence that the applicant has met all applicable requirements in Sections 1628 and 1632 of the Code;

~~(3) Two classifiable sets of fingerprints or a LiveScan form and applicable fee~~The applicant shall furnish two classifiable sets of fingerprints or submit a Live Scan inquiry to establish the identity of the applicant and to permit the Board to conduct a criminal history record check. The applicant shall pay any costs for furnishing the fingerprints and conducting the criminal history record check;

(4) Where applicable, a record of any previous dental practice and ~~verification~~certification of license status in each state or jurisdiction in which licensure as a dentist has been attained;

~~(5) Except for applicants qualifying pursuant to Section 1632(c)(2), satisfactory evidence of liability insurance or of financial responsibility in accordance with Section 1628(c) of the code. For purposes of that subsection:~~

~~(A) Liability insurance shall be deemed satisfactory if it is either occurrence-type liability insurance or claims-made-type liability insurance with a minimum five-year reporting endorsement, issued by an insurance carrier authorized by the Insurance Commissioner to transact business in this State, in the amount of \$100,000 for a single occurrence and \$300,000 for multiple occurrences, and which covers injuries sustained or claimed to be sustained by a dental patient in the course of the licensing examination as a result of the applicant's actions.~~

~~(B) "Satisfactory evidence of financial responsibility" means posting with the board a \$300,000 surety bond.~~

~~(65)~~ Applicant's name, social security number, address of residency, mailing address if different from address of residency, date of birth, and telephone number, and gender of applicant;

~~(76)~~ Applicant's preferred examination site(s) in California unless the applicant has passed the Western Regional Examining Board examination Information as to whether the applicant has ever taken the California Law and Ethics written examination;

~~(87)~~ Any request for accommodation pursuant to the Americans with Disabilities Act;

~~(98)~~ A 2-inch by 2-inch passport style photograph of the applicant, submitted with the "Application for Licensure to Practice Dentistry (WREB)" Form 33A-22W (Revised 11/06), or "Application for Determination of Licensure Eligibility (Portfolio)" Form 33A-22P (New-11/201408/2013);

(409) Information regarding applicant's education including dental education and postgraduate study, if applicable;

(4410) Certification from the dean of the qualifying dental school attended by the applicant to certify the date the applicant graduated;

~~(11) Certification from the dean of the qualifying dental school attended by the applicant to certify the applicant has graduated with no pending ethical issues;~~

(4211) Information regarding whether the applicant has any pending or had in the past any charges filed against a dental license or other healing arts license;

(4312) Information regarding any prior disciplinary action(s) taken against the applicant regarding any dental license or other healing arts license held by the applicant including actions by the United States Military, United States Public Health Service or other federal government entity. "Disciplinary action" includes, but is not limited to, suspension, revocation, probation, confidential discipline, consent order, letter of reprimand or warning, or any other restriction or action taken against a dental license. If an applicant answers "yes", he or she shall provide the date of the effective date of disciplinary action, the state where the discipline occurred, the date(s), charges convicted of, disposition and any other information requested by the board;

(4413) Information as to whether the applicant is currently the subject of any pending investigation by any governmental entity. If the applicant answers "yes," he or she shall provide any additional information requested by the board;

(4514) Information regarding any instances in which the applicant was denied a dental license, denied permission to practice dentistry, or denied permission to take a dental board examination. If the applicant answers "yes", he or she shall provide the state or country where the denial took place, the date of the denial, the reason for denial, and any other information requested by the board;

(4615) Information as to whether the applicant has ever surrendered a license to practice dentistry in another state or country. If the applicant answers "yes," additional information shall be provided including state or country of surrender, date of surrender, reason for surrender, and any other information requested by the board;

(4716) Information as to whether the applicant has ever been convicted of any ~~crime including infractions, misdemeanors and felonies unless the conviction was for an infraction with a fine of less than \$300.~~ "Conviction" for purposes of this subparagraph includes a plea of no contest and any conviction that has been set aside pursuant to Section 1203.4 of the Penal Code. Therefore, applicants shall ~~disclose any convictions in which the applicant entered a plea of no contest and~~

~~any convictions that were subsequently set aside pursuant to Section 1203.4 of the Penal Code, violation of the law in this or any other state, the United States, or other country, omitting traffic infractions under \$1,000 not involving alcohol, dangerous drugs, or controlled substances. For the purposes of this section, "conviction" means a plea or verdict of guilty or a conviction following a plea of nolo contendere or "no contest" and any conviction that has been set aside or deferred pursuant to Sections 1000 or 1203.4 of the Penal Code, including infractions, misdemeanors, and felonies;~~

~~(1817) Information as to whether the applicant is in default on a United States Department of Health and Human Services education loan pursuant to Section 685 of the Code; and~~

~~(19) Any other information the board is authorized to consider when determining if an applicant meets all applicable requirements for examination and licensure; and~~

~~(2018) A certification, under the penalty of perjury, by the applicant that the information on the application is true and correct;_~~

~~(b) Completed applications shall be filed with the board not later than 45 days prior to the date set for the beginning of the examination for which application is made. An application shall not be deemed incomplete for failure to establish compliance with educational requirements if the application is accompanied by a certification from an approved school that the applicant is expected to graduate from that school prior to such examination and if the approved school certifies not less than 15 days prior to examination that the applicant has in fact graduated from that school.~~

(c) In addition to complying with the applicable provisions contained in subsections (a) through (b) above, an applicant submitting an "Application for Licensure to Practice Dentistry" (WREB) Form 33A-22W- (Revised 11/06), for licensure as a dentist upon passage of Western Regional Examining Board ("WREB") examination shall also furnish evidence of having successfully passed, on or after January 1, 2005, the WREB examination.

(d) In addition to complying with the applicable provisions contained in subsections (a) through (b) above, an applicant submitting an "Application for Determination of Licensure Eligibility (Portfolio)" Form 33A-22P (New-11/201408/2013) shall also furnish certification from the dean of the qualifying dental school attended by the applicant to certify the applicant has graduated with no pending ethical issues;

(e) An "Application for Determination of Licensure Eligibility (Portfolio)" Form 33A-22P (New 11/201408/2013) may be submitted prior to graduation, if the application is accompanied by a certification from the school that the applicant is expected to graduate. The Board shall not issue a license, until receipt of a certification from the dean of the school attended by the applicant, certifying the date the applicant graduated

with no pending ethical issues on school letterhead.

(1) The earliest date upon which a candidate may submit their portfolio for review by the board shall be within 90 days of graduation. The latest date upon which a candidate may submit their portfolio for review by the board shall be no more than 90 days after graduation. '

(2) The candidate shall arrange with the dean of his or her dental school for the school to submit the completed portfolio materials to the Board.

(3) The Board shall review the submitted portfolio materials to determine if it is complete and the candidate has met the requirements for Licensure by Portfolio Examination.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1628, ~~and 1628.5,~~ and 1632, Business and Professions Code.

§ 1030. Theory Examination.

An applicant shall successfully complete the ~~National Board of Dental Examiners' National Board Dental Examinations of the Joint Commission on National Dental Examinations~~ examination prior to taking the California examination and shall submit confirmation thereof to the board prior to submission of the "Application for Issuance of License Number and Registration of Place of Practice," (Rev. 11-07). ~~Such confirmation must be received in the board office not less than 30 days prior to the examination date requested.~~

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and ~~4633.5~~1634.1, Business and Professions Code.

ARTICLE 3. EXAMINATIONS

§ 1031. Supplemental Examinations in California Law and Ethics.

Prior to issuance of a license, an applicant shall successfully complete supplemental written examinations in California law and ethics.

(a) The examination on California law shall test the applicant's knowledge of California law as it relates to the practice of dentistry.

(b) The examination on ethics shall test the applicant's ability to recognize and apply ethical principles as they relate to the practice of dentistry.

(c) ~~An examinee~~ candidate shall be deemed to have passed the examinations if his/her score is at least 75% in each examination.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and ~~4633.5~~1634.1, Business and Professions Code.

§ 1032. Demonstrations of SkillPortfolio Examination: Eligibility.

