

# Silensor-sl anti-snoring device



## Technical Information



**schoTTlander**

## Silensor-sl anti-snoring device

**Snoring** is generated in the upper respiratory system. When the respiratory tract (pharynx) is cramped parts of the soft tissue start to vibrate and cause the snoring noise.

There are two types of breathing interruption characteristics of Obstructive Sleep Apnoea (OSA):

**Apnoea:** where the muscles and soft tissues in the throat relax and collapse sufficiently to cause a total blockage of the airway; it's called an apnoea when the airflow is blocked for 10 seconds or more.

**Hypopnoea:** a partial blockage of the airway that results in an airflow reduction of greater than 50% for 10 seconds or more.

The severity of OSA is determined by how often your breathing is affected over the course of an hour. These episodes are measured using the apnoea-hypopnoea index (AHI). To determine the index the number of apnoeas is divided by the hours of sleep.

Severity is measured using the following criteria:

**Mild** – an AHI reading of 5 to 14 episodes an hour

**Moderate** – an AHI reading of 15 to 30 episodes an hour

**Severe** – an AHI reading of more than 30 episodes an hour

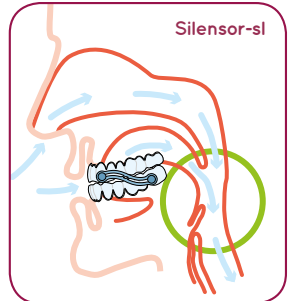
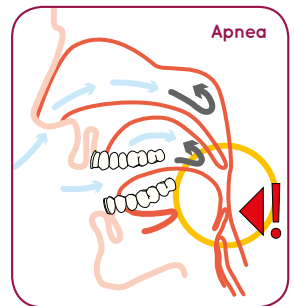
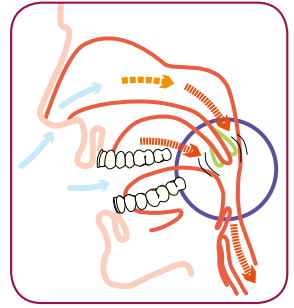
Snoring and obstructive sleep apnoea are a mechanical process that may be mechanically treatable in a dental setting.

Many studies have shown that the advancement of the lower jaw considerably reduced snoring in over 80% of patients and 50% saw a reduction in their apnoea index.

The **Silensor-sl** is a mandibular advancement splint (MAS).

**Silensor-sl** many advantages include:

- improved patient comfort
- proven effectiveness in treating the symptoms of OSA
- completely metal-free
- easily adjustable

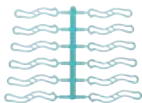


# Silensor-sl important features

1. The upper splint can be made from **Erkoloc-Pro** 3.0mm or from **Erkodur** 2.5mm

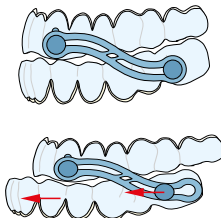
2. The lower splint must stay firmly in place. If enough retention is available, the lower splint can also be made from **Erkoloc-Pro** 3.0mm, but failing that **Erkodur** 2.5mm.

3. The double-S shaped connectors are slightly flexible, improving the comfort and reducing the load in the connecting area of the splints. The connectors come in 6 different lengths, which can be easily changed to adjust the protrusion of the lower splint.



4. The connector on the lower splint should be placed on or near the molar. It will click loosely in place on the anchor.

This allows the anchor to move along the connector in case of sudden movement during sleep. This avoids compressing and over-loading the connectors.



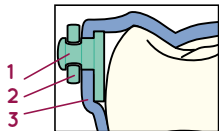
5. The connector on the upper splint must be placed on the canine. It will click firmly in place on the anchor.

The connectors are easily interchangeable by sliding the anchor along the connector slot until it is in position.



The connecting area consists of three parts:

- 1. Anchor
- 2. Connector
- 3. Splint







**2.** Insert the sl-protrusion gauge into the mouth. Ensure that the handle is centred on the upper centrals, and the incisal edges are positioned between the central markers.



**3.** With the patient relaxed and sitting in an upright position, manipulate the mandible to relax the muscles in order to record their natural closed position. This is marked on the gauge.



**4.** The patient's lower jaw is pushed into maximum protrusion and marked on the gauge.



**5.** Mark and adjust the gauge to the desired protrusion and insert into the patient's mouth.



**6.** Register using a silicone based bite registration material such as Schottlander Doric Bite Hard.



**7.** Remove the sl-protrusion gauge with the bite registration.

Generally, half of the maximum protrusion is recommended as the initial protrusion of the lower jaw. If the desired protrusion is known, steps 3 and 4 can be skipped. The protrusion can be easily increased or decreased by changing the connector.

## Useful information

### What are the conditions which allow for successful therapy with the Silensor-sl?

- Absence of inflammatory, painful TMJ.
- Firm tooth anchoring.
- Minimum 8 teeth per jaw.
- No prognathic bite, class 3.
- A BMI of more than 30 may reduce the effectiveness of the **Silensor-sl**.

