SureSmile Wire Design Options

1. Full Expression Archwire (setup wire)

2. Full Expression Archwires (with overrides):
   A. Overcorrected wire
   B. Undersized wire
   C. Limit wire with passive segment (0%)
   D. Limit value % wire (e.g., 75%, 50%, 25%)
   E. Straight archwire

3. Modification Wires:
   A. Setup modification wire (based on treatment simulation)
   B. Compensation wire (based on progress model)
# SureSmile Lingual Archwire Stiffness Comparison Guide

<table>
<thead>
<tr>
<th>Stiffness</th>
<th>Type of Material</th>
<th>Cross-Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Nickel Titanium (NiTi)</td>
<td>.016 round</td>
</tr>
<tr>
<td></td>
<td>NiTi</td>
<td>.016 x .016</td>
</tr>
<tr>
<td></td>
<td>Beta Titanium (Beta-Ti)</td>
<td>.016 round</td>
</tr>
<tr>
<td></td>
<td>Beta-Ti</td>
<td>.016 x .016</td>
</tr>
<tr>
<td></td>
<td>NiTi</td>
<td>.016 x .022</td>
</tr>
<tr>
<td></td>
<td>Beta-Ti</td>
<td>.016 x .022</td>
</tr>
<tr>
<td></td>
<td>NiTi</td>
<td>.017 x .025</td>
</tr>
<tr>
<td></td>
<td>NiTi</td>
<td>.018 x .018</td>
</tr>
<tr>
<td></td>
<td>NiTi</td>
<td>.019 x .025</td>
</tr>
<tr>
<td></td>
<td>Beta-Ti</td>
<td>.017 x .025</td>
</tr>
<tr>
<td></td>
<td>Beta-Ti</td>
<td>.019 x .025</td>
</tr>
<tr>
<td></td>
<td>Elgiloy</td>
<td>.016 x .022</td>
</tr>
<tr>
<td></td>
<td>Elgiloy</td>
<td>.017 x .025</td>
</tr>
<tr>
<td></td>
<td>Elgiloy</td>
<td>.019 x .025</td>
</tr>
</tbody>
</table>
SureSmile Lingual Recommended Wire Sequence

Initial Phase
 .014 NiTi mushroom (*minor to moderate crowding*)
 OR
 .012 NiTi mushroom (*moderate crowding*)
(Use as the teeth are being aligned and derotated)

SureSmile Archwires
 .016 NiTi
 .016x.016 NiTi
 .016x.022 NiTi
 .017x.025 NiTi
 .017x.025 Elgiloy*

*Use if transversal expansion and torque expression is still required in full lingual treatment (upper lingual and lower lingual).
Preferred use is in the maxilla because this wire is very difficult to insert.
Bracket Types Supported by SureSmile Lingual

To view the brackets supported by SureSmile for lingual treatment, visit https://www2.suresmile.com/bracket-library/ and search “lingual”

If we do not have your bracket(s), please contact your SureSmile representative.
Bracket Placement Considerations

Lingual bracket placement - Upper arch

Brackets on the upper arch should be placed as gingivally as possible to prevent bracket-tooth collisions in the final position (overbite 2mm+).

The space between the gingival margin and the bracket base should be a minimum of 1mm to provide enough space for appropriate hygiene.

Lingual bracket placement - Lower arch

Due to small inter-bracket distances it is important to bond the brackets as incisally as possible.

It is helpful to position the canines with the gingival part of the bracket tipping to the mesial – this makes the wire easier to be bent by the robot, as well as easier to engage.

We recommend a distance of 1mm between incisal edge and bracket base. The lower anterior teeth are typically widest (mesiodistally) at this height.

*Note: This placement height can affect aesthetics prior to SureSmile wire use, especially in overly protruded teeth.*
Diagnostic Model Bracket Placement Simulation

Bracket placement may vary based on tooth morphology.

Bracket placement position is very important for successful SureSmile wire bending and wire insertion.

Indirect bonding is strongly recommended with SureSmile Lingual. Direct bonding placement may be used, but it is often necessary to reposition brackets due to wire bending constraints.

Always plan bracket positions in SureSmile using a bracket placement simulation based on a diagnostic model.

Note: The diagnostic model must be Approved in order to start a treatment simulation.

Please see the Diagnostic Simulations Guide for more information on how to do the lingual bracket placement simulation.
Learning Resources

Search the Help Center in SureSmile for:
Online help topics with step-by-step instructions
Downloads including forms and reference documents
Video demonstrations of software features

To open the Help Center, click the question mark button and select Help Center.