~~Each applicant shall complete written examinations in endodontics and removable prosthodontics. Clinical examinations consisting of periodontics, an amalgam restoration and a composite resin restoration will be completed on patients. In addition, each applicant shall be required to complete a simulation examination in fixed prosthetics.~~

The portfolio examination shall be conducted while the candidate is enrolled in a Board-approved dental school located in California. A student may elect to begin the portfolio examination process during the clinical training phase of their dental education.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630 and 1632, Business and Professions Code.

§ 1032.1. EndodonticsPortfolio Examination: Definitions.

~~The written endodontics diagnosis and treatment planning examination shall test the applicant's ability to diagnose, treatment plan, interpret radiographs and evaluate treatment strategies for pulpal and periapical pathoses and systemic entities.~~

As used in this Article, the following definitions shall apply:

(a) "Candidate" means a dental student who is taking the examination for the purpose of applying to the Board for licensure.

(b) "Case" means a dental procedure which satisfies the required clinical experiences.

(c) "Clinical experiences" means procedures, performed with or without faculty intervention, that the candidate must complete to the satisfaction of his or her clinical faculty prior to submission of his or her portfolio examination application. Clinical experiences have been determined as a minimum number in order to provide a candidate with sufficient understanding, knowledge, and skill level to reliably demonstrate competency.

(d) "Competency examination" means a candidate's final assessment in a portfolio examination competency, performed without faculty intervention and graded by competency examiners registered with the Board.

(e) "Critical error" means a gross error that is irreversible or may impact the patient's safety and wellbeing.

(f) "Patient management" means the interaction between patient and candidate from initiation to completion of treatment, including any post-treatment complications that may occur.

(g) "Portfolio" means the cumulative documentation of clinical experiences and competency examinations submitted to the Board.

(h) "Portfolio competency examiner" means the dental school faculty examiner. The portfolio competency examiner shall be a faculty member chosen by the school, registered with the Board, and shall be trained and calibrated to conduct and grade the portfolio competency examinations.

(i) "School" means a Board-approved dental school located in California.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632, Business and Professions Code.

§ 1032.2. Removable Prosthodontics Evaluation Examination Portfolio Examination: Requirements for Demonstration of Clinical Experience.

~~The written removable prosthodontics evaluation examination shall be conducted in a laboratory setting and test the applicant's knowledge, understanding and judgement in the diagnosis and treatment of complete denture, partial denture and implant cases.~~

(a) Each candidate shall complete at least the minimum number of clinical experiences in each of the competencies prior to submission of their portfolio to the Board. All clinical experiences shall be performed on patients under the supervision of school faculty and shall be included in the portfolio submitted to the Board. Clinical experience shall be performed at the dental school clinic, an extramural dental facility or a mobile dental clinic approved by the Board. The portfolio shall contain documentation that the candidate has completed the minimum number of clinical experiences as follows:

(1) Oral diagnosis and treatment planning (ODTP) clinical experiences shall include a minimum of twenty (20) patient cases. Clinical experiences for ODTP include: comprehensive oral evaluations, limited (problem-focused) oral evaluations, and periodic oral evaluation.

(2) Direct restorative clinical experiences shall include a minimum of sixty (60) restorations. The restorations completed in the clinical experiences may include any restoration on a permanent or primary tooth using standard restorative materials including: amalgams, composites, crown build-ups, direct pulp caps, and temporizations.

(3) Indirect restorative clinical experiences shall include a minimum of fourteen (14) restorations. The restorations completed in the clinical experiences may be a combination of the following procedures: inlays, onlays, crowns, abutments, pontics, veneers, cast posts, overdenture copings, or dental implant restorations.

(4) Removable prosthodontic clinical experiences shall include a minimum of five (5) prostheses. One of the five prostheses may be used as a portfolio competency examination provided that it is completed in an independent manner with no faculty intervention. A prosthesis shall include any of the following: full denture, partial denture (cast framework), partial denture (acrylic base with distal

extension replacing a minimum number of three posterior teeth), immediate treatment denture, or overdenture retained by a natural tooth or dental implants.

(5) Endodontic clinical experiences on patients shall include five (5) canals or any combination of canals in three separate teeth.

(6) Periodontal clinical experiences shall include a minimum of twenty-five (25) cases. A periodontal experience shall include the following: An adult prophylaxis, treatment of periodontal disease such as scaling and root planing, any periodontal surgical procedure, and assisting on a periodontal surgical procedure when performed by a faculty or an advanced education candidate in periodontics. The combined clinical periodontal experience shall include a minimum of five (5) quadrants of scaling and root planning procedures.

(b) Completion of all required clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be included in the candidate's portfolio.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1032.3. Clinical Periodontics ExaminationPortfolio Examination: Oral Diagnosis and Treatment Planning (ODTP).

~~(a) The clinical periodontics examination shall include a clinical periodontal examination and diagnosis and hand scaling of a quadrant(s) as assigned or approved by the board. The term "scaling" means the complete removal of explorer-detectable calculus, soft deposits and plaque, and smoothing of the unattached tooth surfaces. Unattached tooth surface means the portion of the crown and root surface to which no tissue is attached. Ultrasonic, sonic, handpiece-drive or other mechanical scaling devices may be used only at the direction of the board.~~

~~Additionally, the clinical periodontics examination shall include a written exercise using projected slides depicting clinical situations which shall test the applicant's ability to recognize, diagnose and treat periodontal diseases.~~

~~(b) One patient shall be provided by the applicant for the clinical periodontal examination and diagnosis and scaling portions of the examination. The applicant shall provide full mouth radiographs of the patient, which shall consist of 18 radiographs of which at least four must be bite-wings. Radiographs must be of diagnostic quality and must depict the current condition of the patient's mouth. If a patient is deemed unacceptable by the examiners, it is the applicant's responsibility to provide another patient who is acceptable. An acceptable patient shall meet the criteria set forth in Section 1033.1 and the following additional criteria:~~

~~(1) Have a minimum of 20 natural teeth, of which at least four must be molar teeth.~~

~~(2) Have at least one quadrant with the following:~~

~~(A) At least six natural teeth;~~

~~(B) At least one molar, one bicuspid and one anterior tooth which are free of conditions which would interfere with evaluation including, but not limited to, gross decay, faulty restorations, orthodontic bands, overhanging margins, or temporary restorations with subgingival margins. (Crowns with smooth margins are acceptable);~~

~~(C) Interproximal probing depths of three to six millimeters, of which at least some must exceed three millimeters. A deviation of one millimeter from the above range is permissible;~~

~~(D) Explorer-detectable moderate to heavy interproximal subgingival calculus must be present on at least 50 percent of the teeth. Calculus must be radiographically evident.~~

~~(c) If an applicant is unable to find a patient with one quadrant which meets the requirements of subsection (b)(2) above, the applicant may provide a patient in which those requirements can be found somewhere in two quadrants on the same side of the mouth rather than in one quadrant. However, an applicant who presents such a patient shall be required to scale all teeth in both quadrants in the same time allotted for scaling one quadrant.~~

(a) The portfolio examination shall contain the following documentation of the minimum ODTP clinical experiences and documentation of ODTP portfolio competency examination:

(1) Evidence of successful completion of the ODTP clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the ODTP competency examination. For purpose of this section, satisfactory proof means the ODTP competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements: The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The ODTP competency examination shall include:

(1) Fifteen (15) scoring factors:

(A) Medical Issues That Impact Dental Care;

(B) Treatment Modifications Based on Medical Conditions;

(C) Patient Concerns/Chief Complaint;

(D) Dental History;

(E) Significant Radiographic Findings;

(F) Clinical Findings;

(G) Risk Level Assessment;

(H) Need for Additional Diagnostic Tests/Referrals;

(I) Findings From Mounted Diagnostic Casts;

(J) Comprehensive Problem List;

(K) Diagnosis and Interaction of Problems;

(L) Overall Treatment Approach;

(M) Phasing and Sequencing of Treatment;

(N) Comprehensiveness of Treatment Plan; and

(O) Treatment Record.

(2) Initiation and completion of one (1) multidisciplinary portfolio competency examination.

