

A close-up, high-resolution photograph of a woman's face, focusing on her eyes and nose. She has dark hair and is looking directly at the camera with a slight smile. The lighting is soft and natural, highlighting the texture of her skin.

OrthoCAD



IT'S ABOUT TIME

USER GUIDE

Revision, August 1, 2006

(Based on OrthoCAD 2.8)



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PROFESSIONAL CREDITS

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technical issues

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general information

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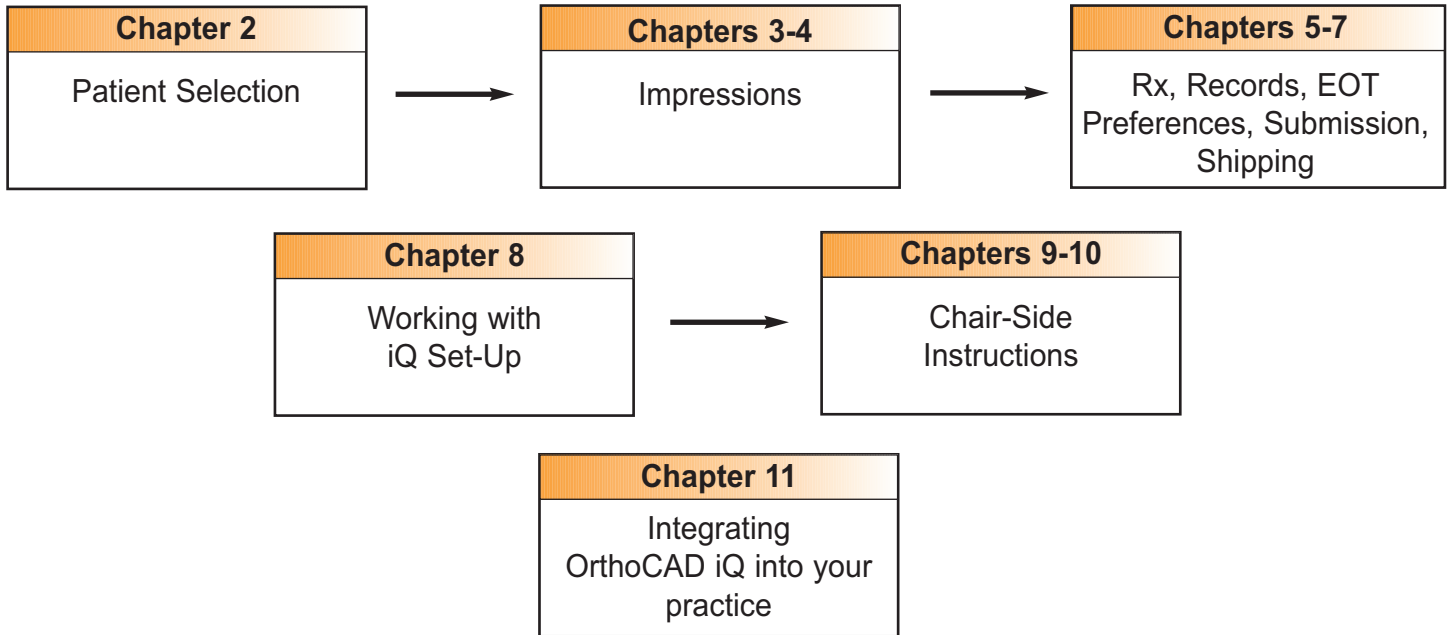
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Chapter 1: Introduction

Overview of User Guide

The purpose of this user guide is to describe the OrthoCAD iQ service and to provide helpful tips and techniques for ensuring the best possible clinical results.

The chapter sequence in this user guide reflects the normal OrthoCAD iQ work cycle.



OrthoCAD iQ Timeline

For best results with OrthoCAD iQ, the entire cycle from the date of patient impressions to the date of the bonding appointment should not exceed two weeks. To meet this time frame, the clinician's iQ set-up approval is required within two business days. OrthoCAD's Customer Support Team will contact your office if approval has not been granted within this time period.

Delivery of iQ records to OrthoCAD	Up to one business day.	<u>Guaranteed</u>
Posting of iQ set-up by OrthoCAD	Up to four business days after arrival of iQ records.	<u>Guaranteed</u>
iQ set-up approval by doctor	Up to two business days after posting of iQ set-up.	<u>Required</u>
Delivery of iQ trays to office	Up to two business days.	<u>Guaranteed</u>

Appointing an “iQ Coordinator” for Your Office

Prior to beginning the iQ service, we strongly recommended that you appoint one person from your office staff to serve as your “iQ Coordinator”. This person should possess basic computer knowledge and will be responsible for all communications and issues related to OrthoCAD iQ including:

1. Ensuring that all needed materials for indirect bonding are stocked and up to date.
2. Acting as the liaison between OrthoCAD, the office staff, and patients/parents.
3. Providing information as needed to patients and parents regarding the bonding procedure.
4. Remaining up to date on all the latest OrthoCAD procedures and requirements, and ensuring that any new information is passed to necessary staff members.
5. Checking that all impressions for OrthoCAD are accurate before shipment, with no distortions.
6. Ensuring that impressions are shipped correctly with all prescription forms and special instructions properly filled in.
7. Informing the doctor when virtual set-ups are ready for approval, and ensuring that they are completed in time for the patient’s bonding appointment.
8. Prior to the patient’s bonding, preparing the appointment for total success by:
 - Checking patient photographs compared to the stone model.
 - Inspecting trays to see that all requested brackets are in place.
 - Noting any areas where there could be concern for proper placement, such as extreme rotations or crowding or partially erupted teeth.
 - Noting any requirements that will require special attention, such as bonding to porcelain crowns, excessive fillings, deciduous teeth, etc.
 - Seeing that the assistant performing the bonding has all materials ready before the patient arrives.
 - Making sure that the assistant is comfortable and has no questions about the iQ procedure before beginning.
 - Being available to offer assistance, if necessary.

When selecting patients for initial iQ cases, we suggest training with a variety of cases ranging from easy to clinically challenging. Please consider the following guidelines:

- No recent appliance removal.
- Patient unlikely to cancel or reschedule appointments.
- Consider friends or family of staff members.
- Ensure the patient knows in advance that he/she will be the center of attention during treatments and verify that both the patient and parents are comfortable with this scenario.

Note: Two arches are required to process any OrthoCAD iQ case. If you are only bonding a single arch, send both arches for processing.

As you become familiar with OrthoCAD iQ, it will be easier to handle cases that are more clinically challenging.

Chapter 3: Recommended Materials

To ensure clinical success of an OrthoCAD iQ case, it is essential to:

- Use dispensing gun or dispensing machine.
- Use scaler, pumice, bristle brush or hand piece to clean the teeth.
- Provide high-quality, accurate VPS impressions and bite registration.

VPS Impression Materials

VPS impressions can be sent “as is” to avoid the need for producing stone models.

Product Name	Item No.	Vendor
AlgiNot Intro Kit (Kerr)	33034	Kerr 800-537-7123 www.kerrdental.com
Position™ Penta™ Quick Intro Kit (3M ESPE Dental Products)	3788337EZ	Henry Schein, Inc. 800-372-4346 www.henryschein.com
StatusBlue™ MixStar Standard Pk (Foremost Dental Mfg Inc.)	2909097	Henry Schein, Inc. 800-372-4346 www.henryschein.com
Position™ Penta™ Quick Intro Kit (3M ESPE Dental Products)	581-0791	Patterson Dental 800-328-5536 www.pattersondental.com

Bite Registration Materials

Product Name	Item No.	Vendor
Occlufast® (Zhermack)	Search for “Occlufast” in online product catalog.	Ortho Technology 800-999-3161 www.orthotechnology.com/
Regisil® Rigid (DENTSPLY Caulk)	619420 Introductory Kit 619425 Four Pack Refill 619425-8 Bulk Refill 619451 Tips Refill (Yellow)	Dentsply Caulk 800-532-2855 www.caulk.com/
Vanilla Bite Registration (Discus Dental)	Search for “bite” in online store.	Discus Dental 800-422-9448 www.discusdentalstore.com/product/

OrthoCAD Impression Tray Supply and Replenishment Service

We recommend you use the OrthoCAD Impression Tray Supply and Replenishment Service. We supply you with the impression trays at no additional cost. You use the trays to send in your OrthoCAD cases. OrthoCAD will continue to replenish your stock with new trays. To get you started, we send an introductory kit of fifty impression trays. When you need a minimum of fifty or more impression trays, all you do is complete an order form and FAX it to 1 (866) 943-7466.

Other Impression Trays

If you prefer to purchase and use trays supplied by others, we recommend using disposable trays with the following features:

- Retention holes
- Retention rim
- Rigid enough to prevent distortion
- High sides to provide best margin and gingival detail
- Extension into deep vestibules for replicating anatomy

Sample Plastic Trays



Chapter 4: VPS Impressions

Before Taking the Impression

Teeth Preparation

Prior to taking the impression, please perform these four necessary steps. This will ensure a clean impression.

1. Have the patient brush their teeth.
2. Scale the teeth to remove any plaque and calculus.
3. Pumice the teeth to obtain a clean surface.
4. Rinse teeth well with water.

Proper Tray Selection

Follow these three steps to select the right tray.

1. Take the wax bite in Centric Occlusion first and then use the wax bite to obtain the correct tray size.
2. Select the correct tray size. Each tray should extend slightly beyond the facial surface of the teeth, approximately 2-3 mm beyond the third molar or tuberosity area of each individual arch.
3. Ensure the trays have enough distance from the patient's soft tissue.