## Possible side effects and how to manage them?

- **Tooth migration.** The splint must fit all teeth to spread the forces and minimize the risks. Initial models or scans should be kept as a reference point.
- **Morning malocclusion.** After removal of the splint the patient may feel the lower jaw is out of alignment until the reorientation of the masticatory musculature. Every individual is different, but this feeling should disappear after a short time, and several studies show that it does not have any clinical consequences. Silensor-sl Relax Strips can be used to eliminate morning malocclusion.
- **Periodontic Pain.** This is a result of the splint being too tight. Correct construction should relieve stress on the gingival margin.
- **Excessive salivation.** This will reduce over a period of time as the patient becomes used to wearing the **Silensor-sl**.

# Silensor-sl products

**Silensor-sl Introductory Kit allows the fabrication of two devices.**

**Contents:** 2 x parts card, 1 x HSS twist drill (1.4 mm), 1 x plate Erkodur 2.5mm, 1 x plate Erkodur freeze 2.5mm, 1 x plate Erkoloc-pro 3.0mm, 1 x plate Erkoloc-pro blue 3.0mm, 1 x plate Erkolen 1.0mm, 1 x sample Erkogum lilac, 1 x sample blocking out wax lilac, 1 x sample Erkoskin, 2 x sample Aton-Lab 80 A + B, 2 x Erkobox, 2 x bite help strip, 1 x permanent marker, 2 x Silensor care instructions, 10 x Silensor-sl patient leaflets, 2 x Silensor-sl instructions with information concerning use and change of connectors.

## SILENSOR-SL PROTRUSION GAUGE

Pack of 5	<b>Code 596 105</b>
Pack of 20	<b>Code 596 120</b>

## TWIST DRILL HSS (Pack of 5)

Ø1.4mm	<b>Code 110</b>
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## SILENSOR-SL RELAX STRIPS

Pack of 20	<b>Code 596</b>
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## SILENSOR-SL INTRODUCTORY KITS

Ø120mm	<b>Code 596 011</b>
Ø125mm	<b>Code 596 016</b>
125mm Square	<b>Code 596 036</b>

## SILENSOR-SL CARD(S) TURQUOISE

Single	<b>Code 596 001</b>
Pack of 10	<b>Code 596 000</b>
Pack of 40	<b>Code 596 040</b>

## SILENSOR-SL CONNECTORS (Pack of 10)

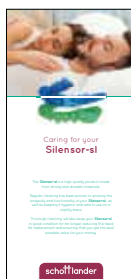
Assorted Pack	<b>Code 596 110</b>
21mm	<b>Code 596 121</b>
22mm	<b>Code 596 122</b>
23mm	<b>Code 596 123</b>
24mm	<b>Code 596 124</b>
25mm	<b>Code 596 125</b>
26mm	<b>Code 596 126</b>



### Silensor-sl Patient Leaflets

A patient information leaflet explaining the characteristics of OSA and the effectiveness of the **Silensor-sl**.

**Code 217035**



### Caring for your Silensor-sl Patient Cards

An information card explaining how to keep the **Silensor-sl** in good condition. Ensuring that patients get the best value for money.

**Code 217015**

### Erkoloc-pro: *Blue/Green/Pink* Transparent with insulating foil

Foil (mm) Thickness	Pack Qty	○ Ø120mm Code	● Ø125mm Code	■ 125x125mm Code	Colour
3.0	10	595 630	596 630	597 630	<i>Blue</i>
3.0	10	597 230	598 230	596 530	<i>Green</i>
3.0	10	595 930	597 530	597 030	<i>Pink</i>

### Erkoloc-pro: Transparent with insulating foil

Foil (mm) Thickness	Pack Qty	○ Ø120mm Code	● Ø125mm Code	■ 125x125mm Code
3.0	10	595 130	595 530	595 230

### Erkodur: Clear with insulating foil

Foil (mm) Thickness	Pack Qty	○ Ø120mm Code	● Ø125mm Code	■ 125x125mm Code
2.5	10	521 225	521 425	521 525

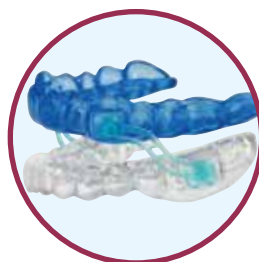
## Silensor-sl



# Schottlander Support & Training Courses

Dentistry is becoming more technically demanding as materials and techniques become more sophisticated, enabling improvements in patient care. At Schottlander we believe in continuing education and training as well as in providing technical support to our customers. Schottlander run courses at our purpose built Training Centre in Hertfordshire, and throughout the UK, as well as worldwide through our distributor network.

All Schottlander courses are listed on **[www.schottlander.com](http://www.schottlander.com)** or alternatively please contact the Schottlander Education & Events Coordinator on email: **[courses@schottlander.co.uk](mailto:courses@schottlander.co.uk)** or **Freephone 0800 97 000 79**.



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