(3) The treatment plan shall involve at least three (3) of the following six disciplines: periodontics, endodontics, operative (direct and indirect restoration), fixed and removable prosthodontics, orthodontics, and oral surgery.

(4) Patient's Medical History: The medical history shall include: an evaluation of past illnesses and conditions, hospitalizations and operations, allergies, family history, social history, current illnesses and medications, and their effect on dental condition.

(5) Patient's Dental History: The dental history shall include: age of previous prostheses, existing restorations, prior history of orthodontic/periodontic treatment, and oral hygiene habits/adjuncts.

(6) Documentation of a comprehensive examination of patient's current oral health condition and vital signs. The documentation shall include:

(A) Interpretation of radiographic series;

(B) Performance of caries risk assessment;

(C) Determination of periodontal condition;

(D) Performance of a head and neck examination, including oral cancer screening;

(E) Screening for temporomandibular disorders;

(F) Assessment of vital signs;

(G) Performance of a clinical examination of dentition; and

(H) Performance of an occlusal examination.

(7) Documentation the candidate evaluated data to identify problems. The documentation shall include:

(A) Chief complaint;

(B) Medical problem;

(C) Stomatognathic problems; and

(D) Psychosocial problems.

(8) Documentation the candidate worked-up the problems and developed a tentative treatment plan. The documentation shall include:

(A) Problem definition, e.g., severity/chronicity and classification;

(B) Determination if additional diagnostic tests are needed;

(C) Development of a differential diagnosis;

(D) Recognition of need for referral(s);

(E) Pathophysiology of the problem;

(F) Short term needs;

(G) Long term needs;

(H) Determination interaction of problems;

(I) Development of treatment options;

(J) Determination of prognosis; and

(K) Patient information regarding informed consent.

(9) Documentation the candidate developed a final treatment plan. The documentation shall include:

(A) Rationale for treatment;

(B) Problems to be addressed, or any condition that puts the patient at risk in the long term; and

(C) Determination of sequencing with the following framework:

(i) Systemic: medical issues of concern, medications and their effects, effect of diseases on oral condition, precautions, treatment modifications;

(ii) Urgent: Acute pain/infection management, urgent esthetic issues, further exploration/additional information, oral medicine consultation, pathology;

(iii) Preparatory: Preventive interventions, orthodontic, periodontal (Phase I, II), endodontic treatment, caries control, other temporization;

(iv) Restorative: operative, fixed, removable prostheses, occlusal splints, implants;

(v) Elective: esthetic (veneers, etc.) any procedure that is not clinically necessary, replacement of sound restoration for esthetic purposes, bleaching; and

(vi) Maintenance: periodontic recall, radiographic interval, periodic oral examination, caries risk management.

(c) Acceptable Patient Criteria for ODTP Competency Examination. The patient used for the competency examination shall meet the following criteria:

(1) Maximum of ASA II, as defined by the American Society of Anesthesiologists (ASA) Physical Status Classification System;

(2) Missing or will be missing two or more teeth, not including third molars; and

(3) At least moderate periodontitis with probing depths of 5 mm or more.

(d) Competency Examination Scoring: The scoring system used for the ODTP competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error.

(2) A score of 1 is unacceptable; major deviations that are correctable

(3) A score of 2 is acceptable; minimum competence

(4) A score of 3 is adequate; less than optimal

(5) A score of 4 is optimal

A score rating of “2” shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1 Business and Professions Code.

§ 1032.4. Clinical Amalgam Restoration and Composite Resin Restoration Portfolio Examination: Direct Restoration.

~~(a) Amalgam restoration. Each applicant shall complete to the satisfaction of the board one Class II amalgam restoration in a vital posterior tooth, excluding the mandibular first bicuspid. The tooth involved in the restoration must have caries which penetrates the dento-enamel junction and must be in occlusion. Proximal caries must be in contact with at least one adjacent tooth. The tooth selected may have one existing single-surface restoration or sealant on the occlusal, buccal or lingual surfaces.~~

~~(b) Composite resin restoration. Each applicant shall complete to the satisfaction of the board, one Class III or IV composite resin cavity preparation and restoration of a permanent incisor or canine. The tooth to be restored with a Class III or IV restoration must have proximal caries which penetrates the dento-enamel junction and the caries must be in contact with an adjacent tooth.~~

~~(c) Radiographic requirements. Each applicant shall provide satisfactory periapical and bite-wing radiographs of the tooth to be treated for the amalgam restoration and a satisfactory periapical radiograph of the tooth to be treated for the composite resin~~

restoration. All radiographs shall have been taken not more than six months prior to the examination at which they are presented and must depict the current condition of the patient's tooth.

(d) Rubber dams. A rubber dam shall be used during the preparation of the amalgam restoration and the composite resin restoration. The Amalgam preparation and the composite resin preparation shall be presented for grading with a rubber dam in place.

(e) Altering preparations. A preparation which has been graded shall not be changed or altered by the examinee without the specific approval and signature of an examiner.

(f) Pathological exposures. In the event of a pathological exposure during the amalgam preparation or the composite resin preparation, both the preparation and the restoration will be graded.

(g) Mechanical exposures. In the event of a mechanical exposure, completion of the clinical procedure will not be allowed for either the amalgam restoration or the composite resin restoration and the applicant will receive a grade of zero.

(a) The portfolio examination shall contain the following documentation of the minimum direct restoration clinical experiences and documentation of the direct restoration portfolio competency examination:

(1) Evidence of successful completion of the direct restoration clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the direct restoration competency examination. For purpose of this section, satisfactory proof means the direct restoration competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements: The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The direct restoration portfolio shall include documentation of the candidate's clinical competency to perform a direct restoration on teeth containing primary carious lesions to optimal form, function and esthetics using amalgam or composite restorative materials. The case selection shall be based on minimum direct restoration criteria for any permanent anterior or posterior teeth. Each procedure may be considered a clinical experience. The direct restoration competency examination shall include:

(1) Seven (7) scoring factors:

(A) Case Presentation;

(B) Outline and Extensions;

(C) Internal Form;

(D) Operative Environment;

(E) Anatomical Form;

(F) Margins; and

(G) Finish and Function.

(2) Two (2) restorations: One (1) Class II amalgam or composite, maximum one slot preparation; and one (1) Class III/IV composite.

(3) Restoration can be performed on an interproximal lesion on one interproximal surface in an anterior tooth that does not connect with a second interproximal lesion which can be restored separately.

(4) A case presentation for which the proposed treatment is appropriate for patient's medical and dental history, is in appropriate treatment sequence, and treatment consent is obtained.

(5) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(6) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(c) Acceptable Criteria for Direct Restoration Examination: The tooth used for each of the competency examinations shall meet the following criteria:

(1) A Class II direct restoration shall be performed on any permanent posterior tooth.

(A) The treatment shall be performed in the sequence described in the treatment plan.

(B) More than one test procedure shall be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments.

(C) Caries as shown on either of the two required radiographic images of an unrestored proximal surface shall extend to or beyond the dento-enamel junction.

(D) The tooth to be treated shall be in occlusion.

(E) The restoration shall have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration shall be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces.

(F) The tooth shall be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment.

(G) Any tooth with bonded veneer is not acceptable.

(2) A Class III/IV direct restoration shall be performed on any permanent anterior tooth.

(A) The treatment shall be performed in the sequence described in the treatment plan.

(B) Caries as shown on the required radiographic image of an unrestored proximal surface shall extend to or beyond the dento-enamel junction.

(C) Carious lesions shall involve the interproximal contact area.

(D) The restoration shall have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration shall be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces.

(E) The tooth shall be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment.

(F) The lesion shall not be acceptable if it is in contact with circumferential decalcification.

(G) Procedural approach shall be appropriate for the lesion on the tooth.

(H) Any tooth with bonded veneer is not acceptable.

(d) Competency Examination Scoring. The scoring system used for the direct restoration competency examination is defined as follows:

- (1) A score of 0 is unacceptable; candidate exhibits a critical error.
- (2) A score of 1 is unacceptable; multiple major deviations that are correctable.
- (3) A score of 2 is unacceptable; one major deviation that is correctable.
- (4) A score of 3 is acceptable; minimum competence.
- (5) A score of 4 is adequate; less than optimal.
- (6) A score of 5 is optimal.