Patient Review and Tray Preparation

1. Check the patient's dentition for areas that may need special attention such as bridges, deep undercuts or food in the interproximals.
2. If the patient has a bridge or deep undercuts, use wax to block out those areas. This reduces the risk of tearing the impression.
3. Dispense a small amount of material onto a tray liner to ensure the syringe is fully purged.

****NOTE****

You may use a timer to estimate the material set time. However, the material set time can be affected by environmental factors.

4. Dispense the material into the tray by starting at the distal portion of the tray on one side and working your way around the tray until you reach the distal of the other side.

****NOTE****

To avoid air bubbles, make sure the syringe tip is not removed from the material.

Taking the Maxillary Impression

****NOTE****

If patients have a gag reflex, advise them to breathe through their nose. If this doesn't work, advise them to bring their knees to their chest to open the airway and make breathing easier.

1. Seat the patient in an upright position.
2. Fill 3/4 of the impression tray. Place more material toward the anterior portion of the arch rather than the posterior. Be sure there's enough material to obtain a complete palate registration.

****NOTE****

In cases with protruded maxillary incisors, more material needs to be placed in the anterior portion*

3. Insert the tray on an angle since the posterior part of the tray is usually wider than the mouth.
4. Once the tray is in the mouth, straighten it and align the midline.
5. Seat the tray evenly, gently retract the lips and gradually push the tray upward forcing the material into the vestibular fornix.
6. Pull the upper lips and cheeks away from the tray periphery to let the material flow into the labial fold.
7. Seat the tray all the way (making sure not to punch through the tray), and maintain equal pressure on both sides for proper seating.
8. Check to ensure the material is fully set. The material will be stiff through the perforation holes.
9. When set, slide your finger along the top portion of the tray posteriorly and apply downward pressure to break the suction.

****NOTE****

To avoid distortion, do not rock the tray back and forth and break the suction.

Taking The Mandibular Impression

Much of the mandibular procedure is similar to the maxillary impressions.

****NOTE****

The lower tray does not need heavy loading of impression material in the molar region. This is because the alveolar arch is much thicker in the posterior region, causing a greater displacement of impression material.

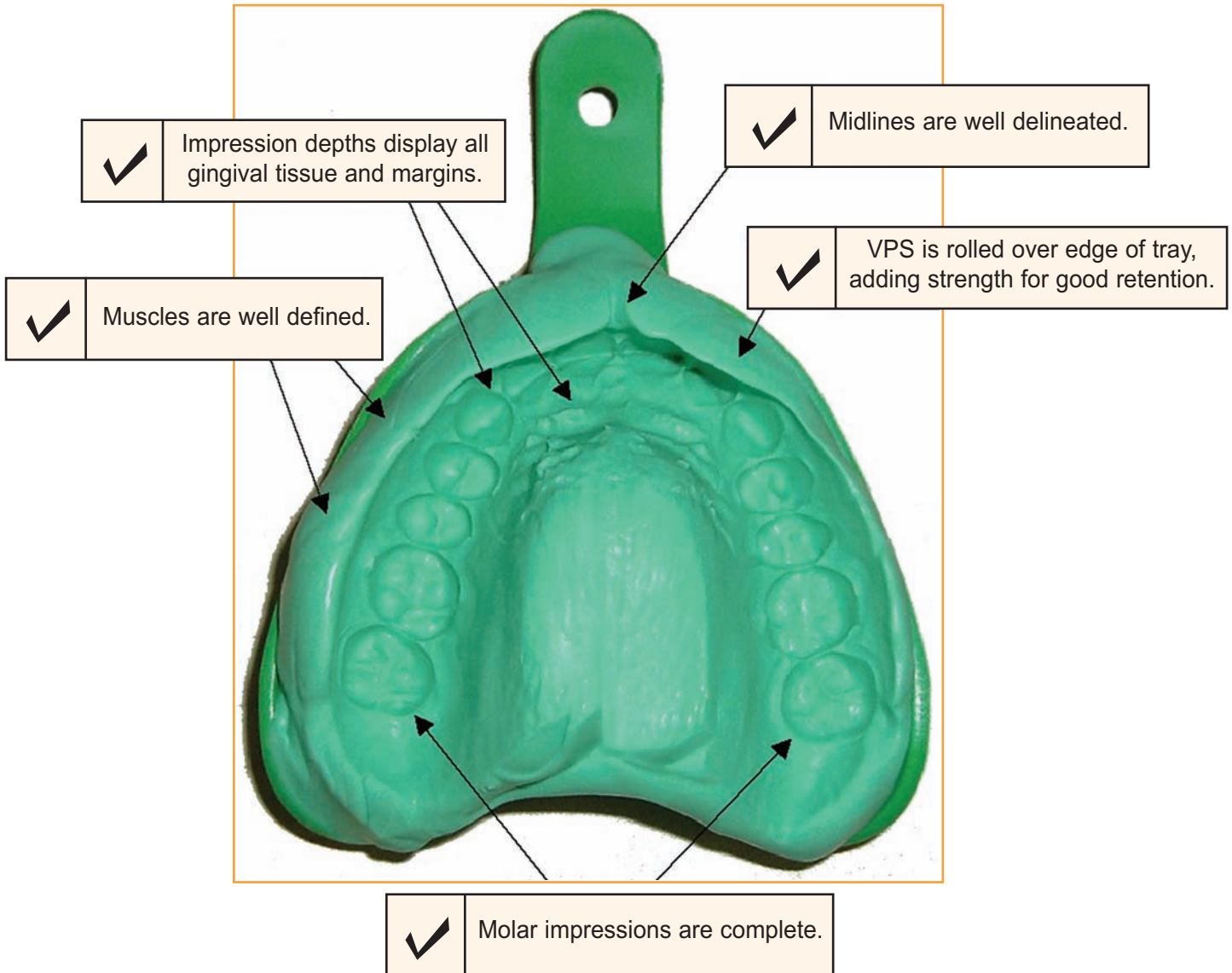
1. Insert the tray into the mouth at an angle.
2. Center the tray with the midline and seat the tray on the arch, applying continuous gentle downward (and slightly posterior) pressure.
3. Pull the lips and cheeks forward from the tray to ensure proper duplication of tissues.
4. Check to ensure the material is fully set. The material will be stiff through the perforation holes.
5. When set, slide your finger along the bottom portion of the tray posteriorly, and apply upward pressure to break the suction.

****NOTE****

To avoid distortion, do not rock the tray back and forth to break the suction.

Quick Review Checklist

When providing VPS impressions, use the checklist below to ensure top quality. Be sure that the impressions are accurate and complete before proceeding.



Due to the fact that we are fabricating an appliance and accuracy and fit are critical to successful bracket bonding, the OrthoCAD iQ system requires a highly accurate VPS impression. Alginate impressions are not acceptable.

Helpful Tips

Description	How to Avoid...
<p>Teeth Hit Tray Impression was taken too deep and contacted the tray, or material was partially set when the tray was seated.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Seat the tray within 30 seconds of dispensing material. <input type="checkbox"/> Size tray to fit patient's mouth. <input type="checkbox"/> Use enough impression material to adequately fill tray. <input type="checkbox"/> Seat tray deep enough to include teeth and gums. <input type="checkbox"/> Do not allow patient to bite into tray.
<p>Smearing of VPS Material Impression tray was moved too early or after seating.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Do not move the impression tray until the VPS material is fully set. <input type="checkbox"/> After seating, use passive pressure to immobilize.
<p>Impression Not Deep Enough Impression tray was not fully seated or the tray was not deep enough.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Seat tray fully into patient's mouth without hitting the bottom of the tray. <input type="checkbox"/> Consider using a deeper tray. <input type="checkbox"/> Place light, equal pressure on both sides of the tray.
<p>Bubbles Improper mixing of impression material or syringe technique.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Use a stirring motion when dispensing. <input type="checkbox"/> Follow manufacturer's instructions when preparing impressions.
<p>Missing Distal of the Molars Tray was not properly fit.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Prior to taking the impression, ensure correct tray size is used for patient.
<p>Tray Too Small or Too Large Impression tray was not a proper fit.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Check size of tray in patient's mouth prior to impression.
<p>Impression Pulled Away From Tray Sides Poor bonding of stock tray.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Use trays with locking holes (perforations). <input type="checkbox"/> Roughen the tray with a bur. <input type="checkbox"/> Use tray adhesive.
<p>Thin Incisal Edges in the Anterior Region Tray was removed prior too early.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Ensure the material is fully set prior to tray removal.
<p>Folds in Syringe Material Material working time was exceeded or room temperature was not right.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Delay extrusion of syringe material until solution assistant begins filling heavy body tray material. <input type="checkbox"/> Store at normal room temperature (preferably at 70 to 75 degrees).

Chapter 5: End-of-Treatment Preferences

Recording your end-of-treatment preferences will help the OrthoCAD iQ Clinical Team understand your end-of-treatment objective. The team will execute the objective in the digital set-up model to reflect your desired treatment outcome. This document is not meant to replace the prescription Rx for each patient. It is designed to help us understand the general common preferences you have for all of your patients.

