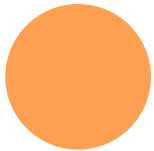




CARDIFF ORTHO

an **ALS** company

Occlusal Splints



Your handy guide to occlusal splints



Splints are known by a wide variety of names such as:

- Occlusal appliance
- Interocclusal or intraoral appliance
- Stabilisation appliance
- Repositioning splint
- Bruxism splint
- Nightguard
- Bite raising appliance (BRA)
- Mouthguard/Biteguard
- Various commercial names promoting brands, designs etc
- And many more

This guide will help you distinguish between the various types of splints offered by Cardiff Ortho.

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Issue/target treatment area	Recommended splint
• Jaw clenching • Occlusal trauma • Bruxism (short term) • Pain relief • TMJ/TMD trauma	Soft splint
• Bruxism (long-term) • Occlusal trauma • Preventing tooth wear	Dual laminate splint
• Bruxism (long term) • Occlusal trauma • Stabilisation • Preventing tooth wear • TMJ/TMD trauma	Hard splint (essix style) Hard splint (flat plane)
• Suitable for long term wear • Posterior teeth disclusion • Bruxism • Teeth clenching • Intracapsular disorders • Ideal occlusal scheme • Protection of teeth after treatment or of tooth enamel against GORD	Hard splint (with guidance)
• Repositioning of the joint position of the jaw • Retraining of the jaw muscles • Preventing posterior teeth from touching • Protection of teeth from oral parafunction	Deprogramming splint

Soft Splints

Soft splints, also known as soft bite raising appliances (BRA) or soft nightguards are primarily short term appliances made from transparent EVA material.

They are the most commonly prescribed splint as they are highly effective at protecting teeth by absorbing occlusal forces and reducing trauma, typically in conjunction with other treatments.

Key benefits:

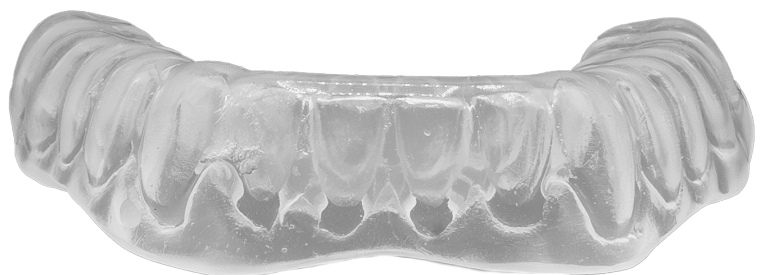
- Pain relief for patients showing signs of pain dysfunction syndrome, TMJ or occlusal trauma
- Joint support

Standard design:

- 3mm Clear Ethylene-vinyl acetate (EVA)
- Extended 1.5-2mm over the gingiva
- Full occlusal coverage

Customisation options:

- Buccal extensions as requested
- Various thicknesses available including 1, 1.5, 2, 4 or 5mm



Lab Requirements:

- Upper and lower impressions or scans (Full sulcus depth)
- Instructions on the design (coverage, extension and material thickness)

Dual Laminate Splints

Dual laminate splints, also known as hard/soft nightguards, are soft on the fitting surface and hard on the occlusal surface for durability.

This type of splint is ideal for patients with moderate to severe undercuts as the soft fitting surface allows a degree of flexibility and ease on insertion/removal whilst maintaining the durable outer surface.

Key benefits:

- Ideal for treating bruxism
- Prevents tooth wear
- Treatment of occlusal trauma
- Good balance of comfort and high levels of protection.



Standard design:

- 3mm hard/soft material
- Extended 1mm over the gingiva
- Full occlusal coverage



Customisation options:

- Anterior bite plane
- Occlusal flat plane
- Add guidance
- Colours (see extras section for selection)
- Different thicknesses - 1.3, 2, 3, 4 or 5mm

Lab Requirements:

- Upper and lower impressions or scans (full sulcus depth)
- Instructions on the design (coverage, extension and material thickness)

Hard Splints - Essix style

Hard splints, also known as a thick material retainer, are made from a rigid polyethylene material making them long wearing and perfect for patients who are mild to moderate grinders

Key benefits:

- Perfect for patients who suffer from mild to moderate tooth grinding, clenching and occlusal trauma.
- Prevents tooth wear

Standard design:

- 1.5mm hard material
- Full occlusal coverage
- Extended 1mm over the gingiva unless specified otherwise

Customisation options:

- Anterior bite plane
- Add guidance
- Adding occlusal coverage
- Different thicknesses - 1, 2, 3, 4, or 5mm.



