

inlays

Preparation for Inlays/Onlays

Occlusal reduction: A minimum of 1.5 - 2.00mm porcelain thickness is required on the occlusal surface. Therefore reduction must comply with this necessity.

INTERPROXIMAL REDUCTION: 1.0 - 1.5mm with an accentuated chamfer or a butt margin gingivally to enable the porcelain to support occlusal forces. A divergence of at least 15 - 20 degrees axial-pulpally allows for a path of insertion.

INTERPROXIMAL EMBRASURE AREAS: Extend margins to an area that is accessible for finishing.

INTERNAL FORM: Should not have any sharp line angles and the buccal lingual walls should be divergent (15' or more) to allow for the path of insertion.

CAVOSURFACE MARGIN: Should be a butt joint to allow for maximum thickness of porcelain in a stressed area. If placement of this butt joint is likely to end an occlusal contact area another option is to overlay the cusp. Fig 6

ONLAY PREPARATION: When overlaying cusps, sufficient bulk of porcelain should be obtained to resist occlusal forces. At least 1.5mm for pre-molar functional cusps and 1.5 - 2.0mm for molar functional cusps.

Mandibular Bicuspid Proximal View

Glass Ionomer
Blocked out
undercut





TEREC

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chameleon

guide to allceramic restorations

minimal veneers

Since the Chameleon Porcelain Veneer was introduced into the U.K. by the Terec Group, it has established an expanding demand. This simple technique for replacing natural enamel, allows the restoration of anterior teeth without involving the removal of large amounts of sound tooth substance.

Indications

Chameleon Veneers have been successfully used to correct the following situations:

- 1 Restoring worn and aged appearance.
- 2 Discoloured teeth. Tetracycline stains - Hypoplasia.
- 3 Chipped teeth.
- 4 Peg laterals.
- 5 Malaligned teeth.
- 6 Partial erupted teeth
- 7 Median diastema and space closure.
- 8 Covering eroded palatal enamel.

Clinical Advantages

- 1 In most cases no anaesthetic required.
- 2 Minimal preparation, therefore preserving irreplaceably sound tooth structure.
- 3 Gingival integrity. The margin of the preparation is supra-gingival ensuring excellent gingival response and tolerance.
- 4 High level of oral hygiene.
- 5 No temporisation.

Assessment

Devise treatment plan in conjunction with Laboratory, indicate purpose of treatment, use study models and diagnostic wax-up if necessary.

Preparation

Preparation is generally restricted to the removal of 0.5mm of labial enamel. Proximally the preparation is extended to the embrasures, removing undercuts, but preserving contact areas. The supra-gingival finishing line should be distinct but fine. This will assist the technician during the construction of the Veneer and the operator when fitting. Incisal preparation may vary, but usually the incisal edge is reduced, leaving approximately a third if the incisal edge. If the tooth is stained generally more enamel is removed.

Impression

Stock trays are suitable, but acrylic special trays are ideal. Ensure adequate labial support for impression material. Standard elastomeric impression materials, polysulphides, or polyethers are suitable. Remember, it is on the labial surface that accuracy is required, allow adequate space for perfecting paste if using 2-part technique.

Full arch upper and lower impressions, (opposing impression may be in alginate.)

Record Shade (Lumin-Vita.)

Indicate on laboratory card reason for treatment.

Specify any particular defects on surface.

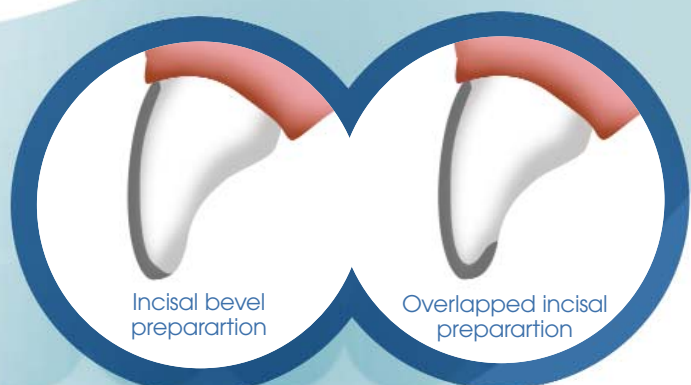
Take squash bite where necessary.