Form Instructions

- I. **Bracket Height Preference** – This indicates your normal height preferences, for special circumstances such as an open bite case, that would be marked in the special instructions area of the Rx. OrthoCAD normally sets the height as the height of the central incisor divided in half, so most doctors will indicate Height of Contour. However, if you normally like your bracket heights more gingival or more incisal than the Height of Contour, please indicate so.
- II. **Molar Tube Preferences** – Normally most doctors will indicate that the molar tubes should be in the buccal groove as the tube pads have a protrusion to place in the buccal groove. Again, if you like your tubes off center for any reason, indicate that. Remember, this is for your normal tube position – in a special case, use the special instructions portion of the Rx.
- III. **Anterior Region** – This section is fairly self-explanatory. If you submit a photo for a Smile Arc, please indicate by drawing on the photo how the Smile Arc should go.
- IV. **Teeth to have rotations overcorrected for increased appliance expression** – This section is for those doctors, particularly Speed™ and Damon™ doctors, who place certain brackets (cuspids and lower lateral incisors) more to the mesial. Use this section to specify if you prefer your normal bracket position to be off the center of the tooth.



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End-of-Treatment Preferences

Doctor's Name: _____ Office Name: _____ Date: _____

Recording the preferences below will help the OrthoCAD Clinical Team understand your end of treatment objective. The team will execute the objective in the Virtual Set-Up model to reflect the desired treatment outcome.

This document is designed to help us understand the general common preferences you have for all of your patients. It is not meant to replace the individual patient Rx.

In the following four sections please check the box that represents your preference criteria for that category

I. Bracket Height preference – dictates the vertical position of the wire on the tooth

Upper Arch:

- Height of Contour
- More Incisal
- More Gingival

Lower Arch:

- Height of Contour
- More Incisal
- More Gingival

Note: The default wire plane position is height of contour for each arch

II. Molar Tube preferences:

- Molar tubes always in buccal groove (recommended for bracket pads with a bracket indent)
- Molar tubes placed for purpose of achieving desired rotation correction (irrelevant of buccal groove)

III. Anterior region – Facial view:

This is to describe the facial view outcome

- Lateral Incisors will be set 0.5mm more gingival than Central Incisors
- Lateral Incisors will be even with Central Incisors
- Smile Arc as defined by enclosed photos

IV. Teeth to have rotations over-corrected for increased appliance expression:

- | | |
|---|---|
| <input type="checkbox"/> Lower Cuspids | <input type="checkbox"/> Brackets to Mesial |
| <input type="checkbox"/> Upper Cuspids | <input type="checkbox"/> Brackets to Mesial |
| <input type="checkbox"/> Lower Lateral Incisors | <input type="checkbox"/> Brackets to Mesial |
| <input type="checkbox"/> Others _____ | |

V. Additional Instructions:

Please feel free to call our Customer Support Team with any questions at 800-577-8767.

Fax to: 1-866-943-7466
Revision 7/12/2006

Chapter 6: Prescription (Rx) Form

The information you enter in the Rx form is essential to the treatment plan and is used by OrthoCAD to build the virtual set-up for the 3D model. It is crucial that the form be filled in both completely and accurately.

- For each set-up scenario requested, a separate copy of the Rx form should be submitted.
- Prior to submitting a form, please make a copy for your office records and for reviewing the iQ set-up.
- The Rx form is located on our website at: http://www.orthocad.com/download/Rx_Form.pdf

Form Instructions

1. **Case Details/Bonding Date and Time** – Fill out all information. Indicate bonding date and time.
2. **Appliances/Specified Sets** – You may have already listed "User Defined Sets" of brackets, tubes and wire shapes with OrthoCAD. If you have more than one such set listed, indicate which sets are required for the case.
- 2A. **Appliances** – If the appliances are different from the normal specified set, indicate the torque prescription.
3. **Which Teeth Being Bonded** – Indicate which permanent and deciduous teeth you are bonding by circling the appropriate teeth in the table.
4. **A-P Final Class Desired** – Circle target class relationships for both molars and cuspids.
5. **Overbite/Overjet** – Check appropriate boxes for both overbite and overjet.
6. **Extraction** – Circle those teeth that are to be extracted and indicate whether the extraction spaces are to be closed or not.
7. **Spacing** – Check appropriate boxes in the left column if space closure is more important than maintaining class. Check appropriate boxes in the right column if spaces are necessary. To relay more information, please use the "Special Instructions" box.
8. **Tooth Eruption/Bridge/Implant Space** - Circle tooth numbers where space for missing or unerupted teeth/bridges/implants needs to be maintained and enter mm values.
9. **Interproximal Reduction (IPR)** – Indicate in mm amount of IPR required for each tooth. OrthoCAD will distribute the IPR values evenly on both sides of a tooth.
10. **Molar Width** – Specify whether to maintain current width if possible or whether to affect expansion/constriction changes. OrthoCAD will compensate to coordinate upper and lower arches unless otherwise indicated.
11. **Molar movement** - Indicate whether molars are to be kept in position or whether they need to be moved mesially/distally.
12. **Incisor Alignment** – Specify whether alignment is incisal edges or gingival margins.
13. **iQ Trays** – Check appropriate boxes to ensure trays are sectioned according to clinical preference. If there is significant crowding of the teeth, it may be easier to work with sectioned trays.
14. **Special Instructions** – Use this area to add any additional information or instructions that vary from your normal end-of-treatment preferences.



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1) Do **not** use for study models 2) Please make a copy for your own records

(Check one) **iQ Rx** **Virtual Set-Up Rx**

Doctor: _____

Location: _____ Phone #: _____

1. Case Details (Required)

Patient Name: Last _____ First _____ Chart # _____

Gender: Male Female Date of Birth ___/___/___ Study Model already sent

Bonding Date: _____ Bonding Time: _____ Model # _____ (OrthoCAD use only)

2. Appliances (Required)

Write your specified Bracket Set # _____

Write your specified Tube Set # _____

Write your specified Arch Wire Shape _____

(IF DIFFERENT FROM YOUR NORMAL SPECIFIED SET, PLEASE INDICATE IN 2A, OTHERWISE SKIP TO 3.)

2A. Appliances (Required)

Indicate torque prescription above or below the appropriate tooth number.

R	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	L			
R	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	L			

3. Which Teeth Are You Bonding (Required)

Circle appropriate permanent and deciduous teeth.

					E	D	C	B	A	A	B	C	D	E						
R	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	L			
R	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	L			
					E	D	C	B	A	A	B	C	D	E						

4. Final Class Desired (Required)

(Circle)

Molar Relationship - Class:

R	I	II	III
---	---	----	-----

Cuspid Relationship - Class:

R	I	II	III
---	---	----	-----

L	I	II	III
---	---	----	-----

L	I	II	III
---	---	----	-----

Additional Instructions:

5. Overbite

Maintain current Overbite (if possible) Improve deep bite Close open bite

Overjet

Keep incisors in contact Overjet if necessary to maintain Class

6. Extraction

Extract the following circled teeth →

Close all extraction spaces. (Check one below.)

Yes No (If no, specify space location in #8.)

					E	D	C	B	A	A	B	C	D	E						
R	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	L			
R	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	L			
					E	D	C	B	A	A	B	C	D	E						

7. Spacing (check) (Required)

Close all, even if class is not maintained

OR

To keep Class, indicate where to leave space (indicate on the right →)

OR

To keep Class, IPR opposite arch

Leave space:

Distal to Upper 2's

Distal to Upper 3's

Equally mesial/distal to Upper 2's

Other - indicate in (#8.) or Special Instructions (#13.)

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support@orthocad.com • www.orthocad.com1) Do not use for study models 2) Please make a copy for your own records**8. Tooth Eruption, Bridge or Implant**

To leave space for missing, unerupted/impacted teeth or a bridge or implant (Circle tooth number). If specific amount is desired, indicate amount in mm., above or below the corresponding tooth number

R	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8	L								
R	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8	L								

9. Interproximal Reduction in mmIndicate amount of **TOTAL IPR** per tooth (**mesial and distal combined**) in box above or below the corresponding tooth number. **Software divides IPR total amount equally - 1/2 mesial and 1/2 distal (cannot do only mesial or distal)**

R	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8	L								
R	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8	L								

10. Molar Width Will Be Maintained If Possible

Indicate If You Want Changes (check)

Upper: Expand ___mm Constrict ___mmLower: Expand ___mm Constrict ___mm**11. Molar Movement Will Be Maintained unless Indicated below**

Indicate If You Want Changes (check)

Upper: Move mesially ___mm distally ___mmLower: Move mesially ___mm distally ___mm**12. Incisor Alignment** (check) Align Incisal Edges Align Gingival Margins**13. IQ Trays** (check) Full arch *Section both inner and outer tray *Section inner tray only

*Mark where to section on the diagram

**14. Special Instructions**Patient Name: Last _____ First _____ Chart # _____
Doctor Signature: _____ Date: _____

This form and subsequent approval constitute final and complete prescription to CADENT. Diagnosis and prescription are the decision and sole responsibility of the doctor ordering this service who waives any and all claims against Cadent and employees of CADENT based on the failure of CADENT to achieve a successful outcome, either alone or in combination with other treatment modalities.

Revised June 5, 2006

Chapter 7: Packing and Shipping Instructions

Below are instructions for packing and shipping an OrthoCAD iQ Case Box.

The more patient information we receive for each case, the better quality service we can provide. Please place printouts of your patient's intra-oral photos and panoramic x-ray in the OrthoCAD iQ Case Box for your iQ cases.

1. Fill-in iQ Case Box Label (top of box)

Attach the label to the top of the iQ Case Box. Print clearly using CAPS and fill in all fields.