A score rating of "3" shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, ~~and~~ 1632, and 1632.1, Business and Professions Code.

§ 1032.5. Clinical ~~Simulated Fixed Prosthetics Examination~~ Portfolio Examination: Indirect Restoration.

~~(a) Each applicant shall prepare two abutments to retain a three-unit posterior fixed partial denture and a crown preparation on an anterior tooth. The two abutment preparations of the three-unit posterior fixed partial denture shall be a metal-ceramic retainer and/or complete metal crown retainer and/or a 3/4 crown retainer. Assignment of abutment preparations will be made at start of the prosthetics examination. The crown preparation on an anterior tooth shall be a metal-ceramic preparation.~~

~~(b) Each applicant shall provide an articulated dentoform typodont which has 32 synthetic teeth and soft rubber gingivae. The typodont shall be an articulated Columbia typodont No.s 560, 660, 860, 1360, or 1560 or Kilgore typodont D-95S-200 series or an equivalent in all respects.~~

~~(c) The typodont shall be mounted in a manikin. The manikin must be mounted in a simulated patient position and kept in a correct operating position while performing examination procedures. The manikin will be provided at the test site and will be mounted either on a dental chair with a headrest bar or mounted on a simulator. The type of manikin mounted on a dental chair shall be a Columbia Aluminum head with metal checks, model number AH-1C-1 or its equivalent. The type of manikin mounted on a simulator shall be a Frasco phantom head P-5 with face mask or its equivalent.~~

~~(d) Minimum equipment to be supplied with the dental chair or simulator at the test site shall be a dental operatory light, a high-speed air handpiece hose with water and airspray, a low-speed air handpiece hose, a three-way air-water dental syringe and an evacuation system.~~

(a) The portfolio examination shall contain the following documentation of the minimum indirect restoration clinical experiences and documentation of the indirect restoration portfolio competency examination:

(1) Evidence of successful completion of the indirect restoration clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the indirect restoration competency examination. For purpose of this section, satisfactory proof means the indirect restoration competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements: The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The indirect restoration competency examination shall include documentation of the candidate's competency to complete a ceramic onlay or more extensive, a partial gold restoration onlay or more extensive, a metal-ceramic restoration, or full gold restoration. The indirect restoration competency examination shall include:

(1) Seven (7) scoring factors:

(A) Case Presentation;

(B) Preparation;

(C) Impression;

(D) Provisional;

(E) Candidate Evaluation of Laboratory Work;

(F) Pre-Cementation

(G) Cementation and Finish.

(2) One (1) indirect restoration which may be any of the following procedures.

(A) Ceramic restoration shall be onlay or more extensive;

(B) Partial gold restoration shall be onlay or more extensive;

(C) Metal ceramic restoration; or

(D) Full gold restoration.

(3) A case presentation for which the proposed treatment is appropriate for

patient's medical and dental history, is in appropriate treatment sequence, and treatment consent is obtained.

(4) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(5) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(c) Acceptable Criteria for Indirect Restoration Examination: The tooth used for the competency examination shall meet the following criteria:

(1) Treatment shall be performed in the sequence described in the treatment plan.

(2) The tooth shall be asymptomatic with no pulpal or periapical pathosis; cannot be in need of endodontic treatment.

(3) The tooth selected for restoration, shall have opposing occlusion that is stable.

(4) The tooth shall be in occlusal contact with a natural tooth or a permanent restoration. Occlusion with a full or partial denture is not acceptable.

(5) The restoration shall include at least one cusp.

(6) The restoration shall have an adjacent tooth to be able to restore a proximal contact; proximal surface of the tooth adjacent to the planned restoration shall be either an enamel surface or a permanent restoration; temporary restorations or removable partial dentures are not acceptable adjacent surfaces.

(7) The tooth selected shall require an indirect restoration at least the size of an onlay or greater. The tooth selected cannot replace existing or temporary crowns.

(8) The candidate shall not perform any portion of the crown preparation in advance.

(9) The direct restorative materials which are placed to contribute to the retention and resistance form of the final restoration may be completed in advance, if needed.

(10) The restoration shall be completed on the same tooth and same patient by the same candidate.

(11) A validated lab or fabrication error will allow a second delivery attempt

starting from a new impression or modification of the existing crown.

(12) Teeth with cast post shall not be allowed.

(13) A facial veneer is not acceptable documentation of the candidate's competency to perform indirect restorations.

(d) Competency Examination Scoring. The scoring system used for the indirect restoration competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error

(2) A score of 1 is unacceptable; multiple major deviations that are correctable

(3) A score of 2 is unacceptable; one major deviation that is correctable

(4) A score of 3 is acceptable; minimum competence

(5) A score of 4 is adequate; less than optimal

(6) A score of 5 is optimal

A score rating of "3" shall be deemed the minimum competence level of performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, ~~and 1632~~, and 1632.1, Business and Professions Code.

§ 1032.6. Removable Prosthodontics Evaluation Examination Portfolio
Examination: Removable Prosthodontics.

(a) The portfolio examination shall contain the following documentation of the minimum removable prosthodontic clinical experiences and documentation of the removable prosthodontic portfolio competency examination:

(1) Evidence of successful completion of the removable prosthodontic clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the removable prosthodontic competency examination. For purpose of this section, satisfactory proof means the removable prosthodontic competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements. The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The removable prosthodontic competency examination shall include:

(1) One (1) of the following prosthetic treatments from start to finish on the same patient:

(A) Denture or overdenture for a single edentulous arch; or

(B) Cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially edentulous arch.

(2) Scoring factors on prosthetic treatments for denture or overdenture for a single edentulous arch or scoring factors on prosthetic treatments for cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially edentulous arch, as follows:

(A) Nine (9) scoring factors on prosthetic treatments for denture or overdenture for a single edentulous arch, as follows:

(i) Patient Evaluation and Diagnosis

(ii) Treatment Plan and Sequencing

(iii) Preliminary Impressions

(iv) Border Molding and Final Impressions

(v) Jaw Relation Records

(vi) Trial Dentures

(vii) Insertion of Removable Prosthesis

(viii) Post-Insertion

(ix) Laboratory Services for Prosthesis

(B) Twelve (12) scoring factors on prosthetic treatments for cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially edentulous arch, as follows:

(i) Patient Evaluation and Diagnosis

(ii) Treatment Plan and Sequencing

- (iii) Preliminary Impressions
- (iv) RPD Design
- (v) Tooth Modification
- (vi) Border Molding and Final Impressions
- (vii) Framework Try-in
- (viii) Jaw Relation Records
- (ix) Trial Dentures
- (x) Insertion of Removable Prosthesis
- (xi) Post-Insertion
- (xii) Laboratory Services for Prosthesis

(3) Documentation the candidate developed a diagnosis, determined treatment options and prognosis for the patient to receive a removable prosthesis. The documentation shall include:

- (A) Evidence the candidate obtained a patient history, (e.g. medical, dental and psychosocial).
- (B) Evaluation of the patient's chief complaint.
- (C) Radiographs and photographs of the patient.
- (D) Evidence the candidate performed a clinical examination, (e.g. hard/soft tissue charting, endodontic evaluation, occlusal examination, skeletal/jaw relationship, VDO, DR, MIP).
- (E) Evaluation of existing prosthesis and the patient's concerns.
- (F) Evidence the candidate obtained and mounted a diagnostic cast.
- (G) Evidence the candidate determined the complexity of the case based on ACP classifications.
- (H) Evidence the patient was presented with treatment plan options and assessment of the prognosis, (e.g. complete dentures, partial denture, overdenture, implant options, FPD).

(I) Evidence the candidate analyzed the patient risks/benefits for the various treatment options.

(J) Evidence the candidate exercised critical thinking and made evidence based treatment decisions.

(4) Documentation of the candidate's competency to successfully restore edentulous spaces with removable prosthesis. The documentation shall include:

(A) Evidence the candidate developed a diagnosis and treatment plan for the removable prosthesis.