Cementation

Standard technique using Terec Duo-Cure.

- 1 Clean tooth with pumice water slurry.
- 2 Using a small amount of Try-in paste from Duo-Cure Kit carefully position Veneer, check fit and shade.
- 3 Remove Veneer, and clean fitting surface with Isopropyl alcohol or acetone.
- 4 Clean tooth enamel, fit interproximal matrix strips, acid etch for 30 seconds, wash for 30 seconds and dry thoroughly.
- 5 Apply a thin coating of unfilled bonding resin to the etched surface of the tooth and gently blow off excess.
- 6 Paint a thin coating of optional light cure unfilled bonding resin to the etched surface of the Veneer and gently blow off excess.
- 7 Mix Duo-Cure Base and Catalyst 50/50 and apply small amount to fitting surface of Veneer.
- 8 Fit into place using gentle finger pressure.
- 9 Maintain finger pressure and apply curing light for 10 seconds. Trim away excess composite from around margins.
- 10 Apply curing light for 60 seconds gingival and 60 seconds incisal.
- 11 Finish margins with fine diamonds, Rubbers - diamond paste if necessary.

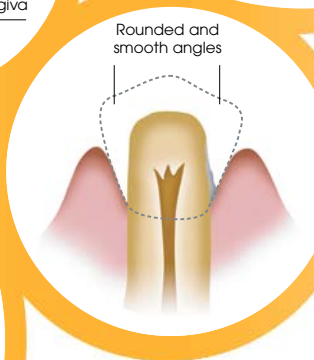
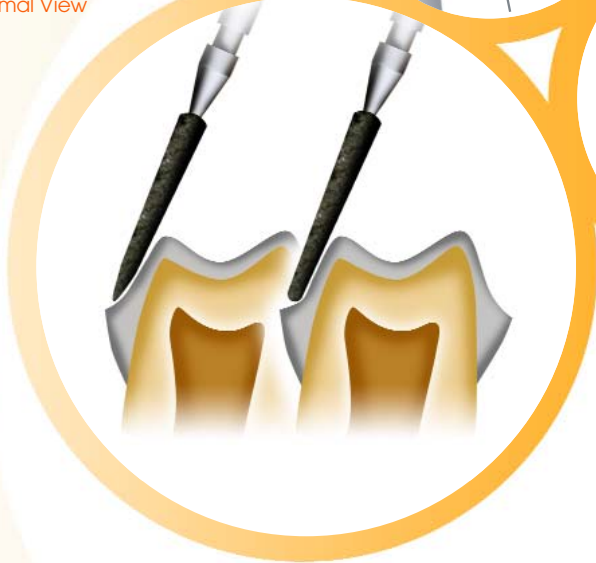
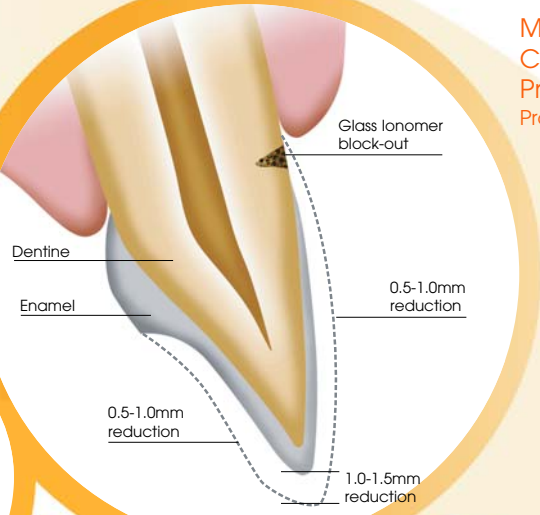
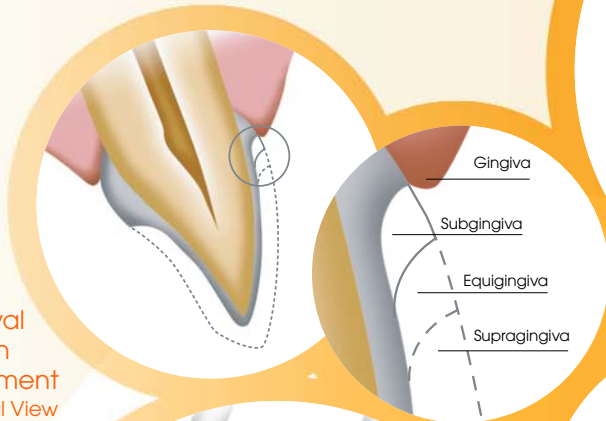
As with all acid etching, it is essential to use an oil and moisture free air supply.