OrthoCAD
iQ
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PLACE OFFICE ID LABEL HERE

Last Name

First Name

Chart Number

Date of Impression

Date of Bonding

2. Select iQ Service (side of box)

Select "iQ" as the requested service.



iQ
 Return Casts

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3. Prepare Bracket Case

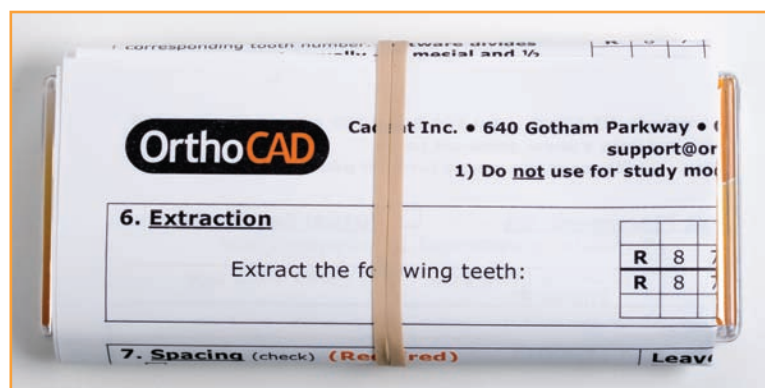
Place desired appliances inside the bracket case.



QC the brackets prior to shipping. Compare them to the Rx.

4. Wrap Rx Form around Bracket Case

Wrap the completed Rx form around the bracket case and secure with a rubber band.



5. Pack Impressions Using Proper Materials

PACKING VPS IMPRESSIONS

Place bracket case and Rx here.

Place bite registration on top of Rx.



Place each impression tray face down on foam.

6. Ship

Up to four OrthoCAD iQ boxes can be packed together in a single next day express box. Call the shipping carrier to request pickup.

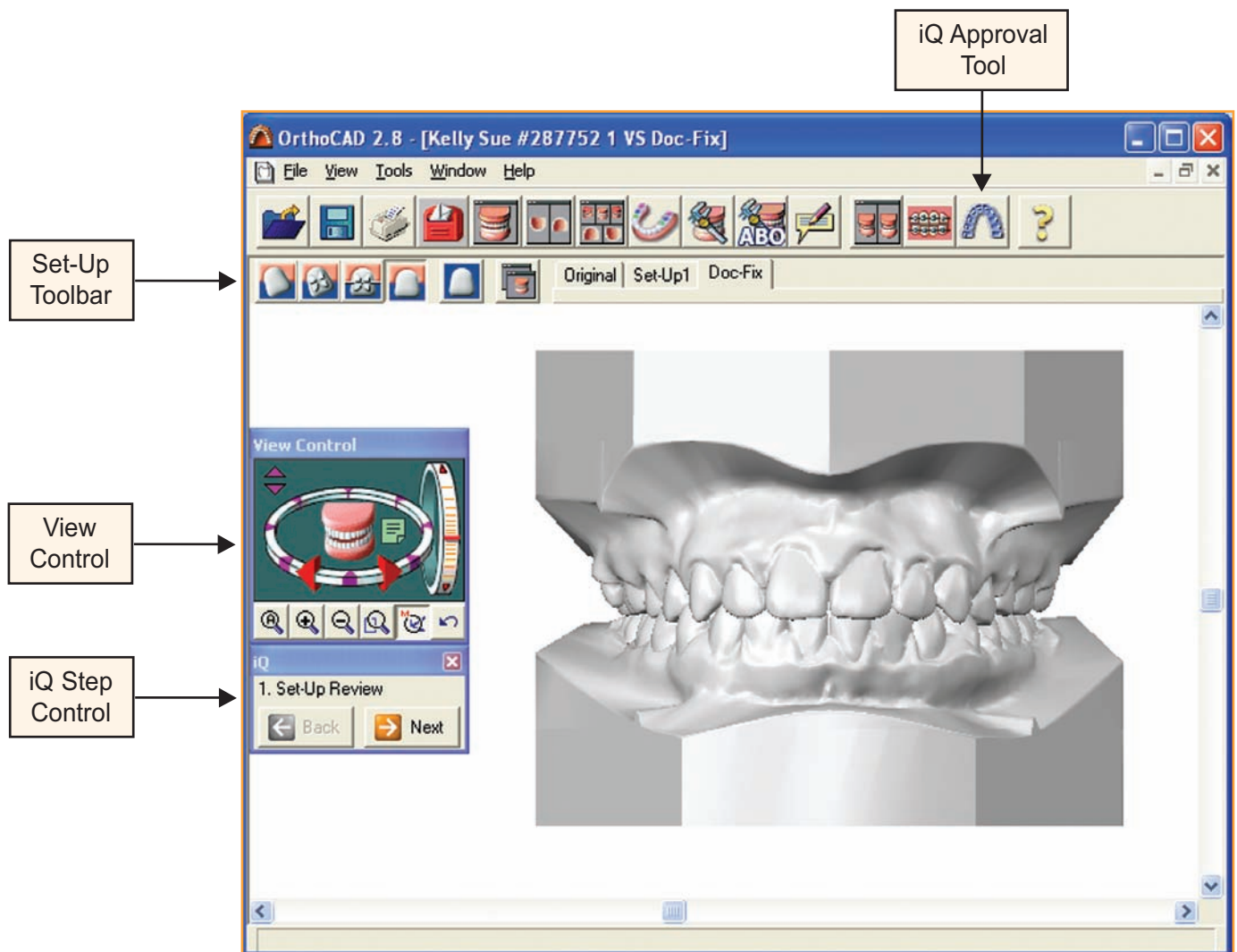
Chapter 8: Approving an OrthoCAD iQ Case

Opening an OrthoCAD iQ model automatically guides you through a multi-step approval process, allowing you to review, fine tune and approve a virtual set-up for the ordering of OrthoCAD iQ trays.

Once you have given final approval, your selected set-up is marked on screen with an iQ* prefix and closed to further changes. The OrthoCAD lab then begins production of the iQ trays based on the approved set-up.

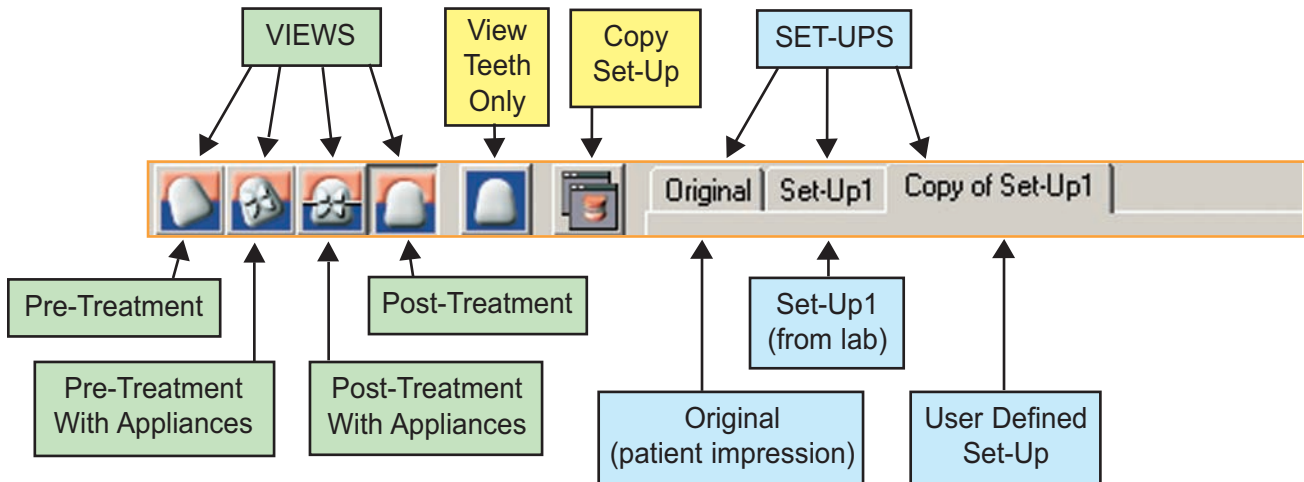
Step 1A: Set-Up Review

Review the model in the 3D graphic window using the set-up toolbar and [View Control](#) dialog, as described on the following two pages. Upon finishing your review, click **Next** in the iQ Step Control to proceed to Step 2.