(B) Evidence the candidate obtained diagnostic casts.

(C) Evidence the candidate performed diagnostic wax-up/survey framework designs.

(D) Evidence the candidate performed an assessment to determine the need for pre-prosthetic surgery and made the necessary referral.

(E) Evidence the candidate performed tooth modifications and/or survey crowns, when indicated.

(F) Evidence the candidate obtained master impressions and casts.

(G) Evidence the candidate obtained occlusal records.

(H) Evidence the candidate performed a try-in and evaluated the trial dentures.

(I) Evidence the candidate inserted the prosthesis and provided the patient with post-insertion care.

(J) Documentation the candidate followed established standards of care in the restoration of the edentulous spaces, (e. g. informed consent, and infection control).

(5) Documentation of the candidate's competency to manage tooth loss transitions with immediate or transitional prostheses. The documentation shall include:

(A) Evidence the candidate developed a diagnosis and treatment plan that identified teeth that could be salvaged and or teeth that needed extraction.

(B) Evidence the candidate educated the patient regarding the healing process, denture experience, and future treatment need.

(C) Evidence the candidate developed prosthetic phases which included surgical plans.

(D) Evidence the candidate obtained casts (preliminary and final impressions).

(E) Evidence the candidate obtained the occlusal records.

(F) Evidence the candidate did try-ins and evaluated trial dentures.

(G) Evidence the candidate competently managed and coordinated the surgical phase.

(H) Evidence the candidate provided the patient post insertion care including adjustment, relines and patient counseling within the established standards of care.

(I) Documentation the candidate followed established standards of care in the restoration of the edentulous spaces, (e. g. informed consent, and infection control).

(6) Documentation of the candidate's competency to manage prosthetic problems. The documentation shall include:

(A) Evidence the candidate competently managed real or perceived patient problems.

(B) Evidence the candidate evaluated existing prosthesis.

(C) Evidence the candidate performed uncomplicated repairs, relines, re-base, re-set or re-do, if needed.

(D) Evidence the candidate made a determination if specialty referral was necessary.

(E) Evidence the candidate obtained impressions/records/information for laboratory use.

(F) Evidence the candidate competently communicated needed prosthetic procedure to laboratory technician.

(G) Evidence the candidate inserted the prosthesis and provided the patient follow-up care.

(H) Evidence the candidate performed in-office maintenance, (e.g. prosthesis cleaning, clasp tightening and occlusal adjustments).

(7) Documentation the candidate directed and evaluated the laboratory services for the prosthesis. The documentation shall include:

(A) Complete laboratory prescriptions sent to the dental technician.

(B) Copies of all communications with the laboratory technicians.

(C) Evaluations of the laboratory work product, (e.g. frameworks, processed dentures).

(8) Prosthetic treatment for the examination shall include an immediate or interim denture.

(9) Patients shall not be shared or split between examination candidates.

(10) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(11) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(12) Case complexity shall not exceed the American College of Prosthodontics Class II for partially edentulous patients.

(c) Acceptable Criteria for Removable Prosthodontics Examination. Prosthetic procedures shall be performed on patients with supported soft tissue, implants, or natural tooth retained overdentures.

(d) Competency Examination Scoring. The scoring system used for the removable prosthodontics competency examination is defined as follows:

(1) A score of 1 is unacceptable with gross errors

(2) A score of 2 is unacceptable with major errors

(3) A score of 3 is minimum competence with moderate errors that do not compromise outcome

(4) A score of 4 is acceptable with minor errors that do not compromise outcome

(5) A score of 5 is optimal with no errors evident

A score rating of "3" shall be deemed the minimum competence level of performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§1032.7 Portfolio Examination: Endodontics.

(a) The portfolio examination shall contain the following documentation of the minimum endodontic clinical experiences and documentation of the endodontic portfolio competency examination:

(1) Evidence of successful completion of the endodontic clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the endodontic competency examination. For purpose of this section, satisfactory proof means the endodontic competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements. The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The endodontic examination shall include:

(1) Ten (10) scoring factors:

(A) Pretreatment Clinical Testing and Radiographic Imaging;

(B) Endodontic Diagnosis;

(C) Endodontic Treatment Plan;

(D) Anesthesia and Pain Control;

(E) Caries Removal, Removal of Failing Restorations, Evaluation of Restorability, Site Isolation;

(F) Access Opening;

(G) Canal Preparation Technique;

(H) Master Cone Fit;

(I) Obturation Technique;

(J) Completion of Case.

(2) One (1) clinical case.

(3) Documentation the candidate applied case selection criteria for endodontic case. The portfolio shall contain evidence the case selected met the American Association of Endodontics case criteria for minimum difficulty such that treated teeth have uncomplicated morphologies, have signs and symptoms of swelling and acute inflammation and have not had previously completed or initiated endodontic therapy. The documentation shall include:

(A) The determination of the diagnostic need for endodontic therapy;

(B) Charting and diagnostic testing;

(C) A record of radiographs performed on the patient and an interpretation of the radiographs pertaining to the patient's oral condition;

(D) Evidence of a pulpal diagnosis within approved parameters, including consideration and determination following the pulpal diagnosis that it was within the approved parameters. The approved parameters for pulpal diagnosis shall be normal pulp, reversible pulpitis, irreversible pulpitis, and necrotic pulp.

(E) Evidence of a periapical diagnosis within approved parameters, including consideration and determination following the periapical diagnosis that it was within the approved parameters. The approved parameters for periapical diagnosis shall be normal periapex, asymptomatic apical periodontitis, symptomatic apical periodontitis, acute apical abscess, and chronic apical abscess.

(F) Evidence of development of an endodontic treatment plan that included trauma treatment, management of emergencies, and referrals when appropriate. An appropriate treatment plan may include an emergency treatment due to a traumatic dental injury or for relief of pain or acute infection. The endodontic treatment may be done at a subsequent appointment.

(4) Documentation the candidate performed pretreatment preparation for endodontic treatment. The documentation shall include:

(A) Evidence the patient's pain was competently managed.

(B) Evidence the caries and failed restorations were removed.

(C) Evidence of determination of tooth restorability.

(D) Evidence of appropriate isolation with a dental dam.

(5) Documentation the candidate competently performed access opening. The documentation shall include:

- (A) Evidence of creation of the indicated outline form.
- (B) Evidence of creation of straight line access.
- (C) Evidence of maintenance of structural integrity.
- (D) Evidence of completion of un-roofing of pulp chamber.
- (E) Evidence of identification of all canal systems.

(6) Documentation the candidate performed proper cleaning and shaping techniques. The documentation shall include:

- (A) Evidence of maintenance of canal integrity.
- (B) Evidence of preservation of canal shape and flow.
- (C) Evidence of applied protocols for establishing working length.
- (D) Evidence of demonstration of apical control.
- (E) Evidence of applied disinfection protocols.

(7) Documentation of performance of proper obturation protocols, including selection and fitting of master cone, determination of canal condition before obturation, and verification of sealer consistency and adequacy of coating.

(8) Documentation of demonstrated proper length control of obturation, including achievement of dense obturation of filling material and obturation achieved to a clinically appropriate height for the planned definitive coronal restoration.

(9) Documentation of a competently completed endodontic case, including evidence of an achieved coronal seal to prevent recontamination and creation of diagnostic, radiographic, and narrative documentation.

(10) Documentation of provided recommendations for post-endodontic treatment, including evidence of recommendations for final restoration alternatives and recommendations for outcome assessment and follow-up.

(11) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(12) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(c) Acceptable Criteria for Endodontics Competency Examination. The procedure shall be performed on any tooth to completion by the same candidate on the same patient. A "~~completed~~competed case" means a tooth with an acceptable and durable coronal seal.

(d) Competency Examination Scoring. The scoring system used for the endodontics competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error.

(2) A score of 1 is unacceptable; major deviations that are correctable.

(3) A score of 2 is acceptable; minimum competence.

(4) A score of 3 is adequate; less than optimal.

(5) A score of 4 is optimal.

A score rating of "2" shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1032.8 Portfolio Examination: Periodontics.

