

V - 072017

**College of Denturists  
of  
British Columbia**

**Complete Denture Evaluation  
Clinical Criteria**

**Version: 072017**

## Clinical Criteria

### Clinical Appearance

	<b>0</b>	<b>1</b>	
	<b>Clinical crowns</b> of teeth not exposed or interproximal papillae poorly defined and shaped	Clinical crowns exposed to crown line and well shaped interproximal papillae	
	<b>Extensions</b> Any buccal or labial flange under extended or overextended greater than 3mm or any frenum impingement	All flanges finished to mucogingival border and no frenum impingement	
	<b>Retention and stability</b> Upper denture displaces on maximum opening or no resistance to physical removal and lower denture unstable during functional movements	Denture remains in place on maximum opening and resists physical removal and lower denture stable relative to anatomical structures	
	<b>Central fossa location</b> Centre of lower posterior teeth is lingual or labial of crest of residual ridge by more than 2mm	Centre of mandibular posteriors lies directly over the crest of the residual ridge	
	<b>Plane of occlusion</b> Not perpendicular to mid sagittal plane or no curve of Wilson/curve of Spee or inconsistent with ala tragus plane or occlusal table exceeds mid height of tongue	Perpendicular to mid sagittal plane and curve of Wilson/curve of Spee present and parallel to ala tragus plane and occlusal table approximates 50% of the retro molar pads	

## Section 1

Examiners: Use this section  
if treatment plan indicates  
IOD of 4 mm or less.

**If the proposed interocclusal distance is greater than 4mm,  
use Section 2.**

## Clinical Criteria

### Vertical Dimension of Occlusion and Relation:

This section will test the candidate's abilities and understanding of vertical jaw relationships. To ensure consistency, please follow the suggested procedures to determine vertical dimension of occlusion and vertical dimension of relation.

### Centric Occlusion:

For the purposes of this exam, centric occlusion is defined as simultaneous bilateral contact of the posterior occluding surfaces at which the condyle is in its most retruded position from which lateral excursions can be made. There must be a cusp fossa relationship, i.e., full intercuspation with buccal overjet involving at least five contacts per side on at least three teeth per side.

***Centric occlusion should be verified prior to interocclusal distance to prevent any proprioceptive behaviour as the patient learns the position of centric occlusion in the dentures, which are the subject of the evaluation.***

**Table L**

	<b>0</b>	<b>1</b>	
	Any premature contact of any tooth or contact on one side prior to the other or less than 5 contacts per side on less than 3 of the posterior occluding surfaces or less than full intercuspation with buccal overjet	Simultaneous, bilateral contact of all posterior teeth with full intercuspation and buccal overjet with at least 5 contacts per side on 3 or more posterior occluding surfaces	

## Clinical Criteria

To determine freeway space complete the following:

1. Place a mark on the patient's nose and chin.
2. With the patient sitting in a comfortable, upright position, dentures in-situ, have the patient close the teeth together with light pressure and relax the lips and cheeks. Measure the distance between the two marks. Complete this step three times, record your findings below, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	A = _____mm

(To calculate average, add 1\_\_\_\_\_ plus 2\_\_\_\_\_ plus 3\_\_\_\_\_ equals Sub Total \_\_\_\_\_)

Sub Total \_\_\_\_\_ divided by 3 = Average \_\_\_\_\_. Write amount on line A.)

**(A)** \_\_\_\_\_mm

## MECHANICAL DETERMINATION OF REST

3. Please choose **ONE** of the following:

- Remove the lower denture  
*or*  
 Leave the lower denture in place.

4. Instruct the patient to open comfortably wide and slowly close together until the lips lightly touch. Measure the distance between the two markings. Complete this step three times, record your findings, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	<b>B = _____mm</b>

5. Instruct the patient to fully wet the lips with the tongue, swallow and relax. Measure the distance between the markings. Complete this step three times, record your findings, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	<b>C = _____mm</b>

Add **B** \_\_\_\_\_ + **C** \_\_\_\_\_, then divide by **2 = (D)** \_\_\_\_\_ **mm**

Subtract the averaged measurement of vertical dimension of occlusion (A) from the averaged measurement of vertical dimension of relation at rest (D)

**D** \_\_\_\_\_ - **A** \_\_\_\_\_ = **E** \_\_\_\_\_ **mm**

**The average mechanically determined inter-occlusal dimension is (E)** \_\_\_\_\_ **mm**

**Table M**

	<b>0</b>	<b>1</b>	
	less than 2mm or more than 4mm of interocclusal distance	2-4mm interocclusal distance	
	Heavy contact of teeth during speech	No contact or light contact with appropriate IOD during speech	
	excessive milling or adjusting (more than 15% of the occluding surfaces have been removed)	less than 15% of the occluding surfaces have been removed through milling and or adjusting	

**Examiner's Initials** \_\_\_\_\_

## Section 2

Examiners: Use this section  
if treatment plan indicates  
IOD of greater than 4 mm.

**Step One:**

Determine if Centric Occlusion of Relation is correct in the Candidate's try-in. Place the upper and lower try-ins in the patient's mouth and verify centric occlusion.

Mark the appropriate box in table N

**Centric Occlusion of Candidate's Try-in :**

For the purposes of this exam, centric occlusion is defined as simultaneous bilateral contact of the posterior occluding surfaces at which the condyle is in its most retruded position from which lateral excursions can be made. There must be a cusp fossa relationship, i.e., full intercuspation with buccal overjet involving at least five contacts per side on at least three teeth per side.