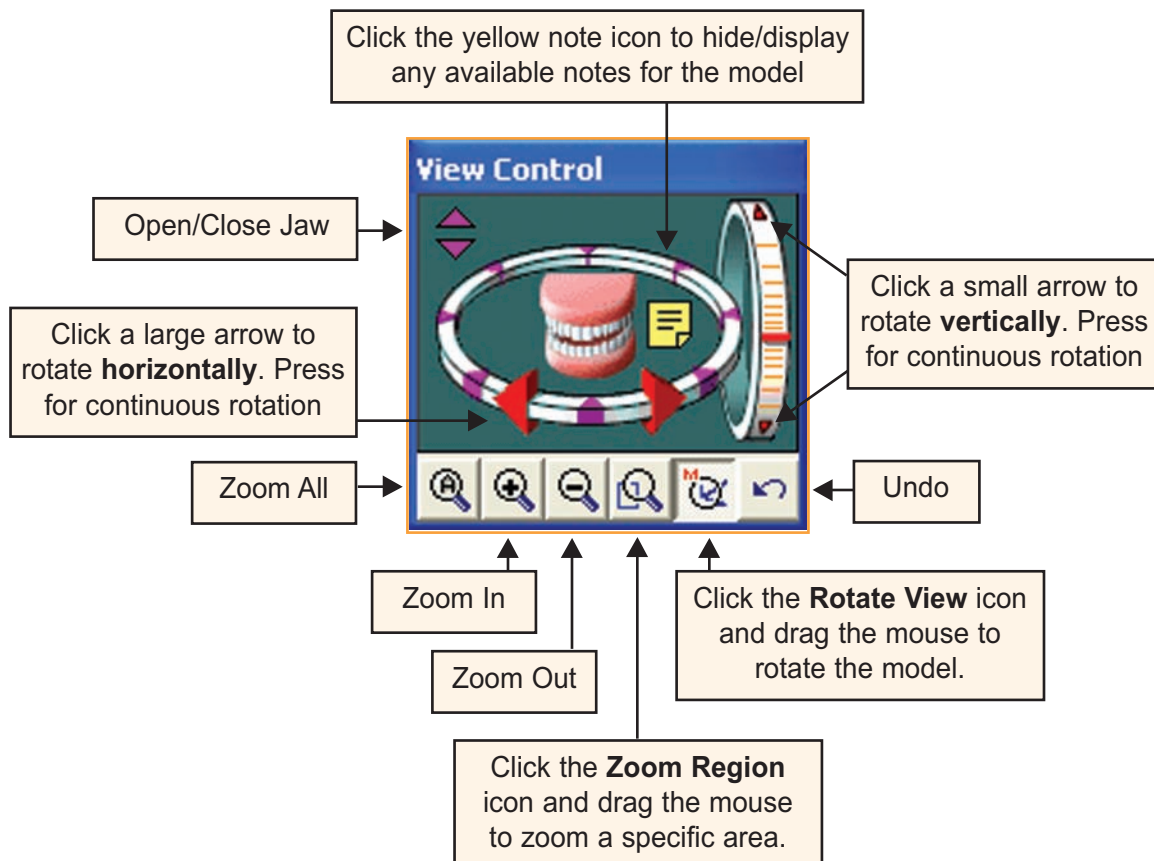
Step 1B: Set-Up Toolbar

Use the set-up toolbar to switch between set-ups and to view any specific set-up at different stages of treatment. “Set-Up1” is supplied as a read only set-up, while “Copy of Set-Up1” is supplied as the default user-defined set-up for making any changes. The system allows the creation of multiple user defined set-ups, each of which can be edited and used for ordering iQ trays. Each user defined set-up is maintained as a separate entity, and making changes to one set-up has no effect on the other set-ups.



Step 1C: View Control

Use the [View Control](#) dialog to zoom and rotate a model in the 3D graphics window.



Step 1D: Keyboard-Mouse Sequences

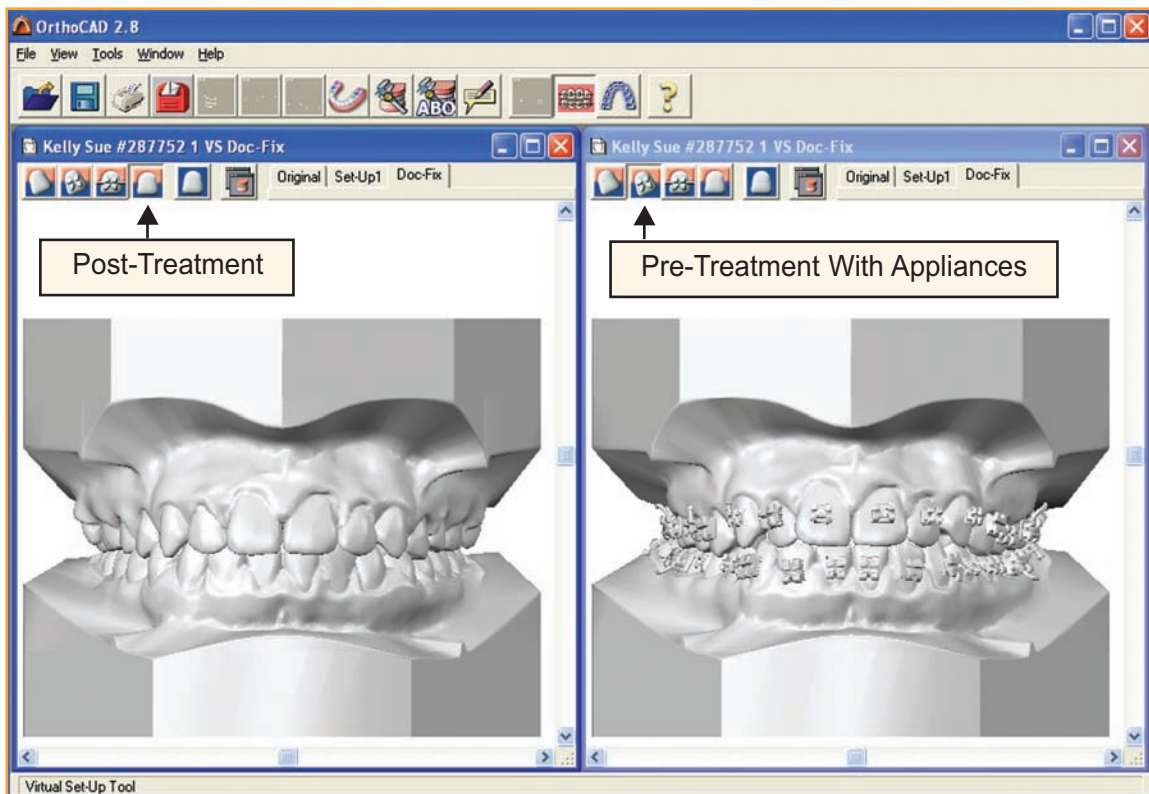
The following keyboard/mouse sequences can be used in the 3D graphics window.

Operation	Keyboard/Mouse Sequence
Zoom region	SHIFT + drag mouse
Drag model	ALT + SHIFT + drag mouse
Rotate model	ALT + drag mouse
Rotate model with keys	Click anywhere in graphic window and use the arrow keys ← ↑ ↓ →
Select a tooth	Click tooth
Select multiple teeth	CTRL + click several teeth
Select all teeth	CTRL + A
Undo tooth selection	Press ESC or click to the side of the 3D model

Step 2A: Modifying Tooth Positions

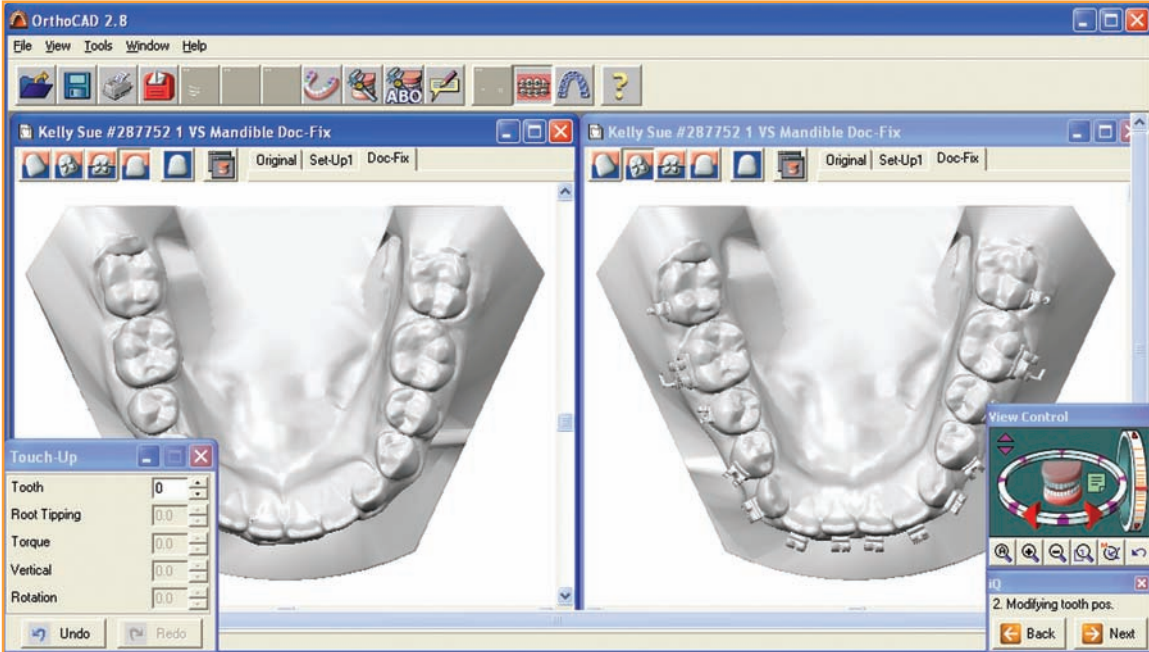
Upon entering Step 2, the **Touch-Up** dialog is opened and the model is presented in two side by side graphic windows showing the Post-Treatment and Pre-Treatment with Appliances views. Any change you make in one window is immediately echoed in the second window.

Since "Set-Up1" is supplied as read only, the software automatically creates an editable copy named "Copy of Set-Up1". It is recommended that you rename the copy by right clicking on the name and selecting the **Rename Set-Up** command. In the example below, the copy has been renamed "Doc-Fix".