(a) The portfolio examination shall contain the following documentation of the minimum periodontic clinical experiences and documentation of the periodontic portfolio competency examination:

(1) Evidence of successful completion of the periodontic clinical experiences shall be certified by the director of the school's clinical education program on the "Portfolio Examination Certification of Clinical Experience Completion" Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the periodontic competency examination. For purpose of this section, satisfactory proof means the periodontic competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements. The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The periodontic competency examination shall include:

(1) One (1) case to be scored in three parts, as follows:

(A) Part A: Review medical and dental history, radiographic findings, comprehensive periodontal data collection, evaluate periodontal etiology/risk factors, comprehensive periodontal diagnosis, and treatment plan;

(B) Part B: Calculus detection and effectiveness of calculus removal; and

(C) Part C: Periodontal re-evaluation.

(2) Nine (9) scoring factors:

(A) Review Medical and Dental History (Part A);

(B) Radiographic Findings(Part A);

(C) Comprehensive Periodontal Data Collection (Part A);

(D) Evaluate Periodontal Etiology/Risk Factors (Part A);

(E) Comprehensive Periodontal Diagnosis (Part A);

(F) Treatment Plan (Part A);

(G) Calculus Detection (Part B);

(H) Effectiveness of Calculus Removal (Part B); and

(I) Periodontal Re-evaluation (Part C).

(3) All three parts of the examination shall be performed on the same patient. In the event the patient does not return for periodontal re-evaluation (Part C), the student shall use a second patient for the completion of the periodontal re-evaluation (Part C) portion of the periodontic competency examination.

(4) Documentation the candidate performed a comprehensive periodontal examination. The documentation shall include:

(A) Evidence that the patient's medical and dental history was reviewed.

(B) Evidence that the patient's radiographs were evaluated.

(C) Evidence of performance of an extra-oral and intra-oral examination on the patient.

(D) Evidence of performance of comprehensive periodontal data collection. Evidence shall include evaluation of patient's plaque index, probing depths, bleeding on probing, suppurations, cementoenamel junction to the gingival margin (CEJ-GM), clinical attachment, furcations, and tooth mobility.

(E) Evidence of performance of an occlusal assessment.

(5) Documentation the candidate diagnosed and developed a periodontal treatment plan. The documentation shall include:

(A) Evidence of determination of periodontal diagnosis.

(B) Evidence of formulation of an initial periodontal treatment plan that demonstrates

(i) Determination of periodontal diagnosis.

(ii) Formulation of an initial periodontal treatment plan that demonstrates the following:

(a) Determination to treat or refer patient to periodontist or periodontal surgery;

(b) Discussion with patient regarding etiology, periodontal disease, benefits of treatment, consequences of no treatment, specific risk factors, and patient-specific oral hygiene instructions;

(c) Determination on non-surgical periodontal therapy;

(d) Determination of re-evaluation need; and

(e) Determination of recall interval.

(6) Documentation of performance of non-surgical periodontal therapy. The documentation shall include:

(A) Detected supragingival and subgingival calculus;

(B) Performance of periodontal instrumentation, including:

(i) Removed calculus;

(ii) Removed plaque; and

(iii) Removed stains;

(C) Demonstration that excessive soft tissue trauma was not inflicted; and

(D) Demonstration that anesthesia was provided to the patient.

(7) Documentation of performance of periodontal re-evaluation. The documentation shall include:

(A) Evidence of evaluation of effectiveness of oral hygiene;

(B) Evidence of assessment of periodontal outcomes, including:

(i) Review of the patient's medical and dental history;

(ii) Review of the patient's radiographs;

(iii) Performance of comprehensive periodontal data collections (e.g. evaluation of plaque index, probing depths, bleeding on probing, suppurations, cemento-enamel junction to the gingival margin (CEJ-GM), clinical attachment level, furcations, and tooth mobility.

(C) Evidence of discussion with patient regarding current periodontal status as compared to the pre-treatment status, patient-specific oral hygiene instructions, and modifications of specific risk factors;

(D) Evidence of determination of further periodontal needs including the need for referral to a periodontist and periodontal surgery; and

(E) Evidence of establishment of a recall interval for periodontal treatment.

(c) Acceptable Patient Criteria for Periodontics Competency Examination:

(1) The examination, diagnosis, and treatment planning shall include:

(A) A patient with a minimum of twenty (20) natural teeth, with at least four (4) molars;

(B) At least one probing depth of five (5) mm or greater shall be present on at least four (4) of the teeth, excluding third molars, with at least two of these teeth with clinical attachment loss of 2 mm or greater;

(C) A full mouth assessment or examination

(D) The patient shall not have had previous periodontal treatment at the dental school where the examination is being conducted. Additionally, the

patient shall not have had previous non-surgical or surgical periodontal treatment within the past six (6) months.

(2) Calculus detection and periodontal instrumentation (scaling and root planing) shall include:

(A) A patient with a minimum of six (6) natural teeth in one quadrant, with at least two (2) adjacent posterior teeth in contact, one of which shall be a molar. Third molars may be used if they are fully erupted.

(B) At least one probing depth of five (5) mm or greater shall be present on at least two (2) of the teeth that require scaling and root planing.

(C) A minimum of six (6) surfaces of clinically demonstrable subgingival calculus shall be present in one or two quadrants. Readily clinically demonstrable calculus is defined as easily explorer detectable, heavy ledges. At least four (4) surfaces of the subgingival calculus shall be on posterior teeth. Each tooth is divided into four surfaces for qualifying calculus: mesial, distal, facial, and lingual. If additional teeth are needed to obtain the required calculus and pocket depths two quadrants may be used.

(3) Re-evaluation shall include:

(A) A thorough knowledge of the patient's case;

(B) At least two (2) quadrants of scaling and root planing on the patient being reevaluated.

(C) At least two documented oral hygiene care (OHC) instructions with the patient being reevaluated 4-6 weeks after scaling and root planing is completed. The scaling and root planing shall be completed within an interval of 6 weeks or less.

(D) A patient with a minimum twenty (20) natural teeth with at least four (4) molars.

(E) Baseline probing depth of at least five (5) mm on at least four (4) of the teeth, excluding third molars.

(d) Competency Examination Scoring. The scoring system used for the periodontics competency examination is defined as follows:

- (1) A score of 0 is unacceptable; candidate exhibits a critical error
- (2) A score of 1 is unacceptable; major deviations that are correctable
- (3) A score of 2 is acceptable; minimum competence
- (4) A score of 3 is adequate; less than optimal
- (5) A score of 4 is optimal

A score rating of “2” shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

1032.9 Portfolio Examination: Competency Examiner Qualifications.

(a) Portfolio competency examiners shall meet the following criteria:

- (1) An examiner shall be full-time or part-time faculty member of a Board-approved California dental school.
- (2) An examiner shall have a minimum of one (1) year of previous experience in administering clinical examinations.
- (3) An examiner shall undergo calibration training in the Board’s standardized evaluation system through didactic and experiential methods as established in section 1032.10. Portfolio competency examiners are required to attend Board-developedapproved standardized calibration training sessions offered at their schools prior to administering a competency examination and annually thereafter.

(b) At the beginning of each school year, each school shall submit to the Board the names, credentials and qualifications of the dental school faculty to be approved or disapproved by the Board as portfolio competency examiners. Documentation of qualifications shall include a letter from the dean of the California dental school stating that the dental school faculty satisfies the criteria and standards established by the dental school to conduct portfolio competency examinations in an objective manner, and has met the requirements of subdivision (a)(1) through (a)(3) of this section.

(c) In addition to the names, credentials and qualifications, the dean of the California dental school shall submit documentation that the appointed dental school faculty examiners have been trained and calibrated in compliance with the Board’s requirements established in section 1032.10.

(d) Any changes to the list of portfolio competency examiners shall be reported to the Board within thirty (30) days, including any action taken by the school to replace an examiner.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1032.10 Portfolio Examination: Competency Examiner Training Requirements.