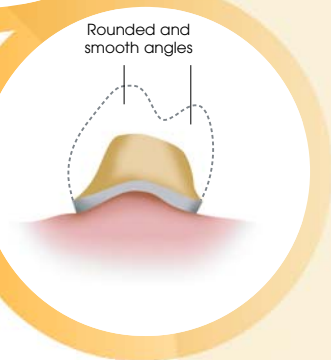
transform veneers

Minimum
Crown
Preparation
Proximal View

Gingival
Margin
Placement
Proximal View



Buccal view



Interproximal
view

Minimum preparation for Anterior Crowns

This is indicated for very conservative treatment of anterior teeth. Preparation should remain mostly in enamel.

Facial and lingual surfaces should be reduced 0.5 - 1.00mm. Proximal surfaces should be prepared with divergence of 15-20° to allow for an adequate path of insertion. Most of the preparation should remain enamel.

Incisal edge reductions should allow for 1.0 - 1.5mm thickness of porcelain which is necessary for adequate strength.

All line angles should be smooth and rounded to eliminate concentration of internal stress in the porcelain restoration.

Existing restorations should be removed and may be blocked out with glass ionomer. Similarly cervical erosion areas which are undercut should also be blocked out.

Subgingival margin replacement on cementum may require placement of retraction cord.

Margins should not end on restorative material such as glass ionomer, or composite resin.

Recent advances in adhesive bonding techniques have produced some distinct advantages over conventional restorative procedures. These techniques offer a more conservative preparation together with vastly enhanced aesthetics. In particular the development of MIRAGE-BOND allows bonding direct to dentine reducing the use of glass ionomer, without damaging the pulp.

Indications

Resin-Bond Restorations are constructed in high strength porcelain. They can be utilised for the smallest inlay preparation, through to full crown restorations.

Where the main consideration is the preservation of healthy tooth structure or aesthetics, this technique is ideal.

Contra Indications

Deeply sub-gingival preparations, or areas that are difficult to isolate from moisture.

Highly abusive occlusion.

zirconia

beautiful and strong

Since the Terec Group was formed back in 1982 it has been our quest to research and then guide clinicians in the very latest technologies. The group first introduced Chameleon Cosmetic veneers, inlays and crowns and the very latest luting composite to our clinicians, the Terec Group are delighted they have brought the best veneering system to the UK market, a restoration that is still at the forefront of technology.

Now for the first time the Terec Group can not only bring beauty, aesthetics and biocompatibility but more importantly the ultimate in strength.

"The new all round prosthetic solution"

Zirconia

Zirconia restorations are being developed by some of the leading dental companies, all striving to give the best fit, design and reliability. Zirconia has been around for a long time in other industries, but only in recent years has it been specifically developed for the dental use. With a Mega Pascal (MPa) strength of the substrate between 1200-1300 strength of the substrate, the Clinician and Patient have ultimate reliability, and with the beauty of modern ceramics specifically developed for Zirconia substrate the Terec Group believes it is the best all round ceramic solution today.

Biocompatibility

It has been shown in recent studies that the "Nature" of Zirconia makes it the most biocompatibly accepted material to live within the biological space. The material clinicians can place next to the tissue, whether it is a crown, bridge or an implant retained prosthesis without any gum retraction.

Preparation

The optimal preparation is a shoulder or chamfered preparation with a circumferential step or chamfer. We recommend 1.5 – 2.0mm incisal reduction and 1.0 – 1.5mm labial and lingual reduction with round internal line angles.

Advantages

- Extreme strength
- Translucence
- Cementability
- Biocompatibility



Zirconia has strength and beauty and is available from all Terec Laboratories, who are at the forefront of the Zirconia revolution.