Lab Requirements:

- Upper and lower impressions or scans (Full sulcus depth)
- Instructions on the design (coverage, extension and material thickness)

Hard Occlusal Splint (flat plane)

Hard occlusal splints, also known as flat plane, flat occlusal or stabilisation splints, cover all upper or lower teeth and has a flat surface intended to help reduce tooth grinding and relax the jaw muscles.

Key benefits:

- Perfect for patients who suffer from mild to moderate tooth grinding, clenching and occlusal trauma.
- Prevents tooth wear
- Made from a dual laminate material for both comfort and rigidity.

Standard design:

- 2mm hard/soft material
- Dentition opened by 3-4mm
- Acrylic added to occlusal surface for point contact on opposing dentition

Customisation options:

- Adding clasps (adams/ball)
- Colour options (see extras section for selection)
- Flat plane height



Lab Requirements:

- Upper and lower impressions or scans (Full sulcus depth)
- Instructions on the design (coverage, extension and material thickness)

Hard Splints with Guidance

Hard splints with guidance are used to give an ideal and full occlusal scheme/coverage, it is also suitable for patients to wear consistently rather than intermittently.

Key benefits:

- Used in the treatment of the TMJ.
- Controlling/treating Bruxism.
- Can be used to protect restorations and tooth enamel, especially in patients suffering from gastro-oesophageal reflux disease.

Standard design (Michigan/Tanner)

- Occlusal contacts on working parts of all teeth
- Canine guidance
- Anterior guidance (if requested)
- Michigan - upper arch
- Tanner - lower arch



Lab Requirements:

- Upper and lower impressions or scans
- Centric relation bite record
- The case can also be submitted with a facebow for better accuracy

Deprogramming Splints

Deprogramming splints are used for essentially knocking a patients bite out of occlusion or to help correct any jaw alignment shifts that have occurred due to bruxism, teeth clenching, chewing gum etc

This splint focuses heavily in reprogramming how the muscles function in the jaw and how the joint of the jaw sits. Common types of deprogramming splints are B splints, Kois deprogrammers and NTI splints.

Key benefits:

- Used to protect existing teeth from damage.
- Can prevent posterior teeth from touching.
- Can help seat the patients jaw properly by retraining the muscles.
- Help with bruxism and clenching.

Standard design:

- B splint (short term) upper extended 3-3
- B splint (long term) upper and lower with full posterior coverage



Customisation options:

- The appliance is made on the upper arch as standard but can be made on the lower arch if requested.
- Colour customisation - See extras section for selection
- Wire retention
- Short term upper with full occlusal coverage

Lab Requirements:

- Upper and lower impressions or scans (Full sulcus depth)
- Instructions on the design (coverage, extension and material thickness)

Extras

Splints can be customised in a number of ways to suit the patient and the needs of their treatment as well as cosmetic choices that can be added for patients to add their own personal touch.

- Add wire retention: Cribs and ball ended
- Add guidance planes (available on all splints apart from the soft splint)
- Add colours

Colour guide

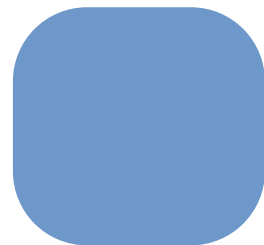
Splints come in a colourless material as standard unless otherwise requested.



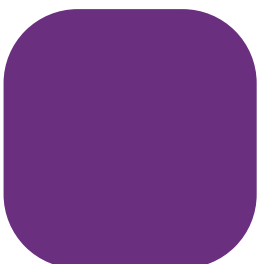
Turquoise



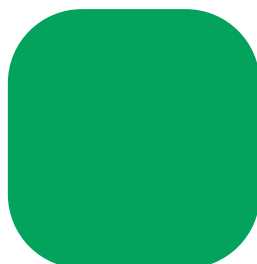
Pink



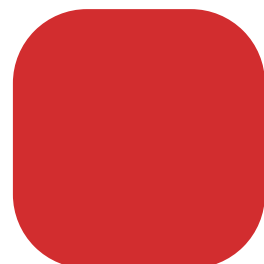
Blue



Purple



Green



Red

How to order

We accept a range of methods to receive your order. Besides traditional impressions that can be posted to the lab or picked up via courier, we also accept digital scans through several different portals, email and WeTransfer.

Search for cardiff-digital@als-dental.com or cardiffortho@als-dental.com to connect to us, alternatively contact your scanner support in order to set up a link.



Medit Link

3shape 



You can use WeTransfer or send your STL files direct to Cardiff-digital@als-dental.com

To send impressions, you will find our handy tracked returns labels on our website at <https://www.cardiffortholab.co.uk/downloads/> or call us on 02920251114 to arrange a collection of larger amounts of work.



CARDIFF ORTHO

an **ALS** company

6 Earlswood Road, Llanishen, Cardiff,
CF14 5GH, Wales

02920251114