(a) ~~Prospective p~~Portfolio competency examiners are required to attend Board-developed~~approved~~ standardized calibration training sessions offered at their schools prior to administering a competency examination. Each of the schools will designate faculty who have been approved by the Board to serve as competency examiners and is responsible for administering the Board ~~developedapproved~~ calibration course for said examiners. Examiners may grade any competency examination in which they have completed the required calibration. Each training session shall be presented by designated Portfolio competency examiners at their respective schools and require the prospective examiners to participate in both didactic and hands-on activities.

(b) Didactic Training Component. During didactic training, designated Portfolio competency examiners shall present an overview of the examination and its evaluation (grading) system through lecture, review of examiner training materials, including slide presentations, sample documentation, and sample cases.

(c) Hands-On Component. Training shall include multiple examples of performance that clearly relate to the specific judgments that examiners are expected to provide during the portfolio competency examinations. Hands-on training sessions include an overview of the rating process, clear examples of rating errors, examples of how to mark the grading forms, a series of several sample cases for examiners to hone their skills, and opportunities for training staff to provide feedback to individual examiners.

(d) Calibration of Examiners. The calibration of portfolio competency examiners shall be conducted to maintain common standards as an ongoing process. Portfolio competency examiners shall be provided feedback about their performance and how their scoring varies from their fellow examiners. Portfolio competency examiners whose error rate exceeds psychometrically accepted standards for reliability shall be re-calibrated. A school shall notify the Board if, at any time, it is determined that a competency examiner is unable to meet the Board's calibration standards. If any portfolio competency examiner is unable to be re-calibrated, the Board shall disapprove the portfolio competency examiner from further participation in the portfolio examination process.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1033. General Procedures for Law and Ethics Written and Laboratory Dental Licensure Examinations.

The following rules, which are in addition to any other examination rules set forth elsewhere in this chapter, are adopted for the uniform conduct of all written and laboratory dental licensure examinations:

- (a) The ability of an examineecandidate to read and interpret instructions and examination material is a part of the examination.
- ~~(b) No person shall be admitted to an examination room or laboratory unless he or she is wearing the appropriate identification badge.~~

~~(cb)~~ An examineecandidate may be dismissed from the entire examination, and a statement of issues may be filed against the examineecandidate, for acts which interfere with the board's objective of evaluating professional competence. Such acts include, but are not limited to, the following:

- (1) Allowing another person to take the examination in the place of, and under the identity, of the examineecandidate.
- (2) Copying or otherwise obtaining examination answers from other persons during the course of the written examination.
- (3) Bringing any notes, textbooks, unauthorized models, or other informative data into an examination room or laboratory.
- (4) Assisting another examineecandidate during the examination process.
- (5) Copying, photographing or in any way reproducing or recording examination questions or answers.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, ~~and 1632,~~ and 1632.1, Business and Professions Code.

§ 1033.1. General Procedures and Policies for Clinical Dental Licensure Portfolio Examination.

The following rules, which are in addition to any other examination rules set forth elsewhere in this chapter, are adopted for the uniform conduct of the clinical dental licensure portfolio examination.

~~(a) Each examinee shall furnish patients, instruments, handpieces and materials, necessary to carry the procedures to completion. The board will provide operatory lights, dental delivery units and chairs or simulators.~~

(a) The candidate shall be able to read and interpret instructions and examination material as part of the examination.

~~(b) A patient provided by an examinee shall be in a health condition acceptable for dental treatment. If conditions indicate a need to consult the patient's physician or for the patient to be premedicated (e.g. high blood pressure, heart murmur, rheumatic fever, heart condition, prosthesis), the examineecandidate must obtain the necessary written medical clearance and/or, evidence of premedication before the patient will be accepted. The examiners may, in their discretion, reject a patient who in the opinion of at least two examiners has a condition which interferes with evaluation or which may be hazardous to the patient, other patients, applicants or examiners. A hazardous condition includes, but is not limited to, acute symptomatic hepatitis, active herpetic lesions, acute periodontal or periapical abscesses, or necrotizing ulcerative gingivitis. In addition, a patient may be rejected when, in the opinion of at least two examiners, the proposed treatment demonstrates improper patient management, including but not necessarily limited to, contraindicating medical status of the patient, grossly pathologic or unhygienic oral conditions such as extremely heavy calculus deposits, other pathology related to the tooth to be treated, or selection of a restoration that is not suited to the patient's biological or cosmetic requirements. Whenever a patient is rejected, the reason for such rejection shall be noted on the examination record and shall be signed by both rejecting examiners. If the patient's well-being is put into jeopardy at any time during the portfolio competency examination, the examination shall be terminated. The candidate shall fail the examination, regardless of performance on any other part of the examination.~~

~~(c) No person shall be admitted to the clinic unless he or she is wearing the appropriate identification badge.~~

~~(dc) The use of local anesthetics shall be administered according to the school's protocol and standards of care. The type and amount of anesthetics shall be consistent with the patient's medical history and current condition not be permitted until the patient has been approved by an examiner.~~

~~(e) Only the services of registered dental assistance or dental assistants shall be permitted.~~

~~(f) An assignment which has been made by the board shall not be changed by an examinee without the specific approval of the board.~~

~~(gd) An examineecandidate may be dismissed from the entire examination, and a statement of issues may be filed against the examineecandidate, for acts which interfere with the board's objective of evaluating professional competence. Such acts include, but are not limited to the following:~~

- ~~(1) Allowing another person to take the portfolio examination in the place of, and under the identity of, the examineecandidate.~~

(2) Presenting purported carious lesions which are artificially created, whether or not the examineecandidate created the defect.

(3) Presenting radiographs which have been altered, or contrived to represent other than the patient's true condition, whether or not the misleading radiograph was created by the examineecandidate.

(4) Bringing any notes, textbooks, unauthorized models, periodontal charting information or other informative data into the clinic during any portfolio competency examination.

(5) Assisting another examineecandidate during the portfolio examination process.

(6) Failing to comply with the board's infection control regulations. Candidates shall be responsible for maintaining all of the standards of infection control while treating patients. This shall include the appropriate sterilization and disinfection of the cubicle, instruments and handpieces, as well as, the use of barrier techniques (including glasses, mask, gloves, proper attire, etc.) as required by the California Division of Occupational Safety and Health (Cal/OSHA) and California Code of Regulations, Title 16, Section 1005.

~~(7) Failing to use an aspirating syringe for administering local anesthesia.~~

~~(8) Utilizing the services of a licensed dentist, dental school graduate, dental school student, registered dental hygienist in extended functions, registered dental hygienist, dental hygiene graduate, dental hygiene student, or registered dental assistant in extended functions, or student or graduate of a registered dental assistant in extended functions program.~~

~~(9) Treating a patient, or causing a patient to receive treatment outside the designated examination settings and timeframes.~~

~~(10) Premedicating a patient for purposes of sedation.~~

~~(11) Dismissing a patient without the approval and signature of an examiner.~~

~~(h) An examinee may be declared by the board to have failed the entire examination for demonstration of gross incompetence in treating a patient.~~

(e) Candidates shall wear personal protective equipment (PPE) during the portfolio competency examinations. PPE shall include masks, gloves, and eye protection during each portfolio competency examination.

(f) Radiographs for each of the portfolio competency examinations shall be of diagnostic quality. Digital or conventional radiographs may be used.

(g) Dental dams shall be used during endodontic treatment and the preparation of amalgam and composite restorations. Finished restorations shall be graded without the dental dam in place.

(h) Candidates shall provide clinical services upon patients of record of the dental school who fulfill the acceptable criteria for each of the six (6) portfolio competency examinations.

(i) Candidates shall be allowed three (3) hours and thirty (30) minutes for each patient treatment session.

(j) Each portfolio competency examination shall be performed by the candidate without faculty intervention. Completion of a successful portfolio competency examination may be counted as a clinical experience for the purpose of meeting the requirements of section 1032.2.

(k) Candidates who fail a portfolio competency examination three (3) times shall not be permitted to retake the portfolio competency examination until remediation has been completed as specified in section 1036.

(l) Readiness for a candidate to take a portfolio competency examination shall be determined by the dental school's clinical faculty.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, ~~and 1632~~, and 1632.1, Business and Professions Code.