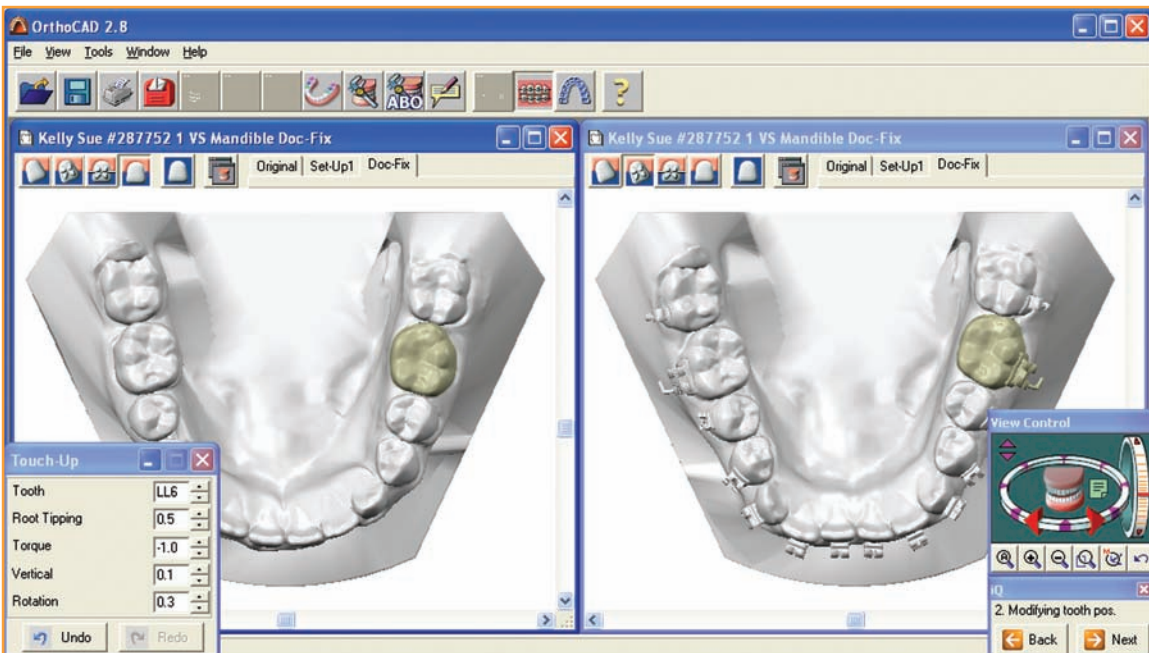
Step 2B: Mandible Review

Double-click the lower arch in the [View Control](#) to display the mandible in occlusal view.



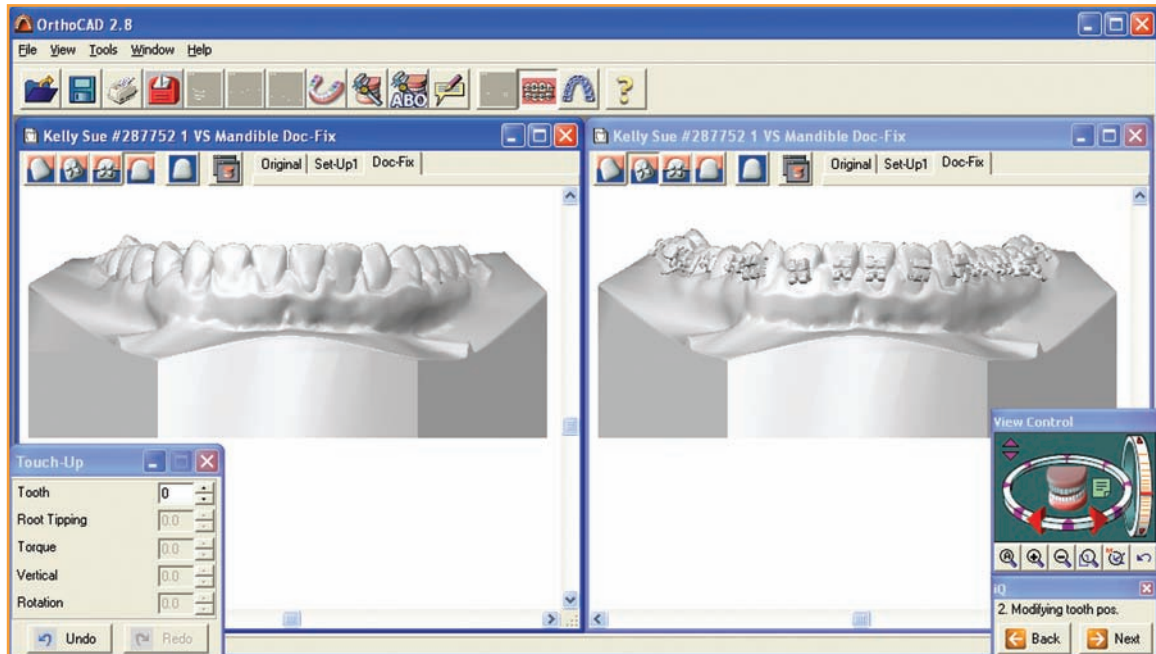
Step 2C: Mandible Rotations

Click a tooth in the left window, zoom in, and use the [Touch-Up](#) dialog to fine tune the tooth position. To unselect the tooth, click to the side of the model in either 3D window.



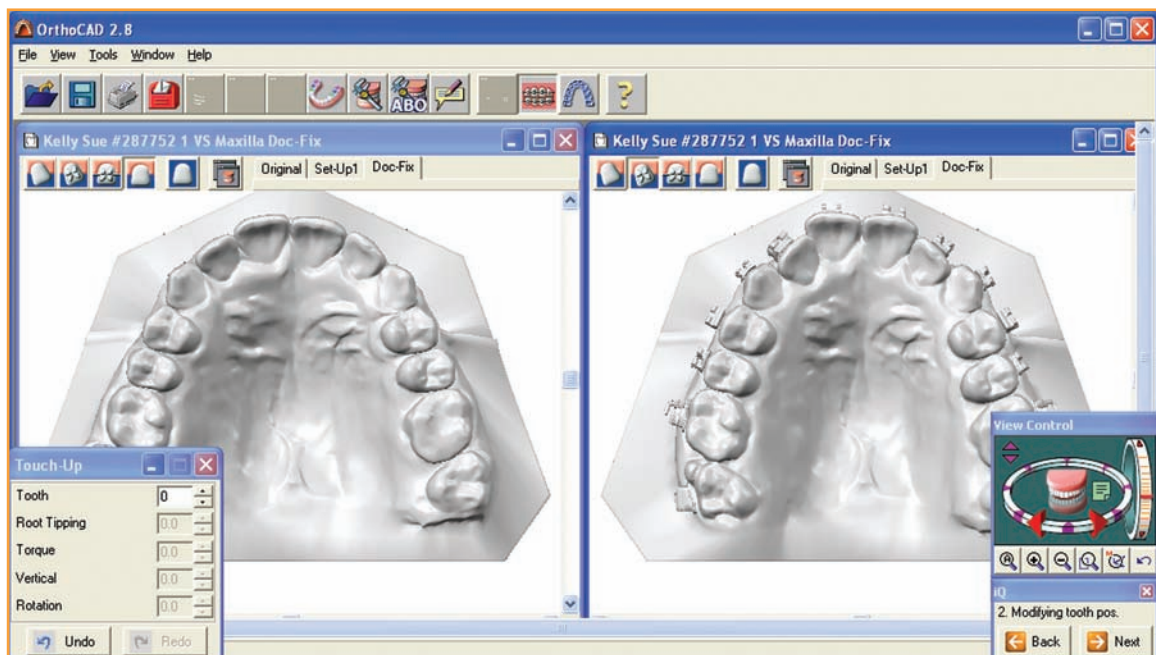
Step 2D: Mandible Heights & Angulations

Click the central orange bar in the vertical wheel of the **View Control**. Check tooth heights and root angulations. *Refer to your panoramic radiograph to fine tune root alignments.*



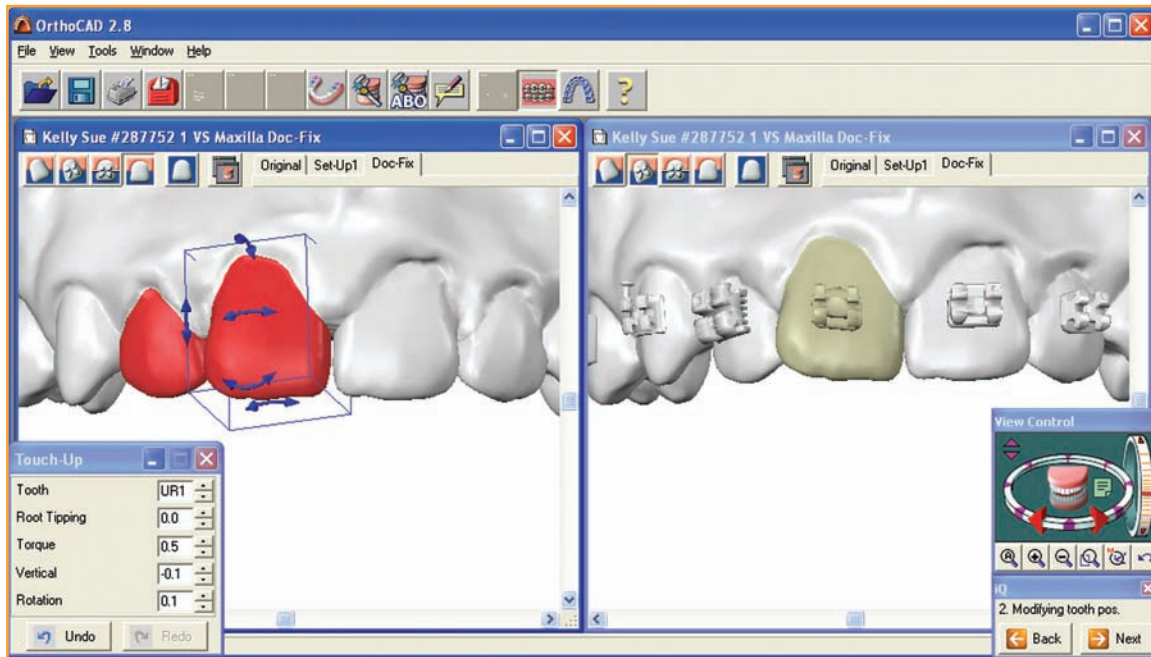
Step 2E: Maxilla Review

Double-click the upper arch in the **View Control** to display the maxilla in occlusal view.