***Centric occlusion must be verified prior to interocclusal distance to prevent any proprioceptive behaviour as the patient learns the position of centric occlusion in the dentures which are the subject of the evaluation.***

**Table N**

0	1
Any premature contact of any tooth or contact on one side prior to the other or less than 5 contacts per side on less than 3 of the posterior occluding surfaces or less than full intercuspation with buccal overjet	Simultaneous, bilateral contact of all posterior teeth with full intercuspation and buccal overjet with at least 5 contacts per side on 3 or more posterior occluding surfaces



**Step Two:**

**Determine the patient’s interocclusal distance *with their existing dentures***

**Vertical Dimension of Occlusion and Relation:**

The candidate has proposed an interocclusal distance that is greater than 4 mm. There are valid reasons for interocclusal distance in excess of normal (3mm+/- 1mm).

- ❖ The reasons **MUST** be noted in the patient record
- ❖ The patient record **MUST** indicate the amount of IOD of the existing dentures.
- ❖ If the candidate is opening the vertical dimension of Centric Occlusion more than 3 mm, the reason **MUST** be noted in the treatment plan and/or patient record.

**Existing Dentures**

**To determine the vertical dimension of occlusion of the existing dentures, complete the following:**

1. Place a mark on the patient’s nose and chin.
2. With the patient sitting in a comfortable, upright position, both dentures in place, have the patient close the teeth together with light pressure and relax the lips and cheeks. Measure the distance between the two marks. Complete this step three times, record your findings below, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	<b>A =</b> _____mm

3. Please choose **ONE** of the following:

- Remove the lower denture
- or*
- Leave the lower denture in place.

\*\* This **MUST** be the same choice in STEP 9 \*\*

4. Instruct the patient to open comfortably wide and slowly close together until the lips lightly touch. Measure the distance between the two markings. Complete this step three times, record your findings, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	<b>B =</b> _____mm

Calculate average as above. Place on line B

5. Instruct the patient to fully wet the lips with the tongue, swallow and relax. Measure the distance between the markings. Complete this step three times, record your findings, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	<b>C =</b> _____mm

Add **B**\_\_\_\_\_ + **C**\_\_\_\_\_, then divide by **2 = (D)**\_\_\_\_\_mm

6. Using the average measurement of vertical dimension of relation, measurement D, subtract the vertical dimension of occlusion of the patient's existing dentures, measurement A and place the result at E.

**D**\_\_\_\_\_ - **A**\_\_\_\_\_ = **E**\_\_\_\_\_mm

The average mechanically determined vertical dimension of occlusion of the patient's existing dentures is (E)\_\_\_\_\_mm

**Step 3: Determine the amount of IOD with the candidate's try-in in place**

**Determine Vertical Dimension of Occlusion of the try-in, complete the following:**

7. Place a mark on the patient's nose and chin.

8. With the patient sitting in a comfortable, upright position, dentures in-situ, have the patient close the teeth together with light pressure and relax the lips and cheeks. Measure the distance between the two marks. Complete this step three times, record your findings below, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	I = _____mm

(I) \_\_\_\_\_mm

**To determine the Mechanical Vertical Dimension of Rest**

9. Please choose **ONE** of the following:

- Remove one denture (preferably the lower) **Remove the lower denture**
- or*
- Leave one denture in place (preferably the lower). **Leave the lower denture**

\*\* This MUST be the same choice in STEP 3 \*\*

10. Instruct the patient to open comfortably wide and slowly close together until the lips lightly touch. Measure the distance between the two markings. Complete this step three times, record your findings, and calculate the average.

1	2	3	Average
_____mm	_____mm	_____mm	J = _____mm

11. Instruct the patient to fully wet the lips with the tongue, swallow and relax. Measure the distance between the markings. Complete this step twice and record your findings.

1	2	3	Average
_____mm	_____mm	_____mm	K=_____mm

Calculate average as above. Place on line K

Add J \_\_\_\_\_ + K \_\_\_\_\_ , then divide by 2 = (L) \_\_\_\_\_ mm

12. Using the average measurement of vertical dimension of relation, measurement L, subtract the try-in's vertical dimension of occlusion, measurement I, and place the result at "M"

L \_\_\_\_\_ - I \_\_\_\_\_ = M \_\_\_\_\_ mm

**The average mechanically determined inter-occlusal dimension is (M) \_\_\_\_\_ mm**

#### **Step 4: Determine the candidate's understanding of jaw relationships**

The generally accepted standard for increasing a patient's vertical dimension of occlusion is 3mm.

Measurement "A" from page 9 determined the patient's vertical dimension of centric occlusion with their existing dentures in place \_\_\_\_\_ **A**

Measurement "I" from page 11 determined the patient's vertical dimension of centric occlusion with the candidate's try-in in place \_\_\_\_\_ **I**

13. Please check if measurement "I" is 3mm (+/- 1mm) greater than "A"

<b>NO</b>	<b>YES</b>
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Enter the Interocclusal distance that the candidate has proposed in their treatment plan on Line (Q)

Candidate's proposed IOD = \_\_\_\_\_ (**Q**)

Then, the candidate's proposed interocclusal distance from the **treatment plan**, must equal (+/- 1mm) the actual IOD measurement obtained in "**M**"

The actual IOD of candidate's try-in (**from "M"**) = \_\_\_\_\_

14. Please check if measurement "**M**" is (+/- 1mm) of "**Q**"

<b>NO</b>	<b>YES</b>
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**Table O**

	<b>0</b>	<b>1</b>	
	IOD is less than 4mm or Line 13 is marked <b>NO</b> or Line 14 is marked <b>NO</b> and excessive milling or adjusting (more than 15% of the occluding surfaces have been removed)	Measurement <b>I</b> is 3mm greater than <b>A</b> and Line 13 is marked <b>YES</b> and Line 14 is marked <b>YES</b> and less than 15% of the occluding surfaces have been removed through milling and or adjusting	