§ 1034. Grading of Examinations Administered by the Board Portfolio Competency Examination Grading.

This section shall apply to the clinical and written examination administered by the board pursuant to Section 1632(c)(1) of the code. This section shall apply, in addition to any other examination rules set forth in this Chapter, for the purpose of uniform conduct of the portfolio examination grading.

(a) Each examiner shall grade independently. Examinations shall be anonymous. An anonymous examination is one conducted in accordance with procedures, including but not limited to those set forth below, which ensure and preserve the anonymity of examinees. The board shall randomly assign each examinee a number, and said examinee shall be known by that number throughout the entire examination. The grading area shall be separated from the examination area by barriers that block the grading examiners' view of examinees during the performance of the examination assignments. There shall be no communication between grading examiners and clinical floor examiners except for oral communications conducted in the presence of board staff. Each portfolio competency examination shall be graded by two (2) independent portfolio competency examiners and shall use the Board's standardized scoring system as specified in subdivision (f) of this section. There shall be no communication between

~~grading examiners and examinees except written communications on board approved forms.~~

~~(b) The final grade of each examinee shall be determined by averaging the grades obtained in:~~

- ~~(1) Endodontics;~~
- ~~(2) Removable prosthodontics evaluation examination;~~
- ~~(3) Periodontics;~~
- ~~(4) Amalgam restoration;~~
- ~~(5) Composite resin restoration; and~~
- ~~(6) Clinical simulated fixed prosthetics preparations.~~

~~(c) An examinee shall be deemed to have passed the examination if his or her overall average for the entire examination is at least 75% and the examinee has obtained a grade of 75% or more in at least four sections of the examination, except that an examinee shall not be deemed to have passed the examination if he or she receives a score of less than 75% in more than one section of the examination in which a patient is treated. A candidate shall be deemed to have passed the portfolio **competency** examination if his or her overall scaled score is at least 75 in each of the portfolio competency examinations.~~

~~(d) The executive officer Board shall compile and summarize the grades attained by each examinee and establish the overall average of each examinee. He or she shall indicate on the records so compiled the names of notify those examinee candidates who have passed or failed the portfolio examination and shall so notify each examinee.~~

~~(e) Each portfolio competency examination shall be signed by the school portfolio competency examiners who performed the grading.~~

~~(f) Competency Examination Scoring: The portfolio competency examiners shall use the following scoring system for each of the competency examinations:~~

- ~~(1) The scoring system used for the ODTP competency examination as specified in Section 1032.3(d).~~
- ~~(2) The scoring system used for the direct restoration competency as specified in Section 1032.4(d).~~
- ~~(3) The scoring system used for the indirect restoration competency examination as specified in Section 1032.5(d).~~

(4) The scoring system used for the removable prosthodontics competency examination as specified in Section 1032.6(d).

(5) The scoring system used for the endodontics competency examination as specified in Section 1032.7(d).

(6) The scoring system used for the periodontics competency examination as specified in Section 1032.8(d).

(g) If a candidate commits a critical error, the candidate shall not proceed with the portfolio competency examination. If the candidate makes a critical error at any point during a portfolio competency examination, a score of "0" shall be assigned and the portfolio competency examination shall be terminated immediately.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections ~~1614, 1615, 1630, 1632, 1632.1, 1633~~ and 1634, Business and Professions Code.

§ 1034.1. Passing Score of Examination Administered by the Western Regional Examining Board (WREB) (§ 1632(c)(2) of the Code).

The board ~~will~~shall accept as a passing score for Western Regional Examining Board examination the passing score as determined by the Western Regional Examining Board.

Note: Authority cited: Sections 1614 and 1632, Business and Professions Code. Reference: Sections 139 and 1632, Business and Professions Code.

§ 1035. Examination Review Procedures; Appeals.

(a) An ~~examinee~~candidate who has failed an examination shall be provided with notice, upon written request, of those areas in which he/she is deficient ~~in the clinical and restorative laboratory phases of such examination.~~

(b) An unsuccessful ~~examinee~~candidate who has been informed of the areas of deficiency in his/her performance ~~on the clinical and restorative laboratory phases of the examination~~ and who has determined that one or more of the following errors was made during the course of his/her examination and grading may appeal to the board within sixty (60) days following receipt of his/her examination results:

- (1) Significant procedural error in the examination process;
- (2) Evidence of adverse discrimination;

(3) Evidence of substantial disadvantage to the ~~examinee~~candidate. Such appeal shall be made by means of a written letter specifying the grounds upon which the appeal is based. The board shall respond to the appeal in writing and may request a personal appearance by the ~~examinee~~candidate. The board shall thereafter take such action as it deems appropriate.

(c) This section shall not apply to the portfolio examination of a candidate's competence to enter the practice of dentistry.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630-1632, Business and Professions Code.

~~§ 1035.1. Clinical Periodontics Examination. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632, Business and Professions Code.~~

~~§ 1035.2. Clinical Cast Restoration and Amalgam. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630 and 1632, Business and Professions Code.~~

§ 1036. Remedial Education-: Law and Ethics; WREB

An applicant, who fails to pass the examination after three attempts shall not be eligible for further re-examination until the applicant has successfully completed the required additional education.

(a) The course work shall be taken at a dental school approved by the Commission on Dental Accreditation or a comparable organization approved by the Board, and shall be completed within a period of one year from the date of notification of the applicant's third failure.

(1) The course of study must be didactic, laboratory or a combination of the two. Use of patients is optional.

(2) Instruction must be provided by a faculty member of a dental school approved by the Commission on Dental Accreditation or a comparable organization approved by the Board.

(3) Pre-testing and post-testing must be part of the course of study.

(b) When an applicant applies for reexamination, he or she shall furnish evidence of successful completion of the remedial education requirements for reexamination.

(1) Evidence of successful completion must be on the ~~certification of successful completion of remedial education requirements for re-examination eligibility (rev.~~

4) “Certification of Successful Completion of Remedial Education Requirements for Re-Examination Eligibility” (Form Rev. 1), that is hereby incorporated by reference, form that is provided by the board and submitted prior to the examination.

(2) The form must be signed and sealed by the Dean of the dental school providing the remedial education course.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632.5, Business and Professions Code.

§ 1036.01. Remedial Education: Portfolio Competency Examinations.

A candidate, who fails to pass a portfolio competency examination after three attempts, shall not be eligible for further re-examination until the candidate has successfully completed the required additional education as specified in Section 1633(b) of the Business and Professions Code.

(a) The course work shall be taken at a dental school approved by the Commission on Dental Accreditation or a comparable organization approved by the Board, and shall be completed within a period of one year from the date of notification of the applicant's third failure.

(1) The course of study must be didactic, laboratory or a combination of the two. Use of patients is optional.

(2) Instruction must be provided by a faculty member of a dental school approved by the Commission on Dental Accreditation or a comparable organization approved by the Board.

(3) Pre-testing and post-testing must be part of the course of study.

(b) When an applicant applies for reexamination, he or she shall furnish evidence of successful completion of the remedial education requirements for reexamination.

(1) Evidence of successful completion must be on the “Certification of Successful Completion of Remedial Education for Portfolio Competency Re-Examination requirements for re-examination Eligibility” (Form New 08/13), that is hereby incorporated by reference, that is submitted prior to the examination.

(2) The form must be signed and sealed by the Dean of the dental school providing the remedial education course.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632.5, Business and Professions Code.

~~§ 1036.1. Amalgam -Restorative Laboratory. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630 and 1632, Business and Professions Code.~~

~~§ 1036.2. Fixed Prosthetics -Restorative Laboratory. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630 and 1632, Business and Professions Code.~~

~~§ 1036.3. Removable Prosthetics -Restorative Laboratory. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630 and 1632, Business and Professions Code.~~

~~§ 1037. Grading of Examinations. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1614, 1615, 1632, 1633 and 1634, Business and Professions Code.~~

~~§ 1038. Examination Review Procedures; Appeals. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630-1632, Business and Professions Code.~~

~~§ 1039. Remedial Education. [REPEAL]~~

~~Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632.5, Business and Professions Code.~~