Step 2F: Maxilla Rotations

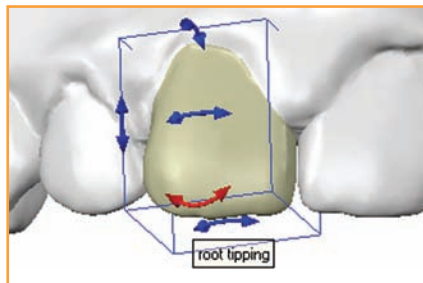
Click the central orange bar in the vertical wheel of the [View Control](#). Double-click a tooth in the left window to display the Tooth Control mechanism. Zoom in and use the [Touch-Up](#) dialog or the Tooth Control to adjust tooth position. If teeth make contact, they are highlighted red.



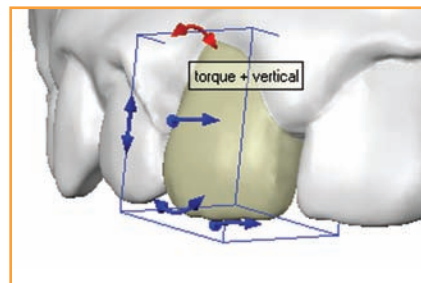
Step 2G: Tooth Control Mechanism

Drag any of the directional arrows to perform fine tuning for the tooth. The values displayed in the [Touch-Up](#) dialog are updated automatically. To unselect the tooth, click to the side of the 3D model.

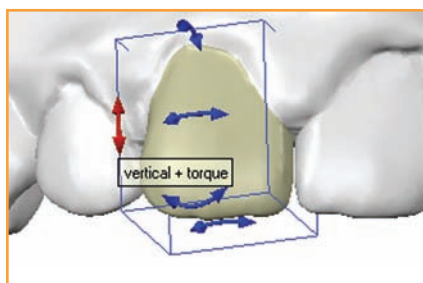
Root Tipping



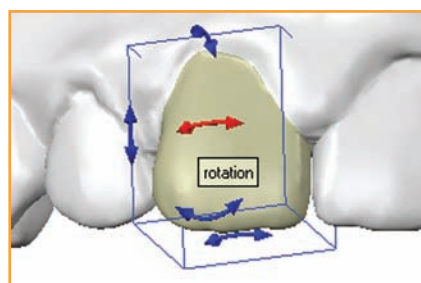
Torque



Vertical

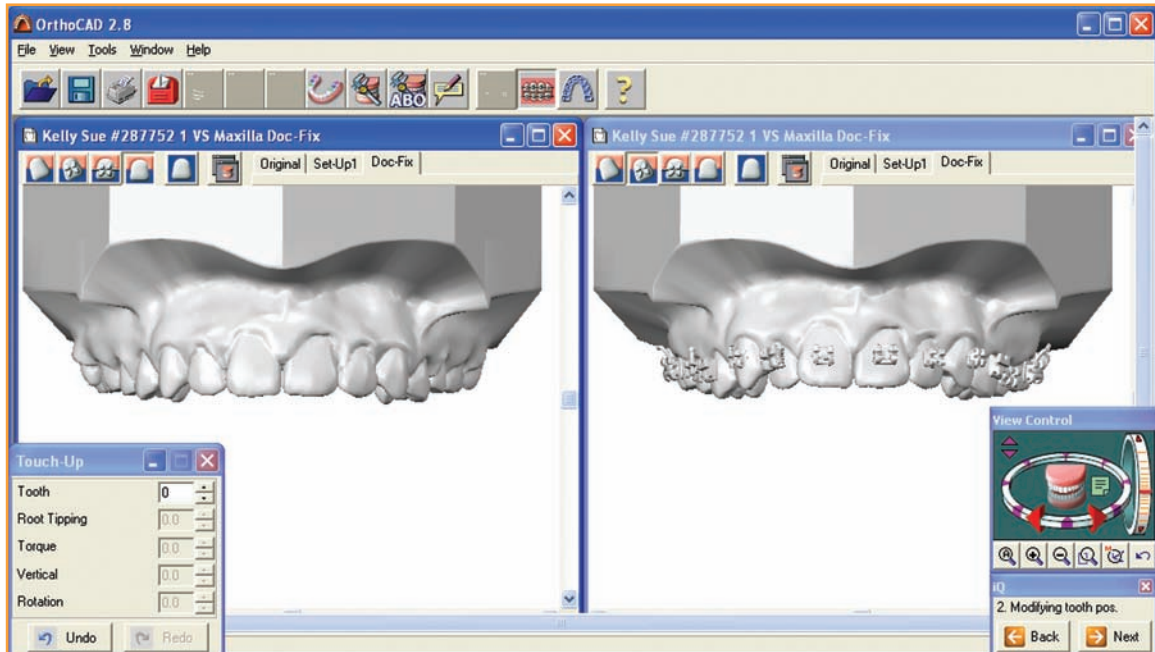


Rotation



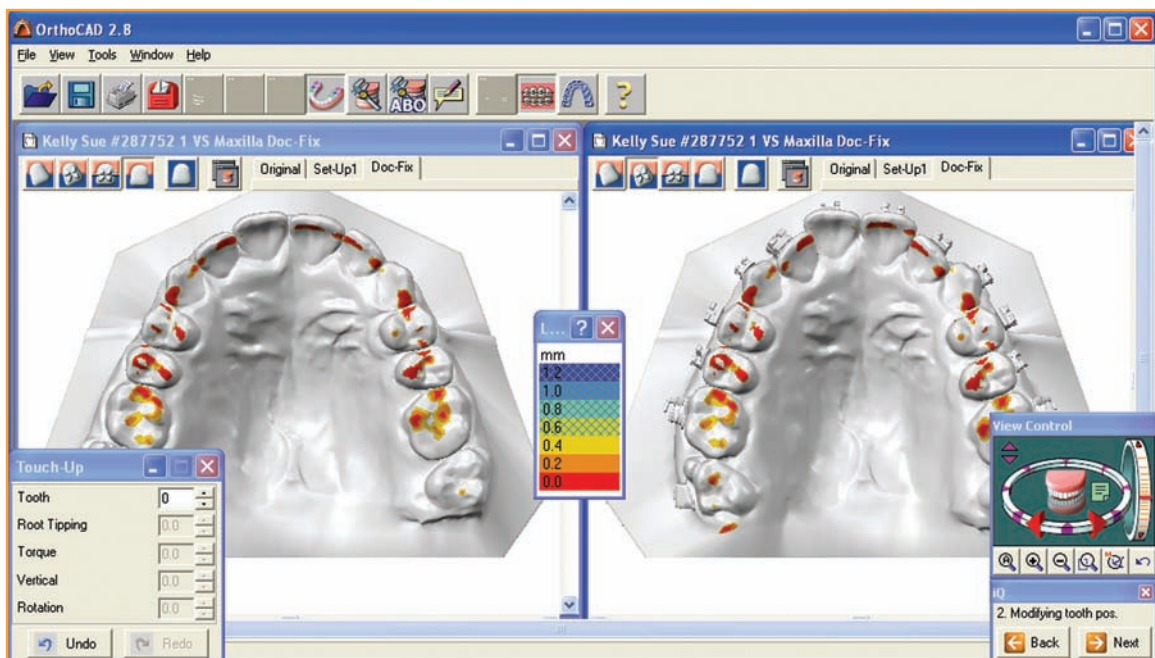
Step 2H: Maxilla Heights & Angulations

Click the central orange bar in the vertical wheel of the **View Control** to redisplay the entire maxilla. Check tooth heights and root angulations. *Refer to your panoramic radiograph to fine tune root alignments.*



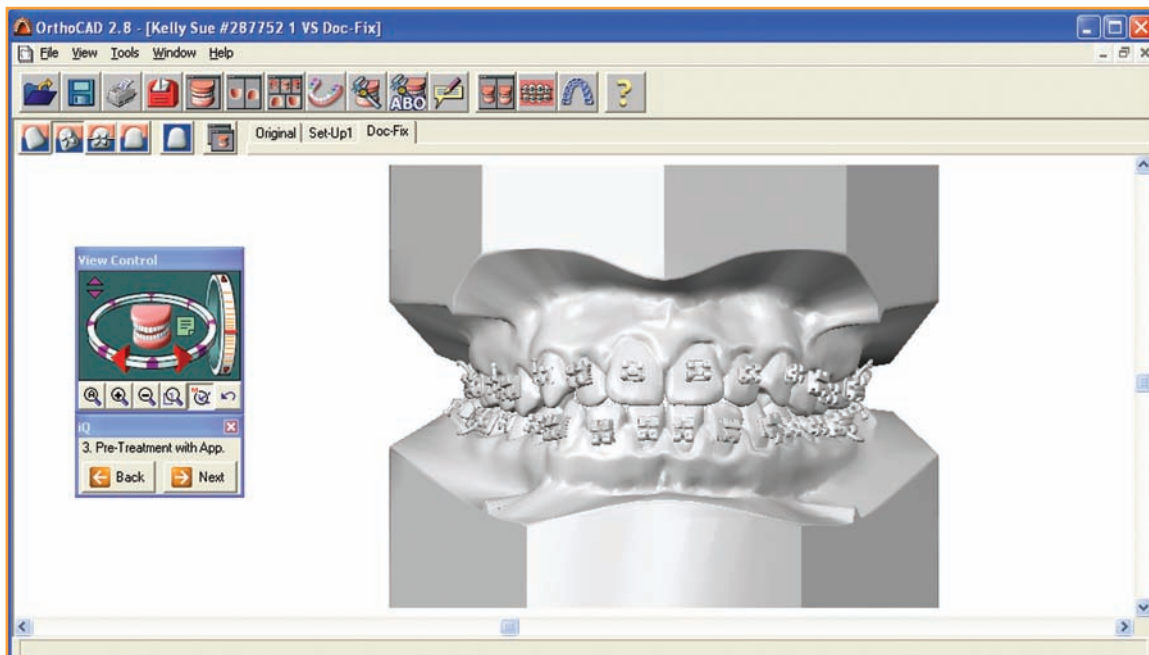
Step 2I: Checking Occlusion

Click the Occlusogram icon and then click any color in the Legend to limit the number of colors displayed. Use the **View Control** to view occlusion at different orientations. Click **Next** to proceed to Step 3.



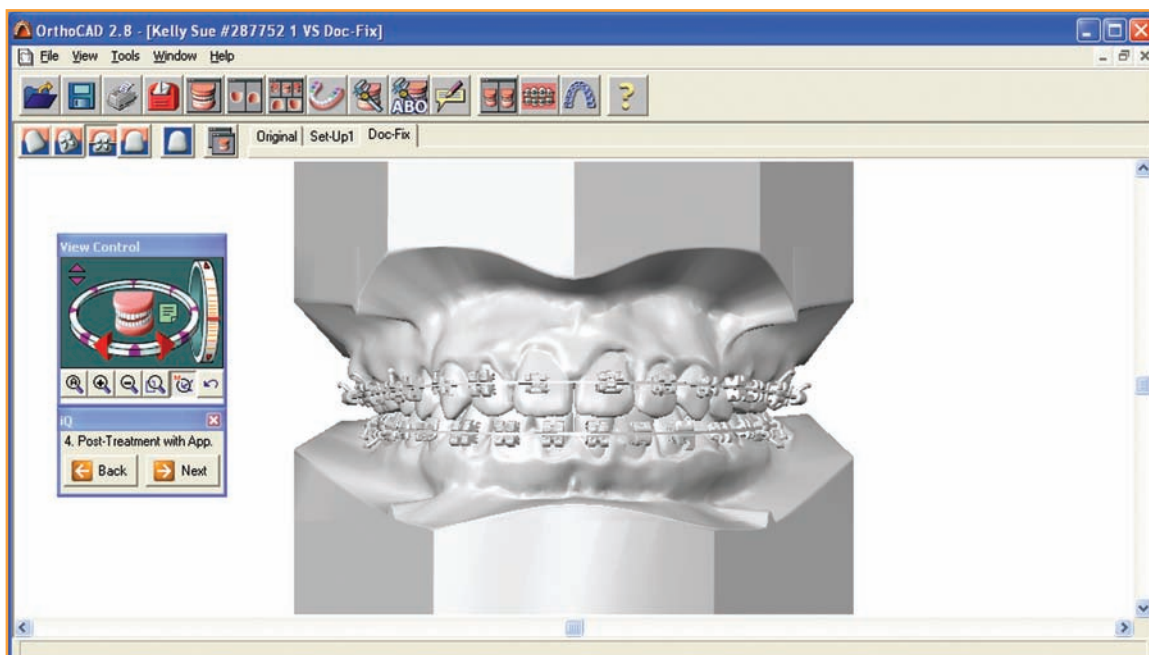
Step 3: Pre-Treatment with Appliances

Review the bracket placements in “Pre-Treatment with Appliances” mode. The bracket positions are customized for the patient. If more changes are necessary, click **Back** to return to Step 2. When done, click **Next** to proceed to Step 4.



Step 4: Post-Treatment with Appliances

Review the bracket placements in Post-Treatment with Appliances view. Click **Next** to proceed to Step 5.



Step 5A: iQ Approval Wizard

Choose the desired set-up for iQ tray production. The default set-up is the last one modified. If you wish to direct bond a bracket, use the "Special Fabrication Instructions". Click **Next** to proceed.

Step 5B: Placing Your Order

Click the **Order** button to have iQ trays fabricated and delivered to your office.

Step 5C: Set-Up Marked as Ordered

The set-up for which you ordered iQ trays is now marked with an iQ* prefix and is closed to any further editing, as shown below.



Step 5D: Receiving iQ Trays

Your iQ trays will be delivered to your office by courier.



Chapter 9: Chairside Materials

Dry Field

- Dry Field Retractors – must utilize continuous suction
- OrthoQuest (Quest™ System) OR Great Lakes Orthodontics (NOLA™ System)
- Absorbent Dri-Angles™

Etch

- Liquid Etch is preferred
- Gel Etch is acceptable if performed with accurate technique
- Self-Etching Primers (L-Pop™) are not acceptable

Chair-Side Materials

- Suction Tips (one slow, one high)
- Air/Water Syringe
- Warm Air Tooth Dryer
- Chair Side Micro Etcher (optional)
- Micro Brushes and/or Sealant Brushes
- Mirror, Scaler and Cotton Pliers
- Patient Napkin and Safety Glasses
- Slow-Speed Hand Piece
- Prophyl Cup
- Prophyl Paste (free of oil, glycerin and fluoride)
- Prophyl Angle
- Timer (recommended)

Light Curing

- Adhesion booster - Assure™ Sealant Resin (Reliance Orthodontics)
- Light-cure adhesive - Flow Tain™ (Reliance Orthodontics)
- Curing Light
- Light Protective Shield Box or Black Retainer Case
- Patient Protective Glasses

Related Links

www.ormco.com

www.relianceorthodontics.com

www.orthoquest.com

www.greatlakesortho.com

Chapter 10: Chairside Instructions

Follow these instructions for applying iQ trays using light curing.



1. Prep the trays when the patient arrives and have them ready by the time they sit in the chair. (Prep with Assure™ and Flow Tain™.)



1A. Apply Assure™ or OrthoSolo with a brush and dab on the surface of each bracket.



1B. Roll each bracket with a dry brush to absorb the excess.



1C. Apply Flow Tain™ on the gingival edge of each bracket with a line across the entire gingival edge for 6's and 7's. Apply just a small amount to the gingival center for 5 to 5 covering approximately 50% of the bracket surface.



2. Check the patient's hygiene and cleanse thoroughly using a scaler and pumice, if necessary, to remove any build up. Pay special attention to 6's and 7's.



3. Apply Dri-Angles™ to help maintain dryfield in the posterior.



3A. Apply Quest™ Dry Field System.



4. Liquid etch makes it easier to coat entire tooth surface evenly.



4A. Liquid etch 30 to 45 seconds per tooth.



4B. Rinse 3 seconds per tooth.



5. Use a warm air tooth dryer to fully dry teeth.



6. Apply Assure™ to brush and dab off onto mixing pad before applying to tooth surface. Dab primer on the entire facial surface making sure that the layer is thin. The primer should be able to be applied to 5 or 6 teeth with one application.



7. Line up the midline on the lower tray and seat it.



8. Press firmly with index and middle finger applying consistent pressure to whole arch.



9. Light cure the lower tray for 10 seconds gingival and 10 seconds occlusal per tooth. Repeat steps 6 through 9 for the upper tray.



10. Remove the dry field system and then remove the upper and the lower hard trays.



11. Light cure the upper and lower soft trays for 10 seconds gingival per tooth.



12. Remove the soft trays. Make sure to peel off along the gum line. Cure the occlusal and incisal edges for 10 seconds per tooth to complete the curing process. Then check each bracket for bond strength.



Place the archwires and then you are finished

Chapter 11: Integrating OrthoCAD iQ Into Your Practice

Integrating OrthoCAD iQ into your practice is easy. We have developed a plan to ensure that your experience with OrthoCAD iQ benefits both you and your patients.

<p>Phase I (First 20 days)</p>	<p>Introduction to OrthoCAD iQ</p> <ul style="list-style-type: none"> • Workflow guidelines • Software – working from the end-of-treatment • Hardware requirements • Role assignments in your practice • Educating patients about OrthoCAD iQ <p>Objective: Setting expectations</p>
<p>Phase II (Next 21-30 days)</p>	<p>Implementation</p> <ul style="list-style-type: none"> • Contract and appliance information collection • Schedule both software and clinical training dates • Receive OrthoCAD iQ starter kit • Software installation • Pre-training review • Collection of your end-of-treatment preferences • Selection of cases and training dates <p>Objective: Getting ready for training</p>
<p>Phase III (Next 31-60 days)</p>	<p>Software and Clinical Training</p> <ul style="list-style-type: none"> • Telephone software training • Doctor-to-doctor case review and approval with our on-site orthodontist • OrthoCAD iQ clinical training • Follow-up calls on treatment progress • OrthoCAD iQ patient marketing <p>Objective: Training and follow-up</p>
<p>Phase IV (Next 12-15 months)</p>	<p>Becoming an OrthoCAD iQ Practice</p> <ul style="list-style-type: none"> • Measuring treatment efficiency gains • Measuring practice efficiency gains • Increasing patient draw and conversion <p>Objective: Quantifying your return on investment</p>

Successful adoption of OrthoCAD iQ means keeping an eye on both short and long-term objectives. This phased approach is designed to make it easy to establish OrthoCAD iQ effectively, and maintain OrthoCAD iQ in your practice for years to come.



Notes:



Notes:



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